5.2 TRANSPORTATION/CIRCULATION

This section evaluates transportation and circulation impacts associated with Stone Creek (the project). The following discussion is based on the *Transportation Impact Analysis* (TIA) prepared for the project by Linscott Law & Greenspan, Engineers (LLG), (May 6, 2015) and included as Appendix C.

Subsequent to preparation of the TIA, an Addendum (*Stone Creek – Traffic Analysis (TIA) Addendum dated* March 21, 2018) was prepared and is included as Appendix C-1 that outlined refinements to the TIA due to changes in the project phasing timeline, which necessitated validation of traffic counts, as well as forecast volumes validation using SANDAG's model. For local variations in forecast traffic volumes, additional analyses were conducted to determine if any new significant impacts would be identified. Previously identified unmitigated impacts were also reviewed to determine if any impacts were eliminated. The Addendum concluded that impact and mitigation measures included in the TIA remain valid.

The TIA examines the effects of the proposed Stone Creek project on the existing and planned circulation system based on development of the project and build-out of the Mira Mesa community. The study area for this project encompasses areas of anticipated impact related to the project. The scope of the study area was developed under the direction of City staff in conjunction with the *City of San Diego Traffic Impact Study Manual* guidelines, a review of approved traffic studies in the project area, and a working knowledge of the local transportation system. The study area for the project includes intersections and street segments, as well as freeway mainline segments and metered freeway ramps. The study area intersections are listed below. All intersections are signalized unless otherwise noted.

1. I-805 Southbound Ramps/Mira Mesa Boulevard
2. I-805 Northbound Ramps/Mira Mesa Boulevard
3. Vista Sorrento Parkway/I-805 Northbound Ramps/Mira Sorrento
4. Scranton Road/Mira Mesa Boulevard
5. Pacific Heights Boulevard/Mira Mesa Boulevard
6. Camino Santa Fe/Mira Mesa Boulevard
7. Parkdale Avenue/Mira Mesa Boulevard
8. Reagan Road/Mira Mesa Boulevard
9. Camino Ruiz/Mira Mesa Boulevard
10. New Salem Street/Mira Mesa Boulevard
11. Westonhill Drive/Mira Mesa Boulevard
12. Black Mountain Road/Mira Mesa Boulevard
13. Westview Parkway/Mira Mesa Boulevard
14. I-15 Southbound Ramps/Mira Mesa Boulevard
15. 1-15 Northbound Ramps/Mira Mesa Boulevard
16. Scripps Ranch Boulevard/Mira Mesa Boulevard
17. Scripps Ranch Boulevard/Scripps Lake Drive

25. Parkdale Avenue/Flanders Drive (all way stop controlled intersection)
26. Westonhill Drive/Flanders Drive (all way stop controlled intersection)
27. Westonhill Drive/Gold Coast Drive (all way stop controlled intersection)
30. Scranton Road/Carroll Canyon Road
31. Pacific Heights Boulevard/Carroll Canyon Road
32. Carroll Road/Carroll Canyon Road
33. Camino Santa Fe/Carroll Canyon Road
34. Camino Ruiz/Carroll Canyon Road
35. Project Driveway C/Carroll Canyon Road
36. Project Driveway D/Carroll Canyon Road
37. Project Driveway E/Carroll Canyon Road
38. Project Driveway F/Carroll Canyon Road
39. Black Mountain Road/Carroll Canyon Road
40. Maya Linda Road/Carroll Canyon Road
41. I-15 Southbound Ramps/Carroll Canyon Road
42. I-15 Northbound Ramps/Carroll Canyon Road
43. Businesspark Avenue/Carroll Canyon Road
44. Scripps Ranch Boulevard/Carroll Canyon Road
45. Project Driveway G/Carroll Canyon Road
46. Project Driveway H/Carroll Canyon Road
50. Towne Centre Drive/Eastgate Mall
51. Judicial Drive/Eastgate Mall
52. Towne Centre Drive/La Jolla Village Drive
53. I-805 Southbound Ramps/La Jolla Village Drive
54. I-805 Northbound Ramps/Miramar Road
55. Nobel Drive/Miramar Road
56. Eastgate Mall/Miramar Road
57. Camino Santa Fe/Miramar Road
58. Carroll Road/Camino Santa Fe
59. Carroll Road/Miramar Road
60. Camino Ruiz/Miramar Road
61. Black Mountain Road/Miramar Road
62. Kearny Villa Road/Miramar Road
93. Kearny Mesa Road/Miramar Road
63. I-15 Southbound Ramps/Miramar Road
64. I-15 Northbound Ramps/Pomerado Road
65. Willow Creek Road/Pomerado Road
66. Nobel Drive/I-805 Southbound On-Ramp
67. Nobel Drive/I-805 Northbound On-Ramp
70. Camino Ruiz/New Salem Street
71. Camino Ruiz/Reagan Road
72. Camino Ruiz/Flanders Drive

73. Camino Ruiz/Gold Coast Drive
74. Camino Ruiz/Jade Coast Road (two way stop controlled intersection)
75. Camino Ruiz/Jade Coast Drive
76. Camino Ruiz/Project Driveway A
77. Camino Ruiz/Project Driveway B
78. Camino Ruiz/Miralani Drive
79. Camino Ruiz/Activity Road
80. Black Mountain Road/Park Village Road
81. Black Mountain Road/Mercy Road
82. Black Mountain Road/Westview Parkway
83. Black Mountain Road/Capricorn Way
84. Black Mountain Road/Hillery Drive
85. Black Mountain Road/Gold Coast Drive
86. Black Mountain Road/Maya Linda Road
87. Black Mountain Road/Carroll Centre Road/Kearny Villa Road
88. Black Mountain Road/Activity Road
89. Kearny Villa Road Southbound Ramps/Miramar Way (two way stop controlled intersection)
90. Kearny Villa Road Northbound Ramps/Miramar Way (two way stop controlled intersection)
91. SR 163 Southbound Ramps/Kearny Villa Road (two way stop controlled intersection)
92. SR 163 Northbound Ramps/Kearny Villa Road

The following street segments were analyzed as part of this study:

1. Mira Mesa Boulevard west of I-805
2. Mira Mesa Boulevard from I-805 to Scranton Road
3. Mira Mesa Boulevard from Scranton Road to Pacific Heights Boulevard
4. Mira Mesa Boulevard from Pacific Heights Boulevard to Camino Santa Fe
5. Mira Mesa Boulevard from Camino Santa Fe to Parkdale Avenue
6. Mira Mesa Boulevard from Parkdale Avenue to Reagan Road
7. Mira Mesa Boulevard from Reagan Road to Camino Ruiz
8. Mira Mesa Boulevard from Camino Ruiz to New Salem Street
9. Mira Mesa Boulevard from New Salem Street to Black Mountain Road
10. Mira Mesa Boulevard from Black Mountain Road to Westview Parkway
11. Mira Mesa Boulevard from Westview Parkway to I-15
12. Mira Mesa Boulevard from I-15 to Scripps Ranch Boulevard
13. Hillary Drive from Black Mountain Road to Westview Parkway
14. Flanders Drive from Parkdale Avenue to Camino Ruiz
15. Flanders Drive from Camino Ruiz to Westonhill Drive
16. Gold Coast Drive from Parkdale Avenue to Camino Ruiz
17. Gold Coast Drive from Camino Ruiz to Westonhill Drive
18. Gold Coast Drive from Westonhill Drive to Black Mountain Road
19. Gold Coast Drive from Black Mountain Road to Maya Linda Road

20. Jade Coast Road from Parkdale Avenue to Camino Ruiz
21. Jade Coast Drive from Camino Ruiz to Westonhill Drive
22. Carroll Canyon Road west of Scranton Road
23. Carroll Canyon Road from Scranton Road to Pacific Heights Boulevard
24. Carroll Canyon Road from Pacific Heights Boulevard to Carroll Road
25. Carroll Canyon Road from Carroll Road to Camino Santa Fe
26. Carroll Canyon Road from Camino Santa Fe to Camino Ruiz
27. Carroll Canyon Road from Camino Ruiz to Project Driveway C
28. Carroll Canyon Road from Project Driveway C to Project Driveway D
29. Carroll Canyon Road from Project Driveway D to Project Driveway E
30. Carroll Canyon Road from Project Driveway E to Project Driveway F
31. Carroll Canyon Road from Project Driveway F to Black Mountain Road
32. Carroll Canyon Road from Black Mountain Road to I-15
33. Carroll Canyon Road from I-15 to Businesspark Avenue
34. Miralani Drive from Arjons Drive to Camino Ruiz
35. Activity Road from Camino Ruiz to Black Mountain Road
36. La Jolla Village Drive/Miramar Road/Pomerado Road west of Towne Centre Drive
37. La Jolla Village Drive/Miramar Road/Pomerado Road from Towne Centre Drive to I-805
38. La Jolla Village Drive/Miramar Road/Pomerado Road from I-805 to Nobel Drive
39. La Jolla Village Drive/Miramar Road/Pomerado Road from Nobel Drive to Eastgate Mall
40. La Jolla Village Drive/Miramar Road/Pomerado Road from Eastgate Mall to Camino Santa Fe
41. La Jolla Village Drive/Miramar Road/Pomerado Road from Camino Santa Fe to Carroll Road
42. La Jolla Village Drive/Miramar Road/Pomerado Road from Carroll Road to Cabot Drive
43. La Jolla Village Drive/Miramar Road/Pomerado Road from Cabot Drive to Camino Ruiz
44. La Jolla Village Drive/Miramar Road/Pomerado Road from Camino Ruiz to Black Mountain Road
45. La Jolla Village Drive/Miramar Road/Pomerado Road from Black Mountain Road to Kearny Villa Road
46. La Jolla Village Drive/Miramar Road/Pomerado Road from Kearny Villa Road to I-15
47. La Jolla Village Drive/Miramar Road/Pomerado Road from I-15 to Willow Creek Road
48. La Jolla Village Drive/Miramar Road/Pomerado Road east of Willow Creek Road
49. Vista Sorrento Parkway from I-805 Northbound Ramps to Mira Mesa Boulevard
50. Scranton Road from Mira Mesa Boulevard to Carroll Canyon Road
51. Camino Santa Fe from Mira Mesa Boulevard to Flanders Drive
52. Camino Santa Fe from Flanders Drive to Carroll Canyon Road
53. Camino Santa Fe from Carroll Canyon Road to Carroll Road
54. Camino Santa Fe from Carroll Road to Miramar Road
55. Camino Ruiz north of New Salem Street
56. Camino Ruiz from New Salem Street to Mira Mesa Boulevard
57. Camino Ruiz from Mira Mesa Boulevard to Reagan Road
58. Camino Ruiz from Reagan Road to Gold Coast Drive
59. Camino Ruiz from Gold Coast Drive to Jade Coast Drive

60. Camino Ruiz from Jade Coast Drive to Project Driveway
61. Camino Ruiz from Project Driveway to Carroll Canyon Road
62. Camino Ruiz from Carroll Canyon Road to Miralani Drive
63. Camino Ruiz from Miralani Drive to Miramar Road
64. Reagan Road from Mira Mesa Boulevard to Camino Ruiz
65. Reagan Road east of Camino Ruiz
66. Westonhill Drive from Mira Mesa Boulevard to Hillery Drive
67. Westonhill Drive from Hillery Drive to Flanders Drive
68. Westonhill Drive from Flanders Drive to Gold Coast Drive
69. Black Mountain Road north of Park Village Road
70. Black Mountain Road from Park Village Road to Mercy Road
71. Black Mountain Road from Mercy Road to Westview Parkway
72. Black Mountain Road from Westview Parkway to Capricorn Way
73. Black Mountain Road from Capricorn Way to Mira Mesa Boulevard
74. Black Mountain Road from Mira Mesa Boulevard to Hillery Drive
75. Black Mountain Road from Hillery Drive to Gold Coast Drive
76. Black Mountain Road from Gold Coast Drive to Carroll Canyon Road
77. Black Mountain Road from Carroll Canyon Road to Maya Linda Road
78. Black Mountain Road from Maya Linda Road to Carroll Centre Road
79. Black Mountain Road from Carroll Centre Road to Miramar Road
80. Kearny Villa Road from Carroll Centre Road to Miramar Road
81. Kearny Villa Road from Miramar Road to Miramar Way
82. Kearny Villa Road from Miramar Way to SR 163
83. Kearny Villa Road south of SR 163
84. Maya Linda Road from Carroll Canyon Road to project Driveway G
85. Maya Linda Road from Project Driveway G to Project Driveway H
86. Maya Linda Road from Project Driveway H to Black Mountain Road
87. Maya Linda Road from Black Mountain Road to Carroll Canyon Road
88. Nobel Drive from I-805 Northbound to Miramar Road
89. Eastgate Mall from Towne Centre Drive to I-805
90. Eastgate Mall from I-805 to Miramar Road

Due to the project site's proximity to I-805, I-15, and SR 163, and the project's expected trips added to the facilities, freeway segment analysis is included in the traffic study. The following freeway segments were analyzed as part of this study:

1. SR 163 north of Kearny Villa Road
2. SR 163 south of Kearny Villa Road
3. I-15 north of Mira Mesa Boulevard
4. I-15 from Mira Mesa Boulevard to Carroll Canyon Road
5. I-15 from Carroll Canyon Road to Miramar Road
6. I-15 from Miramar Road to Miramar Way

7. I-15 from Miramar Way to SR 163
8. I-15 south of SR 163
9. I-805 north of Mira Mesa Boulevard
10. I-805 from Mira Mesa Boulevard to La Jolla Village Drive
11. I-805 from La Jolla Village Drive to Nobel Drive
12. I-805 south of Nobel Drive

The following metered freeway on-ramps were analyzed in the study:

1. I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange – Westbound Mira Mesa Boulevard to Southbound I-805
2. I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange – Eastbound Mira Mesa Boulevard to Southbound I-805
3. I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange – Northbound and Southbound Vista Sorrento Parkway to Northbound I-805
4. I-805/La Jolla Village Drive/Miramar Road Interchange – Westbound Miramar Road to Southbound I-805
5. I-805/La Jolla Village Drive/Miramar Road Interchange – Westbound Miramar Road to Northbound I-805
6. I-805/La Jolla Village Drive/Miramar Road Interchange – Eastbound La Jolla Village Drive to Southbound I-805
7. I-805/La Jolla Village Drive/Miramar Road Interchange – Eastbound La Jolla Village Drive to Northbound I-805
8. I-805/Nobel Drive Interchange – Eastbound and Westbound Nobel Drive to Southbound I-805
9. I-15/Mira Mesa Boulevard Interchange – Westbound Mira Mesa Boulevard to Southbound I-15
10. I-15/Mira Mesa Boulevard Interchange – Westbound Mira Mesa Boulevard to Northbound I-15
11. I-15/Mira Mesa Boulevard Interchange – Eastbound Mira Mesa Boulevard to Southbound I-15
12. I-15/Mira Mesa Boulevard Interchange – Eastbound Mira Mesa Boulevard to Northbound I-15
13. I-15/Carroll Canyon Road Interchange – Eastbound and Westbound Carroll Canyon Road to Southbound I-15
14. I-15/Carroll Canyon Road Interchange – Eastbound and Westbound Carroll Canyon Road to Northbound I-15
15. I-15/Miramar Road Interchange – Westbound Miramar Road to Southbound I-15
16. I-15/Miramar Road Interchange – Westbound Miramar Road to Northbound I-15
17. I-15/Miramar Road Interchange – Eastbound Miramar Road to Southbound I-15
18. I-15/Miramar Road Interchange – Eastbound Miramar Road to Northbound I-15

19. SR 163/Kearny Villa Road Interchange – Southbound Kearny Villa Road to Southbound SR 163
20. SR 163/Kearny Villa Road Interchange – Northbound Kearny Villa Road to Northbound SR 163

The TIA evaluates existing conditions (based on current street improvements and operations), Phase 1 analysis, Phase 2A analysis, Phase 2B analysis, Phase 3A analysis, and Phase 3B analysis, based on phasing of the project as shown in Figure 5.2-1, *Project Phasing for Traffic Analysis Purposes*. Project phasing is summarized in Table 5.2-1, *Project Phasing for Traffic Analysis Purposes*. The years identified in the traffic study are for traffic modeling and analysis purposes only. The project development, the associated improvements, and mitigation within each phase could occur later than identified.

Table 5.2-1. *Project Phasing for Traffic Analysis Purposes*

Phase	Year	Development & Mining Activity	Daily Trips
1	2020	Approximately 165,000 SF Light Industrial Mining & Processing of Sand/Gravel Site Reclamation	2,475
2A	2030A	Approximately 250,000 SF Light Industrial Park; approximately 135,000 SF Light Industrial/Business Park; up to 585 DU Multi-Family Residential Mining & Processing of Sand/Gravel Site Reclamation	9,420
2B	2030B	Up to 2,725 DU Multi-Family Residential; approximately 24,000 SF Specialty Retail; approximately 5.59 Acre Neighborhood Park Mining & Processing of Sand/Gravel Site Reclamation	17,340
3A	2035	Up to 835 DU Multi-Family Residential; approximately 150,000 SF Community Retail; approximately 200,000 SF Commercial Office; up to 175 Hotel Guest Rooms; approximately 24.65 Acre Neighborhood Park Mining & Processing of Sand/Gravel Site Reclamation	14,902
3B	2040	Up to 300 DU Multi-Family Residential; approximately 300,000 SF High Tech Industrial Park	6,600
		TOTAL	**50,737**

General Notes:

1. Phases A and B refer to sub-phasing project development levels within a certain time period.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of transportation impacts associated with the future school would be required at that time.

5.2.1 Existing Conditions

The project site is located in the central portion of the Mira Mesa community, generally north of Miramar Road, south of Mira Mesa Boulevard, west of Black Mountain Road, and east of Camino Santa Fe. (See Figure 2-2, *Vicinity Map*.) The project site is the location of an on-going resource

extraction operation for the mining and processing of sand and gravel, which operates under the 1981 CUP/Reclamation Plan. Primary project access is currently provided from Carroll Canyon Road at the east end of the project site. The development is proposed to be accessed along Carroll Canyon Road, Camino Ruiz, and Maya Linda Road.

The principal roadways in the study area are described briefly below. The project study area falls within three communities of the City of San Diego: the area generally south of Eastgate Mall is the University Community, the area to the northeast is the Mira Mesa Community, and the area to the east is the Scripps Miramar Ranch Community. As such, for the discussion of roadway facilities, recommended roadway classification was determined from a review of the University Community Plan, Mira Mesa Community Plan, and Scripps Miramar Ranch Community Plan.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of Transportation/Circulation impacts assumes this baseline would not differ from the Existing Conditions as presented in this section.

EXISTING ROADWAY FACILITIES

Mira Mesa Boulevard is classified (i.e. Ultimate Classification) as a Six-Lane Prime Arterial between Scranton Road and Black Mountain Road, and an Eight-Lane Prime Arterial from I–805 to Scranton Road and from Black Mountain Road to I–15 in the Mira Mesa Community Plan. Currently, Mira Mesa Boulevard is primarily an east-west six-lane divided roadway (i.e. Functional Classification) within the project area. Additional lanes are provided at the I-805 and I–15 interchanges. Mira Mesa Boulevard is under City of San Diego jurisdiction throughout the study area with the exception of the I-805 and I–15 interchanges, which are operated by Caltrans. Traffic is controlled by signals, and additional turn lanes are generally provided at the study intersections along this roadway. The posted speed limit is 50 miles per hour (mph) between the I–805 interchange and Aderman Road (east of Camino Santa Fe), generally 45 mph between Aderman Road and Black Mountain Road, and 35 mph between Black Mountain Road and the eastern terminus at Scripps Ranch Boulevard. Bus stops are provided on Mira Mesa Boulevard, and curbside parking is prohibited. Bike lanes are mostly continuous along Mira Mesa Boulevard. Specifically, a Class II Bike Lane is located between Scranton Road and Parkdale Avenue and between Reagan Road and Westonhill Drive, and a Class III Bike Route is located between Parkdale Avenue and Reagan Road and between Westonhill Drive and I-15.

La Jolla Village Drive/Miramar Road/Pomerado Road is a contiguous road with different street names. La Jolla Village Drive is classified in the University Community Plan as an Eight-Lane Primary Arterial immediately west of I-805, and as a Six-Lane Primary Arterial from I-805 to Eastgate Mall. In the Mira Mesa Community Plan, Miramar Road is classified as a Six-Lane Primary Arterial from Eastgate Mall to Camino Santa Fe, a Six-Lane Major from Camino Santa Fe to Camino Ruiz, and a Six-Lane Prime from Camino Ruiz to the I–15 interchange.

In the Scripps Miramar Ranch Community Plan, Pomerado Road is classified as a Six-Lane Major from the I-15 interchange to the MCAS Miramar easterly property boundary and as a Four-Lane Major from that point to Scripps Ranch Boulevard. The portion of the roadway east of the I-15 interchange, known as Pomerado Road, currently exists as a Two-Lane Collector. The classification of Pomerado Road was downgraded to a two-lane collector on October 26, 1993, through Resolution R-282903. The improvement was also deleted from the former Pomerado Road Widening CIP programming sheet.

Miramar Road is currently constructed as a seven-lane divided roadway with a raised median between I-805 and Eastgate Mall, and a six-lane roadway with a two-way left-turn lane (TWLTL) east of Eastgate Mall. There is a raised median on both approaches of Miramar Road at the intersection with Camino Santa Fe. Class II and Class III bike facilities are provided along Miramar Road. There are intermittent sections where the bike lanes are not present; however, signage for a bike route is used in lieu (Class III). Curbside parking is prohibited along Miramar Road, bus stops are provided, and the posted speed limit is 50 mph west of Carroll Road and 45 mph east of Carroll Road.

Carroll Canyon Road is currently a non-continuous roadway within the study area. There are currently three sections of the roadway built. The first section is from Sorrento Valley Road to Fenton Road. The second section is from Black Mountain Road to Scripps Ranch Boulevard. A third section was recently built west of Camino Ruiz. This portion of Carroll Canyon Road terminates in a temporary cul-de-sac within the Carroll Canyon Business Park. The Mira Mesa Community Plan shows the future alignment of Carroll Canyon Road as joining these sections as a continuous thoroughfare running between I-805 and I-15. Carroll Canyon Road is classified in the Mira Mesa Community Plan as a Four-Lane Collector between Mira Mesa Boulevard and Scranton Road, as a Four-Lane Major between Scranton Road and Camino Santa Fe, as a Six-Lane Prime Arterial between Camino Santa Fe and Camino Ruiz, as a Six-Lane Major Arterial between Camino Ruiz and Maya Linda Road, and as a Four-Lane Major between Maya Linda Road and I-15. Carroll Canyon Road is classified in the Scripps Miramar Ranch Community Plan as a Four-Lane Prime Arterial between I-15 and Businesspark Avenue. The western section of Carroll Canyon Road, between Mira Mesa Boulevard and Pacific Heights Boulevard, is currently a four-lane undivided roadway with TWLTL. Parking is prohibited, bike route signs are present, and the posted speed limit is 35 mph. The eastern section of Carroll Canyon Road, between the I–15 interchange and Black Mountain Road, is currently a four-lane undivided roadway with TWLTL. Parking is generally allowed and the posted speed limit is 35 mph.

Black Mountain Road is classified as a Six-Lane Prime Arterial north of Kearny Villa Road, and a Four-Lane Major from Kearny Villa Road to its terminus at Miramar Road in the Mira Mesa Community Plan. Black Mountain Road is built to its classification between Mercy Road and Galvin Avenue (six-lane divided roadway) and between Kearny Villa Road and Miramar Road (four-lane divided roadway). The remainder of Black Mountain Road is currently built as a four-lane roadway. As Black Mountain Road leads further north into the Rancho Peñasquitos area just beyond Mercy Road, it becomes a four-lane divided roadway north of Mira Mesa Boulevard. Bike lanes are

provided, and parking is generally prohibited along this segment. The posted speed limit is 50 mph, lowering to 45 mph north of Mercy Road. South of Mira Mesa Boulevard, bike lanes and bus stops are provided. Parking is generally allowed along this segment, except in the vicinity of the Hourglass Field Community Park and the portion fronting Miramar College.

Camino Ruiz is classified as a Four-Lane Major north of Gold Coast Drive, and a Six-Lane Major south of Gold Coast Drive in the Mira Mesa Community Plan. Currently, Camino Ruiz is a four-lane divided roadway within the study area. Bike lanes are provided north of Gold Coast Drive with a posted speed limit of 40 mph. Bike lanes are not provided and the posted speed limit is 45 mph south of Gold Coast. Curbside parking is generally prohibited.

Camino Santa Fe is classified as a Four-Lane Major from Sorrento Valley Boulevard to Top Gun Street, a Six-Lane Major from Top Gun Street to Flanders Drive, and a Six-Lane Prime from Flanders Drive to Miramar Road in the Mira Mesa Community Plan. Camino Santa Fe is currently constructed as a four-lane or six-lane divided roadway in the project area. Camino Santa Fe is currently constructed as a four-lane divided roadway from Sorrento Valley Boulevard to Top Gun Street. Bike lanes are provided and parking is generally prohibited. North of Trade Street, it is a six-lane divided roadway. Bike lanes are provided, parking is prohibited, and the posted speed limit is 50 mph. Between Trade Street and Carroll Road, it is a six-lane divided roadway. The speed limit is 40 mph in the northbound direction and 50 mph in the southbound direction, no bike lanes are provided, and parking is generally prohibited. South of Carroll Road it is a four-lane divided roadway. Midway between Carroll Road and Miramar Road, it widens to a six-lane divided roadway. Parking is allowed between Carroll Road and Miramar Road and the speed limit is 40 mph.

Nobel Drive is classified in the University Community Plan as a Six-Lane Primary Arterial between Genesee Avenue and I-805 and as a Four-Lane Major Street to between I-805 and Miramar Road. It is currently constructed to these classifications. The posted speed limit is 45 mph, and curbside parking is prohibited. A half diamond interchange is provided at I-805.

Eastgate Mall is classified in the University Community Plan as a Four-Lane Collector from Towne Centre Drive to Miramar Road. It is currently constructed as a four-lane divided roadway to the west of I-805. The posted speed limit on this segment is 40 mph, bike lanes are provided, and curbside parking is prohibited. Eastgate Mall narrows to a two-lane undivided roadway just before the overpass across I-805. The segment over the freeway is about 40 feet wide, including bike lanes, and no curbside parking. The posted speed limit on the overpass and continuing east of I-805 is 45 mph. Eastgate Mall is a two-lane undivided roadway with TWLTL between I-805 and Miramar Road. This segment is about 50 feet wide, including bike lanes. Parking is prohibited in the southbound direction and is allowed intermittently in the northbound direction. The southbound shoulder is unimproved (no curb/gutter) between the I-805 overpass and Miramar Road.

Carroll Road is classified in the Mira Mesa Community Plan as a Two-Lane Collector from Carroll Canyon Road to Nancy Ridge Drive and as a Four-Lane Collector from Nancy Ridge Drive to Miramar

Road. Carroll Road is currently a two-lane roadway through the study area. Bike routes are provided on all segments and curbside parking is allowed. It is constructed as a two-lane undivided roadway with a TWLTL between Carroll Canyon Road and Rehco Road. The posted speed limit on this segment is 45 mph, with cautionary speeds of 30 to 40 mph on sharp curves. Carroll Road is a two-lane undivided roadway between Rehco Road and Camino Santa Fe. The speed limit is reduced to 35 mph, and the measured road width is 50 feet. Carroll Road is a two-lane undivided roadway with TWLTL between Camino Santa Fe and Miramar Road. The posted speed limit remains as 35 mph.

Pacific Heights Boulevard is classified in the Mira Mesa Community Plan as a Four-Lane Major Street. It is currently constructed to these classifications. It is a four-lane divided roadway with a measured curb-to-curb width of about 84 feet. The posted speed limit is 40 mph and curbside parking is permitted.

Maya Linda Road is classified in the Mira Mesa Community Plan as a Two-Lane Collector. It is currently constructed to this classification. Maya Linda Road is a two-lane undivided roadway from Black Mountain Road to its terminus just north of Gold Coast Road where it forms a cul-de-sac. The posted speed limit is 25 mph, and curbside parking is generally allowed.

Kearny Villa Road is classified in the Mira Mesa Community Plan as a Six Lane Major Arterial from Black Mountain Road/Carroll Centre Road to south of Miramar Road and a Four Lane Major Arterial from Miramar Road to SR 163. It is currently functioning as a 4-lane Major Arterial from Black Mountain Road/Carroll Centre Road to Miramar Road and as a 4-lane Prime Arterial from Miramar Road to SR 163. Kearny Villa Road south of Miramar Road to SR 163 is a high-speed roadway segment with a posted speed limit of 65 mph serving as a parallel route to I-15 with a raised median and bike lanes.

Activity Road is classified in the Mira Mesa Community Plan as a Two-Lane Collector. It is currently constructed to a two-lane undivided roadway with a TWLTL. No bike lanes or bus stops are provided. Parking is generally provided.

Flanders Drive is classified in the Mira Mesa Community Plan as a Four-Lane Collector from Mira Mesa Boulevard to just east of Camino Santa Fe and as a Two-Lane Collector from just east of Camino Santa Fe to the terminus of the roadway. Currently, Flanders Drive is constructed as a four-lane undivided roadway between Mira Mesa Boulevard and Camino Santa Fe. A bus stop is provided at the Flanders Drive and Camino Santa Fe intersection. Parking is generally prohibited and bike lanes are provided. From Camino Santa Fe to the eastern terminus of the roadway, Flanders Drive is currently constructed as a two-lane undivided roadway.

Gold Coast Drive is classified in the Mira Mesa Community Plan as a Two-Lane Collector. It is currently constructed to a two-lane undivided roadway. No bike lanes are provided, and parking is generally allowed. The posted speed limit is 25 mph. Bus stops are provided at numerous locations along Gold Coast Drive in the project area.

Hillery Drive is classified in the Mira Mesa Community Plan as a Two-Lane Collector west of Black Mountain Road and a Four-Lane Collector east of Black Mountain Road. Currently, Hillery Drive is constructed to a two-lane undivided roadway west of Black Mountain Road. No bike lanes or bus stops are provided, and parking is generally allowed. East of Black Mountain Road, Hillery Drive is currently constructed as a two-lane undivided roadway with a TWLTL. Bike lanes are provided and parking is generally prohibited.

Jade Coast Drive is an unclassified roadway in the Mira Mesa Community Plan. It is currently constructed as a two-lane undivided roadway. No bike lanes or bus stops are provided, and parking is generally allowed.

Jade Coast Road is an unclassified roadway in the Mira Mesa Community Plan. It is currently constructed as a two-lane undivided roadway. No bike lanes or bus stops are provided, and parking is generally allowed.

Miralani Drive is an unclassified roadway in the Mira Mesa Community Plan. It is currently constructed as a two-lane undivided roadway. No bike lanes or bus stops are provided, and parking is generally allowed.

Reagan Road is classified in the Mira Mesa Community Plan as a Two-Lane Collector. It is currently constructed as a two-lane undivided roadway. No bike lanes are provided, and parking is generally allowed. A bus stop is provided at the intersection of Reagan Road and Camino Ruiz.

Scranton Road is classified in the Mira Mesa Community Plan as a Four-Lane Major between Mira Mesa Boulevard and Mira Sorrento Place and as a Four-Lane Collector north of Mira Sorrento Place. Currently, Scranton Road is constructed as a five-lane undivided roadway between Mira Mesa Boulevard and Mira Sorrento Place. Parking is prohibited. No bike lanes or bus stops are provided. North of Mira Sorrento Place, Scranton Road is constructed as a two-lane undivided roadway. No bike lanes are provided, and parking is generally allowed. Bus stops are provided periodically along Scranton Road in the project vicinity.

Westonhill Drive is classified in the Mira Mesa Community Plan as a Two-Lane Collector. It is currently constructed as a two-lane undivided roadway. No bike lanes are provided, and parking is generally allowed. Bus stops are provided in the project study area at Mira Mesa Boulevard, Hebrides Drive, and Gold Coast Drive.

Vista Sorrento Parkway is classified in the Mira Mesa Community Plan as a Four-Lane Collector. It is currently constructed to a three-lane undivided roadway with a TWLTL. Bike lanes are provided, and parking is generally prohibited.

EXISTING MINING TRAFFIC

The Stone Creek project site is the location of an on-going resource extraction operation for the mining and processing of sand and gravel, which operates under the 1981 CUP/Reclamation Plan. Regional access to the mining operations is provided by I-15, SR 163, and I-805. Primary site access is provided off of Maya Linda Road/Black Mountain Road. A secondary access point is located at Royal Ann Avenue and Jade Coast Drive; however, this access is typically closed and used on occasion to transport heavy equipment to the western portion of the site.

Existing Trip Generation

Existing traffic operations associated with the on-going mining activities were obtained from the mine operator. On a typical day of operations, there are about 50 employees. Approximately one-half of the employees leave the plant and return during the day for discretionary trips such as lunch, errands, etc. Additionally, there are about 15 people that visit the plant site on a daily basis for deliveries, such as Federal Express, UPS, etc. Based on this information, the daily passenger car/light truck trips is 180 Average Daily Traffic (ADT) as shown in the breakdown below:

Passenger Cars/Light Truck Trip Generation		
50 employees x 2 trips/employee	=	100 ADT
25 mid-day discretionary employee trips x 2 trips/employee	=	50 ADT
15 other visitors/deliveries x 2 trips/visitors	=	30 ADT
		180 ADT

Traffic counts were conducted at the mining operations driveway located off of Maya Linda Road/Black Mountain Road. Based on these counts, the mining operations were shown to generate approximately 2,640 ADT, accounting for passenger cars, light delivery trucks, and heavy trucks accessing the site. Considering the passenger cars/light delivery trucks account for 180 ADT, or seven percent of the total traffic, the balance of the traffic can be attributed to heavy trucks. This results in 93 percent heavy trucks or 2,460 ADT.

As shown in Table 5.2-2, *Mining Operations – Existing Trip Generation*, using a passenger car equivalent (PCE) factor for the heavy truck traffic, the existing mining operations are calculated to generate 5,100 ADT with 210 inbound and 164 outbound trips occurring in the morning (AM) peak hour and 13 inbound and 25 outbound trips occurring in the afternoon (PM) peak hour. These calculations support observed activity at the site, which experiences heavier traffic volumes in the morning than in the evening.

Table 5.2–2. *Mining Operations—Existing Trip Generation*

Land Use: Extractive Industry	PCE	Factored Daily Trip Ends (ADTs) [b]	AM Peak Hour Trips		PM Peak Hour Trips	
			In	Out	In	Out
Heavy Trucks	2.0[a]	4,920	203	158	12	24
Passenger Cars/Light Trucks	1.0	180	8	6	1	1
Total		**5,100**	**210**	**164**	**13**	**25**

Footnotes:

a. Based on the *Highway Capacity Manual's Exhibit 21-8*, a Passenger Car Equivalent (PCE) factor of 2.0 was applied to traffic data collected at the driveway. The 2.0 factor is an average of the 1.5 PCE for *level terrain* and the 2.5 PCE for *rolling terrain* since the roadway characteristics within the project area exhibit both these characteristics.

b. ADT derived from peak hour traffic counts, assuming an 8% AM peak and 10% PM peak relationship.

General Notes:

1. LLG conducted peak hour traffic counts at the Vulcan Driveway/Black Mountain Road intersection in December 2005.
2. 93% of the total trips were assumed as heavy trucks and 7% as passenger cars/light trucks based on information provided by Vulcan Materials Company.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

Existing weekday AM and PM peak hour traffic volumes were collected at key intersections to capture commuter activity. The AM and PM peak hour manual turning movement counts were conducted while University of California San Diego (UCSD) and Miramar College were in session. Adjustments were made to intersections affected by the extension of Mira Sorrento Place and turn restrictions at Mira Mesa Boulevard/Westonhill Drive that occurred post-data collection. Figure 5.2-2, *Existing Daily Traffic Volumes*, illustrates the existing average daily traffic volumes. Existing street segment ADT volumes were collected in April 2006 while UCSD and Miramar College were in session. Supplemental count data was obtained from City records and other area traffic studies completed by LLG Engineers, such as the I-805/Mira Mesa Boulevard/Sorrento Valley Road Interchange and PETCO Headquarters. Existing counts were reviewed to determine the continuing validity of the counts. The counts were originally reviewed with 2008/09 data and then reevaluated using 2014 data and 2017 data. The reviews determined that the traffic counts were conducted consistent with other traffic studies in the area, and generally higher than current traffic volumes potentially as a result of the economic recession. It was therefore concluded that the existing counts remain conservative relative to present day traffic.

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the

worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

Existing Intersection Operations

Table 5.2-3, *Existing Intersection Operations*, reports the intersection operations during peak hour conditions under existing conditions. The intersections typically operate between LOS C and E. Such operations are typical of intersections located in a densely developed suburban area. The following intersections are calculated to operate at LOS E or F:

- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM peak period*
- Vista Sorrento Parkway/I-805 Northbound Ramps/Mira Sorrento—*LOS F–PM peak period*
- Scranton Road/Mira Mesa Boulevard—*LOS E–PM peak period*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–PM peak period*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–PM peak period*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Parkdale Avenue/Flanders Drive—*LOS E–AM peak period*
- Towne Center Drive/La Jolla Village Drive—*LOS F-AM and LOS E-PM peak periods*
- Camino Santa Fe/Miramar Road—*LOS E–AM and PM peak periods*
- Kearny Villa Road/Miramar Road—*LOS E–AM and PM peak periods*
- Black Mountain Road/Park Village Road—*LOS E–AM peak period*
- Black Mountain Road/Carroll Centre Road/Kearny Villa Road—*LOS E–AM peak period*
- Black Mountain Road/Activity Road—*LOS E–PM peak period*

Existing Street Segment Operations

Table 5.2-4, *Existing Street Segment Operations*, reports existing street segment operations on a daily basis. The majority of street segments operate at LOS D or better under existing conditions. The following segments are calculated to operate at LOS E or F:

- Mira Mesa Boulevard from I-805 to Scranton Road—*LOS F*
- Mira Mesa Boulevard, from Camino Santa Fe to Parkdale Avenue—*LOS E*
- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Mira Mesa Boulevard from Black Mountain Road to Westview Parkway—*LOS F*
- Mira Mesa Boulevard from Westview Parkway to I-15—*LOS E*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*

- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS E*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Carroll Road to Cabot Drive—*LOS F*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS F*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive—*LOS F*
- Westonhill Drive from Hillery Drive to Flanders Drive—*LOS E*
- Eastgate Mall from I-805 to Miramar Road—*LOS F*

Existing Freeway Ramp Meter Operations

As a City standard of practice, ramp meter observations were conducted at the metered interchanges including the I–805/Mira Mesa Boulevard/Sorrento Valley Road, I-805/La Jolla Village Drive/Miramar Road, I-805/Nobel Drive, I-15/Mira Mesa Boulevard, I–15/Carroll Canyon Road, I–15/Miramar Road/Pomerado Road, and SR 163/Kearny Villa Road. The data was collected in November 2010 during typical commuter peak periods. The maximum delays and queues were observed for the single occupancy lanes and are represented in Table 5.2-5, *Observed Ramp Meter Operations*. The purpose of the observations is to help understand the operations and calibrate the near-term ramp meter analysis. The standard, uncalibrated ramp meter analysis tends to produce unrealistic results using the most restrictive discharge rates. The long-term analysis remained uncalibrated since it is difficult to predict future operations based on existing performance.

As shown in Table 5.2-5, all ramp meters operate at acceptable levels (delays of 15 minutes or less). The most critical ramp meter locations are along the I-805 corridor in the PM peak hours at La Jolla Village Drive and Nobel Drive with delays ranging between eight and ten minutes.

Table 5.2-6a, *Existing Ramp Meter Operations – Fixed Rate*, presents the results using the fixed rate approach. Table 5.2-6b, *Existing Ramp Meter Operations – Maximum Delay*, presents the results using the maximum delay approach. As shown in Tables 5.2-6a and 5.2-6b, all of the ramp meters are calculated to operate at acceptable levels (delay of 15 minutes or less).

Existing Freeway Segment Operations

Freeway segments were analyzed under existing conditions. As shown in Table 5.2-7, *Existing Freeway Segment Operations*, all the following segments were calculated to operate at LOS E or F:

- I-15, north of Mira Mesa Boulevard, *LOS E–AM (SB)*
- I-805 between Mira Mesa Boulevard and La Jolla Village Drive, *LOS F(0)–AM Northbound (NB) and LOS E–PM Southbound (SB)*
- I-805 between La Jolla Village Drive and Nobel Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- I-805 south of Nobel Drive, *LOS F(0)–AM (NB) and LOS F(0)–PM (SB)*

CUMULATIVE PROJECTS

Cumulative projects represent planned development that contributes to background cumulative traffic conditions for both the near-term and long-term scenarios. Cumulative projects were identified as *Cumulative Projects Not Completed or Partially Occupied* and *Projects Completed and Occupied*, as shown in Tables 5.2-8 and 5.2-9, respectively.

A review of cumulative projects was conducted as some projects have changed from their original application and new projects have been introduced since work began on the traffic study. The development intensity for a number of cumulative projects have been reduced since the time the Traffic Study began, resulting in a reduction of background ADT; while other more recent applications increased the background ADT within certain locations of the study area. All cumulative projects were assumed completed and fully occupied by Phase 1.

5.2.2 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

According to the City of San Diego's CEQA *Significance Determination Thresholds* report dated January 2011 and updated in 2016, a project is considered to have a significant impact if the new project traffic has decreased the operations of surrounding roadways by a City-defined threshold. For projects deemed complete on or after January 1, 2007, the City defined threshold by roadway type or intersection is shown in Table 5.2-10, *City of San Diego – Traffic Impact Significant Thresholds*. A significant impact can also occur if a project causes the Level of Service to degrade from D to E, even if the allowable increases in Table 5.2-10 are not exceeded. The most recent and more stringent significance criteria was used to determine the project's impacts. These criteria are generally reserved for projects deemed complete after January 1, 2007. Despite the Stone Creek project application being deemed complete prior to this date, the more conservative criteria was used.

An impact is designated either a "direct" or "cumulative" impact. According to the City's *Significance Determination Thresholds* report:

> *Direct* traffic impacts are those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but which are anticipated to be operational at that time (near-term).

Cumulative traffic impacts are those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (short-term cumulative) or when affected community plan area reaches full planned buildout (long-term cumulative).

It is possible that a project's near term (direct) impacts may be reduced in the long term, as future projects develop and provide additional roadway improvements (for instance, through implementation of traffic phasing plans). In such a case, the project may have direct impacts but not contribute considerably to a cumulative impact.

The project is responsible for identifying feasible measures needed to mitigate the impact to within the City thresholds, or the impact is considered significant and unmitigated.

Additionally, the following thresholds have been established to determine significant traffic impacts:

1. If any intersection, roadway segment, or freeway segment affected by a project would operate at LOS E or F under either direct or cumulative conditions, the impact would be significant if the project exceeds the thresholds shown in Table 5.2-10, above.
2. At any ramp meter location with delays above 15 minutes, the impact would be significant if the project exceeds the thresholds shown in Table 5.2-10, above.
3. If a project would add a substantial amount of traffic to a congested freeway segment, interchange, or ramp, the impact may be significant.
4. Addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp as shown in Table 5.2-10, above.
5. If a project would increase traffic hazards to motor vehicles, bicyclists or pedestrians due to proposed non-standard design features (e.g., poor sight distance, proposed driveway onto an access-restricted roadway), the impact would be significant. Note: analysts should refer readers to a discussion of this issue in the Health and Safety section of the environmental document.
6. If a project would result in the construction of a roadway which is inconsistent with the General Plan and/or a community plan, the impact would be significant if the proposed roadway would not properly align with other existing or planned roadways.
7. If a project would result in a substantial restriction in access to publicly or privately owned land, the impact would be significant.

ISSUE 1

Would the project result in:

- *Traffic generation in excess of specific community plan allocation?*
- *An increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street based on the table presented under Thresholds of Significance, above?*
- *Addition of substantial amount of traffic to a congested freeway segment, interchange, or ramp, as shown in the table under Thresholds of Significance, above?*
- *Substantial impact upon existing or planned transportation system?*
- *Substantial alterations to present circulation improvements including effects on existing public access to beaches, parks, or other open space areas?*

Significance thresholds:

- Any intersection, street segment, or freeway segment affected by a project would operate at LOS E or F, or the project would degrade the facility from LOS D to LOS E, under either direct or cumulative conditions, the impact would be significant if the project exceeds the thresholds shown in Table 5.2-10.
- At any ramp meter location with delays above 15 minutes, the impact would be significant if the project exceeds the thresholds shown in Table 5.2-10.
- The project would add a substantial amount of traffic to a congested freeway segment, interchange, or ramp as shown in Table 5.2-10.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would extend the 1981 CUP for 30 years from the date of project approval and make adjustments to the 1981 Reclamation Plan. Neither action would result in excess traffic generation, as project traffic would be minimal, related to the CUP/Reclamation Plan Amendment. Despite the CUP/Reclamation Plan Amendment not generating high traffic volumes, direct and cumulative impacts are expected given the current congestion in the Mira Mesa Community. Near-term (direct impacts) are expected along the Carroll Canyon Road corridor, between the project site and I-15. This area represents the key local and regional access to the site without Carroll Canyon Road being extended west after Year 2030. Cumulative impacts would be more substantial and are expected along the Carroll Canyon Road, Black Mountain Road, and Miramar Road corridors. Given the relatively low traffic volumes, particularly in the critical peak hours, impacts are not expected to be significant or alter circulation patterns within the Community. All impacts would be temporary in nature, since the CUP/Reclamation Plan Amendment traffic would reduce and ultimately be eliminated as the activity would eventual come to a close for the site.

Stone Creek Project

Traffic impacts resulting from the Stone Creek project are presented in Table 5.2-50, *Traffic Impacts by Phase and Proposed Mitigation*, which appears at the end of the discussion of this issue. For the Existing + Project scenario, impacts and mitigation would be the same as the Phase 1 (Year 2020) scenario.

Existing + Project Analysis

Existing + Project Intersection Operations

Intersection capacity analyses were conducted for the study intersections under Existing + Project conditions. Table 5.2-11, *Existing + Project Intersection Operations*, reports intersection operations during the peak hours. The following intersections are calculated to operate at LOS E or F under Existing + Project conditions:

- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM peak period*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS F–PM peak period*
- Scranton Road/Mira Mesa Boulevard—*LOS E–PM peak period*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–PM peak period*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–PM peak period*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Parkdale Avenue/Flanders Drive—*LOS E–AM peak period*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and LOS E–PM peak periods*
- Camino Santa Fe/Miramar Road—*LOS E–AM and PM peak periods*
- Kearny Villa Road/Miramar Road—*LOS E–AM and PM peak periods*
- Black Mountain Road/Park Village Road—*LOS E–AM peak period*
- Black Mountain Road/Carroll Centre Road/Kearny Villa Road—*LOS E–AM peak period*
- Black Mountain Road/Activity Road—*LOS E–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. The Level of Service is degraded at certain intersections. One significant direct impact is calculated at the Kearny Villa Road/Miramar Road intersection, during both AM and PM peak periods.

Existing + Project Street Segment Operations

Existing + Project street segment analyses were conducted for roadways in the study area. Table 5.2-12, *Existing + Project Street Segment Operations*, reports Existing + Project street segment operations. The following street segments are calculated to operate at LOS E or F:

- Mira Mesa Boulevard from I-805 to Scranton Road—*LOS F*
- Mira Mesa Boulevard from Camino Santa Fe to Parkdale Avenue—*LOS E*
- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Mira Mesa Boulevard from Black Mountain Road to Westview Parkway—*LOS F*
- Mira Mesa Boulevard from Westview Parkway to I-15—*LOS E*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS E*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Carroll Road to Cabot Drive—*LOS F*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS F*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive—*LOS F*
- Westonhill Drive from Hillery Drive to Flanders Drive—*LOS E*
- Eastgate Mall from I-805 to Miramar Road—*LOS F*

The addition of project traffic is calculated to increase the volume to capacity (V/C) ratio on most segments. Per the City's significance criteria and analysis methodology, one significant direct project impact is calculated for Carroll Canyon Road from Black Mountain Road to I-15.

Existing + Project Arterial Levels of Service

Arterial analysis was performed for Gold Coast Drive between Westonhill Drive and Black Mountain Road under Existing + Project conditions. As shown in Table 5.2-13, *Existing + Project Arterial Operations*, under Existing + Project conditions, during the AM and PM peak periods, the roadway segment operates at LOS C in the eastbound direction and LOS F in the westbound direction. With the addition of project traffic, no change in the level of service is calculated. There is a slight decrease in speed during the AM peak period; however, the decrease is within the allowable threshold per the significance criteria. As such, no significant arterial impact is calculated under Existing + Project conditions as the decrease in speeds does not exceed the allowable thresholds,

adjacent intersections were not impacted and operate at an acceptable LOS (LOS D or better), and the street segment is built to its ultimate classification per the Mira Mesa Community Plan.

Existing + Project Freeway Ramp Meter Operations

Table 5.2-14a, *Existing + Project Ramp Meter Operations – Fixed Rate*, presents the results using the fixed rate approach ramp meter analyses. Table 5.2-14b, *Existing + Project Ramp Meter Operations – Maximum Delay*, presents the results using the maximum delay approach. As shown in Tables 5.2-14a and 5.2-14b*,* no significant impacts are calculated under Existing + Project conditions.

Existing + Project Freeway Segment Operations

Freeway segments were analyzed under Existing + Project conditions. As shown in Table 5.2-15a, *Existing + Project Freeway Segment Operations – AM Peak Hour*, and Table 5.2-15b, *Existing + Project Freeway Segment Operations – PM Peak Hour*, the following segments were calculated to operate at LOS E or F:

I-15

- North of Mira Mesa Boulevard, *LOS E AM (SB)*

I-805

- Mira Mesa Boulevard to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and LOS F(0)–PM (SB)*
- I-805 south of Nobel Drive, *LOS F(0)–AM (NB) and LOS F(0)–PM (SB)*

With the addition of project trips, no significant direct project impacts were calculated on the freeway segments.

Phase 1 Analysis (Year 2020)

Phase 1 of the project involves the development of approximately 165,000 square feet of light industrial space. Table 5.2-16, *Phase 1 Local Improvements,* identifies Phase 1 planned improvements within the study area.

Additionally, SANDAG has identified future improvements to I-15 within the project area. The Mira Mesa/Scripps Ranch Direct Access Ramp (DAR) and Transit Station (TS) at Hillery Drive (north side of Miramar College), have been completed. These improvements are based upon "Reasonably Expected Revenue" scenario totaling more than $580 million for the development, operation, and maintenance of the transportation facilities and services in the Regional Transportation Plan. This assumes both current sources of transportation revenue as well as future revenue sources such as an extension of the local TransNet transportation sales tax measure set to expire in 2048. It also assumes attracting additional Federal funds for major capital projects, and increase in State and Federal gas taxes based on historical trends.

For Phase 1 (Year 2020), the project would complete the following improvements. These improvements do not represent project mitigation:

- Construct Maya Linda Road–Carroll Canyon Road to Black Mountain Road as a 4-lane Major with Class II bike lanes
- Construct Maya Linda Road/Project Driveway G intersection
- Construct Maya Linda Road/Project Driveway H intersection
- Reconfigure west leg of Maya Linda Road/Black Mountain Road intersection to provide dual left-turn lanes, a thru lane, a right-turn lane with right-turn overlap phase, and a second northbound left-turn lane.

Figure 5.2-3, *Phase 1 Study Area Intersections,* shows the Phase 1 study intersections Figure 5.2-4, *Phase 1 Conditions Diagram (Roadway Segments and Ramp Meters)*, present the roadway cross-sections and traffic control with the planned roadway improvements expected to be in place for Phase 1 conditions.

Phase 1 (Year 2020) Project Traffic – Project Traffic Generation

Trip generation estimates for the proposed development were based on *The City of San Diego Trip Generation Manual, May 2003*. For Phase 1 of the project, the specific land use designation used for the trip generation was "Light Industrial Park" as this best fits the description of this phase of the project. The site currently generates traffic due to on-going mining operations, but was not taken into account since operations are expected to continue during this timeframe. The existing mining operations are estimated to generate 5,100 ADT.

Table 5.2-17, *Phase 1 Project Trip Generation*, tabulates the resultant project traffic generation. The project is calculated to generate approximately 2,475 cumulative ADT with 245 inbound and 27 outbound cumulative trips during the AM peak hour and 59 inbound and 238 outbound cumulative trips during the PM peak hour. Since there are no pass-by trips in Phase 1 for the project, the driveway trips are the same as the cumulative trips, as shown in Table 5.2-17. Figure 5.2-5, *Phase 1 Project Traffic Distribution (Composite)*, presents the estimated Phase 1 project traffic distribution for the project in Phase 1 scenario. Figure 5.2-6, *Phase 1 Cumulative Project Trips (Daily Volumes)*, show the cumulative project trips on a daily basis.

Figure 5.2-7, *Phase 1 without Project Traffic Volumes (Daily Volumes)* illustrates Phase 1 "without Project" traffic volumes on a daily basis. Figure 5.2-8, *Phase 1 with Project Traffic Volumes (Daily Volumes)*, illustrates Phase 1 "with Project" traffic volumes on a daily basis.

Phase 1 (Year 2020) Intersection Operations

Intersection capacity analyses were conducted for the study intersections under Phase 1 "without Project" and Phase 1 "with Project" conditions. Table 5.2-18, *Phase 1Intersection Operations*, reports intersection operations during the peak hours. As traffic volumes are forecasted to increase,

saturated intersections in the near-term continue as such in Phase 1. The following intersections are calculated at LOS E or F in Phase 1 "without Project":

- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM peak period*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS E–AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*LOS F–AM and PM peak period*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS F–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Parkdale Avenue/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Parkdale Avenue/Flanders Drive—*LOS E–AM peak period*
- I-15 Southbound Ramps/Carroll Canyon Road—*LOS E–AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*LOS E–AM and PM peak periods*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and PM peak periods*
- Camino Santa Fe/Miramar Road—*LOS F–AM and PM peak periods*
- Camino Santa Fe/Carroll Road—*LOS E–PM peak period*
- Black Mountain Road/Miramar Road—*LOS E–AM peak period*
- Kearny Villa Road/Miramar Road—*LOS F–AM and PM peak periods*
- Willow Creek Road/Pomerado Road—*LOS E–PM peak period*
- Camino Ruiz/Gold Coast Drive—*LOS E–AM peak period*
- Camino Ruiz/Jade Coast Road—*LOS F–AM and LOS E–PM peak periods*
- Camino Ruiz/Miralani Drive—*LOS F–AM peak period*
- Black Mountain Road/Park Village Road—*LOS E–AM peak period*
- Black Mountain Road/Capricorn Way—*LOS E–AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*LOS E–AM and PM peak periods*
- Black Mountain Road/Activity Road—*LOS E–PM peak period*
- Kearny Villa Road Southbound Ramps/Miramar Way—*LOS E–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. Significant direct impacts are calculated at the following intersections:

- I-15 Southbound Ramps/Carroll Canyon Road—*PM peak period*
- I-15 Northbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- Kearny Villa Road/Miramar Road—*AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*AM and PM peak periods*

Phase 1 (Year 2020) Street Segment Operations

Table 5.2-19, *Phase 1 Street Segment Operations*, reports Phase 1 street segment operations. The following street segments are calculated to operate at LOS E or F without project traffic:

- Mira Mesa Boulevard from Scranton Road to Pacific Heights Boulevard—*LOS E*
- Mira Mesa Boulevard from Camino Santa Fe to Parkdale Avenue—*LOS F*
- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Mira Mesa Boulevard from Black Mountain Road to Westview Parkway—*LOS F*
- Mira Mesa Boulevard from Westview Parkway to I-15—*LOS E*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS F*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS F*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Camino Santa Fe to Carroll Road—*LOS F*
- Miramar Road from Carroll Road to Cabot Drive—*LOS F*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS F*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive—*LOS F*
- Westonhill Drive from Hillery Drive to Flanders Drive—*LOS E*
- Black Mountain Road north of Park Village Road—*LOS E*
- Black Mountain Road from Park Village Road to Mercy Road—*LOS E*
- Eastgate Mall from I-805 to Miramar Road—*LOS F*

The addition of project traffic is calculated to increase the V/C ratio on most segments. A significant direct project impact is calculated at the following street segment.

- Carroll Canyon Road from Black Mountain Road to I-15

Arterial Levels of Service

Arterial analysis was performed for Gold Coast Drive between Westonhill Drive and Black Mountain Road under Phase 1 conditions. As shown in Table 5.2-20, *Phase 1 Arterial Operations*, under Phase 1 conditions, during the AM and PM peak periods, the roadway segment operates at LOS D or better in the eastbound and westbound directions. With the addition of project traffic, no change in the

level of service is calculated. As such, no significant arterial impact is calculated under Phase 1 conditions as the decrease in speeds does not exceed the allowable thresholds, adjacent intersections were not impacted and operate at an acceptable LOS (LOS D or better), and the street segment is built to its ultimate classification per the adopted Community Plan.

Phase 1 (Year 2020) Freeway Ramp Meter Operations

Table 5.2-21a, *Phase 1 Ramp Meter Operations – Fixed Rate*, presents the results using the fixed rate approach. Table 5.2-21b, *Year 2015 Ramp Meter Operations – Maximum Delay*, presents the results using the maximum delay approach. As shown in Tables 5.2-21a and 5.2-21b, no significant impacts are calculated under Phase 1 conditions.

Phase 1 (Year 2020) Freeway Segment Operations

As shown in Table 5.2-22a, *Phase 1 Freeway Segment Operations – AM Peak Hour*, and Table 5.2-22b, *Phase 1 Freeway Segment Operations – PM Peak Hour*, the following segments were calculated to operate at LOS E or F without the project:

SR 163

- North of Kearny Villa Road, *LOS F(0)–AM (SB) and LOS E–PM (SB)*
- South of Kearny Villa Road, *LOS F(0)–AM (SB) and LOS E–PM (SB)*

I-15

- North of Mira Mesa Boulevard, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Mira Mesa Boulevard to Carroll Canyon Road, *LOS F(0)–AM (SB)*
- Carroll Canyon Road to Miramar Road, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Miramar Road to Miramar Way, *LOS E/F(0)–AM (NB/SB) and LOS F(0)–PM (SB)*
- Miramar Way to SR 163, *LOS E/F(0)–AM (NB/SB) and LOS F(0)–PM (SB)*

I-805

- North of Mira Mesa Boulevard, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- Mira Mesa Boulevard to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS F(0)–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and LOS F(0)–PM (SB)*
- I-805 south of Nobel Drive, *LOS F(2)–AM (NB) and LOS F(1)–PM (SB)*

With the addition of Year 2020 Phase 1 project trips, no significant direct project impacts were calculated on the freeway segments.

Phase 2A (Year 2030A) Analysis

Phase 2A of the project involves the development of approximately 250,000 square feet of light industrial park; approximately 135,000 square feet of light industrial/business park; and up to 585 dwelling units of multi-family residential. Table 5.2-23, *Phase 2A Local Improvements*, identifies Phase

2A planned improvements within the study area. The planned improvements assumed in the previous scenarios were also assumed in Phase 2A.

SANDAG has identified future improvements to both I-805 and I-15 within the project area, per the Regional Transportation Plan. SANDAG's Regional Transportation Plan has identified the introduction of four managed lanes on I-805 from SR-905 to I-5. The managed lanes on I-805 will be constructed as a buffer separated facility. The managed lanes are expected to be high occupancy toll (HOT) lanes where solo drivers would be required to pay a per-trip fee to use the lanes. The use of the managed lanes would be free to carpools, vanpools, and buses. Excess capacity would be sold to other vehicles through a variable pricing formula to ensure free flow conditions. This dynamic pricing system is currently in effect on the I-15 express lanes. As part of this project, additional general purpose lanes and DARs are proposed. The project is also planned to accommodate a continuous BRT service to be operated on the managed lanes. Preliminary engineering and environmental studies are currently underway, and the BRT service is scheduled as part of SANDAG's "Early Action Projects." Improvements identified as part of I-805 South (Palomar Street to I-15) and I-805 North (SR-52 to Carroll Canyon Road except the I-805/SR-52 Connector) will be built by 2020. The improvements at Carroll Canyon Road and the improvements to the north on I-805 (within the project area) were completed in April 2014.

These improvements are based upon "Reasonably Expected Revenue" scenario totaling more than $580 million for the development, operation, and maintenance of the transportation facilities and services in the Regional Transportation Plan. This assumes both current sources of transportation revenue as well as future revenue sources such as an extension of the local TransNet transportation sales tax measure set to expire in 2048. It also assumes attracting additional Federal funds for major capital projects, and increase in State and Federal gas taxes based on historical trends.

For Phase 2A, it is assumed that the project would complete the following improvements as part of the project's proposed development.

- Construct Carroll Canyon Road – Camino Ruiz to Black Mountain Road as a 6-lane Major from Camino Ruiz to Maya Linda Road with Class II bike lanes and 4-lane Major Street from Maya Linda Road to Black Mountain Road with Class II bike lanes.
- Construct the east leg of the Carroll Canyon Road/Camino Ruiz intersection
- Construct Carroll Canyon Road/Project Driveway C intersection
- Construct Carroll Canyon Road/Project Driveway D intersection
- Construct Carroll Canyon Road/Project Driveway E intersection
- Construct Carroll Canyon Road/Project Driveway F intersection
- Construct the east leg of the Camino Ruiz/Project Driveway A intersection. The east leg shall provide a dedicated left, thru and right-turn lane.
- Construct the west leg of the Carroll Canyon Road/Black Mountain Road intersection.
- Provide access for a Transit Route by reserving 35-feet along Carroll Canyon Road for use by SANDAG.

- Implement TDM plan as described in Section 22.0 of the Traffic Impact Study.

Figure 5.2-9, *Phase 2A Study Area Intersections*, shows the Phase 2A study intersections. Figure 5.2-10, *Phase 2A Conditions Diagram (Roadway Segments and Ramp Meters)*, present the roadway cross-sections and traffic control with the planned roadway improvements expected to be in place for Phase 2A conditions.

Phase 2A (Year 2030A) Conditions – Project Traffic Generation and Distribution
Table 5.2-24, *Phase 2A Project Trip Generation*, tabulates the project traffic generation for Phase 2A. Figure 5.2-11, *Phase 2A Project Traffic Distribution (Composite)*, presents the estimated project traffic distribution under Phase 2A. Figure 5.2-12, *Phase 2A Cumulative Project Trips (Daily Volumes)*, show the cumulative project trips on a daily basis.

In Phase 2A, the project is projected to generate approximately 11,299 cumulative ADT with 822 inbound and 317 outbound cumulative trips during the AM peak hour and 398 inbound and 850 outbound cumulative trips during the PM peak hour. Since there are no pass-by trips in Phase 2A for the project, the driveway trips are the same as the cumulative trips, as shown in Table 5.2-24.

Phase 2A (Year 2030A) Traffic Volumes
Phase 2A traffic volumes were forecasted for the study area based on the SANDAG Series 11 model and validated with Series 12. Figure 5.2-13, *Phase 2A without Project Traffic Volumes (Daily Volumes)*, illustrate Phase 2A "without Project" traffic volumes on a peak hour and daily basis. Figure 5.2-14, *Phase 2A with Project Traffic Volumes (Daily Volumes)*, illustrate Phase 2A "with Project" traffic volumes on a peak hour and daily basis.

Phase 2A (Year 2030A) Intersection Operations
Intersection capacity analyses were conducted for the study intersections under Phase 2A "Without Project" and Phase 2A "With Project" conditions. Table 5.2-25, *Phase 2A Intersection Operations*, reports intersection operations during the peak hours.

As traffic volumes are forecasted to increase, saturated intersections in the near-term continue as such in Phase 2A. The following intersections are calculated at LOS E or F in Phase 2A "without Project":

- I-805 Southbound Ramps/Mira Mesa Boulevard—*LOS E–AM peak period*
- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM peak period*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS E–AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak period*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS F–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Parkdale Avenue/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*

- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- I-15 Northbound Ramps/Mira Mesa Boulevard—*LOS E–PM peak period*
- Scripps Ranch Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Parkdale Avenue/Flanders Drive—*LOS F–AM peak period*
- Black Mountain Road/Carroll Canyon Road—*LOS E–PM peak period*
- I-15 Southbound Ramps/Carroll Canyon Road—*LOS F–AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*LOS F–AM and LOS E–PM peak periods*
- Judicial Drive/Eastgate Mall—*LOS E–PM peak period*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and PM peak periods*
- I-805 Southbound Ramps/La Jolla Village Drive—*LOS E–AM peak period*
- Camino Santa Fe/Miramar Road—*LOS F–AM and LOS E–PM peak periods*
- Camino Santa Fe/Carroll Road—*LOS E–PM peak period*
- Kearny Villa Road/Miramar Road—*LOS F–AM and PM peak periods*
- Kearny Mesa Road/Miramar Road—*LOS E–AM peak period*
- Willow Creek Road/Pomerado Road—*LOS E–PM peak period*
- Camino Ruiz/Gold Coast Drive—*LOS E–AM peak period*
- Camino Ruiz/Jade Coast Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Park Village Road—*LOS E–AM and PM peak periods*
- Black Mountain Road/Capricorn Way—*LOS E–AM and LOS F–PM peak periods*
- Black Mountain Road/Hillery Drive—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Activity Road—*LOS E–PM peak period*
- Kearny Villa Road Southbound Ramps/Miramar Way—*LOS E–PM peak period*
- Kearny Villa Road Northbound Ramps/Miramar Way—*LOS E–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. The Level of Service is degraded at certain intersections. Significant cumulative impacts are calculated at the following intersections:

- I-805 Northbound Ramps/Vista Sorrento Parkway—*PM peak period*
- Black Mountain Road/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Southbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- Camino Santa Fe/Miramar Road—*PM peak period*
- Kearny Villa Road/Miramar Road—*AM and PM peak periods*
- Camino Ruiz/Gold Coast Drive—*AM peak period*
- Camino Ruiz/Jade Coast Road—*AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*AM peak period*

Phase 2A (Year 2030A) Street Segment Operations

Table 5.2-26, *Phase 2A Street Segment Operations*, reports Phase 2A street segment operations. The following street segments are calculated to operate at LOS E or F without project traffic:

- Mira Mesa Boulevard from Camino Santa Fe to Parkdale Avenue—*LOS F*
- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS F*
- Carroll Canyon Road from I-15 to Businesspark Avenue—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS F*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Camino Santa Fe to Carroll Road—*LOS E*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive—*LOS F*
- Westonhill Drive from Hillery Drive to Flanders Drive—*LOS E*
- Black Mountain Road north of Park Village Road—*LOS F*
- Black Mountain Road from Park Village Road to Mercy Road—*LOS E*

The addition of project traffic is calculated to increase the V/C ratio on most segments. Per the City's significance criteria and analysis methodology, a significant cumulative project impact is calculated at the following street segments:

- Carroll Canyon Road from Black Mountain Road to I-15
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Arterial Levels of Service

Arterial analysis was performed for Gold Coast Drive between Westonhill Drive and Black Mountain Road under Phase 2A conditions. As shown in Table 5.2-27, *Phase 2A Arterial Operations*, under Phase 2A conditions, during the AM and PM peak periods, the roadway segment operates at LOS D or better in the eastbound and westbound directions. With the addition of project traffic, no change in the level of service or speed is calculated. As such, *no* significant arterial impact is calculated under Phase 2A conditions as the decrease in speeds does not exceed the allowable thresholds, adjacent intersections were not impacted and operate at an acceptable LOS (LOS D or better) and the street segment is built to its ultimate classification per the adopted Community Plan.

Phase 2A (Year 2030A) Freeway Ramp Meter Operations

Table 5.2-28a, *Phase 2A Ramp Meter Operations – Fixed Rate*, presents the results using the fixed rate approach. Table 5.2-28b, *Phase 2A Ramp Meter Operations – Maximum Delay*, presents the results using the maximum delay approach.

According to the "Fixed-Rate" method, the project is calculated to have a significant "cumulative" project impact at the following ramp meter locations.

- Eastbound and Westbound Nobel Drive to Southbound I-805—*PM peak period*
- Eastbound Mira Mesa Boulevard to Northbound I-15—*PM peak period*
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15—*AM peak period*
- Northbound and Southbound Kearny Villa Road to Southbound SR 163—*PM peak period*

According to the "Maximum Delay" method, the project is calculated to have a significant "cumulative" project impact at the following ramp meter locations.

- Eastbound Mira Mesa Boulevard to Northbound I-15—*PM peak period*
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15—*AM peak period*

Phase 2A (Year 2030A) Freeway Segment Operations

As shown in Table 5.2-29a, *Phase 2A Freeway Segment Operations – AM Peak Hour*, and Table 5.2-29b, *Phase 2A Freeway Segment Operations – PM Peak Hour*, the following segments were calculated to operate at LOS E or F without the project:

SR 163

- North of Kearny Villa Road, *LOS F(0)–AM (SB) and PM (SB)*
- South of Kearny Villa Road, LOS F(0)–AM (SB) and LOS E/F(0)–PM (NB/SB)

I-15

- North of Mira Mesa Boulevard, *LOS F(1)–AM (SB) and LOS F(0)/E–PM (NB/SB)*
- Mira Mesa Boulevard to Carroll Canyon Road, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Carroll Canyon Road to Miramar Road, *LOS F(0)–AM (SB) and PM (NB)*

- Miramar Road to Miramar Way, *LOS F(0)–AM (NB&SB) and PM (SB)*
- Miramar Way to SR 163, *LOS E/F(0)–AM (NB/SB) and LOS F(0)–PM (SB)*

I-805

- Mira Mesa Blvd. to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- South of Nobel Drive, *LOS F(0)–AM (NB) and PM (SB)*

A significant cumulative project impact was calculated at the following freeway segments:

SR 163

- South of Kearny Villa Road, *AM and PM peak periods*

I-15

- North of Mira Mesa Boulevard, *AM peak period*
- Miramar Road to Miramar Way, *AM and PM peak periods*
- Miramar Way to SR 163, *AM and PM peak periods*

Phase 2B (Year 2030B) Analysis

Phase 2B of the project involves the development of up to 2,725 dwelling units of multi-family residential, approximately 24,000 square feet of specialty retail, and approximately 5.59 acres of neighborhood park. Table 5.2-30, *Phase 2B Local Improvements*, identifies Phase 2B planned improvements within the study area. The planned improvements assumed in the previous scenarios were also assumed in Phase 2B.

SANDAG has identified future improvements to both I-805 and I-15 within the project area, per the Regional Transportation Plan. Specifically, the I-805 Managed Lanes project has been assumed in Phase 2B.

Figure 5.2-15, *Phase 2B Study Area Intersections*, shows the Phase 2B study intersections. Figure 5.2-16, *Phase 2B Conditions Diagram (Roadway Segments and Ramp Meters)*, present the roadway cross-sections and traffic control with the planned roadway improvements expected to be in place for Phase 2B conditions.

SANDAG has identified future improvements to both I-805 and I-15 within the project area, per the Regional Transportation Plan. SANDAG's Regional Transportation Plan has identified the introduction of four managed lanes on I-805 from SR-905 to I-5. The managed lanes on I-805 will be constructed as a buffer separated facility. The managed lanes are expected to be HOT lanes where solo drivers would be required to pay a per-trip fee to use the lanes. The use of the managed lanes would be free to carpools, vanpools and buses. Excess capacity would be sold to other vehicles through a variable pricing formula to ensure free flow conditions. This dynamic pricing system is

currently in effect on the I-15 express lanes. As part of this project, additional general purpose lanes and DARs are proposed. The project is also planned to accommodate a continuous BRT service to be operated on the managed lanes. The BRT service is part of SANDAG's "Early Action Projects." Improvements identified as part of I-805 South (Palomar Street to I-15) and I-805 North (SR-52 to Carroll Canyon Road except the I-805/SR-52 Connector) will be built by 2020. The improvements at Carroll Canyon Road and the improvements to the north on I-805 (within the project area) were completed in April 2014.

These improvements are based upon "Reasonably Expected Revenue" scenario totaling more than $580 million for the development, operation, and maintenance of the transportation facilities and services in the Regional Transportation Plan. This assumes both current sources of transportation revenue as well as future revenue sources such as an extension of the local TransNet transportation sales tax measure set to expire in 2048. It also assumes attracting additional Federal funds for major capital projects, and increase in State and Federal gas taxes based on historical trends.

For Phase 2B, it is assumed that the project would complete the following improvements as part of the project's proposed development.

- Construct the west leg of the Camino Ruiz/Project Driveway A intersection. The west leg shall provide dual left-turn lanes and a dedicated thru and right-turn lane.
- Construct the east and west legs of Camino Ruiz/Project Driveway B intersection. The east leg shall provide dual left-turn lanes, single through lane, and a dedicated right-turn lane. The west leg shall provide dual left-turn lanes, a shared through-right lane, and a dedicated right turn lane (signalized).

Phase 2B (Year 2030B) Conditions – Project Traffic Generation and Distribution

Table 5.2-31, *Phase 2B Project Trip Generation*, tabulates the resultant project traffic generation. In Phase 2B, the project is calculated to generate approximately 28,543 cumulative ADT with 1,100 inbound and 1,374 outbound cumulative trips during the AM peak hour and 1,468 inbound and 1,331 outbound cumulative trips during the PM peak hour. The project is calculated to generate approximately 26,639 driveway ADT with 1,102 inbound and 1,375 outbound driveway trips during the AM peak hour and 1,472 inbound and 1,335 outbound driveway trips during the PM peak hour.

Figure 5.2-17, *Phase 2B Project Traffic Distribution (Composite)*, presents the estimated project traffic distribution under Phase 2B. Figure 5.2-18, *Phase 2B Cumulative Project Trips (Daily Volumes)*, shows the Cumulative Project trips on a peak hour and daily basis.

Figure 5.2-19, *Phase 2B without Project Traffic Volumes (Daily Volumes)*, illustrates Phase 2B "without Project" traffic volumes on a peak hour and daily basis. Figure 5.2-20, *Phase 2B with Project Traffic Volumes (Daily Volumes)*, illustrate Phase 2B "with Project" traffic volumes on a peak hour and daily basis.

Phase 2B Intersection Operations

Table 5.2-32, *Phase 2B Intersection Operations*, reports intersection operations during the peak hours. The following intersections are calculated at LOS E or F in Phase 2B "without Project":

- I-805 Southbound Ramps/Mira Mesa Boulevard—*LOS E–AM peak period*
- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM peak period*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS E–AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS F–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Parkdale Avenue/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- I-15 Northbound Ramps/Mira Mesa Boulevard—*LOS E–PM peak period*
- Scripps Ranch Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Parkdale Avenue/Flanders Drive—*LOS F–AM peak period*
- Black Mountain Road/Carroll Canyon Road—*LOS E–PM peak period*
- I-15 Southbound Ramps/Carroll Canyon Road—*LOS F–AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*LOS F–AM and LOS E–PM peak periods*
- Judicial Drive/Eastgate Mall—*LOS E–PM peak period*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and PM peak periods*
- I-805 Southbound Ramps/La Jolla Village Drive—*LOS E–AM peak period*
- Camino Santa Fe/Miramar Road—*LOS F–AM and LOS E–PM peak periods*
- Camino Santa Fe/Carroll Road—*LOS E–PM peak period*
- Kearny Villa Road/Miramar Road—*LOS F–AM and PM peak periods*
- Kearny Mesa Road/Miramar Road—*LOS E–AM peak period*
- Willow Creek Road/Pomerado Road—*LOS E–PM peak period*
- Camino Ruiz/Gold Coast Drive—*LOS E–AM peak period*
- Camino Ruiz/Jade Coast Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Park Village Road—*LOS E–AM and PM peak periods*
- Black Mountain Road/Capricorn Way—*LOS E–AM and LOS F–PM peak periods*
- Black Mountain Road/Hillery Drive—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Activity Road—*LOS E–PM peak period*
- Kearny Villa Road Southbound Ramps/Miramar Way—*LOS E–PM peak period*
- Kearny Villa Road Northbound Ramps/Miramar Way—*LOS E–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. The Level of Service is degraded at certain intersections. Significant cumulative impacts are calculated at the following intersections:

- I-805 Northbound Ramps/Vista Sorrento Parkway—*AM and PM peak periods*
- Camino Santa Fe/Mira Mesa Boulevard—*PM peak period*
- Black Mountain Road/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Southbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- Camino Santa Fe/Miramar Road—*AM and PM peak periods*
- Camino Ruiz/Miramar Road—*AM peak period*
- Kearny Villa Road/Miramar Road—*AM and PM peak periods*
- Camino Ruiz/Gold Coast Drive—*AM peak period*
- Camino Ruiz/Jade Coast Road—*AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*AM peak period*
- SR 163 Southbound Ramps/Kearny Villa Road—*PM peak period*

Phase 2B (Year 2030B) Street Segment Operations

Phase 2B, street segment analyses were conducted for roadways in the study area. Table 5.2-33, *Phase 2B Street Segment Operations*, reports Phase 2B street segment operations. The following street segments are calculated to operate at LOS E or F without project traffic:

- Mira Mesa Boulevard from Camino Santa Fe to Parkdale Avenue—*LOS F*
- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road west of Scranton Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS F*
- Carroll Canyon Road from I-15 to Businesspark Avenue—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS F*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Camino Santa Fe to Carroll Road—*LOS E*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS E*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*

- Black Mountain Road north of Park Village Road—*LOS F*
- Black Mountain Road from Park Village Road to Mercy Road—*LOS E*

The addition of project traffic is calculated to increase the V/C ratio on most segments. A degradation in Level of Service is calculated on some street segments. Per the City's significance criteria and analysis methodology, a significant cumulative project impact is calculated at the following street segments:

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15
- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Camino Santa Fe to Carroll Road
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Black Mountain Road from Maya Linda Road to Carrol Centre Road

Arterial Levels of Service

Arterial analysis was performed for Gold Coast Drive between Westonhill Drive and Black Mountain Road under Phase 2B conditions. As shown in Table 5.2-34, *Phase 2B Arterial Operations*, under Phase 2B conditions, during the AM and PM peak periods, the roadway segment operates at LOS D or better in the eastbound and westbound directions. With the addition of project traffic, no change in the level of service or speed is calculated. As such, *no* significant arterial impact is calculated under Phase 2B conditions as the decrease in speeds does not exceed the allowable thresholds, adjacent intersections were not impacted and operate at an acceptable LOS (LOS D or better) and the street segment is built to its ultimate classification per the Mira Mesa Community Plan.

Phase 2B Freeway Ramp Meter Operations

Table 5.2-35a, *Phase 2B Ramp Meter Operations – Fixed Rate*, presents the results using the fixed rate approach. Table 5.2-35b, *Phase 2B Ramp Meter Operations – Maximum Delay*, presents the results using the maximum delay approach. According to both the "Fixed-Rate" method and the "Maximum Delay" method, the project is calculated to have a significant cumulative project impact at the following ramp meter locations:

- Eastbound and Westbound Nobel Drive to Southbound I-805—*PM peak period*
- Eastbound Mira Mesa Boulevard to Northbound I-15—*PM peak period*
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15—*AM peak period*

- Northbound and Southbound Kearny Villa Road to Southbound SR 163—*PM peak period*

Phase 2B (Year 2030B) Freeway Segment Operations

As shown in Table 5.2-36a, *Phase 2B Freeway Segment Operations – AM Peak Hour*, and Table 5.2-36b, *Phase 2B Freeway Segment Operations – PM Peak Hour*, the following segments were calculated to operate at LOS E or F without the project:

SR 163

- North of Kearny Villa Road, *LOS F(0)–AM (SB) and PM (SB)*
- South of Kearny Villa Road, *LOS F(0)–AM (SB) and LOS E/F(0)–PM (NB/SB)*

I-15

- North of Mira Mesa Boulevard, *LOS F(1)–AM (SB) and LOS F(0)/E–PM (NB/SB)*
- Mira Mesa Boulevard to Carroll Canyon Road, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Carroll Canyon Road to Miramar Road, *LOS F(0)–AM (SB) and PM (NB)*
- Miramar Road to Miramar Way, *LOS F(0)–AM (NB&SB) and PM (SB)*
- Miramar Way to SR 163, *LOS E/F(0)–AM (NB/SB) and LOS F(0)–PM (SB)*

I-805

- Mira Mesa Boulevard to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- South of Nobel Drive, *LOS F(0)–AM (NB) and PM (SB)*

A significant cumulative project impact was calculated at the following freeway segments:

SR 163

- North of Kearny Villa Road, *AM and PM peak periods*
- South of Kearny Villa Road, *AM and PM peak periods*

I-15

- North of Mira Mesa Boulevard, *AM and PM peak periods*
- Mira Mesa Boulevard to Carroll Canyon Road, *AM peak period*
- Carroll Canyon Road to Miramar Road, *AM and PM peak periods*
- Miramar Road to Miramar Way, *AM and PM peak periods*
- Miramar Way to SR 163, *AM and PM peak periods*

Phase 3A (Year 2035) Analysis

Phase 3A of the project involves the development of up to 835 dwelling units of multi-family residential, approximately 150,000 square feet of community retail, approximately 200,000 square feet of commercial office, up to 175 hotel guest rooms, and approximately 30.21 acres of neighborhood park. Table 5.2-37, *Phase 3A Local Improvements*, identifies Phase 3A planned

improvements within the study area. The planned improvements assumed in the previous scenarios were also assumed in Phase 3A.

Figure 5.2-21, *Phase 3A Study Area Intersections*, shows the Phase 3A study intersections. Figure 5.2-22, *Phase 3A Conditions Diagram (Roadway Segments and Ramp Meters)*, presents the roadway cross-sections and traffic control with the planned roadway improvements expected to be in place for Phase 3A conditions.

Table 5.2-38, *Phase 3A Project Trip Generation*, tabulates the resultant project traffic generation. The project is calculated to generate approximately 41,357 cumulative ADT with 1,587 inbound and 1,641 outbound cumulative trips during the AM peak hour and 2,055 inbound and 2,060 outbound cumulative trips during the PM peak hour. The project is calculated to generate approximately 43,957 driveway ADT with 1,631 inbound and 1,648 outbound driveway trips during the AM peak hour and 2,177 inbound and 2,200 outbound driveway trips during the PM peak hour.

Figure 5.2-23, *Phase 3A Project Traffic Distribution (Composite)*, presents the estimated project traffic distribution under Phase 3A. Figure 5.2-24, *Phase 3A Cumulative Project Trips (Daily Volumes)*, show the Cumulative Project trips on a peak hour and daily basis.

Phase 3A (Year 2035) Traffic Volumes

Phase 3A traffic volumes were forecasted for the study area based on the SANDAG Series 11 model and validated with Series 12. Figure 5.2-25, *Phase 3A without Project Traffic Volumes (Daily Volumes)*, illustrates Phase 3A "without Project" traffic volumes on a daily basis. Figure 5.2-26, *Phase 3A with Project Traffic Volumes (Daily Volumes)*, illustrates Phase 3A "with Project" traffic volumes on a peak hour and daily basis.

Phase 3A (Year 2035) Intersection Operations

Table 5.2-39, *Phase 3A Intersection Operations*, reports intersection operations during the peak hours. The following intersections are calculated at LOS E or F in Phase 3A "without Project":

- I-805 Southbound Ramps/Mira Mesa Boulevard— *LOS E–AM and LOS F–PM peak period*
- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM and LOS E–PM peak periods*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS E–AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS F–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Parkdale Avenue/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Westonhill Drive/Mira Mesa Boulevard—*LOS E–AM peak period*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- I-15 Southbound Ramps/Mira Mesa Boulevard—*LOS E–AM peak period*

- I-15 Northbound Ramps/Mira Mesa Boulevard—*LOS E–PM peak period*
- Scripps Ranch Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Parkdale Avenue/Flanders Drive—*LOS F–AM peak period*
- Westonhill Drive/Gold Coast Drive—*LOS E–PM peak period*
- I-15 Southbound Ramps/Carroll Canyon Road—*LOS F–AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*LOS F–AM and LOS E–PM peak periods*
- Towne Centre Drive/Eastgate Mall—*LOS E–PM peak period*
- Judicial Drive/Eastgate Mall—*LOS F–PM peak period*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and PM peak periods*
- I-805 Southbound Ramps/La Jolla Village Drive—*LOS E–AM peak period*
- Eastgate Mall/Miramar Road—*LOS E–AM peak period*
- Camino Santa Fe/Miramar Road—*LOS F–AM and PM peak periods*
- Camino Santa Fe/Carroll Road—*LOS E–AM and LOS F–PM peak periods*
- Kearny Villa Road/Miramar Road—*LOS F–AM and PM peak periods*
- Kearny Mesa Road/Miramar Road—*LOS E–AM and PM peak periods*
- Willow Creek Road/Pomerado Road—*LOS E–PM peak period*
- Camino Ruiz/Gold Coast Drive—*LOS E–AM peak period*
- Camino Ruiz/Jade Coast Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Park Village Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Capricorn Way—*LOS E–AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Carroll Centre Road—*LOS E–PM peak period*
- Black Mountain Road/Activity Road—*LOS F–PM peak period*
- Kearny Villa Road Southbound Ramps/Miramar Way—*LOS F–PM peak period*
- Kearny Villa Road Northbound Ramps/Miramar Way—*LOS E–PM peak period*
- SR 163 Southbound Ramps/Kearny Villa Road—*LOS F–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. The Level of Service is degraded at certain intersections. Significant cumulative impacts are calculated at the following intersections:

- I-805 Northbound Ramps/Vista Sorrento Parkway—*AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*AM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*PM peak period*
- I-15 Northbound Ramps/Mira Mesa Boulevard—*PM peak period*
- Maya Linda Road/Carroll Canyon Road—*AM and PM peak periods*
- Black Mountain Road/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Southbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- Camino Santa Fe/Miramar Road—*AM and PM peak periods*
- Camino Ruiz/Miramar Road—*AM peak period*
- Kearny Villa Road/Miramar Road—*AM and PM peak periods*

- Camino Ruiz/Gold Coast Drive—*AM peak period*
- Camino Ruiz/Jade Coast Road—*AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*AM peak period*
- Black Mountain Road/Carroll Centre Road—*PM peak period*
- SR 163 Southbound Ramps/Kearny Villa Road—*PM peak period*
- SR 163 Northbound Ramps/Kearny Villa Road—*AM peak period*

Phase 3A (Year 2035) Street Segment Operations

Table 5.2-40, *Phase 3A Street Segment Operations*, reports Phase 3A street segment operations. The following street segments are calculated to operate at LOS E or F without project traffic:

- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road west of Scranton Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS F*
- Carroll Canyon Road from I-15 to Businesspark Avenue—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS F*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Camino Santa Fe to Carroll Road—*LOS E*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS E*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Black Mountain Road north of Park Village Road—*LOS F*
- Black Mountain Road from Park Village Road to Mercy Road—*LOS F*

The addition of project traffic is calculated to increase the V/C ratio on most segments. Per the City's significance criteria and analysis methodology, a significant cumulative project impact is calculated at the following street segments:

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Gold Coast Drive from Westonhill Drive to Black Mountain Road
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15
- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Nobel Drive to Eastgate Mall
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Camino Santa Fe to Carroll Road
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Pomerado Road east of Willow Creek Road
- Black Mountain Road from Capricorn Way to Mira Mesa Boulevard
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Phase 3A (Year 2035) Freeway Ramp Meter Operations

Ramp meter analyses were conducted at the study interchanges for Phase 3A conditions. No calibration of the analysis based on field observations was performed and impacts may be overstated. Table 5.2-41a, *Phase 3A Ramp Meter Operations — Fixed Rate,* presents the results using the fixed rate approach. Table 5.2-41b, *Phase 3A Ramp Meter Operations—Maximum Delay,* presents the results using the maximum delay approach.

According to the "Fixed-Rate" method and the "Maximum Delay" method, the project is calculated to have a significant "cumulative" project impact at the following ramp meter locations:

- Eastbound and Westbound Nobel Drive to Southbound I-805—*PM peak period*
- Eastbound Mira Mesa Boulevard to Northbound I-15—*PM peak period*
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15—*AM peak period*
- Eastbound and Westbound Carroll Canyon Road to Northbound I-15—*PM peak period*
- Northbound and Southbound Kearny Villa Road to Southbound SR 163—*PM peak period*

Phase 3A (Year 2035) Freeway Segment Operations

As shown in Table 5.2-42a. *Phase 3A Freeway Segment Operations — AM Peak Hour,* and Table 5.2-42b, *Phase 3A Freeway Segment Operations — PM Peak Hour*, the following segments were calculated to operate at LOS E or F without the project:

SR 163

- North of Kearny Villa Road, *LOS F(0)–AM (SB) and LOS F(0)–PM (SB)*
- South of Kearny Villa Road, *LOS F(1)–AM (SB) and LOS E/F(0)–PM (NB/SB)*

I-15

- North of Mira Mesa Boulevard, *LOS E/F(1)–AM (NB/SB) and LOS F(0)–PM (NB & SB)*
- Mira Mesa Boulevard to Carroll Canyon Road, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Carroll Canyon Road to Miramar Road, *LOS E/F(0)–AM (NB/SB) and LOS F(0)–PM (NB)*
- Miramar Road to Miramar Way, *LOS F(0)–AM (NB&SB) and LOS F(0)–PM (SB)*
- Miramar Way to SR 163, *LOS F(0)–AM (NB&SB) and LOS F(0)–PM (SB)*

I-805

- North of Mira Mesa Boulevard, *LOS E–AM (NB)*
- Mira Mesa Boulevard to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and PM (SB)*
- South of Nobel Drive, *LOS F(1)–AM (NB) and LOS F(0)–PM (SB)*

A significant cumulative project impact was calculated at the following freeway segments:

SR 163

- North of Kearny Villa Road, *AM and PM peak periods*
- South of Kearny Villa Road, *AM and PM peak periods*

I-15

- North of Mira Mesa Boulevard, *AM and PM peak periods*
- Mira Mesa Boulevard to Carroll Canyon Road, *AM peak period*
- Carroll Canyon Road to Miramar Road, *AM and PM peak periods*
- Miramar Road to Miramar Way, *AM and PM peak periods*
- Miramar Way to SR 163, *AM and PM peak periods*

Phase 3B (Year 2035) Analysis

Phase 3B of the project involves the development of up to 300 dwelling units of multi-family residential and approximately 300,000 square feet of high tech industrial park. Table 5.2-43, *Phase 3B Local Improvements*, identifies Phase 3B planned improvements within the study area. The planned improvements assumed in the previous scenarios were also assumed in Phase 3B.

For Phase 3B, it is assumed that the project would complete the following improvements as part of the proposed development:

- Signalize the Maya Linda Road/Project Driveway G intersection

Figure 5.2-27, *Phase 3B Study Area Intersections*, shows the Phase 3B study intersections. Figure 5.2-28, *Phase 3B Conditions Diagram (Roadway Segments and Ramp Meters)*, presents the roadway cross-sections and traffic control with the planned roadway improvements expected to be in place for Phase 3B conditions.

Phase 3B (Year 2040) – Project Traffic Generation and Distribution

Table 5.2-44, *Phase 3B Project Trip Generation*, tabulates the resultant project traffic generation. The project is calculated to generate approximately 47,566 cumulative ADT with 2,044 inbound and 1,851 outbound cumulative trips during the AM peak hour and 2,267 inbound and 2,541 outbound cumulative trips during the PM peak hour. The project is calculated to generate approximately 50,155 driveway ADT with 2,088 inbound and 1,857 outbound driveway trips during the AM peak hour and 2,388 inbound and 2,680 outbound driveway trips during the PM peak hour.

With the removal of mining traffic, the project is calculated to generate approximately 42,466 *cumulative* ADT with 1,834 inbound and 1,687 outbound *cumulative* trips during the AM peak hour and 2,254 inbound and 2,516 outbound *cumulative* trips during the PM peak hour. Similarly, the project is calculated to generate approximately 50,155 *driveway* ADT with 1,878 inbound and 1,693 outbound *driveway* trips during the AM peak hour and 2,375 inbound and 2,655 outbound *driveway* trips during the PM peak hour.

Figure 5.2-29, *Phase 3B Project Traffic Distribution (Composite)*, presents the estimated project traffic distribution under Phase 3B. Figure 5.2-30, *Phase 3B Cumulative Project Trips (Daily Volumes)*, show the Cumulative Project trips on a peak hour and daily basis.

Phase 3B (Year 2040) Traffic Volumes

Phase 3B traffic volumes were forecasted for the study area based on the SANDAG Series 11 model and validated using the Series 12 model. Figure 5.2-31, *Phase 3B without Project Traffic Volumes (Daily Volumes)*, illustrates Phase 3B "without Project" traffic volumes on a peak hour and daily basis. Figure 5.2-32, *Phase 3B with Project Traffic Volumes (Daily Volumes)*, illustrates Phase 3B "with Project" traffic volumes on a peak hour and daily basis.

Phase 3B (Year 2040) Intersection Operations

Intersection capacity analyses were conducted for the study intersections under Phase 3B "without Project", and Phase 3B "with Project" conditions. Table 5.2-45, *Phase 3B Intersection Operations*, reports intersection operations during the peak hours. The following intersections are calculated at LOS E or F in Phase 3B "without Project":

- I-805 Southbound Ramps/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- I-805 Northbound Ramps/Mira Mesa Boulevard—*LOS F–AM and LOS E–PM peak periods*
- I-805 Northbound Ramps/Vista Sorrento Parkway—*LOS E–AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*
- Pacific Heights Boulevard/Mira Mesa Boulevard—*LOS F–PM peak period*
- Camino Santa Fe/Mira Mesa Boulevard—*LOS E–AM and LOS F–PM peak periods*
- Parkdale Avenue/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Camino Ruiz/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- Westonhill Drive/Mira Mesa Boulevard—*LOS E–AM peak period*
- Black Mountain Road/Mira Mesa Boulevard—*LOS F–AM and PM peak periods*

- Westview Parkway/Mira Mesa Boulevard—*LOS E–AM and PM peak periods*
- I-15 Southbound Ramps/Mira Mesa Boulevard—*LOS E–AM peak period*
- I-15 Northbound Ramps/Mira Mesa Boulevard—*LOS E–PM peak period*
- Scripps Ranch Boulevard/Mira Mesa Boulevard—*LOS E–PM peak period*
- Parkdale Avenue/Flanders Drive—*LOS F–AM peak period*
- Westonhill Drive/Gold Coast Drive—*LOS E–PM peak period*
- I-15 Southbound Ramps/Carroll Canyon Road—*LOS F–AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*LOS F–AM and LOS E–PM peak periods*
- Towne Centre Drive/Eastgate Mall—*LOS E–PM peak period*
- Judicial Drive/Eastgate Mall—*LOS F–PM peak period*
- Towne Centre Drive/La Jolla Village Drive—*LOS F–AM and PM peak periods*
- I-805 Southbound Ramps/La Jolla Village Drive—*LOS E–AM peak period*
- Eastgate Mall/Miramar Road—*LOS E–AM peak period*
- Camino Santa Fe/Miramar Road—*LOS F–AM and PM peak periods*
- Camino Santa Fe/Carroll Road—*LOS E–AM and LOS F–PM peak periods*
- Kearny Villa Road/Miramar Road—*LOS F–AM and PM peak periods*
- Kearny Mesa Road/Miramar Road—*LOS E–AM and PM peak periods*
- Willow Creek Road/Pomerado Road—*LOS E–PM peak period*
- Camino Ruiz/Gold Coast Drive – *LOS E—AM peak period*
- Camino Ruiz/Jade Coast Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Park Village Road—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Capricorn Way—*LOS E–AM peak period*
- Black Mountain Road/Hillery Drive—*LOS F–AM and LOS E–PM peak periods*
- Black Mountain Road/Carroll Centre Road—*LOS E–PM peak period*
- Black Mountain Road/Activity Road—*LOS F–PM peak period*
- Kearny Villa Road Southbound Ramps/Miramar Way—*LOS F–PM peak period*
- Kearny Villa Road Northbound Ramps/Miramar Way—*LOS E–PM peak period*
- SR 163 Southbound Ramps/Kearny Villa Road—*LOS F–PM peak period*

The addition of project related traffic is calculated to increase intersection delays for both the AM and PM peak periods. Significant cumulative impacts are calculated at the following intersections:

- I-805 Northbound Ramps/Vista Sorrento Parkway—*AM and PM peak periods*
- Scranton Road/Mira Mesa Boulevard—*AM and PM peak periods*
- Camino Santa Fe/Mira Mesa Boulevard—*PM peak period*
- Westonhill Drive/Mira Mesa Boulevard—*AM peak period*
- I-15 Northbound Ramps/Mira Mesa Boulevard—*PM peak period*
- Maya Linda Road/Carroll Canyon Road—*AM and PM peak periods*
- Black Mountain Road/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Southbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- I-15 Northbound Ramps/Carroll Canyon Road—*AM and PM peak periods*
- Camino Santa Fe/Miramar Road—*AM and PM peak periods*

- Camino Ruiz/Miramar Road—*AM peak period*
- Kearny Villa Road/Miramar Road—*AM and PM peak periods*
- Camino Ruiz/Gold Coast Drive—*AM peak period*
- Camino Ruiz/Jade Coast Road—*AM and PM peak periods*
- Black Mountain Road/Hillery Drive—*AM peak period*
- Black Mountain Road/Carroll Centre Road—*PM peak period*
- SR 163 Southbound Ramps/Kearny Villa Road—*PM peak period*
- SR 163 Northbound Ramps/Kearny Villa Road—*AM peak period*

Phase 3B (Year 2040) Street Segment Operations

Phase 3B street segment analyses were conducted for roadways in the study area. Table 5.2-46, *Phase 3B Street Segment Operations*, reports Phase 3B street segment operations. The following street segments are calculated to operate at LOS E or F without project traffic:

- Mira Mesa Boulevard from Parkdale Avenue to Reagan Road—*LOS F*
- Mira Mesa Boulevard from Reagan Road to Camino Ruiz—*LOS F*
- Mira Mesa Boulevard from Camino Ruiz to New Salem Street—*LOS F*
- Mira Mesa Boulevard from New Salem Street to Black Mountain Road—*LOS F*
- Flanders Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Parkdale Avenue to Camino Ruiz—*LOS E*
- Gold Coast Drive from Camino Ruiz to Westonhill Drive—*LOS E*
- Gold Coast Drive from Westonhill Drive to Black Mountain Road—*LOS F*
- Gold Coast Drive from Black Mountain Road to Maya Linda Road—*LOS E*
- Carroll Canyon Road west of Scranton Road—*LOS E*
- Carroll Canyon Road from Black Mountain Road to I-15—*LOS F*
- Carroll Canyon Road from I-15 to Businesspark Avenue—*LOS E*
- Miralani Drive from Arjons Drive to Camino Ruiz—*LOS F*
- La Jolla Village Drive from Towne Center Drive to I-805—*LOS E*
- Miramar Road from Nobel Drive to Eastgate Mall—*LOS F*
- Miramar Road from Eastgate Mall to Camino Santa Fe—*LOS F*
- Miramar Road from Camino Santa Fe to Carroll Road—*LOS E*
- Miramar Road from Cabot Drive to Camino Ruiz—*LOS E*
- Miramar Road from Camino Ruiz to Black Mountain Road—*LOS F*
- Miramar Road from Black Mountain Road to Kearny Villa Road—*LOS F*
- Miramar Road from Kearny Villa Road to I-15—*LOS F*
- Pomerado Road from I-15 to Willow Creek Road—*LOS F*
- Pomerado Road east of Willow Creek Road—*LOS F*
- Black Mountain Road north of Park Village Road—*LOS F*
- Black Mountain Road from Park Village Road to Mercy Road—*LOS F*

The addition of project traffic is calculated to increase the V/C ratio on most segments. Per the City's significance criteria and analysis methodology, a significant cumulative project impact is calculated at the following street segments:

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Gold Coast Drive from Westonhill Drive to Black Mountain Road
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15
- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Nobel Drive to Eastgate Mall
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Pomerado Road east of Willow Creek Road
- Black Mountain Road from Capricorn Way to Mira Mesa Boulevard
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Phase 3B (Year 2040) Freeway Ramp Meter Operations

Table 5.2-47a, *Phase 3B Ramp Meter Operations—Fixed Rate,* presents the results using the fixed rate approach. Table 5.2-47b, *Phase 3B Ramp Meter Operations—Maximum Delay,* presents the results using the maximum delay approach.

According to the "Fixed-Rate" method and the "Maximum Delay" method, the project is calculated to have a significant cumulative project impact at the following ramp meter locations.

- Eastbound and Westbound Nobel Drive to Southbound I-805—*PM peak period*
- Eastbound Mira Mesa Boulevard to Northbound I-15—*PM peak period*
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15—*AM peak period*
- Eastbound and Westbound Carroll Canyon Road to Northbound I-15—*PM peak period*
- Northbound and Southbound Kearny Villa Rd to Southbound SR 163—*PM peak period*

Phase 3B (Year 2040) Freeway Segment Operations

As shown in Table 5.2-48a, *Phase 3B Freeway Segment Operations—AM Peak Hour* and Table 5.2-48b, *Phase 3B Freeway Segment Operations—PM Peak Hour*, the following segments were calculated to operate at LOS E or F without the project:

SR 163

- North of Kearny Villa Road, *LOS F(0)–AM (SB) and LOS F(0)–PM (SB)*

- South of Kearny Villa Road, *LOS F(1)–AM (SB) and LOS E/F(0)–PM (NB/SB)*

I-15

- North of Mira Mesa Boulevard, *LOS E/F(1)–AM (NB/SB) and LOS F(0)–PM (NB & SB)*
- Mira Mesa Boulevard to Carroll Canyon Road, *LOS F(0)–AM (SB) and LOS E–PM (NB)*
- Carroll Canyon Road to Miramar Road, *LOS E/F(0)–AM (NB/SB) and LOS E–PM (NB)*
- Miramar Road to Miramar Way, *LOS F(0)–AM (NB&SB) and LOS F(0)–PM (SB)*
- Miramar Way to SR 163, *LOS F(0)–AM (NB&SB) and LOS F(0)–PM (SB)*

I-805

- North of Mira Mesa Boulevard, *LOS E–AM (NB)*
- Mira Mesa Boulevard to La Jolla Village Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- La Jolla Village Drive to Nobel Drive, *LOS F(0)–AM (NB) and LOS E–PM (SB)*
- South of Nobel Drive, *LOS F(1)–AM (NB) and LOS F(0)–PM (SB)*

A significant cumulative project impact was calculated at the following freeway segments:

SR 163

- North of Kearny Villa Road, *AM and PM peak periods*
- South of Kearny Villa Road, *AM and PM peak periods*

I-15

- North of Mira Mesa Boulevard, *AM and PM peak periods*
- Mira Mesa Boulevard to Carroll Canyon Road, *AM peak period*
- Carroll Canyon Road to Miramar Road, *AM and PM peak periods*
- Miramar Road to Miramar Way, *AM and PM peak periods*
- Miramar Way to SR 163, *AM and PM peak periods*

Congestion Management Program

The Congestion Management Program (CMP), adopted on November 22, 1991, is intended to link land use, transportation, and air quality through level of service performance. The CMP requires an Enhanced CEQA Review for projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. As the project trip generation exceeds the CMP thresholds, a CMP analysis is triggered.

The *SANDAG Congestion Management Program Update, July 2005* report contains a list of "CMP Arterials" that are to be analyzed if the project exceeds the above mentioned trip generation thresholds. La Jolla Village Drive and Miramar Road arterials are listed in the report and are contained within the project study area. The *City of San Diego Traffic Impact Study Manual* contains criteria which establishes that a project impact is considered significant if the travel speed along an arterial segment operating at LOS E (with project) decreases by more than one mile per hour, and an

arterial segment operating at LOS F (with project) decreases by more than one-half mile per hour. The study area CMP arterials were analyzed for all scenarios. The results of the analysis are shown in Table 5.2-52, *CMP Arterial Analyses*. No significant project impact is calculated for the identified CMP Arterials under all scenarios.

SUMMARY OF IMPACTS

CUP/Reclamation Plan Amendment

As the CUP/Reclamation Plan Amendment would not result in an increase in traffic or alterations to the circulation network, no impacts would occur. No mitigation measures are required.

Stone Creek Project

Table 5.2-49, *Project Phasing and Traffic Generation*, summarizes the amount of traffic generated at each phase of development. Table 5.2-50, *Traffic Impacts by Phase and Proposed Traffic Mitigation Measures*, provides a tabulation of the traffic impacts resulting from the proposed Stone Creek project along with proposed mitigation, where feasible. The project would result in significant direct and cumulative impacts, as summarized below. As noted elsewhere in this EIR, some of these impacts would not be fully mitigated.

Existing + Project Significant Impacts

Intersections

- Kearny Villa Road/Miramar Road intersection.

Street Segments

- Carroll Canyon Road from Black Mountain Road to I-15.

Freeway Ramp Meters

No significant impacts are calculated.

Freeway Segments

No significant direct project impacts.

CMP Arterials

No impacts.

Phase 1 (Year 2020) Significant Impacts

Intersections

- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road

- Kearny Villa Road/Miramar Road
- Black Mountain Road/Hillery Drive

Street Segment

- Carroll Canyon Road from Black Mountain Road to I-15

Freeway Ramp Meters

No impacts

Freeway Segments

No impacts

CMP Arterials

No impacts

Phase 2A (Year 2030A) Significant Impacts

Intersections

- I-805 Northbound Ramps/Vista Sorrento Parkway
- Black Mountain Road/Carroll Canyon Road
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Miramar Road
- Kearny Villa Road/Miramar Road
- Camino Ruiz/Gold Coast Drive
- Camino Ruiz/Jade Coast Road
- Black Mountain Road/Hillery Drive

Street Segments

- Carroll Canyon Road from Black Mountain Road to I-15
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Westonhill Drive from Mira Mesa Boulevard to Hillery Drive
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Freeway Ramp Meters

- Eastbound and Westbound Nobel Drive to Southbound I-805
- Eastbound Mira Mesa Boulevard to Northbound I-15
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15
- Northbound and Southbound Kearny Villa Road to Southbound SR 163

Freeway Segments

- SR 163 South of Kearny Villa Road
- I-15 between Mercy Road to Mira Mesa Boulevard
- I-15 between Miramar Road to Miramar Way
- I-15 between Miramar Way to SR 163

CMP Arterials

- No impacts

Phase 2B (Year 2030B) Significant Impacts

Intersections

- I-805 Northbound Ramps/Vista Sorrento Parkway
- Camino Santa Fe/Mira Mesa Boulevard
- Black Mountain Road/Carroll Canyon Road
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Miramar Road
- Camino Ruiz/Miramar Road
- Kearny Villa Road/Miramar Road
- Camino Ruiz/Gold Coast Drive
- Camino Ruiz/Jade Coast Road
- Black Mountain Road/Hillery Drive
- SR 163 Southbound Ramps/Kearny Villa Road

Street Segments

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15
- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Camino Santa Fe to Carroll Road
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Freeway Ramp Meters

- Eastbound and Westbound Nobel Drive to Southbound I-805

- Eastbound Mira Mesa Boulevard to Northbound I-15
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15
- Northbound and Southbound Kearny Villa Road to Southbound SR 163

Freeway Segments

- SR 163 North of Kearny Villa Road
- SR 163 South of Kearny Villa Road
- I-15 between Mercy Road and Mira Mesa Boulevard
- I-15 between Mira Mesa Boulevard and Carroll Canyon Road
- I-15 between Carroll Canyon Road and Miramar Road
- I-15 between Miramar Road to Miramar Way
- I-15 between Miramar Way to SR 163

CMP Arterials

No impacts

Phase 3A (Year 2035) Significant Impacts

Intersections

- I-805 Northbound Ramps/Vista Sorrento Parkway
- Scranton Road/Mira Mesa Boulevard
- Camino Santa Fe/Mira Mesa Boulevard
- I-15 Northbound Ramps/Mira Mesa Boulevard
- Black Mountain Road/Carroll Canyon Road
- Maya Linda Road/Carroll Canyon Road
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Miramar Road
- Camino Ruiz/Miramar Road
- Kearny Villa Road/Miramar Road
- Camino Ruiz/Gold Coast Drive
- Camino Ruiz/Jade Coast Road
- Black Mountain Road/Hillery Drive
- Black Mountain Road/Carroll Centre Road
- SR 163 Southbound Ramps/Kearny Villa Road
- SR 163 Northbound Ramps/Kearny Villa Road

Street Segments

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Gold Coast Drive from Westonhill Drive to Black Mountain Road
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15

- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Nobel Drive to Eastgate Mall
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Camino Santa Fe to Carroll Road
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Pomerado Road east of Willow Creek Road
- Black Mountain Road from Capricorn Way to Mira Mesa Boulevard
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Freeway Ramp Meters

- Eastbound and Westbound Nobel Drive to Southbound I-805
- Eastbound Mira Mesa Boulevard to Northbound I-15
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15
- Eastbound and Westbound Carroll Canyon Road to Northbound I-15
- Northbound and Southbound Kearny Villa Road to Southbound SR 163

Freeway Segments

- SR 163 north of Kearny Villa Road
- SR 163 south of Kearny Villa Road
- I-15 between Mercy Road and Mira Mesa Boulevard
- I-15 between Mira Mesa Boulevard and Carroll Canyon Road
- I-15 between Carroll Canyon Road and Miramar Road
- I-15 between Miramar Road and Miramar Way
- I-15 between Miramar Way and SR 163

CMP Arterials

No impacts

Phase 3B (Year 2040) Significant Impacts

Intersections

- I-805 Northbound Ramps/Vista Sorrento Parkway
- Scranton Road/Mira Mesa Boulevard
- Camino Santa Fe/Mira Mesa Boulevard
- Westonhill Drive/Mira Mesa Boulevard
- I-15 Northbound Ramps/Mira Mesa Boulevard
- Black Mountain Road/Carroll Canyon Road

- Maya Linda Road/Carroll Canyon Road
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Miramar Road
- Camino Ruiz/Miramar Road
- Kearny Villa Road/Miramar Road
- Camino Ruiz/Gold Coast Drive
- Camino Ruiz/Jade Coast Road
- Black Mountain Road/Hillery Drive
- Black Mountain Road/Carroll Centre Road
- SR 163 Southbound Ramps/Kearny Villa Road
- SR 163 Northbound Ramps/Kearny Villa Road

Street Segments

- Gold Coast Drive from Camino Ruiz to Westonhill Drive
- Gold Coast Drive from Westonhill Drive to Black Mountain Road
- Carroll Canyon Road west of Scranton Road
- Carroll Canyon Road from Black Mountain Road to I-15
- Carroll Canyon Road from I-15 to Businesspark Avenue
- Miralani Drive from Arjons Drive to Camino Ruiz
- Miramar Road from Nobel Drive to Eastgate Mall
- Miramar Road from Eastgate Mall to Camino Santa Fe
- Miramar Road from Cabot Drive to Camino Ruiz
- Miramar Road from Camino Ruiz to Black Mountain Road
- Miramar Road from Black Mountain Road to Kearny Villa Road
- Miramar Road from Kearny Villa Road to I-15
- Pomerado Road from I-15 to Willow Creek Road
- Pomerado Road east of Willow Creek Road
- Black Mountain Road from Capricorn Way to Mira Mesa Boulevard
- Black Mountain Road from Maya Linda Road to Carroll Centre Road

Freeway Ramp Meters

- Eastbound and Westbound Nobel Drive to Southbound I-805
- Eastbound Mira Mesa Boulevard to Northbound I-15
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15
- Eastbound and Westbound Carroll Canyon Road to Northbound I-15
- Northbound and Southbound Kearny Villa Road to Southbound SR 163

Freeway Segments

- SR 163 north of Kearny Villa Road
- SR 163 south of Kearny Villa Road
- I-15 between Mercy Road and Mira Mesa Boulevard

- I-15 between Mira Mesa Boulevard and Carroll Canyon Road
- I-15 between Carroll Canyon Road and Miramar Road
- I-15 between Miramar Road and Miramar Way
- I-15 between Miramar Way and SR 163

CMP Arterials
No impacts

Mitigation Measures

Table 5.2-50, *Traffic Impacts by Phase and Proposed Traffic Mitigation Measures*, includes the mitigation measures that have been identified to mitigate or partially mitigate significant project impacts and the phase in which each mitigation measures would occur. As noted in this section and outlined below, some of these impacts would not be fully mitigated.

Significance of Impacts Following Implementation of Mitigation Measures

With the exception of the following impacts, the project is able to mitigate all impacts to intersections, segments, freeway ramps, and freeway segments to below a level of significance. The following impacts would remain significant and unmitigated:

Intersections

- I-15 Southbound Ramps/Carroll Canyon Road (Direct and Cumulative)
- I-15 Northbound Ramps/Carroll Canyon Road (Direct and Cumulative)
- Camino Santa Fe/Mira Mesa Boulevard (Cumulative)

Street Segments (Cumulative)

- Miralani Drive from Arjons Drive to Camino Ruiz
- Pomerado Road from I-15 to east of Willow Creek Road
- Gold Coast Drive from Camino Ruiz to Black Mountain Road

Freeway Ramp Meters (Cumulative)

- Eastbound and Westbound Nobel Drive to Southbound I-805
- Eastbound Mira Mesa Boulevard to Northbound I-15
- Eastbound and Westbound Carroll Canyon Road to Southbound I-15
- Eastbound and Westbound Carroll Canyon Road to Northbound I-15
- Northbound and Southbound Kearny Villa Road and Southbound SR 163

Freeway Segments (Cumulative)

- SR 163 north of Kearny Villa Road
- SR 163 south of Kearny Villa Road
- I-15 between Mercy Road to SR 163

ISSUE 2

Would the proposed project result in a conflict with adopted policies, plans or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks)?

Significance thresholds:

- A project would result in the construction of a roadway which is inconsistent with the General Plan and/or a community plan, the impact would be significant if the proposed roadway would not properly align with the other existing or planned roadways.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not conflict with adopted policies, plans, or programs supporting alternative transportation models, as the project would not result in an alteration to the transportation network. No impacts would result.

Stone Creek Project

The Stone Creek project would not result in the construction of roadways that are inconsistent with the Community Plan. The project would complete roadways that are called for in the Mira Mesa Community Plan; specifically, the Stone Creek project would extend Maya Linda Road from Black Mountain Road to Carroll Canyon Road proposed for construction through the project site. Carroll Canyon Road would be constructed from Black Mountain Road to just west of Camino Ruiz. Camino Ruiz would be widened to its Six-lane Major classification. Additionally, the Stone Creek project would provide for future transit along Carroll Canyon Road by reserving a 35-foot wide transit corridor through the project.

Bike routes occur or are planned in the vicinity of the project. According to the San Diego Bicycle Master Plan (December 2013), a Class III bike route, where bicyclists travel within the street right-of-way with vehicles, is proposed for Camino Ruiz. This route would provide for a signed north-south travel route through Mira Mesa for bicyclists. The project design and access does not affect this route. A Class II bike lane, where bicyclists travel within a designated lane within the street right-of-way, is proposed for Carroll Canyon Road, providing east-west travel through this portion of Mira Mesa. The project would construct this facility, as well as other Class II and III bicycle facilities throughout the project site. The San Diego Bicycle Master Plan also proposes a Class I bike path, completely separate from vehicular traffic, roughly following Carroll Canyon Creek, providing additional east-west travel through Mira Mesa. As required in the Mira Mesa Community Plan, this facility would be provided as part of the future development of Stone Creek Central Park, through the City's General Development Plan for public parks. Although the project does propose a Class I

bike path, it is within the Parkside Neighborhood and not along Carroll Canyon Creek. Multi-use paths would be provided along the creek corridor that could accommodate bicycles, as well as pedestrians. Although the project would not construct the proposed Class I bike path along Carroll Canyon Creek, this does not result in an impact to the San Diego Bicycle Master Plan, both because alternate east-west travel is provided through the project site, and because multi-use trails would effectively provide for creekside traversal.

Significance of Impacts

Development of the project would not result in a significant impact to the CMP or San Diego Bicycle Master Plan. Therefore, no mitigation measures are required.

Mitigation Measures

No mitigation measures would be required.

ISSUE 3

Would the proposed project result in an increase in traffic hazards for motor vehicles, bicyclists or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access- restricted roadway)?

Significance threshold:

- If a project would increase traffic hazards to motor vehicles, bicyclists, or pedestrians due to proposed non- standard design features (e.g. poor sight distance, proposed driveway onto an access-restricted roadway), then the impact would be significant.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment does not result in project design features or hazards that would interface with motor vehicles, bicycles, or pedestrians. No impacts would result.

Stone Creek Project

The street network for the Stone Creek project has been designed to encourage alternative transportation, enhance mobility options, and create pedestrian/bicycle friendly streets. The circulation network for Stone Creek includes connections and linkages for walking and bicycle travel by way of a grid pattern of streets with blocks sized to encourage walking. All street curve radii meet City requirements with the exception of two street corner/intersections in the Westside Neighborhood, one location in the Village Center, one location in the Parkside/Eastside

Neighborhood, and two locations in the Creekside Neighborhood. The project proposes tighter curve radii at these locations that deviate from the City's standard curve radius requirements. Using the standard curve radius of 450 feet at these locations would result in wide-sweeping curves, which conflicts with the project's proposal to create smaller, walkable blocks to encourage pedestrian use.

In order to accommodate the curve radii that do not meet minimum City Street Design Manual standards, the VTM shows modified "T" intersections at the following locations: Street A-A/Street 3, Street 7/Street C, Street B/Street 8, Street A/Street 10, Street 10/Street 15, and Street 12/Street 15. Driveways at these intersections would be required to "T" into the public street. Shared driveways would occur at the modified "T" intersections, designed to more evenly balance the expected traffic volumes at these locations. Additionally, special traffic control treatments, such as restricting parking on the approaches and providing larger visibility triangles, would be provided as appropriate and as deemed necessary by the City Engineer. Implementation of the modified "T" intersection design and special traffic control treatments would ameliorate the conflict with the gentler curves called for in the City's Street Design Manual. With the incorporation of these design features and traffic control measures, the project would not result in increased traffic hazards.

Significance of Impacts

Development of the project would not result in significant impacts relative to an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians due to a proposed, non-standard design features. Therefore, no mitigation measures are required.

Mitigation Measures

No mitigation measures would be required.

Table 5.2-3. *Existing Intersection Operations*

Intersection	Peak Hour	Existing	
		Delay[a]	LOS[b]
Mira Mesa Boulevard			
I-805 Southbound Ramps/Mira Mesa Boulevard	AM	41.5	D
	PM	35.5	D
I-805 Northbound Ramps/Mira Mesa Boulevard	AM	**97.0**	**F**
	PM	36.8	D
Vista Sorrento Parkway/I-805 Northbound Ramps/Mira Sorrento	AM	51.3	D
	PM	**84.5**	**F**
Scranton Road/Mira Mesa Boulevard	AM	46.2	D
	PM	**66.3**	**E**
Pacific Heights Boulevard/Mira Mesa Boulevard	AM	46.8	D
	PM	**76.5**	**E**
Camino Santa Fe/Mira Mesa Boulevard	AM	54.2	D
	PM	**62.8**	**E**
Parkdale Avenue/Mira Mesa Boulevard	AM	45.4	D
	PM	47.6	D
Reagan Road/Mira Mesa Boulevard	AM	42.5	D
	PM	51.7	D
Camino Ruiz/Mira Mesa Boulevard	AM	53.9	D
	PM	**66.5**	**E**
New Salem Street/Mira Mesa Boulevard	AM	28.9	C
	PM	39.0	D
Westonhill Drive/Mira Mesa Boulevard	AM	49.7	D
	PM	35.3	D
Black Mountain Road/Mira Mesa Boulevard	AM	**103.2**	**F**
	PM	**116.9**	**F**
Westview Parkway/Mira Mesa Boulevard	AM	**61.1**	**E**
	PM	**63.3**	**E**
I-15 Southbound Ramps/Mira Mesa Boulevard	AM	44.0	D
	PM	33.0	C
I-15 Northbound Ramps/Mira Mesa Boulevard	AM	41.4	D
	PM	49.1	D
Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	38.8	D
	PM	47.2	D
Scripps Ranch Boulevard/Scripps Lake Drive	AM	31.1	C
	PM	29.8	C
Flanders Drive and Westonhill Drive			
Parkdale Avenue/Flanders Drive *(AWSC)*[c]	AM	**44.9**	**E**
	PM	12.3	B
Westonhill Drive/Flanders Drive *(AWSC)*	AM	18.7	C
	PM	14.3	B
Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	16.4	C
	PM	21.6	C
Carroll Canyon Road and Maya Linda Road			
Scranton Road/Carroll Canyon Road	AM	*No Conflicting Movements*	
	PM		
Pacific Heights Boulevard/Carroll Canyon Road	AM	19.0	B
	PM	19.2	B
Carroll Road/Carroll Canyon Road	AM	*DNE*[e]	—
	PM	*DNE*	—
Camino Santa Fe/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—

Intersection	Peak Hour	Existing	
		Delay[a]	LOS[b]
Camino Ruiz/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—
Project Driveway C/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—
Project Driveway D/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—
Project Driveway E/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—
Project Driveway F/Carroll Canyon Road	AM	*DNE*	—
	PM	*DNE*	—
Black Mountain Road/Carroll Canyon Road	AM	27.3	C
	PM	21.6	C
Maya Linda Road/Carroll Canyon Road	AM	27.0	C
	PM	25.1	C
I-15 Southbound Ramps/Carroll Canyon Road	AM	46.7	D
	PM	38.1	D
I-15 Northbound Ramps/Carroll Canyon Road	AM	38.0	D
	PM	35.4	D
Businesspark Avenue/Carroll Canyon Road	AM	31.2	C
	PM	30.0	C
Scripps Ranch Boulevard/Carroll Canyon Road	AM	23.8	C
	PM	19.3	B
Project Driveway G/Maya Linda Road	AM	*DNE*	—
	PM	*DNE*	—
Project Driveway H/Maya Linda Road	AM	*DNE*	—
	PM	*DNE*	—
La Jolla Village Drive/Miramar Road/Pomerado Road			
Towne Centre Drive/Eastgate Mall	AM	29.3	C
	PM	41.5	D
Judicial Drive/Eastgate Mall	AM	26.5	C
	PM	23.9	C
Towne Centre Drive/La Jolla Village Drive	AM	**84.3**	**F**
	PM	**64.5**	**E**
I-805 Southbound Ramps/La Jolla Village Drive	AM	*No Conflicting Movements*	
	PM		
I-805 Northbound Ramps/Miramar Road	AM	*No Conflicting Movements*	
	PM		
Nobel Drive/Miramar Road	AM	22.6	C
	PM	21.2	C
Eastgate Mall/Miramar Road	AM	31.1	C
	PM	34.8	C
Camino Santa Fe/Miramar Road	AM	**70.3**	**E**
	PM	**56.0**	**E**
Carroll Road/Camino Santa Fe	AM	36.4	D
	PM	43.3	D
Carroll Road/Miramar Road	AM	20.6	C
	PM	31.9	C
Camino Ruiz/Miramar Road	AM	43.0	D
	PM	42.8	D
Black Mountain Road/Miramar Road	AM	52.2	D
	PM	49.9	D
Kearny Villa Road/Miramar Road	AM	**61.6**	**E**

Intersection	Peak Hour	Existing	
		Delay[a]	LOS[b]
	PM	**71.0**	**E**
Kearny Mesa Road/Miramar Road	AM	46.5	D
	PM	42.1	D
I-15 Southbound Ramps/Miramar Road	AM	32.4	C
	PM	24.6	C
I-15 Northbound Ramps/Pomerado Road	AM	25.8	C
	PM	29.5	C
Willow Creek Road/Pomerado Road	AM	28.7	C
	PM	52.3	D
Nobel Drive/I-805 Southbound On Ramp	AM	5.2	A
	PM	14.2	B
Nobel Drive/I-805 Northbound Off Ramp	AM	12.2	B
	PM	14.0	B
Camino Ruiz			
Camino Ruiz/New Salem Street	AM	28.2	C
	PM	36.6	D
Camino Ruiz/Reagan Road	AM	32.8	C
	PM	36.5	D
Camino Ruiz/Flanders Drive	AM	20.9	C
	PM	22.4	C
Camino Ruiz/Gold Coast Drive	AM	53.4	D
	PM	42.5	D
Camino Ruiz/Jade Coast Road *(TWSC)*[d]	AM	19.1	C
	PM	17.1	C
Camino Ruiz/Jade Coast Drive	AM	23.4	C
	PM	18.9	B
Camino Ruiz/Project Driveway A	AM	*DNE*	—
	PM	*DNE*	—
Camino Ruiz/Project Driveway B	AM	*DNE*	—
	PM	*DNE*	—
Camino Ruiz/Miralani Drive	AM	52.2	D
	PM	43.6	D
Camino Ruiz/Activity Road	AM	31.3	C
	PM	41.0	D
Black Mountain Road			
Black Mountain Road/Park Village Road	AM	**66.1**	**E**
	PM	49.5	D
Black Mountain Road/Mercy Road	AM	41.2	D
	PM	43.1	D
Black Mountain Road/Westview Parkway	AM	27.1	C
	PM	26.1	C
Black Mountain Road/Capricorn Way	AM	54.5	D
	PM	52.6	D
Black Mountain Road/Hillery Drive	AM	51.3	D
	PM	42.8	D
Black Mountain Road/Gold Coast Drive	AM	39.1	D
	PM	36.7	D
Black Mountain Road/Maya Linda Road	AM	24.2	C
	PM	10.4	B
Black Mountain Road/Carroll Centre Rd/Kearny Villa Road	AM	**57.5**	**E**
	PM	46.2	D

Intersection	Peak Hour	Existing	
		Delay[a]	LOS[b]
Black Mountain Road/Activity Road	AM	39.7	D
	PM	**70.7**	**E**
Kearny Villa Road			
Kearny Villa Road Southbound Ramps/Miramar Way *(TWSC)*	AM	18.1	C
	PM	33.9	D
Kearny Villa Road Northbound Ramps/Miramar Way *(TWSC)*	AM	21.4	C
	PM	16.8	C
SR 163 Southbound Ramps/Kearny Villa Road *(TWSC)*	AM	13.3	B
	PM	18.4	C
SR 163 Northbound Ramps/Kearny Villa Road	AM	20.1	C
	PM	10.7	B

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. AWSC – All-Way Stop Controlled Intersection.
d. TWSC – Two-Way Stop Controlled Intersection.
e. DNE – Does Not Exist

General Notes:

1. Bold typeface indicates intersections operating at LOS E or LOS F.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

Table 5.2-4. *Existing Street Segment Operations*

Roadway Segment	Lanes	Functional Classification	Capacity (LOS E) [a]	Existing ADT [b]	V/C [c]	LOS [d]
Mira Mesa Boulevard						
West of I-805	4	Major Arterial	40,000	16,430	0.411	B
I-805 to Scranton Rd.	9	Prime Arterial	75,000	75,590	**1.080**	**F**
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	48,440	0.807	C
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	43,490	0.725	C
Camino Santa Fe to Parkdale Av.	6	Major Arterial	50,000	47,920	**0.958**	**E**
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	50,190	**1.004**	**F**
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	51,200	**1.024**	**F**
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	53,110	**1.062**	**F**
New Salem St. to Black Mountain Rd.	6	Major Arterial	50,000	61,340	**1.227**	**F**
Black Mountain Rd. to Westview Pkwy.	7	Prime Arterial	65,000	65,660	**1.010**	**F**
Westview Pkwy. to I-15	9	Prime Arterial	75,000	72,400	**0.965**	**E**
I-15 to Scripps Ranch Blvd.	6	Major Arterial	50,000	31,070	0.621	C
Hillery Drive						
Black Mountain Rd. to Westview Pkwy.	2	Collector TWLTL	15,000	11,210	0.747	D
Flanders Drive						
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,620	**0.828**	**E**
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,520	0.690	D
Gold Coast Drive						
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,500	**0.938**	**E**
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,660	**0.833**	**E**
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,270	**1.659**	**F**
Black Mountain Rd. to Maya Linda Rd.	2	Collector	8,000	7,120	**0.890**	**E**
Jade Coast Road						

Roadway Segment	Lanes	Functional Classification	Capacity (LOS E) [a]	Existing ADT [b]	V/C [c]	LOS [d]
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,320	0.540	C
Jade Coast Drive						
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,070	0.384	B
Carroll Canyon Road						
Scranton Rd. to Pacific Heights Blvd.	2	Collector TWLTL	15,000	9,880	0.659	C
Pacific Heights Blvd. to Carroll Rd.	2	Collector TWLTL	15,000	9,000	0.600	C
Black Mountain Rd. to I-15	4	Collector	30,000	24,290	0.810	D
I-15 to Businesspark Av.	4	Collector	30,000	22,690	0.756	D
Miralani Drive						
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,270	**1.159**	**F**
Activity Road						
Camino Ruiz to Black Mountain Rd.	2	Collector	15,000	11,010	0.734	D
La Jolla Village Drive/Miramar Road/Pomerado Road						
West of Towne Center Dr.	6	Prime Arterial	60,000	35,850	0.598	C
Towne Center Dr. to I-805	7	Prime Arterial	65,000	63,550	**0.978**	**E**
I-805 to Nobel Dr.	7	Prime Arterial	65,000	51,200	0.788	C
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	62,500	**0.962**	**E**
Eastgate Mall to Camino Santa Fe	6	Prime Arterial	60,000	64,740	**1.079**	**F**
Camino Santa Fe to Carroll Rd.	6	Major Arterial	50,000	42,230	0.845	D
Carroll Rd. to Cabot Dr.	6	Major Arterial	50,000	56,000	**1.120**	**F**
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	52,180	**1.044**	**F**
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,790	**1.236**	**F**
Black Mountain Rd. to Kearny Villa Rd.	6	Major Arterial	50,000	73,240	**1.465**	**F**
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	61,110	**1.222**	**F**
I-15 to Willow Creek Rd.	2	Collector TWLTL	15,000	34,660	**2.311**	**F**
East of Willow Creek Rd.	2	Collector TWLTL	15,000	29,600	**1.973**	**F**
Vista Sorrento Parkway						
I 805 NB Ramps to Mira Mesa Blvd.	4	Collector	30,000	22,820	0.761	D
Scranton Road						
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	16,220	0.406	B
Camino Santa Fe						
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	13,470	0.269	A
Flanders Dr. to Carroll Rd.	6	Major Arterial	50,000	16,900	0.338	A
Carroll Rd. to Miramar Rd.	4/6	Major Arterial	40,000	24,020	0.601	C
Camino Ruiz						
North of New Salem St.	4	Major Arterial	40,000	24,000	0.600	C
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	26,780	0.670	C
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	20,590	0.515	C
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	23,470	0.587	C
Gold Coast Dr. to Jade Coast Dr.	4	Major Arterial	40,000	21,460	0.537	C
Jade Coast Dr. to Miralani Dr.	4	Major Arterial	40,000	25,100	0.628	C
Miralani Dr. to Miramar Rd.	4	Major Arterial	40,000	27,090	0.677	C
Reagan Road						
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,050	0.756	D
East of Camino Ruiz	2	Collector	8,000	5,200	0.650	D
Westonhill Drive						
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,190	**1.024**	**F**
Hillery Dr. to Flanders Dr.	2	Collector	8,000	6,880	**0.860**	**E**
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,520	0.690	D

Roadway Segment	Lanes	Functional Classification	Capacity (LOS E) [a]	Existing ADT [b]	V/C [c]	LOS [d]
Black Mountain Road						
North of Park Village Rd.	4	Major Arterial	40,000	34,330	0.858	D
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	32,000	0.800	D
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	35,100	0.702	C
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	24,310	0.486	B
Capricorn Way to Mira Mesa Blvd.	4	Major Arterial	40,000	29,380	0.735	C
Mira Mesa Blvd. to Hillery Dr.	4	Major Arterial	40,000	18,060	0.452	B
Hillery Dr. to Gold Coast Dr.	4	Major Arterial	40,000	23,640	0.591	C
Gold Coast Drive. to Carroll Canyon Rd.	4	Major Arterial	40,000	29,840	0.746	C
Carroll Canyon Rd. to Maya Linda Rd.	4	Major Arterial	40,000	24,480	0.612	C
Maya Linda Rd. to Carroll Centre Rd.	5	Major Arterial	45,000	31,000	0.689	C
Carroll Centre Rd. to Miramar Rd.	4	Collector	30,000	17,640	0.588	C
Kearny Villa Road						
Carroll Centre Rd. to Miramar Rd.	4	Major Arterial	40,000	14,880	0.372	A
Miramar Rd. to Miramar Way	4	Major Arterial	50,000[e]	22,700	0.454	B
Miramar Way to SR 163	4	Major Arterial	50,000[e]	25,520	0.510	B
South of SR 163	4	Major Arterial	50,000[e]	18,450	0.369	A
Maya Linda Road						
Black Mountain Rd. to Carroll Canyon Rd	2	Collector	8,000	2,700	0.338	B
Nobel Drive						
I-805 NB to Miramar Rd.	4	Major Arterial	40,000	15,200	0.380	B
Eastgate Mall						
Towne Center Dr. to I-805	4	Collector	30,000	11,350	0.378	B
I 805 to Miramar Rd.	2	Collector TWLTL	15,000	15,950	**1.063**	**F**

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Kearny Villa Road south of Miramar Road to SR 163 is a high-speed roadway segment with a posted speed limit of 65 mph serving as a parallel route to I-15 with a raised median and bike lanes. This is not typical of a Major Arterial classification. As such, a higher capacity was assumed to better reflect the operations of the roadway.

General Notes:

1. TWLTL = Two-way left-turn lane.
2. Bold typeface indicates intersections operating at LOS E or LOS F.

Table 5.2-5. *Observed Ramp Meter Operations*

Location	Peak Period	Observed Maximum Delay (min:sec)	Observed Maximum Queue [a]	
			(vehicles)	(feet) [b]
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange				
WB Mira Mesa Blvd to SB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(3 SOV)	PM	3:11	48	1,200
EB Mira Mesa Blvd to SB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV + 1 HOV)	PM	2:08	30	750
NB & SB Vista Sorrento Pkwy to NB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(2 SOV + 1 HOV)	PM	1:26	17	425
I-805/La Jolla Village Dr./Miramar Rd. Interchange				
WB Miramar Rd. to SB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(2 SOV)	PM	6:31	41	1,025
WB Miramar Rd. to NB I-805	AM	0:50	10	250
(1 SOV+ 1 HOV)	PM	*Ramp Meter Not Activated, No queue or delay observed*		
EB La Jolla Village Dr. to SB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV + 1 HOV)	PM	8:50	74	1,850
EB La Jolla Village Dr. to NB I-805	AM	3:16	32	800
(1 SOV + 1 HOV)	PM	*Ramp Meter Not Activated, No queue or delay observed*		
I-805/Nobel Dr. Interchange				
EB & WB Nobel Dr. to SB I-805	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(2 SOV + 1 HOV)	PM	10:02	33	825
I-15/Mira Mesa Blvd Interchange				
WB Mira Mesa Blvd. to SB I-15	AM	0:12	4	100
(1 SOV + 1 HOV)	PM	*Ramp Meter Not Activated, No queue or delay observed*		
WB Mira Mesa Blvd. to NB I-15	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV + 1 HOV)	PM	0:06	4	100
EB Mira Mesa Blvd. to SB I-15	AM	0:45	12	300
(2 SOV + 1 HOV)	PM	0.26	9	225
EB Mira Mesa Blvd. to NB I-15	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV + 1 HOV)	PM	0:54	10	250
I-15/Carroll Canyon Road Interchange				
EB & WB Carroll Canyon Road to SB I-15	AM	1:45	13	325
(1 SOV + 1 HOV)	PM	1:55	26	650
EB & WB Carroll Canyon Road to NB I-15	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV + 1 HOV)	PM	0:38	11	275
I-15/Miramar Road Interchange				
WB Miramar Rd to SB I-15	AM	0:32	8	200
(2 SOV)	PM	*Ramp Meter Not Activated, No queue or delay observed*		
WB Miramar Rd to NB I-15	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(2 SOV)	PM	0:06	2	50
EB Miramar Rd to SB I-15	AM	0:26	5	125
(1 SOV)	PM	0:24	9	225
EB Miramar Rd to NB I-15	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV)	PM	0:22	7	175
SR 163/Kearny Villa Rd Interchange				
SB Kearny Villa Rd to SB SR 163	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(2 SOV + 1 HOV)	PM	*Ramp Meter Not Activated, No queue or delay observed*		
NB Kearny Villa Rd to NB SR 163	AM	*Ramp Meter Not Activated, No queue or delay observed*		
(1 SOV)	PM	5:40	37	925

Footnotes:

a. Queue measured from ramp meter limit line to back of last vehicle in queue.

b. 25 feet per car assumed in queue length calculations.

General Notes:

1. Observations conducted between the hours of 7:00-9:00 AM and 4:00-6:00 PM in November 2010.

Table 5.2-6a. *Existing Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Existing	
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange			
WB Mira Mesa Blvd to SB I-805 (3 SOV)	AM	Ramp meter not activated	
	PM	3	1,200
EB Mira Mesa Blvd to SB I-805 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	3	756
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	2	425
I-805/La Jolla Village Drive/Miramar Road Interchange			
WB Miramar Rd. to SB I-805 (2 SOV)	AM	Ramp meter not activated	
	PM	10	1,025
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	2	253
	PM	Ramp meter not activated	
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	10	1,848
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	4	804
	PM	Ramp meter not activated	
I-805/Nobel Dr. Interchange			
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	10	1,000
I-15/Mira Mesa Blvd Interchange			
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	< 1	101
	PM	Ramp meter not activated	
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	1	118
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	1	300
	PM	1	225
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	1	266
I-15/Carroll Canyon Road Interchange			
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	2	626
	PM	2	663
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	2	293
I-15/Miramar Road Interchange			
WB Miramar Rd to SB I-15 (2 SOV)	AM	1	200
	PM	Ramp meter not activated	
WB Miramar Rd to NB I-15 (2 SOV)	AM	Ramp meter not activated	
	PM	5	50
EB Miramar Rd to SB I-15 (1 SOV)	AM	< 1	125
	PM	< 1	225
EB Miramar Rd to NB I-15 (1 SOV)	AM	Ramp meter not activated	
	PM	1	175
SR 163/Kearny Villa Rd Interchange			
SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	Ramp meter not activated	
NB Kearny Villa Rd to NB SR 163 (1 SOV)	AM	Ramp meter not activated	
	PM	7	925

Location	Peak Hour	Existing	
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)

Footnotes:

a. SOV = Single-Occupancy Vehicle.

General Notes:

1. Results calibrated based on field observations. (See Table 5.2-5.)
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-6b. *Existing Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Existing	
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange			
WB Mira Mesa Blvd to SB I-805 (3 SOV)	AM	Ramp meter not activated	
	PM	3	1,200
EB Mira Mesa Blvd to SB I-805 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	3	756
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	2	425
I-805/La Jolla Village Drive/Miramar Road Interchange			
WB Miramar Rd. to SB I-805 (2 SOV)	AM	Ramp meter not activated	
	PM	10	1,025
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	2	253
	PM	Ramp meter not activated	
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	10	1,848
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	4	804
	PM	Ramp meter not activated	
I-805/Nobel Dr. Interchange			
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	10	1,000
I-15/Mira Mesa Blvd Interchange			
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	< 1	101
	PM	Ramp meter not activated	
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	1	118
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	1	300
	PM	1	225
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	1	266
I-15/Carroll Canyon Road Interchange			
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	2	626
	PM	2	663
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	2	293
I-15/Miramar Road Interchange			
WB Miramar Rd to SB I-15 (2 SOV)	AM	1	200
	PM	Ramp meter not activated	
WB Miramar Rd to NB I-15 (2 SOV)	AM	Ramp meter not activated	
	PM	5	50

Location	Peak Hour	Existing	
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)
EB Miramar Rd to SB I-15 (1 SOV)	AM	< 1	125
	PM	< 1	225
EB Miramar Rd to NB I-15 (1 SOV)	AM	Ramp meter not activated	
	PM	1	175
SR 163/Kearny Villa Rd Interchange			
SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	AM	Ramp meter not activated	
	PM	Ramp meter not activated	
NB Kearny Villa Rd to NB SR 163 (1 SOV)	AM	Ramp meter not activated	
	PM	7	925

Footnotes:

a. SOV = Single-Occupancy Vehicle.

General Notes:

1. Results calibrated based on field observations. (See Table 5.2-5.)
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-7. *Existing Freeway Segment Operations*

Freeway and Segment	ADT[b]	AM Peak Hour					PM Peak Hour				
		Direction, Number of Lanes, & Capacity[a]			V/C	LOS	Direction, Number of Lanes, & Capacity[a]			V/C	LOS
SR 163											
North of Kearny Villa Rd.	135,000	NB Mainlines	4M+1A	9,200	0.474	B	NB Mainlines	4M+1A	9,200	0.635	C
		SB Mainlines	5M	10,000	0.828	D	SB Mainlines	5M	10,000	0.711	C
South of Kearny Villa Rd.	142,000	NB Mainlines	4M+1A	9,200	0.499	B	NB Mainlines	4M+1A	9,200	0.668	C
		SB Mainlines	5M	10,000	0.871	D	SB Mainlines	5M	10,000	0.748	C
I–15											
North of Mira Mesa Blvd.	268,000	NB Mainlines	5M+1A+2HOV/ML	13,600	0.683	C	NB Mainlines	5M+1A+2HOV/ML	13,600	0.803	D
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.943	**E**	SB Mainlines	5M+1A+2HOV/ML	13,600	0.716	C
Mira Mesa Blvd. to Carroll Canyon Rd.	272,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.622	C	NB Mainlines	6M+1A+2HOV/ML	15,600	0.696	C
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.812	D	SB Mainlines	6M+1A+2HOV/ML	15,600	0.634	C
Carroll Canyon Rd. to Miramar Rd.	281,000	NB Mainlines	6M+2HOV/ML	14,400	0.696	C	NB Mainlines	6M+2HOV/ML	14,400	0.779	C
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.839	D	SB Mainlines	6M+1A+2HOV/ML	15,600	0.655	C
Miramar Rd. to Miramar Way	291,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.754	C	NB Mainlines	6M+1A+2HOV/ML	15,600	0.628	C
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.813	D	SB Mainlines	6M+1A+2HOV/ML	15,600	0.821	**D**
Miramar Way to SR 163	294,000	NB Mainlines	7M+2HOV/ML	16,400	0.725	C	NB Mainlines	7M+2HOV/ML	16,400	0.604	B
		SB Mainlines	7M+2HOV/ML	16,400	0.781	C	SB Mainlines	7M+2HOV/ML	16,400	0.789	**C**
South of SR 163	170,000	NB Mainlines	4M+2HOV/ML	10,400	0.661	C	NB Mainlines	4M+2HOV/ML	10,400	0.551	B
		SB Mainlines	4M+2HOV/ML	10,400	0.712	**C**	SB Mainlines	4M+2HOV/ML	10,400	0.719	**C**
I–805											
North of Mira Mesa Blvd.	150,000	NB Mainlines	4M+1A	9,200	0.827	D	NB Mainlines	4M+1A	9,200	0.504	B
		SB Mainlines	4M+1A	9,200	0.369	B	SB Mainlines	4M+1A	9,200	0.762	C
Mira Mesa Blvd to La Jolla Village Dr.	187,000	NB Mainlines	4M+1A	9,200	1.031	**F(0)**	NB Mainlines	4M+1A	9,200	0.628	C
		SB Mainlines	4M+1A	9,200	0.460	B	SB Mainlines	4M+1A	9,200	0.949	**E**
La Jolla Village Dr. to Nobel Dr.	185,000	NB Mainlines	4M+1A	9,200	1.020	**F(0)**	NB Mainlines	4M+1A	9,200	0.621	C
		SB Mainlines	4M+1A	9,200	0.455	B	SB Mainlines	4M+1A	9,200	0.939	**E**
South of Nobel Dr.	202,000	NB Mainlines	4M+1A	9,200	1.114	**F(0)**	NB Mainlines	4M+1A	9,200	0.679	C
		SB Mainlines	4M+1A	9,200	0.497	B	SB Mainlines	4M+1A	9,200	1.026	**F(0)**

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV: High Occupancy Vehicle Lane).
Example: 4M+2A=4 Mainlines + 2 Auxiliary Lanes)-

b. Existing ADT Volumes from CALTRANS online Traffic and Vehicle Data Systems Unit, 2004.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.80	F(2)	1.45
D	0.92	F(3)	>1.46
E	1.00		

Table 5.2-8. *Cumulative Projects—Not Completed or Partially Occupied*

Project Name	Type of Development	Project Size	Status (as of 2016)
1. Nobel Research Park/IDEC/Illumina	R&D/Corporate Office	766,000 SF	Partially Occupied
2. La Jolla Commons	R&D/Office Residential Commercial (Hotel)	490,000 SF 120 multi-dwelling units 325 rooms	Partially Occupied
3. UCSD	Medical R&D	500,000 SF (700 staff)	Not constructed
4. Eastgate Tech Park (Bridge Pointe)	Industrial/ Business Park	225,842 SF	Partially Occupied
5. Costa Verde Specific Plan—Monte Verde [a]	Retail Residential Hotel	16.5 acres 2,931 dwelling units 400 rooms	Partially Occupied
6. Regency Centre[c]	Retail	75,000 SF	Withdrawn
7. La Jolla Centre III and IV[b]	R&D/Office	278,800 SF 100,000 SF	Not constructed
8. UTC Revitalization Project	Retail Residential	750,000 SF 250 multi-dwelling units	Not constructed
9. Westview Parkway/Casa Mira View Phase II	Residential	319 dwelling-units	Approved, not constructed
10. Holiday Court[c]	Residential Retail	107 dwelling-units 6,100 SF	Withdrawn
11. Fenton—Carroll Canyon Technology Center (Carroll Canyon Master Plan)[d]	Industrial/Business Park	896,000 SF	Partially Occupied
12. Hanson Properties—Carroll Canyon Master Plan[e]	Residential Commercial Mixed-Use	69 acres 40 acres	Approved, not constructed
13. Sorrento Valley Science Park (PID)	Multi-Tenant Office Corporate Office	165,000 SF 165,000 SF	Not constructed
14. Casa Mira View[f]	Residential	1,848 dwelling units	Under Construction
15. Mira Mesa Shopping Center Rezone[g]	Residential Medical Office Retail	88 dwelling units 4,000 SF medical office 41,246 SF specialty retail	Approved, not constructed
16. Carroll Canyon Commercial Center	Commercial	144,000 SF	Under review

Footnotes:

a. A portion of the Costa Verde Specific Plan was built and occupied at the time existing counts were conducted; however, to be conservative, the entire project was incorporated into the Model. The Monte Verde project (within the Costa Verde Specific Plan) involves the conversion (based on trip generation equivalency) of 400 hotel rooms to approximately 664 dwelling units and 420 unbuilt residential dwelling units for a total of 1,084 residential dwellings units. A reduced project at 560 residential units was approved; however, the original project size was conservatively assumed in the model.

b. The project has been changed to include 278,800 SF of commercial office and 100,000 SF of Scientific R&D.

c. The project has since been withdrawn, but was still conservatively assumed in the Model.

d. The Fenton-Carroll Canyon Technology Center is approved as part of the Carroll Canyon Master Plan and represents the westerly development of the Master Plan, which includes approximately 896,000 SF. Approximately 319,754 SF has been built.

e. The project size represents the easterly development of the Hanson Properties-Carroll Canyon Master Plan and does not include the Fenton-Carroll Canyon Technology Center.

f. Buildout of the Casa Mira View project is assumed to be at 200 units per year.

g. The project has been changed to include 88 multi-family dwelling units, 4,000 SF of medical office and 41,246 SF of specialty retail.

Table 5.2-9. *Projects Completed and Occupied*

Project Name	Type of Development	Project Size
17. Solterra (formerly Erma Road)	Residential	114 multi-family dwelling units
18. Congregation Beth Israel	Religious (Temple) Educational (School)	500 seat Temple 75 pre-school and 180 k-8 students
19. Nexus Center	R&D/Office	67,000 SF
20. Towne Centre Science Park	R&D/Office	190,000 SF
21. Qualcomm Building "N"	Office	402,000 SF
22. Qualcomm Building "W"	R&D/Office	350,000 SF
23. Miramar Community College	Educational	14,700 new enrollments
24. Scripps Park West I	Commercial Office Industrial/Office	60,500 SF 84,900 SF
25. La Jolla Crossroads	R&D/Office Residential	162,000 SF 1,500 multi-dwelling units
26. Qualcomm/Campus Point	R&D/Office	330,000 SF
27. PETCO Headquarters	Commercial Office	189,700 SF
28. Carroll Canyon Business Park (Aspen Creek)	Industrial/Business Park	470,000 SF
29. Alexandria Technology Center	Corporate Office	300,753 SF
30. San Diego Technology Center	Industrial/Business Park	559,253 SF

Table 5.2-10. *City of San Diego – Traffic Impact Significant Thresholds*

Level of Service with Project[b]	Allowable Increase Due to Project Impacts[a]					
	Freeways		Roadway Segments		Intersections	Ramp Metering[c]
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
E	0.010	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Footnotes:

a. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note b), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.

b. All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped locations). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

c. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E (upstream) is 2 minutes. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F (upstream) is 1 minute.

General Notes:

1. Delay = Average control delay per vehicle measured in seconds for intersections, or minutes for ramp meters.
2. LOS = Level of Service
3. V/C = Volume to Capacity Ratio
4. Speed = Arterial speed measured in miles per hour

Table 5.2-11. *Existing + Project Intersection Operations*

Intersection	Peak Hour	Existing		Existing + Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard[d]	AM	41.5	D	41.9	D	0.4	No
	PM	35.5	D	37.9	D	2.4	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard	AM	**97.0**	**F**	**97.1**	**F**	0.1	No
	PM	36.8	D	36.9	D	0.1	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	51.3	D	51.4	D	0.1	No
	PM	**84.5**	**F**	**85.2**	**F**	0.7	No
4. Scranton Road/Mira Mesa Boulevard	AM	46.2	D	46.5	D	0.3	No
	PM	**66.3**	**E**	**66.8**	**E**	0.5	No
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	46.8	D	47.2	D	0.4	No
	PM	**76.5**	**E**	**77.1**	**E**	0.6	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	54.2	D	54.5	D	0.3	No
	PM	**62.8**	**E**	**62.9**	**E**	0.1	No
7. Parkdale Avenue/Mira Mesa Boulevard	AM	45.4	D	45.7	D	0.3	No
	PM	47.6	D	47.6	D	0.0	No
8. Reagan Road/Mira Mesa Boulevard	AM	42.5	D	42.5	D	0.0	No
	PM	51.7	D	51.7	D	0.0	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	53.9	D	53.9	D	0.0	No
	PM	**66.5**	**E**	**66.6**	**E**	0.1	No
10. New Salem Street/Mira Mesa Boulevard	AM	28.9	C	29.2	C	0.3	No
	PM	39.0	D	39.0	D	0.0	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	49.7	D	49.9	D	0.2	No
	PM	35.3	D	36.2	D	0.9	No
12. Black Mountain Road/Mira Mesa Boulevard	AM	**103.2**	**F**	**103.6**	**F**	0.4	No
	PM	**116.9**	**F**	**117.7**	**F**	0.8	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**61.1**	**E**	**61.6**	**E**	0.5	No
	PM	**63.3**	**E**	**63.7**	**E**	0.4	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	44.0	D	45.3	D	1.3	No
	PM	33.0	C	34.0	C	1.0	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	41.4	D	41.6	D	0.2	No
	PM	49.1	D	49.8	D	0.7	No
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	38.8	D	39.3	D	0.5	No
	PM	47.2	D	47.2	D	0.0	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	31.1	C	31.8	C	0.7	No
	PM	29.8	C	32.9	C	3.1	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**44.9**	**E**	**44.9**	**E**	0.0	No
	PM	12.3	B	12.3	B	0.0	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	18.7	C	18.7	C	0.0	No
	PM	14.3	B	14.3	B	0.0	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	16.4	C	16.7	C	0.3	No
	PM	21.6	C	22.4	C	0.8	No
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road[d]	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—
31. Pacific Heights Boulevard/Carroll Canyon Road	AM	19.0	B	19.1	B	0.1	No
	PM	19.2	B	19.2	B	0.0	No
32. Carroll Road/Carroll Canyon Road	AM	*DNE*[e]	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
33. Camino Santa Fe/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—

Intersection	Peak Hour	Existing		Existing + Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
34. Camino Ruiz/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
35. Project Driveway C/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
36. Project Driveway D/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
37. Project Driveway E/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
38. Project Driveway F/Carroll Canyon Road [d]	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
39. Black Mountain Road/Carroll Canyon Road	AM	27.3	C	28.8	C	1.4	No
	PM	21.6	C	24.4	C	2.8	No
40. Maya Linda Road/Carroll Canyon Road	AM	27.0	C	27.6	C	0.6	No
	PM	25.1	C	26.7	C	1.6	No
41. I-15 Southbound Ramps/Carroll Canyon Road	AM	46.7	D	54.7	D	8.0	No
	PM	38.1	D	49.6	D	11.5	No
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	38.0	D	46.9	D	8.9	No
	PM	35.4	D	41.6	D	6.2	No
43. Businesspark Avenue/Carroll Canyon Road	AM	31.2	C	31.3	C	0.1	No
	PM	30.0	C	30.1	C	0.1	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	23.8	C	24.5	C	0.7	No
	PM	19.3	B	19.3	B	0.0	No
45. Project Driveway G/Maya Linda Road	AM	*DNE*	—	3.3	A	3.3	No
	PM	*DNE*	—	21.7	C	21.7	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*DNE*	—	9.0	A	9.0	No
	PM	*DNE*	—	9.7	A	9.7	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	29.3	C	29.4	C	0.1	No
	PM	41.5	D	41.5	D	0.0	No
51. Judicial Drive/Eastgate Mall	AM	26.5	C	26.8	C	0.3	No
	PM	23.9	C	24.1	C	0.2	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**84.3**	**F**	**84.4**	**F**	0.1	No
	PM	**64.5**	**E**	**65.1**	**E**	0.6	No
53. I-805 Southbound Ramps/La Jolla Village Drive	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—
54. I-805 Northbound Ramps/Miramar Road	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—
55. Nobel Drive/Miramar Road	AM	22.6	C	22.7	C	0.1	No
	PM	21.2	C	21.6	C	0.4	No
56. Eastgate Mall/Miramar Road	AM	31.1	C	31.6	C	0.5	No
	PM	34.8	C	35.6	D	0.8	No
57. Camino Santa Fe/Miramar Road	AM	**70.3**	**E**	**71.2**	**E**	0.9	No
	PM	**56.0**	**E**	**57.4**	**E**	1.4	No
58. Carroll Road/Camino Santa Fe	AM	36.4	D	36.5	D	0.1	No
	PM	43.3	D	43.4	D	0.1	No
59. Carroll Road/Miramar Road	AM	20.6	C	20.8	C	0.2	No
	PM	31.9	C	35.8	D	3.9	No
60. Camino Ruiz/Miramar Road	AM	43.0	D	46.7	D	3.7	No
	PM	42.8	D	43.8	D	1.0	No
61. Black Mountain Road/Miramar Road	AM	52.2	D	52.4	D	0.2	No
	PM	49.9	D	51.4	D	1.5	No
62. Kearny Villa Road/Miramar Road	AM	**61.6**	**E**	**66.3**	**E**	4.7	**Yes**
	PM	**71.0**	**E**	**75.0**	**E**	4.0	**Yes**
93. Kearny Mesa Road/Miramar Road	AM	46.5	D	46.6	D	0.1	No

Intersection	Peak Hour	Existing		Existing + Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
	PM	42.1	D	42.6	D	0.5	No
63. I-15 Southbound Ramps/Miramar Road	AM	32.4	C	33.0	C	0.6	No
	PM	24.6	C	24.9	C	0.3	No
64. I-15 Northbound Ramps/Miramar Road	AM	25.8	C	25.9	C	0.1	No
	PM	29.5	C	29.9	C	0.4	No
65. Willow Creek Road/Pomerado Road	AM	28.7	C	29.6	C	0.9	No
	PM	52.3	D	53.3	D	1.0	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	5.2	A	5.2	A	0.0	No
	PM	14.2	B	16.6	B	2.4	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	12.2	B	12.2	B	0.0	No
	PM	14.0	B	14.0	B	0.0	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	28.2	C	28.5	C	0.3	No
	PM	36.6	D	36.7	D	0.1	No
71. Camino Ruiz/Reagan Road	AM	32.8	C	32.9	C	0.1	No
	PM	36.5	D	36.8	D	0.3	No
72. Camino Ruiz/Flanders Drive	AM	20.9	C	20.9	C	0.0	No
	PM	22.4	C	22.4	C	0.0	No
73. Camino Ruiz/Gold Coast Drive	AM	53.4	D	54.7	D	1.3	No
	PM	42.5	D	42.7	D	0.2	No
74. Camino Ruiz/Jade Coast Road *(TWSC)*	AM	19.1	C	19.1	C	0.0	No
	PM	17.1	C	17.2	C	0.1	No
75. Camino Ruiz/Jade Coast Drive	AM	23.4	C	23.4	C	0.0	No
	PM	18.9	B	19.0	B	0.1	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
78. Camino Ruiz/Miralani Drive	AM	52.2	D	53.3	D	0.1	No
	PM	43.6	D	43.7	D	0.1	No
79. Camino Ruiz/Activity Road	AM	31.3	C	31.5	C	0.2	No
	PM	41.0	D	41.8	D	0.8	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**66.1**	**E**	**66.3**	**E**	0.2	No
	PM	49.5	D	50.5	D	1.0	No
81. Black Mountain Road/Mercy Road	AM	41.2	D	41.7	D	0.5	No
	PM	43.1	D	43.6	D	0.5	No
82. Black Mountain Road/Westview Parkway	AM	27.1	C	27.3	C	0.2	No
	PM	26.1	C	26.9	C	0.8	No
83. Black Mountain Road/Capricorn Way	AM	54.5	D	54.9	D	0.4	No
	PM	52.6	D	54.3	D	1.7	No
84. Black Mountain Road/Hillery Drive	AM	51.3	D	54.5	D	3.2	No
	PM	42.8	D	43.0	D	0.2	No
85. Black Mountain Road/Gold Coast Drive	AM	39.1	D	39.8	D	0.7	No
	PM	36.7	D	37.4	D	0.7	No
86. Black Mountain Road/Maya Linda	AM	24.2	C	48.1	D	23.9	No
	PM	10.4	B	24.1	C	13.7	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa	AM	**57.5**	**E**	**58.0**	**E**	0.5	No
	PM	46.2	D	47.5	D	1.3	No
88. Black Mountain Road/Activity Road	AM	39.7	D	42.7	D	3.0	No
	PM	**70.7**	**E**	**70.9**	**E**	0.2	No

Intersection	Peak Hour	Existing		Existing + Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way	AM	18.1	C	18.1	C	0.0	No
	PM	33.9	D	34.3	D	0.4	No
90. Kearny Villa Road NB Ramps/Miramar Way	AM	21.4	C	29.5	D	8.1	No
	PM	16.8	C	17.0	C	0.2	No
91. SR 163 SB Ramps/Kearny Villa Road	AM	13.3	B	13.4	B	0.1	No
	PM	18.4	C	18.7	C	0.3	No
92. SR 163 NB Ramps/Kearny Villa Road	AM	20.1	C	20.3	C	0.2	No
	PM	10.7	B	10.8	B	0.1	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Sig = Significant project impacts based on Significance Criteria.
d. Planned FBA roadway improvements for Phase 1.
e. DNE – Does Not Exist

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-12. *Existing + Project Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Existing			Existing + Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	16,430	0.411	B	16,430	0.411	B	0.000	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	75,590	**1.080**	**F**	75,620	**1.080**	**F**	0.000	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	48,440	0.807	C	48,470	0.808	C	0.001	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	43,490	0.725	C	43,520	0.725	C	0.001	No
Camino Santa Fe to Parkdale Av.	6	Major Arterial	50,000	47,920	**0.958**	**E**	47,950	**0.959**	**E**	0.001	No
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	50,190	**1.004**	**F**	50,220	**1.004**	**F**	0.001	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	51,200	**1.024**	**F**	51,230	**1.025**	**F**	0.001	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	53,110	**1.062**	**F**	53,110	**1.062**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	61,340	**1.227**	**F**	61,360	**1.227**	**F**	0.000	No
Black Mountain Rd to Westview Pkwy.	7	Prime Arterial	65,000	65,660	**1.010**	**F**	65,810	**1.012**	**F**	0.002	No
Westview Pkwy. to I-15	9	Prime Arterial	75,000	72,400	**0.965**	**E**	72,550	**0.967**	**E**	0.002	No
I-15 to Scripps Ranch Blvd.	6	Major Arterial	50,000	31,070	0.621	C	31,090	0.622	C	0.000	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy.	4	Collector	30,000	11,210	0.747	D	11,230	0.749	D	0.002	No
Flanders Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,620	**0.828**	**E**	6,620	**0.828**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,520	0.690	D	5,520	0.690	D	0.000	No
Gold Coast Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,500	**0.938**	**E**	7,500	**0.938**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,660	**0.833**	**E**	6,730	**0.841**	**E**	0.008	No
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,270	**1.659**	**F**	13,370	**1.671**	**F**	0.013	No[f]
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,120	**0.890**	**E**	7,170	**0.896**	**E**	0.006	No
Jade Coast Road											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,320	0.540	C	4,320	0.540	C	0.000	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,070	0.384	B	3,070	0.384	B	0.000	No
Carroll Canyon Road											
Scranton Rd. to Pacific Heights Blvd.	2	Collector TWLTL[l]	15,000	9,880	0.659	C	9,880	0.659	C	0.000	No
Pacific Heights Blvd. to Carroll Rd.	2	Collector TWLTL[l]	15,000	9,000	0.600	C	9,000	0.600	C	0.000	No
Black Mountain Rd to I-15	4	Collector	30,000	24,290	0.810	D	25,160	**0.839**	**E**	0.029	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	22,690	0.756	D	22,810	0.760	D	0.004	**No**
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,270	**1.159**	**F**	9,270	**1.159**	**F**	0.000	No
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL[l]	15,000	11,010	0.734	D	11,080	0.739	D	0.005	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Existing			Existing + Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr.	6	Prime Arterial	60,000	35,850	0.598	C	35,880	0.598	C	0.000	No
Towne Center Dr. to I-805	7	Prime Arterial	65,000	63,550	**0.978**	**E**	63,580	**0.978**	**E**	0.000	No
I-805 to Nobel Dr.	7	Prime Arterial	65,000	51,200	0.788	C	51,330	0.733	C	0.002	No
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	62,500	**0.962**	**E**	62,650	**0.964**	**E**	0.002	No
Eastgate Mall to Camino Santa Fe	6	Major Arterial	50,000	64,740	**1.079**	**F**	64,940	**1.299**	**F**	0.004	No
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	42,230	0.845	D	42,430	0.849	D	0.004	No
Carroll Rd to Cabot Dr.	6	Major Arterial	50,000	56,000	**1.120**	**F**	56,200	**1.124**	**F**	0.004	No
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	52,180	**1.044**	**F**	52,380	**1.048**	**F**	0.004	No
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,790	**1.236**	**F**	61,920	**1.238**	**F**	0.002	No
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	73,240	**1.465**	**F**	73,240	**1.465**	**F**	0.000	No
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	61,110	**1.222**	**F**	61,430	**1.229**	**F**	0.007	No
I-15 to Willow Creek Rd.	2	Collector TWLTL[l]	15,000	34,660	**2.311**	**F**	34,710	**2.314**	**F**	0.003	No
East of Willow Creek Rd.	2	Collector TWLTL[l]	15,000	29,600	**1.973**	**F**	29,620	**1.975**	**F**	0.002	No
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.[f]	4	Collector	30,000	22,820	0.761	D	22,850	0.762	D	0.001	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	16,220	0.406	B	16,220	0.406	B	0.000	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	13,470	0.269	A	13,470	0.269	A	0.000	No
Flanders Dr. to Carroll Rd.	6	Major Arterial	50,000	16,900	0.338	A	16,900	0.338	A	0.000	No
Carroll Rd. to Miramar Rd.	4/6	Major Arterial	40,000	24,020	0.601	C	24,020	0.601	C	0.000	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,000	0.600	C	24,020	0.601	C	0.001	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	26,780	0.670	C	26,800	0.670	C	0.000	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	20,590	0.515	C	20,640	0.516	B	0.001	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	23,470	0.587	C	23,520	0.588	C	0.001	No
Gold Coast Dr. to Jade Coast Dr.	4	Major Arterial	40,000	21,460	0.537	C	21,460	0.537	C	0.000	No
Jade Coast Dr. to Miralani Dr.	4	Major Arterial	40,000	25,100	0.628	C	25,100	0.628	C	0.000	No
Miralani Dr. to Miramar Rd.	4	Major Arterial	40,000	27,090	0.677	C	27,160	0.679	C	0.002	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,050	0.756	D	6,050	0.756	D	0.000	No
East of Camino Ruiz	2	Collector	8,000	5,200	0.650	D	5,200	0.650	D	0.000	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,190	**1.024**	**F**	8,190	**1.024**	**F**	0.000	No
Hillery Dr. to Flanders Dr.	2	Collector	8,000	6,880	**0.860**	**E**	6,880	**0.860**	**E**	0.000	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Existing			Existing + Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,520	0.690	D	5,540	0.693	D	0.003	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	34,330	0.858	D	34,350	0.859	D	0.001	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	32,000	0.800	D	32,050	0.801	D	0.001	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	35,100	0.702	C	35,200	0.704	C	0.002	No
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	24,310	0.486	B	24,460	0.489	B	0.003	No
Capricorn Way to Mira Mesa Blvd.	4	Major Arterial	40,000	29,380	0.735	C	29,530	0.738	C	0.003	No
Mira Mesa Blvd. to Hillery Dr.	4	Major Arterial	40,000	18,060	0.452	B	18,380	0.460	B	0.008	No
Hillery Dr. to Gold Coast Dr.	4	Major Arterial	40,000	23,640	0.591	C	24,010	0.600	C	0.009	No
Gold Coast Dr. to Carroll Canyon Rd.	4	Major Arterial	40,000	29,840	0.746	C	30,360	0.759	D	0.013	No
Carroll Canyon Rd. to Maya Linda Rd.	4	Major Arterial	40,000	24,480	0.612	C	25,870	0.647	C	0.035	No
Maya Linda Rd. to Carroll Centre Rd.	5	Major Arterial	45,000	31,000	0.689	C	31,890	0.709	C	0.020	No
Carroll Centre Rd. to Miramar Rd.	4	Collector	30,000	17,640	0.588	C	17,840	0.594	C	0.006	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	4	Major Arterial	40,000	14,880	0.372	A	15,570	0.389	B	0.017	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000[g]	22,700	0.454	B	23,070	0.577	C	0.009	No
Miramar Way to SR 163	4	Major Arterial	50,000[g]	25,520	0.510	B	25,870	0.647	C	0.009	No
South of SR 163	4	Major Arterial	50,000[g]	18,450	0.369	A	18,600	0.465	B	0.004	No
Maya Linda Road											
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	2,700	0.338	B	2,895	0.362	B	0.024	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	15,200	0.380	B	15,220	0.381	B	0.001	No
Eastgate Mall											
Towne Center Dr. to I-805	4	Collector	30,000	11,350	0.378	B	11,370	0.379	B	0.001	No
I-805 to Miramar Rd.	2	Collector TWLTL[l]	15,000	15,950	**1.063**	**F**	16,000	1.067	**F**	0.004	No

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Despite the City's threshold being exceeded, no significant impact is calculated since adjacent intersections operate at an acceptable LOS (LOS D or better), this street segment is built to its ultimate classification per the adopted Community Plan, and no arterial impact is calculated.
g. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.

General Notes:

1. TWLTL = Two-way left-turn lane.

Table 5.2-13. *Existing + Project Arterial Operations*

Arterial Segment	Period	Direction	Existing		Existing + Project		Speed Decrease	Sig[c]
			Speed[a]	LOS[b]	Speed	LOS		
Gold Coast Drive Westonhill Drive to Black Mountain Road	AM	EB	19.4	C	19.2	C	0.2	No
		WB	8.3	**F**	8.3	**F**	0.0	No
	PM	EB	18.7	C	18.7	C	0.0	No
		WB	8.5	**F**	8.5	**F**	0.0	No

Footnotes:

a. Speed in miles per hour.
b. Level of Service.
c. Sig = significant project impact based on significance criteria.

Table 5.2-14a. *Existing + Project Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Existing		Existing + Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	3	1,200	3	1,200	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	3	756	3	756	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	2	425	2	425	0	No
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,025	10	1,025	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	2	253	2	274	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,848	10	1,848	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	4	804	4	804	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,000	10	1,000	0	No
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	< 1	101	< 1	101	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	118	1	118	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	1	300	1	300	0	No
	PM	1	225	1	225	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	AM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	266	1	521	0	No
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	2	626	2	711	0	No
	PM	2	663	4	1,321	2	No
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	2	293	6	994	4	No

Location	Peak Hour	Existing		Existing + Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	1	200	1	200	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	5	50	5	50	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	< 1	125	< 1	125	0	No
	PM	< 1	225	< 1	225	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	175	1	175	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	No
NB & SB Kearny Villa Rd to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	7	925	7	925	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

Table 5.2-14b. *Existing + Project Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Existing		Existing + Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	3	1,200	3	1,200	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	3	756	3	756	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	2	425	2	425	0	No
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,025	10	1,025	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	2	253	2	274	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,848	10	1,848	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	4	804	4	804	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	10	1,000	10	1,000	0	No
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	< 1	101	< 1	101	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	118	1	118	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	1	300	1	300	0	No
	PM	1	225	1	225	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	266	1	521	0	No
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	2	626	2	711	0	No
	PM	2	663	4	1,321	2	No
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	2	293	6	994	4	No

Location	Peak Hour	Existing		Existing + Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	1	200	1	200	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	5	50	5	50	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	< 1	125	< 1	125	0	No
	PM	< 1	225	< 1	225	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	175	1	175	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	No
NB & SB Kearny Villa Rd to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	7	925	7	925	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

Table 5.2-15a. *Existing + Project Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Ex ADT	Direction, Number of Lanes & Capacity[a]			Existing		Existing + Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	135,000	NB Mainlines	4M+1A	9,200	0.474	B	0.474	B	0.000	No
		SB Mainlines	5M	10,000	0.828	D	0.829	D	0.001	No
South of Kearny Villa Rd.	142,000	NB Mainlines	4M+1A	9,200	0.499	B	0.500	B	0.001	No
		SB Mainlines	5M	10,000	0.871	D	0.873	D	0.002	No
I–15										
North of Mira Mesa Blvd.[b]	268,000	NB Mainlines	5M+1A+2HOV/ML	13,600	0.683	C	0.684	C	0.001	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.943	**E**	0.945	**E**	0.002	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	272,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.622	C	0.622	C	0.000	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.812	D	0.813	D	0.001	No
Carroll Canyon Rd. to Miramar Rd.[b]	281,000	NB Mainlines	6M+2HOV/ML	14,400	0.696	C	0.697	C	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.839	D	0.840	D	0.001	No
Miramar Rd. to Miramar Way[b]	291,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.754	C	0.756	C	0.002	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.813	D	0.814	D	0.001	No
Miramar Way to SR 163[b]	294,000	NB Mainlines	7M+2HOV/ML	16,400	0.725	C	0.726	C	0.001	No
		SB Mainlines	7M+2HOV/ML	16,400	0.781	C	0.783	C	0.002	No
South of SR 163[b]	170,000	NB Mainlines	4M+2HOV/ML	10,400	0.661	C	0.663	C	0.002	No
		SB Mainlines	4M+2HOV/ML	10,400	0.712	C	0.714	C	0.002	No
I–805										
North of Mira Mesa Blvd.	150,000	NB Mainlines	4M+1A	9,200	0.827	D	0.828	D	0.001	No
		SB Mainlines	4M+1A	9,200	0.369	B	0.369	B	0.000	No
Mira Mesa Blvd to La Jolla Village Dr.	187,000	NB Mainlines	4M+1A	9,200	1.031	**F(0)**	1.031	**F(0)**	0.000	No
		SB Mainlines	4M+1A	9,200	0.460	B	0.460	B	0.000	No
La Jolla Village Dr. to Nobel Dr.	185,000	NB Mainlines	4M+1A	9,200	1.020	**F(0)**	1.020	**F(0)**	0.000	No
		SB Mainlines	4M+1A	9,200	0.455	B	0.455	B	0.000	No
South of Nobel Dr.	202,000	NB Mainlines	4M+1A	9,200	1.114	**F(0)**	1.114	**F(0)**	0.000	No
		SB Mainlines	4M+1A	9,200	0.497	B	0.497	B	0.000	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes).
Example: 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-15b. *Existing + Project Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Ex ADT	Direction, Number of Lanes & Capacity[a]			Existing		Existing + Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	135,000	NB Mainlines	4M+1A	9,200	0.635	C	0.636	C	0.001	No
		SB Mainlines	5M	10,000	0.711	C	0.712	C	0.001	No
South of Kearny Villa Rd.	142,000	NB Mainlines	4M+1A	9,200	0.668	C	0.670	C	0.002	No
		SB Mainlines	5M	10,000	0.748	C	0.750	C	0.002	No
I–15										
North of Mira Mesa Blvd.[b]	268,000	NB Mainlines	5M+1A+2HOV/ML	13,600	0.803	D	0.804	D	0.001	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.716	C	0.718	C	0.002	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	272,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.696	C	0.697	C	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.634	C	0.635	C	0.001	No
Carroll Canyon Rd. to Miramar Rd.[b]	281,000	NB Mainlines	6M+2HOV/ML	14,400	0.779	C	0.780	C	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.655	C	0.656	C	0.001	No
Miramar Rd. to Miramar Way[b]	291,000	NB Mainlines	6M+1A+2HOV/ML	15,600	0.628	C	0.630	C	0.002	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.821	D	0.822	D	0.001	No
Miramar Way to SR 163[b]	294,000	NB Mainlines	7M+2HOV/ML	16,400	0.604	B	0.605	B	0.001	No
		SB Mainlines	7M+2HOV/ML	16,400	0.789	C	0.790	C	0.001	No
South of SR 163[b]	170,000	NB Mainlines	4M+2HOV/ML	10,400	0.551	B	0.552	B	0.001	No
		SB Mainlines	4M+2HOV/ML	10,400	0.719	C	0.721	C	0.002	No
I–805										
North of Mira Mesa Blvd.	150,000	NB Mainlines	4M+1A	9,200	0.504	B	0.504	B	0.000	No
		SB Mainlines	4M+1A	9,200	0.762	C	0.762	C	0.000	No
Mira Mesa Blvd to La Jolla Village Dr.	187,000	NB Mainlines	4M+1A	9,200	0.628	C	0.629	C	0.001	No
		SB Mainlines	4M+1A	9,200	0.949	**E**	0.950	**E**	0.001	No
La Jolla Village Dr. to Nobel Dr.	185,000	NB Mainlines	4M+1A	9,200	0.621	C	0.621	C	0.000	No
		SB Mainlines	4M+1A	9,200	0.939	**E**	0.939	**E**	0.000	No
South of Nobel Dr.	202,000	NB Mainlines	4M+1A	9,200	0.679	C	0.679	C	0.000	No
		SB Mainlines	4M+1A	9,200	1.026	**F(0)**	1.026	**F(0)**	0.000	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes).
Example: 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-16. *Phase 1 (Year 2020) Local Improvements*

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Carroll Canyon Road – 1000' east of I-805 to Sorrento Valley Road (Mira Mesa/T-29)	This project involves the extension of Carroll Canyon Road from Sorrento Valley Road to the centerline of I–805 then easterly approximately 1,000' as a modified 4-lane Collector with Class II bike lanes. This project will also reconstruct a portion of Sorrento Valley Road to accommodate the Carroll Canyon Road connection, with the construction of an off-ramp for southbound I-805.	This improvement has been completed.
I-15 Managed Lanes, DARs (Mira Mesa)	As part of the I-15 Managed Lanes project, Direct Access Ramps (DAR) are planned to be constructed on I-15 at Hillery Drive.	This improvement has been completed.
Black Mountain Road/Mira Mesa Boulevard Intersection (Casa Mira View Improvements)	This project involves the addition of a dedicated northbound right-turn lane.	This improvement has been completed.
Black Mountain Road/ Hillery Drive Intersection (Casa Mira View Improvements)	This project involves the addition of a dedicated northbound right-turn lane.	This improvement has been completed.
Black Mountain Road/ Gold Coast Drive Intersection (Casa Mira View Improvements)	This project involves the addition of a dedicated westbound right-turn lane.	This improvement has been completed.

Table 5.2-17. *Phase 1 (Year 2020) Project Trip Generation*

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Light Industrial Park *Eastside A–Maya Linda Rd.* 165,000 SF	Trip Rate (15/KSF)	2,475	245	27	59	238
	Cumulative (100%)	2,475	245	27	59	238
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,475	245	27	59	238
TOTALS:	**Cumulative**	**2,475**	**245**	**27**	**59**	**238**
	Pass-By	**0**	**0**	**0**	**0**	**0**
	Driveway	**2,475**	**245**	**27**	**59**	**238**

Footnotes:

a. Traffic volumes expressed in vehicles per day.

b. Pass-by represents difference between Driveway and Cumulative trips, per the City Trip Generation Manual (refer to *Appendix K* of the TIA)

General Notes:

1. Based on the City of San Diego Trip Generation Manual, May 2003.
2. Trip Rate, Transit Credit, and Mixed-Use Credit percentages for the AM and PM peak hour can be found in *Appendix K* of the TIA.
3. Driveway Trips—vehicles entering and exiting project driveways (Driveway = Cumulative + Pass-By)
4. Cumulative Trips—net new vehicles added to the network
5. Pass-By Trips—vehicles already on the street network diverting to the project site.

Table 5.2-18. *Phase 1 (Year 2020) Intersection Operations*

Intersection	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard[d]	AM	42.5	D	47.0	D	4.5	No
	PM	38.2	D	38.2	D	0.0	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard	AM	**137.4**	**F**	**137.4**	**F**	0.0	No
	PM	46.2	D	49.9	D	3.7	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	**59.5**	**E**	**59.6**	**E**	0.1	No
	PM	**57.8**	**E**	**58.0**	**E**	0.2	No
4. Scranton Road/Mira Mesa Boulevard	AM	**89.5**	**F**	**89.7**	**F**	0.2	No
	PM	**100.5**	**F**	**100.8**	**F**	0.3	No
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	49.8	D	49.8	D	0.0	No
	PM	**110.8**	**F**	**111.1**	**F**	0.3	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	**77.6**	**E**	**77.8**	**E**	0.2	No
	PM	**102.1**	**F**	**102.2**	**F**	0.1	No
7. Parkdale Avenue/Mira Mesa Boulevard	AM	**72.3**	**E**	**72.3**	**E**	0.0	No
	PM	**69.7**	**E**	**70.1**	**E**	0.4	No
8. Reagan Road/Mira Mesa Boulevard	AM	50.0	D	50.0	D	0.0	No
	PM	52.4	D	52.4	D	0.0	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	**61.5**	**E**	**61.5**	**E**	0.0	No
	PM	**66.4**	**E**	**66.7**	**E**	0.3	No
10. New Salem Street/Mira Mesa Boulevard	AM	39.8	D	39.8	D	0.0	No
	PM	41.1	D	41.4	D	0.3	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	51.8	D	51.9	D	0.1	No
	PM	36.5	D	38.1	D	1.6	No
12. Black Mountain Road/Mira Mesa Boulevard	AM	111.3	F	111.8	F	0.5	No
	PM	128.7	F	128.9	F	0.2	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**61.5**	**E**	**61.7**	**E**	0.2	No
	PM	**63.4**	**E**	**63.5**	**E**	0.1	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	47.8	D	48.0	D	0.2	No
	PM	35.3	D	36.8	D	1.5	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	41.7	D	42.3	D	0.6	No
	PM	51.5	D	53.1	D	1.6	No
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	41.6	D	41.6	D	0.0	No
	PM	50.9	D	51.2	D	0.3	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	32.3	C	32.3	C	0.0	No
	PM	30.2	C	30.2	C	0.0	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**48.5**	**E**	**48.5**	**E**	0.0	No
	PM	12.3	B	12.3	B	0.0	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	19.2	C	19.2	C	0.0	No
	PM	14.9	B	14.9	B	0.0	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	16.8	C	17.1	C	0.3	No
	PM	22.5	C	23.3	C	0.8	No
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road[d]	AM	19.3	B	19.3	B	0.0	No
	PM	18.3	B	18.3	B	0.0	No
31. Pacific Heights Boulevard/Carroll Canyon Road	AM	19.7	B	19.7	B	0.0	No
	PM	21.8	C	21.8	C	0.0	No
32. Carroll Road/Carroll Canyon Road	AM	*DNE*[e]	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
33. Camino Santa Fe/Carroll Canyon Road	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—

Intersection	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
34. Camino Ruiz/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
35. Project Driveway C/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
36. Project Driveway D/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
37. Project Driveway E/Carroll Canyon Road	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
38. Project Driveway F/Carroll Canyon Road [d]	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
39. Black Mountain Road/Carroll Canyon Road	AM	20.6	C	22.7	C	2.1	No
	PM	14.5	B	15.2	B	0.7	No
40. Maya Linda Road/Carroll Canyon Road	AM	30.7	C	31.1	C	0.4	No
	PM	26.5	C	26.9	C	0.4	No
41. I-15 Southbound Ramps/Carroll Canyon Road	AM	**69.5**	**E**	**69.9**	**E**	0.4	No
	PM	**66.1**	**E**	**80.6**	**F**	14.5	**Yes**
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	**55.8**	**E**	**58.8**	**E**	3.0	**Yes**
	PM	46.8	D	50.7	D	3.9	**Yes**[f]
43. Businesspark Avenue/Carroll Canyon Road	AM	32.8	C	33.1	C	0.3	No
	PM	30.7	C	30.8	C	0.1	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	25.6	C	25.6	C	0.0	No
	PM	19.7	B	19.8	B	0.1	No
45. Project Driveway G/Maya Linda Road	AM	*DNE*	—	23.5	C	23.5	No
	PM	*DNE*	—	19.4	B	19.4	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*DNE*	—	9.3	A	9.3	No
	PM	*DNE*	—	9.7	A	9.7	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	30.8	C	30.8	C	0.0	No
	PM	46.0	D	46.0	D	0.0	No
51. Judicial Drive/Eastgate Mall	AM	27.3	C	27.3	C	0.0	No
	PM	30.9	C	30.9	C	0.0	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**123.2**	**F**	**123.2**	**F**	0.0	No
	PM	**86.9**	**F**	**86.9**	**F**	0.0	No
53. I-805 Southbound Ramps/La Jolla Village Drive	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—
54. I-805 Northbound Ramps/Miramar Road	AM	*No Conflicting Movements*		*No Conflicting Movements*		—	—
	PM					—	—
55. Nobel Drive/Miramar Road	AM	30.4	C	30.4	C	0.0	No
	PM	25.9	C	26.3	C	0.4	No
56. Eastgate Mall/Miramar Road	AM	32.9	C	32.9	C	0.0	No
	PM	35.4	D	35.6	D	0.2	No
57. Camino Santa Fe/Miramar Road	AM	**132.7**	**F**	**132.8**	**F**	0.1	No
	PM	**85.7**	**F**	**86.0**	**F**	0.3	No
58. Carroll Road/Camino Santa Fe	AM	40.6	D	41.4	D	0.8	No
	PM	**61.0**	**E**	**61.0**	**E**	0.0	No
59. Carroll Road/Miramar Road	AM	24.8	C	24.9	C	0.1	No
	PM	33.0	C	33.9	C	0.9	No
60. Camino Ruiz/Miramar Road	AM	42.3	D	42.7	D	0.4	No
	PM	43.1	D	43.9	D	0.8	No
61. Black Mountain Road/Miramar Road	AM	**66.2**	**E**	**67.2**	**E**	1.0	No
	PM	52.9	D	53.2	D	0.3	No
62. Kearny Villa Road/Miramar Road	AM	**99.4**	**F**	**102.4**	**F**	3.0	**Yes**
	PM	**108.4**	**F**	**111.0**	**F**	2.6	**Yes**

Intersection	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
93. Kearny Mesa Road/Miramar Road	AM	53.5	D	54.2	D	0.7	No
	PM	50.0	D	51.0	D	1.0	No
63. I-15 Southbound Ramps/Miramar Road	AM	35.3	D	35.5	D	0.2	No
	PM	25.1	C	25.5	C	0.4	No
64. I-15 Northbound Ramps/Miramar Road	AM	26.1	C	26.2	C	0.1	No
	PM	30.3	C	30.4	C	0.1	No
65. Willow Creek Road/Pomerado Road	AM	29.2	C	29.2	C	0.0	No
	PM	**55.7**	**E**	**55.8**	**E**	0.1	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	5.4	A	5.4	A	0.0	No
	PM	15.6	B	15.6	B	0.0	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	14.2	B	14.2	B	0.0	No
	PM	15.5	B	15.5	B	0.0	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	28.3	C	28.3	C	0.0	No
	PM	37.5	D	37.6	D	0.1	No
71. Camino Ruiz/Reagan Road	AM	32.9	C	33.0	C	0.1	No
	PM	37.2	D	37.4	D	0.2	No
72. Camino Ruiz/Flanders Drive	AM	21.0	C	21.0	C	0.0	No
	PM	22.5	C	22.7	C	0.2	No
73. Camino Ruiz/Gold Coast Drive	AM	**62.7**	**E**	**63.1**	**E**	0.4	No
	PM	41.7	D	41.7	D	0.0	No
74. Camino Ruiz/Jade Coast Road *(TWSC)*	AM	**62.1**	**F**	**62.1**	**F**	0.0	No
	PM	**38.3**	**E**	**38.3**	**E**	0.0	No
75. Camino Ruiz/Jade Coast Drive	AM	22.3	C	22.3	C	0.0	No
	PM	12.1	B	12.1	B	0.0	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	*DNE*	—	—	—
	PM	*DNE*	—	*DNE*	—	—	—
78. Camino Ruiz/Miralani Drive	AM	**93.9**	**F**	**94.2**	**F**	0.5	No
	PM	35.0	D	37.6	D	2.6	No
79. Camino Ruiz/Activity Road	AM	29.3	C	30.0	C	0.7	No
	PM	37.6	D	39.3	D	1.7	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**68.7**	**E**	**69.7**	**E**	1.0	No
	PM	51.6	D	51.9	D	0.3	No
81. Black Mountain Road/Mercy Road	AM	44.9	D	45.8	D	0.9	No
	PM	45.8	D	45.9	D	0.1	No
82. Black Mountain Road/Westview Parkway	AM	28.1	C	28.3	C	0.2	No
	PM	26.4	C	26.7	C	0.3	No
83. Black Mountain Road/Capricorn Way	AM	**57.7**	**E**	**58.3**	**E**	0.6	No
	PM	**61.3**	**E**	**62.2**	**E**	0.9	No
84. Black Mountain Road/Hillery Drive	AM	**58.4**	**E**	**61.6**	**E**	3.2	**Yes**
	PM	49.8	D	50.1	D	0.3	**Yes**[f]
85. Black Mountain Road/Gold Coast Drive[g]	AM	36.9	D	38.7	D	1.8	No
	PM	39.0	D	41.6	D	2.6	No
86. Black Mountain Road/Maya Linda	AM	29.1	C	40.9	D	11.8	No
	PM	22.6	C	25.7	C	3.1	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa Road	AM	27.7	C	29.4	C	1.7	No
	PM	47.5	D	52.6	D	5.1	No
88. Black Mountain Road/Activity Road	AM	42.2	D	42.4	D	0.2	No
	PM	**76.7**	**E**	**78.2**	**E**	1.5	No

Intersection	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way *(TWSC)*	AM	26.2	D	27.2	D	1.0	No
	PM	**37.1**	**E**	**37.3**	**E**	0.2	No
90. Kearny Villa Road NB Ramps/Miramar Way *(TWSC)*	AM	23.3	C	23.5	C	0.2	No
	PM	34.1	D	34.2	D	0.1	No
91. SR 163 SB Ramps/Kearny Villa Road *(TWSC)*	AM	13.5	B	13.6	B	0.1	No
	PM	21.1	C	21.5	C	0.4	No
92. SR 163 NB Ramps/Kearny Villa Road	AM	21.0	C	21.5	C	0.5	No
	PM	11.8	B	11.8	B	0.0	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Sig = Significant project impacts based on Significance Criteria.
d. Planned FBA roadway improvements for Phase 1 (with and without project scenarios).
e. DNE – Does Not Exist
f. An update to the cumulative projects triggers a significant impact.
g. Phase 1 delays are lower than existing due to improvements from the Casa Mira View project.

SIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-19. *Phase 1 (Year 2020) Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 1			Phase 1 with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	17,100	0.428	B	17,100	0.428	B	0.000	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	61,300	0.817	D	61,330	0.817	D	0.000	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	56,300	**0.938**	**E**	56,330	**0.939**	**E**	0.001	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	53,400	0.890	D	53,430	0.891	D	0.001	No
Camino Santa Fe to Parkdale Av.	6	Major Arterial	50,000	56,200	**1.124**	**F**	56,230	**1.125**	**F**	0.001	No
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	54,000	**1.080**	**F**	54,030	**1.081**	**F**	0.001	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	54,900	**1.098**	**F**	54,930	**1.099**	**F**	0.001	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	57,100	**1.142**	**F**	57,100	**1.142**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	62,600	**1.252**	**F**	62,620	**1.252**	**F**	0.000	No
Black Mountain Rd to Westview Pkwy. [f]	7	Prime Arterial	65,000	67,300	**1.035**	**F**	67,450	**1.038**	**F**	0.003	No
Westview Pkwy. to I-15	9	Prime Arterial	75,000	73,800	**0.984**	**E**	73,950	**0.986**	**E**	0.002	No
I-15 to Scripps Ranch Blvd.	6	Major Arterial	50,000	32,000	0.640	C	32,020	0.640	C	0.000	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy. [f]	4	Collector	30,000	13,000	0.433	B	13,020	0.434	B	0.001	No
Flanders Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,660	**0.833**	**E**	6,660	**0.833**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,590	0.699	D	5,590	0.699	D	0.000	No
Gold Coast Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,590	**0.949**	**E**	7,590	**0.949**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,700	**0.838**	**E**	6,770	**0.846**	**E**	0.008	No
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,400	**1.675**	**F**	13,500	**1.688**	**F**	0.013	No[h]
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,200	**0.900**	**E**	7,250	**0.906**	**E**	0.006	No
Jade Coast Road											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,360	0.545	C	4,360	0.545	C	0.000	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,100	0.388	B	3,100	0.388	B	0.000	No
Carroll Canyon Road											
West of Scranton Road [f]	4	Collector	30,000	17,170	0.572	C	17,170	0.572	C	0.000	No
Scranton Rd. to Pacific Heights Blvd.	2	Collector TWLTL[l]	15,000	12,600	0.840	D	12,600	0.840	D	0.000	No
Pacific Heights Blvd. to Carroll Rd.	2	Collector TWLTL[l]	15,000	10,200	0.680	D	10,200	0.680	D	0.000	No
Carroll Rd. to Camino Santa Fe	4	Major Arterial	40,000	*DNE*	—	—	*DNE*	—	—	—	—
Camino Santa Fe to Camino Ruiz	6	Prime Arterial	60,000	*DNE*[g]	—	—	*DNE*	—	—	—	—
Camino Ruiz to Project Dwy. C	6	Major Arterial	50,000	*DNE*	—	—	*DNE*	—	—	—	—
Project Dwy. C to Project Dwy. D	6	Major Arterial	50,000	*DNE*	—	—	*DNE*	—	—	—	—
Project Dwy. D to Project Dwy. E	6	Major Arterial	50,000	*DNE*	—	—	*DNE*	—	—	—	—

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 1			Phase 1 with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. E to Project Dwy. F	6	Major Arterial	50,000	*DNE*	—	—	*DNE*	—	—	—	—
Project Dwy. F to Black Mountain Rd.	4	Major Arterial	40,000	*DNE*	—	—	*DNE*	—	—	—	—
Black Mountain Rd to I-15	4	Collector	30,000	30,000	**1.000**	**E**	30,870	**1.029**	**F**	**0.029**	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	24,900	0.830	D	25,020	**0.834**	**E**	**0.004**	**No[j]**
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,400	**1.175**	**F**	9,400	**1.175**	**F**	0.000	No
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL[l]	15,000	11,200	0.747	D	11,270	0.751	D	0.004	No
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr	6	Prime Arterial	60,000	41,000	0.683	C	41,030	0.684	C	0.001	No
Towne Center Dr to I-805	7	Prime Arterial	65,000	66,700	**1.026**	**F**	66,730	**1.027**	**F**	0.001	No
I-805 to Nobel Dr.[f]	7	Prime Arterial	65,000	51,900	0.798	C	52,030	0.800	C	0.002	No
Nobel Dr. to Eastgate Mall[f]	7	Prime Arterial	65,000	70,480	**1.084**	**F**	70,630	**1.087**	**F**	0.003	No
Eastgate Mall to Camino Santa Fe	6	Major Arterial	50,000	72,000	**1.440**	**F**	72,200	**1.444**	**F**	0.004	No
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	51,000	**1.020**	**F**	51,200	**1.024**	**F**	0.004	No
Carroll Rd to Cabot Dr	6	Major Arterial	50,000	62,000	**1.240**	**F**	62,200	**1.244**	**F**	0.004	No
Cabot Dr to Camino Ruiz	6	Major Arterial	50,000	56,300	**1.126**	**F**	56,500	**1.130**	**F**	0.004	No
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	66,700	**1.334**	**F**	66,830	**1.337**	**F**	0.003	No
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	74,300	**1.486**	**F**	74,300	**1.486**	**F**	0.000	No
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	63,400	**1.268**	**F**	63,720	**1.274**	**F**	0.006	No
I-15 to Willow Creek Rd.	2	Collector TWLTL[l]	15,000	34,950	**2.330**	**F**	35,000	**2.333**	**F**	0.003	No
East of Willow Creek Rd.	2	Collector TWLTL[l]	15,000	29,950	**1.997**	**F**	29,970	**1.998**	**F**	0.001	No
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.[f]	4	Collector	30,000	18,500	0.617	C	18,530	0.618	C	0.001	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	17,500	0.438	B	17,500	0.438	B	0.000	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	4	Major Arterial	50,000	15,980	0.320	A	15,980	0.320	A	0.000	No
Flanders Dr. to Carroll Canyon Rd.	4	Major Arterial	50,000	22,300	0.446	B	22,300	0.446	B	0.000	No
Carroll Canyon Rd. to Carroll Rd.	6	Major Arterial	50,000	29,700	0.594	C	29,700	0.594	C	0.000	No
Carroll Rd. to Miramar Rd.	4/6	Major Arterial	40,000	30,300	0.758	D	30,300	0.758	D	0.000	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,200	0.605	C	24,220	0.606	C	0.001	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	27,500	0.688	C	27,520	0.688	C	0.000	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	20,800	0.520	B	20,850	0.521	B	0.001	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	23,900	0.598	C	23,950	0.599	C	0.001	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 1			Phase 1 with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Gold Coast Dr. to Jade Coast Dr.[f]	4	Major Arterial	40,000	21,900	0.548	C	21,900	0.548	C	0.000	No
Jade Coast Dr. to Project Dwy.[f]	4	Major Arterial	40,000	21,900	0.548	C	21,900	0.548	C	0.000	No
Project Dwy. to Carroll Canyon Rd.[f]	4	Major Arterial	40,000	21,900	0.548	C	21,900	0.548	C	0.000	No
Carroll Canyon Rd. to Miralani Dr.[f]	4	Major Arterial	40,000	26,000	0.650	C	26,000	0.650	C	0.000	No
Miralani Dr. to Miramar Rd.[f]	4	Major Arterial	40,000	27,600	0.690	C	27,670	0.692	C	0.002	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,100	0.763	D	6,100	0.763	D	0.000	No
East of Camino Ruiz	2	Collector	8,000	5,240	0.655	D	5,240	0.655	D	0.000	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,250	**1.031**	**F**	8,250	**1.031**	**F**	0.000	No
Hillery Dr. to Flanders Dr.	2	Collector	8,000	6,920	**0.865**	**E**	6,920	**0.865**	**E**	0.000	No
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,600	0.700	D	5,620	0.703	D	0.003	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	37,490	**0.937**	**E**	37,510	**0.938**	**E**	0.001	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	35,480	**0.887**	**E**	35,530	**0.888**	**E**	0.001	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	36,500	0.730	C	36,600	0.732	C	0.002	No
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	29,040	0.581	C	29,190	0.584	C	0.003	No
Capricorn Way to Mira Mesa Blvd.	4	Major Arterial	40,000	34,030	0.851	D	34,180	0.855	D	0.004	No
Mira Mesa Blvd. to Hillery Dr.	4	Major Arterial	40,000	20,100	0.503	B	20,420	0.511	B	0.008	No
Hillery Dr. to Gold Coast Dr.	4	Major Arterial	40,000	25,210	0.630	C	25,580	0.640	C	0.010	No
Gold Coast Dr. to Carroll Canyon Rd.	4	Major Arterial	40,000	30,100	0.753	D	30,620	0.766	D	0.013	No
Carroll Canyon Rd. to Maya Linda Rd.	4	Major Arterial	40,000	24,900	0.623	C	26,290	0.657	C	0.034	No
Maya Linda Rd. to Carroll Centre Rd.	5	Major Arterial	45,000	33,500	0.744	C	34,390	0.764	C	0.020	No
Carroll Centre Rd. to Miramar Rd.	4	Collector	30,000	18,000	0.600	C	18,200	0.606	C	0.006	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	4	Major Arterial	40,000	15,500	0.388	B	16,190	0.405	B	0.017	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000[i]	32,600	0.652	C	32,970	0.659	C	0.007	No
Miramar Way to SR 163	4	Major Arterial	50,000[i]	28,440	0.569	C	28,790	0.576	C	0.007	No
South of SR 163	4	Major Arterial	50,000[i]	20,220	0.404	B	20,370	0.407	B	0.003	No
Maya Linda Road											
Carroll Canyon Rd. to Project Dwy. G.	4	Collector	30,000	*DNE*	—	—	—	—	—	—	No
Project Dwy G. to Project Dwy. H.	4	Collector	30,000	*DNE*	—	—	2,475	0.083	A	0.083	No
Project Dwy H. to Black Mountain Rd.	4	Collector	30,000	*DNE*	—	—	2,475	0.083	A	0.083	No
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	3,000	0.375	B	3,195	0.399	B	0.024	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	23,000	0.575	C	23,020	0.576	C	0.001	No
Eastgate Mall											

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 1			Phase 1 with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Towne Center Dr to I-805	4	Collector	30,000	12,800	0.427	B	12,820	0.427	B	0.001	No
I-805 to Miramar Rd.	2	Collector TWLTL	15,000	16,100	1.073	**F**	16,150	1.077	**F**	0.004	No

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Planned roadway improvements in Phase 1 (with and without project scenarios).
g. DNE – Does Not Exist
h. Despite the City's threshold being exceeded, no significant impact is calculated since adjacent intersections operate at an acceptable LOS (LOS D or better), this street segment is built to its ultimate classification per the adopted Community Plan, and no arterial impact is calculated.
i. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.
j. With the addition of Casa Mira View II and Carroll Canyon Commercial Center background traffic, no impact is calculated. (See Section 4.3 and Appendix E1 of the TIA for details).

General Notes:

1. TWLTL = Two-way left-turn lane.

Table 5.2-20. *Phase 1 (Year 2020) Arterial Operations*

Arterial Segment	Period	Direction	Phase 1		Phase 1 + Project		Speed Decrease	Sig[c]
			Speed[a]	LOS[b]	Speed	LOS		
Gold Coast Drive Westonhill Drive to Black Mountain Road	AM	EB	18.5	C	18.5	C	0.0	No
		WB	20.2	C	20.1	C	0.1	No
	PM	EB	18.4	C	18.4	C	0.0	No
		WB	18.8	C	17.5	D	1.3	No

Footnotes:

a. Speed in miles per hour.
b. Level of Service.
c. Sig = significant project impact based on significance criteria.

General Notes:

1. See *Appendix M* of the TIA for the calculation sheets.

Table 5.2-21a. *Phase 1 (Year 2020) Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(3 SOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	**35**	**9,788**	**35**	**9,788**	0	No
NB & SB Vista Sorrento Pkwy to NB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	14	2,713	14	2,734	0	No
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	1	106	1	106	0	No
WB Miramar Rd. to NB I-805	AM	2	338	2	359	0	No
(1 SOV+ 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805	AM	4	825	4	825	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	**24**	**2,513**	**25**	**2,534**	1	No
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15	AM	1	250	1	250	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	2	288	2	288	0	No
EB Mira Mesa Blvd. to SB I-15	AM	1	263	1	263	0	No
(2 SOV + 1 HOV)	PM	1	256	1	256	0	No
EB Mira Mesa Blvd. to NB I-15	AM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	1	500	2	755	1	No
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15	AM	10	4,175	11	4,260	1	No
(1 SOV + 1 HOV)	PM	9	2,788	11	3,446	2	No
EB & WB Carroll Canyon Road. To NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	8	1,525	12	2,226	4	No
I-15/Miramar Road/Pomerado Rd. Interchange							
	AM	2	350	2	350	0	No

Location	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
WB Miramar Rd to SB I-15 (2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	**60**	**625**	**60**	**625**	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	0	0	0	0	0	No
	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	7	1,775	8	1,977	1	No
NB & SB Kearny Villa Rd to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	**16**	**2,150**	**16**	**2,150**	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

General Notes:

1. Results calibrated based on field observations. (See Table 5.2-5.)
2. See *Appendix H* to the TIA for the calculation sheets.

Table 5.2-21b. *Phase 1 (Year 2020) Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	5,313	15	5,313	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	14	2,713	14	2,734	0	No
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	1	106	1	106	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	2	338	2	359	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	4	825	4	825	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	1,743	15	1,764	0	No

Location	Peak Hour	Phase 1 without Project		Phase 1 with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15	AM	1	250	1	250	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	2	288	2	288	0	No
EB Mira Mesa Blvd. to SB I-15	AM	1	263	1	263	0	No
(2 SOV + 1 HOV)	PM	1	256	1	256	0	No
EB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	1	500	2	755	1	No
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15	AM	10	4,715	11	4,260	1	No
(1 SOV + 1 HOV)	PM	9	2,788	11	3,446	2	No
EB & WB Carroll Canyon Road. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	8	1,525	12	2,226	4	No
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15	AM	2	350	2	350	0	No
(2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	15	250	15	250	0	No
EB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	7	1,775	8	1,977	1	No
NB & SB Kearny Villa Rd to NB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	15	2,050	15	2,050	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

General Notes:

1. Results calibrated based on field observations. (See Table 5.2-5.)

2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-22a. *Phase 1 (Year 2020) Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Phase 1 ADT	Direction, Number of Lanes & Capacity[a]			Phase 1		Phase 1 with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	175,410	NB Mainlines	4M+1A	9,200	0.616	B	0.616	B	0.000	No
		SB Mainlines	5M	10,000	1.076	**F(0)**	1.077	**F(0)**	0.001	No
South of Kearny Villa Rd.	184,640	NB Mainlines	4M+1A	9,200	0.648	C	0.649	C	0.001	No
		SB Mainlines	5M	10,000	1.133	**F(0)**	1.135	**F(0)**	0.002	No
I–15										
North of Mira Mesa Blvd.[b]	333,100	NB Mainlines	5M+1A+2HOV/ML	13,600	0.849	D	0.850	D	0.001	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.172	**F(0)**	1.174	**F(0)**	0.002	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	337,130	NB Mainlines	6M+1A+2HOV/ML	15,600	0.770	C	0.771	C	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.006	**F(0)**	1.007	**F(0)**	0.001	No
Carroll Canyon Rd. to Miramar Rd.[b]	344,550	NB Mainlines	6M+2HOV/ML	14,400	0.853	D	0.854	D	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.028	**F(0)**	1.029	**F(0)**	0.001	No
Miramar Rd. to Miramar Way[b]	370,170	NB Mainlines	6M+1A+2HOV/ML	15,600	0.960	**E**	0.961	**E**	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.034	**F(0)**	1.035	**F(0)**	0.001	No
Miramar Way to SR 163[b]	379,060	NB Mainlines	7M+2HOV/ML	16,400	0.935	**E**	0.936	**E**	0.001	No
		SB Mainlines	7M+2HOV/ML	16,400	1.007	**F(0)**	1.009	**F(0)**	0.002	No
South of SR 163[b]	214,140	NB Mainlines	4M+1A+2HOV/ML	11,600	0.747	C	0.748	C	0.001	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.804	D	0.806	D	0.002	No
I–805										
North of Mira Mesa Blvd.	186,630	NB Mainlines	4M+1A	9,200	1.029	**F(0)**	1.030	**F(0)**	0.001	No
		SB Mainlines	4M+1A	9,200	0.459	B	0.459	B	0.000	No
Mira Mesa Blvd to La Jolla Village Dr.	212,980	NB Mainlines	4M+1A	9,200	1.174	**F(0)**	1.175	**F(0)**	0.001	No
		SB Mainlines	4M+1A	9,200	0.524	B	0.524	B	0.000	No
La Jolla Village Dr. to Nobel Dr.	220,000	NB Mainlines	4M+1A	9,200	1.213	**F(0)**	1.213	**F(0)**	0.000	No
		SB Mainlines	4M+1A	9,200	0.541	B	0.541	B	0.000	No
South of Nobel Dr.	247,980	NB Mainlines	4M+1A	9,200	1.367	**F(2)**	1.367	**F(2)**	0.000	No
		SB Mainlines	4M+1A	9,200	0.610	B	0.610	B	0.000	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-22b. *Phase 1 (Year 2020) Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Phase 1 ADT	Direction, Number of Lanes & Capacity[a]			Phase 1		Phase 1 with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	175,410	NB Mainlines	4M+1A	9,200	0.825	D	0.826	D	0.001	No
		SB Mainlines	5M	10,000	0.924	**E**	0.924	**E**	0.001	No
South of Kearny Villa Rd.	184,640	NB Mainlines	4M+1A	9,200	0.869	D	0.870	D	0.001	No
		SB Mainlines	5M	10,000	0.972	**E**	0.974	**E**	0.002	No
I–15										
North of Mira Mesa Blvd.[b]	333,100	NB Mainlines	5M+1A+2HOV/ML	13,600	0.998	**E**	1.000	**E**	0.002	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.890	D	0.892	D	0.002	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	337,130	NB Mainlines	6M+1A+2HOV/ML	15,600	0.863	D	0.864	D	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.786	C	0.786	C	0.000	No
Carroll Canyon Rd. to Miramar Rd.[b]	344,550	NB Mainlines	6M+2HOV/ML	14,400	0.955	**E**	0.956	**E**	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.803	D	0.804	D	0.001	No
Miramar Rd. to Miramar Way[b]	370,170	NB Mainlines	6M+1A+2HOV/ML	15,600	0.799	C	0.800	D	0.001	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.044	**F(0)**	1.046	**F(0)**	0.002	No
Miramar Way to SR 163[b]	379,060	NB Mainlines	7M+2HOV/ML	16,400	0.778	C	0.780	C	0.002	No
		SB Mainlines	7M+2HOV/ML	16,400	1.017	**F(0)**	1.018	**F(0)**	0.001	No
South of SR 163[b]	214,140	NB Mainlines	4M+1A+2HOV/ML	11,600	0.622	C	0.623	C	0.001	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.812	D	0.814	D	0.002	No
I–805										
North of Mira Mesa Blvd.	186,630	NB Mainlines	4M+1A	9,200	0.627	C	0.627	C	0.000	No
		SB Mainlines	4M+1A	9,200	0.947	**E**	0.948	**E**	0.001	No
Mira Mesa Blvd to La Jolla Village Dr.	212,980	NB Mainlines	4M+1A	9,200	0.715	C	0.716	C	0.001	No
		SB Mainlines	4M+1A	9,200	1.081	**F(0)**	1.082	**F(0)**	0.001	No
La Jolla Village Dr. to Nobel Dr.	220,000	NB Mainlines	4M+1A	9,200	0.739	C	0.739	C	0.000	No
		SB Mainlines	4M+1A	9,200	1.117	**F(0)**	1.117	**F(0)**	0.000	No
South of Nobel Dr.	247,980	NB Mainlines	4M+1A	9,200	0.833	D	0.833	D	0.000	No
		SB Mainlines	4M+1A	9,200	1.259	**F(1)**	1.259	**F(1)**	0.000	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes).
Example: 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-23. *Phase 2A (Year 2030A) Local Improvements*

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Mira Mesa Boulevard – Black Mountain Road to I-15 (Mira Mesa/T-3)	Construction of the fourth lane on the south side of Mira Mesa Boulevard from Black Mountain Road easterly to the western boundary of Mira Mesa Market Center.	Funding is through the Mira Mesa FBA; expected to be completed FY 2025.
Carroll Canyon Road – Western Fenton Property to Carroll Road (Mira Mesa/T-5A)	Construction of Phase 5A of the project is from the Western Fenton Property to Carroll Road to a 4-lane Major Street.	Funding is through the Mira Mesa FBA; expected to be completed FY 2023 – 2024.
Carroll Canyon Road – Carroll Road to Camino Ruiz (Mira Mesa/T-5B)	Construction of Carroll Canyon Road from Carroll Road to Camino Ruiz to a 4-lane Major street. Phase 5B is from Camino Santa Fe to Fenton Property boundary.	Funding is the responsibility of fronting property owners; expected to be completed FY 2023 – 2024.
Carroll Canyon Road – Camino Santa Fe to Camino Ruiz (Mira Mesa/T-5C)	Construction of Carroll Canyon Road from Camino Santa Fe to Camino Ruiz. Phase 5C involves the construction of Carroll Canyon Road to a 6-lane Primary Arterial from Camino Ruiz to Camino Santa Fe. The intersection of Carroll Canyon Road and Camino Santa Fe was assumed to be constructed to LOS D standards based on forecasted volumes.	Funding is the responsibility of fronting property owners; expected to be completed FY 2023 – 2024.
Carroll Canyon Road – Camino Ruiz to Black Mountain Road (Mira Mesa/T-6)	Extension of Carroll Canyon Road from Camino Ruiz to Black Mountain Road. Construction of a 6-lane Major from Camino Ruiz to Maya Linda Road with Class II bike lanes and 4-lane Major Street from Maya Linda Road to Black Mountain Road with Class II bike lanes.	This improvement is planned to be constructed by the project during Phase 2A in Year 2030 or later.
Maya Linda Road – Carroll Canyon Road to Black Mountain Road (Mira Mesa/T-6B)	Extension of Maya Linda Road from Carroll Canyon Road to Black Mountain Road as a 4-lane Major with Class II bike lanes.	This improvement is planned to be constructed by the project during Phase 1.
Camino Ruiz– Gold Coast Drive to Jade Coast Drive and Miralani Drive to Miramar Road (Mira Mesa/T-10)	This project would widen Camino Ruiz to a modified 6-lane Major Street from Gold Coast Drive to the east leg of Jade Coast and from the northern-most boundaries of Miralani Business Park to Miramar Road. Construction also includes installation of Class II bicycle lanes from Mira Mesa Boulevard to Gold Coast Drive.	According to the Mira Mesa FBA/PFFP (FY 2016), construction is scheduled for FY 2024 - 2025. This project cannot precede T-10A.
Camino Ruiz– Jade Coast to Miralani Drive (Mira Mesa/T-10A)	This project involves the widening of Camino Ruiz from the east leg of Jade Coast Drive to Miralani Drive (for the northbound side) and from Jade Coast Drive to the northern most boundaries of the Miralani Business Park (for the southbound side). The project will widen Camino Ruiz to a 6-lane Major Street with a 14-foot wide, landscaped, raised-center-median (with dual ten-foot left-turn lanes at Carroll Canyon Road), streetlights, and Class II bike lanes. The project would also modify existing street curvature to increase stop/sight distance.	According to the Mira Mesa FBA/PFFP (FY 2016), this project must coincide with or precede project T-10.
Black Mountain Road –From South of Mira Mesa Blvd to Gemini Avenue (Mira Mesa/T-34)	This project involves the widening of Black Mountain Road to provide northbound right-turn lanes to Mira Mesa Boulevard. Class II bike lanes would also be constructed.	According to the Mira Mesa FBA/PFFP (FY 2016), this project is complete.
Black Mountain Road – Gemini Avenue to Mira Mesa Boulevard (Mira Mesa/T-81)	This project widens the east side of Black Mountain Road from Gemini Avenue to Mira Mesa Boulevard for an additional northbound lane. Class II bike lanes are included.	This project is scheduled for completion in FY 2022.
Camino Santa Fe – Carroll Road to 350 feet South of Commerce Avenue (Mira Mesa/T-85)	This project provides for the widening of Camino Santa Fe from Carroll Road to 350 feet south of Commerce Avenue to a 6-lane Major with Class II bike lanes.	Project will be completed when a responsible subdivider is identified and develops the fronting property.
Camino Santa Fe/Miramar Road intersection improvements (Mira Mesa/T-87)	This project involves the widening of the north leg of Camino Santa Fe and east leg of Miramar Road by adding a southbound to westbound right-turn lane and westbound to northbound right-turn lane.	This project is scheduled to begin FY 2025.

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Black Mountain Road/Mercy Road intersection improvements (Mira Mesa/T-88)	This project involves the widening of Black Mountain Road to provide an additional northbound and southbound lane through the Black Mountain Road/Mercy Road intersection.	This improvement is a condition of approval for the Casa Mira View project. These improvements have been completed.
Kearny Villa Road/Miramar Road intersection improvements (Mira Mesa/T-89)	This project involves the widening of the east and north legs of Miramar Road at Kearny Villa Road by adding thru and right turn-lanes.	This project is expected to be completed by 2024.
Black Mountain Road– Mira Mesa Boulevard to Hillery Drive (Mira Mesa/T-90)	This project involves the widening of Black Mountain Road to a 6-lane Primary Arterial with Class II bike lanes between Mira Mesa Boulevard and Hillery Drive.	Project may be completed with subdivider funds. Project completion assumed by 2025.
Kearny Villa Road-Black Mountain Road to Miramar Road (Mira Mesa/T-92)	This project involves the widening of Kearny Villa Road to a 6-lane Primary Arterial with Class II bike lanes between Black Mountain Road and 600 feet south of Miramar Road.	Project funded through FBA. Scheduled to begin in FY 2023 and assumed to be completed by 2025.
Carroll Canyon Road – Scranton Road to El Camino Memorial Park (Mira Mesa/T-96)	This project provides all necessary improvements to upgrade Carroll Canyon Road between Scranton Road and El Camino Memorial Park's western entrance to a 4-lane Major street. Traffic signals at Scranton Road and Nancy Ridge Road intersections are included.	This project should be completed in order to accommodate the completion of project T-5A currently scheduled for FY 2023 - 2024.
Eastgate Mall – Miramar Road to SDGE easement. (North University City/NUC-34)	This project involves the widening of Eastgate Mall to a 4-lane Collector Street between Miramar Road and the SDG&E easement. In addition, this project would provide Class II bike lanes.	Project assumed completion by 2025.
I-805 Interchange Improvements at La Jolla Village Drive/Miramar Road (North University City/NUC-C)	The reconfiguration of the existing I-805 cloverleaf interchange into a diamond/partial cloverleaf interchange with the I-805 southbound and northbound off-ramps being brought under traffic signal control. In addition, the southbound on-ramp from eastbound La Jolla Village Drive will be reconfigured to 2 SOV + 1 HOV lanes.	Construction began in 2010 and was completed.
Aspen Creek/Carroll Canyon Business Park (Mira Mesa)	This project involves the construction of a Business/Industrial Park currently underway. Roadway improvements include the construction of a driveway on the east side of Camino Ruiz/Miralani Drive intersection with a shared left/thru/right-lane. The project also proposes to construct a second northbound left-turn lane, a southbound left-turn lane, and eastbound shared thru/left lane at the Camino Ruiz/Miralani Drive intersection. The project also proposes to construct an additional southbound left-turn lane at the Camino Ruiz/Activity Road intersection.	The majority of these improvements have been completed and considered in *Existing* and *Phase 1* conditions. Other improvements, which require the widening of Camino Ruiz south of Miralani Drive, are dependent upon the implementation of FBA Mira Mesa T-10.

Table 5.2-24. *Phase 2A (Year 2030A) Project Trip Generation*

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Light Industrial Park	Trip Rate (15/KSF)	2,475	245	27	59	238
	Transit Credit (5% ADT)	*-124*	*-16*	*-2*	*-3*	*-13*
Eastside A–Maya Linda Rd.	Cumulative (100%)	2,351	229	25	56	225
165,000 SF	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,351	229	25	56	225
Light Industrial Park	Trip Rate (15/KSF)	3,750	372	41	90	360
	Transit Credit (5% ADT)	*-188*	*-24*	*-3*	*-5*	*-20*
Eastside B–Carroll Canyon Rd.	Cumulative (100%)	3,562	348	38	85	340
250,000 SF	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,562	348	38	85	340
Light Industrial/Business Park	Trip Rate (16/KSF)	2,160	207	52	52	207
	Transit Credit (5% ADT)	*-108*	*-13*	*-3*	*-3*	*-11*
Parkside–Carroll Canyon Rd.	Cumulative (100%)	2,052	194	49	49	196
135,000 SF	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,052	194	49	49	196
Residential	Trip Rate (6/DU)	3,510	56	225	221	95
	Transit Credit (5% ADT)	*-176*	*-5*	*-20*	*-13*	*-6*
Mixed-Use Village Center	Cumulative (100%)	3,334	51	205	208	89
585 Units	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,334	51	205	208	89
	Cumulative	**11,299**	**822**	**317**	**398**	**850**
TOTALS:	**Pass-By**	**0**	**0**	**0**	**0**	**0**
	Driveway	**11,299**	**822**	**317**	**398**	**850**

Footnotes:

a. Traffic volumes expressed in vehicles per day.

b. Pass-by represents difference between Driveway and Cumulative trips, per the City Trip Generation Manual (refer to *Appendix K* of the TIA)

General Notes:

1. Based on the City of San Diego Trip Generation Manual, May 2003.
2. Trip Rate, Transit Credit, and Mixed-Use Credit percentages for the AM and PM peak hour can be found in *Appendix K* of the TIA.
3. Driveway Trips—vehicles entering and exiting project driveways (Driveway = Cumulative + Pass-By)
4. Cumulative Trips—net new vehicles added to the network
5. Pass-By Trips—vehicles already on the street network diverting to the project site
6. Land Uses introduced in previous phases are shaded.

Table 5.2-25. *Phase 2A (Year 2030A) Intersection Operations*

Intersection	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard	AM	**64.6**	**E**	**65.4**	**E**	0.8	No
	PM	49.8	D	50.2	D	0.4	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard	AM	**141.5**	**F**	**142.1**	**F**	0.6	No
	PM	51.1	D	51.3	D	0.2	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	**66.6**	**E**	**67.0**	**E**	0.4	No
	PM	**63.4**	**E**	**66.1**	**E**	**2.7**	**Yes**
4. Scranton Road/Mira Mesa Boulevard	AM	**78.1**	**E**	**79.8**	**E**	1.7	No
	PM	**83.5**	**F**	**83.8**	**F**	0.3	No
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	44.2	D	44.4	D	0.2	No
	PM	**101.3**	**F**	**102.3**	**F**	1.0	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	**61.6**	**E**	**61.7**	**E**	0.1	No
	PM	**81.6**	**F**	**82.0**	**F**	0.4	No
7. Parkdale Avenue/Mira Mesa Boulevard	AM	**62.8**	**E**	**63.0**	**E**	0.2	No
	PM	**60.2**	**E**	**60.2**	**E**	0.0	No
8. Reagan Road/Mira Mesa Boulevard	AM	42.6	D	42.6	D	0.0	No
	PM	51.2	D	51.5	D	0.3	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	**59.6**	**E**	**59.8**	**E**	0.2	No
	PM	**68.2**	**E**	**68.2**	**E**	0.0	No
10. New Salem Street/Mira Mesa Boulevard	AM	45.3	D	45.5	D	0.2	No
	PM	43.4	D	43.7	D	0.3	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	53.9	D	54.0	D	0.1	No
	PM	36.8	D	38.8	D	2.0	No
12. Black Mountain Road/Mira Mesa Boulevard[d]	AM	**112.0**	**F**	**112.6**	**F**	0.6	No
	PM	**132.1**	**F**	**132.3**	**F**	0.2	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**58.9**	**E**	**59.5**	**E**	0.6	No
	PM	**61.6**	**E**	**61.6**	**E**	0.0	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	49.7	D	50.5	D	0.8	No
	PM	38.3	D	40.1	D	1.8	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	43.1	D	43.4	D	0.3	No
	PM	**55.1**	**E**	**56.8**	**E**	1.7	No
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	45.2	D	45.4	D	0.2	No
	PM	**55.4**	**E**	**56.4**	**E**	1.0	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	33.5	C	33.6	C	0.1	No
	PM	30.4	C	30.5	C	0.1	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**50.3**	**F**	**50.4**	**F**	0.1	No
	PM	12.4	B	12.4	B	0.0	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	20.6	C	21.7	C	1.1	No
	PM	15.1	C	15.4	C	0.3	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	17.4	C	17.8	C	0.4	No
	PM	23.2	C	24.1	C	0.9	No

Intersection	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road	AM	23.6	C	23.9	C	0.3	No
	PM	23.1	C	24.0	C	0.9	No
31. Pacific Heights Boulevard/Carroll Canyon Road [d]	AM	25.8	C	27.1	C	1.3	No
	PM	29.9	C	31.1	C	1.2	No
32. Carroll Road/Carroll Canyon Road [d]	AM	17.1	B	17.1	B	0.0	No
	PM	17.9	B	18.0	B	0.1	No
33. Camino Santa Fe/Carroll Canyon Road [d]	AM	35.0	D	36.2	D	1.2	No
	PM	37.7	D	40.5	D	2.8	No
34. Camino Ruiz/Carroll Canyon Road [d]	AM	36.4	D	44.7	D	8.3	No
	PM	37.5	D	40.6	D	3.1	No
35. Project Driveway C/Carroll Canyon Road	AM	*No conflicting movements*		18.0	B	—	No
	PM			25.8	C	—	No
36. Project Driveway D/Carroll Canyon Road	AM	*No conflicting movements*		33.3	C	—	No
	PM			24.0	C	—	No
37. Project Driveway E/Carroll Canyon Road	AM	*No conflicting movements*		21.3	C	—	No
	PM			22.0	C	—	No
38. Project Driveway F/Carroll Canyon Road	AM	29.8	C	36.3	D	6.5	No
	PM	19.5	B	33.6	C	14.1	No
39. Black Mountain Road/Carroll Canyon Road [d]	AM	49.7	D	**69.3**	**E**	**19.6**	**Yes**
	PM	**78.6**	**E**	**100.4**	**F**	**12.8**	**Yes**
40. Maya Linda Road/Carroll Canyon Road	AM	33.4	C	43.0	D	9.6	No
	PM	28.7	C	31.8	C	3.1	No
41. I-15 Southbound Ramps/Carroll Canyon Road [d]	AM	**100.0**	**F**	**120.3**	**F**	**20.3**	**Yes**
	PM	**111.6**	**F**	**163.7**	**F**	**52.1**	**Yes**
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	**80.4**	**F**	**93.1**	**F**	**12.7**	**Yes**
	PM	**59.3**	**E**	**78.7**	**E**	**19.4**	**Yes**
43. Businesspark Avenue/Carroll Canyon Road	AM	34.6	C	35.0	C	0.4	No
	PM	31.4	C	32.0	C	0.6	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	26.4	C	26.5	C	0.1	No
	PM	20.6	C	20.6	C	0.0	No
45. Project Driveway G/Maya Linda Road	AM	*No conflicting movements*		22.4	C	—	No
	PM			21.1	C	—	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*No conflicting movements*		11.9	B	—	No
	PM			11.3	B	—	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	32.1	C	32.2	C	0.1	No
	PM	52.8	D	52.9	D	0.1	No
51. Judicial Drive/Eastgate Mall	AM	28.5	C	28.6	C	0.1	No
	PM	**68.6**	**E**	**68.6**	**E**	0.0	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**172.6**	**F**	**173.0**	**F**	0.4	No
	PM	**119.7**	**F**	**120.1**	**F**	0.4	No
53. I-805 Southbound Ramps/La Jolla Village Drive [d]	AM	**59.1**	**E**	**59.5**	**E**	0.4	No
	PM	19.8	B	20.0	C	0.2	No
54. I-805 Northbound Ramps/Miramar Road [d]	AM	17.4	B	17.4	B	0.0	No
	PM	16.7	B	16.8	B	0.1	No
55. Nobel Drive/Miramar Road	AM	35.8	D	37.2	D	1.4	No
	PM	27.4	C	28.0	C	0.6	No
56. Eastgate Mall/Miramar Road	AM	44.3	D	45.1	D	0.8	No
	PM	36.4	D	36.9	D	0.5	No
57. Camino Santa Fe/Miramar Road	AM	**145.7**	**F**	**146.2**	**F**	0.5	No
	PM	**78.5**	**E**	**86.0**	**F**	**7.5**	**Yes**

Intersection	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
58. Carroll Road/Camino Santa Fe	AM	39.9	D	40.0	D	0.1	No
	PM	**78.7**	**E**	**79.2**	**E**	0.5	No
59. Carroll Road/Miramar Road	AM	20.0	C	21.3	C	1.3	No
	PM	32.3	C	33.0	C	0.7	No
60. Camino Ruiz/Miramar Road	AM	38.9	D	40.8	D	1.9	No
	PM	38.9	D	39.3	D	0.4	No
61. Black Mountain Road/Miramar Road	AM	44.5	D	44.7	D	0.2	No
	PM	49.7	D	49.9	D	0.2	No
62. Kearny Villa Road/Miramar Road [d]	AM	**102.3**	**F**	**107.8**	**F**	**5.5**	**Yes**
	PM	**139.6**	**F**	**143.7**	**F**	**4.1**	**Yes**
93. Kearny Mesa Road/Miramar Road	AM	**55.4**	**E**	**55.9**	**E**	0.5	No
	PM	53.3	D	54.5	D	1.2	No
63. I-15 Southbound Ramps/Miramar Road	AM	43.4	D	45.5	D	2.1	No
	PM	26.8	C	28.5	C	1.7	No
64. I-15 Northbound Ramps/Miramar Road	AM	27.4	C	29.8	C	2.4	No
	PM	31.1	C	31.4	C	0.3	No
65. Willow Creek Road/Pomerado Road	AM	29.4	C	29.4	C	0.0	No
	PM	**56.5**	**E**	**57.0**	**E**	0.5	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	8.6	A	8.6	A	0.0	No
	PM	16.6	B	17.6	B	1.0	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	14.8	B	14.8	B	0.0	No
	PM	16.8	B	17.0	B	0.2	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	28.6	C	28.8	C	0.2	No
	PM	37.9	D	37.9	D	0.0	No
71. Camino Ruiz/Reagan Road	AM	33.2	C	33.5	C	0.3	No
	PM	37.7	D	39.3	D	1.6	No
72. Camino Ruiz/Flanders Drive	AM	21.3	C	21.4	C	0.1	No
	PM	23.0	C	23.1	C	0.1	No
73. Camino Ruiz/Gold Coast Drive	AM	**67.4**	**E**	**71.3**	**E**	**3.9**	**Yes**
	PM	44.4	D	44.6	D	0.2	No
74. Camino Ruiz/Jade Coast Road *(TWSC)* [d]	AM	**58.1**	**F**	**74.5**	**F**	**16.4**	**Yes**
	PM	**39.4**	**E**	**47.8**	**E**	**8.4**	**Yes**
75. Camino Ruiz/Jade Coast Drive [d]	AM	20.6	C	21.7	C	1.1	No
	PM	10.2	B	10.3	B	0.1	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*[e]	—	27.3	C	—	No
	PM	*DNE*	—	11.9	B	—	No
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	*DNE*	—	—	No
	PM	*DNE*	—	*DNE*	—	—	No
78. Camino Ruiz/Miralani Drive [d]	AM	38.9	D	40.0	D	1.1	No
	PM	47.0	D	48.9	D	1.9	No
79. Camino Ruiz/Activity Road [d]	AM	28.6	C	28.6	C	0.0	No
	PM	33.7	C	34.8	C	1.1	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**75.9**	**E**	**76.7**	**E**	0.8	No
	PM	**56.7**	**E**	**56.9**	**E**	0.2	No
81. Black Mountain Road/Mercy Road [d]	AM	43.5	D	46.7	D	3.2	No
	PM	43.5	D	43.6	D	0.1	No
82. Black Mountain Road/Westview Parkway	AM	28.2	C	28.2	C	0.0	No
	PM	27.3	C	27.4	C	0.1	No
83. Black Mountain Road/Capricorn Way	AM	**63.2**	**E**	**63.7**	**E**	0.5	No
	PM	**67.5**	**E**	**68.0**	**E**	0.5	No
84. Black Mountain Road/Hillery Drive [d]	AM	**84.0**	**F**	**99.7**	**F**	**15.7**	**Yes**

Intersection	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
	PM	**55.4**	**E**	**56.1**	**E**	0.7	No
85. Black Mountain Road/Gold Coast Drive [d]	AM	41.3	D	48.1	D	6.8	No
	PM	40.4	D	44.0	D	3.6	No
86. Black Mountain Road/Maya Linda [d]	AM	34.8	C	45.2	D	10.4	No
	PM	28.9	C	34.2	C	5.3	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa Rd. [d]	AM	34.3	C	35.9	D	1.6	No
	PM	**59.5**	**E**	**61.0**	**E**	1.5	No
88. Black Mountain Road/Activity Road	AM	45.8	D	46.3	D	0.5	No
	PM	**78.6**	**E**	**79.5**	**E**	0.9	No
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way *(TWSC)*	AM	27.8	D	28.0	D	0.2	No
	PM	**45.0**	**E**	**45.2**	**E**	0.2	No
90. Kearny Villa Road NB Ramps/Miramar Way *(TWSC)*	AM	23.4	C	25.1	D	1.7	No
	PM	**35.3**	**E**	**37.0**	**E**	1.7	No
91. SR 163 SB Ramps/Kearny Villa Road *(TWSC)*	AM	16.2	C	16.7	C	0.5	No
	PM	30.0	D	32.8	D	2.8	No
92. SR 163 NB Ramps/Kearny Villa Road	AM	24.8	C	26.0	C	1.2	No
	PM	13.7	B	14.1	B	0.4	No

Footnotes:

a. Average delay expressed in seconds per vehicle. Level of Service.
b. Sig = Significant project impacts based on Significance Criteria.
c. Planned FBA roadway improvements for Phase 2A (with and without project scenarios).
d. DNE – Does Not Exist

SIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-26. *Phase 2A (Year 2030A) Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2A			Phase 2A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	17,800	0.445	B	17,870	0.447	B	0.002	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	58,000	0.773	D	58,350	0.778	D	0.005	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	50,540	0.842	D	50,540	0.842	D	0.000	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	46,700	0.778	C	46,700	0.778	C	0.000	No
Camino Santa Fe to Parkdale Av.	6	Major Arterial	50,000	54,500	**1.090**	**F**	54,500	**1.090**	**F**	0.000	No
Parkdale Av. To Reagan Rd.	6	Major Arterial	50,000	52,000	**1.040**	**F**	52,000	**1.040**	**F**	0.000	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	52,900	**1.058**	**F**	52,900	**1.058**	**F**	0.000	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	58,300	**1.166**	**F**	58,300	**1.166**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	62,800	**1.256**	**F**	62,830	**1.257**	**F**	0.001	No
Black Mountain Rd to Westview Pkwy.	8	Prime Arterial	70,000	58,360	0.834	D	58,890	0.841	D	0.008	No
Westview Pkwy. To I-15	9	Prime Arterial	75,000	61,500	0.820	D	62,080	0.828	D	0.008	No
I-15 to Scripps Ranch Blvd.	6	Major Arterial	50,000	32,900	0.658	C	32,980	0.660	C	0.002	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy.	4	Collector	30,000	14,420	0.481	C	14,530	0.484	C	0.003	No
Flanders Drive											
Parkdale Av. To Camino Ruiz	2	Collector	8,000	6,740	**0.843**	**E**	6,740	**0.843**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,620	0.703	D	5,700	0.713	D	0.010	No
Gold Coast Drive											
Parkdale Av. To Camino Ruiz	2	Collector	8,000	7,620	**0.953**	**E**	7,620	**0.953**	**E**	0.000	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,790	**0.849**	**E**	6,900	**0.863**	**E**	0.014	No
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,500	**1.688**	**F**	13,610	**1.701**	**F**	0.013	No[g]
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,240	**0.905**	**E**	7,240	**0.905**	**E**	0.000	No
Jade Coast Road											
Parkdale Av. To Camino Ruiz	2	Collector	8,000	4,380	0.548	C	4,520	0.565	C	0.017	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,120	0.390	B	3,210	0.401	B	0.011	No
Carroll Canyon Road											
West of Scranton Road	4	Collector	30,000	23,000	0.767	D	23,350	0.778	D	0.011	No
Scranton Rd. to Pacific Heights Blvd.	4	Major Arterial	40,000	26,300	0.658	C	27,000	0.675	C	0.017	No
Pacific Heights Blvd. to Carroll Rd.	4	Major Arterial	40,000	18,100	0.453	B	18,910	0.473	B	0.020	No
Carroll Rd. to Camino Santa Fe	4	Major Arterial	40,000	15,490	0.387	B	16,360	0.409	B	0.022	No
Camino Santa Fe to Camino Ruiz [f]	6	Prime Arterial	60,000	24,500	0.408	A	26,360	0.439	B	0.031	No
Camino Ruiz to Project Dwy. C	6	Major Arterial	50,000	16,500	0.330	A	19,650	0.393	A	0.063	No
Project Dwy. C to Project Dwy. D	6	Major Arterial	50,000	16,500	0.330	A	19,500	0.390	A	0.060	No
Project Dwy. D to Project Dwy. E	6	Major Arterial	50,000	16,500	0.330	A	19,550	0.391	A	0.061	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2A			Phase 2A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. E to Project Dwy. F	6	Major Arterial	50,000	16,500	0.330	A	19,770	0.395	A	0.065	No
Project Dwy. F to Black Mountain Rd.	4	Major Arterial	40,000	9,300	0.233	A	12,820	0.321	A	0.088	No
Black Mountain Rd to I-15	4	Collector	30,000	38,570	**1.286**	**F**	41,530	**1.384**	**F**	**0.098**	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	26,000	**0.867**	**E**	26,320	**0.877**	**E**	0.010	No
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,700	**1.213**	**F**	9,830	**1.229**	**F**	**0.016**	**Yes**
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL	15,000	11,500	0.767	D	11,610	0.774	D	0.007	No
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr.	6	Prime Arterial	60,000	45,360	0.756	C	45,540	0.759	C	0.003	No
Towne Center Dr. to I-805	8	Prime Arterial	70,000	67,500	**0.964**	**E**	67,780	0.968	**E**	0.004	No
I-805 to Nobel Dr.	7	Prime Arterial	65,000	52,500	0.808	C	52,780	0.812	D	0.004	No
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	72,610	**1.117**	**F**	73,180	**1.126**	**F**	0.009	No
Eastgate Mall to Camino Santa Fe	6	Major Arterial	50,000	85,010	**1.700**	**F**	85,840	**1.717**	**F**	**0.017**	**Yes**
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	47,170	**0.943**	**E**	47,390	**0.948**	**E**	0.005	No
Carroll Rd to Cabot Dr.	6	Major Arterial	50,000	40,000	0.800	C	40,240	0.805	D	0.005	No
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	41,380	0.828	D	41,680	0.834	D	0.006	No
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,800	**1.236**	**F**	62,100	**1.242**	**F**	0.006	No
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	69,000	**1.380**	**F**	69,300	**1.386**	**F**	0.006	No
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	68,200	**1.364**	**F**	69,480	**1.390**	**F**	**0.026**	**Yes**
I-15 to Willow Creek Rd.	2	Collector TWLTL	15,000	35,870	**2.391**	**F**	36,050	**2.403**	**F**	**0.012**	**Yes**
East of Willow Creek Rd.	2	Collector TWLTL	15,000	30,300	**2.020**	**F**	30,410	**2.027**	**F**	0.007	No
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.	4	Collector	30,000	19,500	0.650	C	19,850	0.662	C	0.012	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	21,000	0.525	B	21,350	0.534	C	0.009	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	15,990	0.320	A	16,070	0.321	A	0.001	No
Flanders Dr. to Carroll Canyon Rd.	6	Major Arterial	50,000	27,000	0.540	B	27,150	0.543	B	0.003	No
Carroll Canyon Rd. to Carroll Rd.	6	Major Arterial	50,000	34,100	0.682	C	34,890	0.698	C	0.016	No
Carroll Rd. to Miramar Rd.	6	Major Arterial	50,000	33,950	0.679	C	34,670	0.693	C	0.014	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,420	0.611	C	24,530	0.613	C	0.002	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	29,000	0.725	C	29,180	0.730	C	0.005	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	21,500	0.538	C	21,940	0.549	C	0.011	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	24,500	0.613	C	25,010	0.625	C	0.012	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2A			Phase 2A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Gold Coast Dr. to Jade Coast Dr.	6	Major Arterial	50,000	22,400	0.448	B	23,100	0.462	B	0.014	No
Jade Coast Dr. to Project Dwy.	6	Major Arterial	50,000	23,800	0.476	B	24,730	0.495	B	0.019	No
Project Dwy. To Carroll Canyon Rd.	6	Major Arterial	50,000	23,800	0.476	B	25,300	0.506	B	0.030	No
Carroll Canyon Rd. to Miralani Dr.	6	Major Arterial	50,000	26,200	0.524	B	26,940	0.539	B	0.015	No
Miralani Dr. to Miramar Rd.	6	Major Arterial	50,000	28,200	0.564	C	28,840	0.577	C	0.013	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,160	0.770	D	6,160	0.770	D	0.000	No
East of Camino Ruiz	2	Collector	8,000	5,290	0.661	D	5,360	0.670	D	0.009	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,310	**1.039**	**F**	8,420	**1.053**	**F**	**0.014**	**Yes**
Hillery Dr. to Flanders Dr.	2	Collector	8,000	7,000	**0.875**	**E**	7,110	**0.889**	**E**	0.014	No
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,620	0.703	D	5,730	0.716	D	0.013	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	40,140	**1.004**	**F**	40,250	**1.006**	**F**	0.002	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	39,530	**0.988**	**E**	39,640	**0.991**	**E**	0.003	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	37,220	0.744	C	37,470	0.749	C	0.005	No
Westview Pkwy. To Capricorn Way	6	Major Arterial	50,000	34,040	0.681	C	34,400	0.688	C	0.007	No
Capricorn Way to Mira Mesa Blvd.	5	Major Arterial	45,000	37,150	0.826	D	37,620	0.836	D	0.010	No
Mira Mesa Blvd. to Hillery Dr.	6	Prime Arterial	60,000	22,100	0.368	A	23,030	0.384	A	0.016	No
Hillery Dr. to Gold Coast Dr.	4	Major Arterial	40,000	27,010	0.675	C	28,130	0.703	C	0.028	No
Gold Coast Dr. to Carroll Canyon Rd.	4	Major Arterial	40,000	30,700	0.768	D	31,960	0.799	D	0.031	No
Carroll Canyon Rd. to Maya Linda Rd.	4	Major Arterial	40,000	25,300	0.633	C	26,010	0.650	C	0.017	No
Maya Linda Rd. to Carroll Centre Rd.[f]	5	Major Arterial	45,000	38,300	0.851	D	40,640	**0.903**	**E**	**0.052**	**Yes**
Carroll Centre Rd. to Miramar Rd.[f]	4	Collector	30,000	17,800	0.593	C	17,880	0.596	C	0.003	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	6	Major Arterial	50,000	20,500	0.410	B	22,750	0.455	B	0.045	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000	32,900	0.658	C	34,170	0.683	C	0.025	No
Miramar Way to SR 163	4	Major Arterial	50,000[h]	36,250	0.725	C	37,240	0.745	C	0.020	No
South of SR 163	4	Major Arterial	50,000[h]	24,660	0.493	B	25,250	0.505	B	0.012	No
Maya Linda Road											
Carroll Canyon Rd. to Project Dwy. G.	4	Collector	30,000	12,200	0.407	B	15,170	0.506	C	0.099	No
Project Dwy G. to Project Dwy. H.	4	Collector	30,000	12,200	0.407	B	16,410	0.547	C	0.140	No
Project Dwy H. to Black Mountain Rd.	4	Collector	30,000	12,200	0.407	B	16,190	0.540	C	0.133	No
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	3,300	0.413	B	3,510	0.439	C	0.026	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	25,400	0.635	C	25,690	0.642	C	0.007	No
Eastgate Mall											

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2A			Phase 2A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Towne Center Dr. to I-805	4	Collector	30,000	13,500	0.450	B	13,650	0.455	B	0.005	No
I-805 to Miramar Rd.	4	Collector	30,000	16,800	0.560	C	17,030	0.568	C	0.008	No

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Planned roadway improvements in Phase 2A (with project scenarios).
g. Despite the City's threshold being exceeded, no significant impact is calculated since adjacent intersections operate at an acceptable LOS (LOS D or better), this street segment is built to its ultimate classification per the adopted Community Plan, and no arterial impact is calculated.
h. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.

General Notes:

1. TWLTL = Two-way left-turn lane.

Table 5.2-27. *Phase 2A (Year 2030A) Arterial Operations*

Arterial Segment	Period	Direction	Phase 2A		Phase 2A + Project		Speed Decrease	Sig[c]
			Speed[a]	LOS[b]	Speed	LOS		
Gold Coast Drive Westonhill Drive to Black Mountain Road	AM	EB	19.6	C	19.6	C	0.0	No
		WB	20.2	C	20.2	C	0.0	No
	PM	EB	18.4	C	18.4	C	0.0	No
		WB	17.7	D	17.7	D	0.0	No

Footnotes:

a. Speed in miles per hour.

b. Level of Service.

c. Sig = significant project impact based on significance criteria.

General Notes:

1. See *Appendix M* of the TIA for the calculation sheets.

Table 5.2-28a. *Phase 2A (Year 2030A) Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	87	18,513	87	18,513	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	121	9,950	126	10,343	5	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	65	6,538	65	6,538	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	36	5,450	36	5,450	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	66	5,406	69	5,608	**3**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	20	4,275	20	4,275	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	12	2,231	12	2,231	0	No
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	68	12,488	72	13,359	**4**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	90	18,513	94	19,299	**14**	**Yes**
	PM	51	10,438	62	12,711	11	No[c]
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	5	1,088	15	2,979	10	No

Location	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	214	14,600	219	14,961	**5**	**Yes**
NB &SB Kearny Villa Rd to NB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	22	3,175	22	3,175	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 9–6B* of the TIA).

General Notes:

1. Results based on Caltrans' rate code F (most restrictive).
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-28b. *Phase 2A (Year 2030A) Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(3 SOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	15	6,248	15	6,248	0	No
NB & SB Vista Sorrento Pkwy to NB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	2,975	17	3,368	2	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805	AM	15	2,508	15	2,508	0	No
(1 SOV+ 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805	AM	15	2,890	15	2,890	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	2,061	16	2,263	1	No
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15	AM	15	3,485	15	3,485	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No

Location	Peak Hour	Phase 2A without Project		Phase 2A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
EB Mira Mesa Blvd. to SB I-15	AM	12	2,231	12	2,231	0	No
(2 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	15	4,718	18	5,589	**3**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15	AM	15	6,163	17	6,949	**2**	**Yes**
(1 SOV + 1 HOV)	PM	15	4,548	23	6,821	8	No[c]
EB & WB Carroll Canyon Road. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	5	1,088	15	2,979	10	No
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	3,740	16	4,101	1	No
NB & SB Kearny Villa Rd to NB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	15	2,350	15	2,350	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS. (see *Table 9–6B* of the TIA).

General Notes:

1. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-29a. *Phase 2A (Year 2030A) Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Phase 2A ADT	Direction, Number of Lanes & Capacity[a]			Phase 2A		Phase 2A with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	193,410	NB Mainlines	4M+1A	9,200	0.679	C	0.682	C	0.003	No
		SB Mainlines	5M	10,000	1.187	**F(0)**	1.192	**F(0)**	0.005	No
South of Kearny Villa Rd.	203,590	NB Mainlines	4M+1A	9,200	0.715	C	0.719	C	0.004	No
		SB Mainlines	5M	10,000	1.249	**F(0)**	1.257	**F(1)**	**0.008**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	360,710	NB Mainlines	5M+1A+2HOV/ML	13,600	0.919	D	0.923	**E**	0.004	**Yes**
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.269	**F(1)**	1.275	**F(1)**	**0.006**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	363,210	NB Mainlines	6M+1A+2HOV/ML	15,600	0.830	D	0.833	D	0.003	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.084	**F(0)**	1.087	**F(0)**	0.003	No
Carroll Canyon Rd. to Miramar Rd.[b]	367,540	NB Mainlines	6M+2HOV/ML	14,400	0.910	D	0.914	D	0.004	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.097	**F(0)**	1.101	**F(0)**	0.004	No
Miramar Rd. to Miramar Way[b]	390,730	NB Mainlines	6M+1A+2HOV/ML	15,600	1.013	**F(0)**	1.020	**F(0)**	**0.007**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.091	**F(0)**	1.099	**F(0)**	**0.008**	**Yes**
Miramar Way to SR 163[b]	379,160	NB Mainlines	7M+2HOV/ML	16,400	0.935	**E**	0.941	E	0.006	No
		SB Mainlines	7M+2HOV/ML	16,400	1.007	**F(0)**	1.014	**F(0)**	**0.007**	**Yes**
South of SR 163[b]	221,260	NB Mainlines	4M+1A+2HOV/ML	11,600	0.771	C	0.777	C	0.006	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.831	D	0.838	D	0.007	No
I–805										
North of Mira Mesa Blvd.[c]	201,540	NB Mainlines	4M+1A+2HOV/ML	11,600	0.881	D	0.884	D	0.003	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.393	B	0.394	B	0.001	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	230,000	NB Mainlines	4M+1A+2HOV/ML	11,600	1.006	**F(0)**	1.006	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.449	B	0.449	B	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	242,600	NB Mainlines	4M+1A+2HOV/ML	11,600	1.061	**F(0)**	1.061	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.473	B	0.473	B	0.000	No
South of Nobel Dr.[c]	279,870	NB Mainlines	4M+1A+2HOV/ML	11,600	1.224	**F(0)**	1.225	**F(0)**	0.001	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.546	B	0.546	B	0.000	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-29b. *Phase 2A (Year 2030A) Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Phase 2A ADT	Direction, Number of Lanes & Capacity[a]			Phase 2A		Phase 2A with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	193,410	NB Mainlines	4M+1A	9,200	0.910	D	0.914	D	0.004	No
		SB Mainlines	5M	10,000	1.019	**F(0)**	1.023	**F(0)**	0.004	No
South of Kearny Villa Rd.	203,590	NB Mainlines	4M+1A	9,200	0.958	**E**	0.964	**E**	0.006	No
		SB Mainlines	5M	10,000	1.072	**F(0)**	1.079	**F(0)**	**0.007**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	360,710	NB Mainlines	5M+1A+2HOV/ML	13,600	1.081	**F(0)**	1.086	**F(0)**	0.005	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.964	**E**	0.969	**E**	0.005	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	363,210	NB Mainlines	6M+1A+2HOV/ML	15,600	0.929	**E**	0.932	**E**	0.003	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.846	D	0.849	D	0.003	No
Carroll Canyon Rd. to Miramar Rd.[b]	367,540	NB Mainlines	6M+2HOV/ML	14,400	1.019	**F(0)**	1.023	**F(0)**	0.004	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.856	D	0.860	D	0.004	No
Miramar Rd. to Miramar Way[b]	390,730	NB Mainlines	6M+1A+2HOV/ML	15,600	0.844	D	0.849	D	0.005	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.102	**F(0)**	1.109	**F(0)**	**0.007**	**Yes**
Miramar Way to SR 163[b]	379,160	NB Mainlines	7M+2HOV/ML	16,400	0.779	C	0.784	C	0.005	No
		SB Mainlines	7M+2HOV/ML	16,400	1.017	**F(0)**	1.024	**F(0)**	**0.007**	**Yes**
South of SR 163[b]	221,260	NB Mainlines	4M+2HOV/ML	11,600	0.717	C	0.722	C	0.005	No
		SB Mainlines	4M+2HOV/ML	11,600	0.936	**E**	0.943	**E**	0.007	No
I–805										
North of Mira Mesa Blvd.[c]	201,540	NB Mainlines	4M+1A+2HOV/ML	11,600	0.537	B	0.538	B	0.001	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.811	D	0.814	D	0.003	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	230,000	NB Mainlines	4M+1A+2HOV/ML	11,600	0.613	B	0.613	B	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.926	**E**	0.926	**E**	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	242,600	NB Mainlines	4M+1A+2HOV/ML	11,600	0.646	C	0.646	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.977	**E**	0.977	**E**	0.000	No
South of Nobel Dr.[c]	279,870	NB Mainlines	4M+1A+2HOV/ML	11,600	0.746	C	0.746	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.127	**F(0)**	1.128	**F(0)**	0.001	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-30. *Phase 2B (Year 2030B) Local Improvements*

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Mira Mesa Boulevard – Black Mountain Road to I-15 (Mira Mesa/T-3)	Construction of the fourth lane on the south side of Mira Mesa Boulevard from Black Mountain Road easterly to the western boundary of Mira Mesa Market Center.	Project expected to be completed by 2025.
Carroll Canyon Road – Western Fenton Property to Carroll Road(Mira Mesa/T-5A)	Construction of Phase 5A of the project is from the Western Fenton Property to Carroll Road to a 4-lane Major Street.	Phase – 5A is expected to be completed by 2019.
Carroll Canyon Road – Carroll Road to Camino Ruiz (Mira Mesa/T-5B)	Construction of Carroll Canyon Road from Carroll Road to Camino Ruiz to a 4-lane Major street. Phase 5B is from Camino Santa Fe to Fenton Property boundary.	Phase – 5B is expected to be completed by 2020.
Carroll Canyon Road – Camino Santa Fe to Camino Ruiz (Mira Mesa/T-5C)	Construction of Carroll Canyon Road from Camino Santa Fe to Camino Ruiz. Phase 5C involves the construction of Carroll Canyon Road to a 6-lane Primary Arterial from Camino Ruiz to Camino Santa Fe. The intersection of Carroll Canyon Road and Camino Santa Fe was assumed to be constructed to LOS D standards based on forecasted volumes.	Phase – 5C is expected to be completed by 2021.
Carroll Canyon Road – Camino Ruiz to Black Mountain Road (Mira Mesa/T-6)	Extension of Carroll Canyon Road from Camino Ruiz to Black Mountain Road. Construction of a 6-lane Major from Camino Ruiz to Maya Linda Road with Class II bike lanes and 4-lane Major Street from Maya Linda Road to Black Mountain Road with Class II bike lanes.	Construction is scheduled for FY 2021. ***This improvement is planned to be constructed by the project during Phase 2A.***
Maya Linda Road – Carroll Canyon Road to Black Mountain Road (Mira Mesa/T-6B)	Extension of Maya Linda Road from Carroll Canyon Road to Black Mountain Road as a 4-lane Major with Class II bike lanes.	Construction is scheduled for FY 2021. ***This improvement is planned to be constructed by the project during Phase 1.***
Carroll Canyon Road – I-15 to Maya Linda Road (Mira Mesa/T-7A)	This project involves the widening of the south side of Carroll Canyon Road to include a right turn lane with Class II bike land.	This project is expected to be complete by 2030.
Camino Ruiz– Gold Coast Drive to Jade Coast Drive and Miralani Drive to Miramar Road (Mira Mesa/T-10)	This project would widen Camino Ruiz to a modified 6-lane Major Street from Gold Coast Drive to the east leg of Jade Coast and from the northern-most boundaries of Miralani Business park to Miramar Road. Construction also includes installation of Class II bicycle lanes from Mira Mesa Boulevard to Gold Coast Drive.	Construction is scheduled for FY 2020. This project cannot precede 15-10A.
Camino Ruiz– Jade Coast to Miralani Drive (Mira Mesa/T-10A)	This project involves the widening of Camino Ruiz from the east leg of Jade Coast Drive to Miralani Drive (for the northbound side) and from Jade Coast Drive to the northern most boundaries of the Miralani Business Park (for the southbound side). The project will widen Camino Ruiz to a 6-lane Major Street with a 14-foot wide, landscaped, raised-center-median (with dual ten-foot left-turn lanes at Carroll Canyon Road), streetlights, and Class II bike lanes. The project would also modify existing street curvature to increase stop/sight distance.	This project must coincide with or precede project T-10.
Black Mountain Road –From South of Mira Mesa Blvd to Gemini Avenue (Mira Mesa/T-34)	This project involves the widening of Black Mountain Road to provide northbound right-turn lanes to Mira Mesa Boulevard. Class II bike lanes would also be constructed.	Construction to take place with increase in development of the surrounding community.
Black Mountain Road – Gemini Avenue to Mira Mesa Boulevard (Mira Mesa/T-81)	This project widens the east side of Black Mountain Road from Gemini Avenue to Mira Mesa Boulevard for an additional northbound lane. Class II bike lanes are included.	This project is scheduled for completion in FY 2023.
Camino Santa Fe – Carroll Road to 350 feet South of Commerce Avenue (Mira Mesa/T-85)	This project provides for the widening of Camino Santa Fe from Carroll Road to 350 feet south of Commerce Avenue to a 6-lane Major with Class II bike lanes.	This project is expected to be complete by 2025.

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Camino Santa Fe/Miramar Road intersection improvements (Mira Mesa/T-87)	This project involves the widening of the north leg of Camino Santa Fe and east leg of Miramar Road by adding a southbound to westbound right-turn lane and westbound to northbound right-turn lane.	This project is scheduled for completion in FY 2016.
Black Mountain Road/Mercy Road intersection improvements (Mira Mesa/T-88)	This project involves the widening of Black Mountain Road to provide an additional northbound and southbound lane through the Black Mountain Road/Mercy Road intersection.	this improvement is a condition of approval for the Casa Mira View project. These improvements have been completed.
Kearny Villa Road/Miramar Road intersection improvements (Mira Mesa/T-89)	This project involves the widening of the east and north legs of Miramar Road at Kearny Villa Road by adding thru and right turn-lanes.	This project is expected to be completed by 2025.
Black Mountain Road– Mira Mesa Boulevard to Hillery Drive (Mira Mesa/T-90)	This project involves the widening of Black Mountain Road to a 6-lane Primary Arterial with Class II bike lanes between Mira Mesa Boulevard and Hillery Drive.	Project expected to be completed by 2025.
Kearny Villa Road-Black Mountain Road to Miramar Road (Mira Mesa/T-92)	This project involves the widening of Kearny Villa Road to a 6-lane Primary Arterial with Class II bike lanes between Black Mountain Road and 600 feet south of Miramar Road.	This project is expected to be completed by 2025.
Carroll Canyon Road – Scranton Road to El Camino Memorial Park (Mira Mesa/T-96)	This project provides all necessary improvements to upgrade Carroll Canyon Road between Scranton Road and El Camino Memorial Park's western entrance to a 4-lane Major street. Traffic signals at Scranton Road and Nancy Ridge Road intersections are included.	This project should be completed in order to accommodate the completion of project 1T-5A currently scheduled for FY 2019.
Eastgate Mall – Miramar Road to SDGE easement. (North University City/NUC-34)	This project involves the widening of Eastgate Mall to a 4-lane Collector Street between Miramar Road and the SDG&E easement. In addition, this project would provide Class II bike lanes.	Project expected to be completed by 2025.
I-805 Interchange Improvements at La Jolla Village Drive/Miramar Road (North University City/NUC-C)	The reconfiguration of the existing I-805 cloverleaf interchange into a diamond/partial cloverleaf interchange with the I-805 southbound and northbound off-ramps being brought under traffic signal control. In addition, the southbound on-ramp from eastbound La Jolla Village Drive would be reconfigured to 2 SOV + 1 HOV lanes.	Construction began in 2010 and was completed.
Aspen Creek/Carroll Canyon Business Park (Mira Mesa)	This project involves the construction of a Business/Industrial Park currently underway. Roadway improvements include the construction of a driveway on the east side of Camino Ruiz/Miralani Drive intersection with a shared left/thru/right-lane. The project also proposes to construct a second northbound left-turn lane, a southbound left-turn lane, and eastbound shared thru/left lane at the Camino Ruiz/Miralani Drive intersection. The project also proposes to construct an additional southbound left-turn lane at the Camino Ruiz/Activity Road intersection.	The majority of these improvements have been completed and considered in *Existing* and *Phase 1* conditions. Other improvements, which require the widening of Camino Ruiz south of Miralani Drive, are dependent upon the implementation of FBA Mira Mesa 15–10.

Table 5.2-31. *Phase 2B (Year 2030B) Project Trip Generation*

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Light Industrial Park *Eastside A–Maya Linda Rd.* 165,000 SF	Trip Rate (15/KSF)	2,475	245	27	59	238
	Transit Credit (5% ADT)	*-124*	*-16*	*-2*	*-3*	*-13*
	Cumulative (100%)	2,351	229	25	56	225
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,351	229	25	56	225
Light Industrial Park *Eastside B–Carroll Canyon Rd.* 250,000 SF	Trip Rate (15/KSF)	3,750	372	41	90	360
	Transit Credit (5% ADT)	*-188*	*-24*	*-3*	*-5*	*-20*
	Cumulative (100%)	3,562	348	38	85	340
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,562	348	38	85	340
Light Industrial/Business Park *Parkside–Carroll Canyon Rd.* 135,000 SF	Trip Rate (16/KSF)	2,160	207	52	52	207
	Transit Credit (5% ADT)	*-108*	*-13*	*-3*	*-3*	*-11*
	Cumulative (100%)	2,052	194	49	49	196
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,052	194	49	49	196
Residential *Mixed-Use Village Center* 585 Units	Trip Rate (6/DU)	3,510	56	225	221	95
	Transit Credit (5% ADT)	*-176*	*-5*	*-20*	*-13*	*-6*
	Cumulative (100%)	3,334	51	205	208	89
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,334	51	205	208	89
Residential *Westside* 2,725 Units	Trip Rate (6/DU)	16,350	262	1,046	1,030	441
	Cumulative (100%)	16,350	262	1,046	1,030	441
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	16,350	262	1,046	1,030	441
Retail—Specialty *Westside* 24,000 SF	Trip Rate (40/KSF)	960	17	12	43	43
	Cumulative (90%)	864	15	11	39	39
	Pass-By[b] (10%)	96	2	1	4	4
	Driveway	960	17	12	43	43
Neighborhood Park *Westside Gardens* 5.37 Acres	Trip Rate (5/Acre)	30	1	0	1	1
	Cumulative (100%)	30	1	0	1	1
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	30	1	0	1	1
TOTALS:	**Cumulative**	**28,543**	**1,100**	**1,374**	**1,468**	**1,331**
	Pass-By	**96**	**2**	**1**	**4**	**4**
	Driveway	**28,639**	**1,102**	**1,375**	**1,472**	**1,335**

Footnotes:

a. Traffic volumes expressed in vehicles per day.

b. Pass-by represents difference between Driveway and Cumulative trips, per the City Trip Generation Manual (refer to *Appendix K* of the TIA)

General Notes:

1. Based on the City of San Diego Trip Generation Manual, May 2003.
2. Trip Rate, Transit Credit, and Mixed-Use Credit percentages for the AM and PM peak hour can be found in *Appendix K* of the TIA.
3. Driveway Trips—vehicles entering and exiting project driveways (Driveway = Cumulative + Pass-By)
4. Cumulative Trips—net new vehicles added to the network
5. Pass-By Trips—vehicles already on the street network diverting to the project site
6. Land Uses introduced in previous phases are shaded.

Table 5.2-32. *Phase 2B (Year 2030B) Intersection Operations*

Intersection	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard	AM	**64.6**	**E**	**65.7**	**E**	1.1	No
	PM	49.8	D	53.3	D	3.5	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard	AM	**141.5**	**F**	**142.3**	**F**	0.8	No
	PM	51.1	D	51.3	D	0.2	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	**66.6**	**E**	**69.6**	**E**	**3.0**	**Yes**
	PM	**63.4**	**E**	**69.1**	**E**	**5.7**	**Yes**
4. Scranton Road/Mira Mesa Boulevard	AM	**78.1**	**E**	**80.0**	**E**	1.9	No
	PM	**83.5**	**F**	**83.9**	**F**	0.4	No
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	44.2	D	45.3	D	1.1	No
	PM	**101.3**	**F**	**102.3**	**F**	1.0	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	**61.6**	**E**	**62.2**	**E**	0.6	No
	PM	**81.6**	**F**	**82.9**	**F**	**1.3**	**Yes**
7. Parkdale Avenue/Mira Mesa Boulevard	AM	**62.8**	**E**	**63.6**	**E**	0.8	No
	PM	**60.2**	**E**	**61.0**	**E**	0.8	No
8. Reagan Road/Mira Mesa Boulevard	AM	42.6	D	43.3	D	0.7	No
	PM	51.2	D	52.0	D	0.8	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	**59.6**	**E**	**60.2**	**E**	0.6	No
	PM	**68.2**	**E**	**68.3**	**E**	0.1	No
10. New Salem Street/Mira Mesa Boulevard	AM	45.3	D	46.2	D	0.9	No
	PM	43.4	D	46.8	D	3.4	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	53.9	D	54.9	D	1.0	No
	PM	36.8	D	38.8	D	2.0	No
12. Black Mountain Road/Mira Mesa Boulevard[d]	AM	**112.0**	**F**	**112.7**	**F**	0.7	No
	PM	**132.1**	**F**	**132.7**	**F**	0.6	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**58.9**	**E**	**59.4**	**E**	0.5	No
	PM	**61.6**	**E**	**61.6**	**E**	0.0	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	49.7	D	50.9	D	1.2	No
	PM	38.3	D	40.7	D	2.4	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	43.1	D	44.0	D	0.9	No
	PM	**55.1**	**E**	**57.0**	**E**	1.9	No
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	45.2	D	45.4	D	0.2	No
	PM	**55.4**	**E**	**56.5**	**E**	1.1	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	33.5	C	33.6	C	0.1	No
	PM	30.4	C	30.4	C	0.0	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**50.3**	**F**	**50.4**	**F**	0.1	No
	PM	12.4	B	12.4	B	0.0	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	20.6	C	24.7	C	4.1	No
	PM	15.1	B	16.7	C	1.6	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	17.4	C	18.6	C	1.2	No
	PM	23.2	C	27.3	D	4.1	No

Intersection	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road	AM	23.6	C	24.2	C	0.6	No
	PM	23.1	C	24.1	C	1.0	No
31. Pacific Heights Boulevard/Carroll Canyon Road [d]	AM	25.8	C	28.0	C	2.2	No
	PM	29.9	C	32.0	C	2.1	No
32. Carroll Road/Carroll Canyon Road [d]	AM	17.1	B	17.1	B	0.0	No
	PM	17.9	B	18.6	B	0.7	No
33. Camino Santa Fe/Carroll Canyon Road [d]	AM	35.0	D	39.9	D	4.9	No
	PM	37.7	D	46.9	D	9.2	No
34. Camino Ruiz/Carroll Canyon Road [d]	AM	36.4	D	45.3	D	8.9	No
	PM	37.5	D	48.2	D	10.7	No
35. Project Driveway C/Carroll Canyon Road	AM	*No conflicting movements*		20.1	C	20.1	No
	PM			27.9	C	27.9	No
36. Project Driveway D/Carroll Canyon Road	AM	*No conflicting movements*		34.0	C	34.0	No
	PM			25.5	C	25.5	No
37. Project Driveway E/Carroll Canyon Road	AM	*No conflicting movements*		21.7	C	21.7	No
	PM			24.0	C	24.0	No
38. Project Driveway F/Carroll Canyon Road	AM	29.8	C	36.4	D	6.6	No
	PM	19.5	B	34.7	C	15.2	No
39. Black Mountain Road/Carroll Canyon Road [d]	AM	49.7	D	**74.9**	**E**	**25.2**	**Yes**
	PM	**78.6**	**E**	**110.1**	**F**	**31.5**	**Yes**
40. Maya Linda Road/Carroll Canyon Road	AM	33.4	C	46.0	D	12.6	No
	PM	28.7	C	36.2	D	7.5	No
41. I-15 Southbound Ramps/Carroll Canyon Road [d]	AM	**100.0**	**F**	**144.5**	**F**	**44.5**	**Yes**
	PM	**111.6**	**F**	**174.7**	**F**	**63.1**	**Yes**
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	**80.4**	**F**	**103.2**	**F**	**22.8**	**Yes**
	PM	**59.3**	**E**	**90.7**	**F**	**31.4**	**Yes**
43. Businesspark Avenue/Carroll Canyon Road	AM	34.6	C	35.2	D	0.6	No
	PM	31.4	C	32.1	C	0.7	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	26.4	C	26.5	C	0.1	No
	PM	20.6	C	20.6	C	0.0	No
45. Project Driveway G/Maya Linda Road	AM	*No conflicting movements*		22.9	C	—	No
	PM			22.3	C	—	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*No conflicting movements*		11.9	B	—	No
	PM			11.5	B	—	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	32.1	C	32.4	C	0.3	No
	PM	52.8	D	53.5	D	0.7	No
51. Judicial Drive/Eastgate Mall	AM	28.5	C	28.7	C	0.2	No
	PM	**68.6**	**E**	**68.7**	**E**	0.1	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**172.6**	**F**	**172.9**	**F**	0.3	No
	PM	**119.7**	**F**	**120.2**	**F**	0.5	No
53. I-805 Southbound Ramps/La Jolla Village Drive [d]	AM	**59.1**	**E**	**60.8**	**E**	1.7	No
	PM	19.8	B	20.4	C	0.6	No
54. I-805 Northbound Ramps/Miramar Road [d]	AM	17.4	B	17.6	B	0.0	No
	PM	16.7	B	16.9	B	0.2	No
55. Nobel Drive/Miramar Road	AM	35.8	D	38.1	D	2.3	No
	PM	27.4	C	28.5	C	1.1	No
56. Eastgate Mall/Miramar Road	AM	44.3	D	45.2	D	0.9	No
	PM	36.4	D	37.2	D	0.8	No
57. Camino Santa Fe/Miramar Road [d]	AM	**145.7**	**F**	**150.7**	**F**	**5.0**	**Yes**
	PM	**78.5**	**E**	**99.3**	**F**	**20.8**	**Yes**

Intersection	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
58. Carroll Road/Camino Santa Fe	AM	39.9	D	41.2	D	1.3	No
	PM	**78.7**	**E**	**79.4**	**E**	0.7	No
59. Carroll Road/Miramar Road	AM	20.0	C	22.5	C	2.5	No
	PM	32.3	C	33.0	C	0.7	No
60. Camino Ruiz/Miramar Road	AM	38.9	D	**61.1**	**E**	**22.2**	**Yes**
	PM	38.9	D	42.4	D	3.5	No
61. Black Mountain Road/Miramar Road	AM	44.5	D	47.3	D	2.8	No
	PM	49.7	D	52.0	D	2.3	No
62. Kearny Villa Road/Miramar Road [d]	AM	**102.3**	**F**	**111.9**	**F**	**9.6**	**Yes**
	PM	**139.6**	**F**	**149.8**	**F**	**10.2**	**Yes**
93. Kearny Mesa Road/Miramar Road	AM	**55.4**	**E**	**56.2**	**E**	0.8	No
	PM	53.3	D	54.5	D	1.2	No
63. I-15 Southbound Ramps/Miramar Road	AM	43.4	D	46.1	D	2.7	No
	PM	26.8	C	28.9	C	2.1	No
64. I-15 Northbound Ramps/Miramar Road	AM	27.4	C	32.5	C	5.1	No
	PM	31.1	C	31.7	C	0.6	No
65. Willow Creek Road/Pomerado Road	AM	29.4	C	29.6	C	0.2	No
	PM	**56.5**	**E**	**57.7**	**E**	1.2	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	8.6	A	8.7	A	0.1	No
	PM	16.6	B	17.7	B	1.1	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	14.8	B	15.0	B	0.2	No
	PM	16.8	B	17.0	B	0.2	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	28.6	C	29.4	C	0.8	No
	PM	37.9	D	38.3	D	0.4	No
71. Camino Ruiz/Reagan Road	AM	33.2	C	33.7	C	0.5	No
	PM	37.7	D	40.1	D	2.4	No
72. Camino Ruiz/Flanders Drive	AM	21.3	C	21.4	C	0.1	No
	PM	23.0	C	24.5	C	1.5	No
73. Camino Ruiz/Gold Coast Drive [d]	AM	**67.4**	**E**	**75.8**	**E**	**8.4**	**Yes**
	PM	44.4	D	46.3	D	1.9	No
74. Camino Ruiz/Jade Coast Road *(TWSC)* [d]	AM	**58.1**	**F**	**102.1**	**F**	**44.0**	**Yes**
	PM	**39.4**	**E**	**112.0**	**F**	**72.6**	**Yes**
75. Camino Ruiz/Jade Coast Drive [d]	AM	20.6	C	22.0	C	1.4	No
	PM	10.2	B	11.1	B	0.9	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*[e]	—	34.4	C	—	No
	PM	*DNE*	—	19.5	B	—	No
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	29.5	C	—	No
	PM	*DNE*	—	19.2	B	—	No
78. Camino Ruiz/Miralani Drive [d]	AM	38.9	D	40.1	D	1.2	No
	PM	47.0	D	50.2	D	3.2	No
79. Camino Ruiz/Activity Road [d]	AM	28.6	C	28.6	C	0.0	No
	PM	33.7	C	38.3	D	4.6	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**75.9**	**E**	**76.9**	**E**	1.0	No
	PM	**56.7**	**E**	**57.4**	**E**	0.7	No
81. Black Mountain Road/Mercy Road [d]	AM	43.5	D	46.9	D	3.4	No
	PM	43.5	D	43.6	D	0.1	No
82. Black Mountain Road/Westview Parkway	AM	28.2	C	28.4	C	0.2	No
	PM	27.3	C	27.4	C	0.1	No
83. Black Mountain Road/Capricorn Way	AM	**63.2**	**E**	**64.0**	**E**	0.8	No
	PM	**67.5**	**F**	**68.0**	**E**	0.5	No

Intersection	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
84. Black Mountain Road/Hillery Drive [d]	AM	**84.0**	**F**	**100.8**	**F**	**16.8**	**Yes**
	PM	**55.4**	**E**	**57.0**	**E**	1.6	No
85. Black Mountain Road/Gold Coast Drive [d]	AM	41.3	D	47.2	D	5.9	No
	PM	40.4	D	54.3	D	13.9	No
86. Black Mountain Road/Maya Linda [d]	AM	34.8	C	44.4	D	9.6	No
	PM	28.9	C	34.9	C	6.0	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa Rd. [d]	AM	34.3	C	37.1	D	2.8	No
	PM	**59.5**	**E**	**61.2**	**E**	1.7	No
88. Black Mountain Road/Activity Road	AM	45.8	D	46.3	D	0.5	No
	PM	**78.6**	**E**	**79.5**	**E**	0.9	No
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way *(TWSC)*	AM	27.8	D	28.3	D	0.5	No
	PM	45.0	**E**	**45.3**	**E**	0.3	No
90. Kearny Villa Road NB Ramps/Miramar Way *(TWSC)*	AM	23.4	C	25.1	D	1.7	No
	PM	**35.3**	**E**	**37.0**	**E**	1.7	No
91. SR 163 SB Ramps/Kearny Villa Road *(TWSC)*	AM	16.2	C	17.2	C	1.0	No
	PM	30.0	D	**35.8**	**E**	**5.8**	**Yes**
92. SR 163 NB Ramps/Kearny Villa Road	AM	24.8	C	26.7	C	1.9	No
	PM	13.7	B	16.2	B	2.5	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Sig = Significant project impacts based on Significance Criteria.
d. Planned FBA roadway improvements for Phase 2B (with and without project scenarios).
e. DNE – Does Not Exist

SIGNALIZED

DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED

DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-33. *Phase 2B (Year 2030B) Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2B			Phase 2B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	17,800	0.445	B	18,030	0.451	B	0.006	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	58,000	0.773	D	59,090	0.788	D	0.015	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	50,540	0.842	D	50,540	0.842	D	0.000	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	46,700	0.778	C	46,860	0.781	C	0.003	No
Camino Santa Fe to Parkdale Av.	6	Major Arterial	50,000	54,500	**1.090**	**F**	54,660	**1.093**	**F**	0.003	No
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	52,000	**1.040**	**F**	52,160	**1.043**	**F**	0.003	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	52,900	**1.058**	**F**	52,900	**1.058**	**F**	0.000	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	58,300	**1.166**	**F**	58,300	**1.166**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	62,800	**1.256**	**F**	63,000	**1.260**	**F**	0.004	No
Black Mountain Rd to Westview Pkwy.	8	Prime Arterial	70,000	58,360	0.834	D	59,230	0.846	D	0.012	No
Westview Pkwy. to I-15	9	Prime Arterial	75,000	61,500	0.820	D	62,420	0.832	D	0.012	No
I-15 to Scripps Ranch Blvd.	6	Major Arterial	50,000	32,900	0.658	C	32,990	0.660	C	0.002	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy.	4	Collector	30,000	14,420	0.481	C	14,540	0.485	C	0.004	No
Flanders Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,740	**0.843**	**E**	6,760	**0.845**	**E**	0.002	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,620	0.703	D	5,860	0.733	D	0.030	No
Gold Coast Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,620	**0.953**	**E**	7,780	**0.973**	**E**	0.020	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,790	**0.849**	**E**	7,250	**0.906**	**E**	**0.057**	**Yes**
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,500	**1.688**	**F**	13,630	**1.704**	**F**	0.016	No[g]
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,240	**0.905**	**E**	7,250	**0.906**	**E**	0.001	No
Jade Coast Road											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,380	0.548	C	4,840	0.605	C	0.057	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,120	0.390	B	3,390	0.424	B	0.034	No
Carroll Canyon Road											
West of Scranton Road	4	Collector	30,000	28,460	**0.949**	**E**	29,550	**0.985**	**E**	**0.036**	**Yes**
Scranton Rd. to Pacific Heights Blvd.	4	Major Arterial	40,000	26,300	0.658	C	28,480	0.712	C	0.054	No
Pacific Heights Blvd. to Carroll Rd.	4	Major Arterial	40,000	18,100	0.453	B	20,720	0.518	B	0.065	No
Carroll Rd. to Camino Santa Fe	4	Major Arterial	40,000	15,490	0.387	B	18,340	0.459	B	0.072	No
Camino Santa Fe to Camino Ruiz [f]	6	Prime Arterial	60,000	24,500	0.408	A	30,890	0.515	B	0.107	No
Camino Ruiz to Project Dwy. C	6	Major Arterial	50,000	16,500	0.330	A	23,560	0.471	B	0.141	No
Project Dwy. C to Project Dwy. D	6	Major Arterial	50,000	16,500	0.330	A	23,360	0.467	B	0.137	No
Project Dwy. D to Project Dwy. E	6	Major Arterial	50,000	16,500	0.330	A	23,220	0.464	B	0.134	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2B			Phase 2B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. E to Project Dwy. F	6	Major Arterial	50,000	16,500	0.330	A	23,430	0.469	B	0.139	No
Project Dwy. F to Black Mountain Rd.	4	Major Arterial	40,000	9,300	0.233	A	15,750	0.394	B	0.161	No
Black Mountain Rd to I-15	4	Collector	30,000	38,570	**1.286**	**F**	43,720	**1.457**	**F**	**0.017**	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	26,000	**0.867**	**E**	26,490	**0.883**	**E**	0.016	**Yes[i]**
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,700	**1.213**	**F**	10,190	**1.274**	**F**	**0.061**	**Yes**
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL	15,000	11,500	0.767	D	11,970	0.798	D	0.031	No
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr.	6	Prime Arterial	60,000	45,360	0.756	C	45,880	0.765	C	0.009	No
Towne Center Dr. to I-805	8	Prime Arterial	70,000	67,500	**0.964**	**E**	68,280	**0.975**	**E**	0.011	No
I-805 to Nobel Dr.	7	Prime Arterial	65,000	52,500	0.808	C	53,280	0.820	D	0.012	No
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	72,610	**1.117**	**F**	74,500	**1.146**	**F**	0.029	No[g]
Eastgate Mall to Camino Santa Fe	6	Major Arterial	50,000	85,010	**1.700**	**F**	87,660	**1.753**	**F**	**0.053**	**Yes**
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	47,170	**0.943**	**E**	48,220	**0.964**	**E**	**0.021**	**Yes**
Carroll Rd to Cabot Dr.	6	Major Arterial	50,000	40,000	0.800	C	41,920	0.838	D	0.038	No
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	41,380	0.828	D	43,400	0.868	D	0.040	**Yes[j]**
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,800	**1.236**	**F**	64,280	**1.286**	**F**	**0.050**	**Yes**
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	69,000	**1.380**	**F**	72,270	**1.445**	**F**	**0.065**	**Yes**
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	68,200	**1.364**	**F**	70,980	**1.420**	**F**	**0.056**	**Yes**
I-15 to Willow Creek Rd.	2	Collector TWLTL	15,000	35,870	**2.391**	**F**	36,400	**2.427**	**F**	**0.036**	**Yes**
East of Willow Creek Rd.	2	Collector TWLTL	15,000	30,300	**2.020**	**F**	30,430	**2.029**	**F**	0.009	No
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.	4	Collector	30,000	19,500	0.650	C	20,590	0.686	D	0.036	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	21,000	0.525	B	22,090	0.552	C	0.027	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	15,990	0.320	A	16,230	0.325	A	0.005	No
Flanders Dr. to Carroll Canyon Rd.	6	Major Arterial	50,000	27,000	0.540	B	27,330	0.547	B	0.007	No
Carroll Canyon Rd. to Carroll Rd.	6	Major Arterial	50,000	34,100	0.682	C	36,900	0.738	C	0.056	No
Carroll Rd. to Miramar Rd.	6	Major Arterial	50,000	33,950	0.679	C	36,000	0.720	C	0.041	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,420	0.611	C	24,700	0.618	C	0.007	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	29,000	0.725	C	29,710	0.743	C	0.018	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	21,500	0.538	C	23,070	0.577	C	0.039	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	24,500	0.613	C	26,650	0.666	C	0.053	No
Gold Coast Dr. to Jade Coast Dr.	6	Major Arterial	50,000	22,400	0.448	B	25,800	0.516	B	0.068	No
Jade Coast Dr. to Project Dwy.	6	Major Arterial	50,000	23,800	0.476	B	27,770	0.555	B	0.079	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2B			Phase 2B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. to Carroll Canyon Rd.	6	Major Arterial	50,000	23,800	0.476	B	38,380	0.768	C	0.292	No
Carroll Canyon Rd. to Miralani Dr.	6	Major Arterial	50,000	26,200	0.524	B	31,560	0.631	C	0.107	No
Miralani Dr. to Miramar Rd.	6	Major Arterial	50,000	28,200	0.564	C	33,070	0.661	C	0.097	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,160	0.770	D	6,330	0.791	D	0.021	No
East of Camino Ruiz	2	Collector	8,000	5,290	0.661	D	5,700	0.713	D	0.052	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,310	**1.039**	**F**	8,770	**1.096**	**F**	**0.057**	No[k]
Hillery Dr. to Flanders Dr.	2	Collector	8,000	7,000	**0.875**	**E**	7,460	**0.933**	**E**	**0.058**	No[k]
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,620	0.703	D	6,080	0.760	D	0.057	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	40,140	**1.004**	**F**	40,440	1.011	**F**	0.007	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	39,530	**0.988**	**E**	39,830	0.996	**E**	0.008	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	37,220	0.744	C	37,830	0.757	C	0.013	No
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	34,040	0.681	C	34,920	0.698	C	0.017	No
Capricorn Way to Mira Mesa Blvd.	5	Major Arterial	45,000	37,150	0.826	D	38,300	0.851	D	0.025	No
Mira Mesa Blvd. to Hillery Dr.	6	Prime Arterial	60,000	22,100	0.368	A	23,720	0.395	A	0.027	No
Hillery Dr. to Gold Coast Dr.	4	Major Arterial	40,000	27,010	0.675	C	28,830	0.721	C	0.046	No
Gold Coast Dr. to Carroll Canyon Rd.	4	Major Arterial	40,000	30,700	0.768	D	32,700	0.818	D	0.050	No
Carroll Canyon Rd. to Maya Linda Rd.	4	Major Arterial	40,000	25,300	0.633	C	26,010	0.650	C	0.017	No
Maya Linda Rd. to Carroll Centre Rd.[f]	5	Major Arterial	45,000	38,300	0.851	D	41,010	**0.911**	**E**	**0.060**	**Yes**
Carroll Centre Rd. to Miramar Rd.[f]	4	Collector	30,000	17,800	0.593	C	17,940	0.598	C	0.005	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	6	Major Arterial	50,000	20,500	0.410	B	23,120	0.462	B	0.052	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000	32,900	0.658	C	36,010	0.720	C	0.062	No
Miramar Way to SR 163	4	Major Arterial	50,000	36,250	0.725	C	39,070	0.781	C	0.056	No
South of SR 163	4	Major Arterial	50,000	24,660	0.493	B	25,590	0.512	B	0.019	No
Maya Linda Road											
Carroll Canyon Rd. to Project Dwy. G.	4	Collector	30,000	12,200	0.407	B	15,730	0.524	C	0.118	No
Project Dwy G. to Project Dwy. H.	4	Collector	30,000	12,200	0.407	B	16,960	0..565	C	0.159	No
Project Dwy H. to Black Mountain Rd.	4	Collector	30,000	12,200	0.407	B	16,740	0..558	C	0.151	No
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	3,300	0.413	B	3,690	0.461	C	0.048	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	25,400	0.635	C	26,510	0.663	C	0.028	No
Eastgate Mall											
Towne Center Dr. to I-805	4	Collector	30,000	13,500	0.450	B	13,820	0.461	B	0.011	No
I-805 to Miramar Rd.	4	Collector	30,000	16,800	0.560	C	17,370	0.579	C	0.019	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 2B			Phase 2B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Planned roadway improvements in Phase 2B (with and without project scenarios).
g. Despite the City's threshold being exceeded, no significant impact is calculated since adjacent intersections operate at an acceptable LOS (LOS D or better), this street segment is built to its ultimate classification per the adopted Community Plan, and no arterial impact is calculated.
h. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.
i. An update to the cumulative projects triggers a significant impact.
j. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be greater than anticipated in the TIA; the increase in the V/C ratio would be significant.
k. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be less than anticipated in the TIA; the increase in the V/C ratio would not be significant.

General Notes:

1. TWLTL = Two-way left-turn lane.

Table 5.2-34. *Phase 2B (Year 2030B) Arterial Operations*

Arterial Segment	Period	Direction	Phase 2B		Phase 2B + Project		Speed Decrease	Sig[c]
			Speed[a]	LOS[b]	Speed	LOS		
Gold Coast Drive Westonhill Drive to Black Mountain Road	AM	EB	19.6	C	19.3	C	0.3	No
		WB	20.2	C	20.2	C	0.0	No
	PM	EB	18.4	C	18.4	C	0.0	No
		WB	17.7	D	17.7	D	0.0	No

Footnotes:

a. Speed in miles per hour.

b. Level of Service.

c. Sig = significant project impact based on significance criteria.

General Notes:

1. See *Appendix M* of the TIA for the calculation sheets.

Table 5.2-35a. *Phase 2B (Year 2030B) Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	87	18,513	87	18,513	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	121	9,950	130	10,673	9	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	65	6,538	65	6,538	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	36	5,450	36	5,450	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	66	5,406	72	5,842	**6**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	20	4,275	20	4,275	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	12	2,231	12	2,231	0	No
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	68	12,488	73	13,550	**5**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	90	18,513	101	20,659	**11**	**Yes**
	PM	51	10,438	65	13,306	14	No[c]
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	5	1,088	17	3,553	12	No

Location	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	0	0	0	0	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	0	0	0	0	0	No
	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	214	14,600	225	15,386	**11**	**Yes**
NB & SB Kearny Villa Rd to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	22	3,175	22	3,175	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS. (see *Table 10–6B* of the TIA).

General Notes:

1. Results based on Caltrans' rate code F (most restrictive).
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-35b. *Phase 2B (Year 2030B) Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	6,248	15	6,248	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	2,975	19	3,698	4	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	15	2,508	15	2,508	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	15	2,890	15	2,890	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—

Location	Peak Hour	Phase 2B without Project		Phase 2B with Project		Delay	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	2,061	18	2,497	**3**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	15	3,485	15	3,485	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	12	2,231	12	2,231	0	No
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	4,718	18	5,780	**3**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	15	6,163	20	8,309	**5**	**Yes**
	PM	15	4,548	24	7,416	9	No[c]
EB & WB Carroll Canyon Road. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	5	1,088	17	3,553	12	No
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	0	0	0	0	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	0	0	0	0	0	No
	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
SB Kearny Villa Rd to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	3,740	18	4,526	**3**	**Yes**
NB Kearny Villa Rd to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	2,350	15	2,350	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria, (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 10–6B* of the TIA).

General Notes:

1. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-36a. *Phase 2B (Year 2030B) Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Phase 2B ADT	Direction, Number of Lanes & Capacity[a]			Phase 2B		Phase 2B with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	193,410	NB Mainlines	4M+1A	9,200	0.679	C	0.684	C	0.005	No
		SB Mainlines	5M	10,000	1.187	**F(0)**	1.196	**F(0)**	**0.009**	**Yes**
South of Kearny Villa Rd.	203,590	NB Mainlines	4M+1A	9,200	0.715	C	0.727	C	0.012	No
		SB Mainlines	5M	10,000	1.249	**F(0)**	1.270	**F(1)**	**0.021**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	360,710	NB Mainlines	5M+1A+2HOV/ML	13,600	0.919	D	0.927	**E**	**0.008**	**Yes**
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.269	**F(1)**	1.280	**F(1)**	**0.011**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	363,210	NB Mainlines	6M+1A+2HOV/ML	15,600	0.830	D	0.835	D	0.005	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.084	**F(0)**	1.090	**F(0)**	**0.006**	**Yes**
Carroll Canyon Rd. to Miramar Rd.[b]	367,540	NB Mainlines	6M+2HOV/ML	14,400	0.910	D	0.916	D	0.006	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.097	**F(0)**	1.104	**F(0)**	**0.007**	**Yes**
Miramar Rd. to Miramar Way[b]	390,730	NB Mainlines	6M+1A+2HOV/ML	15,600	1.013	**F(0)**	1.025	**F(0)**	**0.012**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.091	**F(0)**	1.104	**F(0)**	**0.013**	**Yes**
Miramar Way to SR 163[b]	379,160	NB Mainlines	7M+2HOV/ML	16,400	0.935	**E**	0.947	**E**	**0.012**	**Yes**
		SB Mainlines	7M+2HOV/ML	16,400	1.007	**F(0)**	1.020	**F(0)**	**0.013**	**Yes**
South of SR 163[b]	221,260	NB Mainlines	4M+1A+2HOV/ML	11,600	0.771	C	0.783	C	0.012	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.831	D	0.843	D	0.012	No
I–805										
North of Mira Mesa Blvd.[c]	201,540	NB Mainlines	4M+1A+2HOV/ML	11,600	0.881	D	0.889	D	0.008	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.393	B	0.396	B	0.003	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	230,000	NB Mainlines	4M+1A+2HOV/ML	11,600	1.006	**F(0)**	1.006	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.449	B	0.449	B	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	242,600	NB Mainlines	4M+1A+2HOV/ML	11,600	1.061	**F(0)**	1.061	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.473	B	0.473	B	0.000	No
South of Nobel Dr.[c]	279,870	NB Mainlines	4M+1A+2HOV/ML	11,600	1.224	**F(0)**	1.226	**F(0)**	0.002	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.546	B	0.547	B	0.001	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-36b. *Phase 2B (Year 2030B) Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Phase 2B ADT	Direction, Number of Lanes & Capacity[a]			Phase 2B		Phase 2B with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	193,410	NB Mainlines	4M+1A	9,200	0.910	D	0.917	D	0.007	No
		SB Mainlines	5M	10,000	1.019	**F(0)**	1.027	**F(0)**	**0.008**	**Yes**
South of Kearny Villa Rd.	203,590	NB Mainlines	4M+1A	9,200	0.958	**E**	0.974	**E**	**0.016**	**Yes**
		SB Mainlines	5M	10,000	1.072	**F(0)**	1.090	**F(0)**	**0.018**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	360,710	NB Mainlines	5M+1A+2HOV/ML	13,600	1.081	**F(0)**	1.090	**F(0)**	**0.009**	**Yes**
		SB Mainlines	5M+1A+2HOV/ML	13,600	0.964	**E**	0.972	**E**	0.008	No
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	363,210	NB Mainlines	6M+1A+2HOV/ML	15,600	0.929	**E**	0.935	**E**	0.006	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.846	D	0.851	D	0.005	No
Carroll Canyon Rd. to Miramar Rd.[b]	367,540	NB Mainlines	6M+2HOV/ML	14,400	1.019	**F(0)**	1.026	**F(0)**	**0.007**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.856	D	0.862	D	0.006	No
Miramar Rd. to Miramar Way[b]	390,730	NB Mainlines	6M+1A+2HOV/ML	15,600	0.844	D	0.854	D	0.010	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.102	**F(0)**	1.115	**F(0)**	**0.013**	**Yes**
Miramar Way to SR 163[b]	379,160	NB Mainlines	7M+2HOV/ML	16,400	0.779	C	0.788	C	0.009	No
		SB Mainlines	7M+2HOV/ML	16,400	1.017	**F(0)**	1.030	**F(0)**	**0.013**	**Yes**
South of SR 163[b]	221,260	NB Mainlines	4M+1A+2HOV/ML	11,600	0.642	C	0.652	C	0.010	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.839	D	0.851	D	0.012	No
I–805										
North of Mira Mesa Blvd.[c]	201,540	NB Mainlines	4M+1A+2HOV/ML	11,600	0.537	B	0.541	B	0.004	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.811	D	0.818	D	0.007	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	230,000	NB Mainlines	4M+1A+2HOV/ML	11,600	0.613	B	0.613	B	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.926	**E**	0.926	**E**	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	242,600	NB Mainlines	4M+1A+2HOV/ML	11,600	0.646	C	0.646	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.977	**E**	0.977	**E**	0.000	No
South of Nobel Dr.[c]	279,870	NB Mainlines	4M+1A+2HOV/ML	11,600	0.746	C	0.747	C	0.001	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.127	**F(0)**	1.129	**F(0)**	0.002	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-37. *Phase 3A (Year 2035) Local Improvements*

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Black Mountain Road–Hillery Drive to Gold Coast Drive (Mira Mesa/T-83)	This project involves widening of Black Mountain road to a 6-lane Primary Arterial from Hillery Drive to Gold Coast Drive with Class II bike lanes.	Project expected to be completed by 2030.
Black Mountain Road–Gold Coast Drive to Maya Linda Road (Mira Mesa/T-91)	This project involves the widening of Black Mountain Road to a 6-lane Primary Arterial with Class II bike lanes between Gold Coast Drive and Maya Linda Road.	Project expected to be completed by 2030.

Table 5.2-38. *Phase 3A (Year 2035) Project Trip Generation*

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Light Industrial Park *Eastside A–Maya Linda Rd.* 165,000 SF	Trip Rate (15/KSF)	2,475	245	27	59	238
	Transit Credit (5% ADT)	*-124*	*-16*	*-2*	*-3*	*-13*
	Cumulative (100%)	2,351	229	25	56	225
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,351	229	25	56	225
Light Industrial Park *Eastside B–Carroll Canyon Rd.* 250,000 SF	Trip Rate (15/KSF)	3,750	372	41	90	360
	Transit Credit (5% ADT)	*-188*	*-24*	*-3*	*-5*	*-20*
	Cumulative (100%)	3,562	348	38	85	340
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,562	348	38	85	340
Light Industrial/Business Park *Parkside–Carroll Canyon Rd.* 135,000 SF	Trip Rate (16/KSF)	2,160	207	52	52	207
	Mixed-Use Credit (4% ADT)[d]	*-45*	*-5*	*-1*	*-1*	*-5*
	Transit Credit (5% ADT)	*-106*	*-13*	*-3*	*-3*	*-11*
	Cumulative (100%)	2,009	189	48	48	191
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,009	189	48	48	191
Residential *Mixed-Use Village Center* 1420 Units	Trip Rate (6/DU)	8,520	136	545	537	230
	Mixed-Use Credit (10% ADT)	*-852*	*-11*	*-44*	*-54*	*-23*
	Transit Credit (5% ADT)	*-383*	*-11*	*-45*	*-29*	*-12*
	Cumulative (100%)	7,285	114	456	454	195
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	7,285	114	456	454	195
Retail—Community *Mixed-Use Village Center* 150,000 SF	Trip Rate (70/KSF)	10,500	189	126	525	525
	Mixed-Use Credit (sum)[e]	*-2,153*	*-48*	*-107*	*-132*	*-73*
	Cumulative (70%)	5,843	99	13	275	316
	Pass-By[b] (30%)	2,504	42	6	118	136
	Driveway	8,347	141	19	393	452
Commercial Office *Mixed-Use Village Center* 200,000 SF	Trip Rate (formula[c])	2,851	334	37	80	319
	Mixed-Use Credit (3% ADT)	*-86*	*-17*	*-2*	*-3*	*-13*
	Transit Credit (3% ADT)	*-83*	*-17*	*-2*	*-2*	*-6*
	Cumulative (100%)	2,682	300	33	75	300
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,682	300	33	75	300
Hotel *Mixed-Use Village Center* 175 Rooms	Trip Rate (8/Room)	1,400	42	28	59	39
	Cumulative (100%)	1,400	42	28	59	39
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	1,400	42	28	59	39
	Trip Rate (6/DU)	16,350	262	1,046	1,030	441

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Residential *Westside* 2,725 Units	*Mixed-Use Credit (10% ADT)*[d]	*-1,170*	*-15*	*-60*	*-74*	*-32*
	Cumulative (100%)	15,180	247	986	956	409
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	15,180	247	986	956	409
Retail—Specialty *Westside* 24,000 SF	Trip Rate (40/KSF)	960	17	12	43	43
	Cumulative (90%)	864	15	11	39	39
	Pass-By[b] (10%)	96	2	1	4	4
	Driveway	960	17	12	43	43
Neighborhood Park *Westside Gardens* 5.37 Acres	Trip Rate (5/Acre)	30	1	0	1	1
	Cumulative (100%)	30	1	0	1	1
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	30	1	0	1	1
Neighborhood Park *Central Park* 30.21 Acres	Trip Rate (5/Acre)	151	3	3	7	5
	Cumulative (100%)	151	3	3	7	5
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	151	3	3	7	5
TOTALS:	**Cumulative**	**41,357**	**1,587**	**1,641**	**2,055**	**2,060**
	Pass-By	**2,600**	**44**	**7**	**122**	**140**
	Driveway	**43,957**	**1,631**	**1,648**	**2,177**	**2,200**

Footnotes:

a. Traffic volumes expressed in vehicles per day.
b. Pass-by represents difference between Driveway and Cumulative trips, per the City Trip Generation Manual (refer to *Appendix K* of the TIA)
c. Commercial Office Trip Generation: *Ln (T) = 0.756 Ln (X) + 3.95*, where T is the number of trips and X is the square footage in 1,000's.
d. Trip Reductions based on 1,500-foot capture area. The total size of land use did not qualify for credits. Only the portion of the land use that falls within the capture area was considered in the credit calculations. (See *Appendix K* of the TIA for detailed calculations)
e. Retail mixed-use trip reduction is the sum of the residential, industrial, and office mixed-use trip reductions.

General Notes:

1. Based on the City of San Diego Trip Generation Manual, May 2003.
2. Trip Rate, Transit Credit, and Mixed-Use Credit percentages for the AM and PM peak hour can be found in *Appendix K* of the TIA.
3. Driveway Trips—vehicles entering and exiting project driveways (Driveway = Cumulative + Pass-By)
4. Cumulative Trips—net new vehicles added to the network
5. Pass-By Trips—vehicles already on the street network diverting to the project site
6. Land Uses introduced in previous phases are shaded.

Table 5.2-39. *Phase 3A (Year 2035) Intersection Operations*

Intersection	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard	AM	**65.4**	**E**	**66.4**	**E**	1.0	No
	PM	**114.7**	**F**	**115.5**	**F**	0.8	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard [d]	AM	**147.3**	**F**	**147.6**	**F**	0.3	No
	PM	**55.8**	**E**	**56.1**	**E**	0.3	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	**76.6**	**E**	**82.0**	**F**	**5.4**	**Yes**
	PM	**69.7**	**E**	**78.4**	**E**	**8.7**	**Yes**
4. Scranton Road/Mira Mesa Boulevard	AM	**86.8**	**F**	**89.6**	**F**	**2.8**	**Yes**
	PM	**86.7**	**F**	**87.5**	**F**	0.8	No
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	47.9	D	49.1	D	1.2	No
	PM	**107.6**	**F**	**107.9**	**F**	0.3	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	**66.9**	**E**	**67.7**	**E**	0.8	No
	PM	**94.3**	**F**	**95.5**	**F**	**1.2**	**Yes**
7. Parkdale Avenue/Mira Mesa Boulevard	AM	**65.0**	**E**	**65.9**	**E**	0.9	No
	PM	**63.9**	**E**	**65.1**	**E**	1.2	No
8. Reagan Road/Mira Mesa Boulevard	AM	46.9	D	47.7	D	0.8	No
	PM	53.0	D	53.6	D	0.6	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	**62.9**	**E**	**64.6**	**E**	1.7	No
	PM	**70.4**	**E**	**72.3**	**E**	1.9	No
10. New Salem Street/Mira Mesa Boulevard	AM	47.4	D	47.7	D	0.3	No
	PM	45.5	D	48.9	D	3.4	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	**65.1**	**E**	**66.5**	**E**	1.4	No
	PM	39.7	D	41.6	D	1.9	No
12. Black Mountain Road/Mira Mesa Boulevard	AM	**120.1**	**F**	**120.5**	**F**	0.4	No
	PM	**141.1**	**F**	**141.6**	**F**	0.5	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**59.2**	**E**	**59.9**	**E**	0.7	No
	PM	**64.0**	**E**	**64.2**	**E**	0.2	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	**67.4**	**E**	**69.3**	**E**	1.9	No
	PM	41.5	D	45.8	D	4.3	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	53.2	D	54.1	D	0.9	No
	PM	**66.1**	**E**	**69.5**	**E**	**3.4**	**Yes**
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	49.4	D	49.9	D	0.5	No
	PM	**58.9**	**E**	**59.2**	**E**	0.3	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	36.1	D	36.4	D	0.3	No
	PM	34.8	C	34.9	C	0.1	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**117.2**	**F**	**117.7**	**F**	0.5	No
	PM	15.5	C	16.0	C	0.5	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	22.5	C	32.4	D	9.9	No
	PM	15.8	C	20.0	C	4.2	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	23.0	C	27.6	D	4.6	No
	PM	**35.5**	**E**	**35.7**	**E**	0.2	No

Intersection	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road	AM	25.2	C	26.2	C	1.0	No
	PM	25.8	C	26.3	C	0.5	No
31. Pacific Heights Boulevard/Carroll Canyon Road	AM	32.1	C	42.2	D	10.1	No
	PM	31.7	C	35.0	C	3.3	No
32. Carroll Road/Carroll Canyon Road	AM	17.7	B	17.9	B	0.2	No
	PM	19.2	B	20.3	C	1.1	No
33. Camino Santa Fe/Carroll Canyon Road	AM	37.7	D	47.4	D	9.7	No
	PM	41.9	D	51.9	D	10.0	No
34. Camino Ruiz/Carroll Canyon Road	AM	40.9	D	53.2	D	12.3	No
	PM	38.9	D	54.4	D	15.5	No
35. Project Driveway C/Carroll Canyon Road	AM	*No conflicting movements*		42.0	D	—	No
	PM			33.6	C	—	No
36. Project Driveway D/Carroll Canyon Road	AM	*No conflicting movements*		28.5	C	—	No
	PM			25.9	C	—	No
37. Project Driveway E/Carroll Canyon Road	AM	*No conflicting movements*		26.8	C	—	No
	PM			24.7	C	—	No
38. Project Driveway F/Carroll Canyon Road	AM	35.1	D	42.8	D	7.7	No
	PM	22.2	C	45.6	D	23.4	No
39. Black Mountain Road/Carroll Canyon Road [d]	AM	38.2	D	**57.3**	**E**	**19.1**	**Yes**
	PM	51.8	D	**69.8**	**E**	**18.0**	**Yes**
40. Maya Linda Road/Carroll Canyon Road	AM	36.2	D	**65.1**	**E**	**28.9**	**Yes**
	PM	31.0	C	50.6	D	19.6	**Yes[f]**
41. I-15 Southbound Ramps/Carroll Canyon Road	AM	**111.9**	**F**	**170.1**	**F**	**58.2**	**Yes**
	PM	**129.1**	**F**	**220.4**	**F**	**91.3**	**Yes**
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	**97.7**	**F**	**134.3**	**F**	**36.6**	**Yes**
	PM	**73.2**	**E**	**123.2**	**F**	**50.0**	**Yes**
43. Businesspark Avenue/Carroll Canyon Road	AM	35.5	D	36.2	D	0.7	No
	PM	33.9	C	35.7	D	1.8	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	27.1	C	27.3	C	0.2	No
	PM	21.6	C	21.7	C	0.1	No
45. Project Driveway G/Maya Linda Road	AM	*No conflicting movements*		23.2	C	—	No
	PM			23.6	C	—	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*No conflicting movements*		12.4	B	—	No
	PM			11.9	B	—	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	34.5	C	35.0	D	0.5	No
	PM	**59.8**	**E**	**61.1**	**E**	1.3	No
51. Judicial Drive/Eastgate Mall	AM	30.7	C	30.9	C	0.2	No
	PM	**91.2**	**F**	**92.0**	**F**	0.8	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**184.2**	**F**	**184.6**	**F**	0.4	No
	PM	**144.3**	**F**	**144.6**	**F**	0.3	No
53. I-805 Southbound Ramps/La Jolla Village Drive	AM	**63.7**	**E**	**65.4**	**E**	1.7	No
	PM	20.6	C	21.5	C	0.9	No
54. I-805 Northbound Ramps/Miramar Road	AM	17.4	B	17.7	B	0.3	No
	PM	16.8	B	18.3	B	1.5	No
55. Nobel Drive/Miramar Road	AM	52.1	D	54.2	D	2.1	No
	PM	30.1	C	32.1	C	2.0	No
56. Eastgate Mall/Miramar Road	AM	**59.4**	**E**	**59.5**	**E**	0.1	No
	PM	39.3	D	39.6	D	0.3	No
57. Camino Santa Fe/Miramar Road	AM	**151.8**	**F**	**163.6**	**F**	**11.8**	**Yes**
	PM	**84.3**	**F**	**112.5**	**F**	**28.2**	**Yes**

Intersection	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
58. Carroll Road/Camino Santa Fe	AM	**58.3**	**E**	**59.2**	**E**	0.9	No
	PM	**104.5**	**F**	**104.8**	**F**	0.4	No
59. Carroll Road/Miramar Road	AM	24.2	C	24.9	C	0.7	No
	PM	32.9	C	33.9	C	1.0	No
60. Camino Ruiz/Miramar Road	AM	42.6	D	**72.1**	**E**	**29.5**	**Yes**
	PM	41.6	D	46.5	D	4.9	No
61. Black Mountain Road/Miramar Road	AM	47.0	D	50.2	D	3.2	No
	PM	51.2	D	52.8	D	1.6	No
62. Kearny Villa Road/Miramar Road	AM	**129.4**	**F**	**141.2**	**F**	**11.8**	**Yes**
	PM	**188.2**	**F**	**192.6**	**F**	**4.4**	**Yes**
93. Kearny Mesa Road/Miramar Road	AM	**67.0**	**E**	**68.2**	**E**	1.2	No
	PM	**58.6**	**E**	**60.1**	**E**	1.5	No
63. I-15 Southbound Ramps/Miramar Road	AM	47.9	D	53.4	D	5.5	No
	PM	30.6	C	33.3	C	2.7	No
64. I-15 Northbound Ramps/Miramar Road	AM	30.5	C	33.2	C	2.7	No
	PM	32.6	C	33.3	C	0.7	No
65. Willow Creek Road/Pomerado Road	AM	30.6	C	31.3	C	0.7	No
	PM	**60.9**	**E**	**61.4**	**E**	0.5	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	17.2	B	17.6	B	0.4	No
	PM	17.7	B	18.3	B	0.6	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	16.7	B	17.0	B	0.3	No
	PM	17.9	B	18.3	B	0.4	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	29.8	C	31.9	C	2.1	No
	PM	38.5	D	40.0	D	1.5	No
71. Camino Ruiz/Reagan Road	AM	34.5	C	35.2	D	0.7	No
	PM	38.2	D	42.1	D	3.9	No
72. Camino Ruiz/Flanders Drive	AM	22.1	C	22.1	C	0.0	No
	PM	24.7	C	28.1	C	3.4	No
73. Camino Ruiz/Gold Coast Drive	AM	**74.8**	**E**	**91.0**	**F**	**16.2**	**Yes**
	PM	46.2	D	52.9	D	6.7	No
74. Camino Ruiz/Jade Coast Road *(TWSC)*	AM	**119.7**	**F**	**201.6**	**F**	**81.9**	**Yes**
	PM	**44.2**	**E**	**162.0**	**F**	**117.8**	**Yes**
75. Camino Ruiz/Jade Coast Drive	AM	22.9	C	24.0	C	1.1	No
	PM	11.2	B	11.7	B	0.5	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*[e]	—	34.4	C	—	No
	PM	*DNE*	—	21.8	C	—	No
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	31.2	C	—	No
	PM	*DNE*	—	23.8	C	—	No
78. Camino Ruiz/Miralani Drive	AM	40.6	D	44.3	D	3.7	No
	PM	51.5	D	51.8	D	0.3	No
79. Camino Ruiz/Activity Road	AM	29.0	C	29.2	C	0.2	No
	PM	37.0	D	52.4	D	15.4	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**86.2**	**F**	**86.3**	**F**	0.1	No
	PM	**62.4**	**E**	**63.4**	**E**	1.0	No
81. Black Mountain Road/Mercy Road	AM	48.5	D	50.8	D	2.3	No
	PM	45.4	D	45.6	D	0.2	No
82. Black Mountain Road/Westview Parkway	AM	30.5	C	32.6	C	2.1	No
	PM	29.2	C	29.7	C	0.5	No
83. Black Mountain Road/Capricorn Way	AM	**68.3**	**E**	**69.0**	**E**	0.7	No
	PM	**70.0**	**E**	**70.5**	**E**	0.5	No
84. Black Mountain Road/Hillery Drive	AM	**80.1**	**F**	**90.7**	**F**	**10.6**	**Yes**

Intersection	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
	PM	**71.4**	**E**	**72.6**	**E**	1.2	No
85. Black Mountain Road/Gold Coast Drive [d]	AM	46.6	D	47.5	D	0.9	No
	PM	39.1	D	39.6	D	0.5	No
86. Black Mountain Road/Maya Linda [d]	AM	38.1	D	51.6	D	13.5	No
	PM	29.7	C	33.6	C	3.9	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa Road	AM	34.8	C	37.2	D	2.4	No
	PM	**62.2**	**E**	**65.5**	**E**	**3.3**	**Yes**
88. Black Mountain Road/Activity Road	AM	49.3	D	49.9	D	0.6	No
	PM	**83.5**	**F**	**84.2**	**F**	0.7	No
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way *(TWSC)*	AM	28.3	D	31.9	D	3.6	No
	PM	**51.5**	**F**	**51.5**	**F**	0.0	No
90. Kearny Villa Road NB Ramps/Miramar Way *(TWSC)*	AM	24.0	C	27.6	D	3.6	No
	PM	**43.0**	**E**	**44.5**	**E**	1.5	No
91. SR 163 SB Ramps/Kearny Villa Road *(TWSC)*	AM	21.5	C	24.5	C	3.0	No
	PM	**52.0**	**F**	**73.1**	**F**	**21.1**	**Yes**
92. SR 163 NB Ramps/Kearny Villa Road	AM	47.3	D	**55.4**	**E**	**8.1**	**Yes**
	PM	17.7	B	25.5	C	7.8	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Sig = Significant project impacts based on Significance Criteria.
d. Planned FBA roadway improvements for Phase 3A (with and without project scenarios).
e. DNE – Does Not Exist
f. An update to the cumulative projects triggers a significant impact. Section 4.3 of the TIA provides additional information and Appendix E1 of the TIA includes supplemental analysis.

SIGNALIZED

DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED

DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-40. *Phase 3A (Year 2035) Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3A			Phase 3A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	17,180	0.430	B	17,450	0.436	B	0.006	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	59,010	0.787	D	60,330	0.804	D	0.017	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	51,770	0.863	D	51,770	0.863	D	0.000	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	47,250	0.788	C	47,500	0.792	C	0.004	No
Camino Santa Fe to Parkdale Av.	6	Prime Arterial	60,000	54,730	0.912	D	54,980	0.916	D	0.004	No
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	52,550	**1.051**	**F**	52,800	**1.056**	**F**	0.005	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	53,350	**1.067**	**F**	53,350	**1.067**	**F**	0.000	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	58,790	**1.176**	**F**	58,790	**1.176**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	63,030	**1.261**	**F**	63,330	**1.267**	**F**	0.006	No
Black Mountain Rd to Westview Pkwy.	8	Prime Arterial	70,000	58,950	0.842	D	60,010	0.857	D	0.015	No
Westview Pkwy. to I-15	9	Prime Arterial	75,000	61,600	0.821	D	62,780	0.837	D	0.016	No
I-15 to Scripps Ranch Blvd.	6	Prime Arterial	60,000	33,450	0.558	B	33,660	0.561	B	0.003	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy.	4	Collector	30,000	16,900	0.563	C	17,160	0.572	C	0.009	No
Flanders Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,750	**0.844**	**E**	6,900	**0.863**	**E**	0.019	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,630	0.704	D	6,040	0.755	D	0.051	No
Gold Coast Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,640	**0.955**	**E**	7,800	**0.975**	**E**	0.020	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,800	**0.850**	**E**	7,450	**0.931**	**E**	**0.081**	**Yes**
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,530	**1.691**	**F**	13,900	**1.738**	**F**	**0.047**	**Yes**
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,260	**0.908**	**E**	7,270	**0.909**	**E**	0.001	No
Jade Coast Road											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,400	0.550	C	5,050	0.631	D	0.081	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,150	0.394	B	3,630	0.454	C	0.060	No
Carroll Canyon Road											
West of Scranton Road	4	Collector	30,000	25,990	**0.866**	**E**	27,310	**0.910**	**E**	**0.044**	**Yes**
Scranton Rd. to Pacific Heights Blvd.	4	Major Arterial	40,000	28,630	0.716	C	31,270	0.782	D	0.066	No
Pacific Heights Blvd. to Carroll Rd.	4	Major Arterial	40,000	20,160	0.504	B	23,270	0.582	C	0.078	No
Carroll Rd. to Camino Santa Fe	4	Major Arterial	40,000	16,530	0.413	B	20,000	0.500	B	0.087	No
Camino Santa Fe to Camino Ruiz	6	Prime Arterial	60,000	25,780	0.430	B	34,240	0.571	B	0.141	No
Camino Ruiz to Project Dwy. C	6	Major Arterial	50,000	19,470	0.389	A	29,620	0.592	C	0.203	No
Project Dwy. C to Project Dwy. D	6	Major Arterial	50,000	19,470	0.389	A	30,420	0.608	C	0.219	No
Project Dwy. D to Project Dwy. E	6	Major Arterial	50,000	19,470	0.389	A	30,880	0.618	C	0.229	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3A			Phase 3A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. E to Project Dwy. F	6	Major Arterial	50,000	19,470	0.389	A	30,870	0.617	C	0.228	No
Project Dwy. F to Black Mountain Rd.	4	Major Arterial	40,000	11,070	0.277	A	20,390	0.510	B	0.233	No
Black Mountain Rd to I-15	4	Collector	30,000	39,540	**1.318**	**F**	46,440	**1.548**	**F**	**0.230**	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	27,150	**0.905**	**E**	27,820	**0.927**	**E**	**0.022**	**Yes**
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,750	**1.219**	**F**	10,790	**1.349**	**F**	**0.130**	**Yes**
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL	15,000	11,530	0.769	D	12,350	0.823	D	0.054	No
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr.	6	Prime Arterial	60,000	50,720	0.845	D	51,390	0.857	D	0.012	No
Towne Center Dr. to I-805	8	Prime Arterial	70,000	68,280	**0.975**	**E**	69,250	**0.989**	**E**	0.014	No
I-805 to Nobel Dr.	7	Prime Arterial	65,000	52,870	0.813	D	53,840	0.828	D	0.015	No
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	75,070	**1.155**	**F**	77,290	**1.189**	**F**	**0.034**	**Yes**
Eastgate Mall to Camino Santa Fe.	6	Major Arterial	50,000	87,570	**1.751**	**F**	90,760	**1.815**	**F**	**0.064**	**Yes**
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	47,960	**0.959**	**E**	49,170	**0.983**	**E**	**0.024**	**Yes**
Carroll Rd to Cabot Dr.	6	Major Arterial	50,000	40,040	0.801	D	41,680	0.834	D	0.033	No
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	42,120	0.842	D	44,310	0.886	D	0.044	**Yes[h]**
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,830	**1.237**	**F**	65,750	**1.315**	**F**	**0.078**	**Yes**
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	69,640	**1.393**	**F**	73,280	**1.466**	**F**	**0.073**	**Yes**
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	69,380	**1.388**	**F**	72,770	**1.455**	**F**	**0.067**	**Yes**
I-15 to Willow Creek Rd.	2	Collector TWLTL	15,000	35,930	**2.395**	**F**	36,690	**2.446**	**F**	**0.051**	**Yes**
East of Willow Creek Rd.	2	Collector TWLTL	15,000	30,340	**2.023**	**F**	30,540	**2.036**	**F**	**0.013**	**Yes**
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.	4	Collector	30,000	19,700	0.657	C	21,020	0.701	D	0.044	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	22,910	0.573	C	24,230	0.606	C	0.033	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	19,730	0.395	A	19,990	0.400	A	0.005	No
Flanders Dr. to Carroll Canyon Rd.	6	Major Arterial	50,000	27,390	0.548	B	27,970	0.559	B	0.011	No
Carroll Canyon Rd. to Carroll Rd.	6	Major Arterial	50,000	36,250	0.725	C	39,960	0.799	C	0.074	No
Carroll Rd. to Miramar Rd.	6	Major Arterial	50,000	34,580	0.692	C	37,200	0.744	C	0.052	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,470	0.612	C	24,880	0.622	C	0.010	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	29,230	0.731	C	30,470	0.762	D	0.031	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	21,550	0.539	C	24,150	0.604	C	0.065	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	24,550	0.614	C	28,010	0.700	C	0.086	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3A			Phase 3A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Gold Coast Dr. to Jade Coast Dr.	6	Major Arterial	50,000	22,450	0.449	B	27,700	0.554	B	0.105	No
Jade Coast Dr. to Project Dwy.	6	Major Arterial	50,000	23,900	0.478	B	30,100	0.602	C	0.124	No
Project Dwy. to Carroll Canyon Rd.	6	Major Arterial	50,000	23,900	0.478	B	43,460	0.869	D	0.391	No
Carroll Canyon Rd. to Miralani Dr.	6	Major Arterial	50,000	26,250	0.525	B	34,140	0.683	C	0.158	No
Miralani Dr. to Miramar Rd.	6	Major Arterial	50,000	28,300	0.566	C	35,160	0.703	C	0.137	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,170	0.771	D	6,430	0.804	D	0.033	No
East of Camino Ruiz	2	Collector	8,000	5,440	0.680	D	6,060	0.758	D	0.078	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,350	**1.044**	**F**	9,050	**1.131**	**F**	**0.087**	No[i]
Hillery Dr. to Flanders Dr.	2	Collector	8,000	7,020	**0.878**	**E**	7,720	**0.965**	**E**	**0.087**	No[i]
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,630	0.704	D	6,330	0.791	D	0.087	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	41,790	**1.045**	**F**	42,180	**1.055**	**F**	0.010	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	40,990	**1.025**	**F**	41,380	**1.035**	**F**	0.010	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	39,340	0.787	C	40,170	0.803	D	0.016	No
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	36,270	0.725	C	37,540	0.751	C	0.026	No
Capricorn Way to Mira Mesa Blvd.	5	Major Arterial	45,000	39,850	0.886	D	41,520	**0.923**	**E**	**0.037**	**Yes**
Mira Mesa Blvd. to Hillery Dr.	6	Prime Arterial	60,000	24,800	0.413	A	27,060	0.451	B	0.038	No
Hillery Dr. to Gold Coast Dr.[f]	6	Prime Arterial	60,000	29,640	0.494	B	32,250	0.538	B	0.044	No
Gold Coast Dr. to Carroll Canyon Rd.[f]	6	Prime Arterial	60,000	30,950	0.516	B	34,100	0.568	B	0.052	No
Carroll Canyon Rd. to Maya Linda Rd.[f]	6	Prime Arterial	60,000	25,350	0.423	B	26,060	0.434	B	0.011	No
Maya Linda Rd. to Carroll Centre Rd.	5	Major Arterial	45,000	39,880	0.886	D	43,770	**0.972**	**E**	**0.086**	**Yes**
Carroll Centre Rd. to Miramar Rd.	4	Collector	30,000	22,070	0.735	D	22,160	0.738	D	0.003	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	6	Major Arterial	50,000	22,070	0.441	B	25,870	0.517	B	0.076	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000[g]	36,080	0.722	C	40,070	0.801	D	0.079	No
Miramar Way to SR 163	4	Major Arterial	50,000[g]	38,790	0.776	C	42,080	0.842	D	0.066	No
South of SR 163	4	Major Arterial	50,000[g]	28,050	0.561	C	29,290	0.586	C	0.025	No
Maya Linda Road											
Carroll Canyon Rd. to Project Dwy. G.	4	Collector	30,000	12,700	0.423	B	17,570	0.586	C	0.162	No
Project Dwy G. to Project Dwy. H.	4	Collector	30,000	12,700	0.423	B	18,700	0.623	C	0.200	No
Project Dwy H. to Black Mountain Rd.	4	Collector	30,000	12,700	0.423	B	18,590	0.620	C	0.196	No
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	4,250	0.531	C	4,800	0.600	C	0.069	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	33,100	0.828	D	34,350	0.859	D	0.031	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3A			Phase 3A with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Eastgate Mall											
Towne Center Dr. to I-805	4	Collector	30,000	15,250	0.508	C	15,740	0.525	C	0.017	No
I-805 to Miramar Rd.	4	Collector	30,000	16,820	0.561	C	17,540	0.585	C	0.024	No

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Planned roadway improvements in Phase 3A (with and without project scenarios).
g. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.
h. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be greater than anticipated in the TIA; the increase in the V/C ratio would be significant.
i. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be less than anticipated in the TIA; the increase in the V/C ratio would not be significant.

General Notes:

1. TWLTL = Two-way left-turn lane.

Table 5.2-41a. *Phase 3A (Year 2035) Ramp Meter Operations — Fixed Rate*

Location	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	130	27,544	130	27,544	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	139	11,438	151	12,373	12	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	70	6,963	70	6,963	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	41	6,088	41	6,088	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	97	7,956	104	8,477	**7**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	26	5,763	26	5,763	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	13	2,338	13	2,338	0	No
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	70	12,913	76	14,145	**6**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	92	18,938	106	21,679	**14**	**Yes**
	PM	59	12,138	79	16,196	20	No[c]
EB & WB Carroll Canyon Road to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	7	1,513	23	4,785	**16**	**Yes**
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	0	0	0	0	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	0	0	0	0	0	No
	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Road to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	217	14,813	230	15,716	**13**	**Yes**

Location	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
NB & SB Kearny Villa Road to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	59	8,425	59	8,425	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 11–6B* of the TIA).

General Notes:

1. Results based on Caltrans' rate code F (most restrictive).
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-41b. *Phase 3A (Year 2035) Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805 (3 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	8,054	15	8,054	0	No
NB & SB Vista Sorrento Pkwy to NB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	3,273	19	4,208	4	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805 (1 SOV+ 1 HOV)	AM	15	2,593	15	2,593	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805 (1 SOV + 1 HOV)	AM	15	3,018	15	3,018	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	2,571	18	3,092	**3**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15 (1 SOV + 1 HOV)	AM	15	3,783	15	3,783	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15 (2 SOV + 1 HOV)	AM	13	2,338	13	2,338	0	No
	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	4,803	19	6,035	**4**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15 (1 SOV + 1 HOV)	AM	15	6,248	22	8,989	**7**	**Yes**
	PM	15	4,888	27	8,946	12	No[c]
EB & WB Carroll Canyon Road to NB I-15 (1 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	7	1,513	23	4,785	**16**	**Yes**

Location	Peak Hour	Phase 3A without Project		Phase 3A with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15 (2 SOV)	AM	0	0	0	0	0	No
	PM	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15 (1 SOV + 1 HOV)	AM	0	0	0	0	0	No
	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15 (2 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Road to SB SR 163 (2 SOV + 1 HOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	3,783	19	4,686	**4**	**Yes**
NB & SB Kearny Villa Road to NB SR 163 (1 SOV)	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
	PM	15	3,400	15	3,400	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 11–6B* of the TIA).

General Notes:

See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-42a. *Phase 3A (Year 2035) Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Phase 3A ADT	Direction, Number of Lanes & Capacity[a]			Phase 3A		Phase 3A with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	195,020	NB Mainlines	4M+1A	9,200	0.685	C	0.693	C	0.008	No
		SB Mainlines	5M	10,000	1.197	**F(0)**	1.210	**F(0)**	**0.013**	**Yes**
South of Kearny Villa Rd.	205,110	NB Mainlines	4M+1A	9,200	0.720	C	0.735	C	0.015	No
		SB Mainlines	5M	10,000	1.258	**F(1)**	1.285	**F(1)**	**0.027**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	377,150	NB Mainlines	5M+1A+2HOV/ML	13,600	0.961	**E**	0.971	**E**	0.010	No
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.327	**F(1)**	1.340	**F(1)**	**0.013**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	379,300	NB Mainlines	6M+1A+2HOV/ML	15,600	0.867	D	0.873	D	0.006	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.132	**F(0)**	1.140	**F(0)**	**0.008**	**Yes**
Carroll Canyon Rd. to Miramar Rd.[b]	391,370	NB Mainlines	6M+2HOV/ML	14,400	0.969	**E**	0.977	**E**	0.008	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.168	**F(0)**	1.178	**F(0)**	**0.010**	**Yes**
Miramar Rd. to Miramar Way[b]	402,180	NB Mainlines	6M+1A+2HOV/ML	15,600	1.043	**F(0)**	1.059	**F(0)**	**0.016**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.123	**F(0)**	1.141	**F(0)**	**0.018**	**Yes**
Miramar Way to SR 163[b]	410,150	NB Mainlines	7M+2HOV/ML	16,400	1.011	**F(0)**	1.027	**F(0)**	**0.016**	**Yes**
		SB Mainlines	7M+2HOV/ML	16,400	1.090	**F(0)**	1.106	**F(0)**	**0.016**	**Yes**
South of SR 163[b]	228,580	NB Mainlines	4M+2HOV/ML	11,600	0.797	C	0.811	D	0.014	No
		SB Mainlines	4M+2HOV/ML	11,600	0.858	D	0.874	D	0.016	No
I–805										
North of Mira Mesa Blvd.[c]	210,450	NB Mainlines	4M+1A+2HOV/ML	11,600	0.920	**E**	0.929	**E**	0.009	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.411	B	0.415	B	0.004	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	235,350	NB Mainlines	4M+1A+2HOV/ML	11,600	1.029	**F(0)**	1.029	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.459	B	0.459	B	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	262,950	NB Mainlines	4M+1A+2HOV/ML	11,600	1.150	**F(0)**	1.150	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.513	B	0.513	B	0.000	No
South of Nobel Dr.[c]	293,440	NB Mainlines	4M+1A+2HOV/ML	11,600	1.283	**F(1)**	1.287	**F(1)**	0.004	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.572	B	0.574	B	0.002	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-42b. *Phase 3A (Year 2035) Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Phase 3A ADT	Direction, Number of Lanes & Capacity[a]			Phase 3A		Phase 3A with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	195,020	NB Mainlines	4M+1A	9,200	0.917	D	0.928	**E**	**0.011**	**Yes**
		SB Mainlines	5M	10,000	1.027	**F(0)**	1.039	**F(0)**	**0.012**	**Yes**
South of Kearny Villa Rd.	205,110	NB Mainlines	4M+1A	9,200	0.965	**E**	0.985	**E**	**0.020**	**Yes**
		SB Mainlines	5M	10,000	1.080	**F(0)**	1.103	**F(0)**	**0.023**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	377,150	NB Mainlines	5M+1A+2HOV/ML	13,600	1.130	**F(0)**	1.141	**F(0)**	**0.011**	**Yes**
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.008	**F(0)**	1.018	**F(0)**	**0.010**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	379,300	NB Mainlines	6M+1A+2HOV/ML	15,600	0.971	**E**	0.978	**E**	0.007	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.884	D	0.890	D	0.006	No
Carroll Canyon Rd. to Miramar Rd.[b]	391,370	NB Mainlines	6M+2HOV/ML	14,400	1.085	**F(0)**	1.094	**F(0)**	**0.009**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.912	D	0.920	D	0.008	No
Miramar Rd. to Miramar Way[b]	402,180	NB Mainlines	6M+1A+2HOV/ML	15,600	0.868	D	0.882	D	0.014	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.134	**F(0)**	1.152	**F(0)**	**0.018**	**Yes**
Miramar Way to SR 163[b]	410,150	NB Mainlines	7M+2HOV/ML	16,400	0.842	D	0.855	D	0.013	No
		SB Mainlines	7M+2HOV/ML	16,400	1.100	**F(0)**	1.117	**F(0)**	**0.017**	**Yes**
South of SR 163[b]	228,580	NB Mainlines	4M+2HOV/ML	11,600	0.664	C	0.676	C	0.012	No
		SB Mainlines	4M+2HOV/ML	11,600	0.867	D	0.882	D	0.015	No
I–805										
North of Mira Mesa Blvd.[c]	210,450	NB Mainlines	4M+1A+2HOV/ML	11,600	0.561	B	0.566	B	0.005	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.847	D	0.856	D	0.009	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	235,350	NB Mainlines	4M+1A+2HOV/ML	11,600	0.627	C	0.627	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.948	**E**	0.948	**E**	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	262,950	NB Mainlines	4M+1A+2HOV/ML	11,600	0.701	C	0.701	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.059	**F(0)**	1.059	**F(0)**	0.000	No
South of Nobel Dr.[c]	293,440	NB Mainlines	4M+1A+2HOV/ML	11,600	0.782	C	0.784	C	0.002	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.182	**F(0)**	1.185	**F(0)**	0.003	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

Table 5.2-43. *Phase 3B (Year 2040) Local Improvements*

Project Name (Community/Project No.)	Improvements	Schedule/Funding
Black Mountain Road–Hillery Drive to Gold Coast Drive (Mira Mesa/T-83)	This project involves widening of Black Mountain road to a 6-lane Primary Arterial from Hillery Drive to Gold Coast Drive with Class II bike lanes.	Project expected to be completed by 2030.
Black Mountain Road–Gold Coast Drive to Maya Linda Road (Mira Mesa/T-91)	This project involves the widening of Black Mountain Road to a 6-lane Primary Arterial with Class II bike lanes between Gold Coast Drive and Maya Linda Road.	Project expected to be completed by 2030.

Table 5.2-44. *Phase 3B (Year 2040) Project Trip Generation*

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Light Industrial Park *Eastside A–Maya Linda Rd.* 165,000 SF	Trip Rate (15/KSF)	2,475	245	27	59	238
	Transit Credit (5% ADT)	*-124*	*-16*	*-2*	*-3*	*-13*
	Cumulative (100%)	2,351	229	25	56	225
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,351	229	25	56	225
Light Industrial Park *Eastside B–Carroll Canyon Rd.* 250,000 SF	Trip Rate (15/KSF)	3,750	372	41	90	360
	Transit Credit (5% ADT)	*-188*	*-24*	*-3*	*-5*	*-20*
	Cumulative (100%)	3,562	348	38	85	340
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	3,562	348	38	85	340
Light Industrial/Business Park *Parkside–Carroll Canyon Rd.* 135,000 SF	Trip Rate (16/KSF)	2,160	207	52	52	207
	Mixed-Use Credit (4% ADT)[d]	*-45*	*-5*	*-1*	*-1*	*-5*
	Transit Credit (5% ADT)	*-106*	*-13*	*-3*	*-3*	*-11*
	Cumulative (100%)	2,009	189	48	48	191
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,009	189	48	48	191
Residential *Mixed-Use Village Center* 1420 Units	Trip Rate (6/DU)	8,520	136	545	537	230
	Mixed-Use Credit (10% ADT)	*-852*	*-11*	*-44*	*-54*	*-23*
	Transit Credit (5% ADT)	*-383*	*-11*	*-45*	*-29*	*-12*
	Cumulative (100%)	7,285	114	456	454	195
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	7,285	114	456	454	195
Retail—Community *Mixed-Use Village Center* 150,000 SF	Trip Rate (70/KSF)	10,500	189	126	525	525
	Mixed-Use Credit (sum)[e]	*-2,190*	*-48*	*-109*	*-134*	*-74*
	Cumulative (70%)	5,817	99	12	274	316
	Pass-By[b] (30%)	2,493	42	5	117	135
	Driveway	8,310	141	17	391	451
Commercial Office *Mixed-Use Village Center* 200,000 SF	Trip Rate (formula[c])	2,851	334	37	80	319
	Mixed-Use Credit (3% ADT)	*-86*	*-17*	*-2*	*-3*	*-13*
	Transit Credit (3% ADT)	*-83*	*-17*	*-2*	*-2*	*-6*
	Cumulative (100%)	2,682	300	33	75	300
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	2,682	300	33	75	300
Hotel *Mixed-Use Village Center* 175 Rooms	Trip Rate (8/Room)	1,400	42	28	59	39
	Cumulative (100%)	1,400	42	28	59	39
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	1,400	42	28	59	39
	Trip Rate (6/DU)	16,350	262	1,046	1,030	441

Land Use & Size	Trip Rate & Credits	Weekday ADT[a]	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Residential *Westside* 2,725 Units	*Mixed-Use Credit (10% ADT)*[d]	*-1,170*	*-15*	*-60*	*-74*	*-32*
	Cumulative (100%)	15,180	247	986	956	409
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	15,180	247	986	956	409
Retail—Specialty *Westside* 24,000 SF	Trip Rate (40/KSF)	960	17	12	43	43
	Cumulative (90%)	864	15	11	39	39
	Pass-By[b] (10%)	96	2	1	4	4
	Driveway	960	17	12	43	43
Neighborhood Park *Westside Gardens* 5.37 Acres	Trip Rate (5/Acre)	30	1	0	1	1
	Cumulative (100%)	30	1	0	1	1
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	30	1	0	1	1
Neighborhood Park *Central Park* 30.21 Acres	Trip Rate (5/Acre)	151	3	3	7	5
	Cumulative (100%)	151	3	3	7	5
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	151	3	3	7	5
High Tech Park—Residential *Creekside* 300 Units	Trip Rate (6/DU)	1,800	29	115	113	49
	Mixed-Use Credit (10% ADT)[d]	*-37*	*0*	*-2*	*-2*	*-1*
	Transit Credit (5% ADT)	*-88*	*-3*	*-10*	*-7*	*-3*
	Cumulative (100%)	1,675	26	103	104	45
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	1,675	26	103	104	45
High Tech Park—Industrial *Creekside* 300,000 SF	Trip Rate (16/KSF)	4,800	461	115	115	461
	Transit Credit (5% ADT)	*-240*	*-30*	*-7*	*-6*	*-25*
	Cumulative (100%)	4,560	431	108	109	436
	Pass-By[b] (0%)	0	0	0	0	0
	Driveway	4,560	431	108	109	436
TOTALS[f]:	**Cumulative**	**47,566**	**2,044**	**1,851**	**2,267**	**2,541**
	Pass-By	**2,589**	**44**	**6**	**121**	**139**
	Driveway	**50,155**	**2,088**	**1,857**	**2,388**	**2,680**

Footnotes:

a. Traffic volumes expressed in vehicles per day.
b. Pass-by represents difference between Driveway and Cumulative trips, per the City Trip Generation Manual (refer to *Appendix K* of the TIA)
c. Commercial Office Trip Generation: *Ln (T) = 0.756 Ln (X) + 3.95*, where T is the number of trips and X is the square footage in 1,000's.
d. Trip Reductions based on 1,500-foot capture area. The total size of land use did not qualify for credits. Only the portion of the land use that falls within the capture area was considered in the credit calculations. (See *Appendix K* of the TIA for detailed calculations)
e. Retail mixed-use trip reduction is the sum of the residential, industrial, and office mixed-use trip reductions.
f. Traffic volumes ***do not*** reflect the removal of existing mining traffic. See Sections 2.4 and 12.8.

General Notes:

1. Based on the City of San Diego Trip Generation Manual, May 2003.
2. Trip Rate, Transit Credit, and Mixed-Use Credit percentages for the AM and PM peak hour can be found in *Appendix K* of the TIA.
3. Driveway Trips—vehicles entering and exiting project driveways (Driveway = Cumulative + Pass-By)
4. Cumulative Trips—net new vehicles added to the network
5. Pass-By Trips—vehicles already on the street network diverting to the project site
6. Land Uses introduced in previous phases are shaded.

Table 5.2-45. *Phase 3B (Year 2040) Intersection Operations*

Intersection	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Mira Mesa Boulevard							
1. I-805 Southbound Ramps/Mira Mesa Boulevard	AM	**65.4**	**E**	**66.5**	**E**	1.1	No
	PM	**114.7**	**F**	**115.5**	**F**	0.8	No
2. I-805 Northbound Ramps/Mira Mesa Boulevard [d]	AM	**147.3**	**F**	**148.0**	**F**	0.7	No
	PM	**55.8**	**E**	**56.7**	**E**	0.9	No
3. Vista Sorrento Parkway/I-805 NB Ramps/Mira Sorrento	AM	**76.6**	**E**	**82.9**	**F**	**6.3**	**Yes**
	PM	**69.7**	**E**	**80.9**	**F**	**11.2**	**Yes**
4. Scranton Road/Mira Mesa Boulevard	AM	**86.8**	**F**	**90.2**	**F**	**3.4**	**Yes**
	PM	**86.7**	**F**	**87.8**	**F**	**1.1**	**Yes**
5. Pacific Heights Boulevard/Mira Mesa Boulevard	AM	47.9	D	49.3	D	1.4	No
	PM	**107.6**	**F**	**108.2**	**F**	0.6	No
6. Camino Santa Fe/Mira Mesa Boulevard	AM	**66.9**	**E**	**67.8**	**E**	0.9	No
	PM	**94.3**	**F**	**95.6**	**F**	**1.3**	**Yes**
7. Parkdale Avenue/Mira Mesa Boulevard	AM	**65.0**	**E**	**66.0**	**E**	1.0	No
	PM	**63.9**	**E**	**65.2**	**E**	1.3	No
8. Reagan Road/Mira Mesa Boulevard	AM	46.9	D	47.9	D	1.0	No
	PM	53.0	D	53.7	D	0.7	No
9. Camino Ruiz/Mira Mesa Boulevard	AM	**62.9**	**E**	**64.8**	**E**	1.9	No
	PM	**70.4**	**E**	**72.3**	**E**	1.9	No
10. New Salem Street/Mira Mesa Boulevard	AM	47.4	D	47.9	D	0.5	No
	PM	45.5	D	50.3	D	4.8	No
11. Westonhill Drive/Mira Mesa Boulevard	AM	**65.1**	**E**	**72.2**	**E**	**7.1**	**Yes**
	PM	39.7	D	41.9	D	2.2	No
12. Black Mountain Road/Mira Mesa Boulevard	AM	**120.1**	**F**	**120.9**	**F**	0.8	No
	PM	**141.1**	**F**	**142.1**	**F**	1.0	No
13. Westview Parkway/Mira Mesa Boulevard	AM	**59.2**	**E**	**59.9**	**E**	0.7	No
	PM	**64.0**	**E**	**64.2**	**E**	0.2	No
14. I-15 Southbound Ramps/Mira Mesa Boulevard	AM	**67.4**	**E**	**72.8**	**E**	**5.4**	No*
	PM	41.5	D	47.7	D	6.2	No
15. I-15 Northbound Ramps/Mira Mesa Boulevard	AM	53.2	D	54.5	D	1.3	No
	PM	**66.1**	**E**	**71.6**	**E**	**5.5**	**Yes**
16. Scripps Ranch Boulevard/Mira Mesa Boulevard	AM	49.4	D	50.2	D	0.8	No
	PM	**58.9**	**E**	**59.3**	**E**	0.4	No
17. Scripps Ranch Boulevard/Scripps Lake Drive	AM	36.1	D	36.4	D	0.3	No
	PM	34.8	C	35.0	C	0.2	No
Flanders Drive and Westonhill Drive							
25. Parkdale Avenue/Flanders Drive *(AWSC)*	AM	**117.2**	**F**	**117.7**	**F**	0.5	No
	PM	15.5	C	16.0	C	0.5	No
26. Westonhill Drive/Flanders Drive *(AWSC)*	AM	22.5	C	34.7	D	12.2	No
	PM	15.8	C	21.2	C	5.4	No
27. Westonhill Drive/Gold Coast Drive *(AWSC)*	AM	23.0	C	28.7	D	5.7	No
	PM	**35.5**	**E**	**36.7**	**E**	1.2	No

Intersection	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
Carroll Canyon Road and Maya Linda Road							
30. Scranton Road/Carroll Canyon Road	AM	25.2	C	26.4	C	1.2	No
	PM	25.8	C	26.4	C	0.6	No
31. Pacific Heights Boulevard/Carroll Canyon Road	AM	32.1	C	43.1	D	11.0	No
	PM	31.7	C	36.1	D	4.4	No
32. Carroll Road/Carroll Canyon Road	AM	17.7	B	18.1	B	0.4	No
	PM	19.2	B	20.4	C	1.2	No
33. Camino Santa Fe/Carroll Canyon Road	AM	37.7	D	50.2	D	12.5	No
	PM	41.9	D	54.4	D	12.5	No
34. Camino Ruiz/Carroll Canyon Road	AM	40.9	D	54.1	D	13.2	No
	PM	38.9	D	54.9	D	16.0	No
35. Project Driveway C/Carroll Canyon Road	AM	*No conflicting movements*		49.3	D	—	No
	PM			36.3	D	—	No
36. Project Driveway D/Carroll Canyon Road	AM	*No conflicting movements*		30.8	C	—	No
	PM			28.9	C	—	No
37. Project Driveway E/Carroll Canyon Road	AM	*No conflicting movements*		36.9	D	—	No
	PM			50.2	D	—	No
38. Project Driveway F/Carroll Canyon Road	AM	35.1	D	52.3	D	17.2	No
	PM	22.2	C	54.2	D	32.0	No
39. Black Mountain Road/Carroll Canyon Road [d]	AM	38.2	D	**69.6**	**E**	**31.4**	**Yes**
	PM	51.8	D	**87.9**	**F**	**36.1**	**Yes**
40. Maya Linda Road/Carroll Canyon Road	AM	36.2	D	**85.9**	**F**	**49.7**	**Yes**
	PM	31.0	C	**70.0**	**E**	**39.0**	**Yes**
41. I-15 Southbound Ramps/Carroll Canyon Road	AM	**111.9**	**F**	**189.2**	**F**	**77.3**	**Yes**
	PM	**129.1**	**F**	**260.8**	**F**	**131.7**	**Yes**
42. I-15 Northbound Ramps/Carroll Canyon Road	AM	**97.7**	**F**	**149.7**	**F**	**52.0**	**Yes**
	PM	**73.2**	**E**	**143.0**	**F**	**69.8**	**Yes**
43. Businesspark Avenue/Carroll Canyon Road	AM	35.5	D	36.8	D	1.3	No
	PM	33.9	C	36.3	D	2.4	No
44. Scripps Ranch Boulevard/Carroll Canyon Road	AM	27.1	C	27.4	C	0.3	No
	PM	21.6	C	21.8	C	0.2	No
45. Project Driveway G/Maya Linda Road	AM	*No conflicting movements*		25.8	C	—	No
	PM			25.3	C	—	No
46. Project Driveway H/Maya Linda Road *(TWSC)*	AM	*No conflicting movements*		13.0	B	—	No
	PM			12.1	B	—	No
La Jolla Village Drive/Miramar Road/Pomerado Road							
50. Towne Centre Drive/Eastgate Mall	AM	34.5	C	35.1	D	0.6	No
	PM	**59.8**	**E**	**61.1**	**E**	1.3	No
51. Judicial Drive/Eastgate Mall	AM	30.7	C	30.9	C	0.2	No
	PM	**91.2**	**F**	**92.1**	**F**	0.9	No
52. Towne Centre Drive/La Jolla Village Drive	AM	**184.2**	**F**	**184.6**	**F**	0.4	No
	PM	**144.3**	**F**	**145.2**	**F**	0.9	No
53. I-805 Southbound Ramps/La Jolla Village Drive	AM	**63.7**	**E**	**65.5**	**E**	1.8	No
	PM	20.6	C	21.7	C	1.1	No
54. I-805 Northbound Ramps/Miramar Road	AM	17.4	B	17.7	B	0.3	No
	PM	16.8	B	18.3	B	1.5	No
55. Nobel Drive/Miramar Road	AM	52.1	D	54.9	D	2.8	No
	PM	30.1	C	33.4	C	3.3	No
56. Eastgate Mall/Miramar Road	AM	**59.4**	**E**	**59.9**	**E**	0.5	No
	PM	39.3	D	42.2	D	2.9	No
57. Camino Santa Fe/Miramar Road	AM	**151.8**	**F**	**166.0**	**F**	**14.2**	**Yes**
	PM	**84.3**	**F**	**114.9**	**F**	**30.6**	**Yes**

Intersection	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
58. Carroll Road/Camino Santa Fe	AM	**58.3**	**E**	**59.4**	**E**	1.1	No
	PM	**104.5**	**F**	**105.4**	**F**	0.9	No
59. Carroll Road/Miramar Road	AM	24.2	C	25.3	C	1.1	No
	PM	32.9	C	34.5	C	1.6	No
60. Camino Ruiz/Miramar Road	AM	42.6	D	**74.2**	**E**	**31.6**	**Yes**
	PM	41.6	D	47.2	D	5.6	No
61. Black Mountain Road/Miramar Road	AM	47.0	D	50.7	D	3.7	No
	PM	51.2	D	52.9	D	1.7	No
62. Kearny Villa Road/Miramar Road	AM	**129.4**	**F**	**145.8**	**F**	**16.4**	**Yes**
	PM	**188.2**	**F**	**195.7**	**F**	**7.5**	**Yes**
93. Kearny Mesa Road/Miramar Road	AM	**67.0**	**E**	**68.6**	**E**	1.6	No
	PM	**58.6**	**E**	**60.3**	**E**	1.7	No
63. I-15 Southbound Ramps/Miramar Road	AM	47.9	D	54.8	D	6.9	No
	PM	30.6	C	35.2	D	4.6	No
64. I-15 Northbound Ramps/Miramar Road	AM	30.5	C	36.8	D	6.3	No
	PM	32.6	C	34.7	C	2.1	No
65. Willow Creek Road/Pomerado Road	AM	30.6	C	31.3	C	0.7	No
	PM	**60.9**	**E**	**62.2**	**E**	1.3	No
66. Nobel Drive/I–805 Southbound On-Ramp	AM	17.2	B	18.3	B	1.1	No
	PM	17.7	B	18.7	B	1.0	No
67. Nobel Drive/I–805 Northbound Off-Ramp	AM	16.7	B	17.1	B	0.4	No
	PM	17.9	B	18.4	B	0.5	No
Camino Ruiz							
70. Camino Ruiz/New Salem Street	AM	29.8	C	32.0	C	2.2	No
	PM	38.5	D	40.0	D	1.5	No
71. Camino Ruiz/Reagan Road	AM	34.5	C	35.8	D	1.3	No
	PM	38.2	D	42.1	D	3.9	No
72. Camino Ruiz/Flanders Drive	AM	22.1	C	22.3	C	0.2	No
	PM	24.7	C	28.5	C	3.8	No
73. Camino Ruiz/Gold Coast Drive	AM	**74.8**	**E**	**98.9**	**F**	**24.1**	**Yes**
	PM	46.2	D	53.1	D	6.9	No
74. Camino Ruiz/Jade Coast Road *(TWSC)*	AM	**119.7**	**F**	**345.6**	**F**	**225.9**	**Yes**
	PM	**44.2**	**E**	**180.6**	**F**	**136.4**	**Yes**
75. Camino Ruiz/Jade Coast Drive	AM	22.9	C	24.4	C	1.5	No
	PM	11.2	B	11.8	B	0.6	No
76. Camino Ruiz/Project Driveway A	AM	*DNE*[e]	—	35.2	D	—	No
	PM	*DNE*	—	22.5	C	—	No
77. Camino Ruiz/Project Driveway B	AM	*DNE*	—	31.6	C	—	No
	PM	*DNE*	—	25.6	C	—	No
78. Camino Ruiz/Miralani Drive	AM	40.6	D	44.4	D	3.8	No
	PM	51.5	D	53.4	D	1.9	No
79. Camino Ruiz/Activity Road	AM	29.0	C	29.2	C	0.2	No
	PM	37.0	D	54.5	D	17.5	No
Black Mountain Road							
80. Black Mountain Road/Park Village Road	AM	**86.2**	**F**	**86.5**	**F**	0.3	No
	PM	**62.4**	**E**	**63.5**	**E**	1.1	No
81. Black Mountain Road/Mercy Road	AM	48.5	D	51.0	D	2.5	No
	PM	45.4	D	45.6	D	0.2	No
82. Black Mountain Road/Westview Parkway	AM	30.5	C	33.2	C	2.7	No
	PM	29.2	C	29.7	C	0.5	No
83. Black Mountain Road/Capricorn Way	AM	**68.3**	**E**	**69.2**	**E**	0.9	No
	PM	**70.0**	**E**	**70.8**	**E**	0.8	No
84. Black Mountain Road/Hillery Drive [d]	AM	**80.1**	**F**	**98.1**	**F**	**18.0**	**Yes**

Intersection	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig?[c]
		Delay[a]	LOS[b]	Delay	LOS		
	PM	**71.4**	**E**	**72.7**	**E**	1.3	No
85. Black Mountain Road/Gold Coast Drive [d]	AM	46.6	D	48.0	D	1.4	No
	PM	39.1	D	39.9	D	0.8	No
86. Black Mountain Road/Maya Linda [d]	AM	38.1	D	53.8	D	15.7	No
	PM	29.7	C	36.0	D	6.3	No
87. Black Mountain Rd/Carroll Centre Rd/Kearny Villa	AM	34.8	C	37.4	D	2.6	No
	PM	**62.2**	**E**	**68.2**	**E**	**6.0**	**Yes**
88. Black Mountain Road/Activity Road	AM	49.3	D	50.0	D	0.7	No
	PM	**83.5**	**F**	**84.4**	**F**	0.9	No
Kearny Villa Road							
89. Kearny Villa Road SB Ramps/Miramar Way	AM	28.3	D	32.6	D	4.3	No
	PM	**51.5**	**F**	**51.8**	**F**	0.3	No
90. Kearny Villa Road NB Ramps/Miramar Way *(TWSC)*	AM	24.0	C	28.6	D	4.6	No
	PM	**43.0**	**E**	**44.6**	**E**	1.6	No
91. SR 163 SB Ramps/Kearny Villa Road *(TWSC)*	AM	21.5	C	25.5	D	4.0	No
	PM	**52.0**	**F**	**79.5**	**F**	**27.5**	**Yes**
92. SR 163 NB Ramps/Kearny Villa Road	AM	47.3	D	**57.0**	**E**	**9.7**	**Yes**
	PM	17.7	B	26.9	C	9.2	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Sig = Significant project impacts based on Significance Criteria.
d. Planned FBA roadway improvements for Phase 3B (with and without project scenarios).
e. DNE – Does Not Exist

General Notes:

* – Indicates no impact when the "existing mining traffic" is removed from Phase 3B analysis. See Section 12.8 of the TIA.

SIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

UNSIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 5.2-46. *Phase 3B (Year 2040) Street Segment Operations*

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3B without Project			Phase 3B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Mira Mesa Boulevard											
West of I-805	4	Major Arterial	40,000	17,180	0.430	B	17,490	0.437	B	0.007	No
I-805 to Scranton Rd.	9	Prime Arterial	75,000	59,010	0.787	D	60,510	0.807	D	0.020	No
Scranton Rd. to Pacific Heights Blvd.	6	Prime Arterial	60,000	51,770	0.863	D	51,770	0.863	D	0.000	No
Pacific Heights Blvd. to Camino Santa Fe	6	Prime Arterial	60,000	47,250	0.788	C	47,520	0.792	C	0.004	No
Camino Santa Fe to Parkdale Av.	6	Prime Arterial	60,000	54,730	0.912	D	55,000	0.917	D	0.005	No
Parkdale Av. to Reagan Rd.	6	Major Arterial	50,000	52,550	**1.051**	**F**	52,820	**1.056**	**F**	0.005	No
Reagan Rd. to Camino Ruiz	6	Major Arterial	50,000	53,350	**1.067**	**F**	53,350	**1.067**	**F**	0.000	No
Camino Ruiz to New Salem St.	6	Major Arterial	50,000	58,790	**1.176**	**F**	58,790	**1.176**	**F**	0.000	No
New Salem St to Black Mountain Rd.	6	Major Arterial	50,000	63,030	**1.261**	**F**	63,330	**1.267**	**F**	0.006	No
Black Mountain Rd to Westview Pkwy.	8	Prime Arterial	70,000	58,950	0.842	D	60,330	0.862	D	0.020	No
Westview Pkwy. to I-15	9	Prime Arterial	75,000	61,600	0.821	D	63,120	0.842	D	0.021	No
I-15 to Scripps Ranch Blvd.	6	Prime Arterial	60,000	33,450	0.558	B	33,730	0.562	B	0.004	No
Hillery Drive											
Black Mountain Rd. to Westview Pkwy.	4	Collector	30,000	16,900	0.563	C	17,240	0.575	C	0.012	No
Flanders Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	6,750	**0.844**	**E**	6,900	**0.863**	**E**	0.019	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	5,630	0.704	D	6,110	0.764	D	0.060	No
Gold Coast Drive											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	7,640	**0.955**	**E**	7,800	**0.975**	**E**	0.020	No
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	6,800	**0.850**	**E**	7,520	**0.940**	**E**	**0.090**	**Yes**
Westonhill Dr. to Black Mountain Rd.	2	Collector	8,000	13,530	**1.691**	**F**	13,980	**1.748**	**F**	**0.057**	**Yes**
Black Mountain Rd. to Maya Linda Rd	2	Collector	8,000	7,260	**0.908**	**E**	7,310	**0.914**	**E**	0.006	No
Jade Coast Road											
Parkdale Av. to Camino Ruiz	2	Collector	8,000	4,400	0.550	C	5,120	0.640	D	0.090	No
Jade Coast Drive											
Camino Ruiz to Westonhill Dr.	2	Collector	8,000	3,150	0.394	B	3,680	0.460	C	0.066	No
Carroll Canyon Road											
West of Scranton Road	4	Collector	30,000	25,990	**0.866**	**E**	27,490	**0.916**	**E**	**0.050**	**Yes**
Scranton Rd. to Pacific Heights Blvd.	4	Major Arterial	40,000	28,630	0.716	C	31,630	0.791	D	0.075	No
Pacific Heights Blvd. to Carroll Rd.	4	Major Arterial	40,000	20,160	0.504	B	23,690	0.592	C	0.088	No
Carroll Rd. to Camino Santa Fe	4	Major Arterial	40,000	16,530	0.413	B	20,470	0.512	B	0.099	No
Camino Santa Fe to Camino Ruiz	6	Prime Arterial	60,000	25,780	0.430	B	35,270	0.588	C	0.158	No
Camino Ruiz to Project Dwy. C	6	Major Arterial	50,000	19,470	0.389	A	31,490	0.630	C	0.241	No
Project Dwy. C to Project Dwy. D	6	Major Arterial	50,000	19,470	0.389	A	32,590	0.652	C	0.263	No
Project Dwy. D to Project Dwy. E	6	Major Arterial	50,000	19,470	0.389	A	33,890	0.678	C	0.289	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3B without Project			Phase 3B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Project Dwy. E to Project Dwy. F	6	Major Arterial	50,000	19,470	0.389	A	35,060	0.701	C	0.312	No
Project Dwy. F to Black Mountain Rd.	4	Major Arterial	40,000	11,070	0.277	A	22,980	0.575	C	0.298	No
Black Mountain Rd to I-15	4	Collector	30,000	39,540	**1.318**	**F**	48,240	**1.608**	**F**	**0.290**	**Yes**
I-15 to Businesspark Av.	4	Collector	30,000	27,150	**0.905**	**E**	28,030	**0.934**	**E**	**0.029**	**Yes**
Miralani Drive											
Arjons Dr. to Camino Ruiz	2	Collector	8,000	9,750	**1.219**	**F**	10,860	**1.358**	**F**	**0.139**	**Yes**
Activity Road											
Camino Ruiz to Black Mountain Rd.	2	Collector TWLTL	15,000	11,530	0.769	D	12,420	0.828	D	0.059	No
La Jolla Village Drive/Miramar Road/Pomerado Road											
West of Towne Center Dr.	6	Prime Arterial	60,000	50,720	0.845	D	51,400	0.857	D	0.012	No
Towne Center Dr. to I-805	8	Prime Arterial	70,000	68,280	**0.975**	**E**	69,390	**0.991**	**E**	0.016	No
I-805 to Nobel Dr.	7	Prime Arterial	65,000	52,870	0.813	D	53,980	0.830	D	0.017	No
Nobel Dr. to Eastgate Mall	7	Prime Arterial	65,000	75,070	**1.155**	**F**	77,570	**1.193**	**F**	**0.038**	**Yes**
Eastgate Mall to Camino Santa Fe	6	Major Arterial	50,000	87,570	**1.751**	**F**	91,180	**1.824**	**F**	**0.073**	**Yes**
Camino Santa Fe to Carroll Rd	6	Major Arterial	50,000	47,960	**0.959**	**E**	49,190	**0.984**	**E**	**0.025**	No*****
Carroll Rd to Cabot Dr.	6	Major Arterial	50,000	40,040	0.801	D	42,160	0.843	D	0.042	No
Cabot Dr. to Camino Ruiz	6	Major Arterial	50,000	42,120	0.842	D	45,080	**0.902**	**E**	**0.060**	**Yes**[h]
Camino Ruiz to Black Mountain Rd.	6	Major Arterial	50,000	61,830	**1.237**	**F**	65,020	**1.300**	**F**	**0.063**	**Yes**
Black Mountain Road to Kearny Villa Rd.	6	Major Arterial	50,000	69,640	**1.393**	**F**	73,700	**1.474**	**F**	**0.081**	**Yes**
Kearny Villa Rd. to I-15	6	Major Arterial	50,000	69,380	**1.388**	**F**	73,650	**1.473**	**F**	**0.085**	**Yes**
I-15 to Willow Creek Rd.	2	Collector TWLTL	15,000	35,930	**2.395**	**F**	36,760	**2.451**	**F**	**0.056**	**Yes**
East of Willow Creek Rd.	2	Collector TWLTL	15,000	30,340	**2.023**	**F**	30,590	**2.039**	**F**	**0.016**	**Yes**
Vista Sorrento Parkway											
I-805 NB Ramps to Mira Mesa Blvd.	4	Collector	30,000	19,700	0.657	C	21,200	0.707	D	0.050	No
Scranton Road											
Mira Mesa Blvd. to Carroll Canyon Rd.	4	Major Arterial	40,000	22,910	0.573	C	24,410	0.610	C	0.037	No
Camino Santa Fe											
Mira Mesa Blvd. to Flanders Dr.	6	Major Arterial	50,000	19,730	0.395	A	20,060	0.401	B	0.006	No
Flanders Dr. to Carroll Canyon Rd.	6	Major Arterial	50,000	27,390	0.548	B	28,040	0.561	C	0.013	No
Carroll Canyon Rd. to Carroll Rd.	6	Major Arterial	50,000	36,250	0.725	C	40,380	0.808	D	0.083	No
Carroll Rd. to Miramar Rd.	6	Major Arterial	50,000	34,580	0.692	C	37,620	0.752	C	0.060	No
Camino Ruiz											
North of New Salem St.	4	Major Arterial	40,000	24,470	0.612	C	24,930	0.623	C	0.011	No
New Salem St. to Mira Mesa Blvd.	4	Major Arterial	40,000	29,230	0.731	C	30,540	0.764	D	0.033	No
Mira Mesa Blvd. to Reagan Rd.	4	Major Arterial	40,000	21,550	0.539	C	24,230	0.606	C	0.067	No
Reagan Rd. to Gold Coast Dr.	4	Major Arterial	40,000	24,550	0.614	C	28,160	0.704	C	0.090	No

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3B without Project			Phase 3B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Gold Coast Dr. to Jade Coast Dr.	6	Major Arterial	50,000	22,450	0.449	B	27,980	0.560	B	0.111	No
Jade Coast Dr. to Project Dwy.	6	Major Arterial	50,000	23,900	0.478	B	30,450	0.609	C	0.131	No
Project Dwy. to Carroll Canyon Rd.	6	Major Arterial	50,000	23,900	0.478	B	44,120	0.882	D	0.404	No
Carroll Canyon Rd. to Miralani Dr.	6	Major Arterial	50,000	26,250	0.525	B	34,320	0.686	C	0.161	No
Miralani Dr. to Miramar Rd.	6	Major Arterial	50,000	28,300	0.566	C	35,250	0.705	C	0.139	No
Reagan Road											
Mira Mesa Blvd. to Camino Ruiz	2	Collector	8,000	6,170	0.771	D	6,450	0.806	D	0.035	No
East of Camino Ruiz	2	Collector	8,000	5,440	0.680	D	6,060	0.758	D	0.078	No
Westonhill Drive											
Mira Mesa Blvd. to Hillery Dr.	2	Collector	8,000	8,350	**1.044**	**F**	9,130	**1.141**	**F**	**0.097**	No[i]
Hillery Dr. to Flanders Dr.	2	Collector	8,000	7,020	**0.878**	**E**	7,820	**0.978**	**E**	**0.100**	No[i]
Flanders Dr. to Gold Coast Dr.	2	Collector	8,000	5,630	0.704	D	6,430	0.804	D	0.100	No
Black Mountain Road											
North of Park Village Rd.	4	Major Arterial	40,000	41,790	**1.045**	**F**	42,200	**1.055**	**F**	0.010	No
Park Village Rd. to Mercy Rd.	4	Major Arterial	40,000	40,990	**1.025**	**F**	41,400	**1.035**	**F**	0.010	No
Mercy Rd. to Westview Pkwy.	6	Major Arterial	50,000	39,340	0.787	C	40,290	0.806	D	0.019	No
Westview Pkwy. to Capricorn Way	6	Major Arterial	50,000	36,270	0.725	C	37,720	0.754	C	0.029	No
Capricorn Way to Mira Mesa Blvd.	5	Major Arterial	45,000	39,850	0.886	D	41,770	**0.928**	**E**	**0.042**	**Yes**
Mira Mesa Blvd. to Hillery Dr.	6	Prime Arterial	60,000	24,800	0.413	A	27,640	0.461	B	0.048	No
Hillery Dr. to Gold Coast Dr.[f]	6	Prime Arterial	60,000	29,640	0.494	B	32,940	0.549	B	0.055	No
Gold Coast Dr. to Carroll Canyon Rd.[f]	6	Prime Arterial	60,000	30,950	0.516	B	34,880	0.581	B	0.065	No
Carroll Canyon Rd. to Maya Linda Rd.[f]	6	Prime Arterial	60,000	25,350	0.423	B	26,060	0.434	B	0.011	No
Maya Linda Rd. to Carroll Centre Rd.	5	Major Arterial	45,000	39,880	0.886	D	45,120	**1.002**	**E**	**0.116**	**Yes**
Carroll Centre Rd. to Miramar Rd.	4	Collector	30,000	22,070	0.735	D	22,440	0.748	D	0.013	No
Kearny Villa Road											
Carroll Centre Rd to Miramar Rd.	6	Major Arterial	50,000	22,070	0.441	B	27,180	0.544	B	0.103	No
Miramar Rd. to Miramar Way	4	Major Arterial	50,000	36,080	0.722	C	40,700	0.814	D	0.092	No
Miramar Way to SR 163	4	Major Arterial	50,000	38,790	0.776	C	42,650	0.853	D	0.077	No
South of SR 163	4	Major Arterial	50,000	28,050	0.561	C	29,650	0.593	C	0.032	No
Maya Linda Road											
Carroll Canyon Rd. to Project Dwy. G.	4	Collector	30,000	12,700	0.423	B	17,980	0.599	C	0.176	No
Project Dwy G. to Project Dwy. H.	4	Collector	30,000	12,700	0.423	B	19,990	0.666	C	0.243	No
Project Dwy H. to Black Mountain Rd.	4	Collector	30,000	12,700	0.423	B	19,990	0.666	C	0.243	No
Black Mountain Rd. to Carroll Canyon Rd.	2	Collector	8,000	4,250	0.531	C	4,850	0.606	C	0.075	No
Nobel Drive											
I-805 NB Off Ramp to Miramar Rd.	4	Major Arterial	40,000	33,100	0.828	D	34,490	0.862	D	0.034	No
Eastgate Mall											

Roadway Segment	Lanes	Classification	Capacity (LOS E)[a]	Phase 3B without Project			Phase 3B with Project			V/C Increase	Sig[e]
				ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		
Towne Center Dr. to I-805	4	Collector	30,000	15,250	0.508	C	15,250	0.508	C	0.000	No
I-805 to Miramar Rd.	4	Collector	30,000	16,820	0.561	C	17,660	0.589	C	0.028	No

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Volume to Capacity.
d. Level of Service.
e. Sig = Significant project impact based on Significance Criteria.
f. Planned roadway improvements in Phase 3B (with and without project scenarios).
g. Kearny Villa Road south of Miramar Road functions as a high-speed roadway segment (65 mph) with a raised median and no driveway friction. A more appropriate capacity was assumed to better reflect the operations of the roadway.
h. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be greater than anticipated in the TIA; the increase in the V/C ratio would be significant.
i. As a result of the 2018 Addendum traffic validation, the projected roadway volume on these street segments would be less than anticipated in the TIA; the increase in the V/C ratio would not be significant.

General Notes:

1. TWLTL = Two-way left-turn lane.

* – Indicates no impact when the "existing mining traffic" is removed from Phase 3B analysis. See Section 12.8 of the TIA.

Table 5.2-47a. *Phase 3B (Year 2040) Ramp Meter Operations—Fixed Rate*

Location	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(3 SOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	130	27,544	130	27,544	0	No
NB & SB Vista Sorrento Pkwy to NB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	139	11,438	155	12,713	16	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805	AM	70	6,963	70	6,963	0	No
(1 SOV+ 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805	AM	41	6,088	41	6,088	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	97	7,956	105	8,583	**8**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15	AM	26	5,763	26	5,763	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15	AM	13	2,338	13	2,338	0	No
(2 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	70	12,913	79	14,634	**10**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15	AM	92	18,938	109	22,359	**17**	**Yes**
(1 SOV + 1 HOV)	PM	59	12,138	87	17,769	28	No[c]
EB & WB Carroll Canyon Road to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	7	1,513	29	6,039	**22**	**Yes**
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Road to SB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	217	14,813	229	15,673	**12**	**Yes**

Location	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
NB & SB Kearny Villa Road to NB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	59	8,425	59	8,425	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle
b. Sig = Significant project impacts based on Significance Criteria.
c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 12–6B* of the TIA).

General Notes:

1. Results based on Caltrans' rate code F (most restrictive).
2. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-47b. *Phase 3B (Year 2040) Ramp Meter Operations—Maximum Delay*

Location	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-805/Sorrento Valley Road/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(3 SOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	15	8,054	15	8,054	0	No
NB & SB Vista Sorrento Pkwy to NB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	3,273	21	4,548	6	No[c]
I-805/La Jolla Village Drive/Miramar Road Interchange							
WB Miramar Rd. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
WB Miramar Rd. to NB I-805	AM	15	2,593	15	2,593	0	No
(1 SOV+ 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
EB La Jolla Village Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB La Jolla Village Dr. to NB I-805	AM	15	3,018	15	3,018	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
I-805/Nobel Drive Interchange							
EB & WB Nobel Dr. to SB I-805	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	2,571	19	3,198	**4**	**Yes**
I-15/Mira Mesa Boulevard Interchange							
WB Mira Mesa Blvd. to SB I-15	AM	15	3,783	15	3,783	0	No
(1 SOV + 1 HOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to SB I-15	AM	13	2,338	13	2,338	0	No
(2 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Mira Mesa Blvd. to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	15	4,803	20	6,524	**5**	**Yes**
I-15/Carroll Canyon Road Interchange							
EB & WB Carroll Canyon Road to SB I-15	AM	15	6,248	23	9,669	**8**	**Yes**
(1 SOV + 1 HOV)	PM	15	4,888	32	10,519	7	No[c]
EB & WB Carroll Canyon Road to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV + 1 HOV)	PM	7	1,513	29	6,039	**22**	**Yes**

Location	Peak Hour	Phase 3B without Project		Phase 3B with Project		Delay Increase	Sig[b]
		SOV[a] Delay (minutes/lane)	SOV Queue (feet/lane)	SOV Delay (minutes/lane)	SOV Queue (feet/lane)		
I-15/Miramar Road/Pomerado Rd. Interchange							
WB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(2 SOV)	*PM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
WB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	0	0	0	0	0	No
EB Miramar Rd to SB I-15	AM	0	0	0	0	0	No
(1 SOV + 1 HOV)	PM	0	0	0	0	0	No
EB Miramar Rd to NB I-15	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV)	PM	0	0	0	0	0	No
SR 163/Kearny Villa Road Interchange							
NB & SB Kearny Villa Road to SB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(2 SOV + 1 HOV)	PM	15	3,783	18	4,643	**3**	**Yes**
NB & SB Kearny Villa Road to NB SR 163	*AM*	*Ramp meter not activated*		*Ramp meter not activated*		—	—
(1 SOV)	PM	15	3,400	15	3,400	0	No

Footnotes:

a. SOV = Single-Occupancy Vehicle

b. Sig = Significant project impacts based on Significance Criteria.

c. Per the significance criteria (*Section 5.0* of the TIA), no impact is calculated since the adjacent freeway segment is calculated to operate at acceptable LOS (see *Table 12–6B* of the TIA).

General Notes:

1. See *Appendix H* of the TIA for the calculation sheets.

Table 5.2-48a. *Phase 3B (Year 2040) Freeway Segment Operations—AM Peak Hour*

Freeway and Segment	Phase 3B ADT	Direction, Number of Lanes & Capacity[a]			Phase 3B without Project		Phase 3B with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	195,020	NB Mainlines	4M+1A	9,200	0.685	C	0.694	C	0.009	No
		SB Mainlines	5M	10,000	1.197	**F(0)**	1.214	**F(0)**	**0.017**	**Yes**
South of Kearny Villa Rd.	205,110	NB Mainlines	4M+1A	9,200	0.720	C	0.738	C	0.018	No
		SB Mainlines	5M	10,000	1.258	**F(1)**	1.289	**F(1)**	**0.031**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	377,150	NB Mainlines	5M+1A+2HOV/ML	13,600	0.961	**E**	0.973	**E**	**0.012**	No*****
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.327	**F(1)**	1.344	**F(1)**	**0.017**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	379,300	NB Mainlines	6M+1A+2HOV/ML	15,600	0.867	D	0.875	D	0.008	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.132	**F(0)**	1.142	**F(0)**	**0.010**	**Yes**
Carroll Canyon Rd. to Miramar Rd.[b]	391,370	NB Mainlines	6M+2HOV/ML	14,400	0.969	**E**	0.979	**E**	0.010	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.168	**F(0)**	1.181	**F(0)**	**0.013**	**Yes**
Miramar Rd. to Miramar Way[b]	402,180	NB Mainlines	6M+1A+2HOV/ML	15,600	1.043	**F(0)**	1.063	**F(0)**	**0.020**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.123	**F(0)**	1.145	**F(0)**	**0.022**	**Yes**
Miramar Way to SR 163[b]	410,150	NB Mainlines	7M+2HOV/ML	16,400	1.011	**F(0)**	1.031	**F(0)**	**0.020**	**Yes**
		SB Mainlines	7M+2HOV/ML	16,400	1.090	**F(0)**	1.110	**F(0)**	**0.020**	**Yes**
South of SR 163[b]	228,580	NB Mainlines	4M+2HOV/ML	11,600	0.797	C	0.815	D	0.018	No
		SB Mainlines	4M+2HOV/ML	11,600	0.858	D	0.878	D	0.020	No
I–805										
North of Mira Mesa Blvd.[c]	210,450	NB Mainlines	4M+1A+2HOV/ML	11,600	0.920	**E**	0.930	**E**	0.010	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.411	B	0.415	B	0.004	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	235,350	NB Mainlines	4M+1A+2HOV/ML	11,600	1.029	**F(0)**	1.029	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.459	B	0.459	B	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	262,950	NB Mainlines	4M+1A+2HOV/ML	11,600	1.150	**F(0)**	1.150	**F(0)**	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.513	B	0.513	B	0.000	No
South of Nobel Dr.[c]	293,440	NB Mainlines	4M+1A+2HOV/ML	11,600	1.283	**F(1)**	1.287	**F(1)**	0.004	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.572	B	0.574	B	0.002	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes). *Example:* 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

General Notes:

1. See *Appendix I* of the TIA for calculation sheets.

* –Indicates no impact when the "existing mining traffic" is removed from Phase 3B analysis. See Section 12.8 of the TIA.

LOS	V/C
A	<0.41
B	0.62
C	0.8
D	0.92
E	1

LOS	V/C
F(0)	1.25
F(1)	1.35
F(2)	1.45
F(3)	>1.46

Table 5.2-48b. *Phase 3B (Year 2040) Freeway Segment Operations—PM Peak Hour*

Freeway and Segment	Phase 3B ADT	Direction, Number of Lanes & Capacity[a]			Phase 3B without Project		Phase 3B with Project		V/C Delta	Significant
					V/C	LOS	V/C	LOS		
SR 163										
North of Kearny Villa Rd.	195,020	NB Mainlines	4M+1A	9,200	0.917	D	0.930	**E**	**0.013**	No*****
		SB Mainlines	5M	10,000	1.027	**F(0)**	1.042	**F(0)**	**0.015**	**Yes**
South of Kearny Villa Rd.	205,110	NB Mainlines	4M+1A	9,200	0.965	**E**	0.989	**E**	**0.024**	**Yes**
		SB Mainlines	5M	10,000	1.080	**F(0)**	1.107	**F(0)**	**0.027**	**Yes**
I–15										
North of Mira Mesa Blvd.[b]	377,150	NB Mainlines	5M+1A+2HOV/ML	13,600	1.130	**F(0)**	1.144	**F(0)**	**0.014**	**Yes**
		SB Mainlines	5M+1A+2HOV/ML	13,600	1.008	**F(0)**	1.021	**F(0)**	**0.013**	**Yes**
Mira Mesa Blvd. to Carroll Canyon Rd.[b]	379,300	NB Mainlines	6M+1A+2HOV/ML	15,600	0.971	**E**	0.979	**E**	0.008	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.884	D	0.892	D	0.008	No
Carroll Canyon Rd. to Miramar Rd.[b]	391,370	NB Mainlines	6M+2HOV/ML	14,400	1.085	**F(0)**	1.097	**F(0)**	**0.012**	**Yes**
		SB Mainlines	6M+1A+2HOV/ML	15,600	0.912	D	0.922	**E**	**0.010**	No*****
Miramar Rd. to Miramar Way[b]	402,180	NB Mainlines	6M+1A+2HOV/ML	15,600	0.868	D	0.885	D	0.017	No
		SB Mainlines	6M+1A+2HOV/ML	15,600	1.134	**F(0)**	1.156	**F(0)**	**0.022**	**Yes**
Miramar Way to SR 163[b]	410,150	NB Mainlines	7M+2HOV/ML	16,400	0.842	D	0.858	D	0.016	No
		SB Mainlines	7M+2HOV/ML	16,400	1.100	**F(0)**	1.121	**F(0)**	**0.021**	**Yes**
South of SR 163[b]	228,580	NB Mainlines	4M+2HOV/ML	11,600	0.664	C	0.678	C	0.014	No
		SB Mainlines	4M+2HOV/ML	11,600	0.867	D	0.886	D	0.019	No
I–805										
North of Mira Mesa Blvd.[c]	210,450	NB Mainlines	4M+1A+2HOV/ML	11,600	0.561	B	0.567	B	0.006	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.847	D	0.857	D	0.010	No
Mira Mesa Blvd to La Jolla Village Dr.[c]	235,350	NB Mainlines	4M+1A+2HOV/ML	11,600	0.627	C	0.627	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	0.948	**E**	0.948	**E**	0.000	No
La Jolla Village Dr. to Nobel Dr.[c]	262,950	NB Mainlines	4M+1A+2HOV/ML	11,600	0.701	C	0.701	C	0.000	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.059	**F(0)**	1.059	**F(0)**	0.000	No
South of Nobel Dr.[c]	293,440	NB Mainlines	4M+1A+2HOV/ML	11,600	0.782	C	0.784	C	0.002	No
		SB Mainlines	4M+1A+2HOV/ML	11,600	1.182	**F(0)**	1.185	**F(0)**	0.003	No

Footnotes:

a. Capacity calculated at 2000 ADT per lane and 1200 ADT per aux lane (M: Mainline, A: Auxiliary Lane, HOV/ML: High Occupancy Vehicle Lane/Managed Lanes).
Example: 4M+2A=4 Mainlines + 2 Auxiliary Lanes.

b. Planned improvements on I-15 include the addition of two managed lanes (for a total of four managed lanes) with a movable barrier.

c. Planned improvements on I-805 include the introduction of four managed lanes with a movable barrier.

LOS	V/C	LOS	V/C
A	<0.41	F(0)	1.25
B	0.62	F(1)	1.35
C	0.8	F(2)	1.45
D	0.92	F(3)	>1.46
E	1		

General Notes:

1. See *Appendix I* of the TIA for calculation sheets.

* Indicates no impact when the "existing mining traffic" is removed from Phase 3B analysis. See Section 12.8 of the TIA.

Table 5.2-49. *Project Phasing and Traffic Generation*

Phase	Land Use & Size	Weekday ADT[a]		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
1	**Light Industrial Park** *Eastside A–Maya Linda Rd.* 165,000 SF	Cumulative	2,351	229	25	56	225
		Driveway	2,351	229	25	56	225
2A	**Light Industrial Park** *Eastside B–Carroll Canyon Rd.* 250,000 SF **Light Industrial/Business Park** *Parkside–Carroll Canyon Rd.* 135,000 SF **Residential** *Mixed-Use Village Center* 585 Units	Cumulative	8,905	588	291	341	620
		Driveway	8,905	588	291	341	620
2B	**Residential** *Westside* 2,725 Units **Retail—Specialty** *Westside* 24,000 SF **Neighborhood Park** *Westside Gardens* 5.37 Acres	Cumulative	16,074	263	997	996	449
		Driveway	16,170	265	998	1,000	453
3A	**Residential** *Mixed-Use Village Center* 835 Units **Retail—Community** *Mixed-Use Village Center* 150,000 SF **Commercial Office** *Mixed-Use Village Center* 200,000 SF **Hotel** *Mixed-Use Village Center* 175 Rooms **Neighborhood Park** *Central Park* 30.21 Acres	Cumulative	14,001	507	327	661	766
		Driveway	16,494	549	332	778	901
3B	**High Tech Park—Residential** *Creekside* 300 Units **High Tech Park—Industrial** *Creekside* 300,000 SF	Cumulative	6,235	457	211	213	481
		Driveway	6,235	457	211	213	481
TOTALS		**Cumulative**	**47,566**	**2,044**	**1,851**	**2,267**	**2,541**
		Driveway	**50,155**	**2,088**	**1,857**	**2,388**	**2,680**

Table 5.2-50. *Traffic Impacts by Phase and Proposed Traffic Mitigation Measures*

FULLY MITIGATED IMPACTS

Impact	Phase that Impact Occurs	Impact Type	Mitigation Measure	Mitigation Phase(s) | Fair Share Percentage (if applicable)
Intersections				
Kearny Villa Road and Miramar Road	Phase 1 (Year 2020) Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Direct and Cumulative	Prior to issuance of the first building permit for development in Phase 1, owner/permittee shall assure by permit and bond the reconstruction of the median on Kearny Villa Road, south of Miramar Road to provide a single 500-foot northbound left-turn lane in conjunction with the existing 150-foot northbound left-turn lane. This mitigation would require the existing median barrier to be reconstructed further to the west, satisfactory to the City Engineer. This improvement must be completed and accepted by the City Engineer prior to the issuance of the first occupancy in Phase 1.	Phase 1(Year 2020) | 100%
Black Mountain Road and Hillery Drive	Phase 1 (Year 2020) Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2040)	Direct and Cumulative	Prior to issuance of the first building permit for development in Phase 1, owner/permittee shall assure by permit and bond the following improvements: • Widen the southbound approach to provide an exclusive right-turn lane, satisfactory to the City Engineer. This improvement must be completed and accepted by the City Engineer prior to the issuance of the First Certificate of Occupancy in Phase 1. Modify traffic signal timing accordingly, satisfactory to the City Engineer. This improvement must be completed and accepted by the City Engineer prior to the issuance of the First Certificate of Occupancy in Phase 1.	Phase 1 (Year 2020) | 100%
Street Segments				
Carroll Canyon Road, from Black Mountain Road to I-15	Phase 1 (Year 2020) Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Direct and Cumulative	Prior to issuance of the first building permit for development in Phase 1, owner/permittee shall assure by permit and bond the construction of a raised median on Carroll Canyon Road to the satisfaction of the City Engineer and remove on-street parking to meet its classification of a four-lane Major Arterial. This improvement must be completed and accepted by the City Engineer prior to the issuance of the First Certificate of Occupancy in Phase 1.	Phase 1 (Year 2020) | 100%

PARTIALLY MITIGATED IMPACTS

Impact	Phase that Impact Occurs	Impact Type	Comments	Mitigation Phase(s) | Fair Share Percentage (if applicable)
Intersections				
Black Mountain Road and Hillery Drive	Phase 3B (Year 2040)	Cumulative	[In Phase 3B, with the addition of background traffic, additional mitigation is required (i.e., overlap phasing) thereby requiring an additional fair-share contribution to mitigate this cumulative impact.] The owner/permittee shall make a fair share contribution (27.3%) in Phase 3B for the following improvement: • Provide northbound and southbound right-turn overlap phasing (Phase 3B only). Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3B (Year 2040) | 27.3%
Vista Sorrento Parkway/I-805 Northbound Ramps/Mira Sorrento	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phases 2A, 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the westbound approach to provide an exclusive right-turn lane with a right-turn overlap phase. To accommodate the additional lane, widening and/or modifications to the median along the roadway may be required. • Modify traffic signal timing accordingly, satisfactory to the City Engineer. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2A (Year 2030)| 1.3% Phase 2B (Year 2030)| 1.7% Phase 3A (Year 2035) | 23.7% Phase 3B (Year 2040) | 4.2%
Camino Santa Fe and Miramar Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2A, 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the eastbound approach to provide a third exclusive left-turn lane. This will include changes to the configuration of the median deemed necessary by the City Engineer to physically accommodate the additional lane without otherwise changing the configuration of the rest of the roadway. • Modify traffic signal timing accordingly.	Phase 2A (Year 2030)| 6.5% Phase 2B (Year 2030)| 10.3% Phase 3A (Year 2035) | 1.1% Phase 3B(Year 2040) | 2.2%

			Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	
Camino Ruiz and Gold Coast Drive	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2A, 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Reconfigure the eastbound approach to provide an exclusive right-turn lane. The additional lane is expected to be accommodated by restricting on-street parking on the south-side. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2A (Year 2030)| 2.3% Phase 2B (Year 2030)|6.2% Phase 3A (Year 2035) | 57.3% Phase 3B (Year 2040) | 1.5%
Camino Ruiz and Jade Coast Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2A and 2B, owner/ permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Install a traffic signal. No changes to lane configurations are required. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2A (Year 2030)| 4.1% Phase 2B (Year 2030)| 82.4%
Camino Ruiz and Miramar Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the westbound approach to provide a second exclusive right-turn lane. This will include changes to the configuration of the median deemed necessary by the City Engineer to physically accommodate the additional lane without otherwise changing the configuration or flow of the rest of the roadway. In addition, provide right-turn overlap phase for the southbound and westbound approaches. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2B (Year 2030)| 6.8% Phase 3A (Year 2035) | 1.2% Phase 3B (Year 2040) | 0.1%
SR 163 Southbound Ramps and Kearny Villa Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Install a traffic signal. No changes to lane configurations are required.	Phase 2B (Year 2030)| 22.3% Phase 3B (Year 2040) | 3.0%

Scranton Road and Mira Mesa Boulevard	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Add a right-turn overlap phase to the eastbound approach. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 15.0% Phase 3B (Year 2040) | 16.2%
I-15 Northbound Ramps and Mira Mesa Boulevard	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Reconfigure the northbound approach to provide two left-turn lanes, one shared left-turn lane, and one right-turn lane. No physical widening is proposed. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 21.0% Phase 3B (Year 2040) | 5.7%
Black Mountain Road and Carroll Centre Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the southbound approach to provide a second exclusive right-turn lane. This will include changes to the configuration of the median deemed necessary by the City Engineer to physically accommodate the additional lane without otherwise changing the configuration of the rest of the roadway. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 34.1% Phase 3B (Year 2040) | 7.3%
SR 163 Northbound Ramps and Kearny Villa Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the eastbound approach to provide a second exclusive left-turn lane. To accommodate the additional lane, modifications to the ramp may be required. • Modify traffic signal timing accordingly.	Phase 3A (Year 2035) | 17.3% Phase 3B (Year 2040) | 4.1%

			Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	
Westonhill Drive and Mira Mesa Boulevard	Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3B, owner/permittee shall pay a fair share contribution toward the following improvements: • Restripe the northbound approach to provide an exclusive left-turn lane and shared left-thru-right lane. • Modify traffic signal timing accordingly, satisfactory to the City Engineer. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3B (Year 2040) | 1.6%
Maya Linda Road and Carroll Canyon Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the eastbound approach to provide a third through lane. This will include changes to the configuration of the median deemed necessary by the City Engineer to physically accommodate the additional lane without otherwise changing the configuration of the rest of the roadway. • Modify traffic signal timing accordingly. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 40.6% Phase 3B (Year 2040) | 6.6%
Camino Santa Fe and Mira Mesa Boulevard	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the westbound approach to provide a second exclusive left-turn lane and lengthen the left-turn pocket to accommodate additional queue storage. This will include changes to the configuration of the median deemed necessary by the City Engineer to physically accommodate the additional lane without otherwise changing the configuration or flow of the rest of the roadway. The current RTP includes a Bus Rapid Transit (BRT) in the Mira Mesa community. As part of the project, queue jumper lanes may be added on Mira Mesa Boulevard to provide priority signals for buses. If BRT queue jumper lanes are implemented on Mira Mesa Boulevard, the mitigation is likely infeasible. However, in the future, the BRT may be moved to run	Phase 2B (Year 2030)| 0.8% Phase 3A (Year 2035) | 5.7% Phase 3B (Year 2040) | 1.0%

			along Carroll Canyon Road, allowing for the queue jumper lanes to be added on Mira Mesa Boulevard. Nonetheless, the cumulative impact at this location is significant and unavoidable, because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	
Black Mountain Road and Mira Mesa Boulevard	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	If the PFFP improvement T-90 is deleted from the PFFP, the project impact would remain significant and unmitigated. Alternatively, if the PFFP improvement (T-90: widening of Black Mountain Road to a 6-lane Prime Arterial) is not constructed by Year 2030, the Stone Creek project is calculated to have a significant "cumulative impact" at Black Mountain Road / Mira Mesa Boulevard intersection. The project will be responsible for a fair-share contribution towards implementing the T-90 improvement. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2A (Year 2030)| 1.5% Phase 2B (Year 2030)| 1.2% Phase 3A (Year 2035) | 21.5% Phase 3B (Year 2040) | 4.1%
Black Mountain Road and Maya Linda Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	If the PFFP improvement (T-91: widening of Black Mountain Road to a 6-lane Prime Arterial) is not constructed by Phase 3A, the Stone Creek project is calculated to have a significant "cumulative impact" at Black Mountain Road / Maya Linda Road intersection. The project will be responsible for a fair-share contribution towards implementing the T-91 improvement. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 14.2% Phase 3B (Year 2040) | 8.3%
Black Mountain Road and Carroll Canyon Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first construction permit for development in Phase 2A, 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • Widen the westbound approach to provide a two-foot raised median and a 19-foot sneaker lane. The sneaker lane is intended to help westbound right-turning vehicles "sneak by" the westbound thru traffic, thereby reducing delay. Widen on the south curb by approximately three feet to allow for westbound u-turns (due to the restriction of the left-turn movements from the residential driveways due to the proposed raised median). • Modify traffic signal timing accordingly.	Phase 2A (Year 2030)| 27.8% Phase 2B (Year 2030)| 9.6% Phase 3A (Year 2035) | 0.3% Phase 3B (Year 2040) | 8.3%

			Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	
Street Segments				
Carroll Canyon Road, west of Scranton Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2B, owner/permittee shall pay a fair-share contribution toward the construction of the raised median on Carroll Canyon Road, west of Scranton Road to meet the roadway classification of a four-lane Major Arterial satisfactory to the City Engineer. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2B (Year 2030)| 8.3% Phase 3A (Year 2035) | 4.8% Phase 3B (Year 2040) | 0.6%
Carroll Canyon Road, between I-15 to Businesspark Avenue	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer: • A raised median and remove on-street parking to meet the ultimate classification as a four-lane Prime Arterial. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2B (Year 2030)| 4.4% Phase 3A (Year 2035) | 1.0% Phase 3B (Year 2040) | 6.0%
Miramar Road, from Eastgate Mall and Camino Santa Fe	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2A, 2B, 3A, and 3B, owner/permittee shall pay a fair share contribution toward providing a raised median and restricting driveway access to meet roadway mitigation classification of a six-lane Prime Arterial satisfactory to the City Engineer. The raised median shall consolidate left-turns to designated median breaks and introduce U-turns. The left-turn pocket lengths would be determined during design phase to confirm whether the standard left-turn pocket length of 250 feet is sufficient or if longer pockets are warranted. As an alternative mitigation measure, Adaptive Traffic Signal Control may be implemented along the Miramar Corridor. The developer would be responsible for a fair-share cost participation, which would reduce the project's impacts to below a level of significance. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2A (Year 2030)| 3.9% Phase 2B (Year 2030)| 7.6% Phase 3A (Year 2035) | 0.7% Phase 3B (Year 2040) | 1.4%
Miramar Road, from Kearny Villa Road to I-15	Phase 2A (Year 2020) Phase 2B (Year 2020) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		Phase 2A (Year 2030)| 1.8% Phase 2B (Year 2030)| 26.3% Phase 3A (Year 2035) | 0.9% Phase 3B (Year 2040) | 5.0%
Miramar Road, from Camino Santa Fe to Carroll Road	Phase 2B (Year 2030) Phase 3A (Year 2035)	Cumulative		Phase 2B (Year 2030)| 17.5%
Miramar Road, from Camino Ruiz to Black Mountain Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		Phase 2B (Year 2030)| 3.9% Phase 3A (Year 2035) | 2.1% Phase 3B (Year 2040) | 1.0%
Miramar Road, from Black Mountain Road to Kearny Villa Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		Phase 2B | 4.5% Phase 3A (Year 2035) | 0.4% Phase 3B (Year 2040) | 0.5%

Miramar Road, from Nobel Drive and Eastgate Mall	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution toward construction of one additional eastbound lane and construction of a raised median between Nobel Drive and Eastgate Mall. As an alternative mitigation measure, Adaptive Traffic Signal Control may be implemented along the Miramar Corridor. The developer would be responsible for a fair-share cost participation. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 15.0% Phase 3B(Year 2040) | 1.6%
Miramar Road, from Cabot Drive to Camino Ruiz	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2B, 3A, and 3B, Owner/Permittee shall pay a fair share contribution toward providing a raised median and restricting driveway access to meet roadway mitigation classification of a six-lane Prime Arterial satisfactory to the City Engineer. The raised median shall consolidate left-turns to designated median breaks and introduce U-turns. The left-turn pocket lengths would be determined by a study by the Owner/Permittee during the final design phase. As an alternate mitigation measure, the project may pay a fair-share contribution to install Adaptive Traffic Signal Control along Miramar Road. " If Adaptive Traffic Signal Control is installed along Miramar Road to mitigate the project's impact, the developer would be responsible for a fair-share cost participation in Phase 2B to mitigate the project's impact between Cabot Drive and Camino Ruiz. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 2B (Year 2030)| 4.2% Phase 3A (Year 2035) | 0.2% Phase 3B (Year 2040) | 1.2%
Black Mountain Road, from Capricorn Way to Mira Mesa Boulevard	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 3A and 3B, owner/permittee shall pay a fair share contribution toward the addition of one lane in the southbound direction, satisfactory to the City Engineer. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	Phase 3A (Year 2035) | 13.6% Phase 3B(Year 2040) | 1.7%
Black Mountain Road, from Maya Linda Road to Carroll Centre Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Prior to issuance of the first building permit for development in Phase 2A, 2B, 3A, and 3B, the owner/permittee shall pay a fair share contribution as shown toward the following improvements, satisfactory to the City Engineer:	Phase 2A (Year 2030)| 24.3% Phase 2B (Year 2030)| 2.8% Phase 3A (Year 2035) | 3.4% Phase 3B (Year 2040) | 6.6%

			• A third southbound travel lane. A portion of this widening is along the project frontage for which the developer is 100-percent responsible. The portion between the property line and Carroll Centre Road would require a fair-share contribution. Because proposed mitigation for this project impact is payment of a fair share percentage and the balance of funding for this improvement is not assured, the impact remains significant and unmitigated.	
Metered Freeway On-Ramps				
Eastbound and Westbound Carroll Canyon Road to Northbound I-15	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	In order to partially mitigate impacts at the Carroll Canyon Road/I-15 Freeway Ramps, improvements to the Carroll Canyon Road northbound on-ramp are physically feasible. Therefore, mitigation to be implemented as a fair-share contribution toward the following improvement would be provided: • Provide a 3-lane northbound on-ramp, Carroll Canyon Road/I-15 This improvement partially mitigates the project's impacts by providing additional queuing area on the on-ramp to minimize queuing through the intersection. Therefore, ramp meter impacts remain significant and unmitigated.	Phase 2A (Year 2030)| 45.1% Phase 2B (Year 2030)| 6.7% Phase 3A (Year 2035) | 1.0% Phase 3B (Year 2040) | 7.8%

UNMITIGATED IMPACTS

Impact	Phase that Impact Occurs	Impact Type	Comments	Mitigation Phase(s) | Fair Share Percentage (if applicable)
I-15 Southbound Ramps and Carroll Canyon Road	Phase 1 (Year 2020) Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Direct and Cumulative	The intersection impacts can be mitigated with the widening of the interchange to include dual left-turn lane and dual through lanes on the bridge at the southbound and northbound ramps. In the Phase 1, Phase 2 and Phase 3 Scenarios, this impact would remain significant and unmitigated.	N/A
I-15 Northbound Ramps and Carroll Canyon Road	Phase 1 (Year 2020) Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Direct and Cumulative		
Miralani Drive from Arjons Drive to Camino Ruiz	Phase 2A (Year 2030)Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Relative to the significant unmitigated street section impact to Miralani Drive between Arjons Drive and Camino Ruiz, identified mitigation involves the addition of a two-way left-turn lane and removal of on-street parking similar to the geometry on Activity Road. The addition of the two-way left-turn lane can be accomplished within the existing curb-to-curb width (i.e. no additional right-of-way), and therefore this	N/A

Impact	Phase that Impact Occurs	Impact Type	Comments	Mitigation Phase(s) | Fair Share Percentage (if applicable)
			mitigation is considered physically feasible. However, the removal of curbside parking fronting an active industrial/business park is not consistent with established City policy since the Street Design Manual provides for on-street parking for Collector streets. Parking removal may also negatively influence the character, quality, and operation of this business community due to a reduction in pedestrian friendliness and loss of a barrier between the sidewalk and a traffic lane. The identified mitigation measure is *not* recommended. Therefore, this impact would remain significant and unmitigated.	
Pomerado Road from I-15 to Willow Creek Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Relative to significant unmitigated impacts to the street segment of Pomerado Road from I-15 to Willow Creek Road and east of Willow Creek Road, mitigation for Pomerado Road involves the addition of two lanes. The four-lane major street classification of Pomerado Road from I-15 to Willow Creek Road was downgraded to a two-lane collector on October 26, 1993, through Resolution R-282903. The improvement was also deleted from the former Pomerado Road Widening CIP programming sheet. Therefore, although the project would result in cumulative street segment impacts, mitigation is not considered feasible given the City Council action.	N/A
Pomerado Road from East of Willow Creek Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
Gold Coast Drive from Camino Ruiz to Westonhill Drive	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Relative to significant unmitigated impacts to the street segment of Gold Coast Drive from Camino Ruiz to Westonhill Drive and from Westonhill Drive to Black Mountain Road, identified mitigation is the addition of a two-way left-turn lane and removal of on-street parking. The addition of the two-way left-turn lane can be accomplished within the existing curb-to-curb width (i.e. no additional right-of-way), and therefore this mitigation is considered physically feasible. However, the removal of curbside parking on a single-family home fronting street is not consistent with established City policy since the Street Design Manual provides for on-street parking in single family neighborhoods**.** The identified mitigation measure is *not* recommended. Therefore, this impact would remain significant and unmitigated.	N/A
Gold Coast Drive from Westonhill Drive to Black Mountain Road	Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
Metered Freeway On-Ramps				
Eastbound and Westbound Nobel Drive to Southbound I-805	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Ramp meter impacts can be mitigated by the addition of lanes on I-805, which would reduce delay and congestion on the freeway, thus increase ramp meter discharge rates. Planned improvements on I-805 scheduled to be completed in 2020 will offer partial mitigation. Furthermore, the on-ramp currently includes the maximum number of lanes per Caltrans	N/A

Impact	Phase that Impact Occurs	Impact Type	Comments	Mitigation Phase(s) | Fair Share Percentage (if applicable)
			standards. Therefore, ramp meter impacts remain significant and unmitigated.	
Eastbound Mira Mesa Boulevard to Northbound I-15	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Ramp meter impacts can be mitigated by the addition of lanes on I-15, which would reduce delay and congestion on the freeway, thus increase ramp meter discharge rates. However, the on-ramp currently has three lanes, which is the maximum allowed within the space provided. No additional lanes can be added. Therefore, ramp meter impacts remain significant and unmitigated.	N/A
Eastbound and Westbound Carroll Canyon Road to Southbound I-15	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Ramp meter impacts can be mitigated by the addition of lanes on I-15, which would reduce delay and congestion on the freeway, thus increase ramp meter discharge rates. They can be partially mitigated by providing additional on-ramp storage; however, the addition of a third on-ramp lane was deemed physically infeasible due to proximity of the existing retaining wall fronting multi-family residential homes on Carroll Canyon Road. Therefore, ramp meter impacts remain significant and unmitigated.	N/A
Northbound and Southbound Kearny Villa Road to Southbound SR 163	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Ramp meter impacts can be mitigated by the addition of lanes on SR 163, which increases ramp meter discharge rates and reduces delay. they can be partially mitigated by providing additional on-ramp storage. However, the on-ramp currently includes the maximum number of lanes per Caltrans standards. Therefore, ramp meter impacts remain significant and unmitigated.	N/A
Freeway Segments				
SR 163 South of Kearny Villa Road	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative	Relative to significant unmitigated freeway segment impacts, the freeway analysis identified cumulative freeway impacts on I-15 and SR 163. Congested conditions are due primarily to background growth of the region. SANDAG has identified future improvements to both I-15 and I-805 within the project study area as part of the Regional Transportation Plan. These improvements are expected to improve regional mobility within the study area. No improvements are identified for SR 163. The improvements that are required to mitigate the freeway impacts on I-15 would be beyond what is identified in RTP, which would render any project-specific mitigation inconsistent with regional plans.	N/A
I-15 Mercy Road to Mira Mesa Boulevard	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
I-15 from Miramar Road to Miramar Way	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
I-15 from Miramar Way to SR 163	Phase 2A (Year 2030) Phase 2B (Year 2030) Phase 3A (Year 2035)	Cumulative		

Impact	Phase that Impact Occurs	Impact Type	Comments	Mitigation Phase(s) | Fair Share Percentage (if applicable)
	Phase 3B (Year 2040)			
SR 163 North of Kearny Villa Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
I-15 from Mira Mesa Boulevard to Carroll Canyon Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		
I-15 from Carroll Canyon Road to Miramar Road	Phase 2B (Year 2030) Phase 3A (Year 2035) Phase 3B (Year 2040)	Cumulative		

Table 5.2-51. *Parking Requirements*

Use	Parking Requirements[a]			
Commercial Retail (CC-5-5) [b]	Retail Sales, Commercial Services, and Mixed-Use Development, 1.25 (min) to 5.5 (max) parking spaces per 1,000 sq. ft. Eating and Drinking Establishments,[e] 1.25 to 20.0 parking spaces per 1,000 sq. ft.			
Commercial Retail (CN-1-1) [b]	Retail Sales, Commercial Services, and Mixed-Use Development, 1.0 to 5.5 parking spaces per 1,000 sq. ft. Eating and Drinking Establishments,[e] 1.0 to 20.0 parking spaces per 1,000 sq. ft.			
Visitor Accommodations (hotel)[c]	1.0 space per room			
Professional Office[c]	3.3 – 5.0 spaces per 1,000 sq. ft.			
Medical, Dental & Health Practitioners[c]	4.0 – 6.0 spaces per 1,000 sq. ft.			
Light Industrial/Research & Development[c]	3.30 – 4.0 Spaces per 1,000 sq. ft.			
Residential[d]	1 bedroom: 1.5 parking spaces/unit	2 bedrooms: 2.0 parking spaces/unit	3–4 bedrooms: 2.25 parking spaces/unit	Common area: For developments less than 200 units: 20 percent of total off-street parking spaces required. For developments of greater than 200 units:15 percent of total off-street parking spaces required

Footnotes:
[a] City of San Diego Municipal Code Ch. 4, Art. 2, Div. 5
[b] City of San Diego Municipal Code Table 142-05D
[c] City of San Diego Municipal Code Table 142-05F
[d] City of San Diego Municipal Code Table 142-05C
[e] City of San Diego Municipal Code Table 142-05E

Table 5.2-52. *CMP Arterial Analyses*

Arterial Segment	Period	Direction	Without Project		With Project		Speed Decrease	Sig?
			Speed[a]	LOS[b]	Speed	LOS		
Existing								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	18.3	D	18.3	D	0.0	No
		WB	13.1	**E**	13.1	**E**	0.0	No
	PM	EB	21.8	D	21.5	D	0.3	No
		WB	21.7	D	21.7	D	0.0	No
Miramar Road I-805 to I-15	AM	EB	35.0	B	34.8	B	0.2	No
		WB	20.2	D	20.1	D	0.1	No
	PM	EB	29.4	B	29.3	B	0.1	No
		WB	29.1	B	29.0	B	0.1	No
Phase 1								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	18.1	D	18.1	D	0.0	No
		WB	10.3	**F**	10.3	**F**	0.0	No
	PM	EB	20.6	D	20.5	D	0.1	No
		WB	21.1	D	21.1	D	0.0	No
Miramar Road I-805 to I-15	AM	EB	33.8	B	33.7	B	0.1	No
		WB	19.4	D	19.2	D	0.2	No
	PM	EB	28.7	B	28.6	B	0.1	No

Arterial Segment	Period	Direction	Without Project		With Project		Speed Decrease	Sig?
			Speed[a]	LOS[b]	Speed	LOS		
		WB	29.0	B	28.5	B	0.5	No
Phase 2A								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	16.8	**E**	16.4	**E**	0.4	No
		WB	8.0	**F**	8.0	**F**	0.0	No
	PM	EB	18.2	D	17.6	D	0.6	No
		WB	20.1	D	19.9	D	0.2	No
Miramar Road I-805 to I-15	AM	EB	32.5	B	32.3	B	0.2	No
		WB	20.1	D	19.9	D	0.2	No
	PM	EB	29.3	B	28.8	B	0.5	No
		WB	29.0	B	28.0	C	1.0	No
Phase 2B								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	16.8	**E**	16.3	**E**	0.5	No
		WB	8.0	**F**	7.8	**F**	0.2	No
	PM	EB	18.2	D	17.6	D	0.6	No
		WB	20.1	D	19.3	D	0.8	No
Miramar Road I-805 to I-15	AM	EB	32.5	B	32.0	B	0.5	No
		WB	20.1	D	19.6	D	0.5	No
	PM	EB	29.3	B	28.7	B	0.6	No
		WB	29.0	B	27.9	C	1.1	No
Phase 3A								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	16.7	**E**	16.0	**E**	0.7	No
		WB	8.0	**F**	7.7	**F**	0.3	No
	PM	EB	18.0	D	17.1	D	0.9	No
		WB	20.0	D	18.9	D	1.1	No
Miramar Road I-805 to I-15	AM	EB	31.4	B	30.9	B	0.5	No
		WB	17.5	D	17.0	D	0.5	No
	PM	EB	29.0	B	28.0	C	1.0	No
		WB	25.2	C	24.2	C	1.0	No
Phase 3B								
La Jolla Village Drive Towne Center Dr. to I-805	AM	EB	16.7	**E**	15.9	**E**	0.8	No
		WB	8.0	**F**	7.7	**F**	0.3	No
	PM	EB	18.0	D	17.0	D	1.0	No
		WB	20.0	D	18.9	D	1.1	No
Miramar Road I-805 to I-15	AM	EB	31.4	B	30.8	B	0.6	No
		WB	17.5	D	17.0	D	0.5	No
	PM	EB	29.0	B	27.9	C	1.1	No
		WB	25.2	C	24.0	C	1.2	No

Footnotes:

a. Speed in miles per hour.

b. Level of Service.

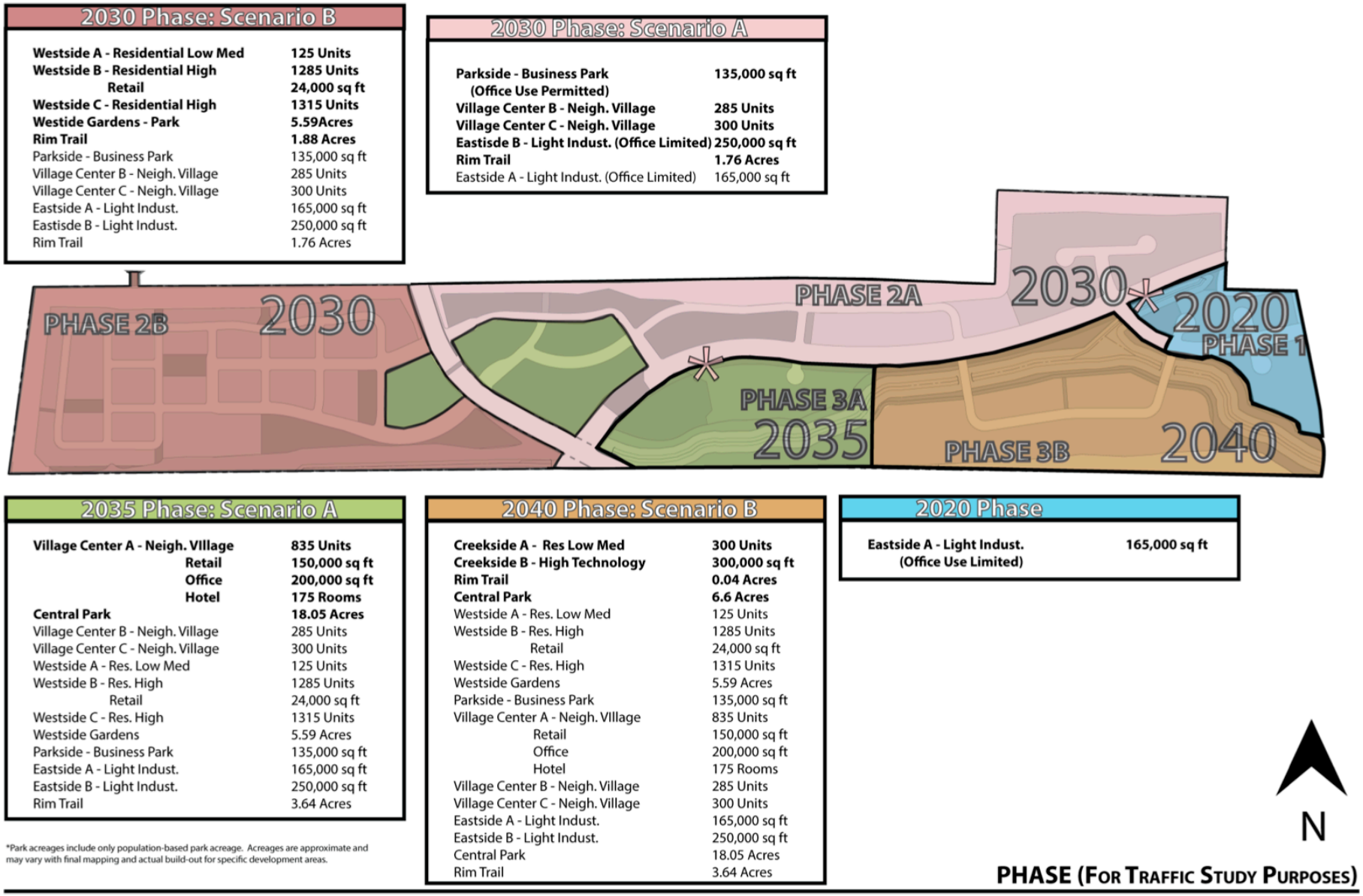


Figure 5.2-1. ***Project Phasing for Traffic Analysis Purposes***

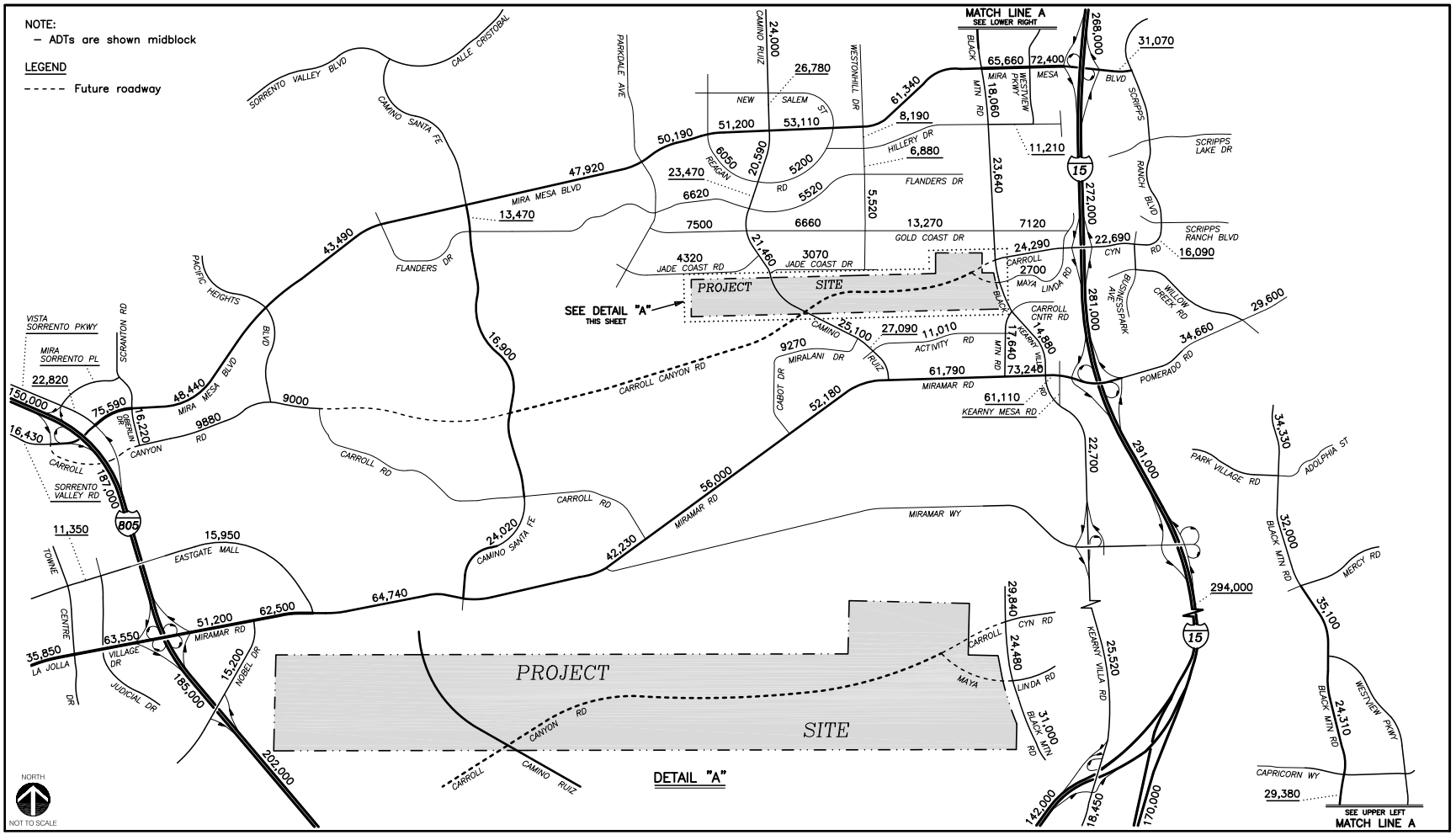


Figure 5.2-2. ***Existing Daily Traffic Volumes***

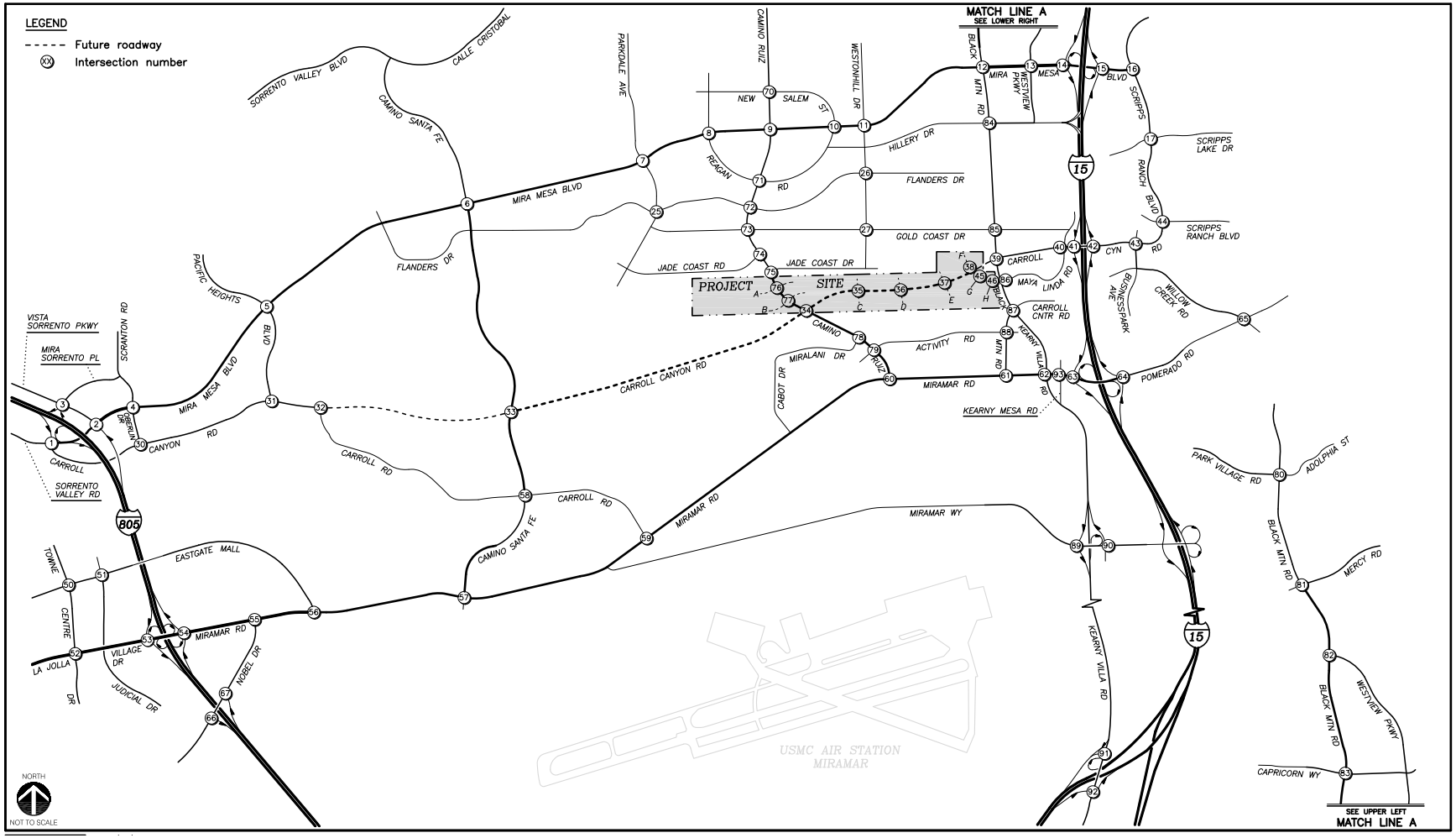


Figure 5.2-3. ***Phase 1 (Year 2020) Study Area Intersections***

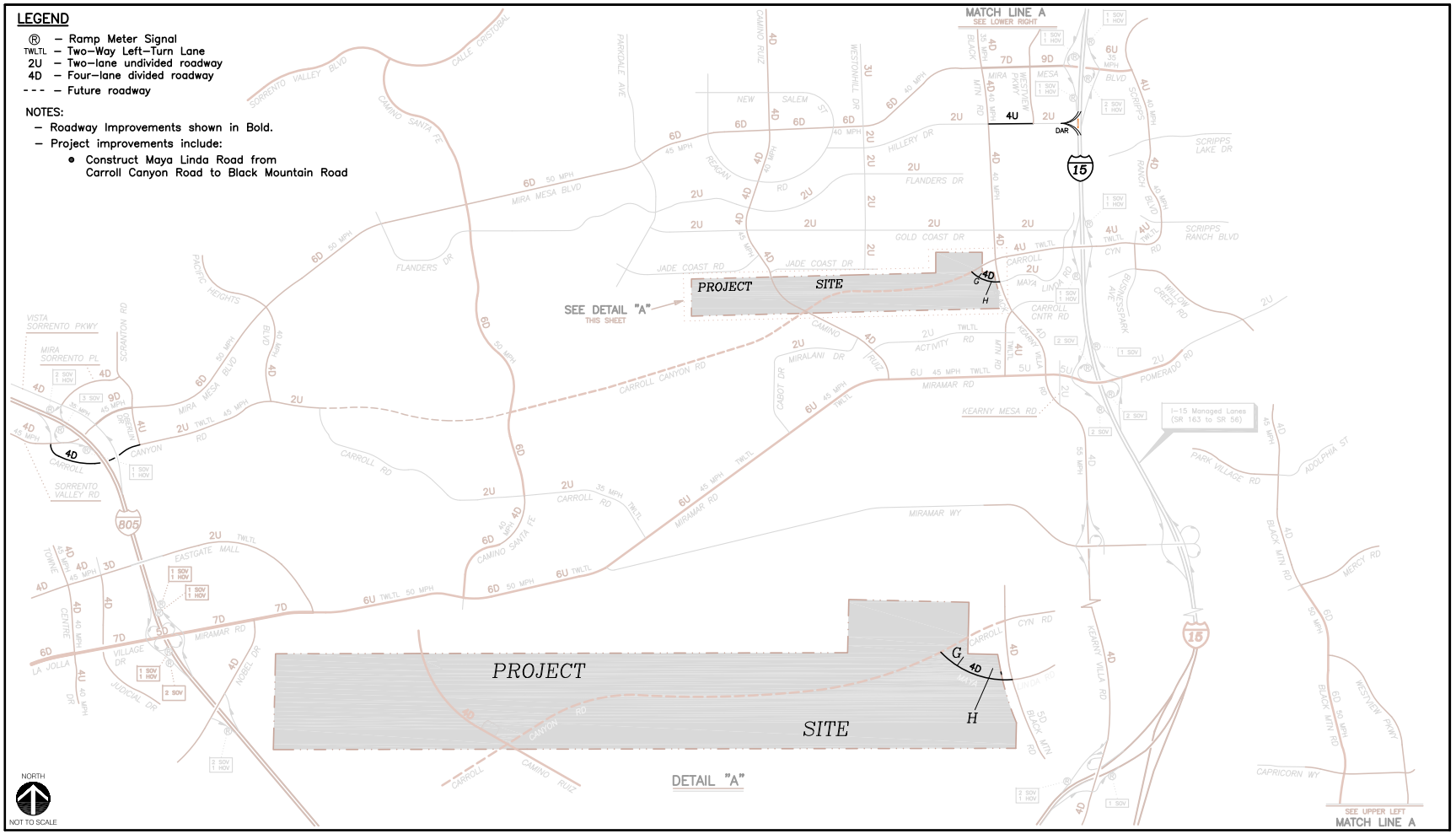


Figure 5.2-4. ***Phase 1 (Year 2020) Conditions Diagram (Roadway Segments and Ramp Meters)***

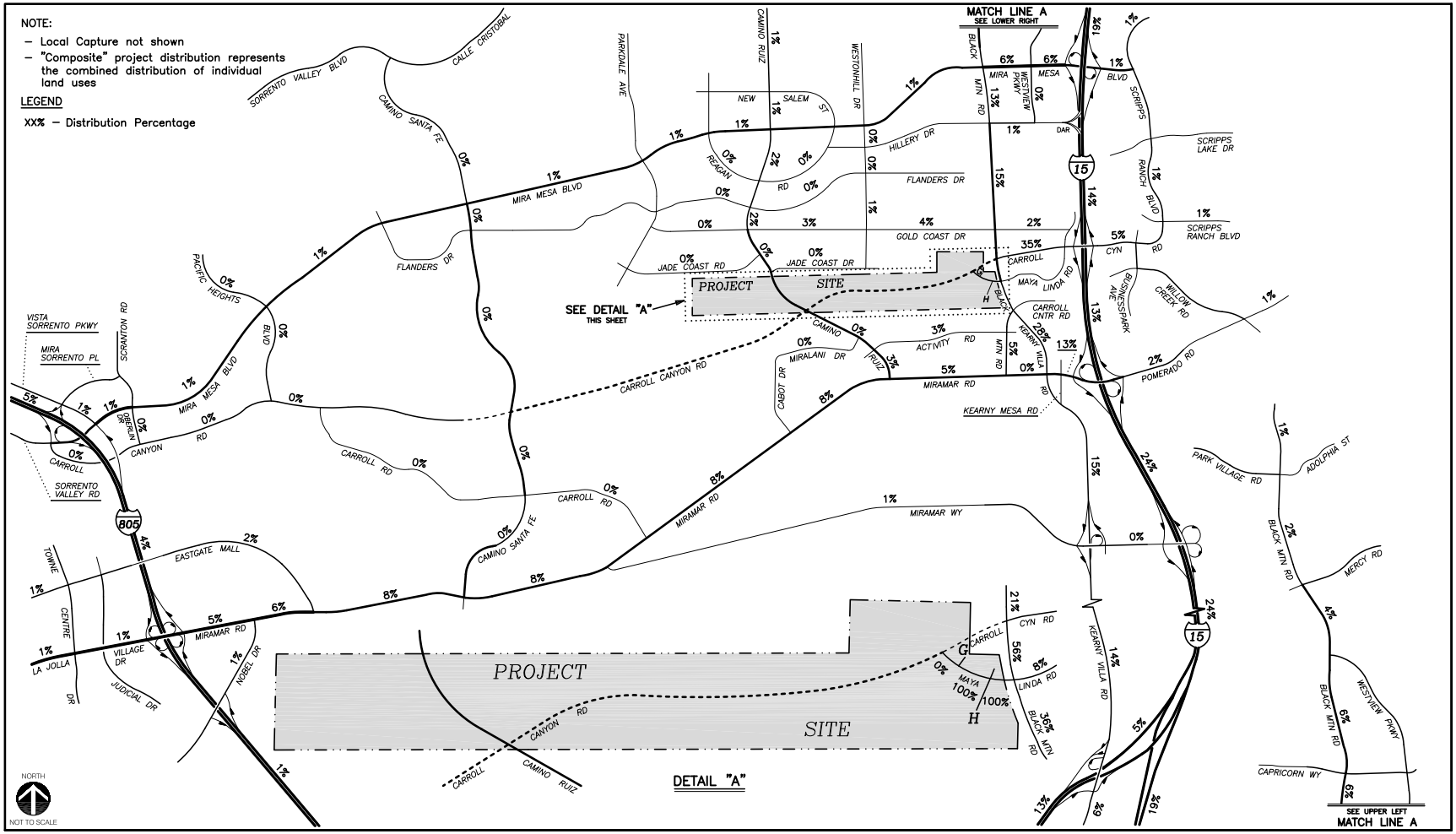


Figure 5.2-5. ***Phase 1 (Year 2020) Project Traffic Distribution (Composite)***

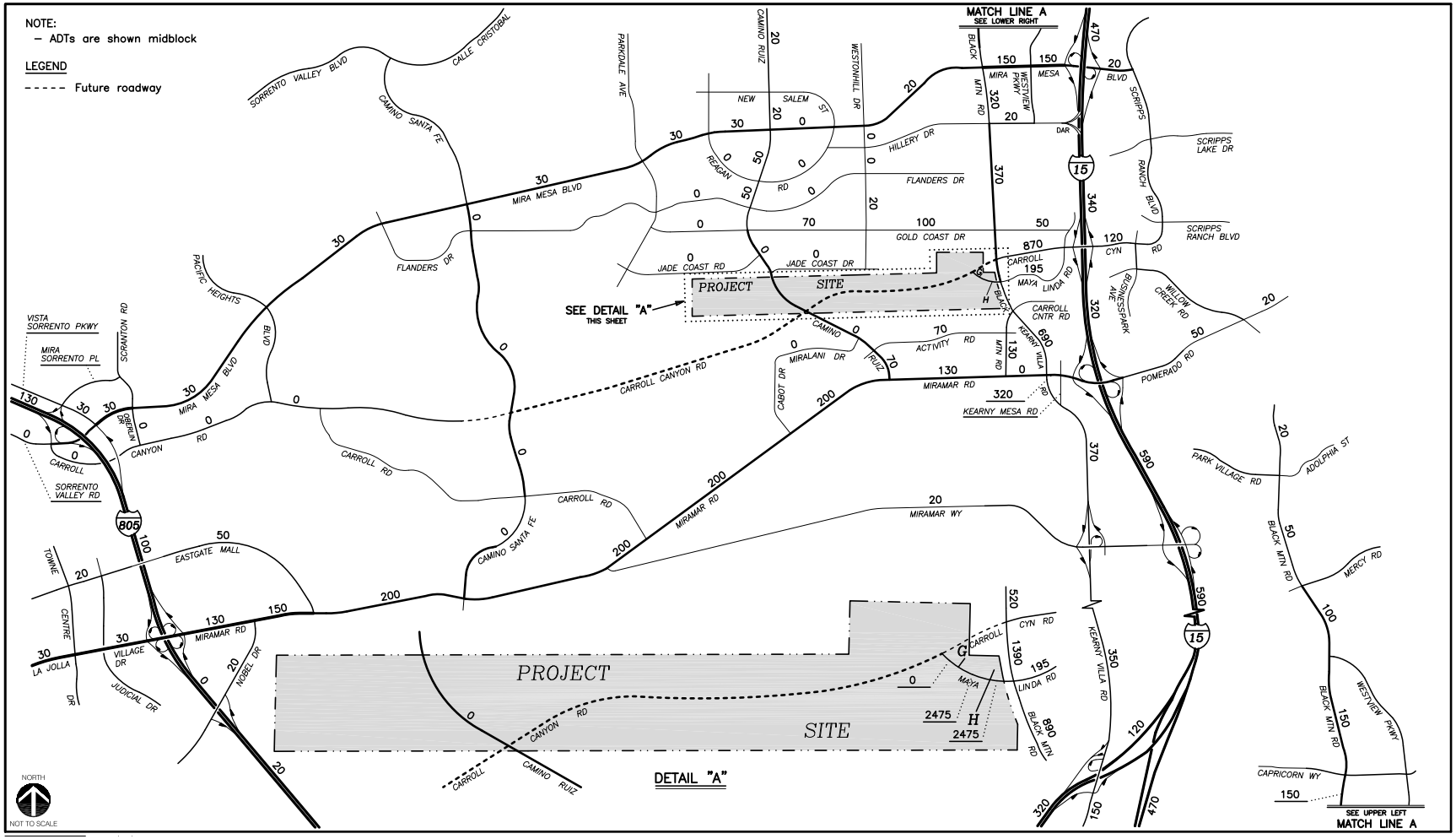


Figure 5.2-6. ***Phase 1 (Year 2020) Cumulative Project Trips (Daily Volumes)***

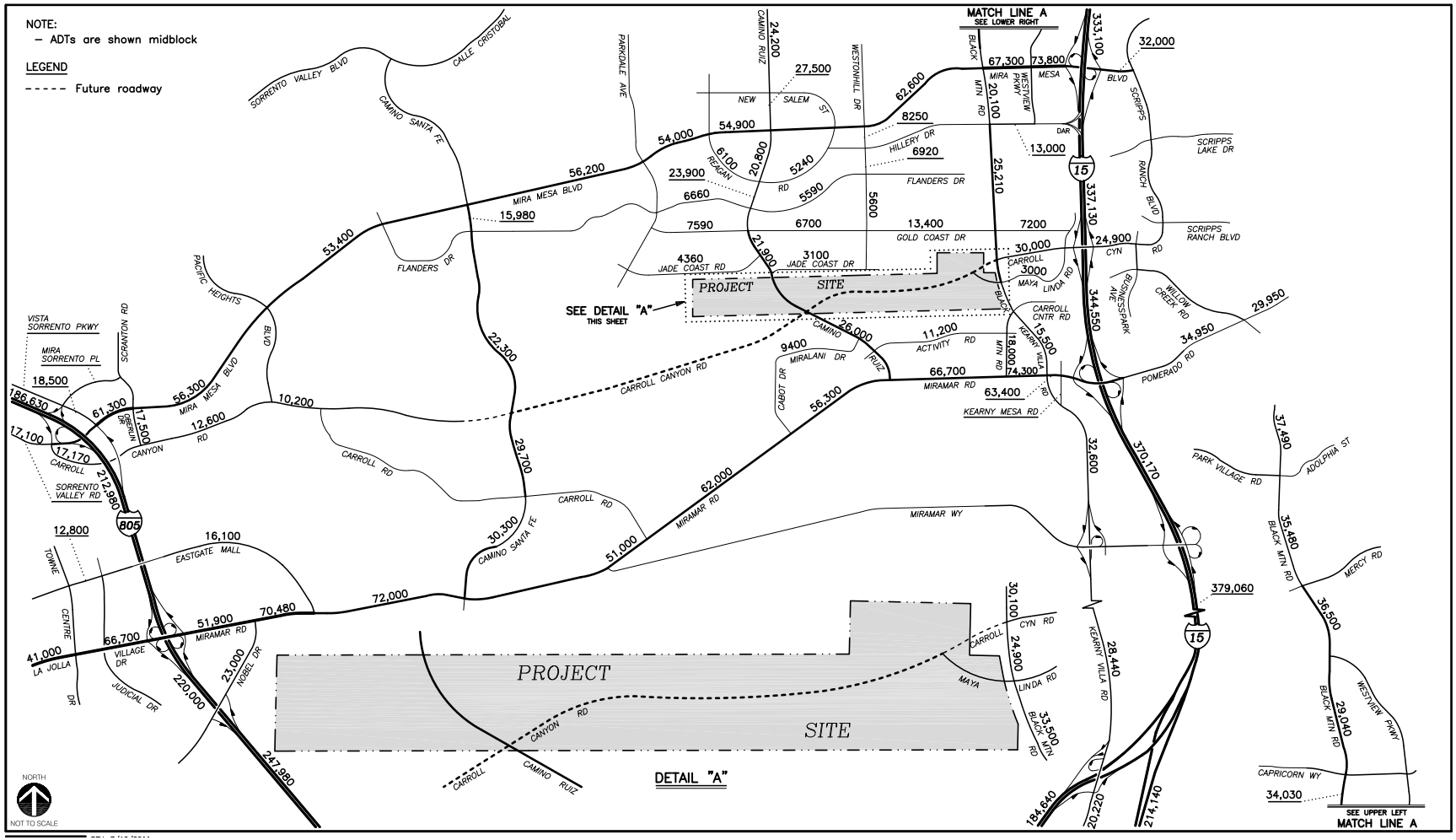


Figure 5.2-7. ***Phase 1 (Year 2020) without Project Traffic Volumes (Daily Volumes)***

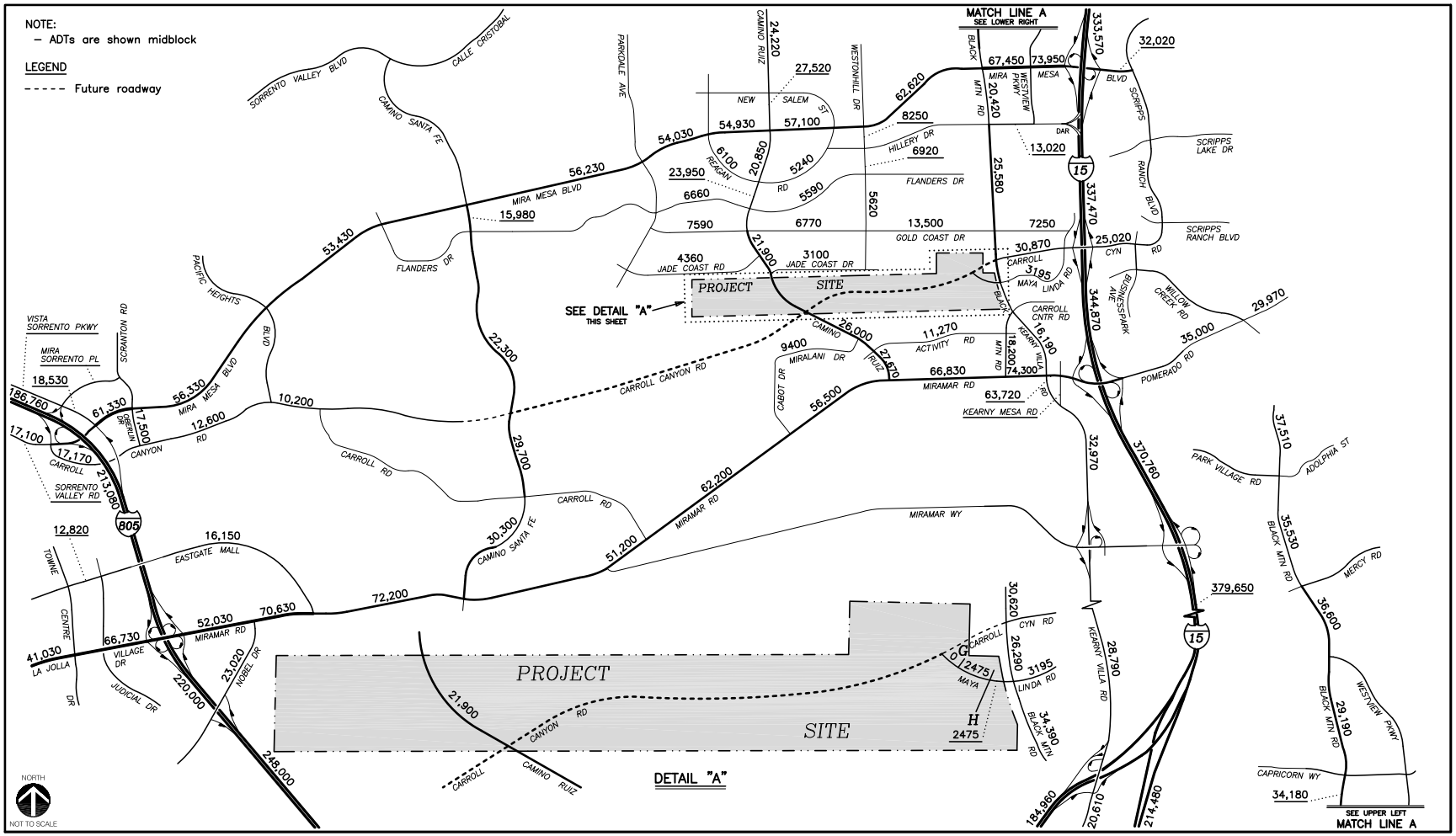


Figure 5.2-8. ***Phase 1 with Project Traffic Volumes (Daily Volumes)***

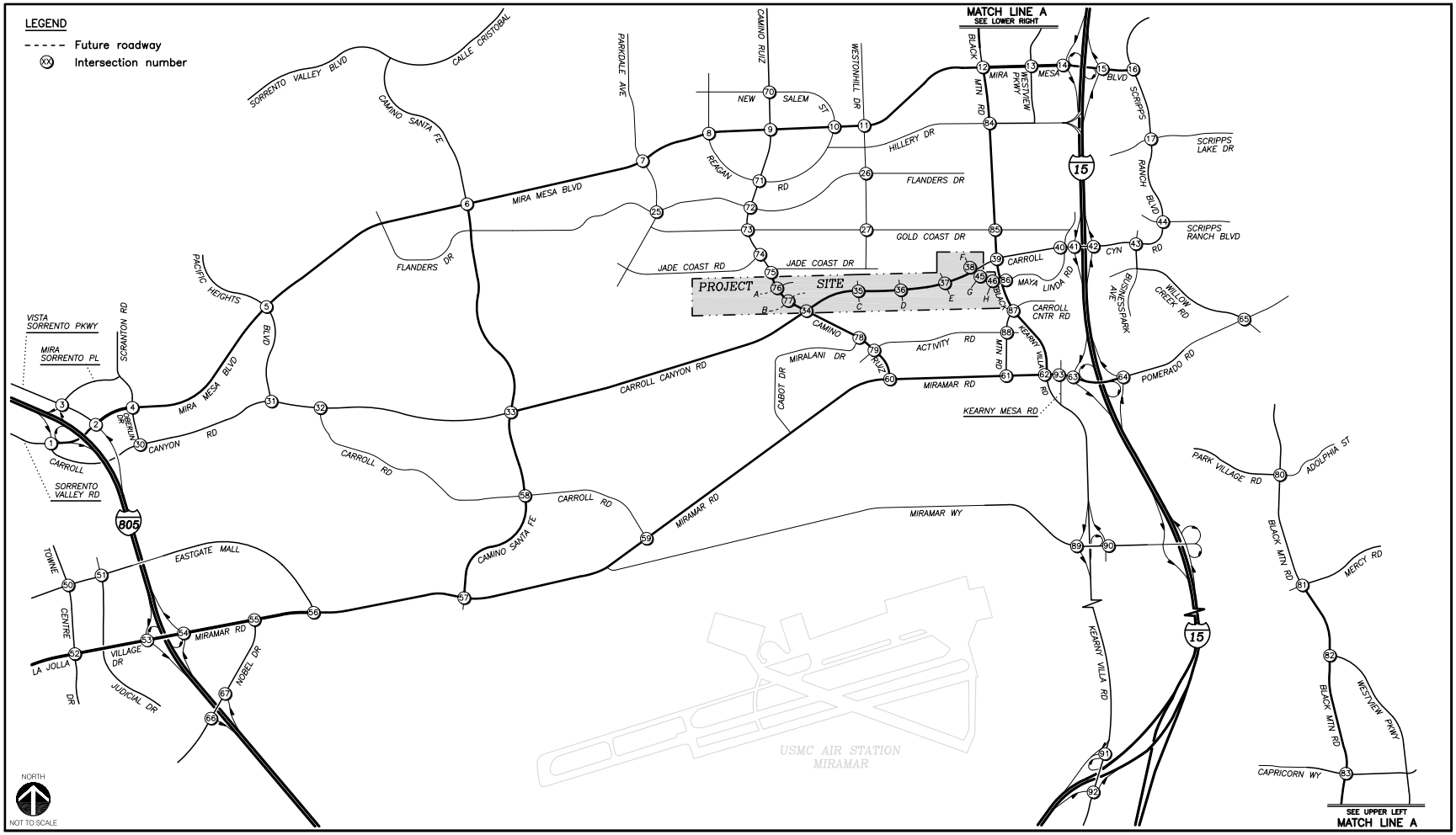


Figure 5.2-9. *Phase 2A (Year 2030) Study Area Intersections*

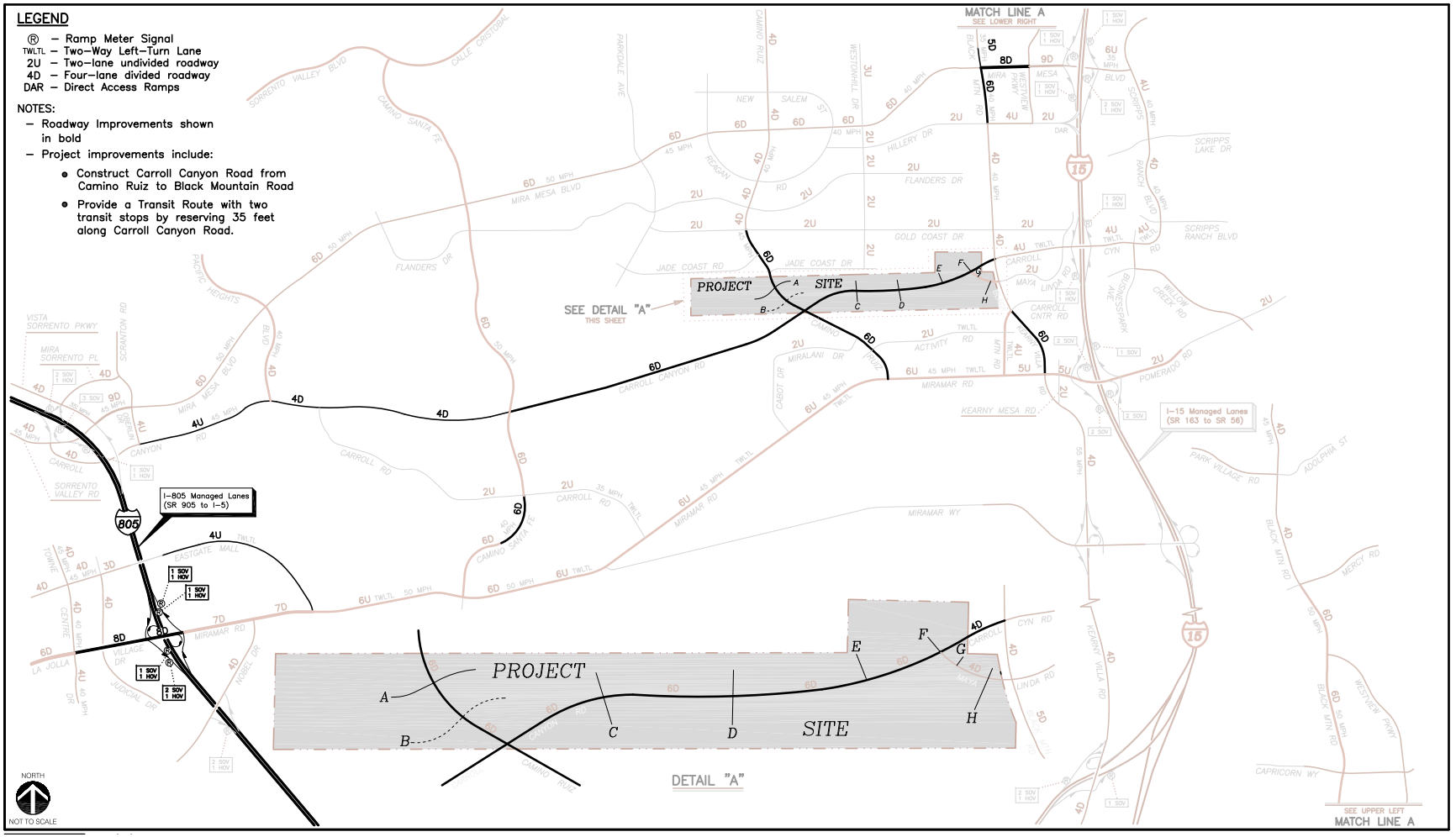


Figure 5.2-10. ***Phase 2A (Year 2030) Conditions Diagram (Roadway Segments and Ramp Meters)***

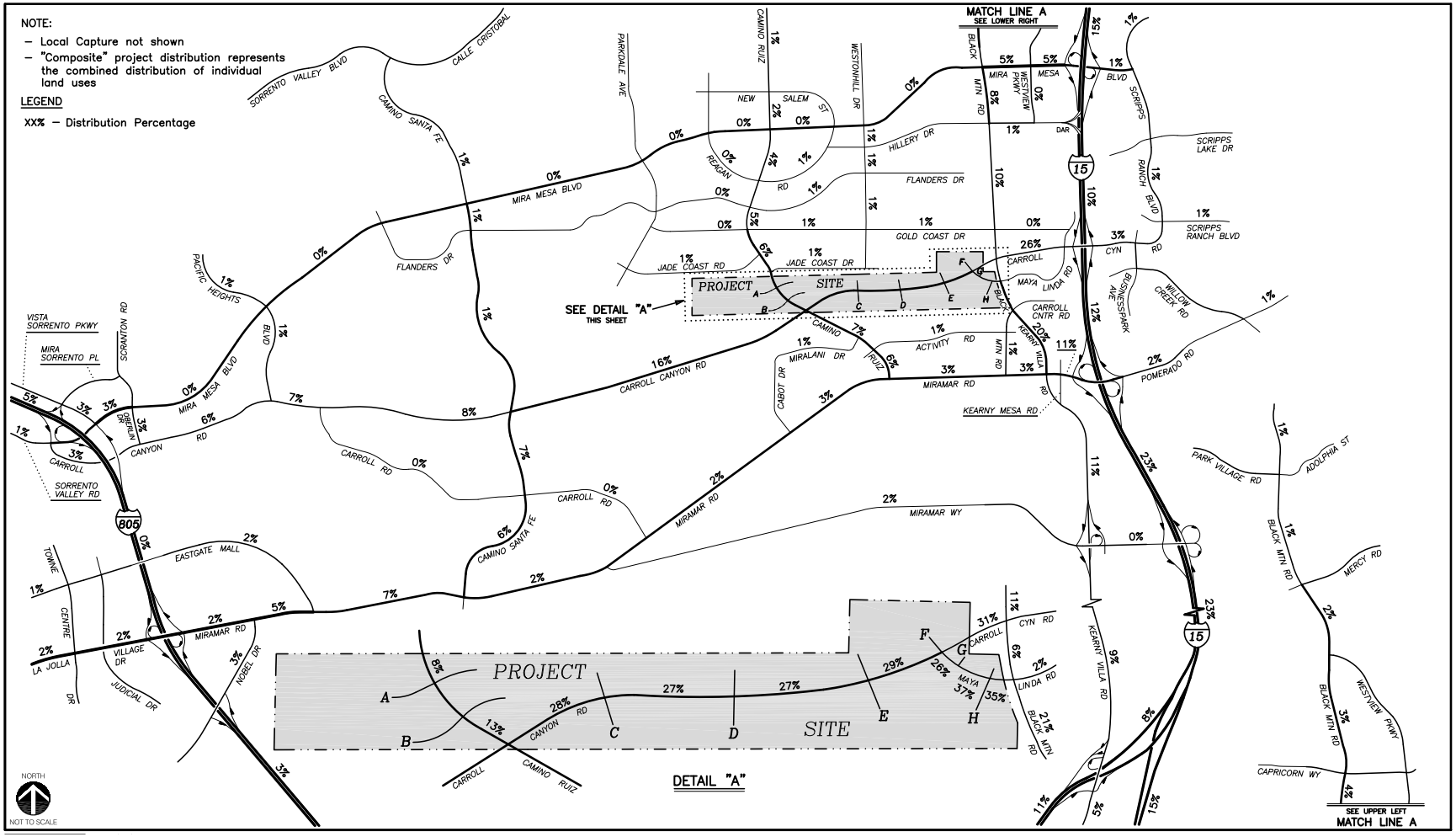


Figure 5.2-11. ***Phase 2A (Year 2030) Project Traffic Distribution (Composite)***

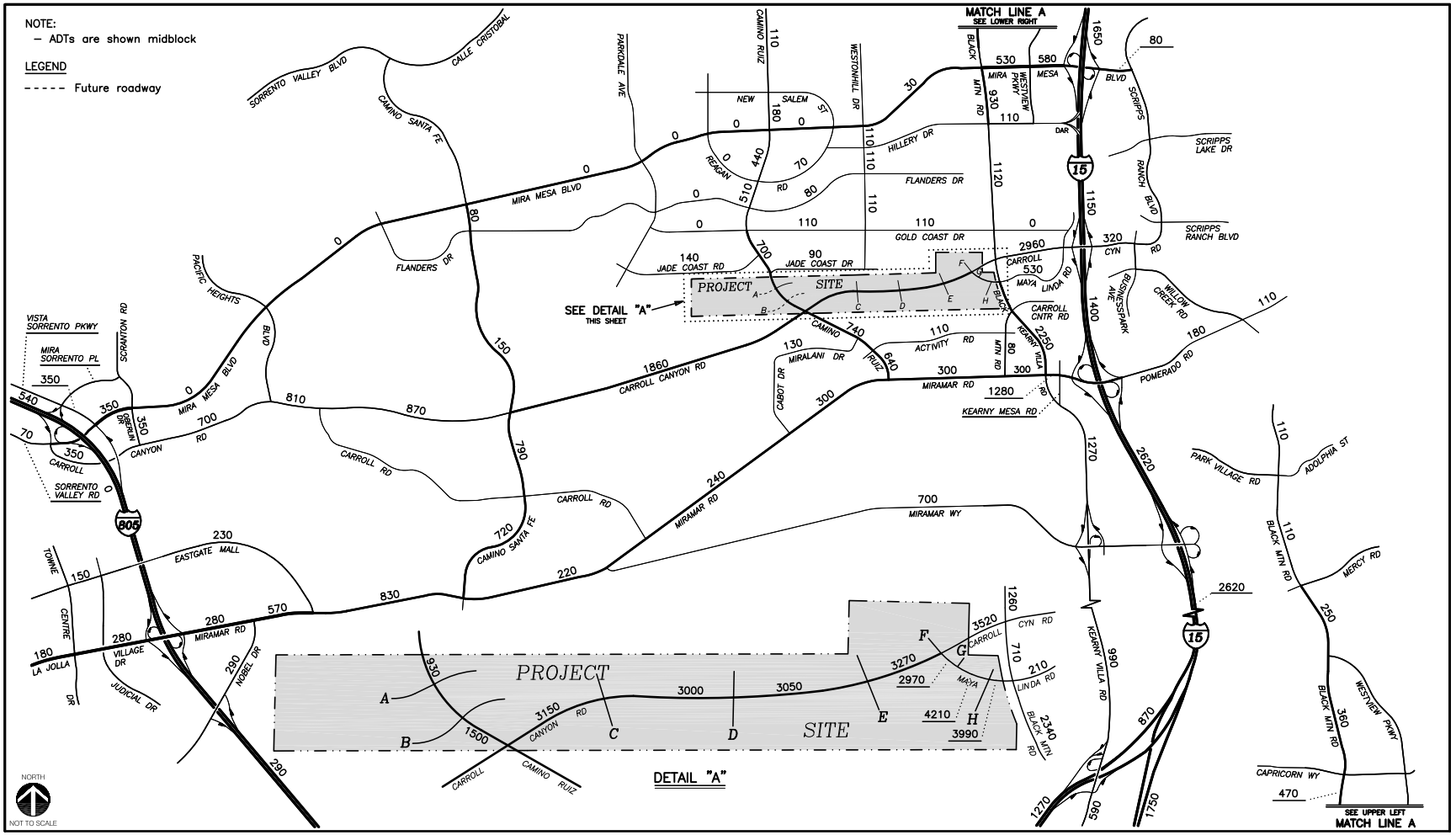


Figure 5.2-12. ***Phase 2A Cumulative Project Trips (Daily Volumes)***

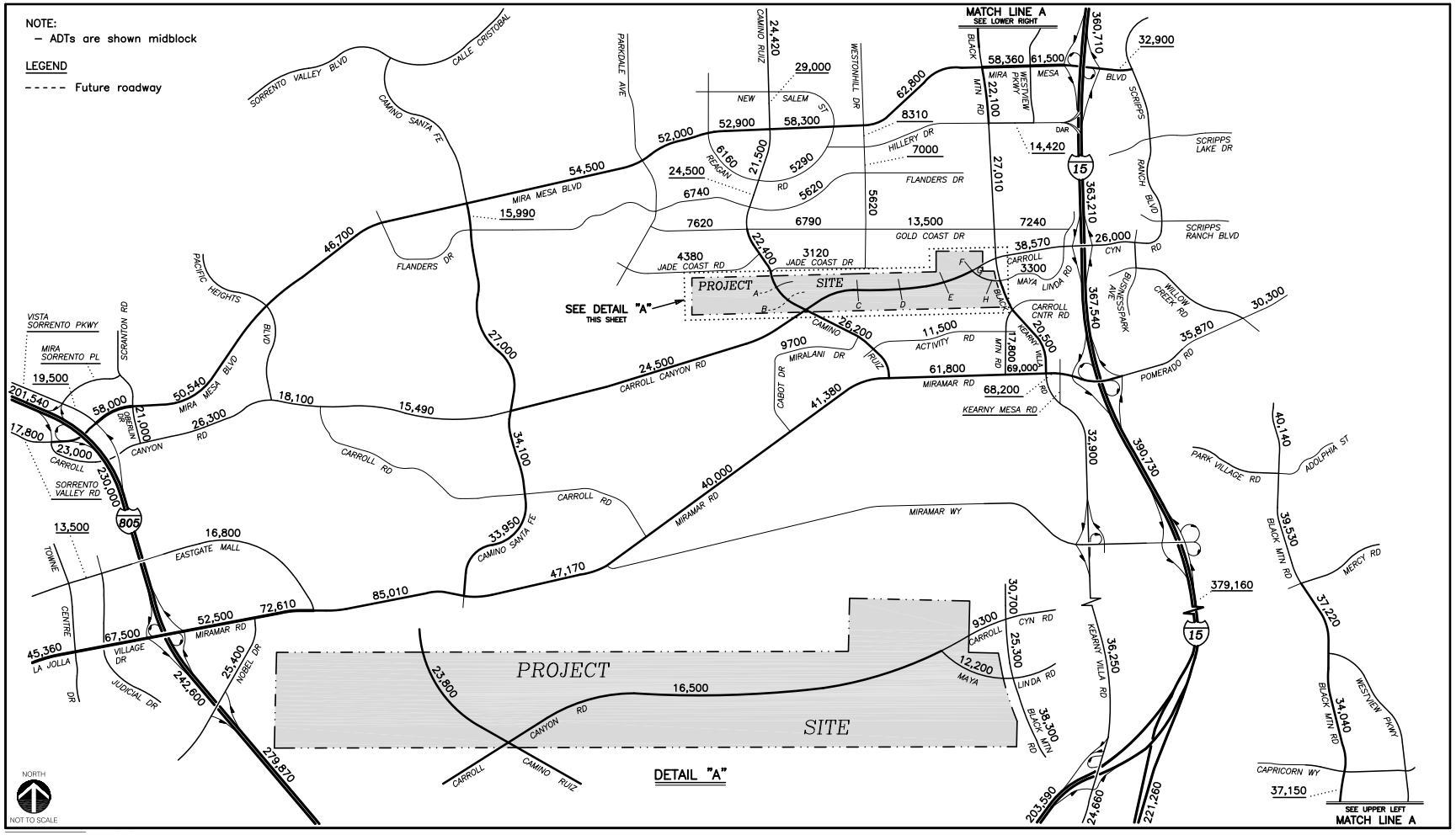


Figure 5.2-13. ***Phase 2A (Year 2030) without Project Traffic Volumes (Daily Volumes)***

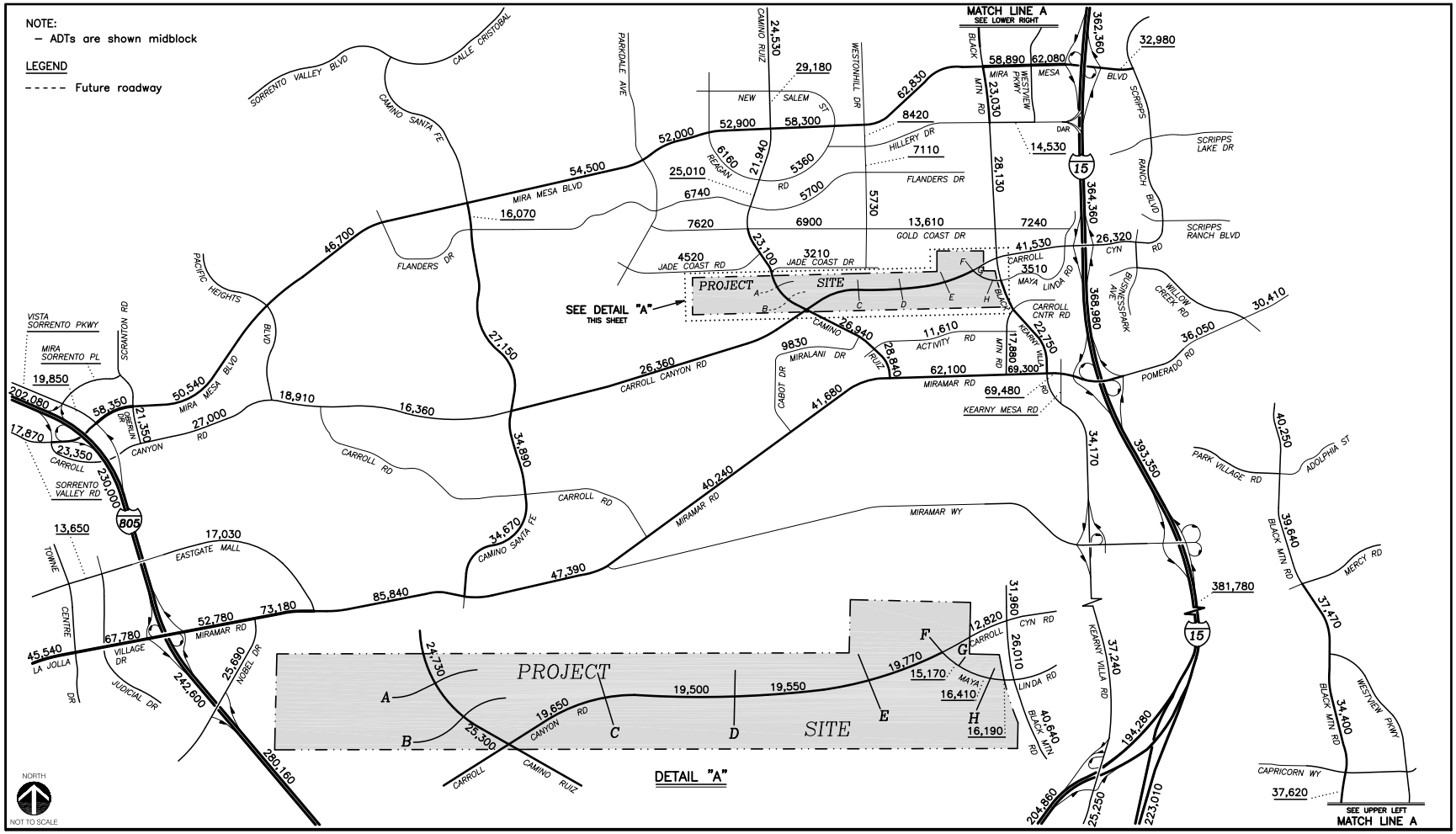


Figure 5.2-14. ***Phase 2A with Project Traffic Volumes (Daily Volumes)***

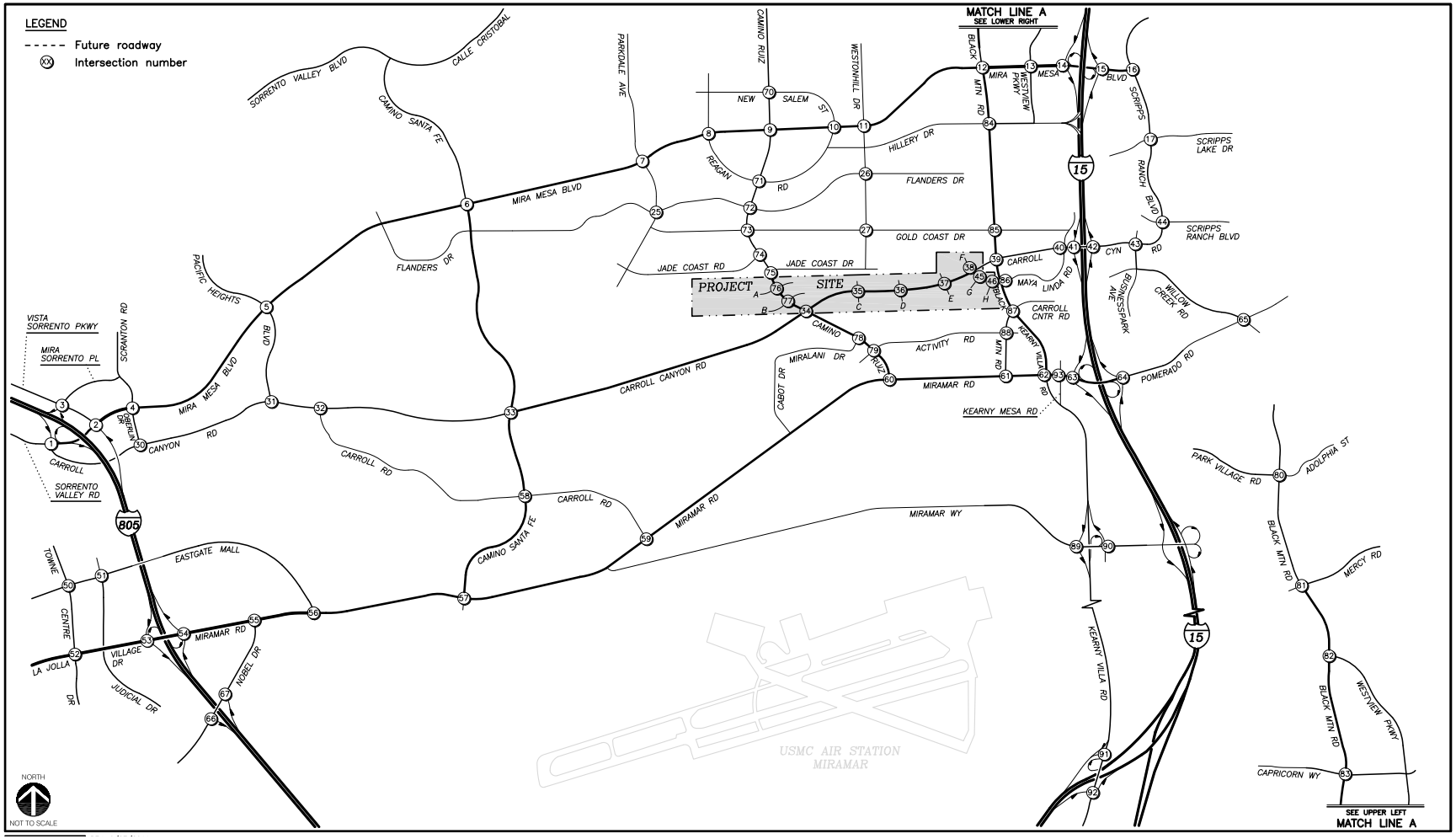


Figure 5.2-15. ***Phase 2B (Year 2030) Study Area Intersections***

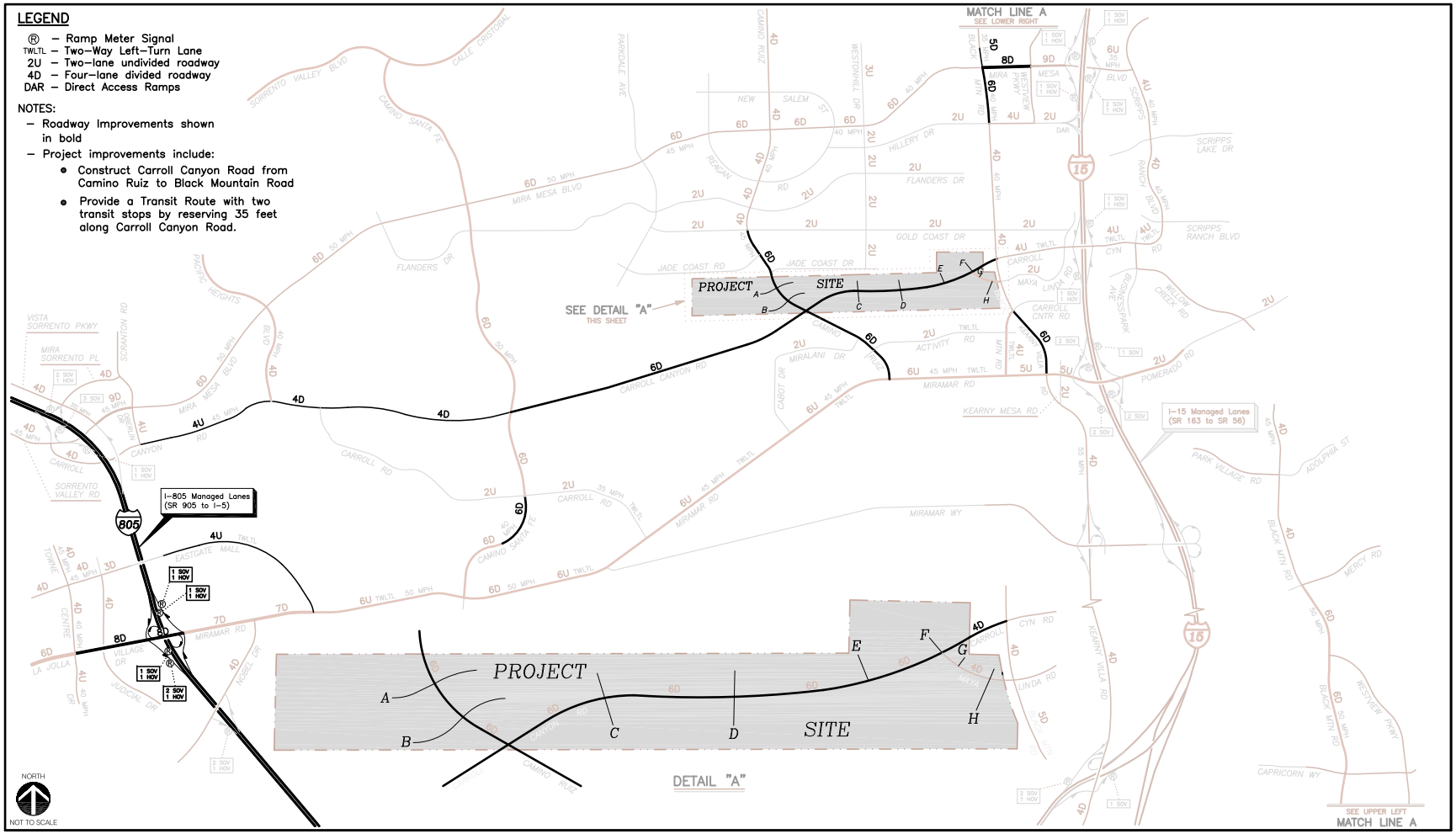


Figure 5.2-16. ***Phase 2B Conditions Diagram (Roadway Segments and Ramp Meters)***

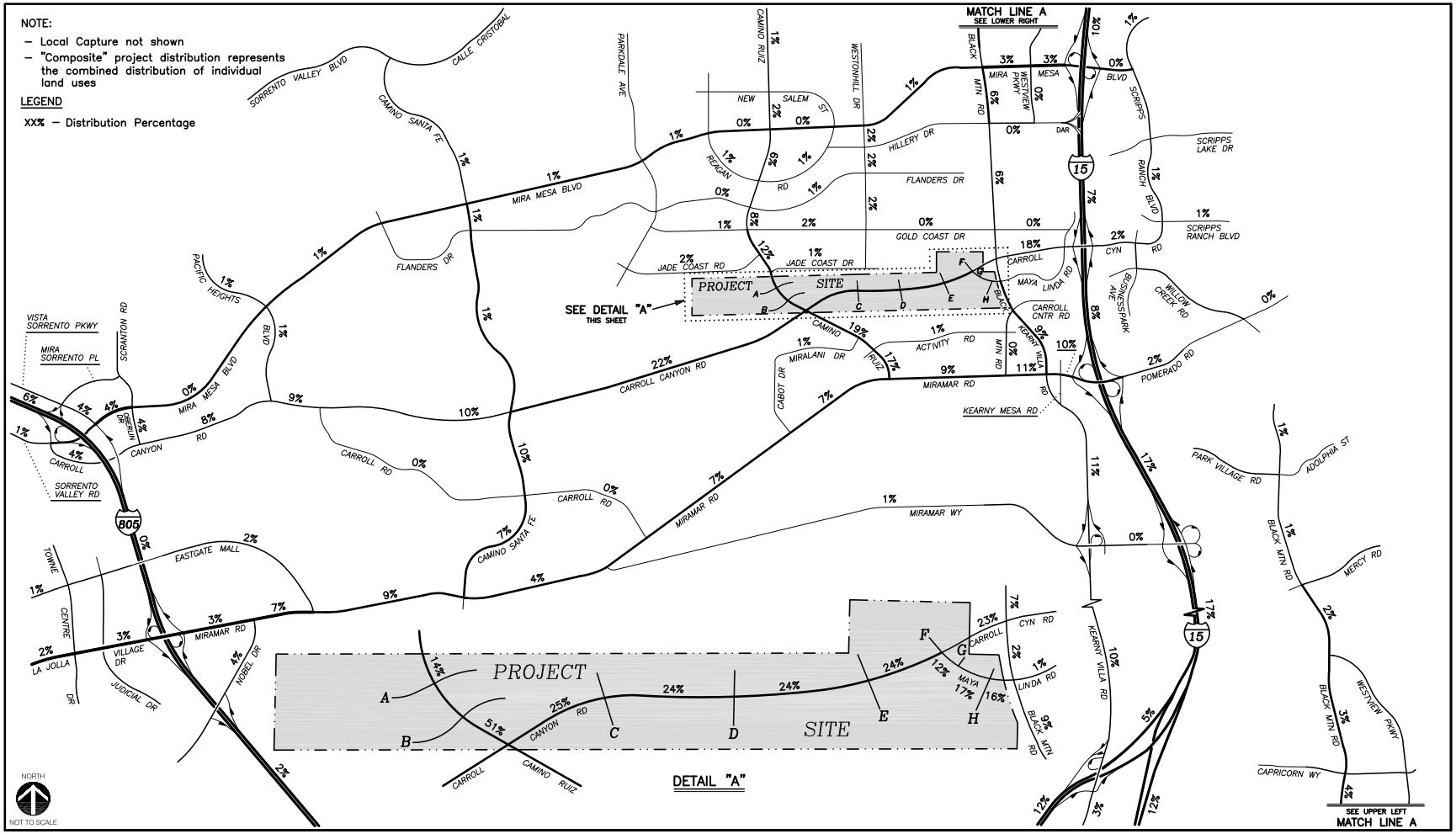


Figure 5.2-17. ***Phase 2B (Year 2030) Project Traffic Distribution (Composite)***

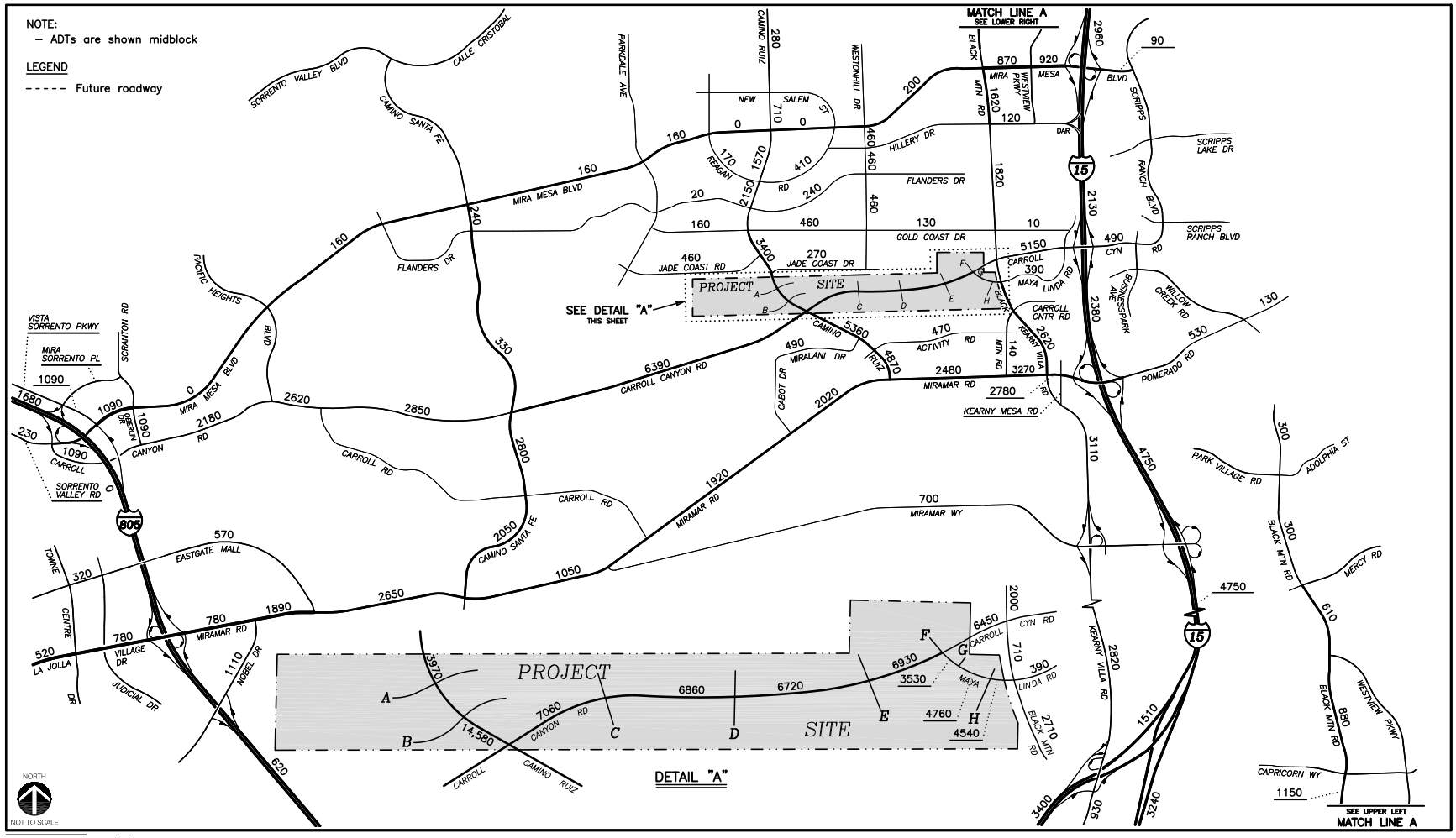


Figure 5.2-18. ***Phase 2B (Year 2030) Cumulative Project Trips (Daily Volumes)***

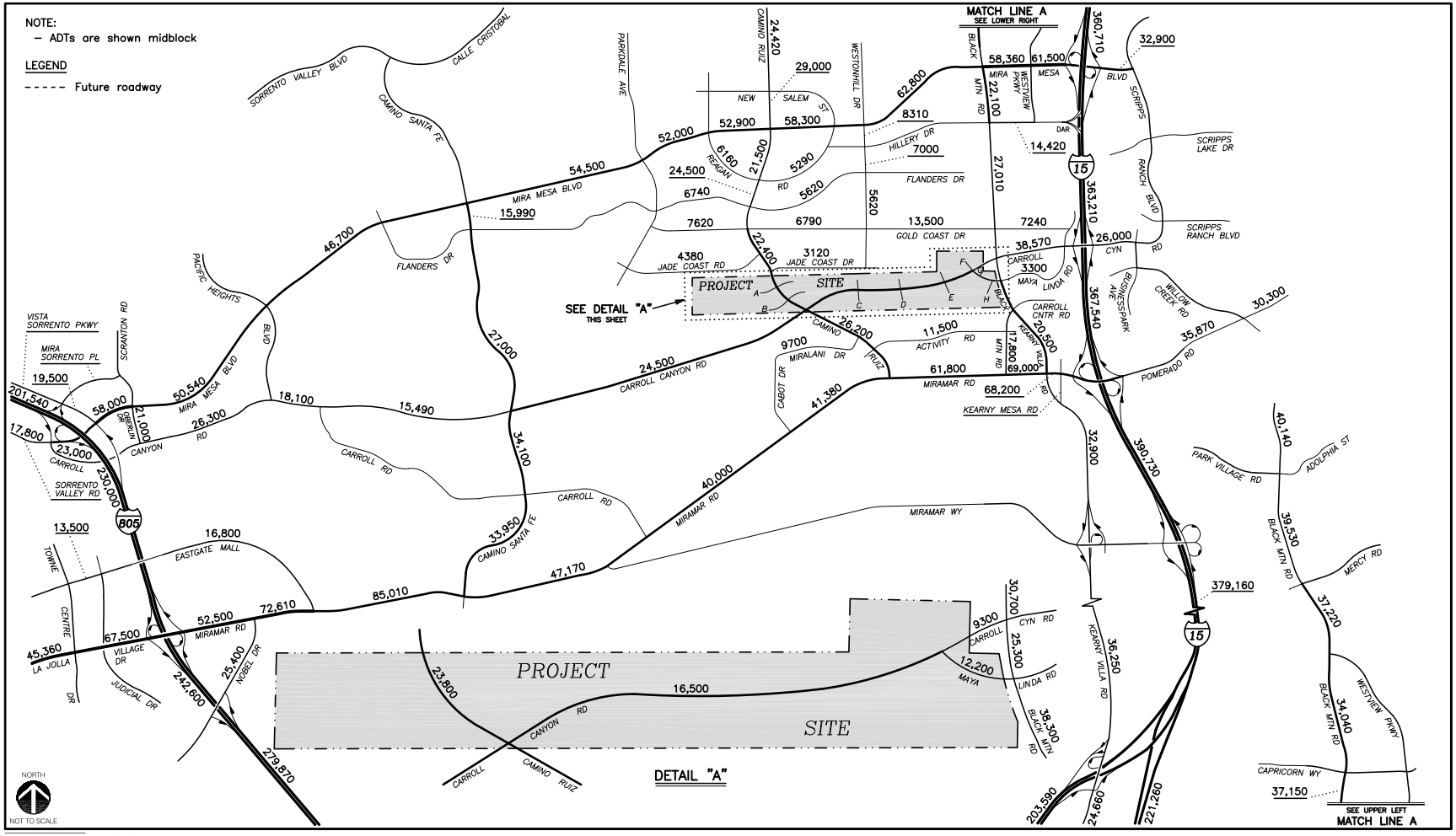


Figure 5.2-19. ***Phase 2B (Year 2030) without Project Traffic Volumes (Daily Volumes)***

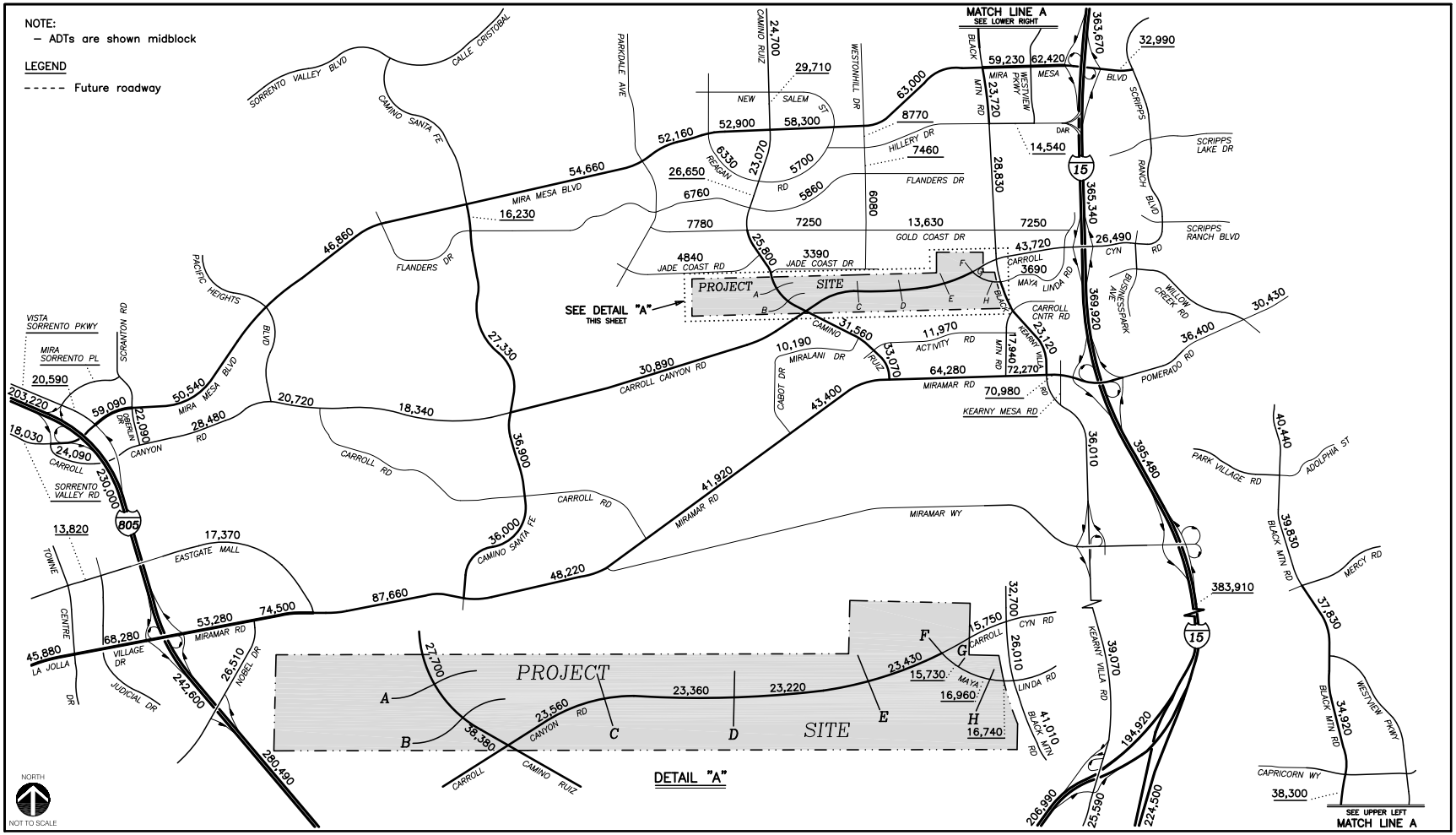


Figure 5.2-20. ***Phase 2B with Project Traffic Volumes (Daily Volumes)***

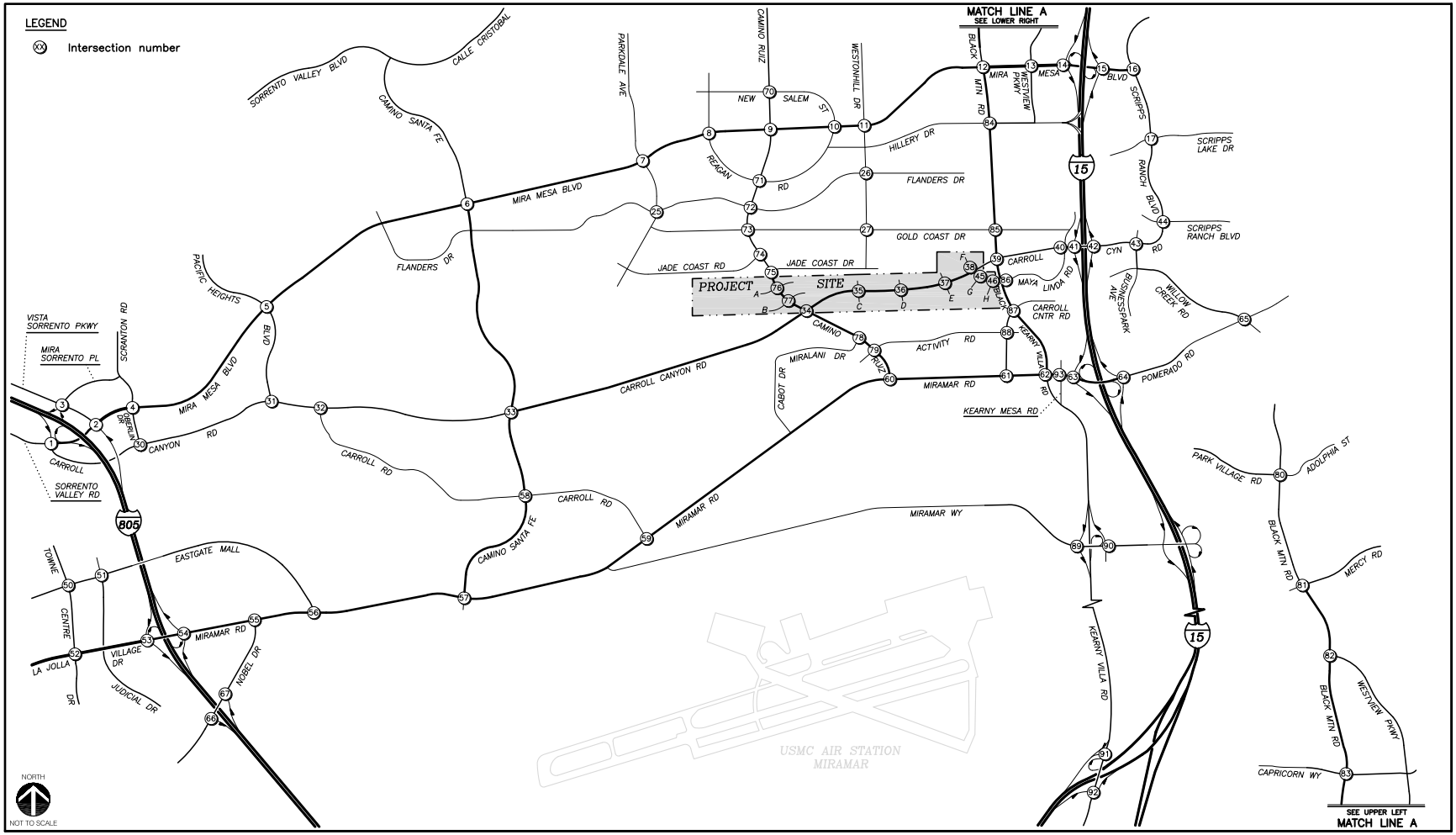


Figure 5.2-21. ***Phase 3A (Year 2035) Study Area Intersections***

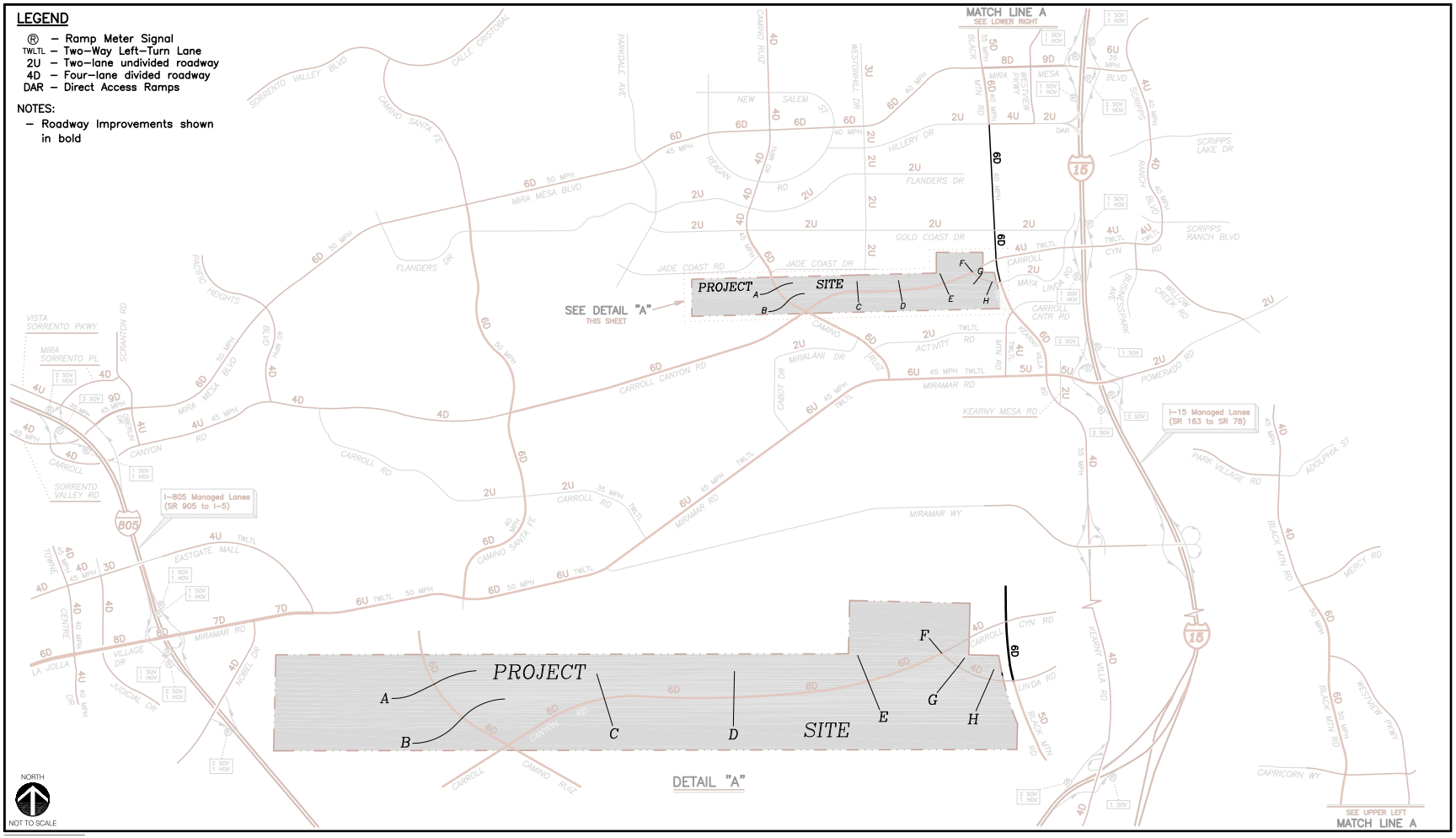


Figure 5.2-22. ***Phase 3A Conditions Diagram (Roadway Segments and Ramp Meters)***

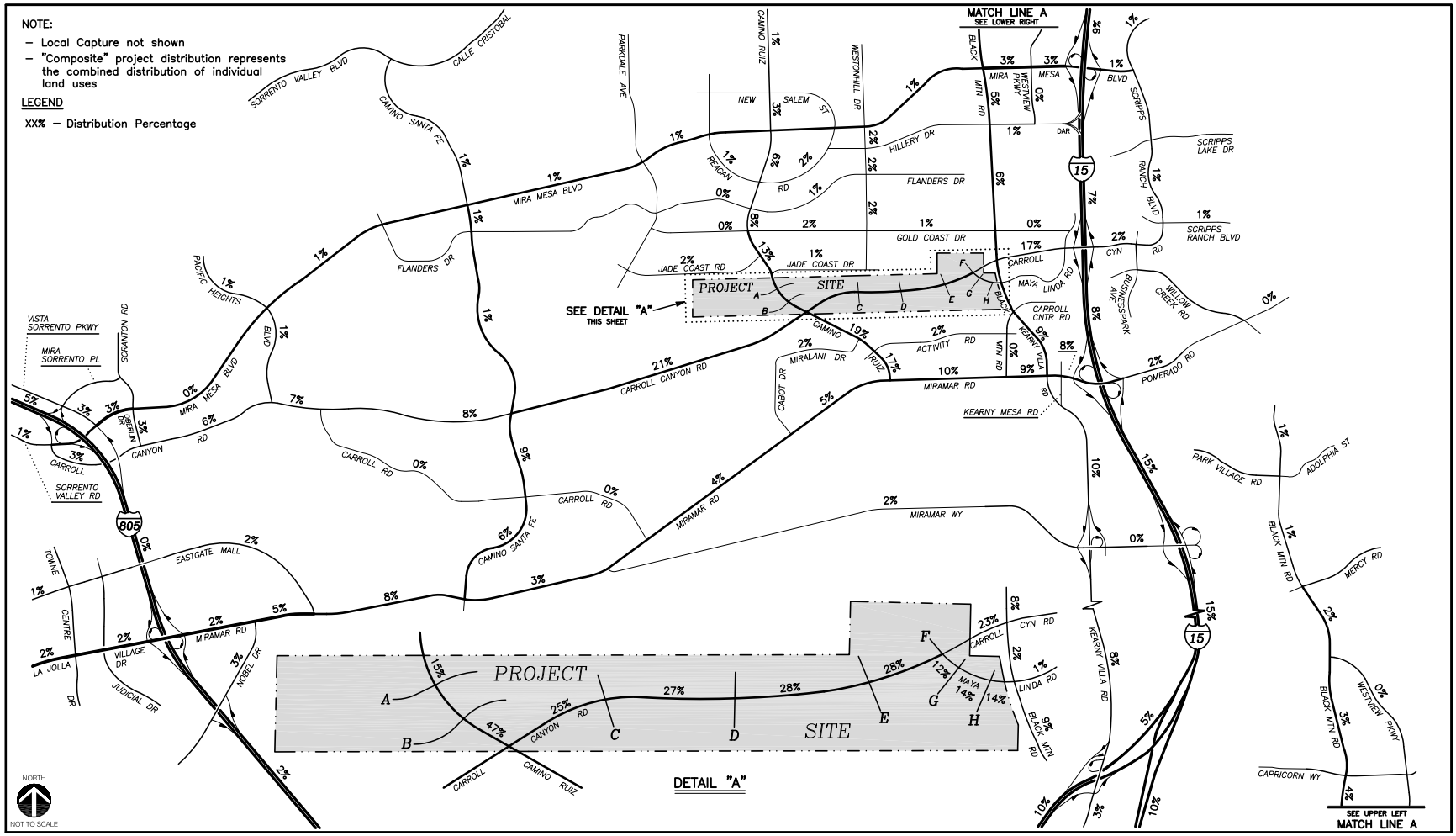


Figure 5.2-23. ***Phase 3A (Year 2035) Project Traffic Distribution (Composite)***

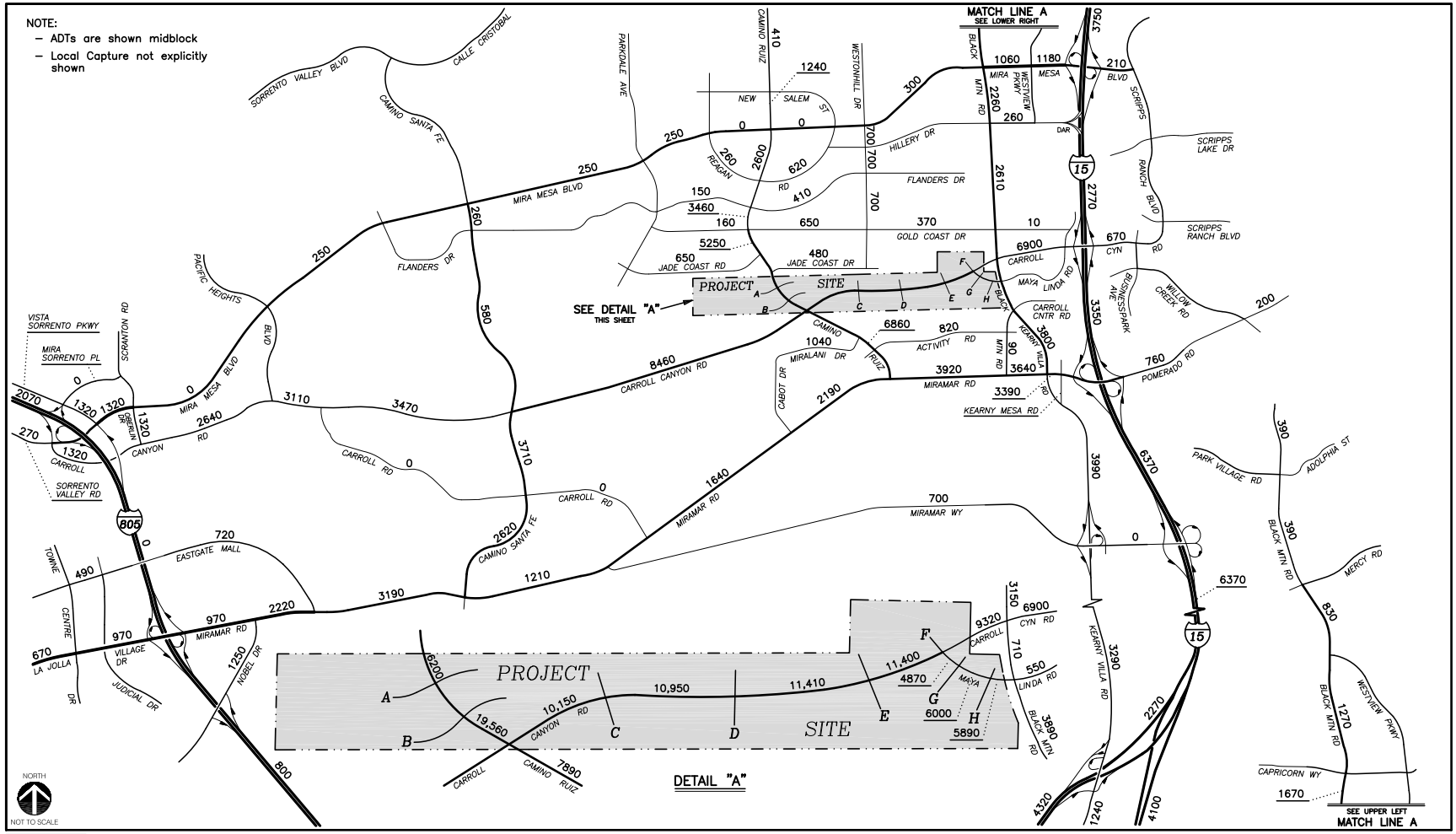


Figure 5.2-24. ***Phase 3A (Year 2035) Cumulative Project Trips (Daily Volumes)***

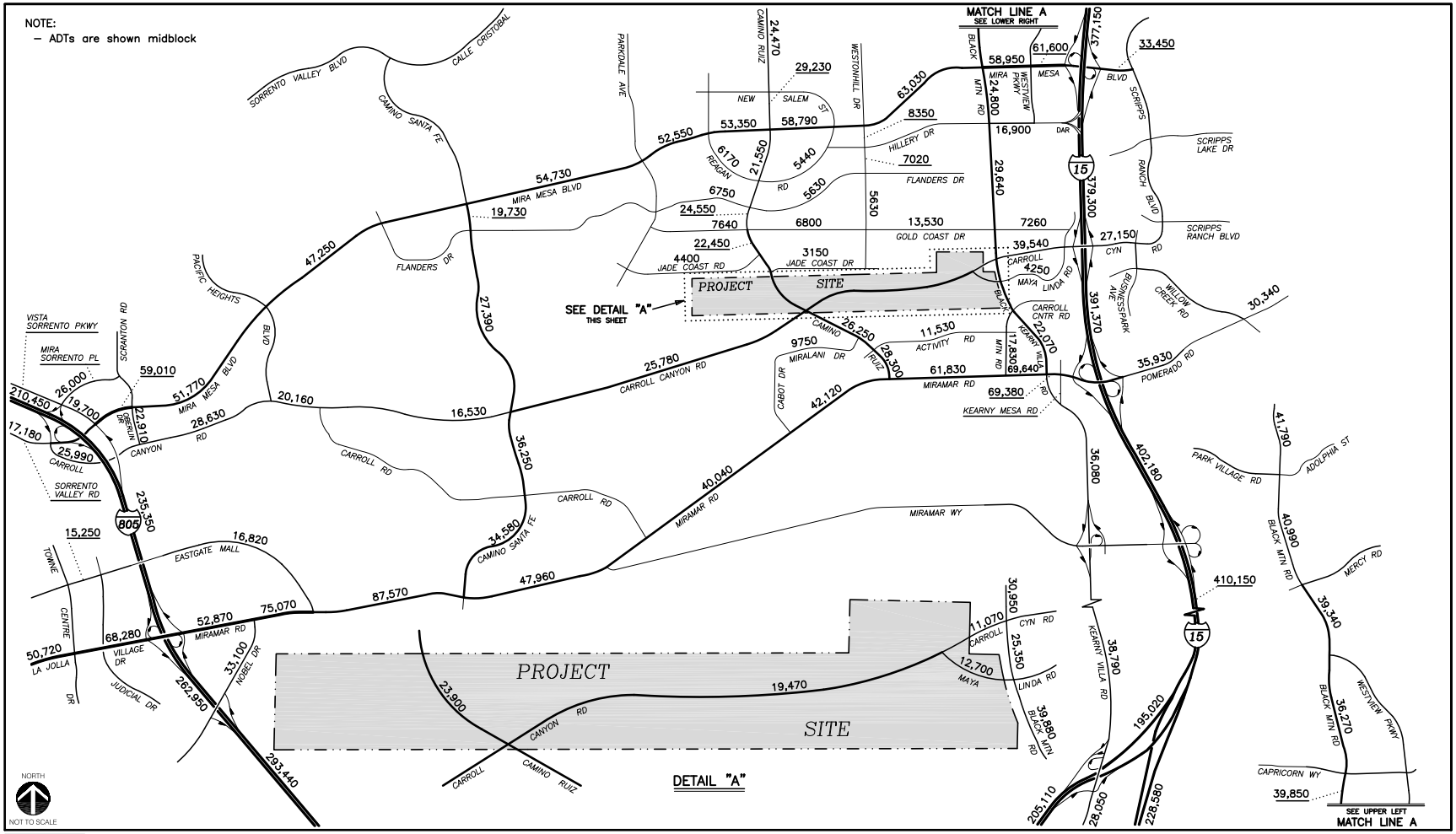


Figure 5.2-25. ***Phase 3A (Year 2035) without Project Traffic Volumes (Daily Volumes)***

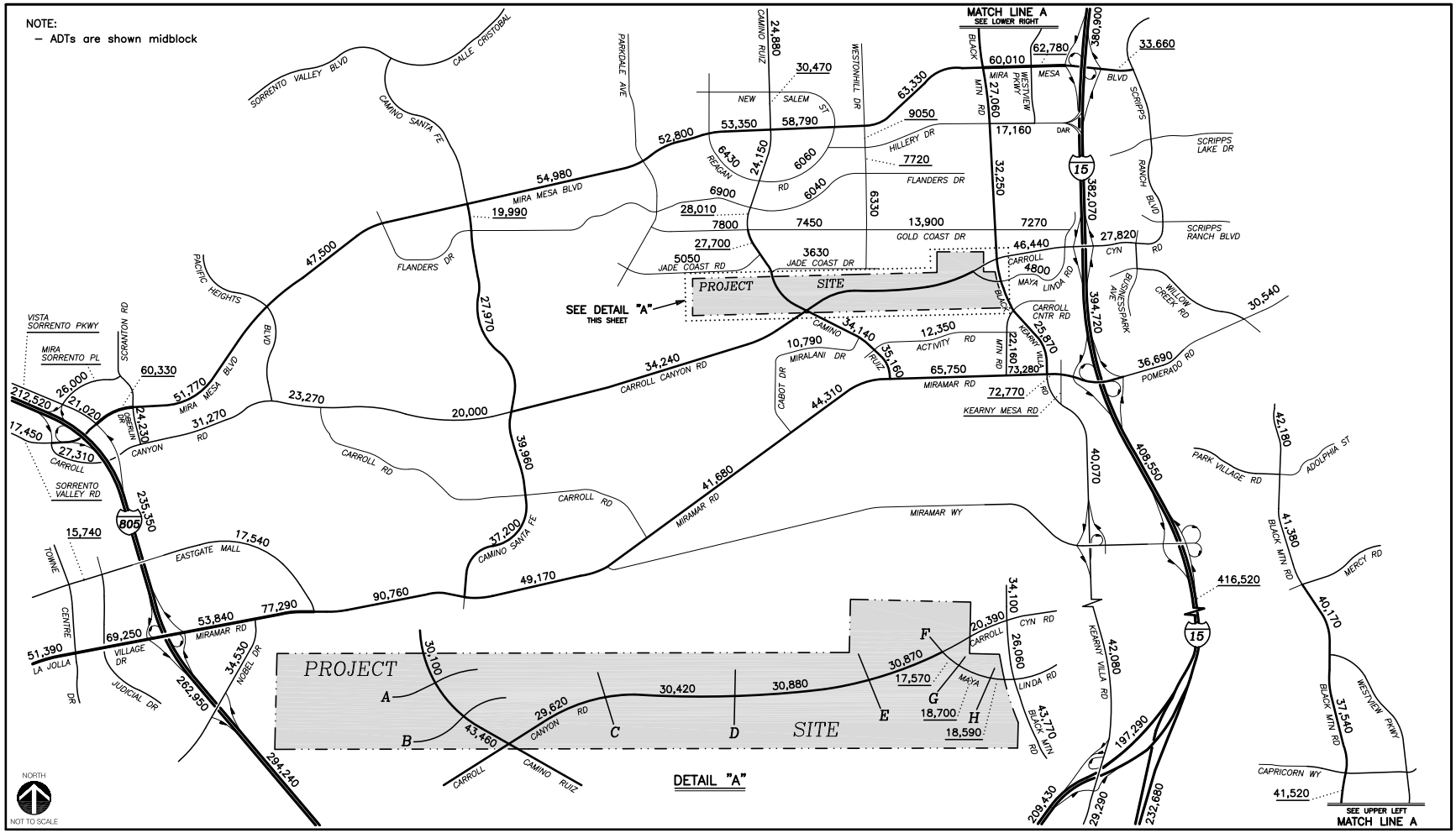


Figure 5.2-26. ***Phase 3A with Project Traffic Volumes (Daily Volumes)***

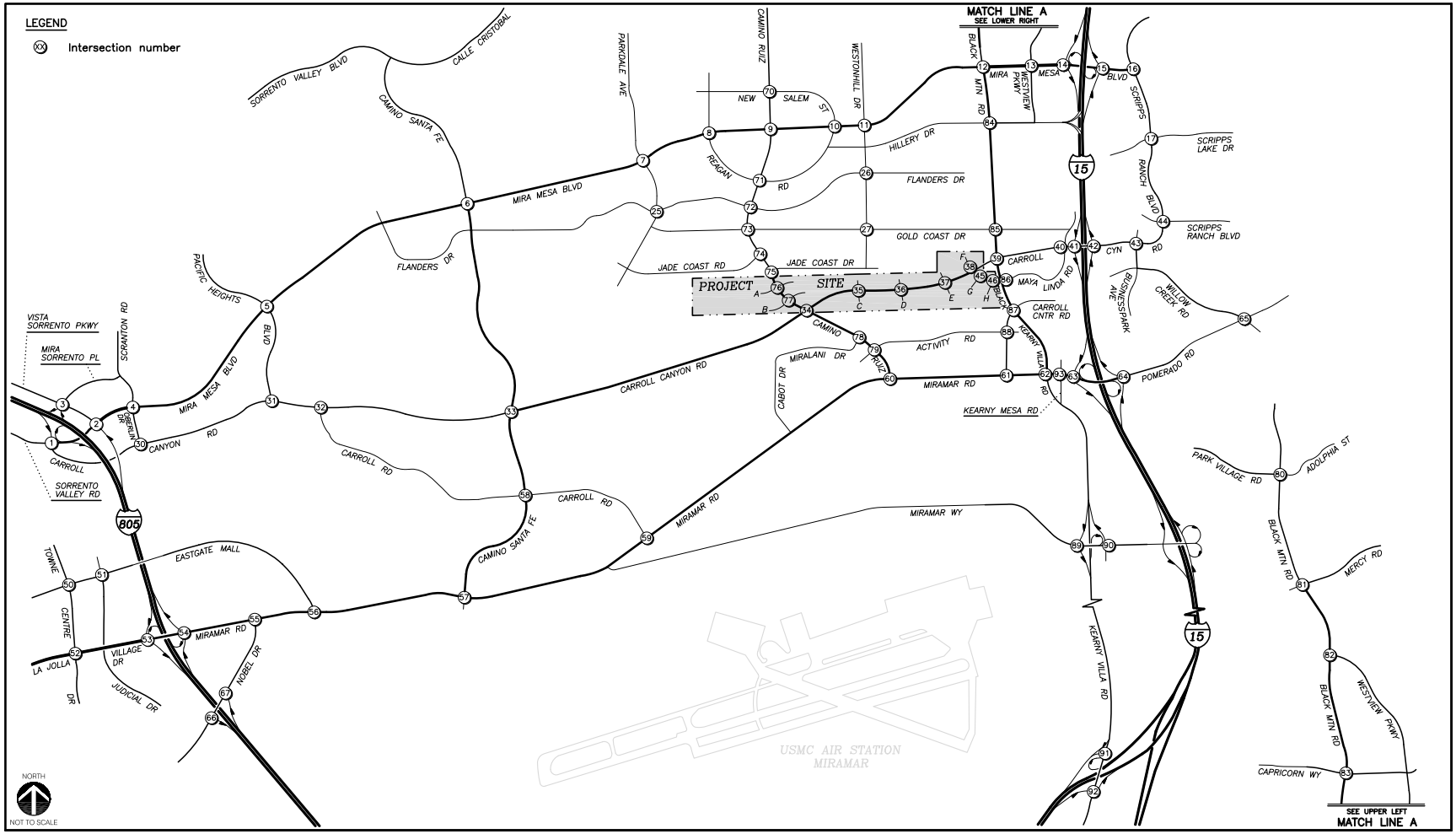


Figure 5.2-27. ***Phase 3B (Year 2035) Study Area Intersections***

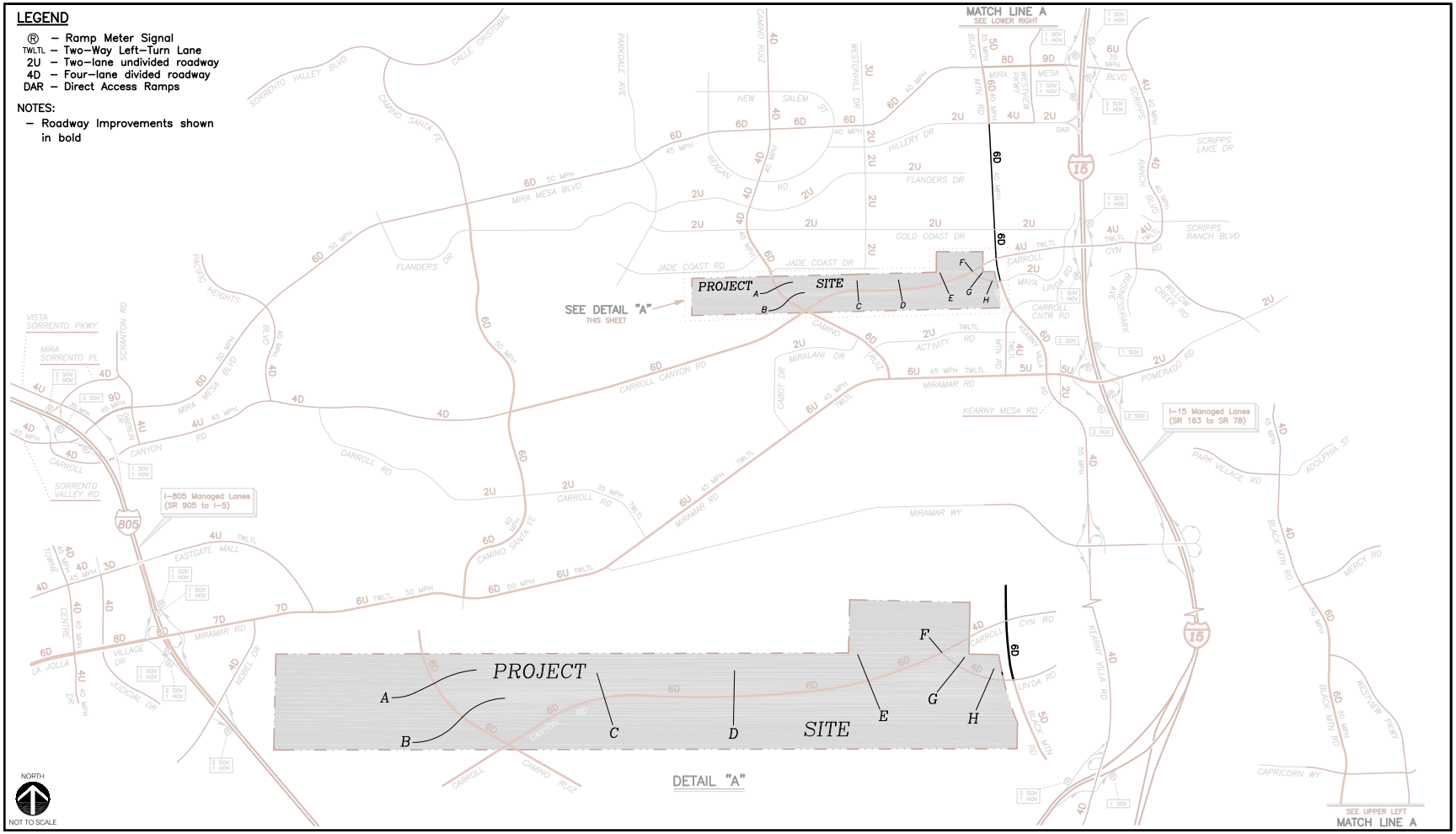


Figure 5.2-28. ***Phase 3B Conditions Diagram (Roadway Segments and Ramp Meters)***

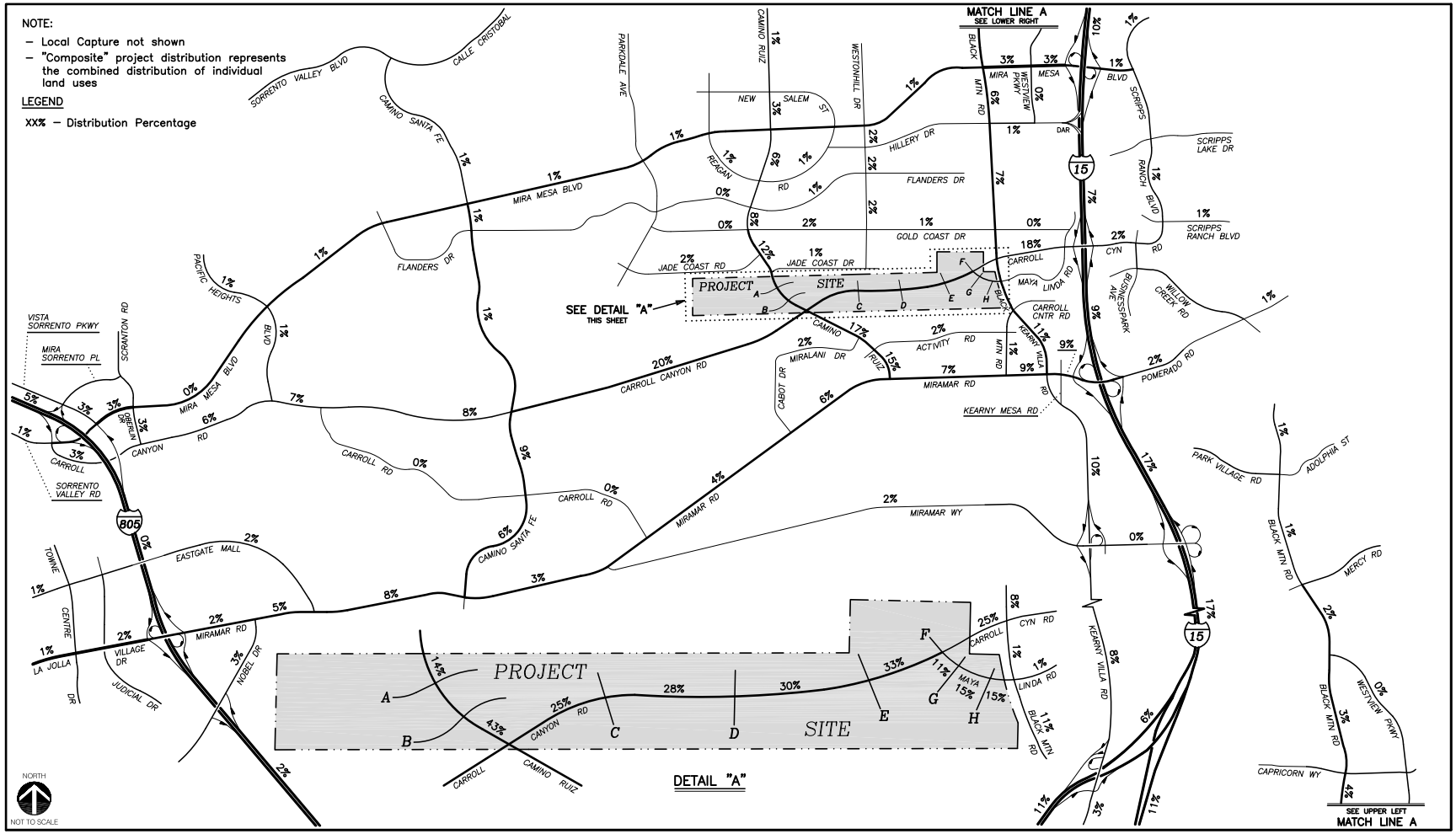


Figure 5.2-29. ***Phase 3B (Year 2035) Project Traffic Distribution (Composite)***

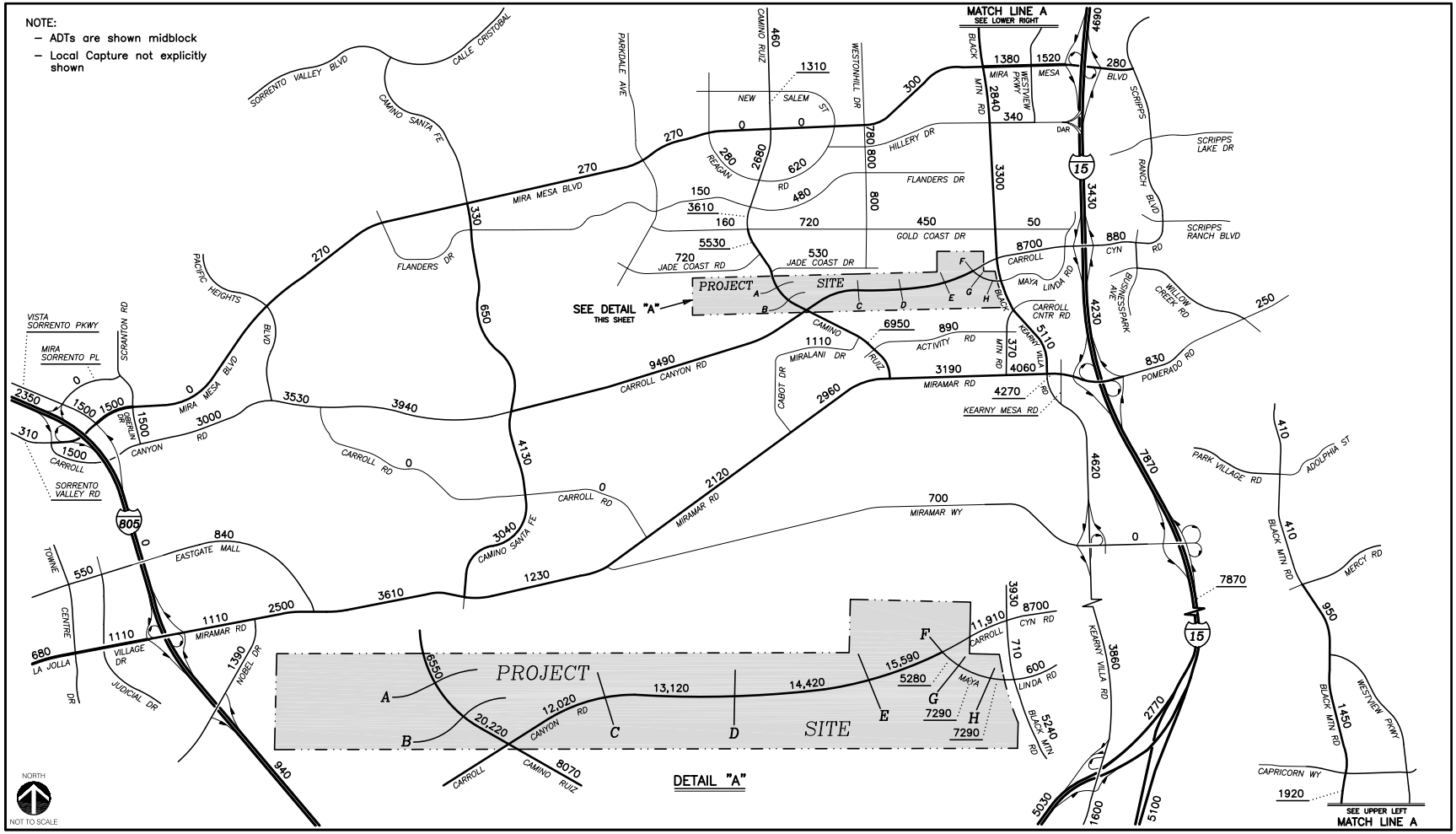


Figure 5.2-30. ***Phase 3B Cumulative Project Trips (Daily Volumes)***

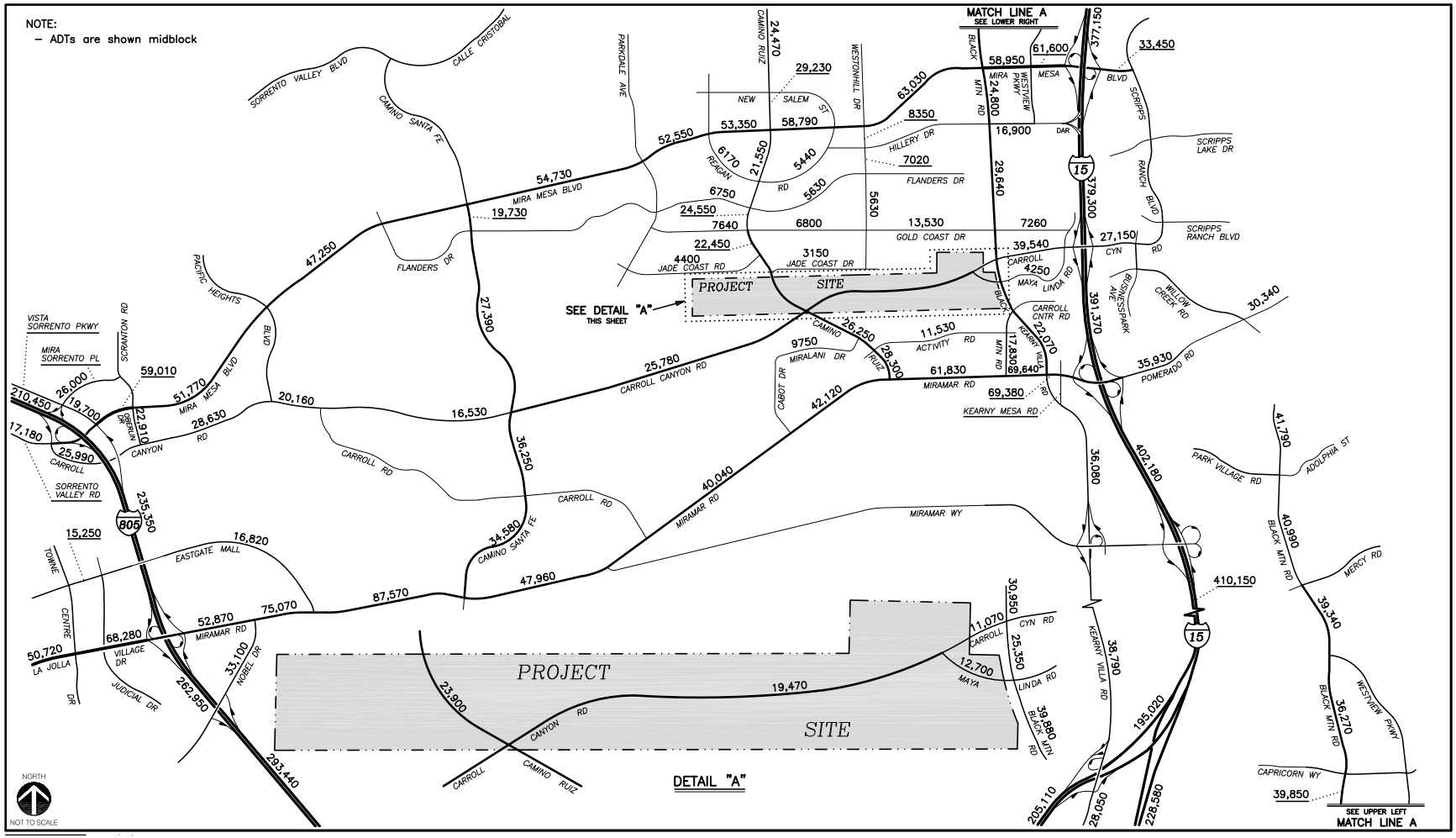


Figure 5.2-31. ***Phase 3B (Year 2035) without Project Traffic Volumes (Daily Volumes)***

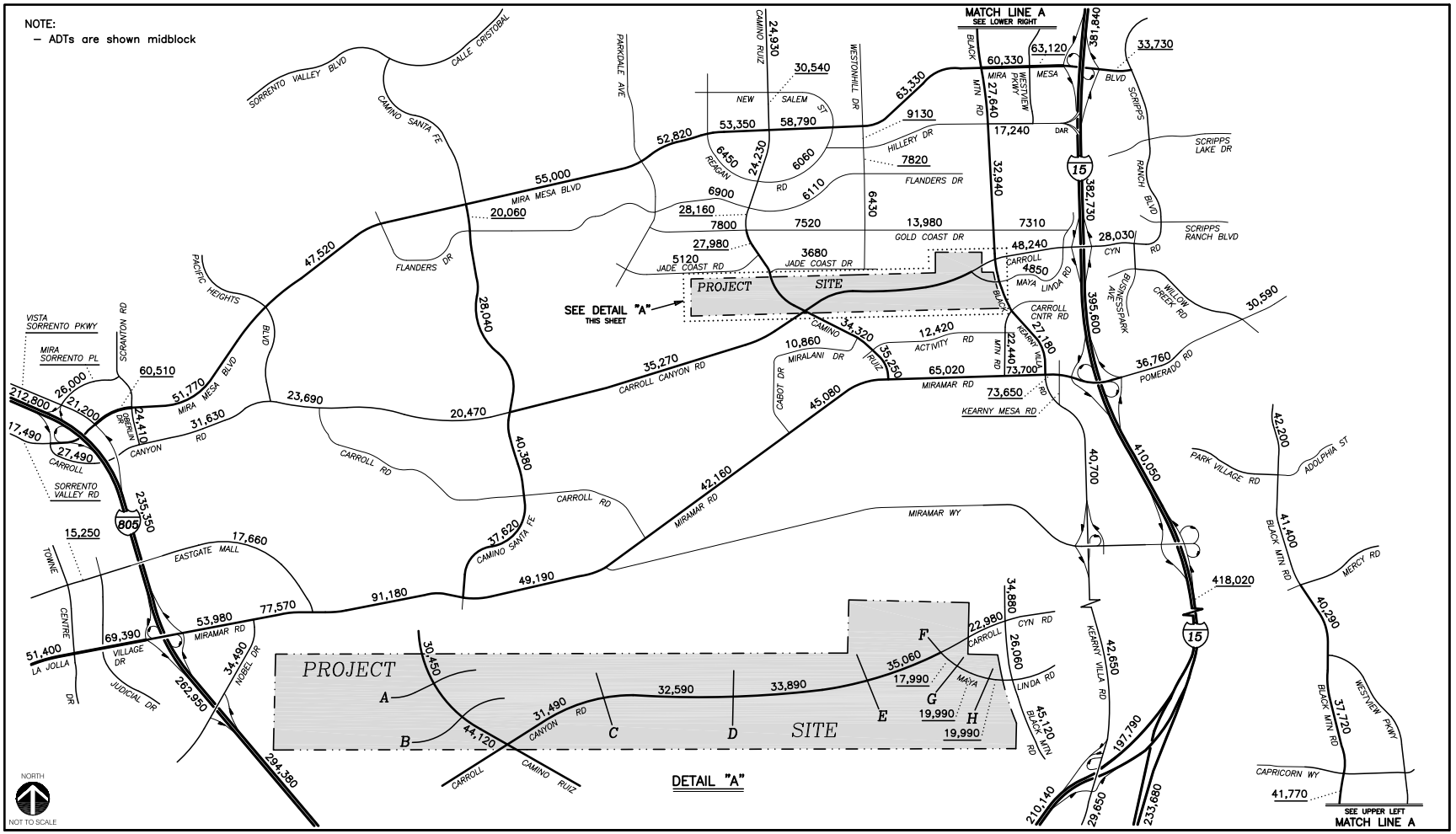


Figure 5.2-32. ***Phase 3B (Year 2035) with Project Traffic Volumes (Daily Volumes)***

5.3 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

This section describes the existing visual setting of the project and vicinity within the context of the surrounding community. Additionally, this section identifies applicable guidelines and regulations related to visual resources and evaluates potential visual impacts related to implementation of the project.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of visual effects and neighborhood character impacts associated with the future school would be required at that time.

5.3.1 Existing Conditions

INTERIM VIEWS OF THE PROJECT SITE

Figure 5.3-1, *Project Site Aerial Photograph*, provides an aerial photograph of the project site. (It should be noted that as mining occurs on the project site, the landform continues to change. Therefore, the conditions of the project site shown on the aerial photograph may not represent actual site conditions at any given time.) Views of the project site are characterized by the barren mined land and steep mined slopes. A series of mining ponds have been constructed on the project site. The industrial mine ponds are constructed as plant processing water storage areas where silts from processing are allowed to settle out and the water is then re-used in the processing plant. The location of the mining ponds and water levels fluctuate, due to pond maintenance and mining activities. As mining occurs on the project site, large mining equipment moves across the site extracting sand and gravel resources. Conveyers transport material on-site and to the processing plant area ("Plant Operations"). Equipment associated with the asphalt and concrete plants can be seen in the southern and eastern portions of the project site. Photographs in Figure 5.3-2, *Typical View of Mined Terrain*, provide a sample of site conditions resulting from the on-going mining operations.

Views of the project site are provided to motorists, pedestrians, and bicyclists along Camino Ruiz. A white chain link and vinyl fence along both sides of Camino Ruiz mostly shields the project site from view. Due to the higher elevation of Camino Ruiz from the project site, views that may be possible from Camino Ruiz are largely expansive vistas over the mined land, slopes, and machinery related to extraction and processing of materials.

INTERIM VIEWS FROM THE PROJECT SITE

Views from the project are dominated by the steep hillsides forming the project's northern boundary. Existing residential development can be seen to the north, at the top of the site's northern slopes. Looking east from the site, existing multi-family residential development and light industrial uses are seen. Views to the south and southwest are of existing light industrial and office

developments, some to the south located at an elevation higher than the mining floor. Views to the west are of the Hanson Aggregates mining site (also the location of the 3Roots project currently under review by the City of San Diego). Views from the project site are interim, as conditions at build-out are unknown at this time.

VIEWS OF THE PROJECT SITE WITH IMPLEMENTATION OF THE 1981 RECLAMATION PLAN

The Stone Creek project site is situated in the southeastern portion of the Mira Mesa community (see Figure 2-5, *Locations of Current Uses*). The project site is the location of an on-going mining operation occurring under the 1981 CUP. Sand and gravel extraction is occurring or has occurred on the majority of the 293-acre site. The terrain is being modified on a daily basis as mining proceeds. The 1981 Reclamation Plan would leave the site as two large pads divided by Camino Ruiz and rimmed by mined slopes up to 112 feet in height in some areas with vegetation. The eastern pad (east of Camino Ruiz) would be relatively flat; whereas, the western pad (west of Camino Ruiz) would slope up towards the northwest. (See Figure 2-4, *1981 Reclamation Plan*).

For purposes of analysis, the baseline conditions exist following the implementation of the 1981 CUP/Reclamation Plan (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of Visual Effects and Neighborhood Character impacts assumes this baseline differs from the existing conditions, as presented in this section. The 1981 Reclamation Plan would leave the site as two large pads divided by Camino Ruiz. The final topography resulting from the 1981 CUP/Reclamation Plan is characterized by a relatively large flat pad in the eastern portion of the site rimmed by steep mined slopes up to 90 feet in height, and a pad that slopes up towards the northwest in the western portion of the site surrounded by steep mined slopes up to 112 feet in height. The 1981 Reclamation Plan shows perimeter plantings on the reclaimed/recontoured slopes with ornamental species to screen the property from adjacent developed areas. Flatter graded pads below these slopes would be hydroseeded.

NEIGHBORHOOD CHARACTER

The project site is located within the urbanized community of Mira Mesa. The character of the Mira Mesa neighborhoods surrounding the project site is a mix of commercial office, light industrial/business parks, and residential. Single family and multi-family residential developments are located north of the project site. Multi-family residential development is also located east of the project site, along with light industrial uses. Light industrial and office developments are located south and southeast of the project site. Office and residential buildings surrounding the site vary in height from one- and two-story industrial buildings, to multi-story (two to four stories) residential and office complexes, as well as single and two-story single-family developments. The Hanson Aggregates extractive resource site and single-family residential are located west of the project site.

5.3.2 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

Making the determination of a significant impact on visual quality is highly subjective. Identifying how a proposed development would fit or blend with the existing scale and character of the surrounding developed and natural environment is the key to determining significance. The following thresholds have been identified in the City's *CEQA Significance Determination Thresholds* for impacts to visual effects and neighborhood character:

- **Views.** Projects that would block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas (Pacific Ocean, downtown skyline, mountains, canyons, waterways). To meet this significance threshold, one or more of the following conditions must apply:

    a. The project would substantially block a view through a designated public view corridor as shown in an adopted community plan, the General Plan, or the Local Coastal Program. Minor view blockages would not be considered to meet this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view.
    b. The project would cause substantial view blockage of a public resource (such as the ocean) that is considered significant by the applicable community plan. Unless the project is moderate to large in scale, condition "c" would typically have to be met for view blockage to be considered substantial.
    c. The project exceeds the allowed height or bulk regulations, and this excess results in a substantial view blockage from a public viewing area.
    d. The project would have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view blockage. (Cumulative effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level.) View blockage would be considered "extensive" when the overall scenic quality of a resource is changed; for example, from an essentially natural view to a largely manufactured appearance.

- **Neighborhood Character/Architecture**. Projects that severely contrast with the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply:

    a. The project exceeds the allowed height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity by a substantial margin.
    b. The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common

architectural theme (e.g., Gaslamp Quarter, Old Town).

c. The project would result in the physical loss, isolation, or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or local coastal program.
d. The project is located in a highly visible area (e.g., on a canyon edge, hilltop, or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections.
e. The project would have a cumulative effect by opening up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multi-family). Project level mitigation should be identified at the community plan level. Analysts should also evaluate the potential for a project to initiate a cumulative effect by building structures that substantially differ from the character of the vicinity through height, bulk, scale, type of use, etc., when it is reasonably foreseeable that other such changes in neighborhood character will allow.

- **Land Form Alteration/Grading**. Projects that significantly alter the natural landform. To meet this significance threshold, typically the following conditions must apply:

a. The project would alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill. Grading of a smaller amount may still be considered significant in highly scenic or environmentally sensitive areas. Excavation for garages and basements are typically not held to this threshold. In addition, one or more of the following conditions (1-4) must apply to meet this significance threshold.

    1. The project would disturb steep hillsides in excess of the encroachment allowances of the Environmentally Sensitive Lands regulations (LDC Chapter 14, Article 3, Division 1). In evaluating this issue, environmental staff should consult with permit staff.
    2. The project would create manufactured slopes higher than ten feet or steeper than 2:1 (50 percent).
    3. The project would result in a change in elevation of steep hillsides as defined by the SDMC Section 113.0103 from existing grade to proposed grade of more than five feet by either excavation or fill, unless the area over which excavation or fill would exceed five feet is only at isolated points on the site. (A continuous elevation change of five feet may be noticeable in relation to surrounding areas. In addition, such a change may require retaining walls and other features to stabilize slopes, potentially resulting in a manufactured appearance.)
    4. The project includes mass terracing of natural slopes with cut or fill slopes in excess of five feet in order to construct flat-pad structures. (This item moved from

"Development Features" section below.)

b. However, the above conditions may not be considered significant if one or more of the following apply:

    1. The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed landforms will very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This may be achieved through "naturalized" variable slopes.
    2. The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations.
    3. The proposed excavation or fill is necessary to permit installation of alternative design features such as step-down or detached buildings, non-typical roadway or parking lot designs, and alternative retaining wall designs which reduce the project's overall grading requirements.

- **Development Features**. Projects that have a negative visual appearance. To meet this significance threshold, one or more of the following conditions must apply:

    a. The project would create a disorganized appearance and would substantially conflict with City codes (e.g., a sign plan which proposes extensive signage beyond the City's sign ordinance allowance).
    b. The project significantly conflicts with the height, bulk, or coverage regulations of the zone and does not provide architectural interest (e.g., a tilt-up concrete building with no offsets or varying window treatment).
    c. The project includes crib, retaining or noise walls greater than six feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public.
    d. The project is large and would result in an exceedingly monotonous visual environment (e.g., a large subdivision in which all the units are virtually identical).
    e. The project includes a shoreline protection device in a scenic, high public use area, unless the adjacent bluff areas are similarly protected.

- **Light/Glare**. Projects that would emit or reflect a significant amount of light and glare. To meet this significance threshold, one or more of the following must apply:

    a. The project would be moderate to large in scale, more than 50 percent of any single elevation of a building's exterior is built with a material with a light reflectivity greater than 30 percent (see LDC Section 142.07330(a)), and the project is adjacent to a major public roadway or public area.

b. The project would shed substantial light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and industrial uses, and natural areas.

ISSUE 1

Would the proposal result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan?

Significance thresholds:

Block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas. One or more of the following conditions must apply:

- The project would substantially block a view through a designated public view corridor as shown in an adopted community plan, the General Plan, or the Local Coastal Program. Minor view blockages would not be considered to meet this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view;
- The project would cause substantial view blockage from a public viewing area of a public resource that is considered significant by the applicable community plan. Unless the project is moderate to large in scale, condition "c" would typically have to be met for view blockage to be considered substantial;
- The project exceeds the allowed height or bulk regulations, and this excess results in a substantial view blockage from a public viewing area; or
- The project would have a cumulative effect by opening up a new area for development, which would ultimately cause extensive view blockage. (Cumulative effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level.) View blockage would be considered "extensive" when the overall scenic quality of a visual resource is changed; for example, from an essentially natural view to a largely manufactured appearance.

Impacts

CUP/Reclamation Plan Amendment

The Mira Mesa Community Plan does not identify any scenic vistas or views within the boundaries of the project site. Therefore, no impact would result.

Stone Creek Project

The Mira Mesa Community Plan does not identify any scenic vista or views within the boundaries of the project site. Therefore, the project would not impact community plan-identified vistas or scenic views. Development would occur at lower elevations than the northern perimeter of the mining site.

Significance of Impacts

There are no vistas or scenic views identified in the Mira Mesa Community Plan; therefore, the CUP/Reclamation Plan Amendment, as well as the Stone Creek Master Plan and associated actions, would not result in an obstruction of any vista or scenic view from a public viewing areas. No impacts would result.

Mitigation Measures

No mitigation measures would be required.

ISSUE 2

Would the proposal result in the creation of a negative aesthetic site or project?

ISSUE 3

Would the proposal result in project bulk, scale, materials, or style which would be incompatible with surrounding development?

Significance thresholds:

Projects that have a negative visual appearance. To meet this significance threshold, one or more of the following conditions must apply:

- The project would create a disorganized appearance and would substantially conflict with City codes (e.g., a sign plan which proposes extensive signage beyond the City's sign ordinance allowance).
- The project significantly conflicts with the height, bulk, or coverage regulations of the zone and does not provide architectural interest (e.g., a tilt-up concrete building with no offsets or varying window treatment).
- The project includes crib, retaining, or noise walls greater than six feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public.

Projects that severely contrast with the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply:

- The project exceeds the allowable height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity of the project by a substantial margin.
- The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme (e.g., Gaslamp Quarter, Old Town).

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would allow for continued phased mining operations for 30 years from the date of project approval; allow for grading or grading modifications to the 1981 Reclamation Plan to accommodate the relocation, restoration/enhancement of Carroll Canyon Creek through the project site; and to reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. The CUP/Reclamation Plan Amendment would leave the eastern portion of the project site (east of Camino Ruiz) as a generally level interior portion, with mined slopes rimming the site at heights up to approximately 85 feet. The area west of Camino Ruiz would be left as a deep quarry depression rimmed by mined slopes up to approximately 120 feet. As part of mining activities, asphalt and concrete plants are in operation in the eastern portion of the site and would continue to operate under the CUP Amendment. As resources are depleted and mining operations phase out, the Reclamation Plan Amendment would be implemented.

The Reclamation Plan Amendment proposes contour grading of mined slopes such that the slope gradients vary and range from 4:1 to 2:1. The Reclamation Plan Amendment would also construct storm water control devices to act as detention facilities for water quality. Additionally, the Reclamation Plan Amendment would reconfigure the Carroll Canyon Creek Corridor to mimic its previous alignment.

Concurrent with and following the Reclamation Plan Amendment, the project site would be landscaped. As each phase is reclaimed, it would be landscaped in accordance with the Reclamation Plan Amendment landscape plan. The landscape plan proposes that the reclaimed site be landscaped with a variety of native plant species as hydroseed mix and container stock (including shrubs and trees). Species have been selected based on slope inclination and location of plantings. For example, plantings along the creek corridor focus on riparian species, while upland plant species are proposed for slope areas. The relatively level areas in the central portions of the site would also be hydroseeded with a native plant mix for erosion control. Interim brush management consistent with the City's Brush Management Regulations, LDC Section 142.0412, would be provided for adjacent, existing development until such a time as the Stone Creek VTM is implemented.

With implementation of the CUP/Reclamation Plan Amendment, the project site would be reclaimed to reflect a natural landscape. This would not result in a negative aesthetic site, and no adverse impacts to visual quality would occur.

Additionally, implementation of the CUP/Reclamation Plan Amendment would result in a project that differs from the bulk, scale, materials, and style of the surrounding development. The project site sits in the middle of an urban community and is surrounded by residential neighborhoods to the north and west, residential and light industrials uses to the east, and light industrial uses and business parks to the south. The reclaimed mined site would remain as a visible undeveloped area; no structural development would occur that could create incompatibility with surrounding development. Implementation of the Reclamation Plan Amendment would result in leaving the mined site in a manner that would not create an adverse visual impact.

Stone Creek Project

Development of the Stone Creek project would be governed and guided by the Stone Creek Master Plan and Master PDP. The Stone Creek Master Plan includes a number of design guidelines and development standards that promote the cohesive implementation of the project, which would ensure that the project would not result in a negative aesthetic. The guiding principles relative to site aesthetic are summarized below. The Stone Creek project would result in less than significant impacts relative to site aesthetics.

The general layout of the Stone Creek project is illustrated in Figure 5.3-3, *Stone Creek Illustrative Site Plan*. The western portion of the project site, west of Camino Ruiz, is predominantly made up of the Westside Neighborhood, which comprises three sub-neighborhoods (Westside Neighborhood A, Westside Neighborhood B, and Westside Neighborhood C) (see Figure 5.3-4, *Westside Neighborhood Illustrative*). The Westside Neighborhood is characterized by a mix of residential and commercial uses, with a series of pocket parks and a neighborhood park space (see Figure 5.3-5, *Westside Neighborhood's Pocket Parks Illustrative*), as well as a multi-modal circulation. This neighborhood is envisioned by the Master Plan to be a cohesive, multi-family environment organized by a traditional circulation network with compact blocks and tree-lined sidewalks.

Westside Neighborhood A, the 10.69-acre western-most portion of Westside Neighborhood and the Stone Creek project (see Figure 5.3-4 and Figure 3-5, *Stone Creek Neighborhoods*), would be zoned RM-1-2 and would develop up to 125 attached multi-family residential units. Maximum building heights allowed by the RM-1-2 zone would be 40 feet. This sub-neighborhood would be of a smaller-scale with townhouse-style development, envisioned to have street entries and walk-ups to promote an intimate pedestrian scale; the 0.56-acre Westside Crossing pocket park would be located within Westside Neighborhood A. Westside Neighborhood B comprises the middle 29.25 acres of the Westside Neighborhood (see Figure 5.3-4). This neighborhood would be zoned RM-3-9, RM-4-10, and CC-5-5 and would encompass up to 1,285 multi-family residential units, 24,000 square feet of

neighborhood commercial retail space around Westside Commons pocket park, and a potential school site. Maximum building heights allowed by the zones proposed for Westside Neighborhood B would range from 60 feet to 100 feet. Westside Commons pocket park (1.04 acres) would be the central node of the Westside Neighborhood, with commercial and dining establishments fronting the park. Trailhead Park (0.13 acre), also located within Westside Neighborhood B, would provide a link to the existing community to the north. Westside Neighborhood C, located adjacent to Camino Ruiz (see Figure 5.3-4), would encompass 33.80 acres and up to 1,315 multi-family residential units under the RM-4-10 and RM-4-11 zones. These zones do not limit building heights; building heights in Neighborhood C are intended to reflect and provide a transition between the Village Center and Westside Gardens. Westside Terrace pocket park (0.95 acre) would connect Westside Neighborhood to the Village Center to the east. Westside Gardens neighborhood park would be located in the southern portion of Westside Neighborhoods B and C. This 16.58-acre neighborhood park would provide open play areas with picnic and relaxation spaces and landscaped slopes.

The Village Center would be located within the central portion of the project site, mostly east of Camino Ruiz, with the Westside Piazza of Village Center A located west of Camino Ruiz (Figure 5.3-6, *Village Center Illustrative*). This higher intensity neighborhood would act as the central core of the community and provide for an integrated mix of residential and commercial retail uses linked by a series of piazzas that would transport pedestrians to and through the Village Center (Figure 5.3-7, *Village Center Piazza Illustrative*).

All of the piazzas would be located within Village Center A, the 25.34-acre urban node of the Village Center (see Figure 5.3-6). These piazzas transport pedestrians to the Village Center via integrated pedestrian overcrossings; the piazzas themselves act as a central spine or main street through Village Center A. This sub-neighborhood is planned to develop with up to 840 multi-family residential units, 175 hotel rooms, approximately 150,000 square feet of commercial retail space, and approximately 200,000 square feet of office space, providing for live/work opportunities. The mix of CC-5-5 and RM-4-11 zoning would allow for a vertical mix of uses, with retail/employment space fronting the piazzas and residential uses above, with maximum building heights of 100 feet. Village Center B and C make up the northern portion of this neighborhood (see Figure 5.3-6) and central northern portion the Stone Creek project site (see Figure 3-5, *Stone Creek Neighborhoods*), and are planned to develop with up to 290 multi-family residential units in each neighborhood under the RM-3-9 zone. Maximum building heights in Village Center sub-neighborhoods B and C would be 60 feet. One of Stone Creek's two transit stops would be within the Village Center along Carroll Canyon Road, east of Camino Ruiz, and is proposed to be architecturally cohesive with the surrounding development.

Continuing along the northern portion of the project site, the Parkside Neighborhood, just east of the Village Center (Figure 5.3-8, *Parkside Neighborhood Illustrative*), provides employment uses proximate to residential and commercial developments in the form of business park opportunities. Zoned IL-3-1, Parkside Neighborhood would develop up to 135,000 square feet of business park

(office use permitted) space. Maximum floor area ratio for the Parkside Neighborhood would be 2.0. Like all Stone Creek neighborhoods, Parkside Neighborhood would be integrally linked to the rest of the community with connections to the network of trails and multi-use paths, as well as dedicated bicycle facilities.

Eastside Neighborhood comprises the northeastern and eastern portion of the project site and makes up Stone Creek's light industrial employment component (see Figure 5.3-9, *Eastside Neighborhood Illustrative*). Eastside Neighborhood additionally forms the eastern boundary for Stone Creek Central Park, along with Creekside Neighborhood, and provides an extension of park space in the form of the 0.77-acre Eastside Park. This pocket park is intended for day-use by adjacent employees, as well as the community as a whole, and may include turf areas, picnic tables, and benches. Also located within Eastside Neighborhood, adjacent to Carroll Canyon Road, is Stone Creek's second transit stop, proposed to be architecturally integrated into the neighborhood design.

Eastside Neighborhood A is located south of Carroll Canyon Road and is roughly bisected by Maya Linda Road (see Figure 5.3-9). This 12.17-acre sub-neighborhood would be zoned IL-1-1 and IL-2-1, affording for 165,000 square feet of light industrial (office use limited) space, and is intended to provide for light industrial uses with some office use. The maximum floor area ratio for Eastside Neighborhood A would be 2.0.

Eastside Neighborhood B, located north of Carroll Canyon Road (see Figure 5.3-9), could develop up to 250,000 square feet of IL-2-1-zoned light industrial (office permitted) space over 18.21 acres. This sub-neighborhood is located immediately south of existing residential development and would provide an expanded landscaped setback along this interface to soften the transition between these two uses. The maximum floor area ratio for Eastside Neighborhood B would be 2.0.

Located in the southeast portion of the project site is the Creekside Neighborhood (Figure 5.3-.10, *Creekside Neighborhood Illustrative*). Creekside Neighborhood would be unique in that it is the only neighborhood located south of Carroll Canyon Creek. As a result of this location, two architecturally-enhanced bridges would serve to connect automobiles, bicyclists, and pedestrians to Creekside Neighborhood. These bridges would function as elevated promenades due to wider sidewalks.

Creekside Neighborhood is made up of two sub-neighborhoods. Creekside Neighborhood A, which provides the interface for this neighborhood with Stone Creek Central Park (see Figure 5.3-10), would be zoned RM-2-5, allowing for the development of up to 300 slightly lower-intensity multi-family residential units over 12.84 acres. Residential buildings fronting along Stone Creek Central Park would feature pedestrian-scaled detailing to provide a backdrop for the creek and the trail system. When appropriate, balconies, decks, bay windows, and massing that steps down toward the creek would allow for additional detail within this backdrop. Maximum building heights for Creekside Neighborhood A would be 40 feet. Creekside Neighborhood B (see Figure 5.3-10) is a

12.24-acre sub-neighborhood zoned IL-3-1 to allow for the development of approximately 300,000 square feet of high technology uses at a maximum floor area ratio of 2.0.

Stone Creek Central Park (43.16 acres), Westside Gardens (16.58 acres), and the Rim Trail (3.68 acres) would provide for Stone Creek's neighborhood park elements (Figure 5.3-11, *Stone Creek Central Park and Westside Gardens Illustrative*). Street trees, clustered and aligned to reflect natural form, would be used to visually separate Stone Creek Central Park from Carroll Canyon Road. Street trees along Carroll Canyon Road would be placed in a random cluster pattern to afford direct visual glimpses into Stone Creek Central Park. Alternating rows of trees, with shrubs and groundcover as understory, would also provide a visual opening at the base of the tree canopy. An extension of the Carroll Canyon Creek trail would loop around the east end of Stone Creek Central Park between the Carroll Canyon Creek edge and Carroll Canyon and Maya Linda Roads, allowing for view opportunities into Stone Creek Central Park.

The Master Plan proposes the use of low, stone walls. These features would be located along the project's major thoroughfares (Carroll Canyon Road and Camino Ruiz); would be used to frame Stone Creek's Central Park and Westside Gardens; are proposed as a visual interface between the Creekside Neighborhood and the Carroll Canyon Creek Corridor; and would be located at trail connections within Stone Creek, as well as trail entries from adjoining neighborhoods. Stone walls would also be integrated into Stone Creek's pocket parks, piazzas, and other outdoor spaces to promote a sense of place and organization.

Relative to site planning and neighborhood character, the Stone Creek Master Plan proposes an active street scene that would help create a sense of place that is pedestrian-friendly and public transit-oriented. Distinctive gathering spaces would contribute to neighborhood character and a sense of belonging. Connected by tree-lined sidewalks and a system of trails, Stone Creek's outdoor gathering spaces are intended to promote active use across the length of Stone Creek. The proposed mix of uses includes a variety of shops, businesses, and homes directed at creating a sense of place and character consistent with contemporary planning concepts. Site design and building layouts propose an overall development that flows together as a single community. Density and building design would reflect a variety of building heights, architectural massing and styles, and building densities that would result in creating multiple layers to Stone Creek's character.

Overall site planning would establish a consistent level of unifying community character to establish connectivity between the various neighborhoods of Stone Creek. This would be accomplished through compatible landscaping palettes; community identification signs and monuments; a common palette of streetscape elements, such as lamp posts and paving patterns; a continuous thread of low-lying stone walls; high quality human-scaled details at the pedestrian level of buildings; inviting public spaces that establish neighborhood destinations and identity; and an interconnected network of tree-lined streets, sidewalks, and trails.

Relative to building placement and massing, the Stone Creek Master Plan addresses solar access, overall aesthetic appearance, and delineation between public and private realms. Street-oriented openings and building entrances, varied setbacks, arcades, bays, and pedestrian-scaled details are proposed to maximize streetscape interest and provide view opportunities. The project's design guidelines include requirements for projections, such as balconies, bay windows, decks, roof overhangs, trim moldings, and fascia articulated with a level of detail that enhances building appearance and creates interesting shadow lines. Stepped massing is recommended to allow ample natural light and ventilation into public parks and piazzas.

The Stone Creek Master Plan also addresses the use of massing elements to define statement corners and neighborhood entries, create points of interest as vista terminations, distinguish neighborhood character, and act as identifiable landmarks. Examples of massing elements include turreted building corners, prominent bay windows or balconies, a special clock tower, gabled dormer windows, ground floor arcades, or prominent pedestrian entryways.

Treatments such as intermediate front balconies and porches, walk-up residential units, and/or landscaping would be used to provide a transition between the public and private realms. While allowing for privacy, this also creates many opportunities for "rooms with a view" from windows that look down onto neighborhood streets, parks, the creek corridor, and piazzas.

Relative to architectural design, the Master Plan promotes the use of traditional architectural styles, all featuring detailing and human-scaled elements, to contribute to the sense of place at Stone Creek. Utilizing a variety of architectural styles is recommended to create the impression that individual buildings within neighborhoods were built over an extended period of time. Neighboring buildings that vary in their defining elements – from openings and projections to massing and height – are design tools that may be used to create a variety and diversity in architecture and design throughout the neighborhoods of Stone Creek.

The Master Plan proposes that buildings at Stone Creek diminish the pedestrian-scaled frontage onto the auto-dominated Camino Ruiz and Carroll Canyon Road and focus on design of buildings that front onto Stone Creek's internal, more intimate streets, parks, and piazzas to create a pedestrian-friendly atmosphere. Building components are intended to incorporate a layer of decorative ornamentation so as to support the pedestrian environment. Building walls or fences bordering the pedestrian network are limited to 50 linear feet unless some form of architectural or design variation is incorporated into the wall/fence design. For example, the building or fence could protrude, recess, or change height or texture.

The Master Plan calls for articulation of building details and structural elements to include (but not be limited to) the following:

Mixed-Use and Residential Buildings

- Balconies with intricate railing design and expressed structural brackets
- Deep eve overhangs with profiled rafter tails and bracket supports
- Cornices with a substantial massing and detailed profiles
- Awnings which are supported by ornamental brackets
- Balustrades with classic profiles and cut-stone appearance
- Trellises or pergolas with profiled rafters and articulated posts
- Ground floor arcades detailed with classic column design
- Exterior stairs with detailed railings or balustrade
- Trim moldings with classic profiles so as to create shadow lines
- Cornerstones and building base materials with a heavy stone appearance

Industrial and Business Park Buildings

- Deep-set windows with articulated overhangs
- Awnings at business entrances to accentuate entry-points
- Trellises or other organic wall treatments to avoid masses of concrete void of visual interest
- Trim moldings with classic profile to create shadowy lines
- Cornerstones and building base materials with heavy stone appearance
- Repetition of simple structural elements
- Clearly defined horizontal or vertical elements
- Expression of parapet top and building base
- Articulation and unique expression of building corners
- Use of columns or panel legs to express the structural system supporting these spans
- Use of recessed glass to create a shadowing effect

The project would not result in creating a negative aesthetic or site because the project would be developed in accordance with the design guidelines and development standards included in the Stone Creek Master Plan. Although the bulk and scale of the Stone Creek project would be different from what currently exists, as the project would be developed as an intensive mixed-use TOD, as discussed further in *Issue 4*, below, the project would not be in stark contrast with surrounding development. The surrounding community character is of single- and multi-family housing and lower-scale (predominantly one- to three-story) light industrial/business park and commercial office uses. Development of Stone Creek would represent a divergence from the typical pattern of bulk and scale within the community. However, because the project would require adherence with the design guidelines and development standards presented in the Stone Creek Master Plan, this change in bulk and scale would not result in an adverse effect on the neighboring communities and would therefore not be incompatible with the project surroundings. Project impacts relative to site aesthetics and bulk and scale, as well as materials and style, would be less than significant.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in an impact relative to a negative site aesthetic. The CUP/Reclamation Plan Amendment includes development guidelines relative to reclamation grading, landscaping, and final site design. Additionally, the CUP/Reclamation Plan Amendment does not have the potential to result in impacts relative to bulk, scale, style, or materials as no structural development would occur as a result of the Reclamation Plan Amendment. Impacts would be less than significant.

Stone Creek Project

Implementation of the Stone Creek Master Plan would ensure that a negative aesthetic site would not result with project development. The Master Plan includes distinct guidelines relative to architectural design and detail to promote a cohesive, visually stimulating environment. Furthermore, the Master Plan provides for development guidelines relative to neighborhood composition and design, park elements, and connectivity network. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 4

Would the proposal result in substantial alteration to the existing or planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area?

Significance thresholds:

Projects that severely contrast with the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply:

- The project exceeds the allowable height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity of the project by a substantial margin.
- The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme (e.g., Gaslamp Quarter, Old Town).

Impacts

CUP/Reclamation Plan Amendment

Implementation of the CUP/Reclamation Plan Amendment would not result in a substantial alteration to the existing character of the area. The project site is the location of an on-going resource extraction and processing operation; as a result, the entire project site has been or would be disturbed prior to the depletion of resources. The proposed CUP/Reclamation Plan Amendment would leave the eastern portion of the project site (east of Camino Ruiz) as a generally level interior portion, with mined slopes rimming the site at heights up to 85 feet. The area west of Camino Ruiz would be left as a deep quarry depression rimmed by mined slopes ranging with heights up to approximately 120 feet. As part of mining activities, asphalt and concrete plants are in operation in the eastern portion of the site and would continue to operate under the CUP Amendment. As resources are depleted and mining operations phase out, the Reclamation Plan Amendment would be implemented.

The Reclamation Plan Amendment proposes contour grading of mined slopes such that the slope gradients vary and range from 4:1 to 2:1. The Reclamation Plan Amendment would also construct storm water control devices to act as detention facilities for water quality. Additionally, the Reclamation Plan Amendment would reconfigure the Carroll Canyon Creek Corridor to approximately mimic its previous alignment.

The CUP/Reclamation Plan Amendment would not result in a significantly different project than what would be required under the existing 1981 CUP/Reclamation Plan. Therefore, the CUP/Reclamation Plan Amendment would not result in a substantial change to the existing environment.

Relative to the Mira Mesa Community Plan's requirements for continued mining operations, the Surface Mining and Reclamation Act of 1975 requires that a reclamation plan be approved by the local jurisdiction for all new natural resource mining operations. Extensions to existing conditional use permits may be considered if they are necessary to fully extract the aggregate resources in Carroll Canyon. Conditional Use Permit amendments shall be reviewed for conformance with the following guidelines:

1. Plans should include the planting and seeding of recontoured hillside areas with trees, shrubs and grasses which can be expected to exist on their own once established. Revegetation within interim brush management zones shall be consistent with the City's Brush Management Regulations, LDC Section 142.0412(h)(5)(D). Revegetation within interim brush management zones shall be consistent with the City's Brush Management Regulations, LDC Section 142.0412(h)(5)(D). Supplementary watering of plant materials and

grass areas would be necessary to achieve establishment. The planting pattern and densities should be in keeping with the natural growth on adjacent unmined lands.

2. Variable slope ratios (horizontal and vertical) should be applied over reclaimed surfaces to more closely resemble natural hillsides.

3. Control of erosion of the reclaimed surface from natural runoff of storm waters or other water sources should be instituted.
4. Reclamation plans should include a provision for an open space corridor in Carroll Canyon.

The CUP/Reclamation Plan Amendment would allow for the continued mining of the project site and provide for reclamation in accordance with SMARA and City regulations relative to mining and reclamation. (See Appendix Q, *SMARA Section Analysis*.) No impacts would result.

Stone Creek Project

The Stone Creek project would result in the construction of a subdivision on an existing mining site where urban development has not yet occurred. Development of the project site as a master planned, mixed-use, transit-oriented development would occur within the Mira Mesa Community Plan and, therefore, would be consistent with the planned character of the area.

The Stone Creek project site is identified in the Mira Mesa Community Plan as part of the Carroll Canyon Master Plan Area. The Mira Mesa Community Plan calls for the project site to be developed with a mix of uses in one of two forms:

- A Transit-Oriented Development (TOD) scenario with an intensive mix of land uses relying heavily on the LRT or other transit forms to reduce automobile uses; or

- A more conventional development scenario with the predominant use being industrial/business parks. Commercial uses that provide convenience services to employees and residents within the community service area should also be provided.

The Stone Creek project would implement the Community Plan's recommendation for a TOD, with a mix of uses that can support LRT and other transit forms. Relative to the Transit-Oriented Development within the Carroll Canyon Master Plan Area, according to the Mira Mesa Community Plan, the intensity of land uses should be greatest where they occur near an LRT station or transit center. Intensities should decrease as the distance from transit stations increases. Additionally, the intensity of use may be greater than that allowed with conventional development due to a realized reduction in traffic associated with an increase in transportation options. Residential development should be provided to encourage housing opportunities near employment centers. Accordingly,

higher density residential development should be permitted to support the intensity of uses envisioned in the TOD and to create a viable neighborhood within Carroll Canyon.

The Stone Creek project proposes a mix of residential, commercial, hotel, light industrial, business park, and high technology uses. The project includes an extensive park and trail network, with a transit corridor bisecting the project site along Carroll Canyon Road, creating the spine of the community. Two transit stops would be provided within Stone Creek: one in the core of the community, the Village Center, and one in the eastern employment portion of the community.

Furthermore, the Stone Creek project has been designed to be compatible with neighborhoods immediately surrounding the project site. Eastside Neighborhood B's adjacency to existing off-site residential development to the east would be addressed through thoughtful siting of buildings. Rooftop equipment would be adequately screened from residential views, and large expanses of unarticulated building massing would be avoided. Additionally, landscaping along the eastern boundary of Eastside Neighborhood B is proposed to create a pleasant interface with adjacent residential uses. Additionally, existing multi-family residential development occurs immediately east of Eastside Neighborhood B. To soften the transition between light industrial uses and the off-site residential uses, an expanded landscaped setback would be provided.

As a result of Stone Creek's mixed-use and TOD nature, the project is consistent with the recommendation of the Carroll Canyon Master Plan Area of the Mira Mesa Community Plan. The project is therefore consistent with the planned character of the community.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in a substantial change to the existing environment. The CUP/Reclamation Plan Amendment would leave the project site in a manner consistent with the existing character of the project site. Impacts would be less than significant.

Stone Creek Project

The Stone Creek Master Plan and associated actions are consistent with the planned character of the community, as development of the project site as a mixed-use TOD is explicitly called for in the Mira Mesa Community Plan. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 5

Would the proposal result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan?

Significance threshold:

- Result in the physical loss, isolation or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark), which is identified in the General Plan, applicable community plan or local coastal program.

Impacts

The site is currently the location of on-going resource extraction and processing as allowed under the 1981 CUP/Reclamation Plan. As a result of the mining operations, the whole site has been or would be disturbed. Although some landscaping exists on-site, there are no distinctive or landmark trees or stand of mature trees identified in the Mira Mesa Community Plan. Implementation of the CUP/Reclamation Plan Amendment and/or development of the Stone Creek Master Plan and associated actions would not result in significant environmental impacts relative to trees.

Significance of Impacts

The CUP/Reclamation Plan Amendment, as well as the Stone Creek Master Plan and associated actions, would not result in significant impacts relative to trees, as no significant mature trees or stands of trees occur on the project site.

Mitigation Measures

No mitigation measures would be required.

ISSUE 6

Would the proposal result in substantial change in the existing landform?

Significance threshold:

- Alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill. Grading of a smaller amount may still be considered significant in highly scenic or environmentally sensitive areas.

Impacts

The Stone Creek project site is in the Carroll Canyon valley area of San Diego located between two mesa tops, one to the north and the other to the south. The project site generally lies at a lower elevation than the surrounding properties. As mining operations continue on-site, the site topography is constantly changing. Resources are being mined in accordance with the 1981 CUP,

regularly altering specific site conditions. The 1981 Reclamation Plan shows the final topography resulting from the 1981 CUP as being characterized by a relatively large flat pad in the eastern portion of the site rimmed by steep mined slopes up to 90 feet in height, and a pad that slopes up towards the northwest in the western portion of the site surrounded by steep mined slopes up to 112 feet. Site elevations resulting from the 1981 Reclamation Plan range from approximately 330 feet above mean sea level AMSL to approximately 440 feet AMSL.

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would allow for continued phased mining operations to be extended for an additional 30 years from the date of project approval; allow for grading or grading modifications to the 1981 Reclamation Plan to accommodate the relocation, restoration/ enhancement of Carroll Canyon Creek through the project site; and to reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. The CUP/Reclamation Plan Amendment would leave the eastern portion of the project site (east of Camino Ruiz) as a generally level interior portion, with mined slopes rimming the site at heights up to approximately 85. The area west of Camino Ruiz would be left as a deep quarry depression rimmed by mined slopes up to approximately 120 feet in height. As part of mining activities, asphalt and concrete plants are in operation in the eastern portion of the site and would continue to operate under the CUP Amendment. As resources are depleted and mining operations phase out, the Reclamation Plan Amendment would be implemented to serve as an interim control until the project area builds out as anticipated by the Stone Creek Master Plan.

The Reclamation Plan Amendment proposes contour grading of mined slopes such that the slope gradients vary and range from 4:1 to 2:1, as shown in Figure 3-2, *Proposed Adjusted Reclamation Plan Amendment*. The Reclamation Plan Amendment would also construct storm water control devices to act as detention facilities for water quality. Additionally, the Reclamation Plan Amendment would reconfigure the Carroll Canyon Creek Corridor to approximately mimic its previous alignment.

The CUP/Reclamation Plan Amendment would result in a change in the existing landform. This change would result in a more natural appearance to the site, with undulating slopes and a reconfigured creek corridor. While this change in landform may be substantial in certain portions of the project site, it does not result in an adverse environmental effect, as the project would reclaim the site to a more naturally appearing state. Additionally, the Reclamation Plan Amendment includes a landscape plan that would revegetate mined areas with a varied plant palette, utilizing native and naturalized plant material including trees, shrubs, and groundcover.

Stone Creek Project

In order to facilitate development of Stone Creek, a VTM is proposed. The Stone Creek VTM details actual landform alterations and resultant elevations, as well as necessary infrastructure, and has been prepared in accordance with the guidelines and development intensities proposed in the

Master Plan, the State Subdivision Map Act and City requirements. The VTM proposed for the Stone Creek project is shown in Figures 3-23, *Stone Creek Vesting Tentative Map*.

The VTM proposes approximately 304,270 cubic yards of cut and 3,803,680 cubic yards of fill. Implementation of the VTM would require that approximately 39.7 percent of the site be graded. For the most part, the CUP/Reclamation Plan Amendment (see Section 3.3.7, *CUP/Reclamation Plan Amendment*) would leave the eastern portion of the project site ready for development, with some minor final grading proposed by the VTM to accommodate circulation and development pads. The CUP/Reclamation Plan Amendment, however, would leave a large quarry depression in the western portion of the site. Approximately 3,499,410 cubic yards of fill would need to be imported in order to fill the depression in the western portion of the site in a manner that would be suitable for urban development.

Manufactured slopes would occur primarily around the perimeter of areas proposed for development. Slopes remaining from mining activities would be contour graded, with slopes gradients varying from 4:1 to 2:1, and landscaped in accordance with the proposed *Conceptual Landscape Plan* (see Figure 3-12). The maximum height of fill slopes would be approximately 65 feet; cut slopes would be a maximum of approximately 75 feet in height.

The proposed VTM would result in a change to the existing landform and to that which would occur with the 1981 Reclamation Plan. All slopes would be contour graded to emulate natural slopes which typically rim San Diego's canyons. This change would result in more naturally appearing and gradual slopes than what currently exists on-site and what would occur under the 1981 Reclamation Plan. Additionally, resulting slope heights of the proposed VTM would be less than what would result from the CUP and Reclamation Plan. The project proposes extensive landscaping of all slope areas, as well as circulation element streets, parks, and the Carroll Canyon Creek Corridor. Therefore, the alteration in landform that would result from the Stone Creek VTM does not create a significant environmental impact, as the change would not be considered substantial or adverse.

Significance of Impacts

The CUP/Reclamation Plan Amendment would result in less than significant impacts regarding a change in landform. The CUP/Reclamation Plan Amendment would include contour grading and landscaping that would ensure that, while a change in landform would occur, this change would not be considered a substantially adverse visual impact.

The Stone Creek Master Plan and associated actions would result in less than significant impacts regarding a change in landform. The VTM would provide for grading guidelines and requirements that would ensure that, while a change in landform would occur, this change would not be considered substantial or adverse.

Mitigation Measures

No mitigation measures would be required.

ISSUE 7

Would the proposal result in substantial light or glare which would adversely affect daytime or nighttime view in the area?

Significance thresholds:

Projects that would emit or reflect a significant amount of light and glare. To meet this significance threshold, one or more of the following must apply:

- The project would be moderate to large in scale, more than 50 percent of any single elevation of a building's exterior is built with a material with a light reflectivity greater than 30 percent (see LDC Section 142.07330(a)), and the project is adjacent to a major public roadway or public area.
- The project would shed substantial light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and industrial uses, and natural areas.

Impacts

CUP/Reclamation Plan Amendment

Implementation of the CUP/Reclamation Plan Amendment, as described above, would result in a site that reflects the natural landscape. No urban development would occur, and no structures, lighting, or other features of urbanized development would result. The project would be left in an open state, with necessary fencing and security measures to keep out trespassers and ensure safety. Therefore, the project would not result in substantial light and glare, as the site would not be developed with uses that could create light and glare. Should lighting be provided for security purposes, the lighting impacts of such measures would be regulated by compliance with Section 142.0740 of the City of San Diego Land Development Code. No impacts would result relative to lighting and glare.

Stone Creek Project

The project site is currently fully disturbed with resource extraction and processing operations. Current development includes resource extraction and processing equipment in the southern and eastern portions of the project site. Sources of light on-site include the processing buildings and structures, parking lighting, and some lighting in the areas where mining is occurring.

Lighting for the Stone Creek project is proposed to provide a unifying theme to the entire project site. Light fixtures would be of matching and/or complementary design. Landscaping and architectural features would be illuminated and accented with lighting. Lighting for parking areas and structures is also proposed to match the site lighting theme. Additional lighting would be provided in pedestrian and parking areas to provide necessary security. Building-mounted flood lighting would not be used to illuminate parking areas. Pedestrian trails around the perimeter of the project would also be lit to allow use during evening hours.

Outdoor lighting is regulated by Section 142.0740 of the City of San Diego Land Development Code. The purpose of the City's outdoor lighting regulations is to minimize negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Regulation of outdoor lighting is also intended to promote lighting design that provides for public safety and conserves electrical energy. New outdoor lighting fixtures must minimize light trespass in accordance with the Green Building Regulations where applicable, or otherwise shall direct, shield, and control light to keep it from falling onto surrounding properties. No direct-beam illumination is permitted to leave the premises. The City's lighting regulations require that most outdoor lighting be turned off between 11:00 P.M. and 6:00 A.M. with some exceptions (such as lighting provided for commercial and industrial uses that continue to be fully operational after 11:00 P.M., adequate lighting for public safety).

As described in Section 2.10, *Multiple Species Conservation Program Subarea Plan/Multi-Habitat Planning Area*, the MHPA does not occur within the project site. However, the MHPA occurs immediately offsite to the west (see Figure 2.14, *MHPA Exhibit*). In accordance with the MSCP Adjacency Guidelines, lighting of all developed areas adjacent to the MHPA would be directed away from the MHPA.

Section 142.0730 of the City's Land Development Code regulates glare. Section 142.0730 limits a maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light reflectivity factor greater than 30 percent. Additionally, reflective building materials are not permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space.

The project site is located in a fully developed urban community. Lighting from surrounding residential, light industrial, and business park development, as well as street lighting on public streets, predominate the area. Because the majority of development in the project area is below the top slope of the project site and comprised of commercial retail, hotel, office, business park, light industrial, and high technology uses, as well as multi-family residential developments, glare from an expanse of windows is minimal. Relative to shading, there are no buildings in the immediate project area that can cast substantial shadows on the project site for extended periods of time.

Significance of Impacts

the CUP/Reclamation Plan Amendment would not result in significant impacts relative to lighting and glare. Additionally, the Stone Creek Master Plan and associated actions would not result in significant impacts relative to lighting and glare.

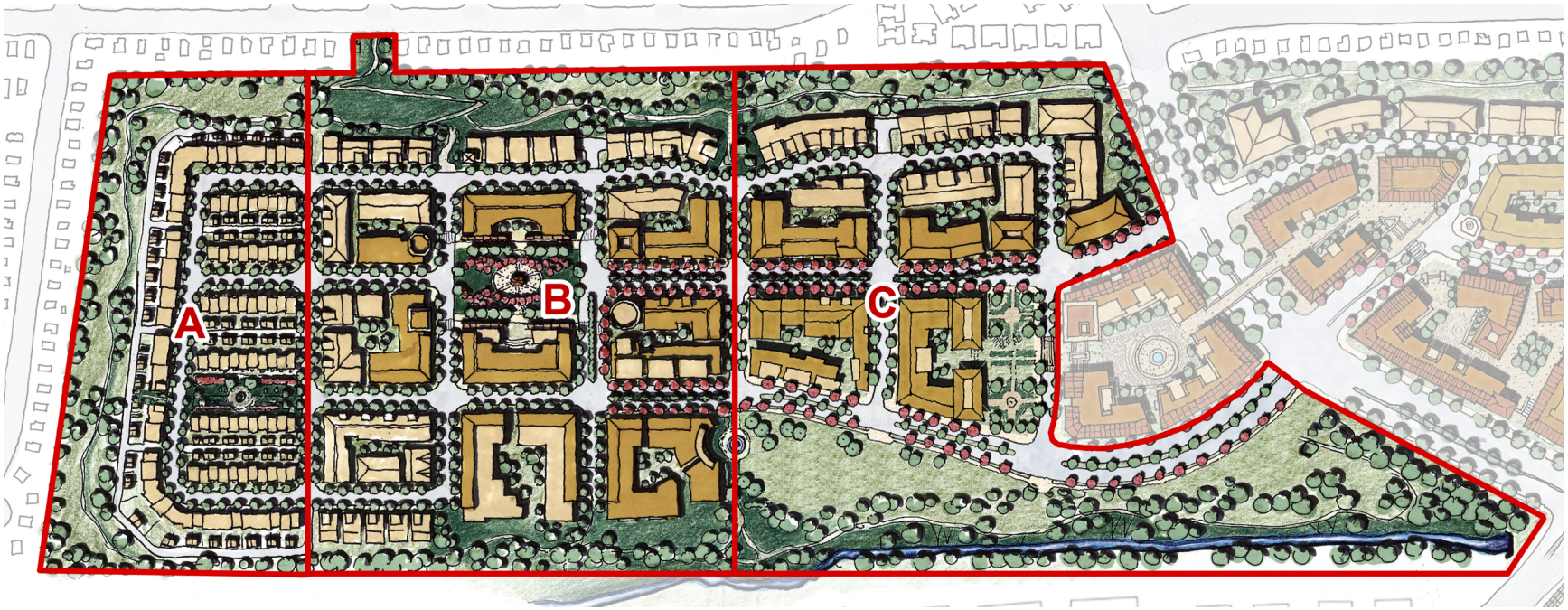
Mitigation Measures

No mitigation measures would be required.

Figure 5.3-1. ***Project Site Aerial Photograph***

Figure 5.3-2. ***Typical View of Mined Terrain***

Figure 5.3-3. *Stone Creek Illustrative Site Plan*



Conceptual design for illustrative purposes only.

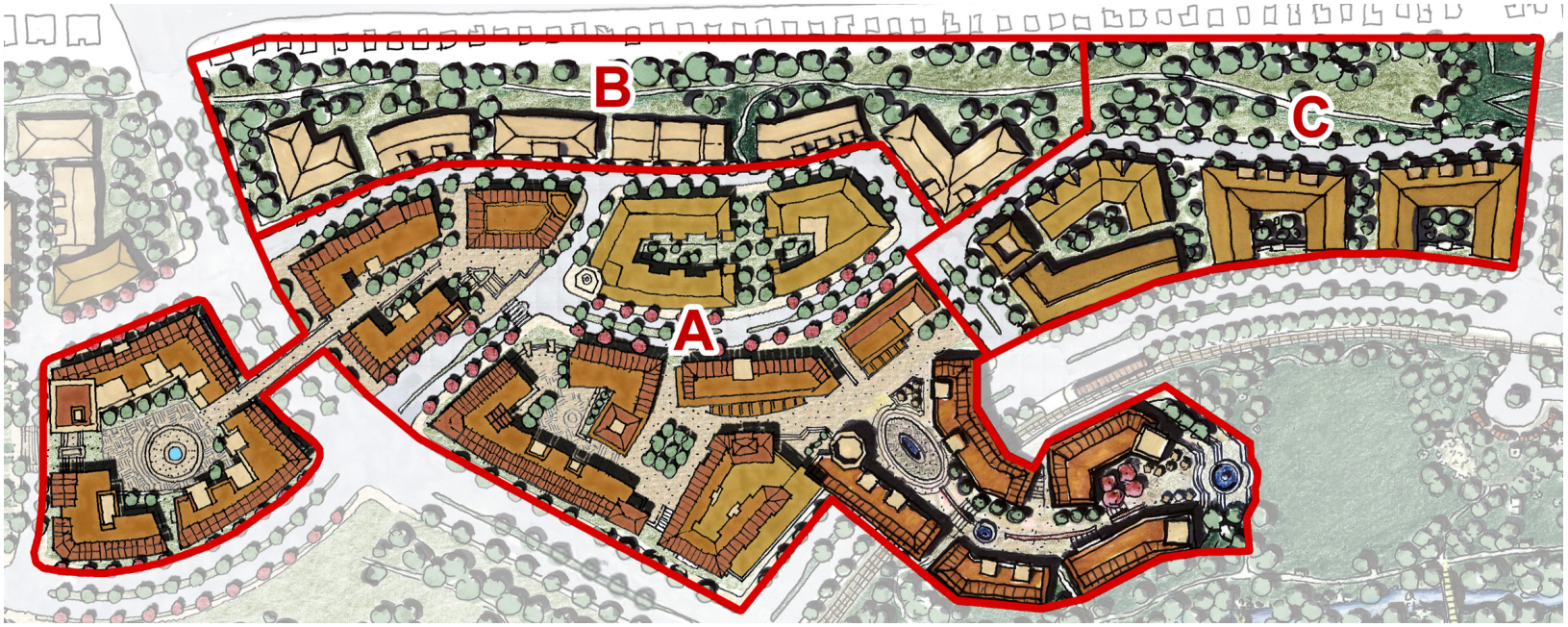
Figure 5.3-4. *Westside Neighborhood Illustrative*

Parkland Legend:

1. Westside Terrace
2. Westside Commons
3. Westside Crossing
4. Trailhead Park
5. Overlook Terrace

Conceptual design for illustrative purposes only.

Figure 5.3-5. *Westside Neighborhood's Pocket Parks Illustrative*



Conceptual design for illustrative purposes only.

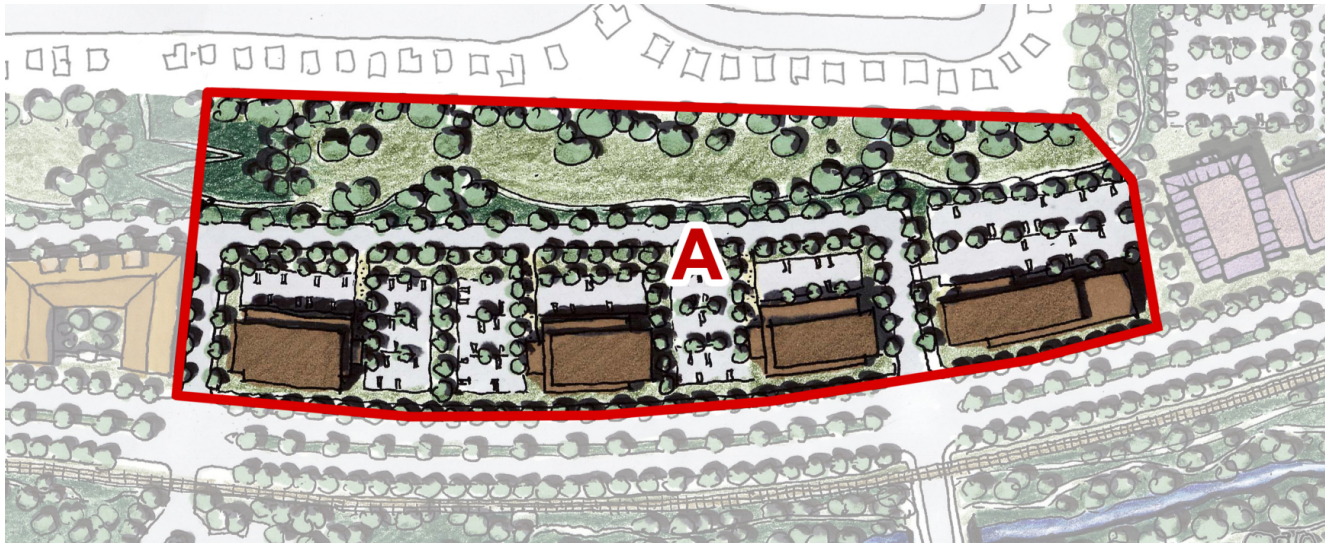
Figure 5.3-6. *Village Center Illustrative*

Piazza Legend:

1. Westside Stairway
2. Westside Piazza
3. Village Piazza
4. Market Piazza
5. Grand Piazza
6. Overlook Piazza
7. The Grand Staircase

Conceptual design for illustrative purposes only.

Figure 5.3-7. *Village Center Piazzas Illustrative*

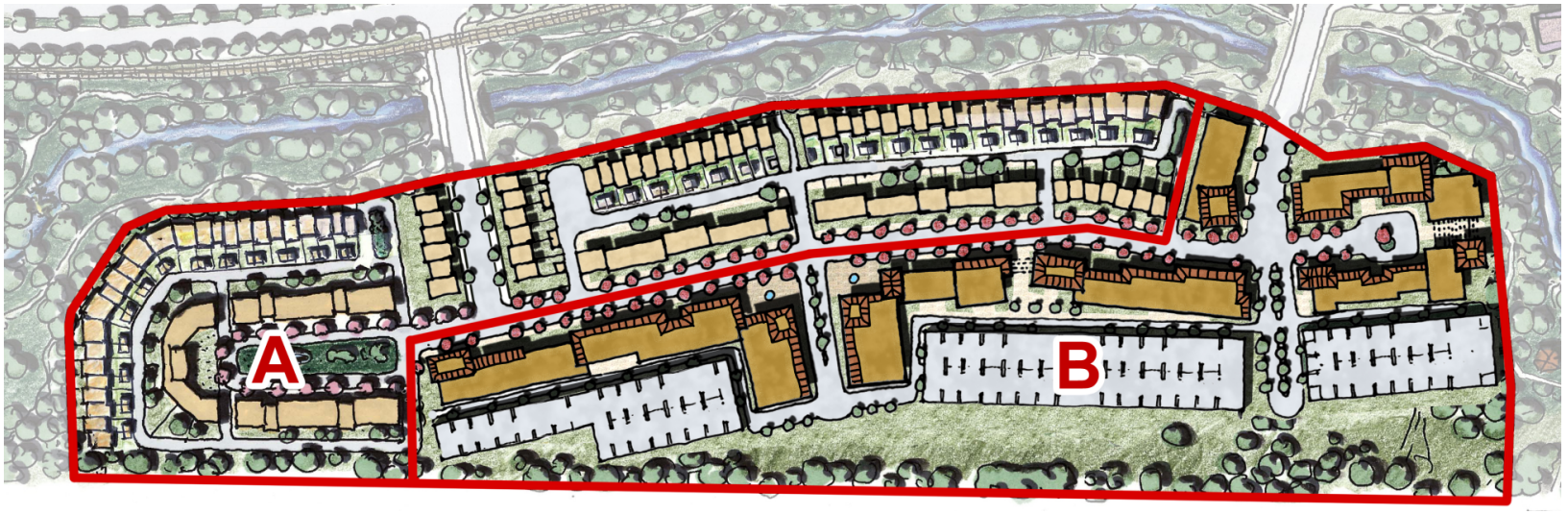


Conceptual design for illustrative purposes only.

Figure 5.3-8. *Parkside Neighborhood Illustrative*

Conceptual design for illustrative purposes only.

Figure 5.3-9. *Eastside Neighborhood Illustrative*



Conceptual design for illustrative purposes only.

Figure 5.3-10. *Creekside Neighborhood Illustrative*

Conceptual design for illustrative purposes only.

Figure 5.3-11. ***Stone Creek Central Park and Westside Gardens Illustrative***

5.4 BIOLOGICAL RESOURCES

This section evaluates the potential biological resources impacts associated with Stone Creek (the project). The following discussion is based on the *Biological Technical Report*, prepared by RECON (August 20, 2019) and is included as Appendix F, and the *Wetland Mitigation Plan for the Conditional Use Permit/Reclamation Plan, San Diego, California*, prepared by RECON (June 10, 2019), included in Appendix F-1.

The site was surveyed on June 28 and July 11, 2011, following the guidelines set forth by the U.S. Army Corps of Engineers (USACOE; 1987, 2008) to delineate wetlands on the Stone Creek Project site. An additional biological resource survey was conducted on April 1, 2015 to verify the existing conditions on the property. The site was resurveyed on September 13, 2017, to verify the condition of the on-site biological resources and document any changes or additions to the biological resource information already collected.

5.4.1 Existing Conditions

The project site is located in the Mira Mesa community in the City of San Diego, California (see Figure 2-2, *Vicinity Map*). The site is located west of I-15, between Miramar Road and Mira Mesa Boulevard. As shown in Figure 2-3, *Project Location Map*, a mix of residential, commercial, and light industrial developments surround the site, with another gravel mining operation off-site to the southwest in Carroll Canyon. On-site elevations range between approximately 330 feet in the southwest corner to 440 feet AMSL in the northeast corner of the project site.

Six soil types are mapped on the project site: Redding gravelly loam, two to nine percent slopes; Redding cobbly loam, nine to 30 percent slopes; Redding cobbly loam, dissected, 15 to 30 percent slopes; riverwash; terrace escapements; and gravel pit. Each soil type is classified in accordance with the U.S. Department of Agriculture (USDA) characterizations of soil types in San Diego County. Because the site is actively mined, most of the topsoils have been removed.

BOTANY

A total of 62 plant species were identified on the project site (see Table 5.4-1, *Plant Species Observed at the Stone Creek Project Site*). Of this total, 28 (45 percent) are species native to San Diego County, and 34 (55 percent) are introduced species.

Six vegetation communities were identified on the project site: freshwater marsh, southern willow scrub, mule fat scrub, riparian scrub, disturbed wetland, and eucalyptus woodland. Five land cover types were also mapped on the survey area: open water (industrial mining ponds), natural flood channel, concrete channel, disturbed land, and developed. (See Table 5.4-2, *Existing Vegetation Communities and Land Cover Types*).

Table 5.4-2. *Existing Vegetation Communities and Land Cover Types*

Vegetation Community / Land Cover Type	City of San Diego Tier	Acreage
Eucalyptus woodland	Tier IV	17.10
Disturbed Land	Tier IV	232.76
Developed	Tier IV	4.09
Southern willow scrub	*	4.68
Mule fat scrub	*	0.28
Riparian scrub	*	0.36
Freshwater marsh	*	0.22
Natural flood channel	*	1.48
Disturbed southern willow scrub	*	0.17
Concrete channel	*	0.06
Open water (Mining ponds)	**	32.02
	TOTAL	**293.22**

*Wetlands do not have a Tier ranking, but are considered sensitive vegetation communities.
**Open water associated with the mining ponds is not considered a wetland.

Open Water

Industrial mine ponds are constructed as plant processing water storage areas where silts are allowed to settle out and the water is then reused in the processing plant. Narrow patches of vegetation may temporarily grow along the edges of these ponds, but this vegetation is subject to change due to water levels that fluctuate, pond maintenance, and mining activities.

The industrial mining siltation ponds on-site are mapped as open water. Most of these ponds change in location based on the current mining operation and the direction of runoff water. The largest industrial siltation pond, located near the Vulcan mine main office, is currently stationary, but has changing water levels based on usage.

Freshwater Marsh

Freshwater marsh is located within a short segment of the central drainage course on the site. This area has bulrush (*Schoenoplectus* sp.), water cress (*Rorippa nasturtium-aquaticum*), and cattail (*Typha latifolia*).

Natural Flood Channel

Natural flood channel is mapped as sections of the Carroll Canyon Creek drainage courses on-site that lack significant vegetation. These areas have a cobble bottom and are mostly void of vegetation, but are characterized by scattered mule fat (*Baccharis salicifolia*), tamarisk (*Tamarisk rammosissima*), and pampas grass (*Cortaderia jubata*) individuals.

Concrete Channel

A short section of a small tributary drainage is concrete where it enters the site from a culvert under Black Mountain Road (Tributary B identified on Figure 5.4-1).

Southern Willow Scrub

Southern willow scrub dominates the drainage course on much of the site. This vegetation community is dominated by red willow (*Salix laevigata*), Gooding's black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepis*).

Mule Fat Scrub and Riparian Scrub

Mule fat scrub on-site occurs in one section of the drainage course in the central portion of the site along the southern property boundary. This area is dominated by mule fat shrubs. A small area of riparian scrub grows on a floodplain terrace of Carroll Canyon Creek near the southwest border of the project site. This location is primarily vegetated with coyote bush (*Baccharis pulularis*) and California buckwheat (*Eriogonum fasciculatum*), with scattered individuals of mule fat shrubs.

Disturbed Southern Willow Scrub

A portion of the drainage channel that likely supported willow scrub habitat has been infested with non-native plant species that have displaced most of the native wetland plant species. The area is dominated by non-native species such as acacia (*Acacia* sp.), eucalyptus (*Eucalyptus* sp.), and pampas grass.

Eucalyptus Woodland

Eucalyptus woodland occurs along the perimeter of the site between the mining operation and the surrounding properties. This area was most likely planted to visually buffer the sight of the mine from the neighboring properties. Within the eucalyptus woodland are a few remaining native plants, including California buckwheat, chamise (*Adenostoma fasciculatum*), black sage (*Salvia mellifera*), and lemonadeberry (*Rhus integrifolia*). Many other non-native plant species were observed here, including eucalyptus, tocolote (*Centaurea melitensis*), black mustard (*Brassica nigra*), and erodium *(Erodium* sp.).

Disturbed Land

The majority of the site is mapped as disturbed land. The disturbed land areas include all of the active mining operation as well as the adjacent slopes. Any vegetation that becomes established in these disturbed areas is subject to clearing at any time as the mining operation progresses.

Developed

The developed portion of the site includes the portion of Camino Ruiz within the project boundary.

ZOOLOGY

The wildlife species observed on-site are typical of the habitat present. A complete list of the species detected is provided in Table 5.4-3, *Wildlife Species Observed on the Stone Creek Project Site*. Sensitive species observed or potentially occurring are discussed under *Sensitive Biological Resources*, below.

Amphibians

Amphibians require moisture for at least a portion of their life cycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season.

No amphibian species were observed during the survey. However, common amphibians, such as the Pacific treefrog (*Pseudacris regilla*), are likely to occur on this site in the wetter portions of Carroll Canyon Creek and perhaps briefly along the shores of the mining ponds when they contain water.

Reptiles

The diversity and abundance of reptile species vary with habitat type. Many reptiles are restricted to certain vegetation communities and soil types, although some of these species would also forage in adjacent communities. Other species are more ubiquitous, using a variety of vegetation types for foraging and shelter.

The western fence lizard (*Sceloporus occidentalis*) was the only reptile observed on-site. It was observed using the southern willow scrub, eucalyptus woodland, and some of the disturbed land on-site.

Birds

The diversity of bird species varies with respect to the character, quality, and diversity of vegetation communities present. Riparian habitats typically have a high number of bird species because they provide protection and food throughout the dry summer months. Because the site is an active mine, the disturbance may limit the number of species using the site.

The birds detected are common within the urban areas with a permanent source of water, including mallard (*Anas platyrhynchos platyrhynchos*), rudy duck (*Oxyura jamaicensis rubida*), killdeer (*Charadrius vociferus vociferus*), northern rough-wing swallow (*Stelgidopteryx serripennis*), black phoebe (*Sayornis nigricans semiatra*), common yellowthroat (*Geothlypis trichas*), and song sparrow (*Melospiza melodia*). Raptor species detected on-site include osprey (*Pandion haliaetus carolinensis*), red-shouldered hawk (*Buteo lineatus elegans*), and red-tailed hawk (*Buteo jamaicensis*). The majority of the bird species observed used the riparian scrub, freshwater marsh, and eucalyptus woodland habitats, but also foraged in the adjacent disturbed land. While ducks and osprey may occasionally use the mining siltation ponds to forage on-site, these ponds do not represent a habitat type that would support breeding activities or a major source of food/shelter due to the wide fluctuations in water levels and lack of significant native vegetation.

Mammals

Naturally vegetated areas provide cover and foraging opportunities for a variety of mammal species. Disturbed areas provide limited opportunities for mammals. Most mammal species are nocturnal and are difficult to detect during daytime surveys.

Because the site is an active mining operation, disturbance is high and mammal activity is expected to be low. Evidence of southern mule deer (*Odocoileus hemionus fuliginata*) and common raccoon (*Procyon lotor*) were found on-site. Coyotes (*Canis latrans*) are also expected to occur on-site. These mammal species likely use the southern willow scrub habitat and eucalyptus woodland on-site for cover when moving across the disturbed land of the mine.

SENSITIVE BIOLOGICAL RESOURCES

Sensitivity Criteria

Local, State, and Federal agencies regulate sensitive species and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of any proposed development on a property. All species listed by State or Federal agencies as rare, threatened, endangered, or proposed for listing are considered to be sensitive biological resources. The habitat that supports a listed species is also a sensitive biological resource.

All wetland areas and non-wetland waters of the U.S. are considered sensitive. Wetlands and non-wetland waters are under the jurisdiction of USACOE. Streambeds and associated vegetation are under the jurisdiction of CDFW. The City of San Diego defines wetlands as:

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation;
2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation;
3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands (City of San Diego 2002).

Assessments for the potential occurrence of sensitive species are based upon known ranges, habitat preferences for the species, species occurrence records from the California Natural Diversity Database (CNDDB), and species occurrence records from other sites in the vicinity of the project site.

The assessment of the sensitivity of plant communities and species follows the guidelines presented in the MSCP (City of San Diego 1997) and the City's Land Development Code, Biology Guidelines (City of San Diego 2002). MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA

lands are considered by the City to be a sensitive biological resource. Under the City's MSCP Subarea Plan, upland vegetation communities have been divided into four tiers of sensitivity. Upland vegetation communities classified as Tier I, Tier II, or Tier III are considered sensitive by the City. Tier IV vegetation communities are not considered sensitive.

A total of 85 sensitive plant and wildlife species are considered to be adequately protected within MHPA lands. These sensitive species are MSCP-covered species and are included in the Incidental Take Authorization issued to the City by Federal and State governments as part of the City's MSCP Subarea Plan. There are 13 plant species that are classified as "narrow endemic species" based on their limited distributions in the region. These narrow endemics are sensitive biological resources, and some are also listed species. The habitat that supports a narrow endemic species is also considered a sensitive biological resource.

Sensitive Vegetation Communities

There are six sensitive vegetation communities on-site: freshwater marsh, southern willow scrub, mule fat scrub, disturbed wetland, natural flood channel, and riparian scrub. Freshwater marsh, southern willow scrub, disturbed wetland, natural flood channel, riparian scrub, and mule fat scrub are considered sensitive wetland habitats by CDFW, USACOE, and the City of San Diego.

Sensitive Plant Species

No sensitive plant species were observed during the survey. No sensitive plant species or narrow endemic plant species are expected to occur on the site due to the disturbed nature of the land. A list of sensitive plant species with a potential to occur on-site or known to occur within the vicinity of the site is provided in Table 5.4-4, *Sensitive Plant Species Observed or with the Potential for Occurrence on the Stone Creek Project Site*; the sensitivity codes are explained in Table 5.4-5, *Sensitive Plant Species Status Code*.

Sensitive Wildlife

Five sensitive wildlife species were observed or detected on-site and are described below. Table 5.4-6, *Sensitive Wildlife Species Known or with the Potential to Occur on the Stone Creek Project Site*, lists sensitive species on-site, are known to occur within two miles of the site according to CNDDB records, or could potentially occur on-site based on the ranges and habitat requirements of the species.

Observed

Great blue heron (*Ardea herodias*). Great blue herons and their nests are protected under the Federal Migratory Bird Treaty Act. Great blue herons are distributed throughout the United States and Mexico. Peak abundance is in coastal estuaries, but this species occurs in a wide variety of aquatic habitats. Great blue herons usually nest in colonies of several hundred pairs (Butler 1992). A

large, flat platform is constructed of sticks lined with finer twigs and vegetation placed in trees or shrubs 30 to 70 feet above the ground. Few great blue heron breeding colonies occur in San Diego County. From 1997 to 2001, 30 great blue heron nest sites were recorded in San Diego County. Great blue herons capture and feed on small fish, amphibians, invertebrates, reptiles, mammals, and birds. Great blue heron populations are at risk because of loss of habitat, specifically nesting habitat. Development of coastal lowlands and lagoons has decreased nesting sites and threatens the future success of the great blue heron. A great blue heron was observed at the main mining siltation pond. No rookery site was observed, and this species is not expected to nest on-site.

Osprey (*Pandion haliaetus carolinensis*). The osprey is a CDFW species of special concern. This species ranges worldwide and is found along the coastline and around lakes of the coastal lowlands. Small numbers overwinter in San Diego County; they are most numerous in mid-September and November (Unitt 1984). Fewer are present in spring and summer during the breeding season. Individuals will often take up residence at favored areas and remain there for several years. Ospreys nest on large platform nests of sticks lined with moss and grass in trees, cliffs, or human structures at a height of five to 200 feet high (Polite 1983). Breeding occurs from March through September. Their diet consists primarily of fish, but they will also prey on mammals, reptiles, amphibians, and invertebrates (Polite 1983). Ospreys forage by hovering over water, diving down, and catching fish in their talons. Severe reduction of the osprey's potential foraging habitat, as well as breeding failures due to the long-term effects of pesticides such as dichlorodiphenyltrichloroethane, have combined to greatly reduce the number of osprey present in San Diego County. One osprey was observed trying to build a nest in the San Diego Gas & Electric power pole near the dock in the main mining siltation pond (see Figure 5.4-1, *Existing Biological Resources – Pre-Reclamation Plan*). Though numerous attempts were made by the osprey, no nesting material was successfully installed on the power pole.

Raptor species. Two additional raptor species, red-shouldered hawk and red-tailed hawk, were observed on-site and have potential to nest in the tall trees in the eucalyptus woodland along the perimeter of the site. All active raptor nests are protected under the California Fish and Game Code Section 3503.5.

Southern mule deer (*Odocoileus hemionus fuliginata*). The southern mule deer is an MSCP-covered species that ranges from western Canada south through the western United States. This species prefers habitats consisting of a mosaic of various-aged vegetation that provides woody cover, meadow and shrubby openings, and a water source. Mule deer primarily graze upon herbaceous plants, but will also browse on various shrubs and trees and dig out subterranean mushrooms. This species is threatened by loss or fragmentation of habitat, resource competition with range and wild animals, and overpopulation due to habitat loss and loss of natural predators. Southern mule deer were observed on-site.

Wildlife Movement Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations. Wildlife movement corridors are considered sensitive by resource and conservation agencies.

The project site is part of a canyon and contains a portion of Carroll Canyon Creek. However, the site is currently being mined and is surrounded by development and mining. This project site does not function as a wildlife corridor for large mammals due to the high level of surrounding disturbance and active mining operation. Small mammals and birds may continue to use this canyon as a local wildlife movement corridor. The proposed enhanced creek corridor would comply with the Mira Mesa Community Plan requirement to provide a local wildlife corridor that connects to wildlife corridors to the west in Carroll Canyon.

Jurisdictional Areas

Wetland areas observed on the project site are shown in Figures 5.4-2, *Stone Creek Location of Jurisdictional Waters*, and 5.4-3, *City of San Diego Wetlands*. These wetlands are located along Carroll Canyon Creek and its tributaries on the property. Non-wetland waters and streambeds also occur on the property and are located along portions of Carroll Canyon Creek and a tributary drainage. A breakdown of how each jurisdiction applies to these jurisdictional waters is summarized below. As previously identified, mining and related reclamation activities were permitted on the property in 1981 prior to the development of City wetland regulation. Thus, wetlands existing in the property are not subject to City jurisdiction.

USACOE Jurisdictional Areas

All drainage courses on the site are ephemeral, exhibiting surface flow in times of high precipitation and subsiding to dry channels in drier times. Wetlands are supported along portions of Carroll Canyon Creek where the soils stay moist for prolonged periods of time. Non-wetland waters occur in portions of the creek where the channel bottoms are devoid of vegetation due to high flow velocities. A total of 5.35 acres of waters of the U.S. occur on the site, including 1.543 acres of non-wetland waters and 3.807 acres of wetland. (See Figure 5.4-2, *Stone Creek – Location of Jurisdictional Wetlands,* and Table 5.4-7, *USACOE Water of the U.S.)*

CDFW Jurisdictional Areas

State wetlands are located on the property in the same locations as the USACOE wetlands discussed in the previous section. Waters of the State or streambeds are in the same locations as the USACOE non-wetland waters. In addition, riparian areas associated with Carroll Canyon Creek and the tributary drainages have been added to the CDFW jurisdiction, as their jurisdiction extends beyond

the USACOE ordinary high-water mark and to the limits of the riparian canopy. A total of 7.27 acres of waters of the State occur on the property. (Figure 5.4-2, *Stone Creek – Location of Jurisdictional Wetlands,* and Table 5.4-8, *CDFW Jurisdictional Waters.*)

Regional Water Quality Control Board Jurisdictional Areas

The RWQCB takes jurisdiction over all waters of the State and all waters of the United States as mandated by both the Federal Clean Water Act and the California Porter-Cologne Water Quality Control Act. Therefore, RWQCB jurisdictional areas total 7.27 acres, which includes the areas under the jurisdiction of USACOE and CDFW.

Non-Jurisdictional Waters

The project site contains several industrial siltation ponds that were created in upland areas and are used as part of the operation of the mine. These ponds are manufactured, and water levels are manipulated by the operation of the mine. Although some vegetation may become established along the edges of these ponds, the size and distribution of these vegetated areas varies as the water level in the pond's changes and mining activities progress.

Implementation of 1981 CUP/Reclamation Plan Implementation of the 1981 CUP/Reclamation Plan impacts 5.25 acres of Federal and State jurisdictional waters. Impacts would be mitigated through creation of 10.50 acres of Federal and State jurisdictional waters. Mitigation would be provided at a 2:1 ratio and would be completed as part of the implementation of the 1981 CUP/Reclamation Plan. Impacts to wetlands and waters required to complete reclamation and associated restoration activities are summarized in Table 5.4-9, *Summary of Jurisdictional Waters Impacts and Mitigation*.

Upon completion of mining and implementation of the 1981 CUP/Reclamation Plan, Carroll Canyon Creek would be located along the southern property boundary. The remaining project site would consist of perimeter plantings on reclaimed/recontoured slopes with ornamental species to screen the property from adjacent developed areas. Flatter graded pads below these slopes would be hydroseeded to stabilize the soils and prevent excess sediment runoff. The biological resources on-site following implementation of the 1981 CUP/Reclamation Plan are summarized in Table 5.4-10, FUTURE *Baseline Biological Resources – Implementation of 1981 CUP/Reclamation Plan*. The CUP/Reclamation Amendment and Stone Creek Development Plan would be analyzed against these future baseline conditions.

5.4.2 Regulatory Framework

This section summarizes Federal, State, and local regulations that govern biological resources potentially impacted by the project.

FEDERAL REGULATIONS

Endangered Species Act

The Federal Endangered Species Act (FESA) provides protections for species endangered or threatened with extinction. FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR Section 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties. Projects that are implemented consistent with the City of San Diego's MSCP and Biology Guidelines (City of San Diego 2002) would be allowed to take listed species with the City of San Diego's authorization and approval.

Clean Water Act

Pursuant to Section 404 of the CWA, USACOE is authorized to regulate any activity that would result in the discharge of dredged or fill material into jurisdictional waters of the U.S., which include those waters listed in 33 CFR Part 328 (Definitions). USACOE, with oversight by Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 Permits. Pursuant to Section 401 of the CWA, the RWQCB, Region 9, certifies that any discharge into jurisdictional waters of the U.S. will comply with State water quality standards. RWQCB, as delegated by EPA, has the principal authority to issue a CWA Section 401 water quality certification or waiver.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits any person unless permitted by regulations, to *pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, delivery for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention…for the protection of migratory birds…or any part, nest, or egg of any such bird* (16 U.S. Code 703). The list of migratory birds protected by the MBTA includes nearly all bird species native to the United States. The statute was extended in 197 to include parts of birds, as well as eggs and nests. Thus, it is illegal under the MBTA to directly kill, or destroy a nest of, nearly any bird species, not just endangered species. Activities that result in removal or destruction of an active nest (a nest with eggs or young being attended by one or more adults) would violate the MBTA. Removal of unoccupied nests is not considered a violation of the MBTA.

STATE REGULATIONS

California Fish and Game Code

The California Fish and Game Code (CFGC) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the State. Applicable sections of the CFGC are discussed below.

Section 2050 Et Seq. – California Endangered Species Act

This California Endangered Species Act (CESA) (Section 2050 et seq.) prohibits the "take" (defined as "to hunt, pursue, catch, capture, or kill") of State-listed species except as otherwise provided in State law. CESA is administered by CDFW and is similar to FESA. State lead agencies are required to consult with CDFW to ensure that their authorized actions are not likely to jeopardize the continued existence of any State-listed species or result in the degradation of occupied habitat.

Under Section 2081, CDFW authorizes "take" of State-listed endangered, threatened, or candidate species through incidental take permits or memoranda of understanding if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in questions, and (4) the applicant ensures suitable funding to implement the measures required by CDFW.

Section 3503 and 3503.5 – Protection of Birds, Nests, and Raptors

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Section 3511, 4700, 5050, and 5515 – Fully Protected Species

Protection of fully protected species is described in CFGC Sections 3511, 4700, 5050, and 5515. These species include certain fish, amphibian and reptile, bird, and mammal species. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take of fully protected species.

Section 3513 – Migratory Birds

This code protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame birds.

Section 1900 et seq. – Native Plant Protection Act

The Native Plant Protection Act (NPPA) (CFGC Section 1900 et seq.) includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for "rare and endangered" are different from those contained in CESA, although CESA-listed rare and endangered species are included in the species protected under the NPPA.

Section 1600 et seq. – Streambed Alteration Agreement

Pursuant to Section 1600 et seq. of the CFGC, CDFW regulates activities of an applicant's project that would substantially alter the flow, bed, channel, or bank of streams or lakes, unless certain conditions outlined by CDFW are met by the applicant. The limits of CDFW jurisdiction are defined in CFGC Section 1600 et seq. as the *bed, channel, or bank of any river, stream, or lake designated by the CDFW in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit*. However, in practice, CDFW usually extends its jurisdictional limit and assertion to the top of a bank of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider.

In some cases, drainage ditches and retention ponds can be potentially considered under the regulator administration of CDFW. CDFW provides specific guidance concerning its regulatory administration in CCR Title 14 Section 720 (Designation of Waters of Department Interest):

> For the purpose of implementing Sections 1601 and 1603 of the Fish and Game Code, which requires submission to the department of general plans sufficient to indicate the nature of a project for construction by or on behalf of any person, governmental agency, State of local, and any public utility, of any project which will divert, obstruct, or change the natural flow or bed of any river, stream, or lake designated by the department, or will use material from the streambeds in the State of California, including all rivers, streams, and streambeds, *which may have intermittent flows of water*, are hereby designated for such purpose. (Italics added.)

Porter-Cologne Water Quality Act

Pursuant to Section 13000 et seq. of the California Water Code (the 1969 Porter-Cologne Water Quality Control Act), RWQCB is authorized to regulate any activity that would result in discharges of waste or fill material to waters of the State, including "isolated" waters and wetlands (e.g., vernal pools and seeps). Waters of the State include any surface water or groundwater within the boundaries of the State (California Water Code Section 13050[e]). RWQCB also adopts and implements water quality control plans (basin plans) that recognize and are designed to maintain the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, maintaining water quality, and addressing the water quality problems of that region.

Designated beneficial uses of State waters that may be protected against quality degradation include preservation and enhancement of fish, wildlife, designated biological habitats of special significance, and other aquatic resources or preserves.

LOCAL REGULATIONS

Multiple Species Conservation Program

The MSCP is designed to identify lands that would conserve habitat for Federal and State endangered, threatened, or sensitive species, including the coastal California gnatcatcher. The MSCP is a plan and a process for the local issuance of permits under the Federal and State Endangered Species Acts for impacts to threatened and endangered species. The MSCP provides for the preservation of a network of habitat and open space, protecting biodiversity, and enhancing the region's quality of life. The plan is designed to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. By identifying priority areas for conservation and other areas for future development, the MSCP streamlined permit procedures for development projects that impact habitat thereby providing an economic benefit by reducing constraints on future development and decreasing the costs of compliance with Federal and State laws protecting biological resources. Also included in the MSCP are implementation strategies, preserve design, and management guidelines. The City of San Diego prepared a subarea plan to guide implementation of the MSCP Plan within its corporate boundaries. The City of San Diego adopted the MSCP Subarea Plan in March 1997 (City of San Diego 1997).

MHPA

The goal s MSCP was to create a habitat preserve system known as the (MHPA) to coordinate conservation efforts on a regional scale while allowing development projects to occur. Through the Biology Guidelines in the Land Development Code (City of San Diego 2002), the City regulates development activities according to project location, within or outside of the MHPA. Upon project compliance with the MSCP Subarea Plan and the Biology Guidelines, the City is able to issue "take" authorization for covered species. Prior to the adoption of the MSCP, this "take" authorization would have required project-by-project review with the regulatory agencies. Figure 2-14, *MHPA Exhibit*, locates the MHPA in relationship to the project site. The Stone Creek project area is not within an MHPA area. The closest MHPA area is located southwest of the project site.

Environmentally Sensitive Lands

The Biology Guidelines, provides guidance on implementation of the ESL regulations to ensure protection of resources consistent with CEQA and the City MSCP. ESLs include lands within the MHPA, wetlands, sensitive vegetation communities, habitat for listed species, lands supporting narrow endemics,. The regulations encourage avoidance and minimization of impacts to ESLs. The Biology Guidelines define the survey and impact assessment methodologies and mitigation requirements for unavoidable impacts (City of San Diego 2002).

5.4.3 Impact Analysis

THRESHOLD OF SIGNIFICANCE

According to the City's Significance Determination Thresholds, potential impacts to biological resources are assessed through review of the project's consistency with the City's ESL Regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City's Significance Determination Thresholds, proceeds in two steps: (1) determine if significant biological resources are present; and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

1. Sensitive biological resources are defined by the City of San Diego Municipal Code as:
   - Lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997);
   - Wetlands (as defined by the Municipal Code, Section 113.0103);
   - Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines (July 2002 or current edition) of the Land Development manual;
   - Lands supporting species or subspecies listed as rare, endangered, or threatened;
   - Lands containing habitats with narrow endemic species as listed in the Biology Guidelines of the Land Development manual; and
   - Lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.

2. Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.
   A. Direct Impacts
      - Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.
      - Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered significant.
      - Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to State or Federally listed species and all narrow endemics should be considered significant.
      - Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent

information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B. Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

- Introduction of urban meso-predators into a biological system
- Introduction of urban runoff into a biological system
- Introduction of invasive exotic plant species into a biological system
- Noise and lighting impacts
- Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
- Loss of a wetland buffer that includes no environmentally sensitive lands.

ISSUE 1

Would the project result in:

- *A Substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?*
- *A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?*
- *A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?*

Impacts

CUP/Reclamation Plan Amendment

Impacts to biological resources resulting from the CUP/Reclamation Plan Amendment are shown in Table 5.4-12, Future *Project Baseline and Anticipated Acreages from the CUP/Reclamation Amendment Implementation*.

The CUP/Reclamation Plan Amendment would occur within the 1981 CUP/Reclamation Plan footprint. The CUP/Reclamation Plan Amendment elements include changed grading elevations and the realignment of Carroll Canyon Creek to the center of the project site. As a result, the CUP/Reclamation Plan Amendment is not expected to result in additional impacts to biological

resources beyond those originally associated with the 1981 CUP/Reclamation Plan. No impacts to biological resources (uplands or wetlands) are anticipated from the CUP/Reclamation Amendment.

Following implementation of the CUP/Reclamation Plan Amendment, 212.59 acres of upland habitat would exist on-site. Carroll Canyon Creek would be aligned as shown in Figure 5.4-4 and restored with native wetland plant species to provide an enhanced creek corridor. Restored riparian habitat would be comprised of 10.5 acres of southern willow scrub. This restoration effort would be guided by the Wetland Mitigation Plan (RECON 2019) included as Appendix F-1. Hydroseeded areas would be comprised of a mixture of native plant species and ornamental plantings would comprise 49.02 acres, as implemented under the 1981 CUP/Reclamation Plan.

The large mining pond would be replaced with upland habitat during the implementation of the proposed CUP/Reclamation Plan Amendment; thus, usage of the site by the osprey and great blue heron would no longer be expected. Therefore, no significant impacts to these two species are anticipated. While mule deer may possibly use the site after implementation of the proposed CUP/Reclamation Plan Amendment, these animals are highly mobile and would avoid any direct impacts; therefore, no significant impacts to this species would occur.

Stone Creek Project

While the CUP/Reclamation Amendment could be implemented without the subsequent Stone Creek Master Plan, the Stone Creek Master Plan would be required prior to or concurrent completion of the CUP/Reclamation Plan Amendment. Consequently, the on-site area to be developed through the Stone Creek Master Plan would have been previously graded and hydroseeded or planted with non-natives for erosion control in accordance with the City's landscape guidelines. Native riparian restoration would have been installed. As shown in Figure 5.4-5, *Impacts to Biological Resources – Stone Creek Project,* the riparian restoration areas summarized in Table 5.4-10 after implementation of the CUP/Reclamation Amendment would remain undisturbed. No additional impacts to biological resources from the Stone Creek Master Plan are anticipated within the boundaries of the project, as development would not occur outside the 1981 CUP/Reclamation Plan footprint.

The Stone Creek Master Plan would result in off-site impacts to biological resources due to off-site improvements. Specifically, the project would extend a sewer connection off-site to the south to connect into an existing sewer line in the bottom of Carroll Canyon. This off-site sewer connection would impact approximately 0.08 acre of southern mixed chaparral. This impact to southern mixed chaparral is not considered significant, as it does not exceed the 0.10-acre threshold under City regulations, and therefore no mitigation is required. The project would also extend Carroll Canyon Road off-site to the east, impacting approximately 1.1 acres of disturbed land. Impacts to disturbed land are not considered significant.

Sensitive Plant Species. No sensitive plant species were observed or are expected to occur on-site; therefore, no sensitive plant species are expected to be impacted by this development project.

Sensitive Wildlife. The project may displace general wildlife, and a few small mammals with low mobility may be impacted during construction; however, these impacts are expected to be minimal and are considered less than significant. Impacts to southern mule deer are not expected, since they would move out of the way of construction equipment.

Temporary indirect impacts during construction of the Stone Creek project may include an increase in noise due to an increase in vehicular traffic, and an increase in litter and pollutants into adjacent wildlife habitat. The project site is surrounded by existing development which does not support sensitive wildlife species. These potential impacts are considered less than significant.

Because implementation of the CUP/Reclamation Plan Amendment would involve the realignment and enhancement of Carroll Canyon Creek, it is plausible that when the Stone Creek project begins, the site could support habitat that would be conducive to wildlife use and movement. Thus, pre-construction avian surveys would be required as a condition of the permit.

Jurisdictional Wetland Areas. The project would not impact any habitats that have been preserved or restored/enhanced under the 1981 CUP/Reclamation Plan. The implementation of that plan would create hydroseeded streambed, but the intent of the CUP/Reclamation Plan Amendment would be to realign the streambed to a more natural configuration and revegetate the creek corridor with native riparian species. Changes to the creek configuration would not result in additional impacts that have not been previously analyzed and mitigated. Specifically, the wetland mitigation areas would be protected from potential indirect edge effects by the wetland buffers, which provide horizontal and vertical separation from the adjacent land uses. The portion of the creek corridor adjacent to the population-based park areas would be protected from potential indirect edge effects through native landscaping used in the park areas and barriers, for example, fencing, plantings, and signage, that would deter encroachment into the creek itself. Buffers between the edge of the newly created wetlands of the enhanced creek corridor and the adjacent development would consist mainly of vegetated slopes varying in width between 30 feet and 250 feet.

Thus, the Stone Creek project has provided wetland buffers to protect the functions and values of on-site wetlands and would ensure the health and protection of resources within the Carroll Canyon Creek corridor. No significant impacts to jurisdictional wetlands or waters are anticipated from the CUP/Reclamation Amendment or the Stone Creek project.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in significant direct impacts to vegetation communities and the natural flood channel.

Stone Creek Project

The Stone Creek Project would not result in significant direct impacts to vegetation communities and the natural flood channel.

Mitigation Measures

No significant impacts to biological resources would occur from implementation of the CUP/Reclamation Plan Amendment or the Stone Creek project.

ISSUE 2

Would the proposal result in:

- *Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?*

Significance threshold:

In accordance with the City's Significance Determination Thresholds:

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not substantially interfere with movement of native resident or migrating animal species and would not substantially affect wildlife movement. The project site is part of a canyon and contains a portion of Carroll Canyon Creek. The site is currently being mined and is surrounded by development and mining. Though small mammals and birds may continue to use this canyon as a local wildlife movement corridor, the project site does not currently function as a regional wildlife corridor for large mammals due to the high level of surrounding

disturbance and active mining operation. No significant impacts to wildlife movement or corridors would occur.

Stone Creek Project

The Stone Creek project would not negatively affect local wildlife movement in the area. Impacts to the existing configuration of the local wildlife movement corridor along Carroll Canyon Creek are not considered significant. The project as designed would accommodate local wildlife movement associated with the realigned and enhanced creek corridor implemented under the CUP/Reclamation Amendment. This creek corridor would support native riparian vegetation for cover and habitat for wildlife and would provide a native habitat link to Carroll Canyon Creek downstream of the project. As stated above, enhancement of the creek is expected to potentially improve wildlife movement previously restricted by intensive mining activities and a narrow creek configuration.

Significance of Impacts

CUP/Reclamation Plan Amendment

The project site is currently being mined and is surrounded by urban development. The project site does not currently function as a wildlife corridor. The CUP/Reclamation Plan Amendment would not result in a significant impact to wildlife movement corridors.

Stone Creek Project

The Stone Creek project would not significantly impact wildlife movement or corridors. The project would result in enhancing the Creek Corridor thereby potentially improving wildlife movement. Significant adverse impacts would not occur.

Mitigation Measures

No mitigation measures are required.

ISSUE 3

Would the project result in:

- *A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?*
- *A conflict with any local policies or ordinances protecting biological resources?*

Significance threshold:

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- Conflict with any local policies or ordinances protecting biological resources.

Impacts

The project site is not within an MHPA area; however, the southwest corner of the property is adjacent to MHPA lands (see Figure 2-14, *MHPA Exhibit*). As such, compliance with the following MHPA LUAGs as a condition of approval for both the CUP Amendment/Reclamation Plan Amendment and the Stone Creek project would be required to ensure that indirect impacts would not occur.

Drainage. Drainage should be directed away from the MHPA or, if not possible, must not drain directly into the MHPA. Instead, runoff should flow into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA. The project has been designed so as to not drain directly into the MHPA. All drainage will be treated through proper water quality treatment best management practices prior to discharge from the site.

Toxins. Land uses, such as recreation and agriculture, that use chemicals or generate byproducts, such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by application or drainage of such materials into the MHPA. The project has been designed so that all storm water runoff and drainage from the post-construction site will be treated through proper water quality treatment best management practices to remove any toxins prior to discharge from the site.

Lighting. Per the City of San Diego Municipal Code 142.0740, lighting of all developed areas within and adjacent to the MHPA should be limited to low-level lighting and shielded to minimize the amount of light entering the MHPA. All project lighting adjacent to the MHPA in the southwest corner of the project shall be shielded and directed away from the MHPA.

Noise. During construction under either project, noise levels above 60 hourly equivalent A-weighted decibels (dBA Leq; or the ambient noise level if noise levels already exceed this threshold) at the edge of the adjacent MHPA land in the southwest corner of the project will need to be avoided during the breeding season of the coastal California gnatcatcher (March 1 – August 15). If construction is proposed during the breeding season of this species, U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species presence/absence within the adjacent MHPA land. If the coastal California gnatcatcher is present in the adjacent MHPA, land noise attenuation measures will be required to work during the breeding season at this location.

Brush Management. All BMZ 1 areas must be included within the development footprint and outside the MHPA. BMZ 2 may be permitted within the MHPA (considered impact neutral) but cannot be used as mitigation. There would be no formal BMZs required under the CUP/Reclamation Plan Amendment; however, interim brush management consistent with the City of San Diego's Brush Management Regulations, 142.0412, would be provided for adjacent existing development until such time as the Stone Creek development is implemented. For the Stone Creek Development Plan, interim BMZs 1 and 2 are contained within the development footprint and outside the MHPA. No brush management shall be required for the Stone Creek Development at build-out due to the permanently irrigated condition.

Invasives. No invasive plant species shall be planted in or adjacent to the MHPA. The planting pallets for the Stone Creek Development Plan and CUP/Reclamation Plan Amendment do not include any invasive or non-native plant species adjacent to the MHPA. Additionally, according to City of San Diego standards for brush management, the BMZ 2 buffer along the site must only include native plants.

Grading/Land Development. All manufactured slopes must be included within the development footprint and outside the MHPA. The proposed manufactured slopes for the Stone Creek Development Plan and CUP/Reclamation Plan Amendment are within the development footprint and do not encroach into the MHPA.

Barriers/Access. New developments within or adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation. Access to the MHPA, if any, should be directed to minimize impacts and reduce impacts associated with domestic pet predation. Adjacent to the MHPA, the project would contain steep slopes that slope away from the off-site MHPA lands, making access to the MHPA extremely difficult. Therefore, no additional barriers would be required to limit access at this location.

The protection of those portions of the enhanced Carroll Canyon Creek corridor used to impacts to jurisdictional waters would be accomplished through the establishment of a Covenant of Easement

(CE). The CE would establish the land use restrictions and allowable uses within the preserved areas covered. The CE would be the instrument for the protection of the Carroll Canyon Creek in perpetuity.

Management of the CE protecting the enhanced Carroll Canyon Creek corridor would be provided by a third party entity such as an owners' association or a non-profit Conservation Organization. The management entity chosen would be responsible for the long-term maintenance and management of the areas covered under the CE, and would establish the requirements for the management and monitoring reports. The long-term management of the CE would be funded by one of the following means: the establishment of an endowment or a Community Facilities District. The amount of funding for endowment would be established through the preparation of a Property Analysis Record or other similar method.

The management of the CE would conform to the general management directives outlined in the City's Subarea Plan (City of San Diego 1997), as described below.

Public Access, Trails, and Recreation – Any proposed public access, trails, or recreation would be confined primarily to established parks adjacent to the areas covered under the CE. Encroachment into areas covered by the CE would be discouraged by the placement of barriers and signage.

Litter/Trash and Materials Storage – The management entity for the CE would be responsible for the removal of litter/trash from the areas covered under the CE. The management entity would be responsible for the notification and enforcement of rules governing the re-current dumping of litter/trash and recovering fees to reimburse the costs associated with the removal and disposal of debris, including the restoration of heavily damaged areas, if necessary.

Adjacency Management Issues – In addition to compliance with the MHPA Land Use Adjacency Guidelines (LUAGs), the management entity would be responsible for the control and removal of invasive plant species from the CE covered areas, and performing standard maintenance to ensure that flood waters are controlled adequately (e.g., keep culverts clear, remove accumulated debris that may cause flooding of adjacent lands, etc.).

CUP Amendment/Reclamation Plan Amendment

The existing mining operation does not contain MHPA lands; however, the southwest corner of the site (see Figure 2-14, *MHPA Exhibit*) is adjacent to MHPA lands. Compliance with MHPA LUAGs presented above as a condition of approval would ensure that indirect impacts would not occur, as discussed in Section 5.1, *Land Use*.

Stone Creek Project

The Stone Creek project site does not contain MHPA lands; however, the southwest corner of the site (see Figure 2-14, *MHPA Exhibit*) is adjacent to MHPA lands. Compliance with MHPA LUAGs presented above as a condition of approval would ensure that indirect impacts would not occur, as discussed in Section 5.1, *Land Use*.

Significance of Impacts

CUP/Reclamation Plan Amendment

The project site is located adjacent to MHPA lands. The CUP/Reclamation Plan Amendment would be required to comply with MHPA LUAGs, which would ensure that indirect impacts would not occur. The CUP/Reclamation Plan Amendment would not result in a significant impact to MHPA lands.

Stone Creek Project

The project site is located adjacent to MHPA lands. The project would be required to comply with MHPA LUAGs, which would ensure that indirect impacts would not occur. The project would not result in a significant impact to MHPA lands.

Mitigation Measures

No mitigation measures are required.

ISSUE 4

Would the project result in:

- *Introducing land use within an area adjacent to the MHPA that would result in adverse edge effects?*

Significance threshold:

- Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects.

Impacts

CUP/Reclamation Plan Amendment

As shown in Figure 2-14, *MHPA Exhibit*, the project area is outside of, but adjacent to, the MHPA in the southwest corner of the project site. Implementation of the MSCP LUAGs would reduce indirect impacts to the adjacent MHPA and would prevent adverse effects along the edges of the project site that border the MHPA. Refer to Land Use, see Section 5.1.

Stone Creek Master Plan

As shown in Figure 2-14, *MHPA Exhibit*, the Stone Creek Master Plan area is outside of, but adjacent to, the MHPA in the southwest corner of the project site. Implementation of the MSCP LUAGs presented under Issue 3 above would reduce indirect impacts to the adjacent MHPA and would prevent adverse effects along the edges of the project site that border the MHPA. Refer to Land Use, see Section 5.1.

Significance of Impacts

CUP/Reclamation Plan Amendment

Adverse edge effects would be avoided through the implementation of the MHPA LUAGs as a condition of approval. Therefore, impacts would be less than significant.

Stone Creek Master Plan

Adverse edge effects would be avoided through the implementation of the MHPA LUAGs as a condition of approval. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

ISSUE 5

Would the project result in:

- *An introduction of invasive species of plants into a natural open space area*

Significance Threshold(s):

- Introduction of invasive species of plants into a natural open space area

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment is adjacent to a natural open space area identified as MHPA lands in the southwest corner of the project site. The CUP/Reclamation Plan Amendment would implement the MHPA LUAGs to avoid and minimize the introduction of invasive plants into the natural open space area. Additionally, no invasive plants would be used in the landscaping plan. New plantings adjacent to the MHPA would be composed of native species. Moreover, no brush management is proposed in the MHPA.

Stone Creek Master Plan

The Stone Creek Master Plan is adjacent to a natural open space area identified as MHPA in the southwest corner of the project site. The Stone Creek Master Plan would implement the MHPA LUAGs to avoid and minimize the introduction of invasive plants into the natural open space areas. Additionally, no invasive plants would be used in the landscaping plan. New plantings adjacent to the MHPA would be composed of native species. Moreover, no brush management is proposed in the MHPA.

Significance of Impacts

CUP Amendment/Reclamation Plan Amendment

Impacts related to the introduction of invasive plant species to natural open space area would be less than significant.

Stone Creek Master Plan

Impacts related to the introduction of invasive plant species to natural open space area would be less than significant.

Mitigation Measures

No mitigation measures are required.

Table 5.4-1. *Plant Species Observed at the Stone Creek Project Site*

Scientific Name	Common Name	Habitat	Origin
Acacia sp.	Acacia	Dist, Dev	I
Adenostoma fasciculatum Hook. & Arn.	Chamise	EW, SMC	N
Alnus rhombifolia Nutt.	White alder	SWRF	N
Archontophoenix cunninghamiana Brenzel	King palm	Dist	I
Artemisia californica Less.	California sagebrush	Dist	N
Arundo donax L.	Giant reed	Dist	I
Baccharis pilularis DC.	Coyote bush	Dist, SMC	N
Baccharis salicifolia (Ruiz Lopez & Pavón) Pers.	Mule fat, seep-willow	FM, Dist, MFS	N
Bougainvillea sp.	Bougainvillea	Dev	I
Brassica nigra (l.) Koch.	Black mustard	Dist	I
Bromus madritensis L. ssp. *rubens* (L.) Husnot	Foxtail chess	Dist	I
Carpobrotus edulis (L.) Bolus	Hottentot fig	Dist, Dev	I
Centaurea melitensis L.	Tocolote, star-thistle	Dist	I
Chamaesyce albomarginata (Torrey & A. Gray) Small	Rattlesnake weed	Dist	N
Chenopodium sp.	Goosefoot	Dist	I
Conyza canadensis (L.) Cronq.	Horseweed	Dist	N
Cortaderia jubata (Lemoine) Stapf	Pampas grass	Dist	I
Crassula argentea Brenzel	Jade plant	Dist	I
Cynara cardunculus L.	Cardoon	Dist	I
Cyperus alternifolius L.	Umbrella-plant	FM	I
Datura wrightii Regel	Jimson weed	Dist	N
Encelia californica Nutt.	Common encelia	Dist	N
Eriodictyon crassifolium Benth.	Felt-leaved yerba santa	Dist	N
Eriogonum fasciculatum Benth. Var. *fasciculatum*	California buckwheat	Dist, SMC	N
Erodium sp.	Filaree, stroksbill	Dist	I
Eucalyptus spp.	Eucalyptus	Dist, Dev, EU	I
Europos sp.	Yellow daisy bush	Dev	I
Foeniculum vulgare Mill.	Fennel	Dist	I
Gazania sp.	African daisy	Dev	I
Gnaphalium bicolor Bioletti	Bicolored cudweed	Dist	N
Gnaphalium californicum DC.	Green everlasting	Dist	N
Hemizonia fasciculata (DC.) Torrey & A. Gray	Golden tarplant	Dist	N
Heteromeles arbutifolia (Lindley) Roemer	Toyon, Christmas berry	Dist	N
Iva hayesiana A. Gray	San Diego marsh-elder	SWS	N
Lantana sp.	Lantana	Dev	I

Scientific Name	Common Name	Habitat	Origin
Lemna minuscula Herter	Least duckweed	Dist, FM	N
Lotus scoparius (Nutt. In Torrey & A. Gray) Ottley var. *scoparius*	California broom	Dist	N
Ludwigia peploides (Kunth) Raven	Yellow water primrose	SWS	N
Malosma laurina (Nutt.) Abrams	Laurel sumac	Dist, SMC	N
Malva parviflora L.	Cheeseweed, little mallow	Dist	I
Marrubium vulgare L.	Horehound	Dist	I
Melilotus sp.	Clover	Dist	I
Nerium oleander L.	Oleander	Dev	I
Nicotiana glauca Grah.	Tree tobacco	Dist	I
Oxalis pes-caprae L.	Bermuda buttercup	Dist	I
Pennisetum setaceum Forsskal	Fountain grass	Dist	I
Picris echioides L.	Bristly ox-tongue	Dist	I
Pinus sp.	Pine	Dev	I
Platanus racemosa Nutt.	Western sycamore	Dev, SWRF	N
Quercus berberidifolia Liebm.	Scrub oak	Dist	N
Rhus integrifolia (Nutt.) Brewer & Watson	Lemonadeberry	Dist	N
Ricinus communis L.	Castor bean	Dist	I
Rorippa nasturtium-aquaticum (L.) Hayek	Water cress	FM	I
Salix gooddingii C. Ball.	Goodding's black willow	FM, SWS, SWRF	N
Salix laevigata Bebb.	Red willow	FM, SWS, SWRF	N
Salix lasiolepis Benth.	Arroyo willow	FM, SWS, SWRF	N
Salsola tragus L.	Russian thistle, tumbleweed	Dist	I
Salvia mellifera E. Greene	Black sage	EW, SMC	I
Schinus molle L.	Peruvian pepper tree	Dist	N
Scirpus sp.	Bulrush	FM	N
Sonchus asper (L.) Hill ssp. *asper*	Prickly sow thistle	Dist	N
Stephanomeria virgata (Benth.) ssp. *virgata*	Slender stephanomeria	Dist	I
Toxicodendron diversilobum (Torrey & A. Gray) E. Greene	Western poison oak	Dist, SWRF	N
Tropaeolum majus L.	Garden nasturtium	Dist	I
Typha latifolia L.	Broad-leaved cattail	FM, DW	N
Washingtonia robusta Wendl.	Washington palm	Dist, Dev	I
Xanthium strumarium L.	Cocklebur	Dist	N
Yucca whipplei Torrey	Our Lord's candle	Dist	N

HABITATS

Dev = Developed
Dist = Disturbed
DW = Disturbed wetland
SMC = Southern mixed chaparral
SWS = Southwestern willow scrub
SWRF = Southern willow riparian forest
EW = Eucalyptus woodland
FM = Freshwater marsh
MFS = Mule fat scrub

ORIGIN

N = Native
I = Introduced species from outside locality

Table 5.4-3. *Wildlife Species Observed on the Stone Creek Project Site*

Common Name	Scientific Name	Occupied Habitat	Evidence of Occurrence
Butterflies (Nomenclature from Mattoni 1990 and Opler and Wright 1999)			
White	*Pieris sp.*	F	O
Sara organgetip	*Anthocaris sara*	F	O
Funereal duskywing	*Erynnis funeralis*	F	O
Reptiles (Nomenclature from Crother 2001 and Crother et al. 2003)			
Western fence lizard	*Sceloporus occidentalis*	Dist., SWS, EW	O
Birds (Nomenclature from American Ornithologists' Union 1998 and Unitt 1984			
Mallard	Anas platyrhynchos platyrhynchos	OW	O
Ruddy duck	Oxyura jamaicensis rubida	OW	O
Great blue heron	Ardea herodias herodias	OW	O
Osprey	Pandion haliaetus carolinensis	Dist., OW	O
Red-shouldered hawk	Buteo lineatus elegans	EW	O, V
Red-tailed hawk	Buteo jamaicensis	EW	O
American coot	Fulica amerincana americana	OW	O, V
Killdeer	Charadrius vociferus vociferus	Dist.	O, V
Gull	Larus sp.	F	O, V
Anna's hummingbird	Calypte anna	Dist., SWS	O, V
Black phoebe	Sayornis nigricans semiatra	Dist., SWS	O, V
American crow	Corvus brachyrhynchos hesperis	Dist.	O, V
Northern rough-winged swallow	Stelgidopteryx serripennis	Dist.	O, V
Bushtit	Psaltruparus minimus minimus	Dist., SWS	O, V
Benwik's wren	Thyromanes bewickii	Dist., SWS	O, V
Blue-gray gnatcatcher	Polioptilia caerulea	EW	O, V
Common yellowthroat	Geothlypis trichas	EW, SWS	O, V
California towhee	Piplio crissalis	Dist., SWS	O, V
Song sparrow	Melospiza melodia	Dist.	O, V
White-crowned sparrow	Zonotrichia leucophrys	Dist.	O, V
Red-winged blackbird	CAgelaius phoeniceus	Dist., FWM	O, V
House finch	Carpodacus mexicanus frontalis	Dist., SWS	O, V
Lesser goldfinch	Carduelis psaltria	Dist., SWS	O, V
Mammals (Nomenclature from Jones et al. 1997 and Hall 1981)			
Coyote	Canis Latrans	Dist., SWS, EW	V
Common raccoon	Procyon lotor	Dist., SWS, EW	T
Southern mule deer	Odocoileus hemionus fuliginata	Dist., SWS, EW	T

Habitats
Dist = Disturbed Land
F = Flying overhead
EW = Eucalyptus woodland
OW = Open water (mining, sediment ponds)
FWM = freshwater marsh
SWS = southern willow scrub

Evidence of Occurrence
O = Observed
T = Track
V = Vocalization

Table 5.4-4. *Sensitive Plant Species Observed or with the Potential for Occurrence on the Stone Creek Project Site*

Species	State/Federal Status	CNPS List/Code	City of San Diego Status	Typical Habitat/Comments	Comments
Acanthomintha ilicifolia San Diego thornmint	CE/FT	1B/2-3-3	NE, MSCP	Chaparral, coastal sage scrub, valley and foothill grassland/clay soils	Not expected to occur since clay soils are not present.
Adolphia californica California adolphia	-/-	2/1-2-1	-	Chaparral	Would have been observable during the survey.
Agave shawii Shaw's agave	-/-	2/3-3-1	NE, MSCP	Coastal sage scrub	Would have been observable during the survey.
Ambrosia pumila San Diego ambrosia	-/-	1B/3-2-2	NE, MSCP	Coastal sage scrub, valley and foothill grassland	Not expected to occur due to lack of suitable grassland habitat on-site.
Aphanisma biltoides Aphanisma	-/-	1B/2-2-2	NE, MSCP	Coastal bluff scrub, coastal sage scrub, alkaline areas	Not expected to occur on-site. This is out of range since it's not a coastal site.
Baccharis vanessae Encinitas coyote bush	CE/FT	1B/2-3-3	NE, MSCP	Chaparral	Would have been observable during the survey.
Brodiaea orcuttii Orcutt's brodiaea	-/-	1B/1-3-2	MSCP	Closed-cone coniferous forest, meadows, cismontane woodland, valley and foothill grassland, vernal pools	Low potential to occur since it is usually associated with vernal pool habitat not found on-site/ This species is known to occur within one mile of the site (State of California 2006).
Ceanothus cyaneus Lakeside eanothus	-/-	1B/3-2-2	MSCP	Closed-cone coniferous forest, chaparral	Would have been observable during the survey.
Ceanothus verrucosus Wart-stemmed ceanothus	-/-	2/1-2-1	MSCP	Chaparral	Would have been observable during the survey.
Chorizanthe polygonoides var. *longspina* Long-sined spineflower	-/-	1B/2-2-2	-	Clay soils; openings in chaparral and near vernal pools and montane meadows	Not expected to occur due to lack of clay soils.
Comarostaphylis diversifolia ssp. *diversifolia* Summer holly	-/-	1B/2-2-2	-	Chaparral	Not observed; would have been observable during the survey.

Species	State/Federal Status	CNPS List/Code	City of San Diego Status	Typical Habitat/Comments	Comments
Dudleya blochmaniae ssp. brevifolia (=Dudleya brevifolia) Short-leaved dudleya	CE/-	1B/3-3-3	NE, MSCP	Chaparral, coastal sage scrub (Torrey sandstone)	Not expected to occur due to lack of Torrey sandstone soils.
Dudleya variegate Variegated dudleya	-/-	1B/1-2-2	NE, MSCP	Chaparral, coastal sage scrub	Not expected to occur due to lack of gravelly clay loam soils preferred by this species (Reiser 2001).
Eryngium aristulatum var. *parishii* San Diego button celery	CE/FE	1B/2-3-2	MSCP	Vernal pools, marshes	Not expected to occur due to lack of vernal pools. This species is known to occur within two miles (State of California 2005e).
Ferocactus viridescens Coastal barrel cactus	-/-	2/1-3-1	MSCP	Chaparral, coastal sage scrub, valley and foothill grassland	Not observed and not expected to occur due to lack of suitable habitat/ This species is known to occur within two miles (State of California 2005e).
Hemizonia conjugens Otay tarplant	CE/FT	1B/3-3-2	NE, MSCP	Coastal sage scrub	Not expected to occur since the range f this species is southern San Diego County (Reiser 2001).
Iva hayesiana San Diego marsh elder	-/-	2/2-2-1	-	Riparian, playas	Not observed on-site; however, this species was observed off-site to the south of this property in a restored drainage. Would have been observable on-site during the survey.
Monardella linoides ssp. *viminea* Willowy monardella	CE/FE	1B/2-3-2	MSCP	Riparian scrub	Not observed on-site; however, this species was observed off-site to the south of this property in a restored drainage. Would have been observable on-site during the survey.
Mulla clevelandii San Diego goldenstar	-/-	1B/2-2-2	MSCP	Valley and foothill grassland, vernal pools	Not expected to occur due to the lack of vernal pools.
Navarretia fossalis Prostrate navarretia	-/FT	1B/2-3-2	NE, MSCP	Vernal pools	Not expected to occur due to the lack of vernal pools.
Opuntia parryi (=*Opuntia parryi* var. *serpentina*) Snake cholla	-/-	1B/3-3-2	NE, MSCP	Chaparral, coastal sage scrub	Would have been observable during the survey.
Orcuttia californica California Orcutt grass	CE/FE	1B/3-3-2	NE, MSCP	Vernal pools	Not expected to occur due to the lack of vernal pools.
Pogogyne abramsii San Diego mesa mint	CE/FE	1B/2-3-3	NE, MSCP	Vernal pools	Not expected to occur due to the lack of vernal pools.

Species	State/Federal Status	CNPS List/Code	City of San Diego Status	Typical Habitat/Comments	Comments
Pogogyne nudiuscula Otay mesa mint	CE/FE	1B/3-3-2	NE, MSCP	Vernal pools	Not expected to occur due to the lack of vernal pools.
Quercus dumosa Nuttall's scrub oak	-/-	1B/2-3-2	-	Coastal chaparral	Not observed on-site; would have been observable during the survey.

NOTE: See Table 5.4-5 for explanation of sensitive codes.
CNPS- California Native Plant society

Table 5.4-5. *Sensitive Plant Species Status Codes*

Federal Candidates and Listed Plants
FE = Federally endangered
FT = Federally listed, threatened
State Listed Plants
CE = State listed, endangered
City of San Diego
MSCP = MSCP covered species
NE = MSCP narrow endemic species
California Native Plant Society Lists
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2 = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

Table 5.4-6. *Sensitive Wildlife Species Known or with the Potential to Occur on the Stone Creek Project Site*

Species	Status	Habitat/Comments	Occurrence
Fairy Shrimp (Nomenclature from Eriksen and Belk 1999)			
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE, MSCP, *	Vernal pools.	Not expected to occur since the majority of the site is actively mined and vernal pools do not occur on-site. This species is known to occur within two limes (State of California 2006)
Butterflies (Nomenclature from Mattoni 1990 and Opler and Wright 1999)			
Quino checkerspot butterfly *Euphydryas editha quino*	FE, MSCP (Chula Vista)	Open, dry areas in foothills, mesas, lake margins. Larval host plant *Plantago erecta*. Adult emergence mid-January through April.	Not expected to occur. No suitable habitat present. Site is outside of the 2005 USFWS Survey Area.
Amphibians (Nomenclature from Crother 2001 and Crother et al. 2003)			
Western spadefoot *Spea hammondii*	CSC, FSS, *	Vernal pools, floodplains, and alkali flats within areas of open vegetation.	Not expected to occur since the majority of the site is actively mined. This species is known to occur within two miles (State of California 2006).
Reptiles (Nomenclature from Crother 2001 and Crother et al. 2003)			
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	CSC, MSCP, *	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	Low potential to occur in southern mixed chaparral on-site due to habitat fragmentation and disturbance from mining operation.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	*	Open, sparsely vegetated, often rocky areas within shrub or grassland habitats.	Low potential to occur in vegetated areas on-site due to disturbance from mining operation.
Coast horned lizard *Phrynosoma coronatum* (San Diego/blainvilli population)	CSC, FSS, MSCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	Low potential to occur in vegetated areas on-site due to marginal habitat and proximity to the mining operation.
Red diamond rattlesnake *Crotalus ruber*	CSC, *	Desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields.	Low potential to occur on-site due to level of disturbance from mining operation.
Southern Pacific pond turtle *Clemmys marmorata pallida*	MSCP, CSC, FSS, *	Ponds, small lakes, marshes, slow-moving, sometimes brackish water.	Not expected to occur in the desiltation ponds on-site due to the artificial nature of the ponds and regular maintenance.
Birds (Nomenclature from American Ornithologists" Union 1998 and Unitt 1984)			
Great blue heron (rookery site) *Ardea herodias herodias*	*	Bays, lagoons, ponds, lakes. Non-breeding year-round visitor, some localized breeding.	Observed at the main desilting pond. No rockery site observed. Not expected to next on-site.
Great egret (rookery site) *Ardea alba egretta*	*	Lagoons, bays, estuaries. Ponds and lakes in the coastal lowland. Winter visitor, uncommon in summer.	Potential to forage at main desitling pond. No rockery site observed. Not expected to next on-site.
Snowy egret (rookery)	*	Lagoons, bays, estuaries. Ponds and lakes in the	Potential to forage at main desitling pond. No

Species	Status	Habitat/Comments	Occurrence
Egretta thula thula		coastal lowland.	rockery site observed. Not expected to next on-site.
Black-crowned night heron (rookery site) *Nycticorax nycticorax hoactli*	FSS, *	Lagoons, estuaries, bayshores, ponds, and lakes. Often roost in trees. Year-round visitor. Localized breeding.	Potential to forage at main desitling pond. No rockery site observed. Not expected to next on-site.
Osprey (nesting) *Pandion haliaetus carolinensis*	CSC, *	Coast, lowland lakes, rarely foothills and mountain lakes. Uncommon fall/winter resident, rare in spring and summer. Localized nesting: Scripps Ranch H.S., North Island NAS. Fish are the primary prey item.	Observed an osprey attempting to build a nest on a power pool near the main desilting pond. Though numerous attempts were made by the osprey to build a nest, all attempts were unsuccessful.
White-tailed kite (nesting) *Elanus leucurus*	CFP, *	Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident.	Low potential to nest on-site due to low density of trees near riparian areas. Low potential to forage on-site due to lack of native habitat that supports food items. Known to nest and forage within two miles of site (Clark pers. com., 2006).
Northern harrier (nesting) *Circus cyaneus hudsonius*	CSC, MSCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	Low potential to forage over site due to lack of native habitat that supports food items. Not expected to nest on-site due to proximity to mining operation.
Cooper's hawk (nesting) *Accipiter cooperi*	CSC, MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Year-round resident.	Potential to nest in eucalyptus and other mature trees on-site. Known to occur within two miles of site (Clark, pers. com., 2006).
Western snowy plover (coastal population) *Charadrius alexandrines nivosus*	FT< CSC, MSCP	Sandy beaches, lagoon margins, tidal mud flats. Migrant and winter resident. Localized breeding.	Low potential for occurrence on the site due to lack of suitable habitat for foraging and breeding.
Western burrowing owl (burrow sites) *Athene cunicilaria hypugaea*	CSC, MSCP	Grassland, agriculture land, coastal dunes. Require rodent burrows. Declining resident.	Low potential for occurrence on the site due to lack of suitable grassland or agricultural lands for foraging and breeding.
Vaux's swift *Chaetura vauxi*	CSC, *	All habitat types of San Diego Cunty during migration.	Potential to use site during migration.
California horned lark *Eremophila alpestris actia*	CSC	Sandy shores, mesas disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub. Common breeding resident. Abundant migrant and winter visitor.	Low potential to occur on-site due to proximity to mining operation.
Loggerhead shrike *Lanius ludovicianus*	CSC, BCC, *	Open foraging areas near scattered bushes and low trees; agriculture, desert wash/scrub,	Not expected to occur due to lack of native vegetation that supports food sources.

Species	Status	Habitat/Comments	Occurrence
		grassland. Fairly common resident.	
California thrasher *Toxostoma redivivium redivivium*	*	Chaparral, coastal sage scrub. Resident.	Low potential to occur in southern mixed chaparral on-site due to habitat fragmentation.
Coastal California gnatcatcher *Polioptila californica californica*	FT, CSC, MSCP, *	Coastal sage scrub, maritime succulent scrub. Resident.	Not expected to occur due to lack of habitat on-site and off-site along with the proximity to active mining operation. Known to occur within two miles (State of California 2006).
Lawrence's goldfinch *Carduelis lawrencei*	BCC, *	Common migrant, rare summer resident.	Potential to occur on-site during migration.
Bell's sage sparrow *Amphispiza belli belli*	CSC, BCC, *	Chaparral, coastal sage scrub. Localized resident.	Not expected to occur due to the fragmentation of chaparral on-site.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	CSC, MSCP, *	Coastal sage scrub, chaparral, grassland; favors steep and rocky areas. Localized resident.	Not expected to occur due to the fragmentation of chaparral on-site.
Tricolored blackbird *Agelaius tricolor*	CSC, FSS, MSCP, BCC, *	Freshwater marshes, agriculture areas. Lakeshores, parks. Localized resident often seen among flocks of red-winged blackbirds.	Potential to occur in freshwater marsh areas on-site.
Mammals (Nomenclature from Jones et al/ 1997 and Hall 1981)			
Pallid bat *Antrozous pallidus*	CSC, FSS, *	Many habitats; commonly open, dry areas. Roosts in shallow caves, mines, rock crevices, buildings, bridges, tree cavities. Colonial.	Potential to occur on-site and forage near water sources.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	CSC, *	Open areas of scrub, grasslands, agricultural fields.	Not expected to occur due to disturbed nature of site and lack of suitable habitat.
Dulzura California pocket mouse *Chaetodipus californicus femoralis*	CSC, *	Brushy areas of coastal sage scrub, chamise-redshank & montane chaparral, sagebrush, annual grassland, valley foothill hardwood, valley foothill hardwood-conifer & montane hardwood. Probably most attracted to interface of grassland and brush.	Not expected to occur due to disturbed nature of site and lack of suitable habitat.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC, *	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	Not expected to occur due to disturbed nature of site and lack of suitable habitat.
San Diego desert woodrat *Neotoma lepida intermedia*	CSC, *	Coastal sage scrub and chaparral.	Not expected to occur due to disturbed nature of site and lack of suitable habitat.
American badger *Taxidea taxus*	MSCP, *	Herbaceous, shrub, and open stages of most habitats with dry, friable soils.	Not expected to occur due to disturbed nature of site and lack of suitable habitat.

Species	Status	Habitat/Comments	Occurrence
Mountain lion *Puma concolor*	MSCP	Riparian vegetation and brushy stages of various habitats with interspersions of irregular terrain, rocky outcrops, and tree/brush edges.	Not expected to occur due to disturbed nature of site and surrounding development
Southern mule deer *Odocoileus hemionus fulginata*	MSCP	Mosaic of vegetation with an interspersion of herbaceous openings, dense brush or tree thickets, riparian areas, and abundant edge.	Known to occur on-site.

STATUS CODES

Listed/Proposed
FE = Listed as endangered by the federal government
FSS = Federla (BLM and USFS) sensitive species
FT = Listed as threatened by the federal government

Other
BCC = U.S. Fish and Wildlife Service Birds of Conservation Concern Species
CFP = California fully protected species
CSC = California Department of Fish and Game species of special concern
MSCP = Multiple Species Conservation Program covered species
** = Taxa listed with an asterisk fall into one or more of the following categories:

- Taxa considered endangered or rare under Section 15380(d) of CEQA guideline
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
- Population(s) in California that may be peripheral to the major portion of a taxon's range. But which are threatened with extirpation within California
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

Table 5.4-7. *USACOE Water of the U.S.*

Vegetation Type	Wetland (acres)	Non-wetland water (acres)
Southern willow scrub	3.215	---
Mule fat scrub	0.283	---
Freshwater marsh	0.224	---
Disturbed southern willow scrub	0.085	---
Natural flood channel	---	1.481
Concrete channel	---	0.062
TOTAL	**3.807**	**1.543**

Table 5.4-8. *CDFW Jurisdictional Waters*

Vegetation Type	Wetland/Riparian (acres)	Streambed (acres)
Southern willow scrub	4.685	---
Mule fat scrub	0.283	---
Riparian scrub	0.363	---
Freshwater marsh	0.224	---
Disturbed southern willow scrub	0.171	---
Natural flood channel	---	1.481
Concrete channel	---	0.062
TOTAL	**5.726**	**1.543**

Table 5.4-9. *Summary of Jurisdictional Waters Impacts and Mitigation*

Jurisdictional Water Type	Resource Agency					
	USACOE		RWQCB		CDFW	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Wetland						
Southern Willow Scrub	3.22	6.44	3.22	6.44	3.22	6.44
Mule Fat Scrub	0.28	0.56	0.28	0.56	0.28	0.56
Freshwater Marsh	0.22	0.44	0.22	0.44	0.22	0.44
Riparian Scrub	0.26	0.52	0.26	0.52	0.26	0.52
Disturbed Wetland	0.17	0.34	0.17	0.34	0.17	0.34
Non-wetland (Streambed)						
Natural Flood Channel	1.10	2.20	1.10	2.20	1.10	2.20
TOTAL	**5.25**	**10.5**	**5.25**	**10.5**	**5.25**	**10.5**

USACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife

Table 5.4-10. *Future Baseline Biological Resources*

Vegetation Community/Land Cover Type	City of San Diego Tier	Acreage
Eucalyptus woodland	Tier IV	16.43
Ornamental Planting	Tier IV	49.02
Hydroseed Areas	Tier IV	215.17
Streambed	*	12.60
TOTAL		**293.22**

*Wetlands do not have a Tier ranking, but are considered sensitive vegetation communities.

Table 5.4-11. ***Stone Creek Project Impacts to Biological Resources***

Vegetation Type	Existing (acres)	On-site Impacts (acres)	Off-site Impacts (acres)+
Upland			
Eucalyptus woodland (Tier IV)	16.43	16.43	
Ornamental Plantings (Tier IV)	49.02	49.02	
Hydroseeded Areas	212.59	212.59	
Southern mixed chaparral (Tier III)	0	0	0.08
Disturbed land (Tier IV)			1.1
Wetland			
Southern willow scrub (Preserved)	1.81		
Southern willow scrub (Established)	10.50		
Enhanced creek bed	2.87		
TOTAL	**293.22**	**278.04**	1.18

*Existing = Baseline conditions that includes acres resulting from full implementation of the 1981 CUP/Reclamation Plan
+ Impacts occurring outside of the CUP/Reclamation Plan area

Table 5.4-12. ***Project Baseline and Anticipated Acreages from the CUP/Reclamation Amendment Implementation***

Vegetation Type	Baseline Conditions	CUP/Reclamation Amendment Impacts	Site Conditions After CUP/Reclamation Amendment Implementation
Upland			
Eucalyptus woodland (Tier IV)	16.43	--	16.43
Ornamental Plantings (Tier IV)	49.02	--	49.02
Hydroseed Areas	215.17	--	212.59
Southern mixed chaparral (Tier III)	--	--	--
Disturbed Land (Tier IV)	--	--	--
Wetland			
Southern willow scrub (Preserved)	--	--	1.81
Southern willow scrub (Established)	--	--	10.50[1]
Streambed	12.60	--	2.87[1]
TOTAL	293.22	--	293.22

[1] Wetland habitats created through the implementation of the 1981 CUP/Reclamation Amendment.

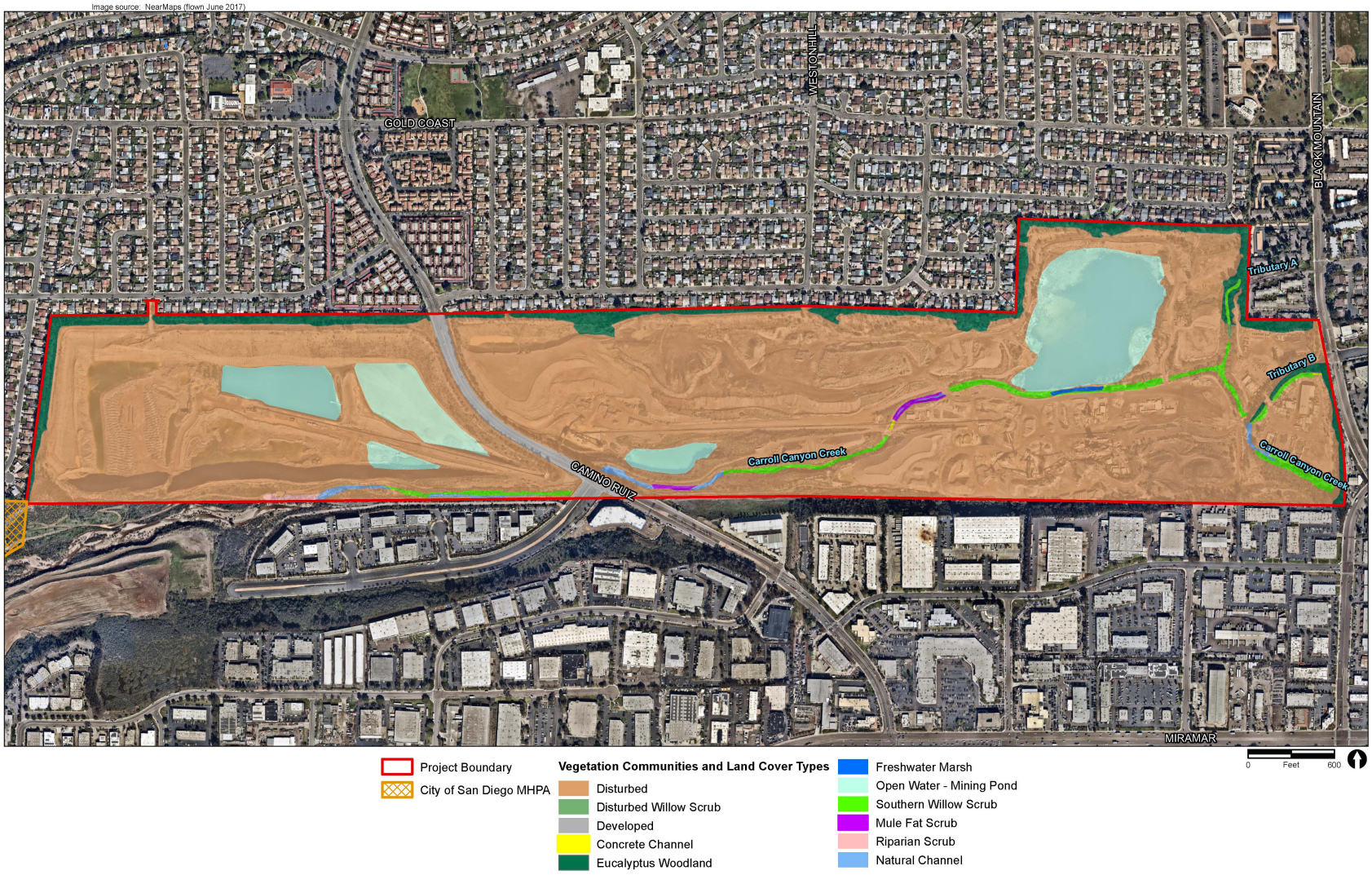


Figure 5.4-1. ***Existing Biological Resources – Pre-Reclamation Plan***

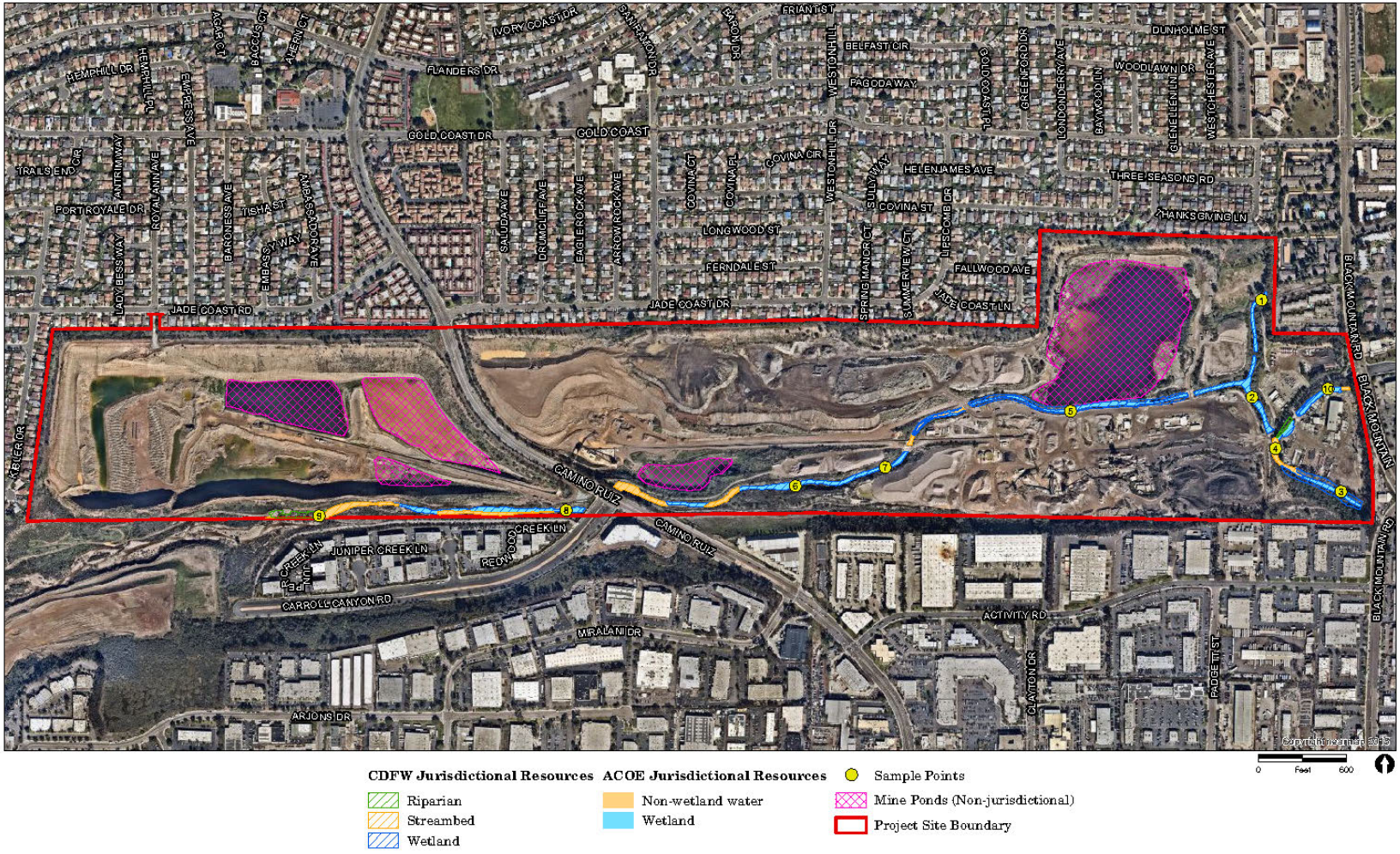


Figure 5.4-2. *Stone Creek – Location of Jurisdictional Waters*

Figure 5.4-3. *Stone Creek – City of San Diego Wetlands*

Figure 5.4-4. ***Baseline Biological Resources – Fully Implemented CUP/Reclamation Plan***

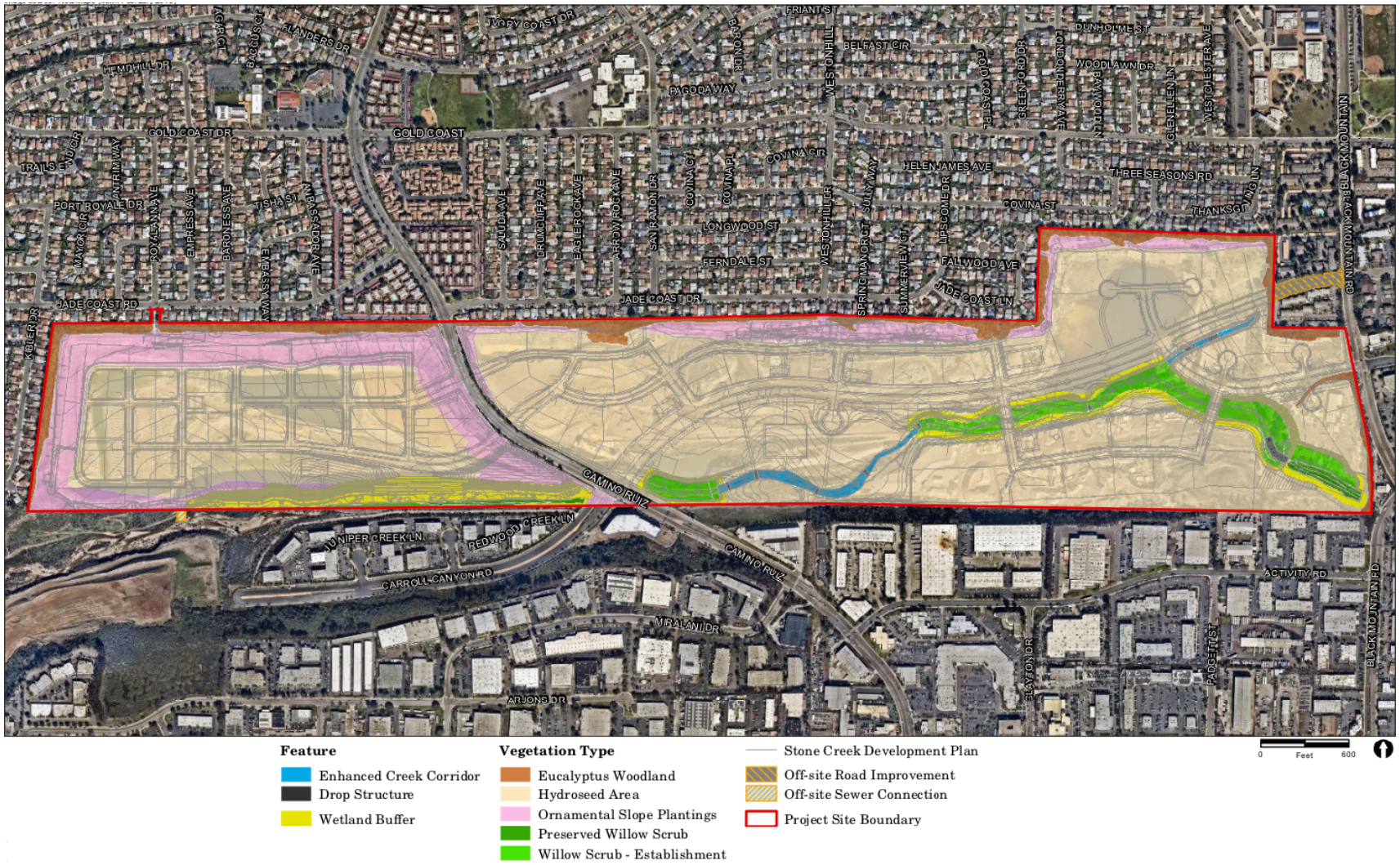


Figure 5.4-5. ***Impacts to Biological Resources – Stone Creek Development Plan***

5.5 NOISE

This section evaluates the potential noise impacts associated with Stone Creek (the project). The following discussion is based on the *Noise Technical Report*, prepared by RECON (March 18, 2019) and is included as Appendix E.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of noise impacts associated with the future school would be required at that time.

5.5.1 Existing Conditions

FUNDAMENTALS OF TRAFFIC NOISE AND NOISE DESCRIPTORS

The actual impact of noise is not a function of loudness alone. The time of day which noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used in the *Noise Technical Report* and this EIR are the L_{eq}, and the CNEL.

The hourly equivalent sound level is the dBA sound level over a one-hour period. The CNEL is a 24-hour A-weighted average sound level [dBA L_{eq}] from midnight to midnight obtained after the addition of 5 dB to sound levels occurring between 7:00 PM and 10:00 PM, and 10 dB to sound levels occurring between 10:00 PM and 7:00 AM. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. Adding 5 dB and 10 dB to the evening and nighttime hours, respectively, accounts for the added sensitivity of humans to noise during these time periods.

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance (6 dBA/DD). However, roadway traffic noise is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The drop-off rate for a line source is 3 dBA/DD. Change in noise levels is perceived as follows: 3 dBA barely perceptible, 5 dBA readily perceptible, and 10 dBA perceived as a doubling or halving of noise.

EXISTING NOISE LEVEL MEASUREMENTS

Noise measurements were taken both on-site and off-site. Figure 5.5-1, *Noise Measurement Locations*, identifies the locations for the various noise measurements. Table 5.5-1, *15-Minute Traffic Counts*, provides the traffic data at the time of the noise measurements; and Table 5.5-2, *Noise Measurement*

Results, shows the results of the noise measurements at the various locations taking into account all ambient noise, including traffic, aircraft, and on-going operations.

Noise measurements were taken on-site adjacent to the noise producing equipment being used for the mining operation. At the time that noise measurements were taken, a dozer, loader, and water truck were operating at the western end of the project site in an area called the Pit. The dozer rips and pushes sand and rock from the slopes to the loader. The loader then transfers this material to a hopper, which then falls onto a conveyor belt that runs from west to east across most of the length of the project site (approximately 6,000 feet). The material is conveyed to the primary plant, where rock is screened from the sand. The sand is conveyed to a stockpile and the rock is conveyed to the primary rock crushing plant. The conveyor belt then carries the crushed rock to the secondary and tertiary crushing plants, where it is washed and crushed into the finished product which consists of ¾-inch, ½-inch, and ⅜-inch gravel and manufactured sand. After further crushing, the finished products are stockpiled for loading into customer trucks.

Measurements 1 through 4 were taken on-site as follows:

- Measurements 1a through 1d were taken in the Pit where the dozer, loader, and water truck were operating. Four simultaneous measurements were taken for a 15-minute period. The noise meters were spaced 85 to 285 feet apart, and the equipment was operating in the center and to the west of the noise meters. The average measured noise levels during Measurement 1 were 72.2 dBA L_{eq} at location 1a, 73.2 dBA L_{eq} at location 1b, 69.3 dBA L_{eq} at location 1c, and 72.8 dBA L_{eq} at location 1d.

- Measurements 2a through 2d were taken at the primary plant adjacent to the shaker screen where rock is screened from the sand. Four simultaneous measurements were taken for a 15-minute period. Each measurement was located 30 feet from the edge of the shaker screen and conveyor belt structure. The shaker screen was the main source of noise, and a rock crusher located to the east was also audible. The average measured noise levels during Measurement 2 were 82.4 dBA L_{eq} at location 2a, 80.4 dBA L_{eq} at location 2b, 78.3 dBA L_{eq} at location 2c, and 76.8 dBA L_{eq} at location 2d.

- Measurements 3a through 3d were also taken at the primary plant adjacent to the rock crusher. Four simultaneous measurements were taken for a 15-minute period. Each measurement was located 10 feet from the edge of the rock crusher structure. The crusher was the main source of noise. The shaker screen located to the west was not audible over the crusher at the measurement locations. The average measured noise levels during Measurement 3 were 85.3 dBA L_{eq} at location 3a, 89.8 dBA L_{eq} at location 3b, 88.1 dBA L_{eq} at location 3c, and 87.1 dBA L_{eq} at location 3d.

- Measurements 4a through 4d were taken at the secondary crushing plant where the rock is washed and crushed into the final product. Four simultaneous measurements were taken for a 15-minute period. Noise was being generated by a number of processes, including rock crushing, located in a large area. The noise meters were spaced throughout the crushing plant as shown in Figure 5.5-1. The average measured noise levels during Measurement 4 were 84.8 dBA L_{eq} at location 4a, 88.9 dBA L_{eq} at location 4b, 87.0 dBA L_{eq} at location 4c, and 90.1 dBA L_{eq} at location 4d.

Measurements 5 through 8 were taken in the residential areas surrounding the project site and adjacent to project area roadways as follows:

- Measurements 5a and 5b were located adjacent to Jade Coast Drive at the northwestern entrance to the project site. Measurements 5a and 5b were located 50 feet and 127 feet from the centerline of Jade Coast Drive, respectively. The main noise source at this location was vehicle traffic noise on Jade Coast Drive. On-site activity was only barely audible when there was no vehicle traffic in the vicinity. Simultaneous measurements were taken for a 15-minute period. During the measurement period, traffic was moving freely on Jade Coast Drive at approximately 30 mph. Traffic volumes were counted and the results are shown in Table 5.5-3. The average measured noise levels during Measurement 5 were 57.4 dBA L_{eq} at location 5a and 61.3 dBA L_{eq} at location 5b. The average noise level is louder at location 5b because a Vulcan Materials Company truck entered the project site boundary and idled briefly next to location 5b while opening a gate. With this noise event removed from the measurement data, the average measured noise levels were 53.5 dBA L_{eq} at location 5a and 47.5 dBA L_{eq} at location 5b.

- Measurement 6 was located approximately 45 feet from the centerline of Camino Ruiz. This is also the location where the conveyor belt passes through a tunnel underneath Camino Ruiz. The main sources of noise at this location were vehicle traffic on Camino Ruiz and the conveyor belt. Jets from MCAS Miramar were also audible. During the 15-minute measurement period, traffic was moving freely on Camino Ruiz at approximately 45 to 50 mph. Traffic volumes were counted and the results are shown in Table 5.5-3. The average measured noise level during Measurement 6 was 74.4 dBA L_{eq}.

- Measurement 7 was located at the eastern project boundary behind an apartment complex located on Black Mountain Road. The future extension of Carroll Canyon Road would be located north of this measurement location. Vehicles on Black Mountain Road were audible, but not visible from this location. During the 15-minute measurement period, the main noise sources were vehicle traffic on Black Mountain Road and activities on-site, including truck traffic. The average measured noise level during Measurement 7 was 50.9 dBA L_{eq}.

- Measurement 8 was located approximately 65 feet from the centerline of Black Mountain Road in a parking lot east of the project site. The main source of noise at this location was vehicle traffic noise on Black Mountain Road. Other sources included an ambulance siren and a street sweeper. During the 15-minute measurement period, traffic was moving freely on Black Mountain Road at approximately 45 mph. Traffic volumes were counted and the results are shown in Table 5.5-3. The average measured noise level during Measurement 8 was 70.8 dBA L_{eq}. With the siren and street sweeper noise events removed from the measurement data, the average measured noise level was 68.4 dBA L_{eq}.

EXISTING AIRCRAFT NOISE

MCAS Miramar is located south of the project site. There are four runways that serve the airfield. The MCAS Miramar runways are approximately two miles southwest of the project site. Operational squadrons currently include F/A-18 fighters, C-12 transport airframes, and rotary wing squadrons of CH-46 and CH-53 aircraft at Miramar. Marine air operations include, but are not limited to, Seawolf and Julian departures, touch-and-gos, field carrier landing practice, and ground control approach box patterns for both fixed and rotary-wing aircraft.

Existing noise level contours for aircraft operations at MCAS Miramar are shown in Figure 5.5-2, *MCAS Miramar Noise Contours*. As shown, the project lies between the 60 and 65 CNEL contour noise contours. Using the distance between the 60 and 65 CNEL contour lines, it was estimated that the southern project boundary closest to MCAS Miramar lies approximately at the 62 CNEL contour. Therefore, aircraft noise levels at the project site range from just below 60 CNEL to 62 CNEL. Additionally, as noted above, aircraft (jet) noise was audible from the location of Measurement 6; therefore, active aircraft noise has been included within this analysis.

For purposes of analysis, the baseline conditions are the 1981 Reclamation Plan represented by the reclaimed site pursuant to RP 81-02-11 (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of noise impacts assumes this baseline would not differ from the Existing Conditions as presented above.

5.5.2 Regulatory Framework

CALIFORNIA CODE OF REGULATIONS

Interior noise levels for habitable rooms are regulated also by Title 24 of the California Code of Regulations California Noise Insulation Standards. Title 24, Chapter 12, Section 1207.4, of the California Building Code requires that interior noise levels attributable to exterior sources not exceed 45 CNEL in any habitable room within a residential structure. A habitable room is a room used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable rooms for this regulation (24 California Code of Regulations 1207 2016).

CITY OF SAN DIEGO NOISE ORDINANCE

The City's noise ordinance is contained in the City's Municipal Code, Chapter 5, Article 9.5, Noise Abatement and Control (City of San Diego 2010). Section 59.5.0401 Sound Level Limits of the noise ordinance regulates operational noise generated by the on-site sources and provides sound level limits for various land uses by the time of day, as shown in Table 5.5-3.

The City also regulates noise associated with construction activities. Construction is permitted between 7 a.m. and 7 p.m., Monday through Saturdays, with the exception of legal holidays. Construction equipment shall be operated so as not to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 dBA during the 12-hour period from 7 a.m. to 7 p.m.

5.5.3 Impact Analysis

Impacts to future sensitive receivers were evaluated in relation to the noise level standards promulgated in the City of San Diego's General Plan (2008) and the City Noise Abatement and Control Ordinance.

THRESHOLDS OF SIGNIFICANCE

The City's CEQA *Significance Determination Thresholds* (City of San Diego 2011) is used to determine whether project noise could have a significant impact According to the City's CEQA Significance Determination Thresholds, a project would have a significant noise impact if it would result in:

- Exposure of people to noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0404 (i.e., 75 dBA L_{eq});

- Exposure of people to noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0401, as identified in Table 5.5-4; or

- Exposure of people to transportation noise levels that exceed the sound level limits as presented in Table K-2 of the City's Significance Determination Thresholds and as identified as Table 5.5-4.

Construction Noise

The City of San Diego Municipal Code addresses the limits of disturbing or offensive construction noise. The Municipal Code states that with the exception of an emergency, it should be unlawful to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12–hour period from 7 AM to 7 PM. Specifically, Section 59.5.0404 of the City's Noise Abatement and Control Ordinance states that:

A. It shall be unlawful for any person, between the hours of 7:00 PM of any day and 7:00 AM of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. . . .

B. . . . it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 AM to 7:00 PM.

The noise ordinance limits are shown in Table 5.5-5, *Applicable Noise Ordinance Limits*.

Noise Impacts to Sensitive Wildlife

Noise mitigation may be required for significant noise impacts to certain avian species during their breeding season, depending upon the location of the project such as in or adjacent to an MHPA, whether or not the project is occupied by the California gnatcatcher, least Bell's vireo, southern willow flycatcher, least tern, cactus wren, tricolored blackbird or western snowy plover, and whether or not noise levels from the project, including construction during the breeding season of these species would exceed 60 dBA or existing ambient noise level if above 60 dBA. Significant noise impacts to the California gnatcatcher are only analyzed if the project is within an MHPA. The project site is not within an MHPA; and there are no restrictions for the gnatcatcher outside the MHPA any time of year. Noise impacts to sensitive wildlife are addressed in Section 5.4, *Biological Resources.*

Vibration

The City does not have regulations that control or limit vibration sources. Additionally, there are no Federal or State vibration regulations or guidelines directly applicable to the project. Publications by the Caltrans represent some of the seminal work for the analysis of groundborne noise and vibration relating to construction-induced vibration. The project is not subject to Caltrans regulations; however, these guidelines serve as a useful tool to evaluate vibration impacts. Therefore, Caltrans' guidelines is used for assessing the vibration impacts of the project. Caltrans guidelines recommend that a standard of 0.20 inch per second peak particle velocity (PPV) not be exceeded for the protection of normal residential buildings.

ISSUE 1

Would the project result in or create a significant increase in the existing ambient noise levels which exceed the City's adopted noise ordinance(s)?

Significance thresholds:

- Exposures of people to noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0404 (i.e., 75dBA Leq).
- Exposure of people to noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 59.5.0401, as identified in Table 5.7-2.

Impacts

CUP/Reclamation Plan Amendment

As discussed in Section 5.5-1, *Existing Conditions*, the current mining operation involves heavy construction equipment and processing machinery including a dozer, loader, water truck, hopper, conveyor belt, and primary, secondary, and tertiary crushing plants. The operation also includes heavy trucks for the transporting of material. Portions of development would come online and be occupied while mining activities continue as shown in the phasing plans. However, the current mining operation does not generate perceptible vibration. There is no pile driving or blasting associated with current mining operations. Vibration impacts to future occupants of early phases of development and to receptors adjacent to the project site would not occur.

Stone Creek Project

As shown in Table 5.1-1, *General Plan Land Use Noise Compatibility Guidelines*, multi-family residential uses are compatible up to 60 CNEL and conditionally compatible up to 70 CNEL. Commercial, retail, and office uses are compatible up to 65 CNEL and conditionally compatible up to 75 CNEL. Industrial uses are compatible up to 75 CNEL. Park uses are compatible to 70 CNEL and conditionally compatible up to 75 CNEL. Visitor accommodations are compatible up to 60 CNEL and conditionally compatible up to 75 CNEL.

To determine significance, exterior noise limits of 65 CNEL at residential uses; 70 CNEL at the park space and office and business park uses; and 75 CNEL at commercial (including hotel), retail, and light industrial uses were assumed. Interior noise limits of 45 CNEL for residential uses and hotels and 50 CNEL for office, retail, and commercial uses were also assumed. Because interior noise levels are regulated by Title 24 of the California Code of Regulations, the City evaluates interior levels for residential units as part of the building permit process.

The Stone Creek Project proposes a mixed-use, transit-oriented development consistent with the Carroll Canyon Master Plan element of the Mira Mesa Community Plan. As shown in Table 3-1, *Stone Creek Land Use Summary*, Stone Creek would provide approximately 66.87 acres of parks and open space; approximately 37.44 acres of landscaped slopes; up to 4,445 residential units offered as a variety of "for sale" and/or "for rent" in response to varying income levels; up to 175 hotel guest rooms; approximately 135,000 square feet of office/business park uses; approximately 415,000 square feet of light industrial uses; approximately 174,000 square feet of commercial/retail use; approximately 200,000 square feet of office space use; and approximately 300,000 square feet of high technology uses. Figure 3-4, *Stone Creek Land Use Map*, shows the types and locations of land uses proposed for the Stone Creek Master Plan area. Figure 3-5, *Stone Creek Neighborhoods*, identifies the various neighborhoods within Stone Creek. The various land uses proposed for Stone Creek are described in detail in Section 3.1, *Project Description*, of this EIR.

Vehicle Traffic Parameters

The roadways that would generate vehicular noise on-site include Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Maya Linda Road. Traffic volumes on all roadways were obtained from the project traffic report prepared by Linscott, Law & Greenspan (2015) and the traffic report addendum (LLG 2018). Table 5.5-6, *Roadway Traffic Parameters*, summarizes the future traffic volumes and speeds used in analysis of noise impacts associated with vehicular noise.

The current traffic mix is 95.4 percent autos, 0.6 percent motorcycles, 2.6 percent medium trucks, 0.3 percent buses, and 1.1 percent heavy trucks based on field traffic counts. A majority of the truck traffic is currently generated by the on-site mining operation. There would be fewer trucks in the project vicinity once the mining operations have ended. This is, therefore, a conservative vehicle mix that assumes a greater truck mix than may actually occur. The day, evening, and nighttime traffic distribution for all roadways was assumed to be 77 percent daytime traffic, ten percent evening traffic, and 13 percent nighttime traffic. With these assumptions, the CNEL is approximately two dB above the average daytime hourly equivalent noise level.

Analysis of Vehicle Traffic Noise

Noise generated by future traffic was modeled using the SoundPLAN, version 4.1 (Navcon Engineering 2018) modeling software which uses Federal Highway Administration Traffic Noise Model (TNM) algorithms and reference levels to calculate traffic noise levels. The program calculates noise contours and noise levels at selected receiver locations using input parameter estimates such as projected hourly average traffic rates; vehicle mix, distribution, and speed; roadway lengths and gradients; distances between sources, barriers, and receivers; and shielding provided by intervening terrain, barriers, and structures. Locations and elevations of the project site and adjacent properties and roadways were obtained from computer-aided design files. Receivers, roadways, and barriers are input into the model using three-dimensional coordinates.

Exterior traffic noise level contours at first-floor receivers were calculated. Calculations were completed for daytime, evening, and nighttime hours, as well as the 24-hour day-night equivalent level (L_{DN}). For the purposes of this analysis, the L_{DN} and the CNEL values are approximately equivalent.

Off-Site Vehicle Traffic Noise Impacts. Traffic noise would result from the trips generated by the project. Because build-out of the project would occur in phases, daily trips would be generated incrementally over time, as each phase is implemented.

Direct project impacts were calculated by comparing the noise increase of each phase of development with the conditions that would occur without the project. Cumulative future impacts were calculated by comparing the horizon year with project traffic volumes to existing traffic volumes. An increase of three decibels is considered a perceptible increase in noise to the human ear (City of San Diego CEQA Significance Determination Thresholds; July 2016). Therefore, a significant cumulative impact could occur to existing receivers adjacent to circulation element roadways where traffic volumes result in noise level increases of more than three decibels.

The existing, near-term, and buildout traffic volumes with and without the project and the potential change in noise were analyzed for each phase of development. The predicted changes in noise between Existing and Existing + Project, Near-Term and Near-Term + Project, and Buildout and Buildout + Project would not exceed three decibels. Thus, direct project impacts would be less than significant.

On-Site Vehicle Traffic Noise Impacts. Future distances to 55, 60, 65, and 70 CNEL contour lines were calculated for Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Maya Linda Road Federal Highway Administration (FHWA) Traffic Noise Prediction Model algorithms and reference levels and assuming flat-site conditions. These contours do not take into account any noise attenuation that would be provided by vegetation, buildings, or topography. Flat-site contour distances from each roadway are summarized in Table 5.5-7, *Flat-Site Vehicle Traffic Noise Contour Distances*.

Future noise contours over the project site due to traffic on Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Maya Linda Road were modeled. These noise contours take into account topography and proposed grading elevations, but do not take into account any shielding provided by the proposed buildings. “Pavement” ground conditions were used in modeling noise levels at these receivers to account for the future site condition.

The project includes the incorporation of stone walls, ranging in heights of three feet to five feet, as project design features. A wall would occur along the south side of Carroll Canyon Road where Stone Creek Central Park is located. Walls would also occur along portions of the west side of Camino Ruiz where Westside Gardens occurs. Noise levels were modeled with the incorporation of the stone

walls. The resulting noise contours at five feet above the ground, as well as the proposed wall heights, are shown in Figure 5.5-3, *Future Vehicle Traffic Noise Contours*. As shown, noise levels are not projected to exceed 70 CNEL at any of the proposed land uses. Figure 5.5-4, *Areas Projected to Exceed 65 CNEL*, highlights those areas that are projected to exceed 65 CNEL.

Village Center Neighborhoods A, B, and C. At full build-out, the Village Center would include up to 1,420 multi-family residential units, up to 175 hotel rooms, approximately 150,000 square feet of commercial/retail space, approximately 200,000 square feet of commercial/office space, approximately 0.77 acre of Rim Trail, and approximately 6.9 acres of landscaped slopes. The exterior noise limit for residential uses is 65 CNEL, the exterior noise limit of commercial/office uses is 70 CNEL, and the exterior noise limit for commercial/retail uses is 75 CNEL. As shown in Figure 5.5-3, exterior noise levels would be less than 70 CNEL at the Village Center. However, residential uses located adjacent to Camino Ruiz or Carroll Canyon Road in those areas highlighted in Figure 5.5-4 would potentially be exposed to traffic noise levels greater than 65 CNEL.

Westside Neighborhoods A, B, and C. At full build-out, the Westside Neighborhood would include up to 2,725 multi-family residential units, approximately 24,000 square feet of commercial/retail space, approximately 21.14 acres of park, trails, and open space; approximately 1.88 acres of Rim Trail; approximately 12.28 acres of landscaped slopes; and a potential school site. The exterior noise limit for residential uses is 65 CNEL, the exterior noise limit for park uses is 70 CNEL, the exterior noise limit for commercial/retail uses is 75 CNEL, and the exterior noise level for schools is 60 CNEL. As shown in Figure 5.5-3 and Figure 5.5-4, exterior noise levels would be less than 75 CNEL at the Westside Neighborhood, and impacts at the commercial/retail uses would be less than significant. Noise levels would also be less than 70 CNEL and impacts at the park uses would be less than significant. Noise levels would be less than 60 CNEL at the site for a potential future school and impacts would be less than significant. However, noise levels would exceed 65 CNEL at the uses located closest to Camino Ruiz. Residential uses in the northeastern portion of Westside Neighborhood C, as highlighted in Figure 5.5-4, would potentially be exposed to traffic noise levels greater than 65 CNEL. Exterior noise impacts at these residences in the northeastern portion of Westside Neighborhood C would be exceeded.

Impact 5.5-1: Potentially significant exterior noise impacts would occur at residential uses located where exterior noise levels exceed 65 CNEL. These areas are located in the Village Center and Westside Neighborhoods and generally occur along Carroll Canyon Road and Camino Ruiz.

Parkside Neighborhood. At full build-out, the Parkside Neighborhood would include approximately 135,000 square feet of business park uses, approximately 0.52 acre of Rim Trail, and approximately 4.7 acres of landscaped slopes. The exterior noise limit for commercial/office

uses is 70 CNEL. As shown in Figure 5.5-4, business park uses located in the Parkside Neighborhood would not be exposed to noise levels greater than 70 CNEL. Exterior noise limits would not be exceeded.

Eastside Neighborhoods A and B. At full build-out, the Eastside Neighborhood uses would include approximately 415,000 square feet of light industrial uses, approximately 0.77 acre of park space, approximately 0.47 acre of Rim Trail, and approximately 5.78 acres of landscaped slopes. The exterior noise limit for light industrial uses is 75 CNEL and the exterior noise limit for park uses is 70 CNEL. As shown in Figure 5.5-3, exterior noise levels would be less than 75 CNEL for light industrial uses. For park uses the noise levels would be less than 70 CNEL. Exterior noise limits would not be exceeded.

Creekside Neighborhoods A and B. At full build-out, the Creekside Neighborhood would include up to 300 multi-family residential units, approximately 300,000 square feet of high-technology commercial space, approximately 0.04 acre of Rim Trail, and approximately 4.69 acres of manufactured slopes. The exterior noise limit for residential uses is 65 CNEL, and the exterior noise limit for high technology commercial space is 70 CNEL (assumed to be the same as commercial/office). As shown Figure 5.5-4, exterior noise levels would be less than 65 CNEL at the Creekside Neighborhood. Exterior noise limits to high technology and residential uses would not be exceeded.

Stone Creek Central Park and Westside Gardens. The Stone Creek Central Park totals approximately 46.25 acres and would include 43.16 acres of park and open space use and 3.09 acres of landscaped slopes. Westside Gardens would include 16.58 acres of park use. As shown in Figures 5.5-3 and 5.5-4, exterior noise levels at the population-based park uses would not exceed 70 CNEL.

(Note: Please refer to Figure 3-4, *Stone Creek Land Use Map*, Figure 3-5, *Stone Creek Neighborhoods*, and Figure 3-13, *Conceptual Park Systems Plan*, for the locations of Stone Creek's neighborhoods, subneighborhoods, and parks and open space uses.)

Additionally, in accordance with Title 24, interior noise levels attributable to exterior sources shall not exceed 45 CNEL in any habitable room within a residential structure. For residential uses, the City conservatively assumes a 15 dB exterior to interior noise reduction. Therefore, residential uses exposed to exterior noise levels greater than 60 CNEL have the potential to result in interior noise levels that exceed 45 CNEL. Exterior vehicle traffic noise levels are projected to exceed 60 CNEL in portions of Village Center, and Westside Neighborhood C B (see Figure 3-5, *Stone Creek Neighborhoods*, for the location of Westside Neighborhood's sub-neighborhoods). Standard construction techniques would result in a 20 dB reduction of exterior noise levels to an interior receiver. Nonetheless, potential operational noise impacts to residential uses in portions of the

Village Center and Westside Neighborhood C could result in interior noise levels that exceed 45 CNEL.

As required by the California Code of Regulations and as a condition of project approval, prior to issuance of building permits for the Village Center and Westside Neighborhood C, a detailed acoustical analysis would be required demonstrating that interior noise levels due to exterior sources would be at or below 45 CNEL in all habitable rooms. The detailed acoustical analysis will be submitted to the City at the time that building plans are available for the proposed buildings, and prior to the issuance of building permits. Standard interior noise attenuation measures that would adequately reduce noise levels include using construction materials with greater noise reduction properties. The exterior to interior noise reduction provided by the building structure is partially a function of the sound transmission class (STC) values of the window, door, wall, and roof components used in the building. The greater the STC value, generally the greater the noise reduction. The necessary STC values required to reduce interior noise levels to 45 CNEL or less would be determined as a part of the interior noise analysis. The applicant's final building plans shall identify all recommendations of the acoustical report, including STC ratings of windows and doors, ventilation requirements, insulation, plumbing isolation, etc. Final building plans shall be reviewed by the City's Acoustical Plan Checker to verify that the mitigation measures recommended in the acoustical report have been incorporated. Additionally, where exterior noise levels are projected to exceed 60 CNEL, if it would be necessary for the windows to be closed in order to achieve the necessary exterior-to-interior noise reduction, the design for the affected units shall include ventilation or air conditioning systems. Implementation of these measures would ensure that impacts are reduced to below a level of significant.

Commercial/office and commercial/retail uses have an interior noise limit of 50 CNEL. Exterior noise levels due to vehicle traffic are not projected to exceed 70 CNEL. Therefore, interior noise impacts to all commercial/office and commercial/retail uses in these areas would be less than significant.

Off-Site Carroll Canyon Road Extension. As a part of the project, Carroll Canyon Road would be constructed through the project site and east to Black Mountain Road (see Figure 3-23, *Stone Creek Vesting Tentative Map)*. A portion of the roadway would be constructed between two apartment complexes located on Black Mountain Road. The existing noise levels adjacent to these apartment complexes are 50.9 dBA L_{eq} between the buildings and the project site (Measurement 7), and 68.4 dBA L_{eq} adjacent to Black Mountain Road (Measurement 8). As shown in Table 5.5-8, *Carroll Canyon Road Off-Site Receiver Noise Levels*, exterior noise levels at the exterior use areas and building façades would not exceed 65 CNEL. Therefore, no significant noise impacts would result from the off-site extension of Carroll Canyon Road.

Transit Noise. As a part of San Diego Forward, it is envisioned that bus rapid transit or other transit would serve the project site along Carroll Canyon Road. It is also envisioned that the trolley's Blue Line would be extended from University Towne Center to Mira Mesa via Sorrento Mesa and Carroll

Canyon. At this time, it is not anticipated that the trolley would extend through the project site. The proposed transit corridor and transit stops are shown in Figure 3-4, *Stone Creek Land Use Map.* If the trolley extension were to continue along Carroll Canyon Road through the project site, it would create a new source of noise in the project area. Noise would be generated from trolley traffic and audible warning signals at rail crossings.

The exact alignment and transit stop locations are not known at this time. Noise measurements of the trolley's Green Line were taken at a transit station located at Hazard Center in the city of San Diego. The trolley tracks and station are located south of Hazard Center, a regional shopping center, and north of a multi-family residential development. Noise measurements were taken of trolley pass-bys and warning signals. On a typical weekday, Saturday, and Sunday, there are 144, 114, and 113 trolley trips, respectively. Using these trolley volumes and the measured noise levels, it was calculated that the trolley would generate noise levels of 54, 53, and 53 CNEL on weekdays, Saturdays, and Sundays at 50 feet from the centerline of the trolley tracks, respectively. For the purposes of this analysis, because the proposed mix in land uses would be similar to the Hazard Center conditions, it was assumed that the proposed rail line and transit stops would be similar to the Hazard Center rail and transit stop. When adding noise levels, there is no measurable change in the total noise level if a noise level is 10 dB less than the other. The trolley contours fall within the 70 CNEL vehicle traffic contour line for Carroll Canyon Road. Trolley noise would not contribute significantly to vehicle traffic noise. Trolley noise impacts would be less than significant.

Construction Noise Analysis

Noise associated with the earthwork, excavation, construction, and surface preparation for the project would result in short-term impacts to adjacent residential properties. A variety of noise-generating equipment would be used during the construction phase of the project, such as scrapers, dump trucks, backhoes, front-end loaders, jackhammers, and concrete mixers, along with others.

Table 5.5-9, *Measured Noise Levels of Common Construction Equipment*, indicates the types of construction equipment typically involved in construction projects. With the exception of pile drivers, this type of equipment can individually generate noise levels that range between 78 and 89 dBA at 50 feet from the source, as listed in Table 5.5-9. Ground-clearing activities generally generate the greatest average construction noise levels. Ground-clearing activities are estimated to generate average noise levels of 83 to 84 dBA L_{eq} 50 feet from the site of construction. These values are based on empirical data on a number and types of equipment at a construction site and their average cycle of operation. Because the site would be pre-graded from the aggregate extraction and processing uses, the amount of heavy equipment needed for site preparation would be less than what would be expected for an undisturbed site. Foundation activities generally generate the next loudest average noise levels. Foundation activities are estimated to generate an average noise level of 81 dBA L_{eq} at 50 feet from the site of construction.

Construction noise generally can be treated as a point source and would attenuate at approximately six dBA for every doubling of distance. A foundations noise level of 81 dBA L_{eq} at 50 feet would attenuate to approximately 75 dBA L_{eq} at 100 feet from the noise source. There are residential uses located to the west and north of the project site. These uses are located at least 100 feet from the edge of proposed foundation construction activity. Therefore, noise levels would not exceed 75 dBA L_{eq} at these residential uses.

Because the site would be pre-graded from the aggregate extraction and processing uses, the amount of heavy equipment needed for site grading would be less than what would be expected for an undisturbed site. There are residential uses located to the west and north of the project site. At these existing off-site residences, construction noise would be at levels currently experienced from the existing on-site sources. Construction-related noise levels would be no greater than existing mining-related noise levels. Given the limited duration of required heavy equipment operations and because construction noise levels would be no more than existing noise levels, construction noise impacts to off-site receivers would be less than significant.

As discussed previously, the project would be developed in phases. Therefore, portions of the development would be occupied while other phases are being constructed. Residential uses would be constructed beginning in development Phase 4 and would continue during development Phases 5, 6, 7, 9, and 10 (see Figures 3-4, *Stone Creek Land Use Map,* and 3-21, *Stone Creek Phasing Plan*). Construction activities, such as grading, which generate the loudest noise levels, would occur over the entire site, and would not be situated at any one location for a long period of time. Therefore, the acoustic center of the construction activity for each development phase was assumed to be the center of the development areas.

The project would comply with the City of San Diego Noise Ordinance which states that *…it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 AM to 7:00 PM*. Short-term, maximum construction noise levels could exceed the noise 75 decibel level when a piece of construction equipment passes by closer to the residential property lines. For example, the peak noise level from a dozer near a residential property line would be 84 dBA L_{max} at 50 feet. These occurrences, however, would be very short term (seconds or minutes) in one location and would not create an adverse noise impact. Average noise levels would not exceed 75 dBA L_{eq} at the residential uses. Therefore, construction noise would result in a less than significant impact.

Pile Driving

Pile driving may be required in limited areas as a part of future construction of the project. As shown in Table 5.5-10, pile drivers generate a maximum noise level of 95 dBA at 50 feet and have a usage factor of 20 percent. This results in an average hourly noise level of 88 dBA L_{eq} at 50 feet. This would attenuate to 75 dBA L_{eq} at approximately 225 feet. Therefore, if pile driving were to occur within 225

feet of a residential use, pile driving noise could exceed applicable noise ordinance.

Impact 5.5-2: Potentially significant noise impacts could result, if pile driving occurs within 225 feet of a residential use.

Vibration

On-Site Land Uses. Light industrial and commercial operations have, on occasion, been known to utilize equipment or processes in the manufacture and distribution of materials that have a potential to generate groundborne vibration. However, vibrations found to be excessive for human exposure that are the result of a manufacturing process or industrial machinery are generally addressed from an occupational health and safety perspective. The residual vibrations from industrial processes or machinery are typically of such low amplitude that they quickly dissipate into the surrounding soil and are rarely perceivable at the surrounding land uses. Impacts would be less than significant.

Construction. Typical project construction activities, such as the use of jackhammers, other high-power or vibratory tools, compactors, and tracked equipment, may also potentially generate substantial vibration (i.e., greater than 0.2 inches per second peak particle velocity) in the immediate vicinity, typically within 15 feet of the equipment. However, standard building construction does not typically have these larger sources of vibration, and is therefore not anticipated to be a source of substantial vibration. By use of administrative controls, such as scheduling, construction activities would be restricted to hours with the least potential to affect nearby properties. Thus, perceptible vibration can be kept to a minimum and not result in human annoyance or structural damage. Some specific construction activities result in higher levels of vibration. Pile driving has the potential to generate the highest groundborne vibration levels. Based on published vibration data, maximum vibration levels from pile driving would exceed 0.20 in per second PPV level at approximately 95 feet. However, vibration levels generated by pile-driving activities would vary depending on project conditions, such as soil conditions, construction methods, and equipment used; therefore, the use of 95 feet is considered conservative. Vibration from pile driving at 95 feet of existing structures would be a potentially significant construction impact.

Impact 5.5-3: Potentially significant vibration impacts due to construction could result, if pile driving occurs within 95 feet of an existing structure.

While the project would be developed in phases over a period of 25 to 30 years, actual development in each phase is constrained by ongoing mining operations. Mining would cease in a portion of the eastern property first, which is anticipated to occur five to ten years following project approvals. The next phase would not occur until at least 2030, as mining of resources continues and the site reclamation work progresses. In order for the western portion of the site to begin development, additional mining and reclamation would take place and the conveyor would need to be dismantled. The last phases of development would occur in the central portion of the site and finally in the

southeast. Development in the final phase (Creekside Neighborhood) would occur after termination of the CUP for operation of asphalt and concrete plants in this area, or about 2038.

The first noise-sensitive land uses to be constructed would be in the Village Center in Development Phase 4 (see Figure 2-1, *Stone Creek Land Use Map*, Figure 3-21, *Stone Creek Phasing Plan*, and Figure 8-3, *Stone Creek Neighborhoods*). These noise-sensitive land uses would be located approximately 700 feet from the primary plant rock screener (Measurement 2), 650 feet from the primary plant rock crusher (Measurement 3), and 1,500 feet from the secondary plant (Measurement 4). As discussed in Section 5.5-1, *Existing Conditions*, noise measurements were taken of the mining operation noise sources. Using the existing noise level measurements, the loudest mining noise levels at the Phase 4 development were calculated.

The loudest measured noise level from the primary plant rock screener was 82.4 dBA L_{eq} at 30 feet. This would attenuate to 55.0 dBA L_{eq} at 700 feet. The loudest measured noise level from the primary plant rock crusher was 89.8 dBA L_{eq} at 10 feet. This would attenuate to 53.5 dBA L_{eq} at 650 feet. The loudest measured noise level from the secondary plant was 90.1 dBA L_{eq} at 15 feet. This would attenuate to 50.1 dBA L_{eq} at 1,500 feet. When added together, the resulting noise level at the Phase 4 development would be 58.1 dBA L_{eq}.

As discussed in Section 5.5-1, *Existing Conditions*, the sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Development Phase 4 has a density greater than one dwelling unit per 2,000 square feet. Therefore, the most restrictive sound level limit between Development Phase 4 and the mining operation would be 60 dBA L_{eq}. Therefore, mining noise levels at the Phase 4 development would not be exceeded.

Additional noise-sensitive land uses would be constructed in Development Phases 5, 6, and 7. However, these noise-sensitive land uses would be located farther away from the mining operations than Development Phase 4, and noise levels would be less than those estimated above. Impacts would be less than significant.

At the time that the remaining development phases are constructed, the only mining activity remaining would be located in the southeastern portion of the project site. The secondary plant would be located approximately 850 feet from the nearest Development Phase 8 boundary. Noise levels at this distance would be 58 dBA L_{eq}. Therefore, impacts would be less than significant. Once minerals are depleted and mining activities cease, there would be no impact.

Significance of Impacts

CUP/Reclamation Plan Amendment

As mining operations phase out, reclamation activities would include finish-grading, applying topsoil, reseeding, and revegetating with native species. Because reclamation noise levels would be no more than existing noise levels, reclamation noise impacts to off-site receivers would be less than significant. Once reclamation is complete and the site has been revegetated, there would be no on-site noise generating source. Ambient noise levels on-site and in the project vicinity would be less than the existing condition. Operational noise impacts of reclamation would be less than significant. Noise-sensitive residential uses would be constructed as mining operations continue. However, mining operations would be located far enough away from noise sensitive uses that noise levels would be less than significant. Once minerals are depleted and mining activities cease, there would be no impact. No mitigation is required.

Stone Creek Project

A significant cumulative noise increase would occur at four off-site roadway segments. However, as no noise-sensitive land uses are located along these roadway segments, off-site traffic noise impacts would be less than significant.

Noise levels at exterior use areas within Westside Neighborhood C and Village Center A through C would be reduced through site design measures such as placing buildings between the roadways and the exterior useable areas or setting exterior useable areas back from the roadways. Interior noise impacts to all residential uses in portions of Village Center, Westside Neighborhood C, and Eastside Neighborhood A and B where exterior noise levels exceed 60 CNEL would be potentially significant. (See Figure 3-5, *Stone Creek Neighborhoods*, for the location of Stone Creek's neighborhoods and sub-neighborhoods). Interior noise impacts to all commercial/office and commercial/retail uses in these areas would be less than significant. Because construction noise levels would be no more than existing noise levels, construction noise impacts to off-site receivers would be less than significant.

Residential uses would be constructed beginning in Development Phase 4 and would be operational during construction of later phases. Non-pile driving construction noise levels are not projected to exceed 75 dBA L_{eq} at residential receivers. However, pile driving may be required in limited areas as a part of future construction of the project. If pile driving were to occur within 225 feet of a residential use, pile driving noise could result in a significant impact.

Vibration impacts from mining operations, construction, and on-site uses would be less than significant. However, pile-driving activities within 95 feet of existing structures would be a potentially significant construction impact.

Mitigation Measures

Potentially significant exterior noise impacts would occur at residential areas located in the Village Center and Westside Neighborhood, generally along Carroll Canyon Road and Camino Ruiz. Mitigation measure MM 5.5-1 would be required to reduce noise levels to below a level of significance.

MM 5.5-1: Prior to the issuance of building permits for Westside Neighborhood C and Village Center A through C, an acoustical analysis shall be prepared demonstrating that the proposed site plan would reduce the noise levels at exterior useable areas of the residential uses located within the shaded areas shown in Figure 5.5-4 to less than 65 CNEL.

Potentially significant interior noise impacts would occur at all residential uses in portions of Village Center, Westside Neighborhood C, and Eastside Neighborhood A and B where exterior noise levels exceed 60 CNEL.

Non-pile driving construction noise levels are not projected to exceed 75 dBA L_{eq} at residential receivers. However, pile driving may be required in limited areas as a part of future construction of the project. If pile driving were to occur within 225 feet of a residential use, pile-driving noise would result in a significant impact. Implementation of the following measures would reduce pile-driving noise impacts to a level less than significant.

MM 5.5-2: Where pile driving will occur within 225 feet of a residential structure, best construction management practices, including the following measures, shall be used to reduce construction noise levels to comply with standards established by the City of San Diego in Article 9.5 Noise Abatement and Control. Control measures include:

- **Erect Temporary Noise Attenuation Barriers Adjacent to Pile-Driving Equipment or Employ Temporary Shields to the Pile-Driving Equipment, Where Necessary and Feasible.** The need for and feasibility of noise attenuation barriers/curtains or pile-driver shielding shall be evaluated on a case-by-case basis by considering the distance to noise-sensitive receptors, the available space at the construction location, safety, and proposed project operations. The noise barriers/curtains shall be installed directly around the pile-driving equipment to shield the line of sight from the nearest noise-sensitive receptor, where feasible. Another alternative is to employ shields that are physically attached to the pile drivers. The pile-driver shielding is more effective

where considerable noise reduction is required.

- **Silencing Technologies:**
  - **Pile-Driving Silencer.** A pile-driver silencer achieves reductions by shrouding the impact zone between the hammer and pile top with a specially designed soundproof casing. A silencer generally comprises a hollow section steel frame filled with foam, surrounded by a second casing that houses a 50-mm thick rubber layer to absorb high frequency noise and a 6-mm thick layer to dampen low frequency noise. The casing attaches to the mast of the piling rig and surrounds the whole hammer. Two hydraulically controlled gates close the casing at the bottom of the hammer so that it fits snugly across the top of the sheet pile wall without hampering the installation process.

    Or,

  - **Wood Block Silencer.** Similar in theory to the pile-driver silencer is to use a wood block to dampen the noise. The block of wood reduces the hammer energy being imparted onto the pile. The air noise level may be reduced but more significantly the higher frequency wave lengths are reduced. The human ear hears a low-frequency thud instead of a high-frequency ping

- **Limiting Operation.** Limit the number of pile-driving strikes per hour, as necessary, to reduce construction noise levels to comply with standards established by the City of San Diego in Article 9.5 Noise Abatement and Control.

Pile driving within 95 feet of existing structures has the potential to exceed 0.20 inch per second, resulting in a potentially significant impact associated with vibration during construction. Implementation of the following measures would reduce construction-related vibration impacts to a level less than significant.

MM 5.5-3: Where pile driving would occur within 95 feet of existing structures, site- specific vibration studies shall be conducted to determine the appropriate mitigation. Mitigation, if necessary, shall include the following:

- Identify sites that would include vibration-generating soil compaction activities such as pile driving and have the potential to generate groundborne vibration and the sensitivity of nearby structures to groundborne vibration. This task shall be conducted by a qualified structural engineer.

- Develop a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; set up a vibration monitoring

schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies would be identified for when vibration levels approach the limits.

- At a minimum, monitor vibration during initial demolition activities and during pile- driving activities. Monitoring results may indicate the need for more or less intensive measurements.

- When vibration levels approach limits, construction shall be suspended and contingencies to either lower vibration levels or secure the affected structures shall be implemented.

- Post-construction surveys shall be conducted on structures where either monitoring has indicated high levels or complaints of damage have been made. Appropriate repairs or compensation shall be made where damage has occurred as a result of construction activities.

Significance of Impacts Following Implementation of Mitigation Measures

Implementation of mitigation measures MM 5.5-1 through 5.5-3 would mitigate exterior and interior noise impact to below a level of significance.

Table 5.5-1. *15-Minute Traffic Counts*

Measurement Location	Cars	Motorcycles	Medium Trucks	Buses	Heavy Trucks
Measurement 5					
EB Jade Coast Drive	25	0	0	0	0
WB Jade Coast Drive	22	0	0	1	0
Measurement 6					
SB Camino Ruiz	200	2	0	4	1
NB Camino Ruiz	184	1	1	1	0
Measurement 8					
NB Black Mountain Road	160	1	0	6	1
SB Black Mountain Road	150	0	1	8	6

EB = eastbound; WB = westbound; NB = northbound; SB = southbound.

Table 5.5-2. *Noise Measurement Results*

Measurement	Noise Source	Measured Noise Level dBA L_{eq}
1a	Pit – Loader, dozer, water truck	72.2
1b	Pit – Loader, dozer, water truck	73.2
1c	Pit – Loader, dozer, water truck	69.3
1d	Pit – Loader, dozer, water truck	72.8
2a	Primary Plant – Shaker Screen	82.4
2b	Primary Plant – Shaker Screen	80.4
2c	Primary Plant – Shaker Screen	78.3
2d	Primary Plant – Shaker Screen	76.8
3a	Primary Plant – Rock Crusher	85.3
3b	Primary Plant – Rock Crusher	89.8
3c	Primary Plant – Rock Crusher	88.1
3d	Primary Plant – Rock Crusher	87.1
4a	Secondary Rock Plant	84.8
4b	Secondary Rock Plant	88.9
4c	Secondary Rock Plant	87.0
4d	Secondary Rock Plant	90.1
5a	Jade Coast Drive	57.4
5b	Jade Coast Drive	61.3
6	Camino Ruiz	50.9
7	Vulcan, Black Mountain Road	70.8
8	Black Mountain Road	74.4

Table 5.5-3. *Sound Level Limits*

Land Use Zone	Time of Day	One-Hour Average Sound Level (dB)*
Single-Family Residential	7 a.m. to 7 p.m.	50
	7 p.m. to 10 p.m.	45
	10 p.m. to 7 a.m.	40
Multifamily Residential (Up to a maximum density of 12,000)	7 a.m. to 7 p.m.	55
	7 p.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
All Other Residential	7 a.m. to 7 p.m.	60
	7 p.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial	7 a.m. to 7 p.m.	65
	7 p.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	60
Industrial or Agricultural	Any time	75

***** The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits of the two zones.

Table 5.5-4. *Traffic Noise Significance Thresholds* [dBA CNEL]

Structure or Proposed Use that would be impacted by Traffic Noise	Interior Space	Exterior Useable Space[2]	General Indication of Potential Significance
Single-family detached	45 dB	65 dB	Structure or outdoor useable area[2] is < 50 feet from the center of the closest (outside) lane on a street with existing or future ADTs > 7500[3]
Multi-family, schools, libraries, hospitals, day care, hotels, motels, parks, convalescent homes.	Development Services Department (DSD) ensures 45 dB pursuant to Title 24.	65 dB	
Offices, Churches, Business, Professional Uses	n/a	70 dB	Structure or outdoor usable area is < 50 feet from the center of the closest lane on a street with existing or future ADTs > 20,000
Commercial, Retail, Industrial, Outdoor Spectator Sports Uses.	n/a	75 dB.	Structure or outdoor usable area is < 50 feet from the center of the closest lane on a street with existing or future ADTs > 40,000.

[1] If a project is currently at or exceeds the significance thresholds for traffic noise described above and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.

[2] Exterior usable areas do not include residential front yards or balconies, unless the areas such as balconies are part of the required usable open space calculation for multi-family units.

[3] Traffic counts are available from: San Diego Regional Association of Governments (SANDAG) Regional Economic Development Information System (REDI): http://cart.sandag.cog.ca.us/REDI/ SANDAG Traffic Forecast Information Center: http://pele.sandag.org/trfic.html.

Table 5.5-5. *Applicable Noise Ordinance Limits*

Land Use	Time of Day	One-Hour Average Sound Level [dBA L_{eq}]
Single-family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-family Residential (Up to a max. density of 1 du/2,000 sq. ft.)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agriculture	7:00 a.m. to 7:00 p.m.	75
	7:00 p.m. to 10:00 p.m.	75
	10:00 p.m. to 7:00 a.m.	75

Table 5.5-6. *Roadway Traffic Parameters*

Roadway	From	To	Buildout ADT	Speed (mph)
Carroll Canyon Road	Camino Santa Fe	Camino Ruiz	40,570	45
	Camino Ruiz	Project Driveway C	44,910	45
	Project Driveway C	Project Driveway D	36,890	45
	Project Driveway D	Project Driveway E	39,630	45
	Project Driveway E	Project Driveway F	41,190	45
	Project Driveway F	Black Mountain Road	34,800	45
Camino Ruiz	Gold Coast Drive	Jade Coast Drive	31,500	45
	Jade Coast Drive	Project Driveway	40,200	45
	Project Driveway	Carroll Canyon Road	55,500	45
	Carroll Canyon Road	Miralani Drive	24,700	45
	Miralani Drive	Miramar Road	33,400	45
Black Mountain Road	Gold Coast Drive	Carroll Canyon Road	34,880	40
	Carroll Canyon Road	Maya Linda Road	16,100	40
	Maya Linda Road	Carroll Centre Road	24,960	40
	Carroll Centre Road	Miramar Road	17,100	40
Maya Lina Road	Carroll Canyon Road	Project Driveway G	12,480	45
	Project Driveway G	Project Driveway H	15,760	45
	Project Driveway H	Black Mountain Road	15,860	45

Table 5.5-7. ***Flat-Site Vehicle Traffic Noise Contour Distances***

Roadway	From	To	Distance to (feet):		
			70 CNEL	65 CNEL	60 CNEL
Carroll Canyon Road	Camino Santa Fe	Camino Ruiz	166	524	1,656
	Camino Ruiz	Project Driveway C	182	574	1,815
	Project Driveway C	Project Driveway D	148	467	1,476
	Project Driveway D	Project Driveway E	158	500	1,581
	Project Driveway E	Project Driveway F	166	524	1,656
	Project Driveway F	Black Mountain Road	141	446	1,409
Camino Ruiz	Gold Coast Drive	Jade Coast Drive	129	406	1,285
	Jade Coast Drive	Project Driveway	162	512	1,618
	Project Driveway	Carroll Canyon Road	223	706	2,233
	Carroll Canyon Road	Miralani Drive	100	315	998
	Miralani Drive	Miramar Road	135	426	1,346
Black Mountain Road	Gold Coast Drive	Carroll Canyon Road	107	338	1,069
	Carroll Canyon Road	Maya Linda Road	49	155	489
	Maya Linda Road	Carroll Centre Road	76	239	757
	Carroll Centre Road	Miramar Road	52	166	524
Maya Lina Road	Carroll Canyon Road	Project Driveway G	50	158	500
	Project Driveway G	Project Driveway H	63	199	629
	Project Driveway H	Black Mountain Road	64	204	644

Table 5.5-8. ***Carroll Canyon Road Off-Site Receiver Noise Levels***

Receiver	Location	Noise Level (CNEL)
1	Exterior Usable Space - Courtyard	56
2	Exterior Usable Space - Courtyard	58
3	Exterior Usable Space - Courtyard	57
4	Exterior Usable Space - Courtyard	59
5	Exterior Usable Space - Courtyard	62
6	Exterior Usable Space - Courtyard	62
7	Building Façade/Front Yard	61
8	Building Façade/Front Yard	62
9	Building Façade/Front Yard	63
10	Building Façade/Front Yard	62
11	Building Façade/Front Yard	58
12	Exterior Usable Space - Courtyard	58
13	Exterior Usable Space - Courtyard	59
14	Exterior Usable Space - Courtyard	57
15	Exterior Usable Space - Courtyard	62

SOURCE: RECON 2009

Table 5.5-9. *Measured Noise Levels of Common Construction Equipment*

Equipment	Measured Noise Level ($dBAL_{max}$)	Acoustical Usage Factor (%)[1]
Air compressor	78	40
Backhoe	78	40
Concrete mixer truck	79	40
Dozer	82	40
Generator	81	50
Grader	85	40
Jackhammer	89	20
Front end loader	79	40
Paver	77	50
Pneumatic tool	85	50
Chain saw	84	20
Scraper	84	40
Dump truck	76	40
Pile driver	95	20

[1] The "acoustic usage factor" represents the percentage of time that a particular item of equipment is assumed to be running at full power while working on site.

Source: Federal Highway Administration 2006.

Note: Noise levels at 50 feet from the source.

Figure 5.5-1. *Noise Measurement Locations*

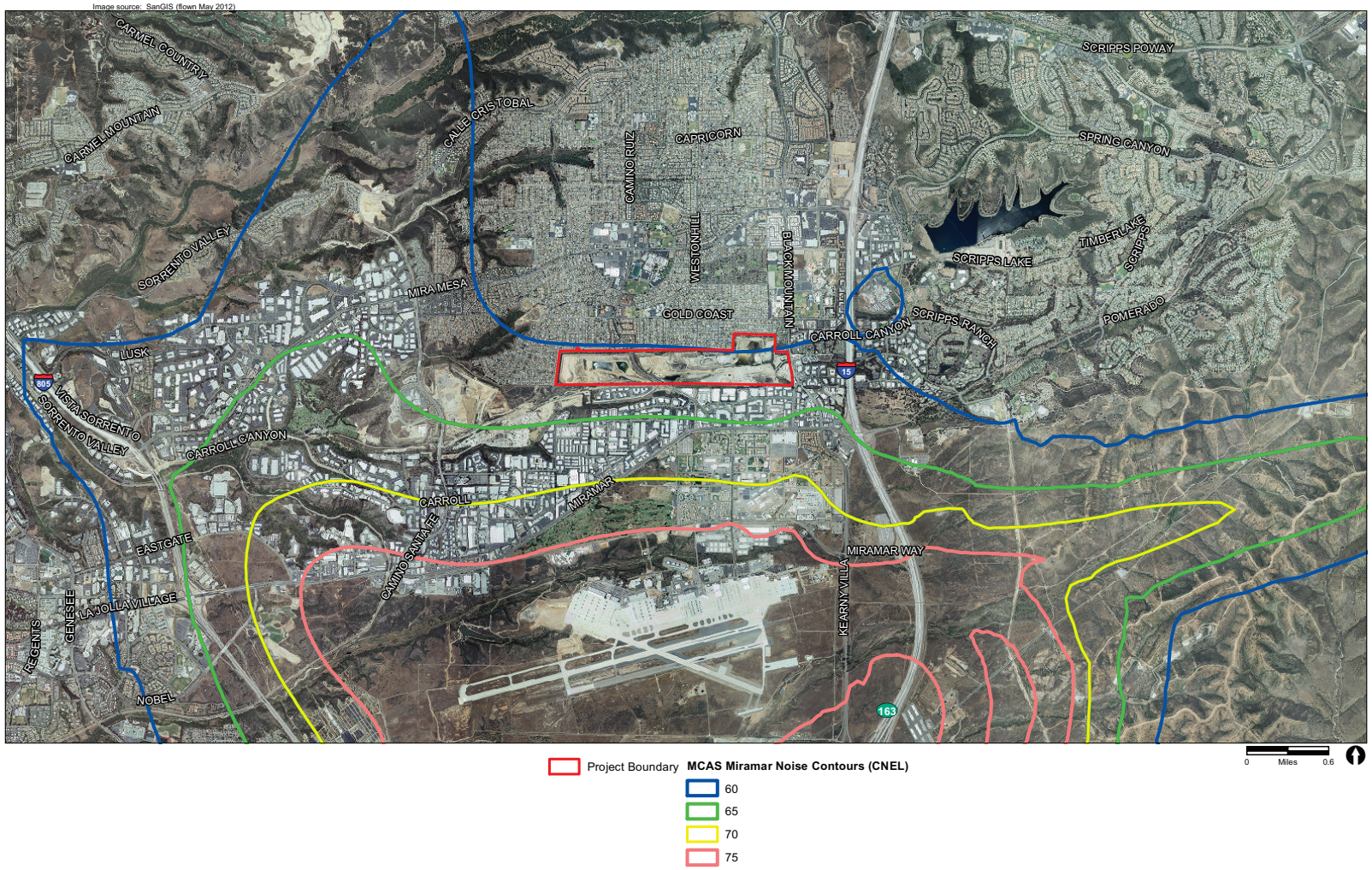


Figure 5.5-2. *MCAS Miramar Noise Contours*

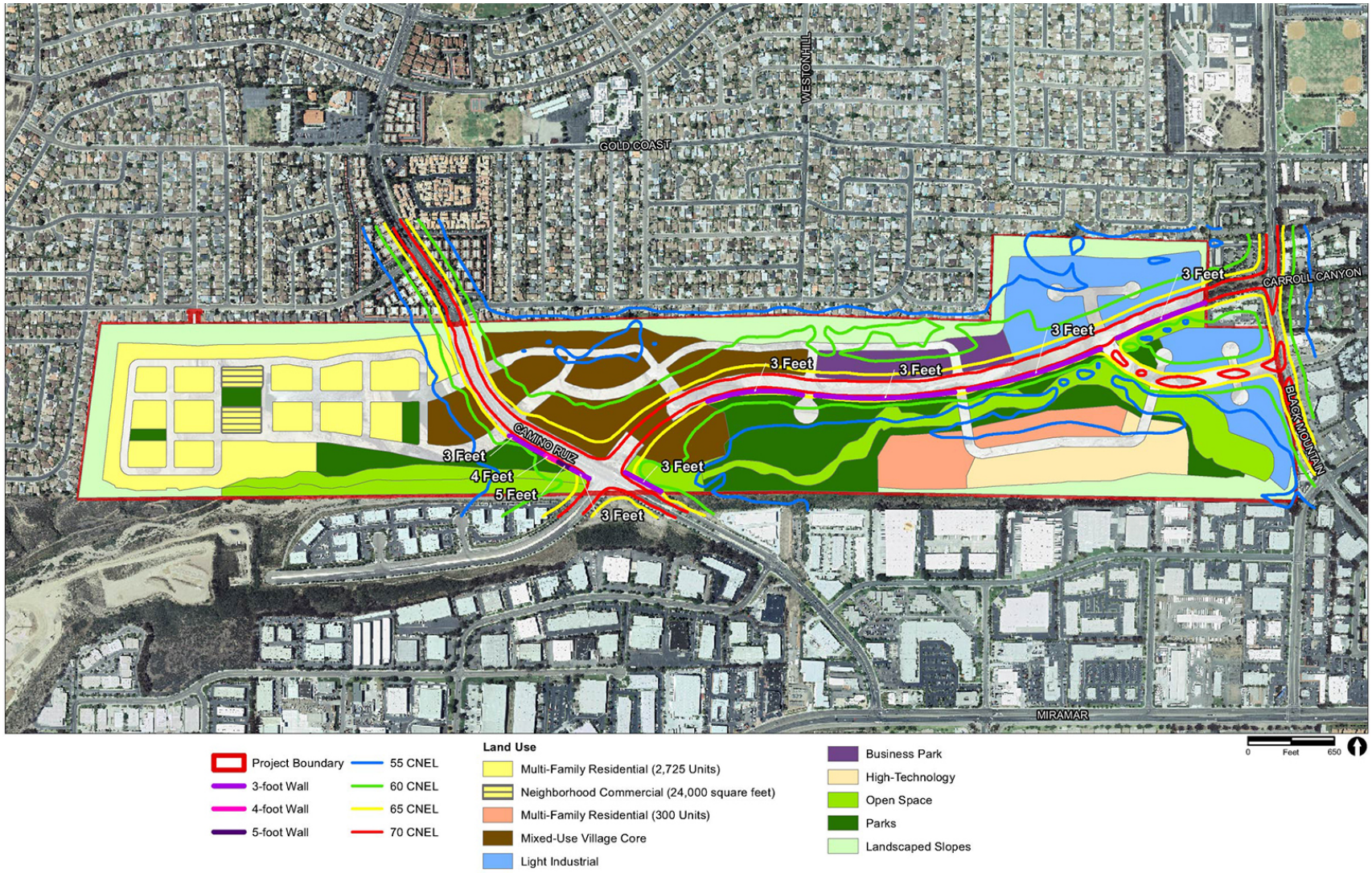


Figure 5.5-3. ***Future Vehicle Traffic Noise Contours***

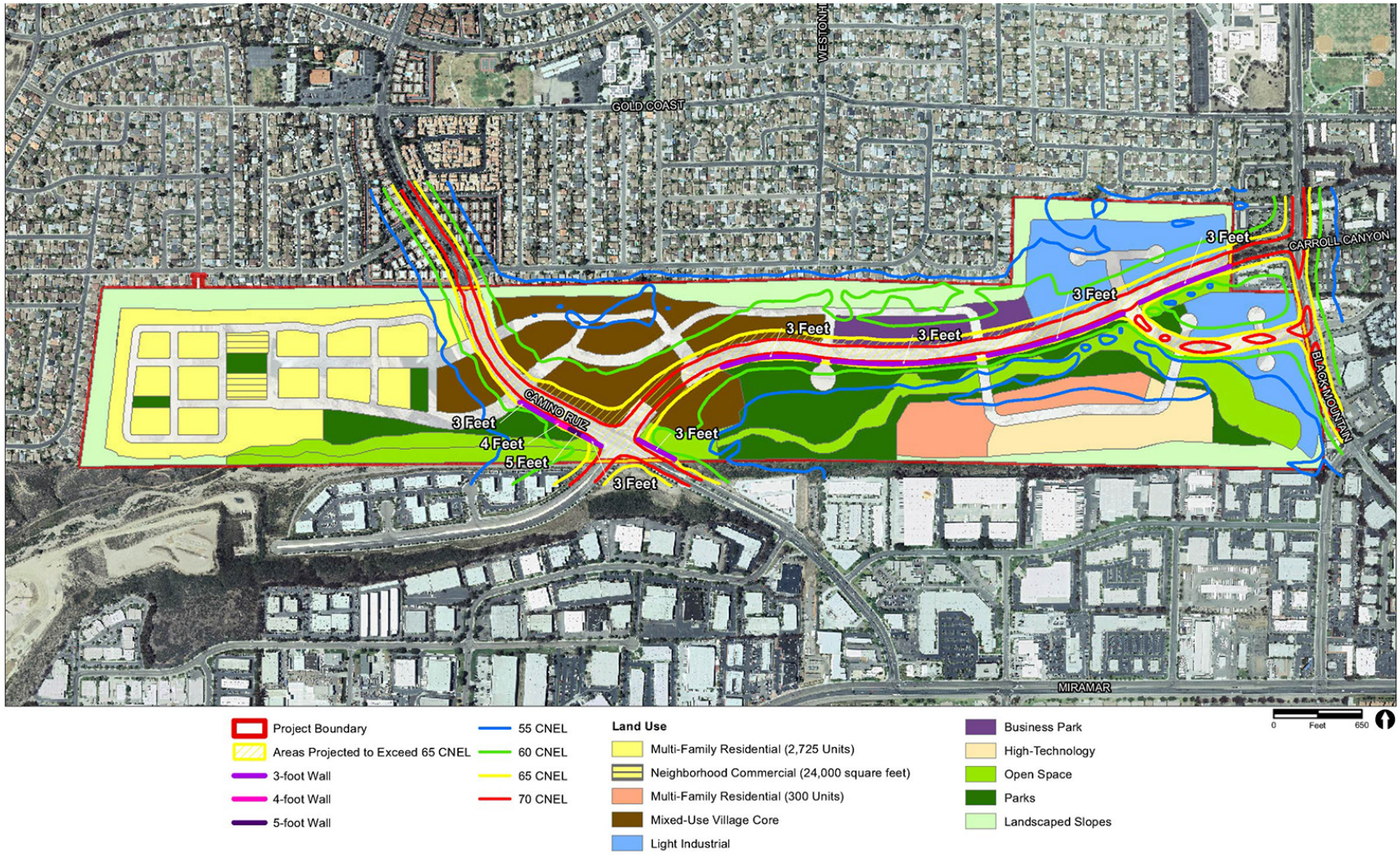


Figure 5.5-4. *Areas Projected to Exceed 65 CNEL*

5.6 AIR QUALITY

This section evaluates the potential air quality impacts associated with the project. The following discussion is based on the *Air Quality Technical Report* prepared for the project by Scientific Resources Associated, dated April 1, 2019, included as Appendix D.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of air quality impacts associated with the future school would be required at that time.

5.6.1 Existing Conditions

The approximately 293-acre project site is located north of Miramar Road, east of Camino Santa Fe, south of Mira Mesa Boulevard, and west of Black Mountain Road within the Mira Mesa community. Camino Ruiz traverses the project site, dividing the site into two parts.

The project site is the location of an on-going resource extraction operation for the mining and processing of sand and gravel, which operates under the 1981 CUP. Additionally, existing asphalt and concrete processing plants operate on the project site.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of air quality impacts assuming this baseline would not differ from the Existing Conditions as presented above.

CLIMATE AND METEOROLOGY

The project site is located in the San Diego Air Basin (SDAB). The climate of the SDAB is dominated by a semi-permanent high-pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. Figure 5.6-1, *Wind Rose – MCAS Miramar*, provides a graphic representation of the prevailing winds in the project vicinity, as measured at MCAS Miramar, which is the closest meteorological monitoring station to the site and provides general wind trends in San Diego County.

The high-pressure cell creates two types of temperature inversions that may act to degrade local air quality. Subsidence inversions occur during the warmer months as descending air associated with the Pacific high pressure cell comes into contact with cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone, commonly known as smog.

BACKGROUND AIR QUALITY

The Air Pollution Control District (APCD) operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). The nearest ambient monitoring station to the project site is the Kearny Mesa monitoring station, which measures ozone, nitrogen dioxide, respirable particulate matter less than or equal to ten microns in diameter (PM_{10}), and fine particulate matter less than or equal to 2.5 microns in diameter($PM_{2.5}$). The nearest monitoring station that measures carbon monoxide in San Diego County is located in downtown San Diego. Sulfur dioxide is no longer monitored at any sites within the City of San Diego and is not considered to be a pollutant of concern for exceedances of the ambient air quality standards. Ambient concentrations of pollutants over the five-year period from 2012 through 2016 are presented in Table 5.6-1, *Ambient Background Concentrations*.

The Kearny Mesa monitoring station measured exceedances of the State 1-hour ozone standard and the State and Federal 8-hour ozone standards in the period from 2012 through 2016. The data from the monitoring station indicates that air quality is in attainment of all other air quality standards.

EXISTING EMISSION SOURCES

The mining operation is currently operating its Carroll Canyon facility at the Stone Creek project site under the 1981 CUP. The current operations include aggregate extraction (mining), aggregate processing (crushing and screening), hot mix asphalt production, concrete batch plant, associated materials transfer equipment (conveyors), and materials storage equipment (including storage piles and silos).

Emissions associated with the Carroll Canyon operation are quantified by the mine operator in their annual Emissions Inventory Report that is prepared by the San Diego Air Pollution Control District based on information submitted by Vulcan. The Emissions Inventory Reports do not quantify emissions from non-permitted sources such as mobile mining equipment (heavy equipment) and motor vehicles (trucks and worker vehicles). Emissions from heavy equipment and motor vehicles were calculated based on emission factors from the ARB's OFFROAD and EMFAC2011 Models. Table 5.6-2, *Existing Operational Emissions – Vulcan Materials Company Carroll Canyon Facility*, presents a summary of the emissions for the facility, based on the 2009 Emissions Inventory Report (Vulcan Materials Company. 2010) and the OFFROAD and EMFAC2011 Models.

5.6.2 Regulatory Framework

FEDERAL

Air quality is defined by ambient air concentrations of specific pollutants identified by the EPA to be of concern with respect to health and welfare of the general public. The EPA is responsible for

enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the EPA established both primary and secondary standards for seven pollutants (called "criteria" pollutants). The seven pollutants regulated under the NAAQS are as follows: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter PM_{10}, $PM_{2.5}$, sulfur dioxide (SO_2), and lead (Pb). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Areas that do not meet the NAAQS for a particular pollutant are considered to be "non-attainment areas" for that pollutant.

In September 1997, the EPA promulgated 8-hour O_3 and 24-hour and annual $PM_{2.5}$ national standards. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants. The EPA has designated the SDAB as an O_3 nonattainment area for the 1997 standard, and is proposed to be designated as a marginal O_3 nonattainment area for the 2008 standard. "Marginal" is the lowest classification for nonattainment areas, meaning that air quality in the SDAB continues to improve. The SDAB is in attainment for the NAAQS for all other criteria pollutants.

The following specific descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on EPA and the California Air Resources Board (ARB).

Ozone. O_3 is considered a photochemical oxidant, which is a chemical that is formed when reactive organic gases (ROG) and oxides of nitrogen (NOx), both by-products of combustion, react in the presence of ultraviolet light. O_3 is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to O_3.

Carbon Monoxide. CO is a product of combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

Nitrogen Dioxide. NO_2 is also a by-product of fuel combustion, and is formed both directly as a product of combustion and indirectly in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations, and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs.

Sulfur dioxide. SO_2 is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Pb in the atmosphere occurs as particulate matter. Pb has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Pb has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Pb is also classified as a probable human carcinogen.

STATE

California Clean Air Act

The California Clean Air Act was signed into law on September 30, 1988, and became effective on January 1, 1989. The Act requires that local air districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. The California Clean Air Act required the SDAB to achieve a five percent annual reduction in ozone precursor emissions from 1987 until the standards are attained. If this reduction cannot be achieved, all feasible control measures must be implemented. Furthermore, the California Clean Air Act required local air districts to implement a Best Available Control Technology rule and to require emission offsets for nonattainment pollutants.

The Air Resources Boards (ARB) is the State regulatory agency with authority to enforce regulations to both achieve and maintain air quality in California. The ARB is responsible for the development, adoption, and enforcement of the State's motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as Federal standards. The ARB has established the

more stringent CAAQS for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The SDAB is currently classified as a nonattainment area under the CAAQS for O_3, PM_{10}, and $PM_{2.5}$. It should be noted that the ARB does not differentiate between attainment of the 1-hour and 8-hour CAAQS for O_3; therefore, if an air basin records exceedance of either standard the area is considered a nonattainment area for the CAAQS for O_3. The SDAB has recorded exceedances of both the 1-hour and 8-hour CAAQS for O_3. The following specific descriptions of health effects for the additional California criteria air pollutants are based on the ARB.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The ARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide. Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the standard would result in exposure to a very disagreeable odor. In 1984, an ARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer, in humans.

Visibility Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that are comprised of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as

metals, soot, soil, dust, and salt. The CAAQS is intended to limit the frequency and severity of visibility impairment due to regional haze. A separate standard for visibility-reducing particles that is applicable only in the Lake Tahoe Air Basin is based on reduction in scenic quality.

Table 5.6-3, *Ambient Air Quality Standards*, presents a summary of the ambient air quality standards adopted by the Federal and California Clean Air Acts.

Toxic Air Contaminants

In 1983, the California Legislature enacted a program to identify the health effects of Toxic Air Contaminants (TACs) and to reduce exposure to these contaminants to protect the public health (Assembly Bill 1807: Health and Safety Code sections 39650-39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The State of California has identified diesel particulate matter as a TAC. Diesel particulate matter is emitted from on- and off-road vehicles that utilize diesel as fuel. Following identification of diesel particulate matter as a TAC in 1998, the ARB has worked on developing strategies and regulations aimed at reducing the emissions and associated risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter from Diesel-Fueled Engines and Vehicles* (State of California 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter by 75 percent by 2010 and by 85 percent by 2020. The *Risk Reduction Plan* contains the following three components:

- New regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce diesel particulate matter emissions by about 90 percent overall from current levels;
- New retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles where determined to be technically feasible and cost-effective; and
- New Phase 2 diesel fuel regulations to reduce the sulfur content levels of diesel fuel to no more than 15 parts per million (ppm) to provide the quality of diesel fuel needed by the advanced diesel particulate matter emission controls.

A number of programs and strategies to reduce diesel particulate matter are in place or are in the process of being developed as part of the ARB's Diesel Risk Reduction Program. Some of these programs and strategies include those that would apply to construction and operation of the Stone Creek project, including the following:

- In 2001, the ARB adopted new particulate matter and NOx emission standards to clean up large diesel engines that power big-rig trucks, trash trucks, delivery vans, and other large vehicles. The new standard for particulate matter takes effect in 2007 and reduces emissions

to 0.01 gram of particulate matter per brake horsepower-hour (g/bhp-hr). This is a 90 percent reduction from the existing particulate matter standard. New engines will meet the 0.01 g/bhp-hr particulate matter standard with the aid of diesel particulate filters that trap the particulate matter before exhaust leaves the vehicle.

- ARB has worked closely with the United States EPA on developing new particulate matter and NOx standards for engines used in off-road equipment such as backhoes, graders, and farm equipment. U.S. EPA has proposed new standards that would reduce the emission from off-road engines to similar levels to the on-road engines discussed above by 2010 to 2012. These new engine standards were adopted as part of the Clean Air Nonroad Diesel Final Rule in 2004. Once approved by U.S. EPA, ARB will adopt these as the applicable State standards for new off-road engines. These standards will reduce diesel particulate matter emission by over 90 percent from new off-road engines currently sold in California.
- The ARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions such as NOx.

As an ongoing process, the ARB reviews air contaminants and identifies those that are classified as TACs. The ARB also continues to establish new programs and regulations for the control of TACs, including diesel particulate matter, as appropriate.

The local APCD has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The San Diego APCD is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County.

The APCD and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991 and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, 2009, and most recently in 2016. The RAQS outlines APCD's plans and control measures designed to attain the State air quality standards for O_3. The RAQS does not address the State air quality standards for PM_{10} or $PM_{2.5}$.

The APCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the Federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the O_3 NAAQS. The SIP is also updated on a triennial basis. The latest SIP update was submitted by the ARB to the EPA in 1998, and the APCD is in the process of updating its SIP to reflect the new 8-hour O_3 NAAQS. To that end, the APCD has developed its *Eight-Hour Ozone Attainment Plan for San Diego County* (hereinafter referred to as the Attainment Plan). The Attainment Plan forms the basis for the SIP update, as it contains documentation on emission inventories and trends, the APCD's emission control strategy,

and an attainment demonstration that shows that the SDAB will meet the NAAQS for O_3. Emission inventories, projections, and trends in the Attainment Plan are based on the latest O_3 SIP planning emission projections compiled and maintained by ARB. Supporting data were developed jointly by stakeholder agencies, including ARB, the APCD, the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), and SANDAG. Each agency plays a role in collecting and reviewing data as necessary to generate comprehensive emission inventories. The supporting data include socio-economic projections, industrial and travel activity levels, emission factors, and emission speciation profiles. These projections are based on data submitted by stakeholder agencies including projections in municipal General Plans.

Because the ARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and by the County as part of the development of general plans, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS and the Attainment Plan. In the event that a project would propose development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS and the Attainment Plan. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP and might have a potentially significant impact on air quality.

LOCAL

In San Diego County, the SDAPCD is the regulatory agency that is responsible for maintaining air quality, including implementation and enforcement of State and Federal regulations. The project site is located in the City of San Diego. The City of San Diego has adopted its *Significance Determination Thresholds* (City of San Diego 2016) that are based on Appendix G of the State CEQA Guidelines. The thresholds are discussed further in Section 5.6.2, below.

5.6.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

According to the City of San Diego Significance Determination Thresholds, a project would have a significant environmental impact if it would:

- Conflict with or obstruct the implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations including air toxics such

as diesel particulates…As adopted by the South Coast Air Quality Management District (SCAQMD) in their CEQA Air Quality handbook (Chapter 4), a sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant than is the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, toxic air contaminant or odors are of particular concern.;

- Creating objectionable odors affecting a substantial number of people; or
- Exceeding 100 pounds per day of particulate matter (PM) (dust).

Additionally, the City utilizes the thresholds for an Air Quality Impact Assessment in the San Diego Air Pollution Control District's Rule 20.2. These thresholds are shown in Table 5.6-4, *Significance Criteria for Air Quality Impacts*.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the State and Federal government as TACs or Hazardous Air Pollutants (HAPs). If a project has the potential to result in emissions of any TAC or HAP that may expose sensitive receptors to substantial pollutant concentrations, the project would be deemed to have a potentially significant impact. With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool to 12th Grade), hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

With regard to odor impacts, a project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

The impacts associated with construction and operation of the project were evaluated for significance based on these significance criteria.

ISSUE 1

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Significance thresholds:

- A conflict with or obstruct the implementation of the applicable air quality plan
- A cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)

Impacts

As discussed above, the SIP is the document that sets forth the State's strategies for attaining and maintaining the NAAQS. The APCD is responsible for developing the San Diego portion of the SIP and has developed an attainment plan for attaining the 8-hour NAAQS for O_3. The RAQS sets forth the plans and programs designed to meet the State air quality standards. Through the RAQS and SIP planning processes, the APCD adopts rules, regulations, and programs designed to achieve attainment of the ambient air quality standards and maintain air quality in the SDAB.

Conformance with the RAQS and SIP determines whether a project would conflict with or obstruct implementation of the applicable air quality plans. The basis for the RAQS and SIP is the distribution of population in the San Diego region as projected by SANDAG. Growth forecasting is based in part on the land uses established by the General Plan. The Stone Creek project is consistent with the current General Plan and with the Community Plan.

The RAQS and SIP address air emissions and impacts from industrial sources, area-wide sources, and mobile sources. The programs also consider transportation control measures and indirect source review. Industrial sources are typically stationary air pollution sources that are subject to APCD rules and regulations, and over which the APCD has regulatory authority. Area-wide sources include sources such as consumer products use, small utility engines, hot water heaters, and furnaces. Both the ARB and the APCD have authority to regulate these sources and have developed plans and programs to reduce emissions from certain types of area-wide sources. Mobile sources are principally emissions from motor vehicles. The ARB establishes emission standards for motor vehicles and establishes regulations for other mobile source activities including off-road vehicles.

Both the RAQS and SIP address emissions of ozone precursors (ROG and NOx), as the SDAB is classified as a basic non-attainment area for the NAAQS and a non-attainment area for the CAAQS. The RAQS and SIP do not address particulate matter. The California CAA requires an air quality strategy to achieve a five percent average annual ozone precursor emission reduction when implemented or, if that is not achievable, an expeditious schedule for adopting every feasible emission control measure under air district purview [California Health and Safety Code (H&SC) Section 40914]. The current RAQS represents an expeditious schedule for adopting feasible control measures, since neither San Diego nor any air district in the State has demonstrated sustained five percent average annual ozone precursor reductions.

Most of the control measures adopted in the RAQS apply to industrial sources and specific source categories. There are no specific rules and regulations that apply to construction or operational sources associated with the Stone Creek project; however, off-road equipment and on-road vehicles involved in construction would be required to comply with ARB emission standards.

In 1992, SANDAG adopted Transportation Control Measures for the Air Quality Plan which set forth 8 tactics aimed at reducing traffic congestion and motor vehicle emissions within the SDAB. For each

of these tactics, the Transportation Control Measures evaluated the potential emissions reductions on a region-wide basis. The tactics include the following:

- Non-commute travel reduction program
- Transit improvements and expansion
- Vanpool program
- High occupancy vehicle lanes
- Park and ride facilities
- Bicycle facilities
- Traffic flow improvements
- Indirect source control program (smart growth program)

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not entail any development. The amendment would allow for continued mining of the project site for 30 years from the date of project approval. The current mining operation functions under approved permits from the San Diego APCD. The CUP/Reclamation Plan Amendment would also be required to function under APCD permitting requirements. As a result, the proposed CUP/Reclamation Plan Amendment would not conflict with or obstruct implementation of an applicable air quality plan.

Stone Creek Project

The tactic that is most applicable to the project is the indirect source control program, which is essentially a smart growth program. The Transportation Control Measures adopted by SANDAG identified job-housing balance, mixed use, and transit corridor development as criteria for indirect source control. As part of job-housing balance, SANDAG indicated that land use policies and programs shall be established to attract appropriate employers to residential areas and to encourage appropriate housing in and near industrial and business areas. Mixed-use development should be designed to maximize walking and minimize vehicle use by providing housing, employment, education, shopping, recreation and any support facilities within convenient proximity.

The Stone Creek project meets the criteria of the RAQS, SIP, and SANDAG's Transportation Control Measures as it provides a mix of uses, including light industrial uses, commercial/office uses, commercial/retail uses, hotel, and residential uses in a planned community with access to transit. Two transit stops would be located proximate to the mixed-use core and the light industrial/office areas, providing easy access to transit; and SANDAG plans a new BRT route along Carroll Canyon Road through the project site. Currently, the nearest bus route to the project site is MTS Route 964. Accordingly, the project is consistent with the applicable air quality plans, and would not result in a significant impact.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would operate under specific approvals from APCD. As a result, no impacts would occur.

Stone Creek Project

For the Stone Creek Master Plan and associated actions, the applicable air quality control plans include the RAQS, the SIP, and SANDAG's Transportation Control Measures. The project is consistent with these air quality plans. No impact would result.

Mitigation Measures

No mitigation measures would be required.

ISSUE 2

Would the project exceed 100 pounds per day of Particulate Matter (dust)?

Significance threshold:

- Construction activities that exceed 100 pounds per day of Particulate Matter (dust).

Impacts

CUP/Reclamation Plan Amendment

As shown in Table 5.6-13, the implementation of the CUP/Reclamation Plan Amendment would result in maximum daily particulate matter emissions of 48.11 and 11.29 pounds per day for PM_{10} and $PM_{2.5}$, respectively. These emissions levels are below the 100 pound of particulate matter per day threshold. Additionally, all other emissions would be below the impact threshold. No impacts relative to particulate matter would result.

Stone Creek Project

Emissions of pollutants are generated during construction from the use of heavy construction equipment on site, truck traffic transporting materials to the site, worker vehicles traveling to the site, fugitive dust generated during construction activities, and emissions of ROG from architectural coatings.

As discussed in Chapter 3.0, *Project Description*, the project would be constructed in phases, starting with Phase 1 at the eastern end of the site and proceeding through a total of five phases, with the Creekside Neighborhood being the final phase of construction. Construction of Phase 1 is anticipated to be completed after 2020. Phase 2 of the project is anticipated to be complete after 2030, and project buildout is anticipated to occur in 2040. Table 5.6-5, *Land Use Summary by Phase*, presents a summary of the project phases, by completion date. For the purpose of estimating construction emissions, it was assumed that each phase would require two to five years to develop.

Emissions from the construction of each phase of the project were estimated using the California Emission Estimator Model (CalEEMod), Version 2016.3.1 (SCAQMD 2016). It was assumed that each phase of construction would require the following subphases: grading, utilities installation, building construction, paving, and architectural coatings application.

The CalEEMod Model provides default assumptions regarding horsepower rating, load factors for heavy equipment, and hours of operation per day. Default assumptions within the CalEEMod Model and assumptions for similar projects were used to represent operation of heavy construction equipment. Table 5.6-6, *Construction Equipment Requirements*, provides estimates of construction equipment requirements for the project for each phase of construction.

Construction calculations within the CalEEMod Model utilize the number and type of equipment shown in Table 5.6-6 to calculate emissions from heavy construction equipment. The methodology used involves multiplication of the number of pieces of each type of equipment times the equipment horsepower rating, load factor, and OFFROAD emission factor, as shown in the equation below:

Emissions, lbs/day = (Number of pieces of equipment) x (equipment horsepower) x (load factor) x (hours of operation per day) x (OFFROAD emission factor, lbs/hp-hr)

In addition to calculating emissions from heavy construction equipment, the CalEEMod Model contains calculation modules to estimate emissions of fugitive dust, based on the amount of earthmoving or surface disturbance required; emissions from heavy-duty truck trips or vendor trips during construction activities; emissions from construction worker vehicles during daily commutes; emissions of ROG from paving using asphalt; and emissions of ROG during application of architectural coatings. As part of the project design features, it was assumed that standard required dust control measures and architectural coatings that comply with SDAPCD Rule 67.01 (assumed to meet a volatile organic compound (VOC) content of 50 gram per liter (g/l) for interior coatings and 100 g/l for exterior coatings) would be used during construction. Standard dust control measures that would be employed during construction include the following:

- Watering active grading sites a minimum of three times daily
- Apply soil stabilizers to inactive construction sites

- Replace ground cover in disturbed areas as soon as possible
- Control dust during equipment loading/unloading (load moist material, ensure at least 12 inches of freeboard in haul trucks
- Reduce speeds on unpaved roads to 15 mph or less
- Water unpaved roads a minimum of three times daily

These dust control measures would reduce the amount of fugitive dust generated during construction, reducing emissions of PM_{10} to below the daily significance thresholds during construction.

Tables 5.6-7 through 5.6-11 provide the detailed emission estimates for each phase of construction as calculated with the CalEEMod Model for each of the construction phases of the project, without mitigation. Table 5.6-12, *Estimated Maximum Simultaneous Construction Emissions, Phases 2 and 3*, provides estimates of the maximum simultaneous construction emissions for the Phase 2A and 2B (operational by 2030) and Phase 3A and 3B (operational by 2040).

As shown in Table 5.6-12, the maximum daily emissions of criteria pollutants during construction would be below the thresholds of significance for all project construction phases for all pollutants except ROG during architectural coatings application during Phase 2 construction. The maximum daily emissions assumes that construction of Phases 2A and 2B would be simultaneous, and construction of Phases 3A and 3B would be simultaneous. Project criteria pollutant emissions during construction would be temporary, and maximum daily emissions would occur during application of architectural coatings which would occur over an approximate 1-year period during construction of Phases 2A and 2B, and during construction of Phases 3A and 3B. Construction was assumed to require one and a half years for Phase 1, five years for Phases 2A and 2B, and five years for Phases 3A and 3B. Exceedance of ROG during architectural coatings application during Phase 2 construction is not regarded as a significant impact because of the project design feature that architectural coatings that comply with SDAPCD Rule 67.0.1 (assumed to meet a VOC content of 50 g/l for interior coatings and 100 g/l for exterior coatings) would be used during construction. Coatings would also be applied using high volume, low pressure spray equipment to reduce overspray to the extent possible. These project features would reduce ROG emissions to below the significance threshold.

Significance of Impacts

CUP/Reclamation Plan Amendment

Relative to the CUP/Reclamation Plan Amendment, emissions would be less than the significance thresholds. Therefore, impacts would be less than significant.

Stone Creek Project

For the Stone Creek Master Plan and associated actions, construction impacts would be temporary and for a short duration. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 3

Would the project cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

Significance threshold:

- A violation of any air quality standard or a substantial contribution to an existing or projected air quality violation

Impacts

CUP/Reclamation Plan Amendment

The project also includes an amendment to the 1981 CUP/Reclamation Plan. As shown in Figure 3-1, the CUP Amendment would leave the eastern portion of the project site (east of Camino Ruiz) as a generally level interior portion, with mined slopes rimming the site at heights ranging from approximately 55 feet to approximately 100 feet. The area west of Camino Ruiz would be left as a deep quarry depression rimmed by mined slopes ranging in heights from approximately 100 feet to approximately 220 feet. As part of mining activities, asphalt and concrete plants are in operation in the eastern portion of the site and would continue to operate under the CUP Amendment. As resources are depleted and mining operations phase out, the Reclamation Plan Amendment would be implemented to reclaim the mined land in a manner that is adaptable to the anticipated end use of the site.

Emissions would be associated with the CUP/Reclamation Plan Amendment. These emissions would be similar to emissions associated with current mining operations and with grading for the Stone Creek project site development. Table 5.6-13, *Operational Emissions – Mining and Reclamation Plan Activities*, presents a summary of emissions that would be associated with site mining and reclamation. As shown in Table 5.6-13, emissions associated with mining operations and reclamation activities would be less than significant.

Stone Creek Project

To address this significance threshold, an evaluation of emissions associated with both the construction and operational phases of the project was conducted. A discussion of the impacts relative to construction is included above, under *Issue 2*. The discussion that follows addresses the project's operational impacts. Operational impacts associated with the Stone Creek project would include impacts associated with vehicular traffic, as well as area sources such as energy use, landscaping, consumer products use, and architectural coatings use for maintenance purposes.

The project includes project features that reduce project emissions relative to dust and ROG. Standard dust control measures that would be employed during construction include the following:

- Water active grading sites a minimum of three times daily
- Apply soil stabilizers to inactive construction sites
- Replace ground cover in disturbed areas as soon as possible
- Control dust during equipment loading/unloading (load moist material, ensure at least 12 inches of freeboard in haul trucks
- Reduce speeds on unpaved roads to 15 mph or less
- Water unpaved roads a minimum of three times daily

Relative to ROG, the project features architectural coatings that comply with SDAPCD Rule 67.0.1 (assumed to meet a VOC content of 50 g/l for interior coatings and 100 g/l for exterior coatings) that would be used during construction.

The *Transportation Impact Analysis – Stone Creek* (Linscott, Law, & Greenspan May 2015) calculated project trip generation rates based on the proposed development phasing. The TIA calculated ADT for each phase of the project and took into account project features such as accessibility to transit and mixed-use credit. The analysis also included a reduction for pass-by trips for the retail portion of the project, and presents cumulative trips (with pass-by reduction) versus driveway trips. For the purpose of the air quality analysis, cumulative trips are used to represent the net trips that would be generated. Table 5.6-14, *Project Trip Generation by Phase/Year*, summarizes the trip generation rates used to calculate emissions for each project phase. Operations for project Phase 1 would overlap construction of Phases 2A and 2B. Operations for project Phase 1, 2A, and 2B would overlap construction of Phases 3A and 3B. To estimate total worst-case emissions during the overlap of construction and operations, operational emissions were added to construction emissions for those phases that overlap.

Operational impacts associated with vehicular traffic and area sources including energy use, landscaping, consumer products use, hearth emissions, and architectural coatings use for maintenance purposes were estimated using the CalEEMod Model, Version 2016.3.1. The CalEEMod Model calculates vehicle emissions based on emission factors from the Emissions Factors (EMFAC)

2014 model. It was assumed that the first year of full occupancy would be 2040 or later. Based on the results of the EMFAC2014 model for subsequent years, emissions would decrease on an annual basis from 2020 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2014 model. Table 5.6-15, *Operational Emissions*, presents the results of the emission calculations, in lbs/day, along with a comparison with the significance criteria.

Based on the estimated emissions associated with Stone Creek project operations and simultaneous construction, emissions would be above the significance thresholds as follows:

- Year 2030 – NOx, CO, PM_{10}, and $PM_{2.5}$
- Year 2040 – NOx, CO, PM_{10}, and $PM_{2.5}$

Implementation of project features, including use of architectural coatings compliant with SDAPCD Rule 67.0.1, would prevent ROG emissions from reaching a level of significance. As addressed below, CO emissions would be below significant thresholds.

Impact 5.6-1 The project would result in a significant air quality impact associated with NOx, PM_{10}, and $PM_{2.5}$ in near-term operational years 2020, 2030, and 2040.

Upon full buildout, the emissions associated with the current mining operations, including asphalt plant operation, concrete plant operation, trucking of materials, and worker trips, would be eliminated. The net emissions would therefore be below the significance thresholds for NOx, PM_{10}, and $PM_{2.5}$, and would result in a net decrease in emissions in the SDAB for these pollutants.

Significance of Impacts

CUP/Reclamation Plan Amendment

For the CUP/Reclamation Plan Amendment, emissions associated with mining and reclamation activities would be below the thresholds. Air quality impacts would be less than significant.

Stone Creek Project

For the Stone Creek Master Plan, operational and construction emissions result in the following emission exceedances prior to build out:

- Year 2030 – NOx, CO, PM_{10}, and $PM_{2.5}$
- Year 2040 – NOx, CO, PM_{10}, and $PM_{2.5}$

Relative to NOx, PM_{10}, and $PM_{2.5}$, near-term operational exceedances would diminish to below the significance threshold at build-out when construction is complete. As such, impacts prior to build-out relative to NOx, PM_{10}, and $PM_{2.5}$ remain significant and unmitigated.

Mitigation Measures

CUP/Reclamation Plan Amendment

No mitigation measures would be required.

Stone Creek Project

Relative to NOx, PM_{10}, and $PM_{2.5}$, there is no mitigation feasible to eliminate operational near-term air quality impacts. Once construction of all phases is complete, the impacts relative to NOx, PM_{10}, and $PM_{2.5}$ would be eliminated. However, because there is a near-term impact that cannot be mitigated, this impact remains significant and unmitigated.

Significance of Impacts Following Implementation of Mitigation Measures

Stone Creek Project

Because there is a near-term impact relative to NOx, PM_{10}, and $PM_{2.5}$ emissions that cannot be mitigated, this impact remains significant and unmitigated.

ISSUE 4

Would the project expose sensitive receptors to substantial pollutant concentrations?

Significance threshold:

- The project would expose sensitive receptors to substantial pollutant concentrations, including air toxics such as diesel particulates. In addition, a significant impact would occur if the project would result in a CO hotspot.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not entail any development. The amendment would allow for continued mining of the project site and would not impact sensitive receptors. As a result,

the CUP/Reclamation Plan Amendment would not expose sensitive receptors to substantial pollutant concentrations.

Stone Creek Project

Because emissions of CO are above the quantitative significance thresholds, the potential for an exceedance of the CO standard has been evaluated. Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO "hot spots." To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO "hot spots" was conducted. Project-related traffic would have the potential to result in CO "hot spots" if project-related traffic resulted in a degradation in the level of service at any intersection to LOS E or F. The *Traffic Impact Analysis* evaluated whether or not there would be a decrease in the level of service at the intersections affected by the project.

Based on the Traffic Impact Analysis, there are no significant unmitigated intersection impacts for the Existing plus Project Scenario. Significant unmitigated intersection impacts were identified for the following scenarios:

Phase 1 Year 2020
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road

Phase 2A Year 2030
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road

Phase 2B Year 2030
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Mira Mesa Boulevard

Phase 3A Year 2035
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Mira Mesa Boulevard

Phase 3B Year 2040
- I-15 Southbound Ramps/Carroll Canyon Road
- I-15 Northbound Ramps/Carroll Canyon Road
- Camino Santa Fe/Mira Mesa Boulevard

To evaluate the potential for CO "hot spots" at these intersections, the procedures in the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) were used. As recommended in the Protocol, CALINE4 modeling was conducted for the intersections identified above for the scenarios with and without Project traffic. Predicted 1-hour CO concentrations were then scaled to evaluate maximum predicted 8-hour CO concentrations using the recommended scaling factor of 0.7 for urban locations.

Inputs to the CALINE4 model were obtained from the Traffic Impact Analysis. As recommended in the Protocol, receptors were located at locations that were approximately three meters from the mixing zone, and at a height of 1.8 meters. Average approach and departure speeds were assumed to be five mph to account for congestion at the intersections and provide a worst case estimate of emissions. Emission factors were estimated from the EMFAC2014 Model for 2020, 2030, and 2040, respectively.

In accordance with the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol, it is also necessary to estimate future background CO concentrations in the project vicinity to determine the potential impact plus background and evaluate the potential for CO "hot spots" due to the project. As a conservative estimate of background CO concentrations, the existing maximum 1-hour background concentration of CO that was measured at the San Diego monitoring station for the period 2012 to 2016 of 3.0 parts per million (ppm) was used to represent future maximum background 1-hour CO concentrations. This is a conservative assumption, as the monitoring station is located in downtown San Diego where there is more congestion than in the project area. The existing maximum 8-hour background concentration of CO that was measured at the San Diego monitoring station during the period from 2012 to 2016 of 2.1 ppm was also used to provide a conservative estimate of the maximum 8-hour background concentrations in the project vicinity. CO concentrations in the future may be lower as inspection and maintenance programs and more stringent emission controls are placed on vehicles.

Table 5.6-16, *CO "Hot Spots" Evaluation*, presents a summary of the predicted CO concentrations (impact plus background) for the intersections evaluated. As shown in Table 5.6-16, the predicted CO concentrations would be substantially below the 1-hour and 8-hour NAAQS and CAAQS for CO shown in Table 5.6-3. Therefore, no exceedances of the CO standard are predicted, and the project would not cause or contribute to a violation of this air quality standard.

The threshold concerns whether the project could expose sensitive receptors to substantial pollutant concentrations of TACs. If a project has the potential to result in emissions of any TAC, which result in a cancer risk of greater than ten in one million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact.

Air quality regulators typically define sensitive receptors as schools (Preschool to 12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals

with health conditions that would be adversely impacted by changes in air quality. Residential land uses may also be considered sensitive receptors. The nearest sensitive receptors to the site are the residents located to the east and west of the project site, as well as to the northwest.

An existing mining operation is currently operating at the site. The mining facility as it exists is a source of TAC emissions, which are reported to the San Diego APCD in their Emissions Inventory Reports. Due to the natural sequencing of mining, the Stone Creek project has been designed to avoid locating sensitive receptors within the development (residences) in the vicinity of the existing TAC sources. Thus, the area where the current asphalt and concrete plants are located would be developed last, as the Creekside Neighborhood, which includes residential dwellings. The Eastside Neighborhood A and Eastside Neighborhood B developments are designed to house light industrial uses, and would not include sensitive receptors.

Emissions of TACs are attributable to temporary emissions from construction emissions, and minor emissions associated with diesel truck traffic used for deliveries at the site. Truck traffic may result in emissions of diesel particulate matter, which is characterized by the State of California as a TAC. Certain types of projects are recommended to be evaluated for impacts associated with TACs. In accordance with the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD 2003), projects that should be evaluated for diesel particulate emissions include truck stops, distribution centers, warehouses, and transit centers which diesel vehicles would utilize and which would be sources of diesel particulate matter from heavy-duty diesel trucks.

It would be speculative to identify industrial uses in the light industrial areas that would emit TACs. It is most likely that the uses planned for the Eastside Neighborhood would use minor amounts of TACs, if any. The TAC emissions from the existing operations would cease upon full buildout. Impacts to sensitive receptors from TAC emissions would, therefore, be less than significant.

Significance of Impacts

Stone Creek Project

The Stone Creek Master Plan and associated actions are not a source of TACs and would not expose sensitive receptors to significant TAC concentrations. Impacts are less than significant.

CUP/Reclamation Plan Amendment

For the CUP/Reclamation Plan Amendment, no impacts would result.

Mitigation Measures

No mitigation measures would be required.

ISSUE 5

Would the project create objectionable odors affecting a substantial number of people?

Significance threshold:

- Creating objectionable odors affecting a substantial number of people.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not generate odors that could affect a substantial number of people. The amendment would allow for continued mining of the project site and would not result in the release of nuisance odors. No impacts would result.

Stone Creek Project

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. These compounds would be emitted in various amounts and at various locations during construction. Sensitive receptors located in the vicinity of the construction site include the residences to the east of the site. Odors are highest near the source and would quickly dissipate offsite; any odors associated with construction would be temporary.

Land uses that are identified as odor sources include agricultural operations, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding operations. These land uses would not be allowed in the Stone Creek development, as they are either agricultural operations or heavy industrial operations that would not be consistent with the proposed land uses for the project. Residential, commercial, and retail uses are not considered sources of objectionable odors. Thus, the potential for odor impacts associated with the project is less than significant.

Significance of Impacts

CUP/Reclamation Plan Amendment

No odors would be generated by the CUP/Reclamation Plan Amendment that would affect a substantial number of people. As such, no impacts would result.

Stone Creek Project

The Stone Creek Master Plan and associated actions are not a source of objectionable odors. Impacts are less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 6

Would the project result in substantial alteration of air movement in the area of the project?

Significance threshold:

- Result in substantial alteration of air movement in the area of the project.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not entail any development. The amendment would allow for continued mining of the project site and would not result in new construction. As a result, the proposed CUP/Reclamation Plan Amendment would not result in substantial alteration of air movement in the project area.

Stone Creek Project

The project would not result in substantial alteration of air movement in the area of the project. The project would not propose to construct tall buildings or make major changes to the terrain that would alter air movement in the area. Impacts would therefore be less than significant.

Significance of Impacts

CUP/Reclamation Plan Amendment

No new development is proposed as part of the CUP/Reclamation Plan Amendment, would not result in substantial alteration of air movement in the project area. As such, no impacts would result.

Stone Creek Project

The Stone Creek Master Plan and associated actions proposed by the project would not result in impacts associated with altering air movement in the project area.

Mitigation Measures

No mitigation measures are required.

Table 5.6-1. *Ambient Background Concentrations*

Air Quality Indicator	2012	2013	2014	2015	2016
Ozone (O_3)					
Peak 1-hour value (ppm)	0.099	0.081	0.099	0.077	0.087
Days above State standard (0.09 ppm)	1	0	1	0	0
Peak 8-hour value (ppm)	0.076	0.082	0.081	0.070	0.075
Fourth high 8-hour value (ppm)	0.067	0.070	0.071	0.067	0.068
Days above Federal standard (0.070 ppm) [1,2]	2	0	4	0	3
Particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$)					
Peak 24-hour value ($\mu g/m^3$)	20.1	22.0	20.2	25.7	19.4
Days above Federal standard (35 $\mu g/m^3$)[3]	0	0	0	0	0
Annual Average value ($\mu g/m^3$)	8.7	8.3	8.1	7.2	7.5
Particulate matter less than or equal to 10 microns in diameter (PM_{10})					
Peak 24-hour value (Federal) ($\mu g/m^3$) [4]	22	50	39	39	36
Peak 24-hour value (State) ($\mu g/m^3$) [4]	22	50	39	37	35
Days above Federal standard (150 $\mu g/m^3$)	0	0	0	0	0
Days above State standard (50 $\mu g/m^3$)	0	0	0	0	0
Annual Average value (Federal) ($\mu g/m^3$) [4]	14.7	19.9	19.4	17.0	17.1
Annual Average value (State) ($\mu g/m^3$) [4]	16.0	20.0	19.5	16.7	17.1
Carbon Monoxide (CO)					
Peak 1-hour value (ppm)	2.6	3.0	2.7	2.6	2.2
Days above Federal and State standard (9 ppm)	0	0	0	0	0
Peak 8-hour value (ppm)	1.9	2.1	1.9	1.9	1.7
Days above Federal standard (35 ppm)	0	0	0	0	0
Days above State standard (20 ppm)	0	0	0	0	0
Nitrogen Dioxide (NO_2)					
Peak 1-hour value (ppm)	0.057	0.067	0.051	0.051	0.053
Days above Federal standard (0.100 ppm)	0	0	0	0	0
Days above State standard (0.18 ppm)	0	0	0	0	0
Annual Average value (ppm)	0.011	0.011	0.010	0.011	0.010

Notes:

[1] The Federal 8-hour O_3 standard was revised downward in 2015 to 0.070 ppm.

[2] The 8-hour O_3 ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average O_3 concentration is less than or equal to the standard.

[3] The Federal $PM_{2.5}$ standard was revised downward in 2007 to 35 $\mu g/m^3$. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

[4] State and Federal statistics may differ for the following reasons : (1) State statistics are based on California approved samplers, whereas national statistics are based on samplers using Federal reference or equivalence methods. State and Federal statistics may therefore be based on different samplers. (2) State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

ppm = parts per million; $\mu g/m^3$ = Micrograms per cubic meter; N/A = data not available

Source: ARB 2017; USEPA 2017

Table 5.6-2. ***Existing Operational Emissions – Vulcan Materials Company Carroll Canyon Facility***

Source	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$[a]
Lbs/day						
Haul Roads – Liquid Asphaltic Concrete	--	--	--	--	<0.1	<0.1
Haul Roads – Product Hot Mix Asphalt	--	--	--	--	0.6	0.13
Asphalt Batch Plant	3.3	8.1	59.5	<0.1	3.9	3.9
Cement/Fly Ash Storage Silos	--	--	--	--	0.6	0.13
Material Storage, Washed Aggregate	--	--	--	--	<0.1	<0.1
Material Storage, Fines and Aggregate	--	--	--	--	<0.1	<0.1
Material Storage, Sand	--	--	--	--	<0.1	<0.1
Haul Roads – Cement Treated Base	--	--	--	--	0.4	0.08
Concrete Batch Plant – Cement Treated Base	--	--	--	--	0.6	0.13
Mining Operations, Aggregate	--	--	--	--	5.9	1.24
Crushing Operations, Cone Crusher	--	--	--	--	0.7	0.15
Crushing Operations, Standard 5½ Crusher	--	--	--	--	<0.1	<0.1
Crushing Operations, Shorthead 5½ Crusher	--	--	--	--	<0.1	<0.1
Screening Operations – S1 Screen	--	--	--	--	0.4	0.08
Screening Operations – S4 Screen	--	--	--	--	0.2	0.04
Screening Operations – S5 Screen	--	--	--	--	0.1	0.02
Screening Operations – S6 Screen	--	--	--	--	0.1	0.02
Screening Operations – S7 Screen	--	--	--	--	0.8	0.17
Screening Operations – S8 Screen	--	--	--	--	0.8	0.17
Haul Roads – Exported Rock	--	--	--	--	2.7	0.57
Haul Roads – Exported Washed Sand	--	--	--	--	<0.1	<0.1
Haul Roads – Exported Raw Sand	--	--	--	--	5.4	1.14
Quarrying Operations	--	--	--	--	16.8	3.53
Material Storage – Half Fines/Half Aggregate	--	--	--	--	<0.1	<0.1
75 Cubic Yard Cement Silo	--	--	--	--	0.7	0.15
103 Cubic Yard Fly Ash Silo	--	--	--	--	0.7	0.15
Haul Roads – Imported Fly Ash	--	--	--	--	<0.1	<0.1
Haul Roads – Imported Aggregate	--	--	--	--	0.2	0.04
Haul Roads – Imported Cement	--	--	--	--	0.2	0.04
Haul Roads – Exported Ready-Mix Concrete	--	--	--	--	1.2	0.25
Transit Mix Production	--	--	--	--	0.9	0.2
Screening – Double-Deck	--	--	--	--	1.5	0.32
Impact Crusher	--	--	--	--	<0.1	<0.1
RAP Stockpile	--	--	--	--	0.8	0.17
Total Stationary Sources	**3.3**	**8.1**	**59.5**	**0.1**	**46.7**	**9.81**
Truck Traffic	40.76	650.25	150.94	1.08	239.41	39.82
Worker Vehicles	0.62	1.48	16.72	0.08	0.88	0.13
TOTAL	**44.68**	**659.83**	**227.16**	**1.26**	**286.99**	**49.76**
Tons/year						
Haul Roads – Liquid AC	--	--	--	--	<0.1	<0.1
Haul Roads – Product HMA	--	--	--	--	1.0	0.21
Asphalt Batch Plant	1.1	2.5	18.0	<0.1	1.4	1.4
Cement/Fly Ash Storage Silos	--	--	--	--	<0.1	<0.1
Material Storage, Washed Aggregate	--	--	--	--	<0.1	<0.1
Material Storage, Fines and Aggregate	--	--	--	--	<0.1	<0.1
Material Storage, Sand	--	--	--	--	<0.1	<0.1

Source	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$[a]
Haul Roads – Cement Treated Base	--	--	--	--	<0.1	<0.1
Concrete Batch Plant – Cement Treated Base	--	--	--	--	<0.1	<0.1
Mining Operations, Aggregate	--	--	--	--	3.8	0.8
Crushing Operations, Cone Crusher	--	--	--	--	0.4	0.08
Crushing Operations, Standard 5½ Crusher	--	--	--	--	<0.1	<0.1
Crushing Operations, Shorthead 5½ Crusher	--	--	--	--	<0.1	<0.1
Screening Operations – S1 Screen	--	--	--	--	0.2	0.04
Screening Operations – S4 Screen	--	--	--	--	0.1	0.01
Screening Operations – S5 Screen	--	--	--	--	<0.1	<0.1
Screening Operations – S6 Screen	--	--	--	--	<0.1	<0.1
Screening Operations – S7 Screen	--	--	--	--	0.4	0.08
Screening Operations – S8 Screen	--	--	--	--	0.4	0.08
Haul Roads – Exported Rock	--	--	--	--	2.7	0.57
Haul Roads – Exported Washed Sand	--	--	--	--	<0.1	<0.1
Haul Roads – Exported Raw Sand	--	--	--	--	5.4	1.14
Quarrying Operations	--	--	--	--	9.5	2.0
Material Storage – Half Fines/Half Aggregate	--	--	--	--	<0.1	<0.1
75 Cubic Yard Cement Silo	--	--	--	--	<0.1	<0.1
103 Cubic Yard Fly Ash Silo	--	--	--	--	<0.1	<0.1
Haul Roads – Imported Fly Ash	--	--	--	--	<0.1	<0.1
Haul Roads – Imported Aggregate	--	--	--	--	<0.1	<0.1
Haul Roads – Imported Cement	--	--	--	--	<0.1	<0.1
Haul Roads – Exported Ready-Mix Concrete	--	--	--	--	<0.1	<0.1
Transit Mix Production	--	--	--	--	<0.1	<0.1
Screening – Double-Deck	--	--	--	--	0.3	0.06
Impact Crusher	--	--	--	--	<0.1	<0.1
RAP Stockpile	--	--	--	--	0.7	0.15
Total Stationary Sources	**1.1**	**2.5**	**18.0**	**0.1**	**27.1**	**5.69**
Truck Traffic	5.10	81.28	18.87	0.14	29.93	4.98
Worker Vehicles	0.08	0.18	2.09	0.01	0.11	0.02
TOTAL	**6.28**	**83.96**	**38.96**	**0.25**	**57.14**	**10.69**

[a]Assuming $PM_{2.5}$ is 21% of PM_{10}, per ARB CEIDARS emission inventory.

Table 5.6-3. *Ambient Air Quality Standards*

Pollutant	Average Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 hour	0.09 ppm (176 μg/m^3)	Ultraviolet Photometry	--	--	Ethylene Chemiluminescence
	8 hour	0.070 ppm (137 μg/m^3)		0.070 ppm (137 μg/m^3)	0.070 ppm (137 μg/m^3)	
Carbon Monoxide (CO)	8 hours	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m^3)	--	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm (56 μg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 μg/m^3)	--	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 μg/m^3)		0.100 ppm (188 μg/m^3)	--	
Sulfur Dioxide (SO_2)	24 hours	0.04 ppm (105 μg/m^3)	Ultraviolet Fluorescence	--	--	Pararosaniline
	3 hours	--		--	0.5 ppm (1300 μg/m^3)	
	1 hour	0.25 ppm (655 μg/m^3)		0.075 ppm (196 μg/m^3)	--	
Respirable Particulate Matter (PM_{10})	24 hours	50 μg/m^3	Gravimetric or Beta Attenuation	150 μg/m^3	150 μg/m^3	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 μg/m^3		--	--	
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 μg/m^3	Gravimetric or Beta Attenuation	12 μg/m^3	15 μg/m^3	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 μg/m^3	--	
Sulfates	24 hours	25 μg/m^3	Ion Chromatography	--	--	--
Lead	30-day Average	1.5 μg/m^3	Atomic Absorption	--	--	Atomic Absorption
	Calendar Quarter	--		1.5 μg/m^3	1.5 μg/m^3	
	3-Month Rolling Average	--		0.15 μg/m^3	0.15 μg/m^3	
Hydrogen Sulfide	1 hour	0.03 ppm (42 μg/m^3)	Ultraviolet Fluorescence	--	--	--
Vinyl Chloride	24 hours	0.010 ppm (26 μg/m^3)	Gas Chromatography	--	--	--

ppm= parts per million; μg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter
Source: California Air Resources Board, www.arb.ca.gov, 2014, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

Table 5.6-4. ***Significance Criteria for Air Quality Impacts***

Pollutant	Emission Rate		
	Lbs/Hr	Lbs/Day	Tons/Year
Carbon Monoxide (CO)	100	550	100
Oxides of Nitrogen (NOx)	25	250	40
Respirable Particulate Matter (PM_{10})	--	100	15
Oxides of Sulfur (SOx)	25	250	40
Lead and Lead Compounds	--	3.2	0.6
Fine Particulate Matter ($PM_{2.5}$)	--	--	--
Volatile Organic Compounds (VOCs)	--	137	15

Table 5.6-5. ***Land Use Summary by Phase***

Phase	Neighborhood	Land Use	Amount
2020 Phase 1	Eastside A	Light Industrial	165,000 square feet
2030 Phase 2 Scenario A	Parkside	Business Park	135,000 square feet
	Village Center B	Neighborhood Village	285 units
	Village Center C	Neighborhood Village	300 units
	Eastside B	Light Industrial	250,000 square feet
2030 Phase 2 Scenario B	Westside A	Residential (low/med)	125 units
	Westside B	Residential (high)	1,285 units
		Retail	24,000 square feet
	Westside C	Residential (high)	1,315 units
	Westside Gardens	Park	5.98 acres
2035 Phase 3 Scenario A	Village Center A	Neighborhood Village	835 units
		Retail	150,000 square feet
		Office	200,000 square feet
		Hotel	175 rooms
2040 Phase 3 Scenario B	Creekside A	Residential (low/med)	300 units
	Creekside B	High Technology	300,000 square feet
		Central Park	20.22 acres

Table 5.6-6. *Construction Equipment Requirements*

Equipment Description	hp	Load Factor	Hours/day	Quantity
Grading				
Excavators	162	0.38	8	2
Grader	174	0.41	8	1
Scraper	361	0.48	8	2
Roller	80	0.38	8	1
Rubber Tired Dozers	255	0.40	8	2
Tractors/Loaders/Backhoes	97	0.37	8	2
Water Truck	400	0.38	8	1
Utilities Installation (Trenching)				
Excavators	162	0.38	8	1
Rough Terrain Forklifts	100	0.40	8	2
Trenchers	80	0.50	8	1
Building Construction				
Crane	226	0.29	8	1
Forklifts	89	0.20	8	3
Generator Set	84	0.74	8	1
Tractors/Loaders/Backhoes	97	0.37	8	1
Welders	46	0.45	8	3
Paving				
Pavers	125	0.42	8	2
Paving Equipment	130	0.36	8	2
Rollers	80	0.38	8	2
Architectural Coatings Application				
Air Compressor	78	0.48	8	1

Table 5.6-7. *Estimated Maximum Daily Construction Emissions, Phase 1*

Construction Activity/Time	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Site Preparation										
Fugitive Dust	--	--	--	--	2.43	0.00	2.43	1.30	0.00	1.30
Off-Road Diesel	9.45	104.84	72.60	0.11	--	4.89	4.89	--	4.49	4.49
Worker Trips	0.11	0.08	0.86	0.00	0.21	0.00	0.21	0.05	0.00	0.06
TOTAL	**9.56**	**104.92**	**73.46**	**0.11**	**2.64**	**4.89**	**7.53**	**1.35**	**4.49**	**5.85**
Trenching/Utilities										
Trenching Off Road Diesel	1.42	15.01	14.14	0.02	--	0.87	0.87	--	0.80	0.80
Trenching Worker Trips	0.04	0.03	0.34	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**1.46**	**15.04**	**14.48**	**0.02**	**0.08**	**0.87**	**0.95**	**0.02**	**0.80**	**0.82**
Paving										
Paving Offgassing	0.00	--	--	--	--	--	--	--	--	--
Paving Off Road Diesel	2.53	24.03	18.64	0.03	--	1.72	1.72	--	1.59	1.59
Paving Worker Trips	0.06	0.05	0.51	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	**2.59**	**24.08**	**19.15**	**0.03**	**0.12**	**1.72**	**1.84**	**0.03**	**1.59**	**1.62**
Building Construction										
Building Off Road Diesel	3.21	30.62	24.31	0.04	--	1.70	1.70	--	1.59	1.59
Building Vendor Trips	0.12	3.35	0.86	0.01	0.18	0.02	0.21	0.05	0.02	0.07
Building Worker Trips	0.27	0.19	2.13	0.01	0.57	0.00	0.57	0.15	0.00	0.15
TOTAL	**3.60**	**34.16**	**27.30**	**0.06**	**0.75**	**1.72**	**2.48**	**0.20**	**1.61**	**1.81**
Architectural Coatings										
Architectural Coatings Offgassing	40.02	--	--	--	--	--	--	--	--	--
Architectural Coatings Offroad Diesel	0.36	2.45	2.46	0.00	--	0.17	0.17	--	0.17	0.17
Worker Trips	0.06	0.04	0.43	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	**40.44**	**2.49**	**2.89**	**0.00**	**0.12**	**0.17**	**0.29**	**0.03**	**0.17**	**0.20**
MAXIMUM DAILY EMISSIONS[1]	**44.03**	**104.91**	**73.46**	**0.11**	**2.64**	**4.89**	**7.53**	**1.35**	**4.50**	**5.85**
Significance Criteria	137	250	550	250			100			55
Significant?	*No*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-8. ***Estimated Maximum Daily Construction Emissions, Phase 2, Scenario A***

Construction Activity/Time	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Site Preparation										
Fugitive Dust	--	--	--	--	4.79	--	4.79	2.59	--	2.59
Off-Road Diesel	6.74	60.26	64.41	0.13	--	2.64	2.64	--	2.43	2.43
Worker Trips	0.03	0.02	0.20	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**6.77**	**60.28**	**64.61**	**0.13**	**4.87**	**2.64**	**7.51**	**2.61**	**2.43**	**5.04**
Trenching/Utilities										
Trenching Off Road Diesel	0.91	8.92	13.96	0.02	--	0.44	0.44	--	0.40	0.40
Trenching Worker Trips	0.03	0.01	0.19	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**0.94**	**8.93**	**14.15**	**0.02**	**0.08**	**0.44**	**0.52**	**0.02**	**0.40**	**0.42**
Paving										
Paving Offgassing	0.00	--	--	--	--	--	--	--	--	--
Paving Off Road Diesel	1.40	14.26	17.85	0.03	--	0.78	0.78	--	0.71	0.71
Paving Worker Trips	0.05	0.03	0.34	0.00	0.15	0.00	0.15	0.04	0.00	0.04
TOTAL	**1.45**	**14.29**	**18.19**	**0.03**	**0.15**	**0.78**	**0.93**	**0.04**	**0.71**	**0.75**
Building Construction										
Building Off Road Diesel	1.74	15.38	21.56	0.034	--	0.66	0.66	--	0.61	0.61
Building Vendor Trips	0.24	9.02	2.63	0.03	0.85	0.01	0.86	0.25	0.01	0.26
Building Worker Trips	1.46	0.78	10.11	0.04	4.67	0.03	4.70	1.24	0.03	1.27
TOTAL	**3.44**	**25.18**	**34.3**	**0.104**	**5.52**	**0.7**	**6.22**	**1.49**	**0.65**	**2.14**
Architectural Coatings										
Architectural Coatings Offgassing	46.94	--	--	--	--	--	--	--	--	--
Architectural Coatings Offroad Diesel	0.17	1.15	1.81	0.00	--	0.05	0.05	--	0.05	0.05
Worker Trips	0.26	0.14	1.82	0.01	0.94	0.00	0.94	0.25	0.00	0.25
TOTAL	**47.37**	**1.29**	**3.63**	**0.01**	**0.94**	**0.05**	**0.99**	**0.25**	**0.05**	**0.30**
MAXIMUM DAILY EMISSIONS[1]	**50.67**	**60.30**	**64.97**	**0.13**	**6.46**	**2.64**	**7.66**	**2.65**	**2.43**	**5.08**
MAXIMUM DAILY EMISSIONS, 2014 REPORT[1]	**52.45**	**109.06**	**70.70**	**0.09**	**5.02**	**5.19**	**10.21**	**2.65**	**4.77**	**7.43**
Significance Criteria	137	250	550	250			100			55
Significant?	*No*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-9. *Estimated Maximum Daily Construction Emissions, Phase 2, Scenario B*

Construction Activity/Time	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Site Preparation										
Fugitive Dust	--	--	--	--	4.84	0.00	4.84	2.60	0.00	2.60
Off-Road Diesel	6.74	60.26	64.41	0.13	--	2.64	2.64	--	2.43	2.43
Worker Trips	0.08	0.04	0.56	0.00	0.23	0.00	0.23	0.06	0.00	0.06
TOTAL	**6.82**	**60.3**	**64.97**	**0.13**	**5.07**	**2.64**	**7.71**	**2.66**	**2.43**	**5.09**
Trenching/Utilities										
Trenching Off Road Diesel	0.91	8.92	13.96	0.02	--	0.44	0.44	--	0.40	0.40
Trenching Worker Trips	0.03	0.01	0.19	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**0.94**	**8.93**	**14.15**	**0.02**	**0.08**	**0.44**	**0.52**	**0.02**	**0.40**	**0.42**
Paving										
Paving Offgassing	0.00	--	--	--	--	--	--	--	--	--
Paving Off Road Diesel	1.40	14.26	17.85	0.03	--	0.78	0.78	--	0.71	0.71
Paving Worker Trips	0.04	0.02	0.28	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	**1.44**	**14.28**	**18.13**	**0.03**	**0.12**	**0.78**	**0.90**	**0.03**	**0.71**	**0.74**
Building Construction										
Building Off Road Diesel	1.74	15.38	21.56	0.04	--	0.66	0.66	--	0.61	0.61
Building Vendor Trips	0.57	21.12	6.15	0.07	2.00	0.02	2.02	0.57	0.02	0.60
Building Worker Trips	5.06	2.71	34.99	0.13	16.18	0.10	16.28	4.29	0.09	4.38
TOTAL	**7.37**	**39.21**	**62.7**	**0.24**	**18.18**	**0.78**	**18.96**	**4.86**	**0.72**	**5.59**
Architectural Coatings										
Architectural Coatings Offgassing	148.52	--	--	--	--	--	--	--	--	--
Architectural Coatings Offroad Diesel	0.17	1.15	1.81	0.00	--	0.05	0.05	--	0.05	0.05
Worker Trips	0.91	0.48	6.29	0.02	3.24	0.02	3.25	0.86	0.02	0.87
TOTAL	**149.60**	**1.63**	**8.1**	**0.02**	**3.24**	**0.07**	**3.30**	**0.86**	**0.07**	**0.92**
MAXIMUM DAILY EMISSIONS[1]	**156.45**	**60.30**	**67.20**	**0.26**	**21.42**	**2.64**	**22.25**	**5.73**	**2.43**	**6.50**
MAXIMUM DAILY EMISSIONS, 2014 REPORT[1]	**159.98**	**109.06**	**128.65**	**0.35**	**21.38**	**1.87**	**23.25**	**5.71**	**1.76**	**7.47**
Significance Criteria	137	250	550	250			100			55
Significant?	*Yes*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-10. ***Estimated Maximum Daily Construction Emissions, Phase 3, Scenario A***

Construction Activity/Time	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Site Preparation										
Fugitive Dust	--	--	--	--	4.74	--	4.74	2.59	--	2.59
Off-Road Diesel	6.22	20.85	47.43	0.14	--	0.72	0.72	--	0.72	0.72
Worker Trips	0.04	0.025	0.34	0.00	0.23	0.00	0.23	0.06	0.00	0.06
TOTAL	**6.26**	**20.875**	**47.77**	**0.14**	**4.97**	**0.72**	**5.69**	**2.65**	**0.72**	**3.37**
Trenching/Utilities										
Trenching Off Road Diesel	1.07	5.13	15.24	0.03	--	0.13	0.13	--	0.13	0.13
Trenching Worker Trips	0.02	0.01	0.12	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**1.09**	**5.14**	**15.36**	**0.03**	**0.08**	**0.13**	**0.21**	**0.02**	**0.13**	**0.15**
Paving										
Paving Offgassing	0.00	--	--	--	--	--	--	--	--	--
Paving Off Road Diesel	1.59	9.56	19.12	0.03	--	0.29	0.29	--	0.29	0.29
Paving Worker Trips	0.02	0.01	0.18	0.00	0.12	0.00	0.12	0.0327	0.00	0.03
TOTAL	**1.61**	**9.57**	**19.3**	**0.03**	**0.12**	**0.29**	**0.41**	**0.0327**	**0.29**	**0.32**
Building Construction										
Building Off Road Diesel	1.54	7.00	21.79	0.04	--	0.11	0.11	--	0.11	0.11
Building Vendor Trips	0.33	12.53	3.83	0.05	1.27	0.01	1.29	0.37	0.01	0.38
Building Worker Trips	1.28	0.72	9.89	0.04	6.74	0.02	6.76	1.79	0.02	1.81
TOTAL	**3.15**	**20.25**	**35.51**	**0.13**	**8.01**	**0.14**	**8.16**	**2.16**	**0.14**	**2.30**
Architectural Coatings										
Architectural Coatings Offgassing	69.18	--	--	--	--	--	--	--	--	--
Architectural Coatings Offroad Diesel	0.12	0.76	1.79	0.00	--	0.01	0.01	--	0.01	0.01
Worker Trips	0.26	0.14	1.98	0.01	1.35	0.00	1.35	0.36	0.00	0.36
TOTAL	**69.56**	**0.90**	**3.77**	**0.01**	**1.35**	**0.01**	**1.36**	**0.36**	**0.01**	**0.37**
MAXIMUM DAILY EMISSIONS[1]	**72.71**	**21.15**	**47.77**	**0.15**	**9.36**	**0.72**	**9.52**	**2.65**	**0.72**	**3.37**
MAXIMUM DAILY EMISSIONS, 2014 REPORT[1]	**73.57**	**37.68**	**42.38**	**0.09**	**4.97**	**1.63**	**6.60**	**2.65**	**1.50**	**4.15**
Significance Criteria	137	250	550	250			100			55
Significant?	*No*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-11. ***Estimated Maximum Daily Construction Emissions, Phase 3, Scenario B***

Construction Activity/Time	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Site Preparation										
Fugitive Dust	--	--	--	--	4.78	0.00	4.78	2.59	0.00	2.59
Off-Road Diesel	6.22	20.85	47.43	0.14	--	0.72	0.72	--	0.72	0.72
Worker Trips	0.04	0.025	0.34	0.00	0.23	0.00	0.23	0.06	0.00	0.06
TOTAL	**6.26**	**20.875**	**47.77**	**0.14**	**5.01**	**0.72**	**5.73**	**2.65**	**0.72**	**3.37**
Trenching/Utilities										
Trenching Off Road Diesel	1.07	5.13	15.24	0.03	--	0.13	0.13	--	0.13	0.13
Trenching Worker Trips	0.02	0.01	0.12	0.00	0.08	0.00	0.08	0.02	0.00	0.02
TOTAL	**1.09**	**5.14**	**15.36**	**0.03**	**0.08**	**0.13**	**0.21**	**0.02**	**0.13**	**0.15**
Paving										
Paving Offgassing	0.00	--	--	--	--	--	--	--	--	--
Paving Off Road Diesel	1.59	9.56	19.12	0.03	--	0.29	0.29	--	0.29	0.29
Paving Worker Trips	0.02	0.01	0.18	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	**1.61**	**9.57**	**19.3**	**0.03**	**0.12**	**0.29**	**0.41**	**0.03**	**0.29**	**0.32**
Building Construction										
Building Off Road Diesel	1.54	7.00	21.79	0.04	--	0.11	0.11	--	0.11	0.11
Building Vendor Trips	0.14	5.40	1.65	0.02	0.55	0.01	0.55	0.16	0.01	0.16
Building Worker Trips	0.53	0.30	4.13	0.02	2.81	0.00	2.82	0.75	0.01	0.75
TOTAL	**2.21**	**12.7**	**27.57**	**0.08**	**3.36**	**0.12**	**3.48**	**0.91**	**0.13**	**1.02**
Architectural Coatings										
Architectural Coatings Offgassing	28.17	--	--	--	--	0.00	0.00	--	0.00	0.00
Architectural Coatings Offroad Diesel	0.13	0.86	1.80	0.00	--	0.02	0.02	--	0.02	0.02
Worker Trips	0.15	0.08	1.03	0.00	0.56	0.00	0.56	0.15	0.00	0.15
TOTAL	**28.45**	**0.94**	**2.83**	**0.00**	**0.56**	**0.02**	**0.58**	**0.15**	**0.02**	**0.17**
MAXIMUM DAILY EMISSIONS[1]	**28.45**	**20.87**	**47.77**	**0.14**	**5.01**	**0.72**	**5.73**	**2.65**	**0.72**	**3.38**
MAXIMUM DAILY EMISSIONS, 2014 REPORT[1]	**28.42**	**37.68**	**42.38**	**0.09**	**5.01**	**1.63**	**6.64**	**2.65**	**1.50**	**4.15**
Significance Criteria	137	250	550	250			100			55
Significant?	*No*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-12. *Estimated Maximum Daily Construction Emissions, Phases 2 and 3*

Construction Phase	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Phase 2A	44.03	104.91	73.46	0.11	2.64	4.89	7.53	1.35	4.50	5.85
Phase 2B	156.45	60.30	67.20	0.26	41.42	2.64	22.25	5.73	2.43	6.50
MAXIMUM DAILY EMISSIONS[1]	**200.48**	**165.21**	**140.66**	**0.37**	**24.06**	**7.53**	**29.78**	**7.08**	**6.93**	**12.35**
Significance Criteria	137	250	550	250			100			55
Significant?	*Yes*	*No*	*No*	*No*			*No*			*No*
Phase 3A	72.71	21.15	47.77	0.15	9.36	0.72	9.52	2.65	0.72	3.37
Phase 3B	28.45	20.87	47.77	0.14	5.01	0.72	5.73	2.65	0.72	3.38
MAXIMUM DAILY EMISSIONS[1]	**101.16**	**42.02**	**95.54**	**0.29**	**14.37**	**1.44**	**15.25**	**5.30**	**1.44**	**6.75**
Significance Criteria	137	250	550	250			100			55
Significant?	*No*	*No*	*No*	*No*			*No*			*No*

[1]Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Table 5.6-13. *Operational Emissions – Mining and Reclamation Plan Activities*

	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Daily Emissions, Lbs/day						
Fugitive Dust	-	-	-	-	42.8	5.91
Offroad Equipment	13.84	113.06	59.38	0.12	5.37	5.37
Worker Vehicles	0.15	0.17	1.70	0.00	0.34	0.01
TOTAL	**13.99**	**113.23**	**61.08**	**0.12**	**48.51**	**11.29**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*No*	*No*	*No*	*No*	*No*	*No*

Table 5.6-14. *Project Trip Generation by Phase/Year*

Land Use and Size		Trip Rate and Credits	Weekday ADT
Phase 1			
Phase 1 - 2020	Light Industrial Park Eastside A 165,000 SF	Trip Rate - 15/KSF Transit Credit – 5% Cumulative Trips	2,475 -124 2,351
Phase 1, Phase 2A, and Phase 2B			
Phase 1 - 2020	Light Industrial Park Eastside A 165,000 SF	Trip Rate - 15/KSF Transit Credit – 5% Cumulative Trips	2,475 -124 2,351
Phase 2A – 2030	Light Industrial Park Eastside B 250,000 SF	Trip Rate - 15/KSF Transit Credit – 5% Cumulative Trips	3,750 -188 3,562
	Light Industrial/Business Park Parkside 135,000 SF	Trip Rate - 16/KSF Transit Credit – 5% Cumulative Trips	2,160 -108 2,052
	Residential Mixed-Use Village Center 585 Units	Trip Rate – 6/DU Transit Credit – 5% Cumulative Trips	3,510 -176 3,334
Phase 2B – 2030	Residential Westside 2,725 Units	Trip Rate – 6/DU Cumulative Trips	16,350 16,350
	Retail – Specialty Westside 24,000 SF	Trip Rate - 40/KSF Pass-by Trips – 10% Cumulative Trips	960 -96 864
	Neighborhood Park Westside Gardens	Trip Rate - 5/acre Cumulative Trips	30 30
All Phases			
Phase 1 - 2020 Phase 2A – 2030 Phase 2B – 2030 Phase 3A – 2035 Phase 3B - 2040	Light Industrial Park Eastside A 165,000 SF	Trip Rate - 15/KSF Transit Credit – 5% Cumulative Trips	2,475 -124 2,351
	Light Industrial Park Eastside B 250,000 SF	Trip Rate - 15/KSF Transit Credit – 5% Cumulative Trips	3,750 -188 3,562
	Light Industrial/Business Park Parkside 135,000 SF	Trip Rate - 16/KSF Transit Credit – 5% Cumulative Trips	2,160 -108 2,052
	Residential Mixed-Use Village Center 1420 Units	Trip Rate – 6/DU Mixed-Use Credit – 10% Transit Credit – 5% Cumulative Trips	8,520 -852 -383 7,285

	Land Use and Size	Trip Rate and Credits	Weekday ADT
	Retail – Community Mixed-Use Village Center 150,000 SF	Trip Rate - 70/KSF Mixed-Use Credit (sum) Pass-By Trips – 30% Cumulative Trips	10,500 -2,190 -2,493 5,817
	Commercial Office Mixed-Use Village Center 200,000 SF	Trip Rate - formula Mixed-Use Credit – 3% Transit Credit – 3% Cumulative Trips	2,851 -86 -83 2,681
	Hotel Mixed-Use Village Center 175 Rooms	Trip Rate – 8/Room Cumulative Trips	1,400 1,400
	Residential Westside 2,725 Units	Trip Rate – 6/DU Mixed-Use Credit – 10% Cumulative Trips	16,350 -1,170 15,180
	Retail – Specialty Westside 24,000 SF	Trip Rate - 40/KSF Pass-by Trips – 10% Cumulative Trips	960 -96 864
	Neighborhood Park Westside Gardens 5.98 Acres	Trip Rate - 5/acre Cumulative Trips	30 30
	Neighborhood Park Westside Gardens 30.21 Acres	Trip Rate - 5/acre Cumulative Trips	151 151
	High Tech Park – Residential Creekside 300 Units	Trip Rate – 6/DU Mixed-Use Credit – 10% Transit Credit – 5% Cumulative Trips	1,800 -37 -88 1,675
	High Tech Park – Industrial Creekside 300,000 SF	Trip Rate - 16/KSF Transit Credit – 5% Cumulative Trips	4,800 -240 4,560
	Total Cumulative ADT		**47,5566**

Table 5.6-15. *Operational Emissions*

	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1, Year 2020						
Summer Day, Lbs/day						
Area Sources	3.53	0.00	0.02	0.00	0.00	0.00
Energy Use	0.06	0.51	0.43	0.00	0.04	0.04
Vehicular Emissions	2.22	9.17	26.25	0.09	7.20	1.98
TOTAL	**5.81**	**9.69**	**26.70**	**0.09**	**7.24**	**2.02**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*No*	*No*	*No*	*No*	*No*	*No*
Maximum Daily Construction Emissions, Phase 2A and 2B	**200.48**	**165.21**	**140.66**	**0.37**	**29.78**	**12.35**
TOTAL	**206.29**	**174.90**	**167.36**	**0.46**	**37.02**	**14.37**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*No*	*No*	*No*	*No*	*No*
Winter Day, Lbs/day						
Area Sources	3.53	0.00	0.02	0.00	0.00	0.00
Energy Use	0.06	0.51	0.43	0.00	0.04	0.04
Vehicular Emissions	2.16	9.46	25.81	0.08	7.20	1.98
TOTAL	**5.75**	**9.97**	**26.25**	**0.09**	**7.24**	**2.02**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*No*	*No*	*No*	*No*	*No*	*No*
Maximum Daily Construction Emissions, Phase 2A and 2B	**200.48**	**165.21**	**140.66**	**0.37**	**29.78**	**12.36**
TOTAL	**206.23**	**175.18**	**166.91**	**0.46**	**37.02**	**14.37**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*No*	*No*	*No*	*No*	*No*
Phase 1, Phase 2A, and Phase 2B, Year 2030						
Summer Day, Lbs/day						
Area Sources	106.04	58.10	298.44	0.36	5.94	5.94
Energy Use	1.80	15.55	7.59	0.10	1.25	1.25
Vehicular Emissions	56.33	225.27	632.19	2.58	167.51	48.32
TOTAL	**164.17**	**298.92**	**938.22**	**3.04**	**174.70**	**55.51**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Maximum Daily Construction Emissions, Phase 3A and 3B	**101.16**	**42.02**	**95.54**	**0.29**	**15.25**	**6.75**
TOTAL	**265.33**	**340.94**	**1,033.76**	**3.33**	**189.95**	**62.26**
Significance Criteria	137	250	550	250	100	55
Above Significance	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*

	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Criteria?						
Winter Day, Lbs/day						
Area Sources	106.04	58.10	298.44	0.36	5.94	5.94
Energy Use	1.80	15.55	7.59	0.10	1.25	1.25
Vehicular Emissions	54.36	229.49	621.52	2.45	167.51	48.33
TOTAL	**162.20**	**303.14**	**927.55**	**2.91**	**174.70**	**55.52**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Maximum Daily Construction Emissions, Phase 3A and 3B	**101.16**	**42.02**	**95.54**	**0.29**	**15.25**	**6.75**
TOTAL	**263.36**	**345.16**	**1023.09**	**3.20**	**189.95**	**62.27**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
All Phases, Year 2040						
Summer Day, Lbs/day						
Area Sources	166.88	151.72	428.02	0.96	13.96	13.96
Energy Use	3.02	26.34	14.78	0.16	2.09	2.09
Vehicular Emissions	122.99	603.34	1,446.11	6.67	182.71	63.75
TOTAL	**292.89**	**781.40**	**1,888.90**	**7.79**	**198.76**	**79.80**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Winter Day, Lbs/day						
Area Sources	166.88	151.72	428.02	0.96	13.96	13.96
Energy Use	3.02	26.34	14.78	0.16	2.09	2.09
Vehicular Emissions	119.60	610.54	1,423.36	6.34	182.71	63.76
TOTAL	**289.50**	**788.60**	**1,866.15**	**7.46**	**198.75**	**79.81**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Current operational emissions	**44.68**	**659.83**	**227.16**	**1.26**	**286.99**	**49.76**
Net Emissions Increase	**248.21**	**128.77**	**1661.74**	**6.53**	**(88.23)**	**30.05**
Significance Criteria	137	250	550	250	100	55
Above Significance Criteria?	*Yes*	*No*	*Yes*	*No*	*No*	*No*

Table 5.6-16. *CO "Hot Spots" Evaluation*

Intersection	am	pm
Year 2020		
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 4.0 ppm		
Carroll Canyon and I-15 Northbound	4.2	4.2
Carroll Canyon and I-15 Southbound	4.4	4.2
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 2.77 ppm		
Carroll Canyon and I-15 Northbound	2.94	
Carroll Canyon and I-15 Southbound	3.08	
Year 2030, Scenario A		
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 4.0 ppm		
Camino Santa Fe and Mira Mesa Road	3.8	3.7
Carroll Canyon and I-15 Northbound	3.6	3.6
Carroll Canyon and I-15 Southbound	3.7	3.6
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 2.77 ppm		
Camino Santa Fe and Mira Mesa Road	2.66	
Carroll Canyon and I-15 Northbound	2.52	
Carroll Canyon and I-15 Southbound	2.59	
Year 2030, Scenario B		
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 4.0 ppm		
Camino Santa Fe and Mira Mesa Road	3.8	3.7
Carroll Canyon and I-15 Northbound	3.6	3.6
Carroll Canyon and I-15 Southbound	3.7	3.7
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 2.77 ppm		
Camino Santa Fe and Mira Mesa Road	2.66	
Carroll Canyon and I-15 Northbound	2.593.26	
Carroll Canyon and I-15 Southbound	2.59	
Year 2040, Scenario A		
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 4.0 ppm		
Camino Santa Fe and Mira Mesa Road	3.7	3.6
Carroll Canyon and I-15 Northbound	3.5	3.5
Carroll Canyon and I-15 Southbound	3.6	3.6
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 2.77 ppm		
Camino Santa Fe and Mira Mesa Road	2.59	
Carroll Canyon and I-15 Northbound	2.45	
Carroll Canyon and I-15 Southbound	2.52	
Year 2040, Scenario B		
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 4.0 ppm		
Camino Santa Fe and Mira Mesa Road	3.7	3.6
Carroll Canyon and I-15 Northbound	3.6	3.5
Carroll Canyon and I-15 Southbound	3.7	3.6

Intersection	am	pm
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 2.77 ppm		
Camino Santa Fe and Mira Mesa Road	2.59	
Carroll Canyon and I-15 Northbound	2.52	
Carroll Canyon and I-15 Southbound	2.59	

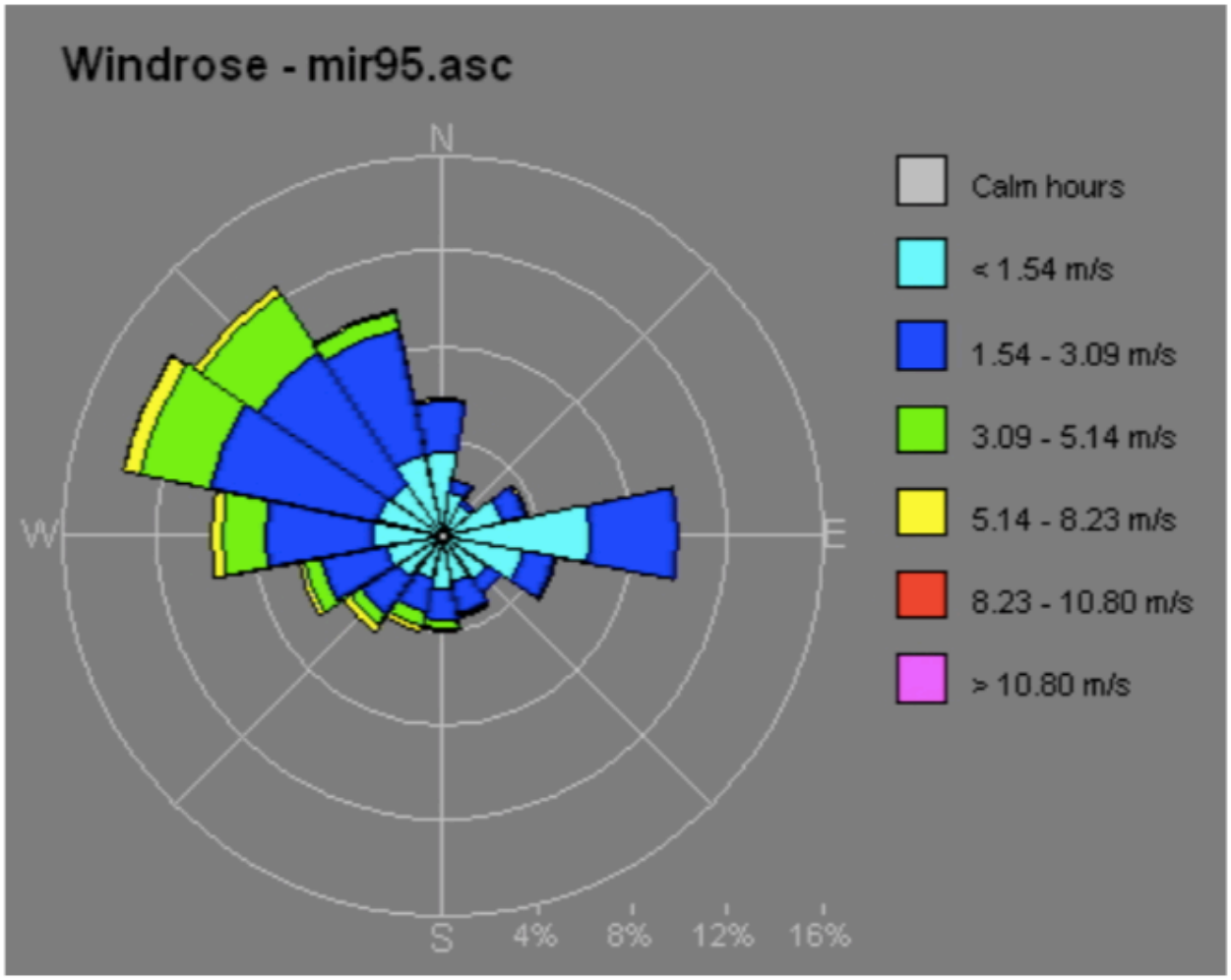


Figure 5.6-1. ***Wind Rose – MCAS Miramar***

5.7 GREENHOUSE GAS EMISSIONS

This section of the EIR evaluates the potential greenhouse gas emissions associated with Stone Creek (the project). The following discussion summarizes the CAP Consistency Checklists prepared for the project, which are included in Appendices R and R-1.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of greenhouse gas emissions impacts associated with the future school would be required at that time.

5.7.1 Existing Conditions

BACKGROUND

Global climate change (GCC) refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land. Historical records indicate that global climate changes have occurred in the past due to natural phenomena (such as during previous ice ages). Some data indicate that the current global conditions differ from past climate changes in rate and magnitude.

Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), which are known as greenhouse gases (GHGs). These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere, much like a greenhouse. GHGs are emitted by both natural processes and human activities. Without these natural GHGs, the Earth's temperature would be about 61 degrees Fahrenheit (°F) cooler (California Environmental Protection Agency 2006). Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere. For example, data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years; however, concentrations of CO_2 have increased in the atmosphere since the industrial revolution.

GCC and GHGs have been at the center of a widely contested political, economic, and scientific debate. Although the conceptual existence of GCC is generally accepted, the extent to which GHGs generally and anthropogenic-induced GHGs (mainly CO_2, CH_4, and N_2O) contribute to it remains a source of debate. The State of California has been at the forefront of developing solutions to address GCC.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC

concluded that a stabilization of GHGs at 400 to 450 ppm CO_2 equivalent concentration is required to keep global mean warming below 3.6° F (2° Celsius), which is assumed to be necessary to avoid dangerous climate change.

State law defines GHGs as any of the following compounds: CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) [California Health and Safety Code Section 38505(g)]. CO_2, followed by CH_4 and N_2O, are the most common GHGs that result from human activity.

SOURCES AND GLOBAL WARMING POTENTIALS OF GHG

Anthropogenic sources of CO_2 include combustion of fossil fuels (coal, oil, natural gas, gasoline and wood). CH_4 is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Accordingly, anthropogenic sources of CH_4 include landfills, fermentation of manure and cattle farming. Anthropogenic sources of N_2O include combustion of fossil fuels and industrial processes such as nylon production and production of nitric acid. Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the *cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas* (USEPA 2006). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of one. The other main greenhouse gases that have been attributed to human activity include CH_4, which has a GWP of 28, and N_2O, which has a GWP of 265. Table 5.7-1, *Global Warming Potentials and Atmospheric Lifetimes of GHGs*, presents the GWP and atmospheric lifetimes of common GHGs. In order to account for each GHG's respective GWP, all types of GHG emissions are expressed in terms of CO_2 equivalents (CO_2e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

The California ARB compiled a statewide inventory of anthropogenic GHG emissions and sinks that includes estimates for CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs. The current inventory covers the years 1990 to 2012, and is summarized in Table 5.7-2, *State of California GHG Emissions by Sector*. Data sources used to calculate this GHG inventory include California and Federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 1990 emissions level is the sum total of sources and sinks from all sectors and categories in the inventory. The inventory is divided into seven broad sectors and categories in the inventory. These sectors include: Agriculture, Commercial, Electricity Generation, Forestry, Industrial, Residential, and Transportation.

In its CAP (City of San Diego 2015), the City of San Diego identified the 2010 baseline for GHG emissions of 13,091,591 MMT CO_2e. Based on the community-wide emissions inventory, 55 percent of the baseline emissions are attributable to transportation, 23 percent are attributable to electricity

use, 17 percent are attributable to natural gas use, five percent are attributable to solid waste and wastewater handling and treatment.

TYPICAL ADVERSE EFFECTS

The Climate Scenarios Report (CCCC 2006), uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Three warming ranges were identified: lower warming range (3.0 to 5.5 degrees (ºF); medium warming range (5.5 to 8.0 ºF); and higher warming range (8.0 to 10.5 ºF). The Climate Scenarios Report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. These impacts are described below.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O_3 formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background O_3 levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including $PM_{2.5}$ could further compromise air quality. The Climate Scenarios Report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

Potential health effects from GCC may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases (such as malaria, dengue fever, yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects.

Water Resources

A vast network of reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. In addition, if temperatures continue to

rise, more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. The State's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

Agriculture

Increased GHG and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development would change as would the intensity and frequency of pests and diseases.

Ecosystems/Habitats

Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus alternating competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. One of the major, most well-documented, and robust findings in ecology over the past century has been the crucial role of climate in determining the geographical distribution of species and ecological communities. Climate variability and change can affect plants and animals in a number of ways, including their distributions, population sizes, and even physical structure, metabolism, and behavior. These ecological responses to changes in climate have important implications, given the historical and continuing increases in atmospheric concentrations of greenhouse gases associated with human activities. Future human-induced changes in the global climate will directly affect regional conditions, such as geographic patterns of temperature and precipitation.

Reports by the Pew Center on Global Climate Change have identified a range of future adverse effects that could occur in U.S. marine and freshwater systems, forests, and ecosystem processes due to greenhouse gas-induced global climate change. According to the reports, the timing of important ecological events such as flowering of plants and breeding times of animals have shifted with changes in the U.S. climate. Geographic ranges of some plants and animals have shifted northward and upward in elevation as well, and in some cases, geographic ranges have contracted. Species composition within communities has changed with local temperature rise. Continued global warming is also likely to increase the populations of and types of pests. Continued global warming would also affect natural ecosystems and biological habitats throughout the State.

Wildland Fires

Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a

combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the high warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats.

Sea levels rose approximately seven inches during the last century and the State of California predicts an additional rise of ten to 17 inches by 2050 and a rise of 31 to 69 inches by 2100, depending on the future levels of GHG emissions. If this occurs, resultant effects could include increased coastal flooding. Sea level rise adaptation strategies include strategies that involve construction of hard structures as barriers, such as seawalls and levees; soft structure strategies such as wetland enhancement, detention basins, and other natural strategies; accommodation strategies that include grade elevations, elevated structures, and other building design options; and withdrawal strategies that limit development to areas unaffected by sea level rise.

Compliance with IBMC Section 15.50.160, Flood Hazard Reduction Standards, would require development within coastal high hazard areas to be elevated above the base flood level and be adequately anchored to resist flotation, collapse, and lateral movement as detailed in the regulatory framework section. The project is not within the coastal high hazard area and is therefore not subject to the standards.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of Greenhouse Gas Emissions impacts assumes this baseline would not differ from the Existing Conditions as presented above.

5.7.2 Regulatory Framework

All levels of government have some responsibility for the protection of air quality, and each level (Federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs are a relatively new component of this air quality regulatory framework.

FEDERAL AND INTERNATIONIONAL EFFORTS

GCC is being addressed at both the national and international levels. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent

reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of GCC. The United States Supreme Court rules in the case of *Massachusetts et al. vs. the Environmental Protection Agency et al., 549 U.S. 497 (2007)*, that the EPA has the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the CAA:

> **Endangerment Finding:** The EPA found that the current and projected concentrations of the six key well-mixed greenhouse gases –CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 – in the atmosphere threaten the public health and welfare of current and future generations.
>
> **Cause or Contribute Finding:** The EPA found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration (NHTSA) in two phases: Phase 1 – Model years 2012-2016 and Phase 2 – Model years 2017 – 2025. The proposed standards for Model years 2017-2025 are projected to achieve 163 grams/mile of CO_2 in Model Year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for Model Years 2017–2021, and NHTSA intends to set standards for Model Years 2022–2025 in a future rulemaking. In addition to these regulations applicable to cars and light-duty trucks, in 2011, EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for Model Years 2014–2018. The standards for CO2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six percent – 23 percent over the 2010 baselines.

In August 2016, EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to Model Year 2018–2027 vehicles for certain trailers, and Model Years 2021–2027 for semitrucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

Mandatory GHG Reporting Rule

On March 10, 2009, in response to the fiscal year (FY) 2008 Consolidated Appropriations Act (House Resolution (H.R.) 2764; Public Law 110–161), the EPA proposed a rule that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of Greenhouse Gases Rule was signed, and was published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. The rule will collect accurate and comprehensive emissions data to inform future policy decisions.

The EPA is requiring suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA. The gases covered by the proposed rule are CO_2, CH_4, N_2O, HFC, PFC, SF_6, and other fluorinated gases including nitrogen trifluoride (NF_3) and hydrofluorinated ethers (HFE).

STATE

The following subsection describes regulations and standards that have been adopted by the State of California to address GCC issues.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed California AB 32, the global warming bill, into law. AB 32 directs the ARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that would achieve the Statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG

emissions from any sources or categories of sources that ARB finds necessary to achieve the statewide GHG emissions limit.
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that by January 1, 2008, the ARB determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. ARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The ARB has estimated that the 1990 GHG emissions level was 427 MMT net CO_2e and the projection for "business as usual" emissions for 2020 was 596 MMT net CO_2e. The ARB therefore estimated that a reduction of 169MMT net CO_2e emissions below "business as usual" would be required by 2020 to meet the 1990 levels. This amounted to roughly a 28.35 percent reduction from projected "business as usual" levels in 2020. In 2011, the ARB developed a supplement to the AB 32 Scoping Plan. The Supplement updated the emissions inventory based on current projections for "business as usual" emissions for 2020 to 506.8 MT of CO_2e. The updated projection included adopted measures (Pavley 1 fuel efficiency standards, 20 percent Renewable Portfolio Standard requirement), and estimated that an additional 16 percent reduction below the estimated "business as usual" levels would be necessary to return to 1990 levels by 2020.

In 2014, the ARB published its First Update to the Climate Change Scoping Plan. The Update indicates that the State is on target to meet the goal of reducing GHG emissions to 1990 level by 2020. The First Update tracks progress in achieving the goals of AB 32 and lays out a new set of actions that will move the State further along the path to achieving the 2050 goal of reducing emissions to 80 percent below 1990 levels. While the Update discusses setting a mid-term target, the plan does not yet set a quantifiable target toward meeting the 2050 goal.

Senate Bill 97

Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs Office of Planning and Research (OPR) to develop draft CEQA guidelines *for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions* by July 1, 2009, and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

OPR published a technical advisory on CEQA and climate change on June 19, 2008. The guidance did not include a suggested threshold, but stated that the OPR had asked the ARB to *recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of greenhouse gas emissions throughout the state*. The OPR technical advisory does recommend that CEQA analyses include the following components:

- Identification of greenhouse gas emissions;
- Determination of significance; and
- Mitigation of impacts, as needed and as feasible.

On December 30, 2009, the California Natural Resource Agency (CNRA) adopted the proposed amendments to the State CEQA guidelines in the California Code of Regulations. These amendments became final on March 18, 2010.

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, *Our Changing Climate: Assessing Risks to California*, and its supporting document *Scenarios of Climate Change in California: An Overview* were published by the California Climate Change Center in 2006.

Executive Order B-30-15.

Executive Order B-30-15 was enacted by the Governor on April 29, 2015. Executive Order B-30-15 establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions to 40 percent below 1990 levels by the Year 2030. This Executive Order directs all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in Executive Order S-3-05 to reduce GHG emissions to 80 percent below 1990 levels by the Year 2050. The Executive Order directs ARB to update its Scoping Plan to address the 2030 goal. It is anticipated that ARB will develop statewide inventory projection data for 2030 and commence efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the new interim goal for 2030.

Executive Order S-21-09

Executive Order S-21-09 was enacted by Governor Schwarzenegger on September 15, 2009. Executive Order S-21-09 requires that the ARB, under its AB 32 authority, adopt a regulation by July 31, 2010, that sets a 33-percent renewable energy target as established in Executive Order S-14-08. Under Executive Order S-21-09, the ARB will work with the Public Utilities Commission and California Energy Commission to encourage the creation and use of renewable energy sources, and will regulate all California utilities. The ARB will also consult with the Independent System Operator and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the Executive Order. The order requires the ARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

California Code of Regulations Title 24

Although not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The GHG emission inventory was based on Title 24 standards as of October 2005; however, Title 24 has been updated as of 2008 and standards began to be phased in beginning in January 2010. The new Title 24 standards are anticipated to increase energy efficiency by 15 percent, thereby reducing GHG emissions from energy use by 15 percent. Energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions.

The GHG emission inventory was based on Title 24 standards as of October 2005; however, Title 24 has been updated as of 2008 and 2013. The 2013 standards require buildings to be 15 percent more energy-efficient than 2008 standards.

Senate Bill 1078, Senate Bill 107, and Executive Order S-14-08.

SB 1078 initially set a target of 20 percent of energy to be sold from renewable sources by the year 2017. The schedule for implementation of the California's Renewable Portfolio Standard (RPS) was accelerated in 2006 with the Governor's signing of SB 107, which accelerated the 20 percent RPS goal from 2017 to 2010. On November 17, 2008, the Governor signed Executive Order S-14-08, which requires all retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. The Governor signed Executive Order S-21-09 on September 15, 2009, which directed ARB to implement a regulation consistent with the 2020 33 percent renewable energy target by July 31, 2010. The 33 percent RPS was adopted in 2010.

State Standards Addressing Vehicular Emissions

California Assembly Bill 1493 (Pavley) enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by ARB would apply to 2009 and later model year vehicles. ARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by 21 percent by 2020.

The ARB has adopted amendments to the "Pavley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the ARB Board on September 24, 2009, are part of California's commitment toward a nation-wide program to reduce

new passenger vehicle GHGs from 2012 through 2016, and prepare California to harmonize its rules with the Federal rules for passenger vehicles.

Executive Order S-01-07

Governor Schwarzenegger enacted Executive Order S-01-07 on January 18, 2007 and mandates that: 1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least ten percent by 2020; and 2) a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California. According to the San Diego County Greenhouse Gas inventory (SDCGHGI), the effects of the LCFS would be a ten percent reduction in GHG emissions from fuel use by 2020. On April 23, 2009, ARB adopted regulations to implement the LCFS.

Senate Bill 375

SB 375 finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so *it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32*. Therefore, SB 375 requires that regions with metropolitan planning organizations adopt sustainable communities strategies, as part of their regional transportation plans, which are designed to achieve certain goals for the reduction of GHG emissions from mobile sources.

SB 375 also includes CEQA streamlining provisions for "transit priority projects" that are consistent with an adopted sustainable communities strategy. As defined in SB 375, a "transit priority project" shall: (1) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 and 50 percent nonresidential uses, a floor area ratio of not less than 0.75; (2) provide a maximum net density of at least 20 dwelling units per acre; and (3) be within 0.5 mile of a major transit stop or high quality transit corridor.

LOCAL REGULATIONS AND STANDARDS

City of San Diego General Plan

The City's General Plan includes various goals and polices designed to help result in a reduction in GHG emissions. As discussed in the General Plan, climate change and GHG reduction policies are addressed in multiple chapters of the General Plan. The goals and policies related to GHG emissions relevant to the project are as follows:

Goal: To reduce the City' overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally-sound waste management.

Policy CE-A.5 Employ sustainable or "green" building techniques for the construction and operation of buildings.

(a) Develop and implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency, and to achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings. This can be accomplished through factors including, but not limited to:
- Designing mechanical and electrical systems that achieve greater energy efficiency with currently available technology;
- Minimizing energy use through innovative site design and building orientation that addresses factors such as sun-shade patterns, prevailing winds, landscape, and sun-screens;
- Employing self-generation of energy using renewable technologies;
- Combining energy efficient measures that have longer payback periods with measures that have shorter payback periods;
- Reducing levels of non-essential lighting, heating and cooling; and
- Using energy efficient appliances and lighting.

(b) Provide technical services for "green" buildings in partnership with other agencies and organizations.

Policy CE-A-7 Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.
- Eliminate the use of chlorofluorocarbon-based refrigerants in newly constructed facilities and major building renovations and retrofits for all heating, ventilation, air conditioning, and refrigerant-based building systems.
- Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to protect installers and occupants' health and comfort. Where feasible, select low-emitting adhesives, paints, coatings, carpet systems, composite wood, agrifiber products, and others.

Policy CE-A.8 Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or be renovating or adding on to existing buildings, rather than constructing new buildings.

Policy CE-A.9 Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:
- Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;

- Using life cycle costing in decision making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system;
- Removing code obstacles to using recycled materials and for construction; and
- Implementing effective economic incentives to recycle construction and demolition debris.

Policy CE-A.10 Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.

- Provide permanent, adequate, and convenient space for individual building occupants to collect refuse and recyclable material.
- Provide a recyclables collection area that serves the entire building or project. The space should allow for the separation, collection and storage of paper, glass, plastic, metals, yard waste, and other materials as needed.

Policy CE-A.11 Implement sustainable landscape design and maintenance.

(a) Use integrated pest management techniques, where feasible, to delay, reduce, or eliminate dependence on the use of pesticides, herbicides, and synthetic fertilizers.
(b) Encourage composting efforts through education, incentives, and other activities.
(c) Decrease the amount of impervious surfaces in developments, especially where public places, plazas and amenities are proposed to serve as recreation opportunities.
(d) Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals.
(e) Reduce use of lawn types that require high levels of irrigation.
(f) Strive to incorporate existing mature trees and native vegetation into site designs.
(g) Minimize the use of landscape equipment powered by fossil fuels.
(h) Implement water conservation measures in site/building design and landscaping.
(i) Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible.

City of San Diego Climate Action Plan

In December 2015, the City adopted a CAP that identified early goals for the reduction of GHG emissions for City facilities. The City's CAP was adopted to ensure that emissions from activities in the City would not exceed established state targets. The CAP assumes a baseline level of construction and buildout of the land use and zoning as of the CAP's adoption. Land use changes such as ones proposed by the project would potentially result in an increase in emissions compared

to those assumed in the CAP by allowing a greater intensity of development or allowing land uses that have a higher rate of vehicle trips.

The City certified an EIR as part of the plan adoption. The CAP established a baseline for 2010, sets goals for GHG reductions for the milestone years 2020 and 2035, and details the implementation actions and phasing for achieving the goals. To implement the state's goals of reducing emissions to 15 percent below 2010 levels by 2020, and 51 percent below 2010 levels by 2035, the City would be required to implement strategies that would reduce emissions to approximately 10.6 MMT CO_2e by 2020 and to 6.4 MMT CO_2e by 2035. The CAP determined that, with implementation of the measures identified therein, the City would exceed the state's targets for 2020 and 2035.

CAP Consistency Checklist

To provide a mechanism for CEQA tiering, the City developed a CAP Consistency Checklist to provide a streamlined review process for GHG emissions for development subject to CEQA. The checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emission targets identified in the CAP are achieved. Implementation of the measures identified in the checklist would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving identified GHG reduction targets.

SANDAG

Regional planning to address GHG emissions has simultaneously been conducted by SANDAG. In 2010, SANDAG prepared a Climate Action Strategy, which provided tools for local agencies, as well as SANDAG itself, to consider as plans and projects are prepared. In accordance with SB 375, SANDAG developed the SCS as a new element of the 2050 RTP. In 2011, SANDAG adopted the region's and State's first SCS as part of the 2050 RTP/SCS. SANDAG also prepared a GHG inventory (as described above) in 2012 to help characterize and better track the region's sources of emissions. An updated SCS was subsequently adopted by SANDAG in December 2015.

The 2015 SCS (referred to as *San Diego Forward: The Regional Plan*) lays out how the region will meet GHG reduction targets set by the CARB. CARB's targets call for the region to reduce per capita emissions seven percent by 2020 and 13 percent by 2035 from a 2005 baseline. The SCS demonstrates how development patterns and transportation network, policies, and programs can work together to achieve GHG reduction targets for cars and light trucks. Five strategies for addressing CARB's targets are outlined in the SCS, including: (1) focus housing and job growth in urbanized areas, (2) protect sensitive habitats, open space, cultural resources and farmland, (3) invest in a transportation network that gives people choices, (4) address the housing needs of all economic sectors, and (5) implement the Regional Plan. In addition to other planning concepts, the SCS encourages mixed use, smart growth land use patterns where people can walk, bike or take transit to shop, attend school or get to/from work to reduce reliance on automobiles, use less resources (i.e., water, electricity), conserve sensitive areas, produce less air pollution and promote healthier lifestyles. Based on programs and incentives contained in the Regional Plan (encompassing

the RTP and SCS), the region is projected to realize a 15 percent reduction in GHG emissions by 2020 and a 21 percent reduction by 2035.

5.7.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

According to the City's Significance Determination Thresholds, projects that are consistent with the City's CAP, as determined through the CAP Consistency Checklist, would result in a less-than-significant cumulative impact regarding GHG emissions. If a project is not consistent with the City's CAP, as determined through the CAP Consistency Checklist, potentially significant cumulative GHG impacts would occur.

ISSUE 1

Would the proposed project generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?

ISSUE 2

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?

Significance threshold:

> According to the City's Significance Determination Thresholds, projects that are consistent with the City's CAP, as determined through the CAP Consistency Checklist, would result in a less-than-significant cumulative impact regarding GHG emissions. If a project is not consistent with the City's CAP, as determined through the CAP Consistency Checklist, potentially significant cumulative GHG impacts would occur.

Impacts

In analyzing a project's GHG emissions, the first step (Step 1) is to assess a project's consistency with the growth projections utilized in the development of the CAP, as determined through the CAP Consistency Checklist. Step 1 is broken down into the following three options:

A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations? OR,

B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA)

and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department? OR,

C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?

Step 2 is to review and evaluate a project's consistency with applicable strategies and actions of the CAP. The third step is to determine whether a project with a land use and/or zone designation change within a TPA would be consistent with the assumptions of the CAP.

Step 3 would only apply if Step 2 is answered in the affirmative under Option B. The project's consistency with the CAP Consistency Checklist is presented below.

CUP/Reclamation Plan Amendment

Step 1: Land Use Consistency

The project site is the location of an on-going mining operation for resource extraction and processing sand and gravel. Mining operations occur under the 1981 CUP, which is permitted in the underlying zones on the property. Further, the project site is identified for such uses in the Mira Mesa Community Plan. Therefore, the project would be consistent with the land use assumptions of the CAP.

Step 2: CAP Strategies Consistency

As stated in footnote 5 of the CAP Checklist Application, use permits or other permits that do not result in the expansion or enlargement of a building are not subject to Step 2. Because the CUP/Reclamation Plan Amendment would not result in the expansion or enlargement nor result in new occupancy of buildings from which GHG emissions reductions could be achieved, Step 2 would not be applicable. Consequently, the CUP/Reclamation Plan Amendment would not have significant direct, indirect, or cumulative impacts on climate change.

Step 3: Project CAP Conformance Evaluation

The CUP/Reclamation Plan Amendment is consistent with the Mira Mesa Community Plan. Therefore, Step 3 does not apply.

Stone Creek Project

Step 1: Land Use Consistency

The first step in determining CAP consistency is to assess the project's consistency with the growth projections used in the development of the CAP. This allows the City to determine a project's consistency with the land use assumptions used in the CAP. The project is anticipated with the SANDAG Series 12 growth projections. Therefore, the project would be consistent with the land use assumptions of the CAP. Because the project is consistent with the growth projections, Step 3, Project CAP Conformance Evaluation, is not required.

Step 2: CAP Strategies Consistency

The second step of conducting a CAP consistency review is to evaluate a project's consistency with the applicable GHG reduction strategies and actions in the CAP. The strategies contained in the CAP address the following topics: (1) Energy and Water Efficient Buildings; (2) Clean and Renewable Energy; and (3) Bicycling, Walking, Transit and Land Use. The Master Plan requires compliance with the current CAP and CAP Consistency Checklist requirements, as applicable. These include, among other things, energy and water efficient buildings, clean and renewable energy, and bicycling/walking/transit/land use. Consequently, the project would comply with the CAP and not have significant direct, indirect, or cumulative impacts on climate change.

Step 3: Project CAP Conformance Evaluation

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department. The project is consistent with the SANDAG Series 12 growth projections; as such, this step does not apply.

General Plan Conservation Element

As discussed above, various policies of the General Plan Conservation Element apply to the project. Below is an evaluation of project consistency with these policies.

Goal: To reduce the City' overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally-sound waste management.

The Stone Creek Master Plan incorporates two transit stops and an interconnected pedestrian and bicycle network. Sustainable planning and design techniques would be supported through the

collocation of residential, commercial, civic, and employment uses within walking distance of each other, transit stops, and the active transportation network. Additionally, the Master Plan includes provisions for sustainable design and operation. The project's Waste Management Plan would ensure waste management consistent with City requirements.

Policy CE-A.5 Employ sustainable or "green" building techniques for the construction and operation of buildings.

(a) Develop and implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency, and to achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings. This can be accomplished through factors including, but not limited to:

- *Designing mechanical and electrical systems that achieve greater energy efficiency with currently available technology;*
- *Minimizing energy use through innovative site design and building orientation that addresses factors such as sun-shade patterns, prevailing winds, landscape, and sun-screens;*
- *Employing self generation of energy using renewable technologies;*
- *Combining energy efficient measures that have longer payback periods with measures that have shorter payback periods;*
- *Reducing levels of non-essential lighting, heating and cooling; and*
- *Using energy efficient appliances and lighting.*

(b) Provide technical services for "green" buildings in partnership with other agencies and organizations.

The Stone Creek Master Plan includes guidelines for sustainable development.

Policy CE-A-7 Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.

- *Eliminate the use of chlorofluorocarbon-based refrigerants in newly constructed facilities and major building renovations and retrofits for all heating, ventilation, air conditioning, and refrigerant-based building systems.*
- *Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to protect installers and occupants' health and comfort. Where feasible, select low-emitting adhesives, paints, coatings, carpet systems, composite wood, agrifiber products, and others.*

The project would utilize building materials and methods directed at improving indoor air quality. Heating, ventilation, and air conditioning (HVAC) units would utilize filters that help screen-out

harmful pollutants, operable windows would allow for natural ventilation, and the project's open courtyards and offsetting planes would allow for air flow through the site.

Policy CE-A.8 *Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or be renovating or adding on to existing buildings, rather than constructing new buildings.*

The project would reduce construction and demolition waste in accordance with the LDC and the project's Waste Management Plan.

Policy CE-A.9 *Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:*

- *Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;*
- *Using life cycle costing in decision making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system;*
- *Removing code obstacles to using recycled materials and for construction; and*
- *Implementing effective economic incentives to recycle construction and demolition debris.*

In accordance with the project's Waste Management Plan, the project would use materials that have recycled content and/or have been derived from sustainable or rapidly renewable sources when possible.

Policy CE-A.10 *Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.*

- *Provide permanent, adequate, and convenient space for individual building occupants to collect refuse and recyclable material.*
- *Provide a recyclables collection area that serves the entire building or project. The space should allow for the separation, collection and storage of paper, glass, plastic, metals, yard waste, and other materials as needed.*

The project would provide refuse storage in accordance with San Diego Municipal Code regulations.

Policy CE-A.11 *Implement sustainable landscape design and maintenance.*

(a) Use integrated pest management techniques, where feasible, to delay, reduce, or eliminate dependence on the use of pesticides, herbicides, and synthetic fertilizers.

(b) Encourage composting efforts through education, incentives, and other activities.

(c) Decrease the amount of impervious surfaces in developments, especially where public places, plazas and amenities are proposed to serve as recreation opportunities.
(d) Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals.
(e) Reduce use of lawn types that require high levels of irrigation.
(f) Strive to incorporate existing mature trees and native vegetation into site designs.
(g) Minimize the use of landscape equipment powered by fossil fuels.
(h) Implement water conservation measures in site/building design and landscaping.
(i) Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible.

The project would implement sustainable landscape design and maintenance.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would be consistent with the CAP. Further, the CUP/Reclamation Plan Amendment would not result in the expansion or enlargement nor result in new occupancy of buildings from which GHG emissions reductions could be achieved. Therefore, the CUP/Reclamation Plan Amendment would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Stone Creek Project

As demonstrated in the CAP Consistency Checklist evaluation, the project would be consistent with and would meet the goals of the City's Conservation Element, and as such, would be consistent with the City's GHG reduction plans and policies. The Stone Creek Master Plan requires compliance with the current CAP Consistency Checklist requirements, as applicable. These include, among other things, energy and water efficient buildings, clean and renewable energy, and bicycling/walking/transit/land use. Consequently, the project would comply with the CAP and not have significant direct, indirect, or cumulative impacts on climate change. Thus, the project would ensure that it would be consistent with the CAP's assumptions and GHG reduction strategies geared toward achieving the identified GHG reduction targets in the CAP. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Mitigation Measures

No mitigation measures would be required.

Table 5.7-1. ***Global Warming Potentials and Atmospheric Lifetimes of GHGs***

GHG	Formula	100-Year Global Warming Potential	Atmospheric Lifetime (Years)
Carbon Dioxide	CO_2	1	Variable
Methane	CH_4	21	12 ± 3
Nitrous Oxide	N_2O	310	120
Sulfur Hexafluoride	SF_6	23,900	3,200

Table 5.7-2. ***State of California GHG Emissions by Sector***

Sector	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2008 Emissions ($MMTCO_2e$)	Percent of Total 2008 Emissions
Agriculture	23.4	5%	32.24	7%
Commercial	14.4	3%	14.87	3%
Electricity Generation	110.6	26%	86.75	19%
Forestry (excluding sinks)	0.2	<1%		
Industrial	103.0	24%	93.24	21%
Residential	29.7	7%	29.85	7%
Transportation	150.7	35%	168.42	38%
Recycling and Waste			7.00	2%
High GWP Gases			15.17	3%

$MMTCO_2e$ – million metric tons equivalent CO_2

5.8 ENERGY

This section provides an evaluation of existing energy production and consumption conditions and related impacts from the project. The following discussion is consistent with and fulfills the intent of CEQA Guidelines Appendix F, and is based on information from the California Energy Demand (CED) Updated Forecast 2017-2027 and CEC's 2016 Integrated Energy Policy Report.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of energy impacts associated with the future school would be required at that time.

5.8.1 Existing Conditions

SDG&E provides electricity and natural gas to the project site. The project site is currently the location of an on-going resource mining operation for extraction and processing of sand and gravel. As such, existing uses consume energy at a level commensurate with those uses not at a level that would be considered excessive.

Energy is addressed in Title 24, Part 6, of California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2016 Standards will continue to improve upon the current 2008 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2013 Standards went into effect on July 1, 2014.

SDG&E, a subsidiary of Sempra Energy, provides natural gas and electricity service to the project site and the City of San Diego as a whole. SDG&E forecasts future natural gas and power consumption demand on a continual basis, primarily for installation of transmission and distribution lines. In situations where projects with large power loads are planned, this is considered together with other loads in the project vicinity, and electrical substations are upgraded as necessary. Direct impacts to electrical and natural gas facilities are addressed and mitigated by SDG&E at the time incoming development projects occur.

Appendix F of the CEQA Guidelines requires that EIRs include a discussion of the potential energy impacts of a proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. According to Appendix F, the means of achieving energy conservation corresponds to decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources.

ELECTRICITY

The State of California produces approximately 82 percent of its electricity and imports the remaining 18 percent. The California Independent System Operator (ISO) governs the transmission of electricity from power plants to utilities. Electricity to San Diego County is transferred via 138 kilo volts (kV) lines at Camp Pendleton, and a 500 kV line near Jacumba. Additionally, there are two operating power plants within San Diego County: Encina (Cabrillo Power) - 965 megawatt (MW), and the Palomar Energy Power Plant, Escondido (SDG&E) - 550 MW that began operating in the summer 2006.

Electricity distribution lines in the project area are located underground. Each year, SDG&E allocates capital funds for the purposes of converting overhead electric distribution lines. Under provisions of Rule 20A established by the California Public Utilities commission, the City may designate major streets for undergrounding the overhead lines. In general, all new commercial, industrial, and residential developments are required to accept the underground service.

SDG&E has the capacity to meet the present demand for electrical service, and there are no service deficiencies in the existing distribution system (see Appendix O). In addition, a variety of energy conservation programs are provided by SDG&E to City residents and businesses. These programs include:

- Conducting surveys to determine energy use and recommending energy efficiency measures to reduce energy use
- Providing discounts for retrofitting lighting, refrigeration, and mechanical equipment with energy efficient technologies
- Incentives for using energy during non-peak hours to reduce peak-hours demand

Title 24 of the California Administrative Code sets efficiency standards for new construction, regulating energy consumed for heating, cooling, ventilations, water heating, and lighting. These building efficiency standards are enforced through the City's building permit process.

The City of San Diego Council Policy 900-14 encourages private sector developers to voluntarily participate in a program to conserve energy. Projects which meet the criteria of the Community Energy Partnership Program, such as compliance with the EPA Energy Start for Buildings Program, and which exceed minimum Title 24 requirements by a certain percentage can receive expedited review of ministerial plan checks as an incentive. Title 24 has mandatory measures for insulation, exterior doors, infiltration and moisture control, space conditioning, water heating and plumbing, and lighting.

SDG&E facilities surround the project site within public streets. Additionally, there are SDG&E power lines (230 kv) within a 20-foot wide easement paralleling the southern property line. SDG&E power

lines also traverse the eastern portion of the project site in a north-south direction. (See Figure 5.8-1, *SDG&E Facilities.*)

NATURAL GAS

Natural gas sources for California include in-state sources (16 percent), Canada (28 percent), the Rockies (10 percent), and the Southwest (46 percent). Gas from outside sources enter the State through large high-pressure gas lines. These transmission lines feed natural gas storage areas located in Orange and northern Los Angeles counties, which serve all of southern California. From these storage facilities, high pressure gas transmission lines enter San Diego County from the north inland area (Rainbow area). A 30-inch transmission line veers to the coast, and a 16-inch line continues inland.

According to SDG&E, the current natural gas distribution system is in good operating condition and is adequate to meet the current demand. No improvements are planned at this time.

Power and gas requirements for upcoming development projects are handled on a case-by-case basis, and SDG&E consults with developers to incorporate energy-saving devices into project design, where feasible. Forecasting future electric power and natural gas consumption demand is performed on a continual basis by SDG&E. In situations where projects with large power loads are planned, these new large power loads are considered together with other existing or anticipated future loads in the project vicinity, and electrical substations are upgraded or new substations are built if the capacities of existing substations are exceeded. Direct impacts to electrical and natural gas facilities are addressed and mitigated by SDG&E at the time incoming development projects occur and are not typically evaluated by City staff.

An overall finding that the project would not have a significant environmental effect is not adequate for SDG&E to plan and implement an electric transmission or substation project in accordance with the permitting requirements of the California Public Utilities Commission's General Order 131-D. For SDG&E to be able to comply with GO 131-D and CEQA when its facilities are a component of a larger development project, the environmental document must make a separate finding that the proposed removal and/or construction or relocation of SDG&E's electric facilities as part of the larger project does not have the potential for significant effect on the environment.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts associated with Energy assumes this baseline would not differ from the Existing Conditions as presented above.

5.8.2 Regulatory Framework

STATE

California Code of Regulations Title 13, Section 2449(d)(3) and 2485

ARB is responsible for enforcing CCR Title 13 Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment.

California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Located in CCR Title 24, Part 6 and commonly referred to as "Title 24," these energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The goal of Title 24 energy standards is the reduction of energy use. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods (CEC 2016a). On October 24, 2015, the California Energy Commission (CEC) adopted the 2016 Building and Energy Efficiency Standards with the effective date of the 2016 Standards beginning January 1, 2017. CEC estimates that implementation of the 2016 Building Energy Efficiency Standards have the potential to reduce statewide annual electricity consumption by approximately 281 gigawatt-hours per year, electrical peak demand by 195 megawatts, and natural gas consumption by 16 million therms per year (CEC 2016b).

Energy Action Plan II

The CEC, California Power Authority, and California Public Utilities Commission (CPUC) adopted an Energy Action Plan (EAP) to establish goals for California's energy future and a means to achieve these goals. EAP II supports and expands on the commitment of state agencies to cooperate and reflect on the energy actions since original EAP adoption. EAP II includes a coordinated implementation plan for state energy policies that have been articulated through EOs, instructions to agencies, public positions, and appointees' statements; CEC's Integrated Energy Policy Report; CPUC and CEC processes; agencies' policy forums; and legislative direction (CEC 2005).

Leadership in Energy and Environmental Design

The U.S. Green Building Council (USGBC) is committed to transforming the way buildings are designed, constructed, and operated through the Leadership in Energy and Environmental Design (LEED) certification program. LEED acts as a certification program for buildings and communities to guide their design, construction, operations and maintenance toward sustainability. LEED is based on prerequisites and credits that a project meets in order to achieve a certification level for Certified, Silver, Gold, or Platinum.

LOCAL

City of San Diego

General Plan

The City of San Diego adopted an updated General Plan in 2008. The following policies contained in the Conservation Element of the General Plan are applicable to the project:

- CE-A.2. Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
  - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
  - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
  - Improve energy efficiency, especially in the transportation sector and buildings and appliances;
  - Reduce the Urban Heat Island effect through sustainable design and building practices;
  - Reduce waste by improving management and recycling programs.

Climate Action Plan

The City of San Diego adopted a CAP in December 2015 (City of San Diego 2015). The CAP identifies GHG emissions; establishes citywide reduction targets for 2020 and 2035; identifies strategies and measures to reduce GHG levels; and provides guidance for monitoring progress on an annual basis. The City of San Diego CAP identifies a comprehensive set of goals and actions, including ordinances, policies, resolutions, programs, and incentives, that the City can use to reduce GHG emissions.

5.8.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

The City of San Diego does not have significance thresholds for Energy, and CEQA Guidelines Appendix G does not contain a specific threshold relative to Energy. However, CEQA Guidelines Appendix F provides guidance in evaluating impacts associated with Energy. Based on the guidance provided in CEQA Guidelines Appendix F, for the evaluation of the project's potential impacts on energy, the following threshold would apply:

ISSUE 1

Would the construction and operation of the proposed project result in the use of excessive amounts of electrical power?

ISSUE 2

Would the proposed project result in the use of excessive amounts of fuel or other forms of energy (including natural gas, oil, etc.)?

Significance threshold:

- A project has the potential to have a significant effect on energy if it would generate a demand for energy (electricity and natural gas) that would exceed the planned capacity of energy suppliers.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would allow for continued phased mining operations until 30 years from the date of project approval; allow for grading or grading adjustments to the 1981 Reclamation Plan to accommodate the relocation, restoration/enhancement of Carroll Canyon Creek through the project site; and reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. The current on-going mining operations are served by existing SDG&E utilities. No changes would be required for the CUP/Reclamation Plan Amendment. The existing mining operation does not consume excessive amounts of energy, and reclamation of the project would not substantially affect energy use. Significant impacts to energy would not result from the implementation of the CUP/Reclamation Plan Amendment.

Stone Creek Project

The project site is the location of ongoing sand and gravel resource extraction operations. Therefore, electricity and natural gas facilities exist at the project site to serve the existing resource extraction facilities. Additionally, there are existing utilities in the surrounding street of Camino Ruiz and Black Mountain Road.

The project would relocate and underground SDG&E facilities. Specifically, the 230 kv power lines that parallel the southern property boundary would be relocated to around the eastern property boundary. Additionally, several easements containing smaller voltage power lines would be vacated, and power lines would be undergrounded beneath internal streets as part of the project. (See Figure 5.8-1, *SDG&E Facilities.*)

SDG&E has indicated that the current energy system would be sufficient to service the project, and that SDG&E would serve the project. A letter from SDG&E states SDG&E gas and electric services can be made available for the Stone Creek project (see Appendix O). No adverse effects to non-renewable energy resources are anticipated with development of the project site as proposed by the Stone Creek project. Furthermore, the project would not result in the use of excessive amounts of fuel or electricity and would not result in the need to develop additional sources of energy.

Energy use at the Stone Creek project would not be excessive and would be commensurate with typical energy use for the proposed land uses. Additionally, the project would incorporate several measures directed at minimizing energy use. The Stone Creek Master Plan would include a mix of land uses and project features that help to achieve the broad goals of smart growth and sustainable development. In accord with the City's Conservation Element, Stone Creek seeks to reduce its "environmental footprint" through an appropriate land use plan that contains a variety of land uses in proximity with one another and connects those land uses in an efficient manner, promoting alternative modes of transportation and a variety of mobility options.

Developing the appropriate land use mix and a circulation system that does not solely rely on automobiles is part of Stone Creek's sustainable development. Future development of individual lots and buildings within Stone Creek should consider sustainable design opportunities.

Low Impact Development (LID) principals, guidelines, and BMPs should be considered, as applicable, during the planning, design, implementation, and maintenance of the public spaces throughout the project. In particular, planting areas within parks, on slopes, and along trails should be designed to incorporate storm water management BMPs to slow, infiltrate, and cleanse storm water as it moves across the landscape. Trails, maintenance access, and other hardscape features within the public realm would be designed of permeable paving materials, where appropriate, such as porous concrete, porous asphalt, interlocking pavers, decomposed granite, or similar treatments to promote storm water infiltration and reduce storm water discharges.

Plant material selection would be guided to consider long-term sustainability without the excessive use of water, pesticides and fertilizers. Where practical, irrigation of these areas should utilize reclaimed water.

The following measures are among those that could be considered as part of future development projects to encourage sustainable design. Other implementable measures may present themselves in the future, as the concept of sustainability matures and becomes a routine component of development in San Diego.

- Implement, to the extent practicable, sustainable building practices directed at reducing greenhouse gas emissions, conserving energy and encouraging clean technologies.

- For buildings over 5,000 square feet in size, consider elements suggested from the U.S. Green Building Council's LEED silver standard, where practicable.
- Design and build energy efficient buildings that consider "green" technology and principles.
- Design mechanical and electrical systems that achieve energy efficiency with currently available technology.
- Design for waste segregation and management.
- Strive for innovative site design and building orientation to reduce energy use by taking advantage of sun-shade patterns, prevailing winds, landscaping, and sun-screens.
- Review levels of non-essential lighting, heating and cooling.
- Construct and operate buildings using materials, methods, and mechanical and electrical systems that promote a healthful indoor air quality.
- Consider re-use of building materials, materials that have post-consumer recycled content, materials that are derived from sustainable or rapidly renewable sources, or materials with lesser environmental impacts.
- Consider sustainable landscape design and maintenance.
- Consider the use of deciduous trees and drought tolerant native vegetation.
- Avoid the use of invasive plants, such as fountain grass.
- Review options for water conservation measures in site/building design and landscaping.
- Consider high efficiency irrigation technology and recycled water to reduce the use of potable water for irrigation.

In addition to the energy efficient components provided above, the project would comply with the Uniform Building Code (UBC) and Title 24 requirements for building materials and insulation in order to reduce unnecessary loss of energy.

The project incorporates a selection of vertical landscape elements such as trees, large shrubs, and climbing vines to shade southern and western building façades to reduce heating in summer and increase solar heat gain in winter months.

Significance of Impacts

CUP/Reclamation Plan Amendment

Significant impacts to energy would not result from the implementation of the proposed CUP/Reclamation Plan Amendment. Impacts would be less that significant.

Stone Creek Project

The project would increase demand for energy in the project area and SDG&E's service area. However, no adverse effects on non-renewable resources are anticipated. The project would follow

UBC and Title 24 requirements for energy efficiency and would incorporate sustainable design features directed at reducing energy consumption. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Figure 5.8-1. *SDG&E Facilities*

5.9 GEOLOGIC CONDITIONS

This section evaluates the potential geologic conditions associated with Stone Creek (the project). The following discussion summarizes the *Soil and Geologic Reconnaissance* and the *Recommended Grading Specifications*, both prepared by GEOCON, Inc. for the Carroll Canyon Mine (June 12, 2020 and June 3, 2020, respectively). Additionally, GEOCON prepared *Responses to Review Comments* (April 12, 2012; May 7, 2012; May 23, 2012; September 13, 2012; September 24, 2013; May 12, 2014; December 17, 2014; February 24, 2015; October 12, 2016; November 27, 2017; February 19, 2019). These technical documents are included in Appendix I.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of geologic conditions impacts associated with the future school would be required at that time.

5.9.1 Existing Conditions

The Stone Creek project site consists of approximately 293 acres in the Mira Mesa area in the City of San Diego, California, located immediately west of Black Mountain Road near its intersection with Carroll Canyon Road and extending about 1.7 miles to the west. Carroll Canyon Creek flows onto the site at the east end and exits just west of Camino Ruiz.

Site elevations range from a high of about 450 feet AMSL at the north rim of the canyon to a low of about 300 AMSL just east of Camino Ruiz. Elevations in the canyon vary considerably due to past and present mining activity. Cut slopes have been excavated to gradients as steep as 1/2:1 (horizontal:vertical) for mining purposes. Reclamation grading would result in slopes no steeper than 2.1. Natural gradients range from nearly flat on the mesa above the canyon to about 2:1.

Residential developments exist north, east, and west of the property and light industrial development exists to the south and east. Current site usage is sand/aggregate mining and concrete production.

SOIL AND GEOLOGIC CONDITIONS

The dominant geologic unit in the area where the surface mining has been conducted is the Stadium Conglomerate. This unit is primarily a mix of sand, gravel, and cobble-size rock particles.

Portions of the Stadium Conglomerate are overlain by Very Old Paralic Deposits formerly known as the Lindavista Formation. This unit is also a sand/gravel/cobble mix. The Very Old Paralic Deposits are exposed in the upper five to 15 feet of the ground surface and at the tops of the mined slopes and canyon walls. A relatively thin mantle of surficial deposits consisting of alluvium, colluvium, and topsoil overlay the geologic bedrock units.

East of Camino Ruiz, the project site exhibits scattered undocumented fill areas, several backfilled excavations, and former settling ponds. An active settling pond currently exists near the northeast

corner of the site. These areas have been previously identified and evaluated and are delineated on the Figure 5.9-1, *Geologic Map*. Several of the backfilled excavations contain as much as 180 feet of undocumented fill and pond deposits considered unsuitable for supporting structural fill or buildings. A brief synopsis of each area follows.

A review of published geologic maps and previous geotechnical studies on the property reveal that the geologic bedrock units underlying the site consist of Stadium Conglomerate mantled by a relatively thin layer of Very Old Paralic Deposits. Observation of significant exposures of these units on the property indicates that the Stadium Conglomerate is very dense with various percentages of sand, gravel, and cobble. Intermittent "clean" sand lenses are also present. Significantly steep and high temporary slopes have been excavated in these materials to extract the resources and adverse geologic structure or slope instability has not been observed. Based on these observations, adverse geologic structure is not present; the slopes constructed during mining, reclamation and the ultimate site grading would be generally stable.

Utility Vault Area

This area was graded nearly flat to provide working/storage area for a manufacturer of utility vaults. Cuts and fills are estimated to be about 30 feet and ten feet, respectively. All fill would require removal and recompaction to make this area suitable for development. Any alluvial soils underlying the fill are also subject to removal.

Plant Area

No mining has been performed in this area, although some grading may have taken place to create level ground for mining operations as one boring encountered 13 feet of fill. All fill would require removal and recompaction. Any alluvial soils underlying the fill would also be subject to removal.

Pond No. 2

This is a settling pond reportedly excavated between 1967 and 1983. Up to 120 feet of predominantly silty clay deposits exist below the water at this pond. The southeast corner of Pond No. 2 has been used as a concrete wash out area. The thickness of concrete materials exceeds 36 feet. The concrete and any underlying compressible soils should be completely removed and replaced with properly compacted fill or wicked-drained and surcharged similar to adjacent areas.

Former Pond No. 1

Former Pond No. 1 was excavated to a depth of about 180 feet and subsequently backfilled with FS-15 sand and rubble. FS-15 sand is a mining by-product with a Sand Equivalent value of about 15.

Area North of Former Pond No. 1

No mining was reported to have occurred in this area, although fill was encountered and is estimated to be up to 30 feet thick. The fill, along with any underlying compressible soil, should be

removed to expose firm formational materials.

Former Pond No. 3

This area contains up to 60 feet of fill, debris, and discarded equipment. These materials should be removed to expose firm formational materials. Debris and discarded equipment should be properly disposed of offsite.

Rubble Fill

Up to 150 feet of rubble fill has been mapped in this area. Rubble fill should be removed to expose firm formational materials and brought to reclamation grade with properly compacted fill.

FS-15 Fill

Approximately 67 feet of fill was encountered in this area at the time of exploration (2002), and the elevation has been raised since that time. All fill soils should be removed to expose firm formational materials and brought to reclamation grade with properly compacted fill.

Landfill Area

The estimated depth and character of fill in this area is unknown but may be similar to the adjacent FS-15 Fill area. All fill soils should be removed to expose firm formational materials and brought to reclamation grade with properly compacted fill.

West Pit

Active mining is occurring in the west pit area. The area is underlain by stockpiles generated during mining, existing ponds, former ponds, and an embankment fill to support the conveyor belt and mining activities. Two areas at the western end of the pit have documented compacted fill placed over the mining pit bottm. Currently, undocumented fill has been stockpiled over the compacted fill.

SEISMIC AND GEOLOGIC CONDITIONS

Faulting and Seismicity

According to the *City of San Diego Seismic Safety Study, Geologic Hazards and Faults*, the Stone Creek project site has been mapped into four hazard categories: Category 32, Category 51, Category 52, and Category 53. Category 32 is characterized as *low (liquefaction) potential, fluctuating groundwater, minor drainages.* Category 51 is characterized as *level mesa underlain by terrace deposits and bedrock, nominal risk.* Category 52 is characterized as *other level areas, gently sloping to steep terrain, favorable geologic structure, low risk.* Category 53 is characterized as *level or sloping terrain, unfavorable geologic structure, and low to moderate risk.* Based on GEOCON reconnaissance and review of geologic maps, reports and aerial photos, the site is not located on any known “active,” “potentially active,” or “inactive” fault traces as defined by the California Geological Survey (CGS).

The Rose Canyon Fault zone, located approximately seven miles west of the site, is the closest known active fault. The CGS considers a fault seismically active when evidence suggests seismic activity within roughly the last 11,000 years. The CGS has included portions of the Rose Canyon Fault zone within an Alquist-Priolo Earthquake Fault Zone. Based on review of available geologic data and published reports, the site is not located within a State of California Earthquake Fault Zone.

Table 5.9-1, *Deterministic Site Parameters*, presents a list of significant active faults, their distance from the site and a summary of potential ground-shaking effects. The information presented on Table 5.9-1 was derived from an analysis using EQFAULT, a computer program that performs deterministic analyses based upon distances from the site to known earthquake faults that have been digitized into an earthquake catalog. Acceleration-attenuation relationships were used to estimate the maximum peak site accelerations.

Groundwater

During the geotechnical investigations at the project site, GEOCON observed the drilling of three borings on the west side of Camino Ruiz where perched groundwater was found at elevations varying from 239 to 253 feet AMSL on the west side of Camino Ruiz. Perched groundwater was also encountered in several borings east of Camino Ruiz, with estimated perched groundwater elevations ranging from 233 to 245 feet AMSL. Borings further to the east encountered water at significantly higher elevations of 368 to 398 feet AMSL. These higher levels may be due to their proximity to Carroll Canyon Creek and to the mining ponds (Pond No. 2).

Liquefaction and Seismically Induced Settlement

Liquefaction typically occurs when a site is located in a zone with seismic activity, onsite soils are cohesionless, groundwater is encountered within 50 feet of the surface, and soil relative densities are less than about 70 percent. If all four criteria are met, a seismic event could result in a rapid pore- water pressure increase from the earthquake-generated ground accelerations. Seismically induced settlement is settlement that may occur whether the potential for liquefaction exists or not. The potential for liquefaction or seismically induced settlement to occur within the site is considered to be very low due to the dense nature of the Stadium Conglomerate and the compaction/densification of fill and alluvial soils.

Landslides

No landslides were mapped or encountered at the site or in an area that could impact the property. The potential for landsliding is not considered to be a hazard to this project.

Seiches

A seiche is a run-up of water within a lake or embayment triggered by fault- or landslide-induced ground displacement. The site is located approximately 1.4 miles downstream of Lake Miramar. A seiche occurring as the result of a seismic event could result in elevated water levels within the

drainage that would cross the project site.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts associated with Geologic Conditions assumes this baseline would not differ from the Existing Conditions as presented above.

5.9.2 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

Based on the City of San Diego's *Significance Determination Guidelines under the California Environmental Quality Act* for impacts to geology, a project may result in a significant impact if it meets one or more of the following criteria:

- If the project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- If the project would result in substantial soil erosion or the loss of topsoil.
- If the project is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- If the project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.
- If the project would have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

ISSUE 1

Would the proposed project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

Significance threshold:

- If the project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would allow for continued phased mining operations until 30 years after the date of project approval; allow for grading or grading modification to the 1981 Reclamation Plan to accommodate the relocation, restoration/enhancement of Carroll Canyon Creek through the project site; and reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. Current mining operations include the extraction, processing, and storage of sand, gravel, rock, clay, decomposed granite, and soils; the manufacture, production, processing, and storage of asphaltic concrete, Portland cement concrete, concrete products, and clay products; and the sale and distribution by truck or other conveyance of those items listed above. Should mining become idle prior to the expiration of the CUP/Reclamation Plan Amendment and/or implementation of the Stone Creek Master Plan, the operator shall submit an interim management plan, as required by SMARA regulations.

Future site grading would consist of removing and compacting mining waste which primarily consists of sandy reject from the Stadium Conglomerate (i.e. yellow fill). Fill embankments including slopes would be constructed with this granular material. Slope excavations in the Stadium Conglomerate would expose dense granular bedrock. Based on geotechnical experience, the slopes would be stable with respect to gross and surficial instability.

With regards to groundwater, reclamation grading may encounter groundwater where deep removals are undertaken. Based on the project geotechnical studies, areas of perched seepage or groundwater occur within the limits of the project. The seepage is typically localized and migrating

along pervious stratum within the Stadium Conglomerate, or along the base of alluvium deposits within the drainages. During remedial grading, the seepage conditions would be removed or managed in the form of de-watering or other means typical of these conditions. In some instances, saturated surficial deposits would be left in place, wick drained and surcharged with embankment loads as part of the geotechnical design measures. Where practical, subdrains would be placed within select areas to convey latent seepage to suitable discharge locations, which is common practice on projects of this nature. Impacts would be less than significant.

Stone Creek Project

The project proposes to develop a mixed-use development that includes commercial office, commercial retail, hotel, residential, light industrial, business park, high technology, and parks and open space uses. The project site is the current location of sand and aggregate resource extraction and processing operations.

As noted in the Soil and Geologic Reconnaissance report, groundwater and landslides are not considered potential hazards to the proposed development. Additionally, the potential for liquefaction or seismically induced settlement to occur within the site is considered to be very low due to the dense nature of the Stadium Conglomerate and the compaction/densification of fill and alluvial soils that would occur during remedial grading. Therefore, potential impacts associated with liquefaction, including risk of life or injury due to local seismic events, would be reduced to an acceptable level of risk.

Additionally, the normal compression of properly compacted fill placed during site grading would be a consideration during the design and construction of future improvements. In this regard, anticipated settlements based on fill thickness and geometry would be considered in future foundation designs for structures. Grading for the project would result in the project site being underlain by deep fills (50 feet to over 100 feet thick) and shallow formational bedrock. Relatively sharp transitions from bedrock to thick fills beneath buildings and underground improvements (e.g. sewer, storm drain, etc.) occur along property margins and some interior areas. This could result in settlement impacts that would be regarded as significant if not treated appropriately.

Impact 5.9-1 Project grading could result in settlement impacts, which would be regarded as significant.

With regards to seismicity, seismic design of the proposed structures should be performed in accordance with International Building Code (IBC) guidelines adopted by the City of San Diego at the time of development. The project would adhere to the IBC guidelines. Damage from earthquake ground shaking could be significant. Structural design in accordance with current building codes is intended to reduce the impact of earthquake ground shaking on proposed buildings to an acceptable level of risk and impacts would be less than significant.

Significant flooding at the project site due to a seiche is not likely to occur. The project site is located a distance from Lake Miramar. Additionally, terrain, the I-15 freeway, and existing development between the project site and Lake Miramar would act as energy dissipaters, limiting the amount of floodwater that could actually reach the project site. Therefore, significant impacts associated with a seiche event is not anticipated.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazard. No significant environmental impacts would occur. In regard to potential impacts to geologic hazards from implementation of the CUP/Reclamation Plan Amendment, adherence to associated design/construction recommendations and mandatory conformance with applicable regulatory/industry standards and codes would reduce impacts to below a level of significance.

Stone Creek Project

The Stone Creek Master Plan and associated actions would not expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazard. No significant environmental impacts would occur. Potential impacts related to geologic hazards from implementation of the project would be avoided or reduced to below a level of significance through required site-specific geotechnical investigation, adherence to associated design/construction recommendations, and mandatory conformance with applicable regulatory/industry standards and codes. Settlement impacts could occur due to relatively sharp transitions between fill and formational bedrock, resulting in a potentially significant impact.

Mitigation Measures

The following mitigation would be required to reduce settlement impacts to below a level of significance.

MM 5.9-1: Prior to Notice to proceed (NTP) for any construction permits including, but not limited to, grading permit, but prior to the preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Designee shall verify the requirement for appropriate treatment of settlement have been noted on the appropriate construction documents as follows:

- In areas where the fill thickness is greater than 50 feet, fill soils shall be compacted to at least 93 percent of the laboratory maximum dry density at

approximately two percent above optimum moisture content. Fills less than 50 feet thick shall be compacted to at least 90 percent of the maximum dry density at optimum moisture content or slightly above.

- Sharp transitions from bedrock to thick fills beneath buildings and underground improvements (e.g. sewer, storm drain, etc.) shall be softened during remedial grading by sloping steep bedrock surfaces and undercutting building pads.

- At completion of grading, the conditions beneath each building pad shall be evaluated for potential soil compression assuming the fills become saturated. The building foundation shall be designed to accommodate estimated total and differential settlement from both short-term settlement due to building loading and long-term soil compression in the event the soils become saturated. The type of foundation utilized shall be determined once building type and locations are known and the depth of fill beneath the structures has been determined. Specific foundation recommendations shall be provided in an update or as-graded geotechnical reports that will be required as part of the approval process.

- An evaluation of differential settlement shall be performed for infrastructure located in areas of sharp transitions from bedrock to deep fills. This evaluation shall be performed once the locations of infrastructure is known with respect to the transition areas. Measures would be included in the utility design in areas where the estimated differential settlement could impact the performance of underground improvements. These measures may include: additional bedrock undercutting; the use of flexible, water tight, and specially-design joints to allow for movement; and increasing pipe gradients.

Significance of Impacts following Implementation of Mitigation Measures

With implementation of MM 5.9-1, project impacts relative to settlement would be less than significant.

ISSUE 2

Would the project result in a substantial increase in wind or water erosion of soils, either on or off the site?

Significance threshold:

- If the project would result in substantial soil erosion or the loss of topsoil.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would manage erosion in a manner acceptable to the regulations provided within SMARA. Vegetation and overburden have been removed in advance of surface mining activities in accordance with the 1981 CUP. Any overburden and minerals that are stockpiled on the site are managed for water and erosion control consistent with State and local requirements. Erosion control facilities include settling ponds and basins. These facilities are maintained to control erosion and storm water runoff.

Settling basins have been planned throughout the property to prevent siltation of Carroll Canyon Creek and manage erosion within the property. Mining operations are conducted in a manner that substantially prevent siltation in the adjacent Carroll Canyon Creek. The proposed revegetation plan would provide short and long-term erosion control throughout the property through the utilization of appropriate native species.

All reasonable measures have been implemented to protect wetland resources and/or mitigate for impacts to wetlands. The proposed revegetation plan utilizes a full range of native species appropriate for the creation of upland and wetland vegetation communities suitable for wildlife habitat. Protection of existing habitat values is focused on protecting downstream habitats through the use of onsite water quality and erosion control best management practices.

Grading and revegetation associated with the Reclamation Plan Amendment has been designed to minimize erosion and to convey surface runoff to natural drainage courses. Depressions where water can collect during periods of heavy rainfall have been designed and occur in areas such that erosion of spillways would not occur. The basin within the western portion of the property has been designed with a temporary pump system to minimize long periods of standing water and vector control issues as the western portion of the site is being filled during reclamation.

Surface and groundwater would be protected from siltation and pollutants which may diminish water quality as required by the Federal Clean Water Act, sections 301 et seq. (33 U.S.C. section 1311), 404 et seq. (33 U.S.C. section 1344); the Porter-Cologne Act, section 13000 et seq.; County anti-siltation ordinances; the Regional Water Quality Control Board; or the State Water Resources

Control Board. The best management practices for erosion control, the siltation basins, and the proposed revegetation all target the reduction of sediment reaching Carroll Canyon Creek and downstream habitat areas. All impacts and improvements relative to the Carroll Canyon Creek would be conducted in accordance with the requirements of the Porter Cologne Act and the Federal Clean Water Act.

Stone Creek Project

Development of the Stone Creek project would utilize BMPs with regards to minimizing wind and water erosion during the development of the project. These BMPs would be prepared in accordance with current City regulations. Impacts due to wind or water erosion would be less than significant.

Underground and above ground basins of various sizes are proposed on the project as permanent water quality basins (hydromodification) and temporary sediment basins. Above ground bio-retention facilities and below grade hydrodynamic separators (sealed chambers) are also planned. The hydromodification facilities would be lined with an impermeable membrane below the permeable soil mix to prevent saturation of the underlying soils based on unsuitable conditions of engineered, compacted fill per the City of San Diego 2018 Storm Water Guidelines. With respect to passive infiltration, the temporary sediment basins would be lined with an impermeable membrane where the potential exists for lateral migration of storm water to affect adjacent improvements.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in substantial increase in wind or water erosion of soils. The Reclamation Plan Amendment has been designed to minimize erosion and to convey surface runoff to natural drainage courses. Impacts would be less than significant.

Stone Creek Project

The project would not result in a substantial increase in wind or water erosion of soils, either on or off the site. Potential impacts related to erosion and sedimentation from implementation of the Stone Creek project would be avoided or reduced to below a level of significance through mandatory conformance with applicable regulatory/industry standards and codes, including applicable requirements.

Mitigation Measures

No mitigation measures would be required.

ISSUE 3

Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Significance threshold:

- If the project is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Impacts

CUP/Reclamation Plan Amendment

As summarized above, the project is not located on a geologic unit or soil that is unstable. Additionally, any potential impacts of the geologic conditions would be adequately addressed through site grading required for reclamation consistent with standard engineering standards. There are no significant geologic conditions that would affect reclamation of the site as proposed. Impacts would be less than significant.

Stone Creek Project

According to the *City of San Diego Seismic Safety Study, Geologic Hazards and Faults*, the Stone Creek project site has been mapped into four hazard categories: Category 32, Category 51, Category 52, and Category 53. Category 32 is characterized as *low (liquefaction) potential, fluctuating groundwater, minor drainages.* Category 51 is characterized as *level mesa underlain by terrace deposits and bedrock, nominal risk.* Category 52 is characterized as *other level areas, gently sloping to steep terrain, favorable geologic structure, low risk.* Category 53 is characterized as *level or sloping terrain, unfavorable geologic structure, and low to moderate risk.* The project is not located on a geologic unit or soil that is unstable. Additionally, any potential impacts of the geologic conditions would be adequately addressed through site grading and foundation design (i.e. differential settlement, hydrocompaction, etc.); and there are no significant geologic conditions that would affect development of the site as proposed. Additionally, future development would be required to comply with standard engineering standards ensuring hazards would be reduced to an acceptable level of risk. Impacts would be less than significant.

Significance of Impacts

CUP/Reclamation Plan Amendment

The project site is not located on a geologic unit or soil that is unstable. Impacts would be less than significant.

Stone Creek Project

Potential impacts related to geologic conditions of the site would be avoided or reduced to below a level of significance through required site-specific geotechnical investigation, implementation of associated design/construction recommendations and mandatory conformance with applicable regulatory/industry standards and codes. Significant impacts would not result.

Mitigation Measures

No mitigation measures would be required.

Table 5.9-1. *Deterministic Site Parameters*

Fault Name	Distance from Site (miles)	Maximum Earthquake Magnitude	Peak Site Acceleration (g)
Rose Canyon	7	7.2	0.33
Coronado Bank	19	7.6	0.19
Newport Inglewood (Offshore)	24	7.1	0.12
Elsinore-Julian	30	7.1	0.09
Elsinore-Temecula	33	6.8	0.07

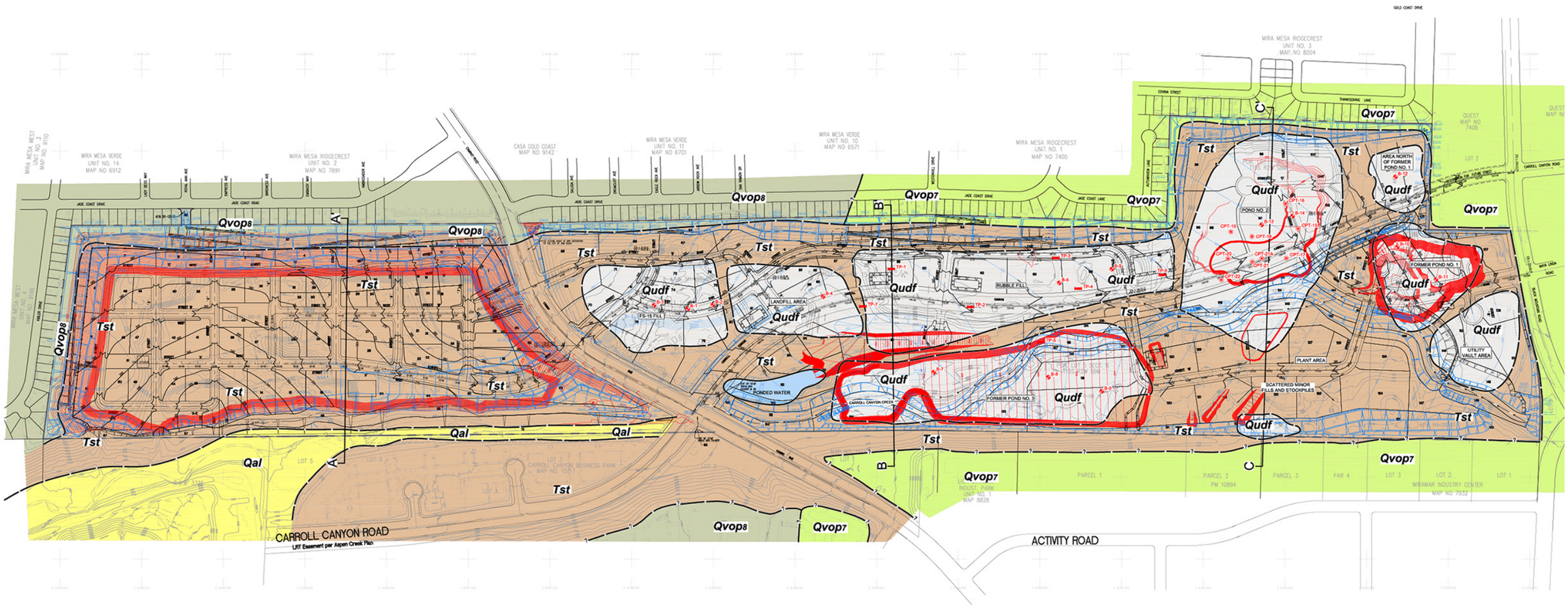


Figure 5.9-1. ***Geologic Map***

5.10 HYDROLOGY

This section evaluates the potential hydrology impacts associated with Stone Creek (the project). The following discussion is based on the *Preliminary Hydrology and Hydraulics Report* prepared by BDS Engineering, Inc. (March 29, 2019), which is included in Appendix H.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of hydrology impacts associated with the future school would be required at that time.

5.10.1 Existing Conditions

WATER RESOURCES

Surface Water

The San Diego region has thirteen principal stream systems originating in the western highlands that flow to the Pacific Ocean. Most of the streams of the San Diego region are interrupted in character, having both perennial and ephemeral components due to the rainfall pattern and the development of the surface water impoundments.

The project site is located within the Peñasquitos Hydrologic Unit (Unit 6.00) of the San Diego Region, based on the *Water Quality Control Plan for the San Diego Basin.* The Peñasquitos Hydrologic Unit is a triangular–shaped area of about 170 square miles extending from Poway to La Jolla. The unit is generally bordered to the north by the San Dieguito River watershed and to the south by the San Diego River watershed. The major surface waters within this Hydrologic Unit are Los Peñasquitos Creek and Carmel Creek, which flow eastward to the Los Peñasquitos Lagoon and then the Pacific Ocean. Development within the hydrologic unit consists of a variety of lands uses, including high-density commercial and residential uses in the University and Mira Mesa areas; medium-density residential areas; and open space areas such as Los Peñasquitos Canyon, the area around MCAS Miramar, the Del Mar Mesa, and Rose Canyon. The unit is relatively dry with annual precipitation levels ranging from approximately eight inches along the coast to over 18 inches at the inland reaches.

The project site is located in the Miramar Reservoir Hydrologic Area, which is part of the broader San Diego Region Peñasquitos Hydrologic Unit. This hydrologic unit drains the area from eastern San Diego to the Pacific Ocean via Los Peñasquitos Lagoon. The project site is located within Carroll Canyon. Carroll Canyon Creek flows through the project site in an east-west direction, eventually entering Los Peñasquitos Lagoon located at the coast. Carroll Canyon Creek has a 100-year floodplain within the project site.

Groundwater

Groundwater exists in small alluvial aquifers within the basin. Historical movement of the groundwater has been down-gradient towards the Pacific Ocean. Marshy conditions exist up to two miles inland from the ocean. Recharge to the alluvial aquifers of Los Peñasquitos and Carroll Canyons are from stream flow, precipitation, groundwater flow from the surrounding formations, and returns from municipal systems to recharge groundwater basins.

PROJECT SITE CONDITIONS

Within the Stone Creek project site, Carroll Canyon Creek is intercepted by an existing 24-inch, 66-inch, and 14-foot storm drain system located at the southeast corner of the site, heading west through the designed creek. The area west of Camino Ruiz (approximately 92 acres) generally slopes from all around the existing mining pit to the mid-southerly edge. A small area at the southern portion of the project site discharges southerly towards Carroll Canyon Creek. The area east of Camino Ruiz (approximately 195 acres) generally slopes from northeast to southwest. Grades in this area continually change due to on-going mining. Storm water runoff from off-site areas enters the project site along and east of Camino Ruiz. On the northerly side, an existing 42-inch reinforced concrete pipe (RCP), 18-inch asbestos concrete pipe (ACP), 24-inch ACP, and 30-inch ACP outlet into the site. On the easterly side of the site, paralleling Black Mountain Road, a 96-inch cast iron pipe (CIP) and 66-inch RCP enter the site. The 66-inch RCP flows into the creek at the southerly part of the site.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site(see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts associated with Hydrology assumes this baseline would not differ from the Existing Conditions as presented above.

5.10.2 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

Based on the City of San Diego Development Services Department's *Significance Determination Guidelines under the California Environmental Quality Act* for impacts to hydrology, a project may result in a significant impact if it meets one or more of the following criteria:

- If a project would result in increased flooding on- or off-site there may be significant impacts on upstream or downstream properties and to environmental resources.

- If a project would result in decreased aquifer recharge there may be significant impacts on hydrologic conditions and well-water supplies because the area available for aquifer recharge is reduced.

- If a project would grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25 percent grade, and would drain into a sensitive water body or stream, there may be significant impacts on stream hydrology if uncontrolled runoff results in erosion and subsequent sedimentation of downstream water bodies.

- If a project would result in modifications to existing drainage patterns there may be significant impacts on environmental resources such as biological communities and archaeological resources.

ISSUE 1

Would the proposed project result in a substantial increase in impervious surfaces and associated increased runoff?

ISSUE 2

Would the proposed project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?

Significance thresholds:

- If a project would grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25 percent grade, and would drain into a sensitive water body or stream, there may be significant impacts on stream hydrology if uncontrolled runoff results in erosion and subsequent sedimentation of downstream water bodies. If a project would result in modifications to existing drainage patterns, there may be significant impacts on environmental resources such as biological communities, archaeological resources, etc.

- If a project would result in modifications to existing drainage patterns, there may be significant impacts on environmental resources such as biological communities, archaeological resources, etc.

Impacts

CUP/Reclamation Plan Amendment

As part of the CUP/Reclamation Plan Amendment, the project would involve finish grading of approximately 195 acres on the east side of Camino Ruiz, a mining basin approximately 92 acres to the west of Camino Ruiz, construction of detention basins (west and east of Camino Ruiz), construction of sediment basins (east of Camino Ruiz), and re-alignment of Carroll Canyon Creek flowing from east to west through the south side of the entire site. West of Camino Ruiz, Carroll Canyon Creek would generally flow within its current alignment. East of Camino Ruiz, the

Reclamation Plan Amendment would result in graded slopes at a slope ratio of 2:1 with benching. For the most part, this area would sheet flow to the southerly end where it would discharge to the existing creek. Temporary sediment basins would be constructed to control urban pollutants.

Runoff entering the project site from off-site areas would continue under the built conditions and during completion of the CUP/Reclamation Plan Amendment. Storm drains located along the easterly project site border (96-inch CIP, 66-inch RCP, and 14-foot CMPA) would be connected into the re-aligned Carroll Canyon Creek. All existing off-site storm drain pipes along the northerly property line (42-inch RCP, 18-inch ACP, 24-inch ACP and 30-inch ACP) would be routed using a storm drain system separate from the on-site generated storm water. As such, a substantial alteration of off-site drainage patterns would not occur.

With the CUP/Reclamation Plan Amendment, off-site drainage would continue to enter the site as it does in the existing conditions. Storm drains located along the easterly edge would be connected into the realigned and restored creek. All existing off-site storm drain pipes along the northerly property line would be routed using a storm drain system separate from the on-site generated storm water. Off-site runoff would be separated from on-site generated flows, routed through the site and directly to the Carroll Canyon Creek without addition of any on-site generated runoff.

Stone Creek Project

As part of the project, the portion of Carroll Canyon Creek that flows through the project would be re-aligned, restored, and enhanced. The re-aligned creek would capture storm water runoff from the existing 96-inch CIP, 66-inch RCP, and 14-foot corrugated metal pipe arch (CMPA) on the easterly side of the site. Proposed modification of the floodplain is contingent upon Federal Emergency Management Agency (FEMA) issuance of a Conditional Letter of Map Revision (CLOMR), based on review of the hydraulic analysis for the project proposal. The CLOMR was issued by FEMA on September 26, 2016. (See Appendix U.) City Council would consider the approval of the proposed modification of the floodplain limits as a part of the project. The area west of Camino Ruiz would be graded and roadways, including curbs and gutters and sidewalks, as well as associated utilities, would be constructed. Underground detention systems are proposed in four drainage areas to control peak flow runoff and satisfy hydromodification requirements. Proposed underground detention basins have been sized for the differential in 100 year storm runoff and hydromodification. In addition, a hydrodynamic separator would be installed upstream of the underground detention system to pretreat the storm water for sediment trash and debris and other pollutants before entering the detention system.

Storm water would be captured within the proposed storm drain system by curb inlets for each corresponding drainage area. Captured runoff would be retained throughout a storm event in the proposed detention basins and then discharged through outlet pipes. The outlet pipes are sized to

release stored runoff into Carroll Canyon Creek at pre-development flow rates to meet hydromodification requirements. This ensures that there is no net increase in peak runoff and that receiving waters are not adversely affected by flows from the site. The underground storm drain system is sized to receive the ultimate development. Table 5.10-1, *Pre-Development and Post-Development Summary* shows the changes to the drainage area before and after development of the project. No significant impacts associated with hydrology, drainage, and runoff would occur.

The off-site drainage entering the project site under existing conditions would continue to enter the site. Storm drains located along the easterly project site border (96-inch, 66-inch, and 14-foot CMPA) would be connected into the realigned Carroll Canyon Creek. All storm drain pipes along the northerly property line (42-inch RCP, 18-inch ACP, 24-inch ACP, and 30-inch ACP) discharge to Carroll Canyon Creek by separate underground storm drain systems and would not be connected to any on-site generated storm water. Adherence to City requirements for hydrology, drainage, and storm water control would ensure that significant impacts do not occur.

The development phase of the project would result in urban development of the project site, an expansive parks and open space system, landscaped slopes, and construction of streets and infrastructure to serve proposed development. Today, the project site is essentially all pervious in nature, as on-going mining occurs on the project site, and the amount of impervious surfaces is limited. With implementation of the proposed Stone Creek project, the amount of impervious surfaces would increase from what exists today. However, urban runoff would be controlled in accordance with City regulations so that significant impacts associated with hydrology would not occur.

Currently, the site is assumed as zero percent impervious surfaces due to limited development on the project site and the on-going mining operations. During the development phase of the project, discharge from the project site would increase from 192.0 cubic feet per second (cfs) to 287.2 cfs. The outlet discharges for unmitigated flows for the 100 year storm event are summarized in Table 5.10-2, *Outlet Discharge Summary (without Detention)*, where post-development flows exceed pre-development flows. In Table 5.10-3, *Outlet Discharge Summary (with Detention)*, the post-development flows are less than or equal to the pre-development flows due to construction of on-site detention basins and detention basin runoff mitigation for a 100-year storm event. Unmanaged flows for a 100-year storm event are estimated to be 940 cfs. Off-site discharge shall be routed by an underground storm drain system that is separate from any system with onsite generated storm water. As stated under *Issue 1*, off-site storm water would be directly discharged via a separate storm drain into Carroll Canyon Creek; therefore, no change in flow rates would occur (Table 5.10-4, *Outlet Discharge Summary – Off-site Drainage – 100-Year Storm Event*).

The project is subject to Hydromodification Management and shall incorporate flow control and treatment control performance criteria for increase in impervious surfaces associated with the ultimate development. The basin size requirements are summarized in the Storm Water Quality

Management Plan for the project (see Appendix L of this EIR). With incorporation of Hydromodification Management, impacts to hydrology would not be significant.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in an increase in impervious surfaces. A substantial increase in runoff or alteration of off-site drainage patterns would not occur. No significant hydrology impacts would result.

Off-site runoff would be separated from on-site generated flows, routed through the site and directly to the Carroll Canyon Creek without addition of any on-site generated runoff. Impacts would be less than significant.

Stone Creek Project

The Stone Creek project would increase the amount of impervious surfaces, as it would replace the mining site with urban development, including streets, infrastructure, parks and open space areas, and buildings. However, the project has been designed in accordance with City storm water and hydromodification standards. Adherence to State and City Water Quality Standards would be assured through permit conditions. Therefore, significant impacts associated with an increase in impervious surfaces and associated runoff would not occur.

The project would alter on-site drainage patterns to accommodate future development. Drainage and run-off would be controlled through the proposed storm drain system and detention basins, which have been designed in accordance with City standards and hydromodification requirements. Adherence to State and City Water Quality Standards would be assured through permit conditions. Therefore, significant impacts associated with an increase in impervious surfaces and associated runoff would not occur. The project would not result in a substantial alteration of off-site drainage patterns. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Table 5.10-1. ***Pre-Development and Post-Development Summary***

Drainage Area	DMA/ Sub-Area	C	Impervious Area	Pervious Area	Q (cfs)	Q Detained (cfs)	Q Released (cfs)
Pre-Development	**M-A**	0.35	0.00	91.74	101.00	0	101.00
	M-C	0.38	8.90	169.12	83.80	0	83.80
	M-D	0.35	0.00	16.35	7.10	0	7.10
Total		**0.36**	**8.90**	**277.21**	**191.90**	**0**	**191.90**
Post-Development	**DMA 1-9**	**0.70**	**161.88**	**89.00**	**208.58**	**16.68**	**191.90**
Difference:		**0**	**+152.98**	**-188.21**	**+16.68**	**+16.68**	**0**

	Volume (CF)
Detention Basin Required	456,332
Detention Basin Provided	1,581,182
Difference:	**+1,124,850**

Note: Post-development flows based on 100-year storm event will be the same or less than the pre-development flows to satisfy hydromodification and flow control requirements.

Table 5.10-2. ***Outlet Discharge Summary (without Detention)***

Outlet	Contributing Area (acre)	Pipe Size	Pre Development (Reclamation Phase) (cfs)	Post Development (Tentative Phase) (cfs)
1	91.74	42" CMP	101.00	226.8
2		48" CMP		
3	12.84	36" RCP	5.84	49.0
4	98.48	54" RCP	68.63	195.0
5	22.99	30" CMP	14.47	41.1
6	9.56	30" RCP	7.38	33.8
7	6.79	30" CMP	5.32	22.9
8	8.48	24" CMP	5.94	19.6
TOTAL	**250.88 AC**	**N/A**	**208.58 CFS**	**588.2 CFS**

Table 5.10-3. ***Outlet Discharge Summary (with Detention)***

Outlet	Contributing Area (acre)	Pipe Size	Pre Development (Reclamation Phase) (cfs)	Post Development (Tentative Phase) (cfs)
1	91.74	42″ CMP	101.00	101.00
2		48″ CMP		
3	12.84	36″ RCP	5.84	5.84
4	98.48	54″ RCP	68.63	68.63
5	22.99	30″ CMP	14.47	14.47
6	9.56	30″ RCP	7.38	7.38
7	6.79	30″ CMP	5.32	5.32
8	8.48	24″ CMP	5.94	5.94
TOTAL	**250.88 AC**	**N/A**	**208.58 CFS**	**208.58 CFS**

Table 5.10-4. ***Outlet Discharge Summary (Off-site Drainage) – 100-Year Storm Event***

Outlet	Contributing Area (acre)	Pipe Size	Pre Development (Reclamation Phase) (cfs)	Post Development (Tentative Phase) (cfs)
OS-0	37.42	18″ RCP	52.5	52.5
OS-1	39.48	42″ RCP	52.5	52.5
OS-2	13.39	18″ CMP	23.3	23.3
OS-3	16.13	24″ CMP	38.4	38.4
OS-4	52.04	30″ ACP	70.9	70.9
TOTAL	**158.46 AC**	**N/A**	**237.6 CFS**	**237.6 CFS**

5.11 WATER QUALITY

This section evaluates the potential water quality impacts from the project based on the *Storm Water Quality Management Plan (SWQMP)* prepared for the project by BDS Engineering, Inc. (March 29, 2019), which is included as Appendix L. For water quality purposes, the scope of the SWQMP includes analysis of the reclamation phase that would occur as part of the Reclamation Plan Amendment and grading of the site that would occur as part of the VTM.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of water quality impacts associated with the future school would be required at that time.

5.11.1 Existing Conditions

The Stone Creek project site is located within the Poway Hydraulic Area, within the Los Peñasquitos Hydrologic Unit. The Los Peñasquitos Hydrologic Unit is comprised of the Los Peñasquitos Creek Watershed, coastal tributaries, and the Mission Bay Watershed. These watersheds drain a highly urbanized region located almost entirely west of I-15 in coastal San Diego County. Collectively and individually, the watersheds support a variety of water supply, economic, recreational, and habitat-related beneficial uses. The major receiving waters, Los Peñasquitos Lagoon and Mission Bay, are both fragile systems that support diverse native fauna and flora. Both water bodies are especially sensitive to the effects of pollutants due to restricted or intermittent tidal flushing.

Los Peñasquitos Creek watershed encompasses a land area of approximately 100 square miles, including portions of the cities of San Diego, Poway, and Del Mar. The watershed is highly urbanized with a population of approximately 400,000 residents. The creek discharges to the 0.6-square mile Los Peñasquitos Lagoon.

Los Peñasquitos Canyon Creek and Los Peñasquitos Lagoon both have 303(d) listed impacts. [The term "303(d) list" is short for the list of impaired and threatened waters (stream/river segments, lakes) that the Clean Water Act requires all states to submit for EPA approval every two years on even-numbered years.] There are no Total Maximum Daily Loads (TMDLs) for any of the receiving waters from the project site. (A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.) According to the California 2006 303(d) list published by the State Water Resources Control Board (SWRCB), Los Peñasquitos Canyon Creek and Los Peñasquitos Lagoon are beneficial impaired water bodies. Los Peñasquitos Canyon Creek is impaired for Phosphate and Total Dissolved Solids. Los Peñasquitos Lagoon is impaired for Sedimentation/Siltation.

The site is currently being used for mining operations for coarse and fine aggregates (sand and gravel) used in the construction industries. The majority of the site is pervious with some vegetation in unmined locations and along the slopes surrounding the site. Camino Ruiz, running north to

south, splits the project site into two parts. Carroll Canyon Creek runs east to west in the southern portion of the site and has a 100-year floodplain within the project site. Carroll Canyon Creek eventually drains to Los Peñasquitos Lagoon on the coast.

For purposes of the water quality analysis, the site can be divided as west of Camino Ruiz and east of Camino Ruiz. The existing conditions of these areas differ, as described below. However, due to the on-going mining, the site's terrain and landform continue to fluctuate.

EXISTING CONDITIONS - WEST OF CAMINO RUIZ

On the west side of Camino Ruiz, the mined depth occurs from elevations at approximately 435 AMSL to 215 AMSL with 2:1 slopes on all sides. A driveway entrance into the mining operations is located at the southeasterly corner of the portion of the project site west of Camino Ruiz. The majority of the site is a pervious surface, as it has been mined out and is essentially void of native vegetation as a result of ongoing authorized mining operations. This area slopes towards the mid-southerly end of the site, where storm water is currently retained for infiltration and evaporation in mining ponds.

EXISTING CONDITIONS – EAST OF CAMINO RUIZ

The site east of Camino Ruiz is also being utilized for mining operations. Due to continued mining operations, the site's grade would fluctuate until the completion of the mining phase in this area. The majority of the site east of Camino Ruiz has a permeable surface; however, there are impervious surfaces from existing structures typical of mining operations, such as plant equipment and a small office building, which occur primarily in the southeastern quadrant of the project site. Slopes surrounding the site of the area east of Camino Ruiz are 2:1 with no benching. Mined areas at the northeast and southwest corner are currently being utilized for retention of storm water runoff.

In accordance with City of San Diego Storm Water Requirements Applicability Checklist (Form DS-560, February 2016), the project is a Priority Development Project (PDP) because the project is:

- New development that creates 10,000 square feet or more of impervious surfaces collectively over the project site.
- New development or redevelopment of a restaurant.
- New development or redevelopment of a parking lot that creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).
- New development or redevelopment of streets, roads, highways, freeways, and driveways.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of Water Quality impacts assumes this baseline would not differ from the Existing Conditions as presented above.

5.11.2 Regulatory Framework

FEDERAL

Clean Water Act of 1972

The Federal Clean Water Act of 1972 is the principle law governing pollution control and water quality of the Nation's waterways. The objective of this Act is to restore and maintain the chemical, physical and biological integrity of the Nation's waters (33 U.S.C. 1251). Section 402 of the Clean Water Act controls water pollution through the National Pollutant Discharge Elimination System (NPDES), by regulating point sources that discharge pollutants into waters of the U.S. Implementation of the act is the responsibility of the EPA, which has delegated much of that authority to State and regional agencies.

Executive Order 11988, Floodplain Management

The major requirements of this Federal order are to avoid support of floodplain development; to prevent uneconomic, hazardous, or incompatible use of floodplains; to protect and preserve the natural and beneficial floodplain values; and to be consistent with the standards and criteria of the National Flood Insurance Program. The basic tools for regulating construction in potentially hazardous floodplain areas are local zoning techniques. Proper floodplain zoning can be beneficial in the preservation of open space, retention of floodplains as groundwater recharge areas, and directing of development to less flood-prone areas.

STATE

State Water Resources Control Board Construction General Permit

Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the requirements of this permit. To be in compliance, the applicant for a construction permit must file a complete and accurate Notice of Intent with the State Water Resources Control Board. Compliance requires conformance with applicable BMPs and development of a Storm Water Pollution Prevention Plan. These prevention plans are to contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project.

LOCAL

The Regional Board regulates waste discharge and reclaimed water use to minimize and control adverse effects on the quality and beneficial uses of the Region's ground and surface waters. The Regional Board issues permits, called "waste discharge requirements" and "master reclamation permits" which require that waste and reclaimed water not be discharged in a manner that would

cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan. The Regional Boards enforce these permits through a variety of administrative means.

The San Diego Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy; (3) describes implementation programs to protect the beneficial uses of all waters in the Region; and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan [California Water Code sections 13240 thru 13244, and section 13050(j)]. Additionally, the Basin Plan incorporates by reference all applicable State and Regional Board plans and policies. The Basin Plan is the Regional Board's plan for achieving the balance between competing uses of surface and ground waters in the San Diego Region.

San Diego Regional Water Quality Control Board (Water Board) Order No. R9-2007-0001, NPDES Permit No. CAS0108758

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) regulates discharges from Phase I municipal separate storm sewer systems (MS4s) in the San Diego Region under the Regional MS4 Permit. The Regional MS4 Permit covers 39 municipal, county government, and special district entities (referred to jointly as Co-Permittees) located in San Diego County, southern Orange County, and southwestern Riverside County who own and operate large MS4s which discharge storm water (wet weather) runoff and non-storm water (dry weather) runoff to surface waters throughout the San Diego Region. The Regional MS4 Permit, Order No. R9-2013-0001, was adopted on May 8, 2013 and initially covered the San Diego County Co-Permittees. Order No. R9-2015-0001 was adopted on February 11, 2015, amending the Regional MS4 Permit to extend coverage to the Orange County Co-Permittees. Finally, Order No. R9-2015-0100 was adopted on November 18, 2015, amending the Regional MS4 Permit to extend coverage to the Riverside County Co-Permittees.

City of San Diego Jurisdictional Urban Runoff Management Program

This document is a total account of how the City of San Diego plans to protect and improve the water quality of rivers, bays and the ocean in the region in compliance with the Water Board permit referenced above. The document describes how the City incorporates storm water best management practices into land use planning, development review and permitting, City capital improvement program project planning and design, and the execution of construction contracts.

The City of San Diego’s CEQA Significance Determination Guidelines states the following with regards to significance thresholds for water quality:

- Compliance with the Water Quality Standards is assured through compliance with the City's Storm Water Standards of the Municipal Code and implementation of Best Management Practices (BMPs) as outlined in the Water Quality Technical Report. Compliance with the water quality standards is generally considered sufficient to preclude significant impacts. However, the size and location of this project warrants an evaluation of potential impacts in spite of adherence to the standards.

Construction of any project in the City of San Diego is subject to the requirements of erosion control in the City's Grading Ordinance and is also required to comply with the SWRCB regulations , including the Regional MS4 Permit Order No. R9-2013-0001, and Order No. R9-2015-0100 amending the Regional MS4 Permit. To comply with this permit, the applicant must obtain a construction permit, which requires conformance with applicable BMPs and development of a SWPPP and monitoring program plan.

5.11.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

The City of San Diego's *CEQA Significance Determination Thresholds* states the following with regards to significance thresholds for water quality:

- Compliance with the Water Quality Standards is assured through compliance with the City's Stormwater Standards of the Municipal Code and implementation of Best Management Practices. Adherence to the water quality standards is considered to preclude water quality impacts.

ISSUE 1

Would the proposed project result in an increase in impervious surfaces or in a substantial alteration of on- or off-site drainage patterns affecting the rate and volume of surface runoff?

Significance threshold:

- Compliance with the Water Quality Standards is assured through compliance with the City's Stormwater Standards of the Municipal Code and implementation of Best Management Practices. Adherence to the water quality standards is considered to preclude water quality impacts.

Impacts

CUP/Reclamation Plan Amendment

During the Reclamation Phase, the mining pit would be contour graded with slopes ranging from 2:1 to 3:1. Benching would occur with the mined slopes around the perimeter of the site and graded to a more moderately sloped entrance to the mining pit at the southeasterly corner.

The CUP/Reclamation Plan Amendment would not result in an increase in impervious surfaces or in a substantial alteration of on- or off-site drainage patterns that could affect the rate and volume of surface runoff. The CUP/Reclamation Plan Amendment would require grading, with approximately 5.8 million cubic yards of cut and approximately 1.3 million cubic yards of material to be imported to the site. The CUP/Reclamation Plan Amendment would leave the eastern portion of the project site (east of Camino Ruiz) as a generally level interior portion, with mined slopes rimming the site at heights up to approximately 85 feet. The area west of Camino Ruiz would be left as a deep quarry depression rimmed by mined slopes ranging in heights up to approximately 120 feet. As part of mining activities, asphalt and concrete plants are in operation in the eastern portion of the site and would continue to operate under the CUP Amendment. As resources are depleted and mining operations phase out, the Reclamation Plan Amendment would be implemented to reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. The Reclamation Plan Amendment includes revegetation of all mined areas.

Runoff from the reclaimed mining site west of Camino Ruiz would sheet flow to the southerly end of the site where it would gravity flow to Carroll Canyon Creek. Runoff from the portion of the project site located east of Camino Ruiz would sheet flow from east to west for the easterly portion of this area and from west to east for the westerly portion of this area. New detention basins would be constructed as part of the Reclamation Plan Amendment to help reduce erosion, as well as runoff rates and volumes. (See Section 5.10, *Hydrology*, and Section 5.16, *Public Facilities*, for a discussion of hydrology, drainage, and storm water runoff.)

The CUP/Reclamation Plan Amendment would not result in an increase in impervious surfaces or in a substantial alteration of on- or off-site drainage patterns that could affect the rate and volume of surface runoff. Impacts would be less than significant.

Stone Creek Project

The project would result in an increase in impervious surfaces (Stone Creek Master Plan and associated actions) and a substantial alteration to drainage patterns (Stone Creek Master Plan and associated actions). Grading of the site as proposed with the VTM would include filling of the mining pit and construction of new streets, curb and gutter, sidewalk, and associated utilities such as water,

sewer, storm drain, etc. to accommodate development of the project site as proposed by the Stone Creek Master Plan. Additionally, as part of the development phase, enhancement of Carroll Canyon Creek would also occur. Storm water runoff would be captured in curb inlets strategically located within the project site and split into four separate drainage systems discharging to four separate underground detention systems. After runoff is detained, it would generally discharge towards the mid-southerly end of the project site, where it would outlet to the restored creek. To address water quality for the project and to ensure that the rate and volume of runoff are controlled, BMPs would be implemented during construction and post-construction activities, in accordance with City requirements, which implement the Regional Water Quality Control Board requirements. Implementation of BMPs would treat storm water to meet City water quality objectives and avoid significant impacts. Future development projects would be required to address stormwater requirements in effect at the time of development.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in an increase in impervious surfaces or in a substantial alteration of on- or off-site drainage patterns that could affect the rate and volume of surface runoff. Impacts would be less than significant.

Stone Creek Project

The project would result in an increase in impervious surfaces and alteration of drainage patterns. However, the modifications associated with the project are not expected to substantially affect the quality of storm water runoff leaving the site compared to existing conditions, because the project would implement BMPs to minimize the impacts of post-construction activities on the quality and quantity of storm water to the maximum extent practicable. In addition, BMPs would be implemented to control the construction sources of potential storm water pollutants. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 2

Would the proposal result in an increase in pollutant discharge to receiving waters during or following construction? Would the proposal discharge identified pollutants to an already impaired water body?

Significance thresholds:

- An increase in pollutant discharge to receiving waters during or following construction.
- Discharge of identified pollutants to an already impaired water body.

Impacts

The site of the proposed Stone Creek project and CUP/Reclamation Plan Amendment is located within Basin Number 906.10 of the San Diego Hydrologic Region, Peñasquitos Unit, Miramar Area. Currently, the site discharges to Carroll Canyon Creek, a tributary of Soledad Canyon. Soledad Canyon discharges to Los Peñasquitos Creek, located five miles upstream of Los Peñasquitos Lagoon where the watershed meets the Pacific Ocean. Soledad Canyon, Los Peñasquitos Creek and Los Peñasquitos Lagoon are listed on the Clean Water Act's 303(d) list of impaired water bodies.

Table 5.11-1, *Clean Water Act Section 303(d) Impairments for Receiving Water*, lists each water body with its impairments and likely cause. Table 5.11-2, *Pollutants of Concern Summary*, provides a summary of the anticipated and potential pollutants generated by the Stone Creek project or CUP/Reclamation Plan Amendment cross-referenced with the pollutants causing impairments to the receiving water bodies.

Run-off from the project site would contribute to the impairments of these receiving waters. The project would be required to implement temporary and permanent BMPs. Implementation of project BMPs would ensure that run-off from the project site is controlled and treated such that impacts to water quality are avoided.

Significance of Impacts

Both the CUP/Reclamation Plan Amendment and the Stone Creek project would provide appropriate source control, site design, and treatment-control BMPs as required by the City's Storm Water Standards during pre- and post-construction. These requirements would be re-verified during the ministerial process. Adherence with the standards would preclude a considerable contribution to water quality and impacts would be less than significant.

Mitigation Measures

No mitigation would be required.

ISSUE 3

What short-term and long-term effects would the proposed project have on local and regional water quality? What types of pre- and post-construction Best Management Practices (BMPs) would be incorporated into the project to preclude impacts to local and regional water quality?

Significance thresholds:

- Short-term and long-term effects on local and regional water quality.
- Pre- and post-construction Best Management Practices (BMPs) incorporated into the project to preclude impacts to local and regional water quality.

Impacts

CUP/Reclamation Plan Amendment

Three permanent underground detention/hydromodification basins would be constructed east of Camino Ruiz as part of the reclamation phase of the project. The underground systems would be pretreated by a hydrodynamic separator. The detention basins would be sized for hydromodification management, water quality, and peak flow mitigation due to construction of impervious surfaces (i.e. roadways, curb and gutter, sidewalk etc.) Six temporary sediment or desilting basins would also be constructed; two during the reclamation phase, and four as part of site development. As the lots become developed, it would be the responsibility of the developer to manage stormwater pollutants and conditions of concern in accordance with regulations in place at the time of development.

Stone Creek Project

The project is not expected to affect the quality of storm water runoff leaving the site in the near- or long-term. The project would implement BMPs directed at precluding impacts to local and regional water quality. During site development, the westerly portion of the project site would be divided into four watershed areas where the underground storm drain system would be routed through a hydrodynamic separator prior to discharge into an underground detention system. This prevents larger trash and debris and other pollutants from entering the detention system. Four underground detention basins would be constructed. The underground system would be pretreated by a structural treatment control device (hydrodynamic separator).

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would provide appropriate source control, site design, and treatment-control BMPs as required by the City's Storm Water Standards during the reclamation phase. These requirements would be re-verified during the ministerial process. Adherence with the standards would preclude a considerable contribution to water quality and impacts would be less than significant.

Stone Creek Project

Implementation of the proposed BMPs would avoid the potential for significant impacts to water quality. The Stone Creek project would provide appropriate source control, site design, and treatment-control BMPs as required by the City's Storm Water Standards during pre- and post-construction. These requirements would be re-verified during the ministerial process. Adherence with the standards would preclude a considerable contribution to water quality and impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Table 5.11-1. ***2006 Clean Water Act Section 303(d) Impairments for Receiving Water***

Receiving Water Body	Listed Impairments/Pollutants	Pollutants Causing Impairments
Soledad Canyon	Sediment Toxicity	Heavy Metals, Organic Compounds
Los Penasquitos Creek	Phosphate, Total Dissolved Solids	Nutrients
Los Penasquitos Lagoon	Sedimentation, Siltation	Sediment

Table 5.11-2. ***Pollutants of Concern Summary***

Pollutant	Anticipate from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment	X	X
Nutrients	X	X
Heavy Metals	X	X
Organic Compounds	X	X
Trash & Debris	X	
Oxygen Demanding Substances	X	
Oil & Grease	X	
Bacteria & Viruses	X	
Pesticides	X	

5.12 MINERAL RESOURCES

This section evaluated the potential mineral resources impacts associated with Stone Creek (the project). For this analysis, "mineral resources" refers to aggregate resources. Aggregate resources consist of sand, gravel, and crushed rock.

5.12.1 Existing Conditions

The project site is currently the location of a resource extraction mining operation. Mining activities have occurred on the property since the 1950s, extracting and processing the construction-grade sand and gravel material for use in construction and road building projects. Some of the materials resulting from current mining activities are stored in stock piles and marketed as bulk aggregate, while the majority of the materials processed on-site are conveyed directly into the on-site concrete and asphalt batch plants.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts to Mineral Resources assumes this baseline would not differ from the Existing Conditions as presented above.

5.12.2 Regulatory Framework

STATE

Surface Mining and Reclamation Act

In 1975, the SMARA was enacted to establish an effective and comprehensive surface mining and reclamation policy. Under authority granted by SMARA, the California Department of Conservation, DMG, established MRZs for the western San Diego County area according to the presence or absence of significant concrete-grade aggregate deposits. The results of the classification of land was summarized in a DMG Special Report 153, which was intended to be an accurate, unbiased data base to assist local government in the decision-making process. As shown in Figure 5.12-1, *Mineral Land Classification of the Western San Diego County Production-Consumption Region – Kearny Mesa-Mission Valley Resource Area*, the project site is within an MRZ-2 zone, which is defined as an area *where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists*. Specifically, the project site is identified within Sector J.

Sector J covers an area of 34,961 acres of Eocene conglomerate terrain, including Kearny Mesa and the hills to the east, along with several isolated patches to the north and a few areas near Mission Valley, south of Kearny Mesa. A large, central part of the sector is on MCAS Miramar, which is outside the jurisdiction of local governments. The thickness of the Eocene conglomerate units varies. Density can be calculated from geologic maps of the area, showing exposures of the Stadium and Pomerado Conglomerates. At the time DMG Special Report 153 was published (1983), six producers

– Fenton, Conrock (now Vulcan), Padre Transit, Nelson Sloan, Asphalt Inc., Sim J. Harris, and Daley Company – had permits to mine in ten different locations; and a resource of 5,810 million tons underlaid Sector J, almost all (5,780 million tons) consisting of coarse aggregate. The producers in Sector J must blend the coarse material with sand from other deposits or crushed coarse material to make PCC aggregate. Consequently, most of the remaining finer material is discarded, giving a waste factor of up to 40 percent.

California Department of Conservation

The DMG updated Special Report 153 in 1996, in a report titled "Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region." According to Open File Report 96-04, the project site is in a "permitted Portland cement concrete (PCC)-grade aggregate pits" area being mined by CalMat Company, one of 16 companies that have permitted mining operations that produce PCC-grade aggregate in Western San Diego County. The material specifications for PCC-grade aggregate are more restrictive than the specifications for aggregate used in other applications. Deposits that are acceptable for use as PCC-grade aggregate are the rarest and most valuable of aggregate resources.

Figure 5.12-2, *Aggregate Sustainability in California*, identifies the project site and shows its relationship to a 50-year aggregate demand compared to permitted aggregate reserves in California. As shown in Figure 5.12-2, the project site is identified as an "Area with Short Term Aggregate Supply" and is anticipated to have less than ten years of reserves remaining.

LOCAL

Mira Mesa Community Plan

Within the Carroll Canyon Master Plan Element of the Mira Mesa Community Plan are *Requirements for Continued Mining Operations.* This subsection of the Carroll Canyon Master Plan Element states that extensions to existing Conditional Use Permits may be considered if they are necessary to fully extract the aggregate resources in Carroll Canyon. Conformance with the following guidelines is to be reviewed for Conditional Use Permit amendments:

1. Plans should include the planting and seeding of recontoured hillside areas with trees, shrubs, and grasses which can be expected to exist on their own once established. Supplementary watering of plant materials and grass areas would be necessary to achieve establishment. The planting pattern and densities should be in keeping with the natural growth on adjacent unmined lands.
2. Variable slope ratios (horizontal and vertical) should be applied over reclaimed surfaces to more closely resemble natural hillsides.
3. Control of erosion of the reclaimed surface from natural runoff storm waters or other water sources should be instituted.

4. Reclamation plans should include for an open space corridor in Carroll Canyon.

5.12.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

The City of San Diego's *California Environmental Quality Act Significance Determination Thresholds* states :

In analyzing the potential for impacts to mineral resource, staff should consult the Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region, 1996, Department of Conservation, California Department of Geological Survey, located in the EAS library. The analyst should answer the following questions:

1. **Is the project site located in the MRZ 2 classification area?**
   A "yes" answer does not automatically mean that a significant impact should be identified. Additional factors should be considered, using questions 2 through 4.

2. **Is the site large enough to allow economically feasible aggregate mining operations?**
   It is unlikely that a site smaller than 10 acres in size could accommodate economically feasible operations. However, Geology Section staff should be consulted, as more information will be required to make a determination.

3. **If the site is too small for an economically feasible mineral resource extraction operation, would its development with the proposed use preclude a mining operation adjacent to or surrounding the site?**
   For example, in the drawing below, assume that properties A, B, and C are all within the MRZ 2 classification, and property B is too small to support a mining operation. If a residential development were built on property B, it could preclude or substantially interfere with development of a mineral resource extraction project or projects on properties A and C, which are large enough to support economically feasible mineral resource extraction. A significant impact should likely be identified for the residential proposal on property B.

4. **Is the site currently being mined?**
   If an economically feasible mineral extraction operation is the site's current use, and the site is not exhausted, a different use of the site would likely result in a significant impact on the availability of a locally important mineral recovery site.

ISSUE 1

Would the project result in the loss of significant mineral resources (e.g. sand and gravel) as identified in "Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region," 1996, Department of Conservation, California Department of Geological Survey?

Significance thresholds:

- If the project site is located in the MRZ 2 classification area.
- If the site is large enough to allow economically feasible aggregate mining operations.
- If the site is too small for an economically feasible mineral resource extraction operation, its development with the proposed use would preclude a mining operation adjacent to or surrounding the site.
- If an economically feasible mineral extraction operation is the site's current use, and the site is not exhausted, would a different use of the site result in a significant impact on the availability of a locally important mineral recovery site.

Impacts

The complete utilization of mineral resources would occur through the implementation of the proposed CUP/Reclamation Plan Amendment allowing the continued extraction of mineral resources from the land concurrent with development of the Stone Creek Master Plan. Currently, the project site is permitted for sand and gravel extraction, as well as concrete and asphalt plants and mining operations through the 1981 CUP/Reclamation Plan. The 1981 CUP/Reclamation Plan would be amended to adjust grading and extend the mining of aggregate materials for 30 years from the date of project approval. The Stone Creek Master Plan would provide for the ultimate re-use of the site and would be implemented in phases (see Section 3.0, *Project Description*, for a discussion of phasing) as mining resources are depleted through the CUP/Reclamation Plan Amendment.

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would result in allowance of mining operations to continue for 30 years from the date of project approval. As a result, no loss of significant mineral resources would occur. As noted above, the Carroll Canyon Master Plan Element of the Mira Mesa Community Plan contains specific requirements for extending CUPs with which conformance is required. The CUP/Reclamation Plan Amendment would be in conformance with these requirements. Table 5.12-1, *Carroll Canyon Master Plan Requirements for Continued Mining Operations*, demonstrates the conformance.

Stone Creek Project

The project would allow for Final Maps to replace reclamation in a phased manner, allowing for development of the mined site in accordance with the proposed Stone Creek Master Plan and VTM. As the CUP/Reclamation Plan Amendment would allow for mining of resources until depletion and prior to build-out of the Stone Creek development, the project would not have a significant impact on mineral resources.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would allow for the continued mining of resources until depletion and would not result in a loss of significant mineral resources. No impact to mineral resources would occur.

Stone Creek Project

The Stone Creek Master Plan would allow for the ultimate re-use of the site as resources are depleted. Therefore, the project would not result in a loss of significant mineral resources and no impact to mineral resources would occur.

Mitigation Measures

No mitigation measures would be required.

Table 5.12-1. *Carroll Canyon Master Plan Requirements for Continued Mining Operations*

Requirement for Continued Mining	Conformance Explanation
1. Plans should include the planting and seeding of recontoured hillside areas with trees, shrubs, and grasses which can be expected to exist on their own once established. Supplementary watering of plant materials and grass areas would be necessary to achieve establishment. The planting pattern and densities should be in keeping with the natural growth on adjacent unmined lands.	Reclamation would begin in the eastern portion of the site and proceed in a westerly direction, as shown in Figure 3-3, *Reclamation Plan Phasing Plan*. As each phase is reclaimed, it would be landscaped in accordance with the proposed *Reclamation Plan Amendment Landscape Development Plan*. The Landscape Development Plan proposes that the reclaimed slopes be landscaped with a variety of native plant species as hydroseed mix and container stock (including shrubs and trees). Species have been selected based on slope inclination and location of plantings. For example, plantings along the creek corridor focus on riparian species, while upland plant species are proposed for slope areas. The relatively level areas in the central portions of the site would also be hydroseeded with a native plant mix for erosion control.
2. Variable slope ratios (horizontal and vertical) should be applied over reclaimed surfaces to more closely resemble natural hillsides.	The Reclamation Plan Amendment proposes contour grading of mined slopes such that the slope gradients vary and range from 4:1 to 2:1.
3. Control of erosion of the reclaimed surface from natural runoff storm waters or other water sources should be instituted.	The Reclamation Plan Amendment would construct storm water control devices to act as detention facilities for water quality and erosion control.
4. Reclamation plans should include an open space corridor in Carroll Canyon.	With the Reclamation Plan Amendment, reclamation of the project site without implementation of the Stone Creek Master Plan project would result in revegetated open land and a reconfigured Carroll Canyon Creek to mimic its previous alignment. As the project would lack a built environment, Carroll Canyon would function as an open space corridor. With implementation of the Stone Creek Master Plan project, Carroll Canyon Creek would be realigned and revegetated in native and native-friendly species, creating an open space corridor along the restored creek channel.

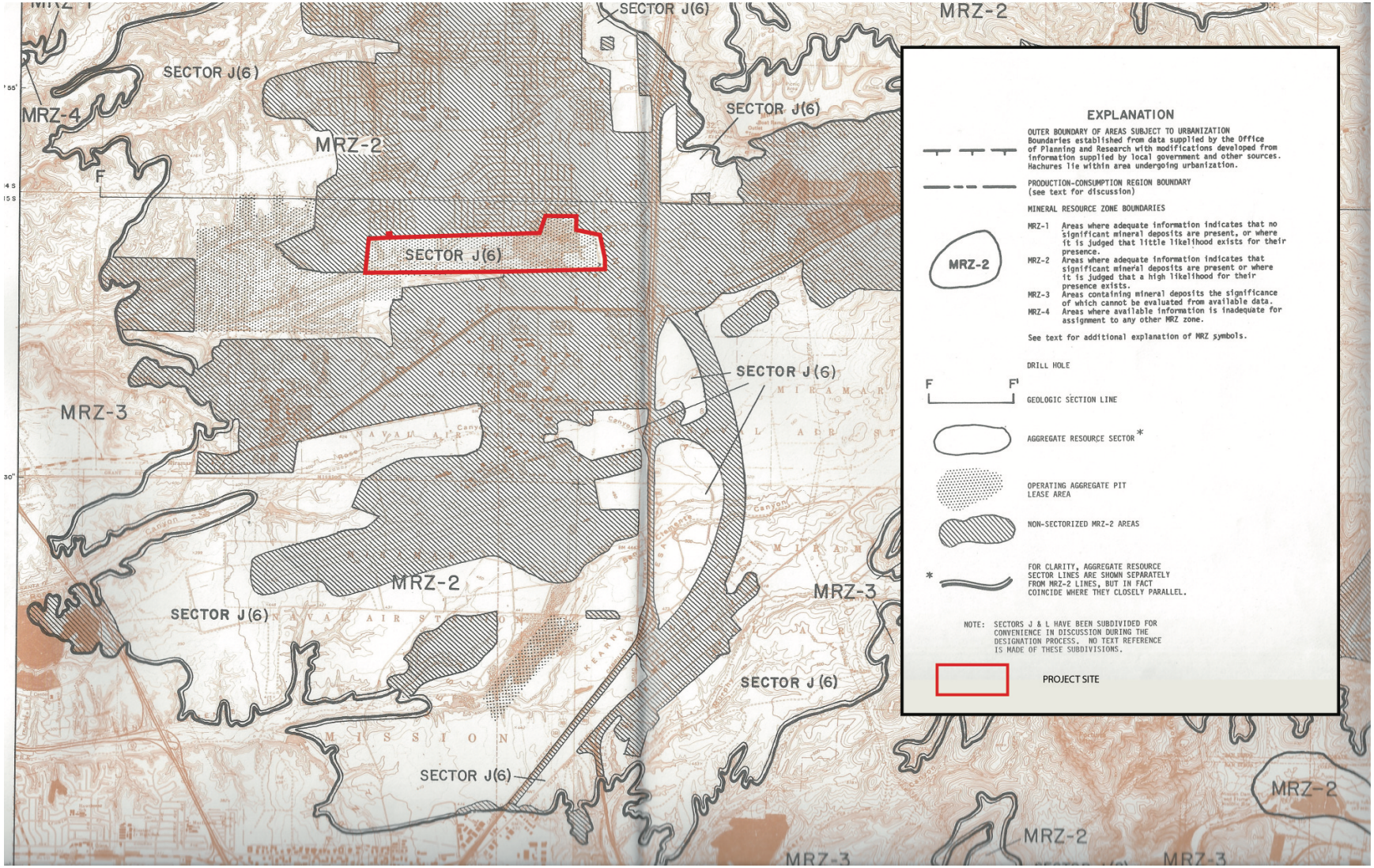


Figure 5.12-1. ***Mineral Land Classification of the Western San Diego County Production-Consumption Region – Kearny Mesa-Mission Valley Resource Area***

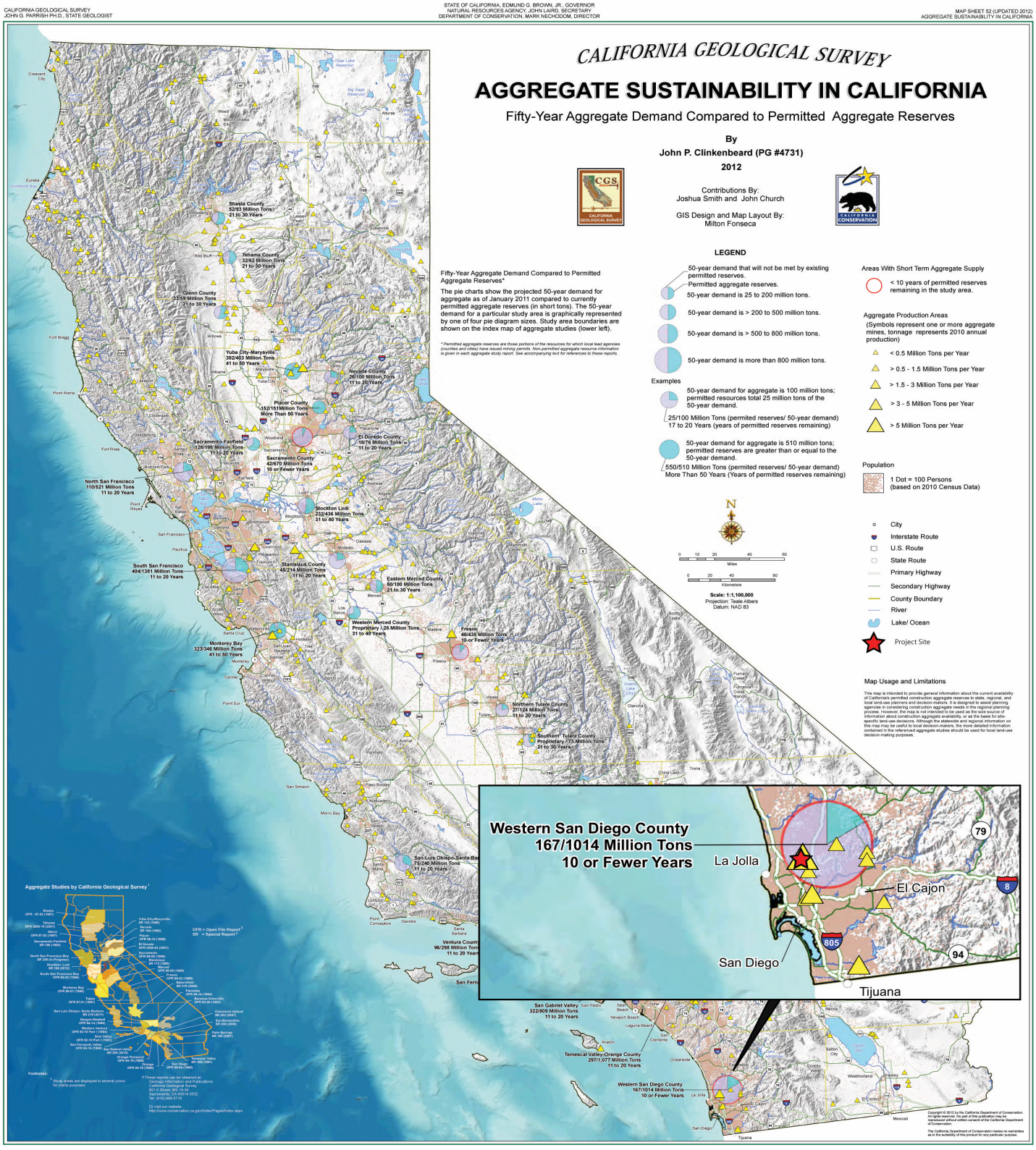


Figure 5.12-2. *Aggregate Sustainability in California*

5.13 HEALTH AND SAFETY

The analysis in this section evaluates the potential health and safety materials impacts associated with Stone Creek (the project).

A potential future school site has been identified as part of the Stone Creek project. Should the SDUSD acquire the site for development, project-level environmental analysis of health and safety impacts associated with the future school would be required at that time.

5.13.1 Existing Conditions

The Stone Creek project site is located within the Mira Mesa Community Plan area. Surrounding uses include single-family residential to the north and west, multi-family residential and light industrial uses to the east, light industrial and business park uses to the south, and light industrial and mining uses to the west. An SDG&E easement containing high voltage overhead transmission lines traverses the southern portion of the site. Currently, sand and gravel mining operations occur on the project site; reclamation of mined areas would occur as mining ceases in areas of the project site.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts associated with Health and Safety assumes this baseline would not differ from the Existing Conditions as presented above.

5.13.2 Regulatory Framework

STATE

Obnoxious uses are regulated under Section 41700 of the State Health and Safety Code, under the "Nuisance Rule." For the project site, this would be enforced by the County Department of Environmental Health. The regulation states that *a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property*. The number of people in the area that are affected is not limited to a specific distance from the source of the nuisance, as long as it can be proven that the business is the true source. In other words, there is no direct distance relationship between an obnoxious source and its impact on a sensitive receptor.

Hazardous materials regulation is discussed under Section 25532(g) of the State Health and Safety Code. The regulation states that facilities that store, handle, or use regulated substances as defined in the California Health and Safety Code Section 25532(g) in excess of threshold quantities shall prepare a risk management plan for determination of risk to the community. As identified in the

California Health and Safety Code, Section 25532(g), the term, "regulated substances" is defined as any substance that is comprised of the following:

1. A regulated substance that is listed in Section 68.130 of Title 40 of the Code of Federal Regulations pursuant to paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 U.S.C. Sec. 7412(r)(3)).

2. An extremely hazardous substance listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations that is any of the following:
   a. A gas at standard temperature and pressure.
   b. A liquid with a vapor pressure at standard temperature and pressure equal to or greater than ten millimeters mercury.
   c. A solid that is (a) in solution or in molten form, (b) in powder form with a particle size less than 100 microns, or (c) reactive with a National Fire Protection Association rating of 2, 3, or 4.

3. On or before June 30, 1997, the office shall, in consultation with the Office of Environmental Health Hazard Assessment, determine which of the extremely hazardous substances listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations do either of the following:
   a. May pose a regulated substances accident risk, with consideration of the factors specified in subdivision (g) of Section 25543.1, and should remain on the list of regulated substances until completion of the review conducted pursuant to subdivision (a) of Section 25543.3.
   b. The office shall adopt, by regulation, a list of the extremely hazardous substances identified pursuant to clause (i). Extremely hazardous substances placed on the list are regulated substances for the purpose of this article.

Facilities which handle, store, or use any quantity of toxic or highly toxic gas as defined by the most recent Uniform Fire Code (UFC), which are also regulated substances as defined in the California Health and Safety Code Section 25532(g), shall prepare an off-site consequence analysis (OCA). This analysis shall be performed in accordance with Title 19 of the California Code of Regulations Section 2750.2 and Section 2750.3. If the OCA demonstrates that toxic release could potentially impact the residential community, the facility will not store, handle, or use the material in those quantities. If a decrease in quantity of material reduces the distance to toxic endpoint to where the community is not impacted, the facility shall be able to utilize the material in that specified quantity.

Facilities that handle, store, or use any quantity of toxic or highly toxic gas need to prepare an OCA. According to Section 2750.2, the OCA parameters consist of assessing toxic endpoints stated in Section 2770.5, Table 1 and Table 3, which include, but are not limited to the following hazardous materials: Acrolein, Acrylonitrile, Ammonia, Arsine, Boron-Tetrachloride, Boron-Tetrafluoride,

Bromine, Carbon-Disulfide, Chlorine, Chloroform, Diborane, Fluorine, Formaldehyde, Furan, Hydrazine, Hydrochloric Acid, Hydrogen-Chlorine, Methyl-Chlorine, Methyl-Hydrazine, Nickel-Carbonyl, Nitric-Acid, Nitric Oxide, Oleum, Phosphine, Phosphorus, Piperidine, Sulfur-Dioxide, Sulfur-Tetrafluoride, and Vinyl Acetate. Regulated flammable substances are stated in Table 2 of Section 2770.5, and include, but are not limited to the following flammable materials: Butane, 1-Butene, 2-Butene, Carbon Oxysulfide, Chlorine Monoxide, Cyanogen, Cyclopropane, Ethane, Hydrogen, Methane, Propane, Silane, Tetramethylsilane, Vinyl Acetate, and Vinyl Fluoride. Flammable endpoints vary according to the following issues: (a) explosion, (b) radiant heat/exposure time, (c) lower flammability limit, (d) wind/speed/atmospheric stability class, (e) ambient temperature/ humidity, (f) height of release, (g) surface roughness, (h) dense or neutrally buoyant gases, and (h) temperature of released substances.

Section 2750.3 of the California Code of Regulations identifies the worst-case release scenario analysis. Based on the consequences of hypothetical toxic and hazardous release, worst-case scenarios comprise toxic gas release, toxic liquids, and flammables. Worst-case scenarios regarding toxic gases include temperature conditions and the potential source of the toxic gases as well as release rates. Worst-case scenarios pertaining to toxic liquids involve temperature, liquid source, area of potential contamination, and release rate. Worst-case scenarios pertaining to flammable materials include vaporization, determination of distance to endpoints as stated in Section 2750.2, potential passive mitigation, pressure and temperature as well as potential source of flammable material.

LOCAL

County Department of Environmental Health

The County Department of Environmental Health (DEH), Hazardous Materials Management Division (HMMD) administers the above State program and issues Unified Facility Program Permits to regulate businesses that may impact public health and safety. These include businesses that use hazardous materials, dispose of hazardous wastes, have underground storage tanks, and/or generate medical waste. The goal of the HMMD is to protect human health and the environment by ensuring hazardous materials, hazardous waste, medical waste, and underground storage tanks are properly managed. This is determined on a project specific basis.

All applications for businesses which use, handle, or store hazardous materials, including hazardous waste, must be reviewed by DEH, HMMD. The purpose of this review is to determine if a Hazardous Materials Business Plan or a Risk Management and Prevention Plan (RMPP) is required to be submitted or updated by the business, and if a DEH permit is required. If a business meets any of the following, a Hazardous Materials Business Plan would be required to be completed prior to final occupancy:

1. The quantity of hazardous materials at any one time is equal to or greater than a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for a compressed gas; or
2. The quantity of any Acutely Hazardous Material (AHM) would be equal or greater than its Threshold Planning Quantity (TPQ); or
3. Any amount of the material is a carcinogen, reproductive toxin, a hazardous gas with a Threshold Limit Value-Time Weighted Average (TLV-TWA) or Threshold Limit Value-Short Term Exposure Limit (TLV-STEL) of 110 ppm or less.

In addition, if the business handles any quantity of an AHM, the business must submit an AHM Registration Form to the Department of Environmental Health prior to issuance of the construction permit. If the business will use or store any AHMs in excess of specified quantities (TPQs), the DEH is required to conduct a site-specific computer screening prior to issuance of the construction permit. The purpose of this screening is to determine if an off-site consequence would likely result from the sudden release of the Acutely Hazardous Materials. If the probability of a release exists, the business must prepare a Risk Management and Prevention Plan.

San Diego Air Pollution Control District

Per the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588), toxic air emissions in the region are regulated by the SDAPCD. A toxic air contaminant is defined as an "air pollutant that may increase a person's risk of developing cancer and/or other serious health effects." Approximately 800 chemical compounds have been identified as having potential adverse health effects.

Hazardous air polluters in San Diego include the following types of businesses: chromium electroplating and anodizing; dry cleaning; aerospace manufacturing and rework facilities; shipbuilding and repair operations; halogenated solvent cleaning; ethylene oxide sterilizing; and miscellaneous organic chemicals process. Other types of businesses are considered hazardous air polluters; however, they are not expected to be major contributors in San Diego. These include: gasoline distribution (bulk terminals), wood furniture manufacturing, boat manufacturing, printing and publishing, research and development facilities, and off-site waste and recovery operations.

The SDAPCD requires a review of businesses which may emit air contaminants from non-vehicular sources. The purpose of this review is to determine whether an Authority to Construct and Permit to Operate is required for certain equipment at the business. In addition, the review would determine whether notification is required for demolition and renovation projects involving asbestos. Permits and notifications help San Diego County protect the public health by attaining and maintaining ambient air quality standards and preventing public nuisance.

There are no set initial limitations or prohibited types of business in relation to closeness to sensitive receptors; however, during the permitting process some issues may arise that would need to be

addressed or changed in order for standards to be met, though these are on a case specific basis. The only exception to this rule is, should the business dealing with hazardous materials be in the vicinity of a school (K-12), it must be a minimum distance of 1,000 feet away from the school. Notification of such use to the parents of each child in the school is also required.

City of San Diego

At the local level, the San Diego Fire-Rescue Department (SDFD) screens inventories of substances and inspects sites. All businesses applying for a permit which use, handle, or store any quantity of hazardous materials shall be reviewed by the SDFD through the completion and submittal of the Development Services Hazardous Materials Reporting form (DS-165). The purpose of this review is to classify the building occupancy in accordance with the CBC.

Brush Management

Proper maintenance of plants and other flammable materials around the project site can reduce future wildfire impacts on the property. Proper maintenance can also avoid creating other hazards such as soil erosion and potential slope failures. The City of San Diego LDC, Section 142.0412 requires the equivalent of a combined brush management Zone One and Two dimension of 100 feet, measured from the exterior of the structure towards the native/naturalized vegetation. Zone 1 and Zone 2 are described below. Additional references include the San Diego Municipal Code Section 55.5001, Very High Severity Zone (2012), and Fire Prevention Bureau Policy B-08-1 (revised May 4, 2010).

Zone One – 35 feet. This zone limits the use of highly flammable plant materials. Trees should not be located any closer to a structure than a distance equal to the tree's mature spread. All plantings are to be maintained in a succulent condition. Non-irrigated plant groupings over six inches in height may be retained provided they do not exceed 100 square feet in area and their combined coverage does not exceed ten percent of the total Zone One area.

Zone Two – 65 feet. This zone requires that new non-irrigated plantings have a low growing spreading habit and are self-regenerating, drought resistant, and effective in erosion control and slope stabilization. Within Zone Two, 50 percent of the plants over 24 inches in height shall be reduced to a height of six inches. Non-native plants shall be reduced in height before native plants are reduced in height. Within Zone Two, all plants remaining after 50 percent are reduced in height, shall be pruned to reduce fuel loading in accordance with the Landscape Standards in the Land Development Manual. Non-native plants shall be pruned before native plants are pruned. New plants shall be low-growing with a maximum height at maturity of 24 inches. Single specimens of native trees and tree-form shrubs may exceed this limitation if they are located to reduce the chance of transmitting fire from native or naturalized vegetation to habitable structures and if the vertical distance between the lowest branches of the trees and the top of adjacent plants are three times the height of the adjacent plants to reduce the spread of fire through ladder fueling. All new Zone Two plantings shall be irrigated temporarily until

established to the satisfaction of the City Manager. Only low-flow, low-gallonage spray heads may be used in Zone Two. Overspray and runoff from the irrigation shall not drift or flow into adjacent areas of native or naturalized vegetation. Temporary irrigation systems shall be removed upon approved establishment of the plantings. Permanent irrigation is not allowed in Zone Two.

Additionally, the City's Municipal Code, Section 142.0412(f), allows that Zone Two can be reduced at a ratio of 1 ½ feet for every 1-foot increase in Zone One. An 80-foot Zone One would preclude the need for Zone Two.

For the Stone Creek project, interim brush management for existing, adjacent development shall consist of an expanded Zone Two on the Reclamation Site consistent with the Brush Management Regulations, Section 142.0412(h)(7). Additionally, all permanent slopes, parks, and other open space areas at VTM build-out would be permanently irrigated and feature drought tolerant, low-fuel, native, and non-native species.

Electro-Magnetic Fields

SDG&E maintains an electric transmission easement corridor that crosses the southern portion of the project site in an east-west fashion and includes high voltage transmission lines. High power electrical transmission lines generate invisible electric and magnetic lines of force referred to as electromagnetic fields (EMF). In the past, there has been concern about electromagnetic fields and the relationship to increased incidence of rare forms of cancer. Studies from the late 1970s have suggested a possible relationship between cancer, specifically childhood leukemia, and exposure to electric and magnetic fields or proximity to overhead power lines. The available scientific data do not support a conclusion that electric and/or magnetic fields cause health effects. The possible link between electromagnetic fields from power lines and deleterious health effects has not been established. Thus, no land use setback distances from power lines or easements has been recommended except for the California State Department of Education, which requires a 150-foot setback from 230 kV transmission lines for adjacent school sites.

CEQA Guidelines Section 15145 states, *If after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.* Because of the inconclusive scientific evidence surrounding the issue of EMF, it has been determined that this issue is too speculative for evaluation and is not addressed in this EIR.

5.13.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

The City of San Diego has adopted its *Significance Determination Thresholds* (City of San Diego 2011). According to the Significance Determination Thresholds, the following significance thresholds have

been established for health and safety:

- Projects which propose the handling, storage and treatment of hazardous materials, e.g., a Hazardous Waste Facility, may result in a significant impact.
- Project sites on or near known contamination sources may result in a significant impact.
- Project sites that meet one or more of the following criteria may result in a significant impact.
  a. Located within 1,000 feet of a known contamination site.
  b. Located within 2,000 feet of a known "border zone property" (also known as a "Superfund" site) or a hazardous waste property subject to corrective action pursuant to the Health and Safety Code.
  c. DEH site file closed. These cases are especially important where excavation (e.g., sewer/water pipeline projects, below grade parking, basements) is involved. DEH often closes a listing when there is no longer danger to the existing use on the property. Where a change in use is proposed DEH should be consulted. Excavation, which would disturb contaminated soils, potentially resulting in the migration of hazardous substances (e.g., along utility trench lines), would require consultation by the applicant and analyst with DEH.
  d. Located in Centre City San Diego, Barrio Logan or other areas known or suspected to contain contamination sites (Check with DEH).
  e. Located on or near an active or former landfill. Hazards associated with methane gas migration and leachates should be considered. Consult with the Local Enforcement Agency (LEA) for assistance.
  f. Properties historically developed with industrial or commercial uses which involved dewatering (the removal of groundwater during excavation), in conjunction with major excavation in an area with high groundwater (such as downtown).
  g. Projects located in a designated airport influence area and where the Federal Aviation Administration (FAA) has reached a determination of "hazard" through FAA Form 7460-1, "Notice of Proposed Construction or Alteration" as required by FAA regulations in the Code of Federal Regulations (CFR) Title 14 §77.13. Inconsistency with an Airport's Land Use Compatibility Plan (ALUCP) could be a significant impact.
  h. Located on a site presently or previously used for agricultural purposes. Pesticides are routinely used during agricultural operations. Pesticides do not degrade easily; therefore, a soils assessment may be required.

ISSUE 1

Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Significance threshold:

- A project that is located in a brush fire hazard area, hillside, or an area with inadequate fire hydrant services or street access.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would result in the landscaping of the project site, including the mined slopes along the perimeter of the project site. This landscaping would be irrigated until establishment. The CUP/Reclamation Plan Amendment would not be required to implement brush management zones to reduce the risk of wildland fires, because no structures would occur as a result of implementing the CUP/Reclamation Plan Amendment. Although no formalized brush management would be required for the CUP/Reclamation Plan Amendment requires interim brush management until such a time as the Stone Creek VTM is implemented.

Stone Creek Project

The project site is located within an urbanized and developed portion of the City of San Diego. No urban forests or open space areas are located adjacent to the project site. The project site is a mining site and essentially void of natural vegetation. The Stone Creek Master Plan project would redevelop the site, including landscaping of mined slopes around the project site perimeter. This landscaping would be comprised of predominantly native, native-friendly, and drought tolerant landscaping and would be irrigated until establishment at a minimum. All permanent slopes, parks, and other open space areas at VTM build-out shall be permanently irrigated and feature drought tolerant, low-fuel, native, and native-friendly species. Additionally, the project would provide interim brush management zone(s) in accordance with City regulations. While landscaping of mined slopes could present possible fuel for fires, due to the developed nature of the project and provisions for permanent irrigation, the project would not result in exposing people or structures to significant risks associated with wildland fires.

Significance of Impacts

CUP/Reclamation Plan Amendment

Interim brush management would effectively minimize wildland fire risk. Impacts are less than significant.

Stone Creek Project

Brush management zones incorporated into project design features would effectively minimize exposure to wildland fire risk. Project impacts are less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 2

Would the project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?

Significance threshold:

- Projects which propose the handling, storage and treatment of hazardous materials, e.g., a Hazardous Waste Facility, falling under Municipal Code Section 141.1001 Hazardous Waste Research Facilities and Section 141.1002.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would extend the life of the 1981 CUP for 30 years from the date of project approval to provide for the depletion of resources on-site. The continued mining of the site, as well as reclamation following mining, would not result in hazardous emissions, as concluded in Section 5.6, *Air Quality*, of this EIR. While heavy trucks utilized for reclamation may result in the accidental release of acutely hazardous materials in the event of an accident on-site, any such events would be regulated by HMMD. No impacts would result.

Stone Creek Project

The project site is located within an urbanized and developed portion of the City of San Diego. There are four schools located within one-quarter mile of the project site: Mason Elementary School, Wangenheim Middle School, Mira Mesa Christian School, and Good Shepherd Catholic School. The areas to the east and south of the project site are the location of existing light industrial and business park/office uses. Additionally, the project proposes light industrial and business park uses within the Parkside Neighborhood and Eastside Neighborhood, as well as the Creekside Neighborhood (see Figure 3-4, *Stone Creek Land Use Map*). Various activities associated with industrial land uses have the potential to introduce toxic and hazardous materials to an area or result in toxic air emissions, which could expose residents to potential health hazards.

Per AB 2588, toxic air emissions in the region are regulated by the SDAPCD. If a business is considered to result in toxic air emission impacts, then a permit would be required from SDAPCD. Conditions are then placed on projects, which include limiting the amount of allowable emissions. There are no set initial limitations or prohibited types of business in relation to closeness to sensitive receptors. The only exception to this rule is, should the business dealing with hazardous materials be in the vicinity of a school (K-12), it must be a minimum distance of 1,000 feet away from the school. Notification of such use to the parents of each child in the school is also required. No other potential health hazards are associated with the project.

While hazardous materials and toxic air emissions are not expected to be generated by Stone Creek, the project's zoning would allow light manufacturing and research and development activities, which could be associated with hazardous materials use. However, the project site would be subject to Federal, State, and local laws regulating these effects. Table 5.13-1, *Industrial Use Regulations*, identifies agencies that regulate hazardous materials and their requirements. In this way, impacts to public health and safety would be minimized.

Once constructed, the project would introduce additional residents into an area where light industrial, office, and manufacturing uses occur to the west of the site. Hazardous materials and toxic air emissions that could be generated by the surrounding uses are regulated by Federal, State, and local regulatory agencies, as shown by Table 5.13-1, *Industrial Use Regulations*. Any business that results in the use, disposal, or emission of harmful materials must obtain permits from applicable regulatory agencies and implement mitigation measures to reduce impacts to a level below significance, thereby minimizing or eliminating impacts to public health and safety. Federal, State, and local regulations for hazardous materials and toxic air emissions would apply to the project site and all surrounding uses.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in hazardous emissions. Accidental release of acutely hazardous materials in the event of an accident on-site would be regulated by HMMD. No significant impacts would result.

Stone Creek Project

The project proposes land uses that could include the handling of hazardous materials. These uses would be regulated by the controls of the HMMD at the Federal, State, and local levels, which would ensure no hazardous emissions would impact sensitive receptors. No impacts would result due to hazardous emissions; additionally, no impacts would result due to the handle of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Due to the controls in place to regulate hazardous materials and emissions, no significant impacts would result.

Mitigation Measures

No mitigation measures would be required.

ISSUE 3

Would the project impair implementation of, or physically interfere with, an adopted emergency response plan?

Significance threshold:

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impacts

CUP/Reclamation Plan Amendment

No new development is proposed as part of the CUP/Reclamation Plan Amendment. The CUP/Reclamation Plan Amendment would allow for continued phased mining operations until 30 years after the date of project approval; allow for grading or grading adjustments to the 1981 Reclamation Plan to accommodate the relocation, restoration/enhancement of Carroll Canyon Creek through the project site; and reclaim the mined land in a manner that is adaptable for the anticipated end use of the site. The reclaimed site would be landscaped with a variety of native plant

species as hydroseed mix and container stock (including shrubs and trees). As a result, emergency response plan or emergency evacuation plan analysis is not required.

Stone Creek Project

The project is located within the developed community of Mira Mesa and on a previously disturbed site. The circulation network for Mira Mesa is in place. The project site has existing access to the circulation network and emergency services. Development of the Stone Creek Master Plan would complete the circulation network through the project site, providing for emergency access through the project site. The project's proposed construction circulation element roadways would allow for greater access to and through the project site. Additionally, the County of San Diego has established a *County Emergency Services Organization and County of San Diego Operational Area Emergency Plan* (October 2010). The project would not impair implementation of this plan.

Significance of Impacts

Project impacts on the adopted emergency response plan would not be significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 4

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment and would the project expose people to potential hazards?

Significance thresholds:

- Located on or near known contamination sources.
- Located within 1,000 feet of a known contamination site.
- Located within 2,000 feet of a known —border zone property (also known as a "Superfund" site) or a hazardous waste property subject to corrective action pursuant to the Health and Safety Code.
- DEH site file closed.
- Located in Centre City San Diego, Barrio Logan, or other areas known or suspected to contain contamination sites.
- Located on or near an active or former landfill.
- A site that has been historically developed with industrial or commercial uses which involved dewatering (the removal of groundwater during excavation), in conjunction with major excavation in an area with high groundwater (such as downtown).

Impacts

An EnviroStor search was conducted on December 6, 2018, for the project site, which covers both the CUP/Reclamation Plan Amendment and the Stone Creek project. That search yielded one site listed on the GeoTracker database. The site, R.E. Hazard Contracting Co., located at 10050 Black Mountain Road in the eastern portion of the site, is listed as a LUST Cleanup and Cleanup Program site. The LUST Cleanup site (RB Case No. 9UT3743; Loc Case No. H02363-004) involved potential diesel contaminant of soil and was completed, with the case closed as of November 30, 1998. There was also a Cleanup Program site (Loc Case No. H02363-003) at the same location, with unspecified potential contaminants or media of concern, which was completed, with the case closed as of July 7, 1996. Cleanup of the listed site has been completed. As such, the project is not located on or near a known contamination site.

Significance of Impacts

The project site is listed on the EnviroStor database. However, cleanup of the listed site has been completed and the cases are closed. No open sites are listed in the EnviroStor database, nor are any known to be located on the project site. As such, there are no impacts relative to hazardous materials.

Mitigation Measures

No mitigation measures would be required.

ISSUE 5

Would the project expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

Significance threshold:

- Located on a site presently or previously used for agricultural purposes

Impacts

CUP/Reclamation Plan Amendment

Mining operations have been in operation since the late 1950s. Current operations on the project site include aggregate extraction (mining), aggregate processing (crushing and screening), hot mix asphalt production, concrete batch plant, associated materials transfer equipment (conveyors), and materials storage equipment (including storage piles and silos). The Carroll Canyon facility as it exists is a source of TAC emissions, which are reported to the SDAPCD in their Emissions Inventory Reports.

The CUP/Reclamation Plan Amendment would not entail any development. The amendment would allow for continued mining of the project site. The current mining operation functions under approved permits from the SDAPCD. The CUP/Reclamation Plan Amendment would also be required to function under APCD permitting requirements. The Stone Creek project has been designed to avoid locating sensitive receptors within the development (residences) in the vicinity of mining operation. The area where the current asphalt and concrete plans are located would be developed last, as the Creekside Neighborhood, which includes residential dwellings. As a result, the CUP/Reclamation Plan Amendment would not expose sensitive receptors to substantial pollutant concentrations.

Stone Creek Project

Although the project site has not been associated with agricultural use, mining operations have been in operation since the late 1950s. As concluded in Section 5.6, *Air Quality*, mining operations are currently occurring on the project site. The Carroll Canyon facility as it exists is a source of TAC emissions, which are reported to the SDAPCD in their Emissions Inventory Reports. The Stone Creek project has been designed to avoid locating sensitive receptors within the development (residences) in the vicinity of existing TAC sources. The area where the current asphalt and concrete plants are located would be developed last, as the Creekside Neighborhood, which includes residential dwellings. The Eastside Neighborhood A and Eastside Neighborhood B developments are designed to house light industrial uses, and would not include sensitive receptors. (See Figure 3-4, *Stone Creek Land Use Map*, for the locations of land uses throughout Stone Creek.)

Additionally, emissions of TACs are attributable to temporary emissions from construction emissions, and minor emissions associated with diesel truck traffic used for deliveries at the site. Truck traffic may result in emissions of diesel particulate matter, which is characterized by the State of California as a TAC. Certain types of projects are recommended to be evaluated for impacts associated with TACs. In accordance with the SCAQMD's "Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis" (SCAQMD 2003), projects that should be evaluated for diesel particulate emissions include truck stops, distribution centers, warehouses, and transit centers which diesel vehicles would utilize and which would be sources of diesel particulate matter from heavy-duty diesel trucks.

It is likely that light industrial uses planned for the Eastside Neighborhood would use minor amounts of TACs, if any. However, such use would be in accordance with existing regulations. The TAC emissions from the existing operations are within limits established by APCD and would cease upon full buildout.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not expose sensitive receptors to substantial pollutant concentrations. No significant impacts would result.

Stone Creek Project

The project has the potential to expose people to toxic substances through the emission of TACs. However, this exposure would be minimal and would result in a less that significant impact.

Mitigation Measures

No mitigation measures would be required.

ISSUE 6

Would the project:

- *Result in a safety hazard for people residing or working in a designated airport influence area?*
- *Result in a safety hazard for people residing or working within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted Airport Land Use Compatibility Plan?*

Significance threshold:

- Projects located in a designated airport influence area and where the Federal Aviation Administration (FAA) has reached a determination of "hazard" through FAA Form 7460- 1, "Notice of Proposed Construction or Alteration" as required by FAA regulations in the Code of Federal Regulations (CFR) Title 14 §77.13 or inconsistent with an Airport's Land Use Compatibility Plan (ALUCP) could be a significant impact.

Impacts

CUP/Reclamation Plan Amendment

As with the Stone Creek Master Plan discussed below, the CUP/Reclamation Plan Amendment area is not located within any airport safety zones.

Stone Creek Project

There are two Review Areas for MCAS Miramar. Review Area 1 consists of locations where noise and/or safety concerns may necessitate limitations on the types of land uses. Specifically, Review Area 1 encompasses locations exposed to noise levels of CNEL 60 dB or greater together with all of the safety zones depicted on the associated maps in the ALUCP. Within Review Area 1, all types of land use actions are to be submitted to the ALUC for review to the extent review is required by law.

Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight areas depicted on the associated maps in the ALUCP. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. The additional function of this area is to define where various mechanisms to alert prospective property owners about the nearby airport are appropriate. Within Review Area 2, only land use actions for which the height of objects is an issue are subject to ALUC review.

The project site is predominantly within Review Area 1, with a small northeastern portion of the project site located in Review Area 2. As shown in Figure 5.1-5, *MCAS Miramar Compatibility Policy Map: Safety*, the project site is not located within any safety zones.

Additionally, the project has been issued a *San Diego County Regional Airport Authority, Airport Land Use Commission Determination* (May 15, 2007; see Appendix P) confirming the consistency of the project with the MCAS Miramar ALUCP. The project has also been issued *Determination of No Hazards to Air Navigation* from the FAA, based on conceptual building heights and locations, demonstrating no risk relative to obstruction of aircraft (see Appendix P). Separate FAA notifications would be required at the time of building permits for future structures.

Significance of Impacts

CUP/Reclamation Plan Amendment

Continuation of the existing mining operations and ultimate reclamation of the mining site, as proposed by the CUP/Reclamation Plan Amendment, would not result in a safety hazard for people residing or working a designated airport influence area. No impacts would result.

Stone Creek Project

The Stone Creek project would not result in a safety hazard for people residing or working in a designated airport influence area. The project site is not located within any safety zones for MCAS Miramar; therefore, no impacts would occur.

Mitigation Measures

No mitigation measures would be required.

Table 5.13-1. *Industrial Use Regulations*

Regulatory Agency	Regulation
Local	
City of San Diego	• Section 131.0620, *Use Regulations of Industrial Zones*, of the San Diego Municipal Code • Section 59.5.0401, *Sound Level Limits*, of the San Diego Municipal Code • Section 143.0101 and Section 143.0141 of *Environmentally Sensitive Lands*, of the San Diego Municipal Code
Air Pollution Control District (APCD)	• General: Permit/Registration Application Form (APP116) • Needed Supplementary Applications (very specific according to use) • Possible Equipment Registration Form • Fees
Regional Water Quality Control Board (RWQCB)	• General Industrial Permit (NOI) • Application for Waste Discharge (NPDES Permit)
County of San Diego Environmental Health	• *Unified Program Facility Permit* if: generate hazardous waste or medical waste, handle hazardous materials or have underground storage tanks • To determine if required to obtain a Unified Program Facility Permit, complete the "*Business Activities*" form and the *"Unified Program Facility Permit Application"* • If required to obtain a Unified Program Facility Permit then complete the "*Business Owner/Operator Identification*" form • If NOT required to obtain a Unified Program Facility Permit, then complete Section I. Identification of the "*Business Owner/Operator Identification*" form
State	
Occupational Safety and Health Administration (CAL-OSHA) ****No Federal OSHA Requirements**	DOSH Permits 1. Construction Activities 2. Tower Cranes 3. Helicopter Operations 4. Tunneling or Underground Mining 5. Pressure Vessels 6. Elevators 7. Portable Amusement Rides and Bungee Jumping 8. Aerial Passenger Tramway Registration 1. Asbestos Abatement Contractors 2. Carcinogen Users Certification 1. Cranes 2. Mining and Tunneling 3. Licensing 4. Asbestos Consultants and Technicians 5. Permanent Amusement Rides Qualified Safety Inspector 6. Loss Control Notification 1. Asbestos Abatement 2. Lead Work Pre-job Notification 3. Annual Permit Holder 4. Serious or Fatal Accident 5. Mine Notification 6. Underground Mine and Tunnel Notifications

Regulatory Agency	Regulation
Department of Toxic Substances Control (DTSC)	• No permit required unless the industrial use is treating/storing/transporting Toxic/Hazardous Waste Materials • Only required to obtain a California or Federal ID#: 1. Federal = if generation of 100kg per month of federally regulated hazardous waste 2. California = any amount of CA regulated hazardous waste
California Air Resources Board (ARB)	No Permit Required through the State Level (only local APCD permits required)
Federal – Environmental Protection Agency (EPA):	
Clean Air Act	No Federal Permit in addition to APCD permitting (unless related to construction)
Clean Water Act	No Federal Permit in addition to SWRCB permitting

5.14 PUBLIC SERVICES AND FACILITIES

Public services and facilities are those functions that serve development on a community-wide basis. These functions include police; fire-rescue response services; parks and recreation; schools; libraries; and the maintenance of those public facilities, as well as public roads. The following discussion is based on correspondence, meetings, and telephone conversations with service providers (see Appendix O) and evaluates the potential impacts the project would have upon existing services. Figures 5.14-1a and 5.14-1b, *Location of Public Services*, show the location of the public services and facilities that serve the project site.

5.14.1 Existing Conditions

POLICE PROTECTION

Police protection for the Stone Creek project would be provided by the San Diego Police Department (SDPD). The goals of police service within San Diego are to provide for safe, peaceful, and orderly communities; and to respond to community needs, respect individuals, develop partnerships, manage emergencies, and apprehend criminals with the highest quality of service. The SDPD is divided into nine divisions. The project site is serviced by the Northeastern Division. The Northeastern Division, located at 13396 Salmon River Road, serves the neighborhoods and communities of Carmel Mountain, Miramar, Miramar Ranch North, Mira Mesa, Rancho Bernardo, Rancho Encantada, Rancho Peñasquitos, Sabre Springs, and Scripps Ranch. The Northeastern Division serves a population of 234,394 people and encompasses 103.8 square miles. This police station is located approximately six miles northeast of the project site.

The Northeastern Division is supplemented by the Mira Mesa/Scripps Ranch Storefront, located at 8450 #A Mira Mesa Boulevard, and the Rancho Bernardo Storefront, located at 17110 Bernardo Center Drive. The Mira Mesa/Scripps Ranch Storefront is located less than two miles north of the project site; the Rancho Bernardo Storefront is located approximately 12 miles northeast of the project site.

Based on information provided by the San Diego Police Department (see Appendix O - Memorandum to Martha Blake from Dawn Summers, Police Lieutenant, Operational Support, February 27, 2014), police services for the project would be provided by officers from Northeastern Division, located at 13396 Salmon River Road, San Diego. The Northeastern Division provides police services to the following communities: San Pasqual, Rancho Bernardo, Rancho Peñasquitos, Carmel Mountain, Sabre Springs, Mira Mesa, Miramar Ranch North, Rancho Encantada, Scripps Miramar Ranch, and MCAS Miramar. The San Diego Police Department has mutual aid agreements with other Law Enforcement Agencies in San Diego County. Northeastern Division is currently staffed by 74 sworn personnel and one civilian employee. Officers work ten-hour shifts. Staffing is comprised of three shifts, which operate from 6:00 AM – 4:00 PM (First Watch), from 2:00 PM – Midnight (Second Watch), and from 9:00 PM – 7:00 AM (Third Watch). Using the Police Department's recommended

staffing guidelines, Northeastern Division currently deploys a minimum of nine patrol officers on First Watch, 11 patrol officers on Second Watch, and seven patrol officers on Third Watch.

The Police Department currently utilizes a five-level priority calls dispatch system, which includes priority E (Emergency), one, two, three, and four. The calls are prioritized by the phone dispatcher and routed to the radio operator for dispatch to the field units. The priority system is designed as a guide, allowing the phone dispatcher and the radio dispatcher discretion to raise or lower the call priority, as necessary, based on the information received. Priority "E" and priority one calls involve serious crimes in progress or those with a potential for injury. Priority two calls include vandalism, disturbances, and property crimes. Priority three includes calls after a crime has been committed, such as cold burglaries and loud music. Priority four calls include parking complaints or lost and found reports. The SDPD's citywide response time goals are:

- Emergency Calls – 7 minutes.
- Priority One Calls – 14 minutes.
- Priority Two Calls – 27 minutes.
- Priority Three Calls – 70 minutes.
- Priority Four Calls – 70 minutes.

The citywide average response times for 2013 were:

- Emergency Calls – 6.6 minutes.
- Priority One Calls – 11.7 minutes.
- Priority Two Calls – 27.4 minutes.
- Priority Three Calls – 68.9 minutes.
- Priority Four Calls – 70.9 minutes.

The Stone Creek project is located within the boundaries of police beat 242. Average response times for beat 242 in 2013 are:

- Emergency Calls - 7.2 minutes.
- Priority One Calls - 12.6 minutes.
- Priority Two Calls - 26.1 minutes.
- Priority Three Calls - 57 minutes.
- Priority Four Calls - 59.6 minutes.

The Police Department strives to maintain the response time goals as one of various other measures used to assess the level of service to the community.

The SDPD does not staff individual stations based on ratios of sworn officers per 1,000 population. The Citywide goal is to maintain 1.48 officers per 1,000-population ratio. The Police Department is

currently reaching its targeted staffing ratio of 1.48 sworn offices per 1,000 residents, based on 2011 estimate residential population of 1,311,882. The ratio is calculated to take into account all support and investigative positions within the Police Department. This ratio does not include the significant population increase resulting from citizens who commute to work from outside the City of San Diego or those visiting.

FIRE-RESCUE

The goal of Fire-Rescue service within San Diego is to protect life, property, and the environment by delivering the highest level of emergency and fire-rescue services, hazard prevention, and safety education. The SDFD is responsible for the preparation, maintenance, and execution of Fire Preparedness and Management Plans and participates in multi-jurisdictional disaster preparedness efforts. In the event of a large wildfire within or threatening City limits, the Department can be assisted by the California Department of Forestry, Federal Fire Department, or other local fire department jurisdictions.

A policy of San Diego Fire-Rescue is to locate, staff, and equip fire stations to meet established response times. There are three fire stations located within the Mira Mesa community in order to facilitate expeditious response times: Station Number 38 located at 8441 New Salem Street, Station Number 44 located at 10011 Black Mountain Road, and Station Number 41 located at 4914 Carroll Canyon Road. Local San Diego Fire Department response times follow the guidance in the 2011 CityGate Study.

Stone Creek is located within the service area of the SDFD. Fire protection and emergency services are provided by the SDFD. SDFD is a multi-faceted organization that provides City residents with fire and life-saving services including fire protection, emergency medical services, and lifeguard protection at San Diego beaches. According to the City of San Diego General Plan, the main objective of providing fire service to City residents is to prevent fires from occurring and to suppress fires when they do occur. Provision of fire protection service depends on adequate equipment, numbers of qualified personnel, effective alarm systems, and the proposed siting of fire stations. Guidelines for providing the optimum degree of security against fire loss include locating fire stations to provide rapid response times within urbanized areas. The General Plan states that fire stations should be sited on lots that are at least three-quarters of an acre with room for expansion within two to two and a half miles apart and be staffed and equipped to respond to calls within their established standards. The SDFD's goal is one firefighter per 1,000 citizens. To ensure adequate fire protection response to fire calls, the SDFD adheres to national standards which require that an initial response of fire suppression resources (i.e., a four-person engine company) react within five minutes, and that an effective fire force (i.e., 15 firefighters), react within nine minutes of a call.

Three fire stations serve the project site. Station Number 38 is located at 8441 New Salem Street, approximately 1.5 miles north of the project site. Station 38 is equipped with an engine, a brush engine, and a paramedic unit and medic rescue rig. Station Number 44 is located at 10011 Black

Mountain Road, immediately east of the project site. Station 44 is equipped with a battalion chief's vehicle, and engine, an aerial truck, and two HAZMAT units. Station Number 41 is located at 4914 Carroll Canyon Road and is equipped with an engine, paramedic unit and medic rescue rig, and an urban search and rescue rig.

Emergency medical services are provided to the project area and throughout the City through a public/private partnership between the City's Emergency Medical Services (EMS) and the Rural Metro Corporation, which provides some personnel and ambulances. City EMS has ambulances, paramedics, and emergency medical technicians (EMTs) who respond to emergency calls. Fire Station 37 houses paramedic units. There are four levels of calls. Level 1 is the most serious (e.g., heart attack, shortness of breath), and the closest fire engine and an advance life support ambulance respond to this type of call. A fire crew has to respond within eight minutes of being dispatched pursuant to City contract requirements, and an ambulance has to respond within 12 minutes. A Level 2 call is the next most serious; however, these calls are either reprioritized up to a Level 1 call or down to a Level 3 call. Only the advance life support ambulance responds to Level 2 calls; no fire station staff or equipment are deployed. The response time for a Level 2 call is 12 minutes, the same as for a Level 1 call. For a Level 3 call (e.g., someone having extended flu-like symptoms), either a basic or advance life support ambulance would respond. A basic ambulance is staffed with two EMTs, whereas an advance life support ambulance is staffed with one paramedic and one EMT. The response time for a Level 3 call is 18 minutes. For a Level 4 call, which is not an emergency (e.g., the patient could have driven themselves to a hospital), a basic ambulance would respond within 18 minutes of being dispatched. EMS is under contract to meet the 12- or 18-minute response times at least 90 percent of the time.

SCHOOLS

Public school service within the project area is provided by SDUSD. San Diego seeks to provide a multi-level public and private school system that enables all students to realize their highest potential as individuals and as members of society. Educational facilities are to be equitable, safe, healthy, technologically equipped, aesthetically pleasing, sustainable, and supportive of optimal teaching and learning for all students, and welcoming to parents and community members. The public school system is to provide opportunities for students to attend schools within their residential neighborhoods, as well as to provide choices in educational settings outside their neighborhoods. Public school service in San Diego is provided by the SDUSD.

Mira Mesa is served by the following schools:

Public Elementary Schools

- Ericson Elementary School
- Hage Elementary School
- Hickman Elementary School
- Mason Elementary School

- Sandburg Elementary School
- Walker Elementary School
- Jonas Salk Elementary School

Public Middle Schools

- Challenger Middle School
- Wangenheim Middle School

Public High School

- Mira Mesa High School

Private Schools

- Christ the Cornerstone Academy
- Good Shepherd Catholic School
- Rainbow Kids Integral School

Charter School

- The Charter School of San Diego

Also located in the Mira Mesa community is the San Diego Miramar Community College. As a part of the San Diego Community College system, San Diego Miramar College is a public two-year college that provides lower division and general education courses that lead to Certificates, Associate Degrees, or transfer to a four-year college or university; career technical education programs; and basic skills instruction to assist all students in meeting their educational goals.

LIBRARY

Library service within the City of San Diego is provided by the San Diego Public Library (SDPL). The Public Library has two goals: to create a library system that contributes to the quality of life through quality library collections, technologically improved services, and welcoming environments; and to be responsive to the specialized needs and desires of individual communities. The library system is a primary steward of the diverse cultural heritage of the San Diego community and of the enduring elements of world civilization. It is a vital learning presence in the community, providing information objectively and offering lifelong learning opportunities to every citizen through the system's Central Library and 35 branches. The Central Library functions as the hub of the library system, and all branches are vitally linked to it for the delivery of their services. Not only does the Central Library serve as the headquarters for the system, but it also supplements the limited collections that branch libraries can offer. The staff, collections, services, physical facilities, and programs exist to provide the best library service possible to all San Diegans. Each library strives to be a welcoming place.

The Mira Mesa community is served by the Mira Mesa Branch Public Library located at 8405 New Salem Street, approximately 1.5 miles north of the project site. The library was expanded and upgraded in 1994. The 20,000 square-foot Mira Mesa Branch Library holds 133,000 items and has a

large meeting room and two seminar rooms. Current programs offered at the Mira Mesa Branch Library are chess club, citizenship classes, tutoring programs for Kindergarten through high school, and dance lessons for adults. The programs for children include storytelling, arts and crafts for young children, pencil drawing for ages five through 13, magic shows, historical programs, and puppet shows. Within the library, there are two community meeting rooms, a computer lab, and various study carrels. The branch is currently open 55.5 hours per week and there are 9.25 employees staffing the branch.

PARKS AND RECREATION

San Diego's Park and Recreation Department is responsible for overseeing nearly 40,000 acres of developed and undeveloped open space; more than 340 parks including Balboa Park, Mission Trails Regional Park, and Mission Bay Park; 26 miles of shoreline from Sunset Cliffs to La Jolla; 13 pools; three public golf complexes; 55 recreation centers and more. Park and recreation professionals and volunteers host hundreds of community events each year and provide safe places for thousands of children to go after school. City employees and volunteers take great pride to enrich the lives of others through quality parks and programs, designed and developed so that people of all ages, abilities and income levels have the chance to participate in excellent recreational opportunities.

The Mira Mesa community is serviced by the Mira Mesa Recreation Center. Facilities at the Mira Mesa Recreation Center include multi-purpose fields, outdoor basketball courts, picnic tables, a gazebo, and tot lot, as well as activity rooms and a kitchen that offers cooking classes. In addition, the following parks are located in the Mira Mesa community:

- Mira Mesa Community Park
- Breen Park
- Camino Ruiz Park
- Carroll Park
- Lopez Ridge Park*
- McAuliffe (Winterwood) Park*
- Mesa Verde Park
- Mesa Viking Park
- Sandburg Park
- Westview Park
- Maddox Park

*Future park.

Lopez Ridge Recreation Center, located at 7245 Calle Cristóbal, approximately four miles northeast of the project site, has facilities which include meeting rooms, outdoor basketball court, baseball field, playground, and picnic area. Gil Johnson Mira Mesa Recreation Center is located at 8575 New Salem Street, approximately 1.5 miles north of the project site, and has facilities that include multi purpose fields, outdoor basketball courts, picnic tables, a gazebo and a tot lot which is accessible for

children and adults with disabilities to offer outdoor fun, while activity rooms and a kitchen offer cooking classes. These rooms are also available for rent.

Joint use parks are one creative means of providing additional lands and facilities for public recreation use through the joint use of public and not-for-profit facilities such as parks, swimming pools, and schools. Joint use facilities can include any land area or physical structure shared by one or more public or not-for-profit entities. An example of a joint use facility is a multi-purpose sports field at an elementary or middle school that is exclusively used for school purposes during school hours, but is available for public use when school is not in session. Joint use serves an increasingly important role in providing recreation space and facilities in the older, more densely populated urban communities. The following joint use parks are located in the Mira Mesa Community:

- Hourglass Field
- Challenger Middle School
- Ericson Elementary School
- Hage Elementary School
- Hickman Elementary School Mason Elementary School
- Walker Elementary School*
- Wangenheim Middle School

*Future joint use park.

ROADWAYS

The project is located is located in the central portion of the Mira Mesa community, generally north of Miramar Road, south of Mira Mesa Boulevard, west of Black Mountain Road, and east of Kibler Drive. (See Figure 2-2, *Vicinity Map*.) The principle roadways in proximity to the project site are identified below:

- Carroll Canyon Road
- Maya Linda Road
- Camino Ruiz
- Jade Coast Drive
- Gold Coast Drive
- Activity Road
- Mira Mesa Boulevard
- Miramar Road

The project would construct Carroll Canyon Road, through the project site, from Black Mountain Road to Camino Ruiz. The project would also extend Maya Linda Road, from Black Mountain Road to Carroll Canyon Road.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts to Public Services and Facilities assumes this baseline would not differ from the Existing Conditions as presented above.

5.14.2 Regulatory Framework

Applicable regulations and the associated agencies with regulatory authority and oversite are described below.

STATE

California Mutual Aid Plan

The California Mutual Aid Plan establishes policies, procedures, and responsibilities for requesting and providing inter- and intra-agency assistance in emergencies. The plan directs local agencies to develop automatic or mutual aid agreements, or to enter into agreements for assistance by hire (e.g. Schedule A contracts) where local needs are not met by the framework established by the Mutual Aid Plan.

Assembly Bill 16

AB 16 was passed in 2002 and created the Critically Overcrowded School Facilities program to supplement the construction provisions within the School Facilities Program (SFP). The SFP provides state funding assistance for new construction and modernization of facilities. The Critically Overcrowded School Facilities program allows school districts that have been determined by the California Department of Education (CDE) to have critically overcrowded facilities to apply for new construction projects without meeting all SFP program requirements (CDE 2015). Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply (Chapter 33, Statutes of 2002).

Senate Bill 50

SB 50, or the Leroy F. Greene School Facilities Act of 1998, restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees are also collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered “full and complete mitigation” of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any school impacts (Chapter 407, Statutes of 1998).

Quimby Act and Assembly Bill 1359

Cities and counties have been authorized since the passage of the 1975 Quimby Act (Government Code Section 66477) to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The dedicated land or fees may only be used for the development or rehabilitation of neighborhood or community parks or recreational facilities in the subdivision they were provided for, according to AB 1359 (Chapter 412, Statutes of 2013), unless certain requirements are met and an exception is made. The goal of the Quimby Act is to require developers to help mitigate the impacts of property improvements. The act gives authority for passage of land dedication ordinances only to cities and counties. Special districts must work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide park and recreation services communitywide.

LOCAL

City of San Diego General Plan

The City of San Diego's General Plan contains a Public Facilities, Services, and Safety Element to address publicly managed and provided facilities and services. This element provides policies for financing, prioritization, develop, and City funding responsibilities for public facilities in San Diego.

5.14.3 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

Based on the City of San Diego's *Significance Determination Thresholds* (July 2016), impacts to public services and facilities would be significant if a project would result in the need for new or expanded public services facilities, the construction of which would cause significant adverse direct physical environmental impacts in order to maintain acceptable service ratios, response times, or other performance measures. The focus of the evaluation of impacts must be on the physical effects of construction or altering the public facilities.

ISSUE 1

Would the proposed project have a substantial effect upon, or result in a need for new or altered governmental services in any of the following areas: Police protection; Fire/Life Safety protection; Libraries; Parks or other recreational facilities; Maintenance of public facilities, including roads; and Schools?

Significance threshold:

- Based on the City of San Diego's *Significance Determination Thresholds* (July 2016),impacts to public services and facilities would be significant if a project would result in the need for new or expanded public services facilities, the construction of which would cause significant adverse direct physical environmental impacts in order to maintain acceptable service ratios, response times, or other performance measures. The focus of the evaluation of impacts must be on the physical effects of construction or altering the public facilities.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in impacts to public services and facilities, as no structural development would occur and no population increase would result.

Stone Creek Project

Police

Correspondence with the San Diego Police Department (Appendix O) provided information regarding response times. The Stone Creek project is located within the boundaries of police beat 242. Average response times for beat 242 in 2013 are:

- Emergency Calls – 7.2 minutes.
- Priority One Calls – 12.6 minutes.
- Priority Two Calls – 26.1 minutes.
- Priority Three Calls – 57 minutes.
- Priority Four Calls – 59.6 minutes.

These response times compare to the San Diego Police Department's citywide response time goals, of:

- Emergency Calls – 7 minutes.
- Priority One Calls – 14 minutes.
- Priority Two Calls – 27 minutes.

- Priority Three Calls – 70 minutes.
- Priority Four Calls – 70 minutes.

There are no current plans for additional police substations in the immediate project area. According to correspondence received from the San Diego Police Department (see Appendix O), police response times in the community would continue to increase with the build-out of community plans and the increase of traffic generated by new growth.

Although the project could result in an increase in service calls, the SDPD has facilities and staffing in the project area to adequately serve the project, ongoing funding for police services is provided by the City General Fund; and no new facilities or improvements to existing faculties would be required. Therefore, no new or expanded facilities would be required as a result of the project and impacts relative to Police Services would not be significant.

Fire Rescue

The Fire-Rescue would provide first responder and first responder paramedic services to the project. Fire service to Stone Creek would be provided by Fire Station 41, located at 4914 Carroll Canyon Road and Fire Station 44, located at 10011 Black Mountain Road. Fire Station 38, located at 8441 New Salem Street, and Fire Station 35, located at 4285 Eastgate Mall, serve as secondary responders.

In June 2011, the City adopted the recommendations of the Fire Service Standards of Response Coverage Deployment Study for the City of San Diego Fire-Rescue Department Report, also known as the Citygate Report. Based on the Citygate Report, the City adopted the performance measure that first due-units to treat medical patients and control small fires should arrive within 7.5 minutes 90 percent of the time from the receipt of the 911 call in fire dispatch. This equates to a one-minute dispatch time, 1.5-minute company turnout time, and five-minute drive time in the most populated areas. To confine fires near the room of origin, stop wildland fires to under three acres when noticed promptly, and treat up to five medical patients at once, a multiple unit response of at least 17 personnel should arrive within 10.5 minutes from the time of 911 call receipt in fire dispatch 90 percent of the time. This equates to a one-minute dispatch time, 1.5-minute company turnout time, and eight-minute drive time spacing for multiple units in the most populated areas.

The Fire-Rescue has identified the need for an additional station in the Mira Mesa Community Plan area. The project would not cause the need for construction of a new fire station or expanded facilities for the community. The community's Public Facilities Financing Plan calls for an additional future fire station in the vicinity of Camino Santa Fe and Miramar Road, west of Stone Creek and between Stations 41 and 44. Therefore, there is no need to construct new facilities relative to the Stone Creek project.

Schools

Correspondence with SDUSD Demographer Sarah Hudson (see Appendix O) provided the following information relative to school services.

The project site would be served by Jonas Salk, Mason, and Walker Elementary Schools; Challenger and Wangenheim Middle Schools; and Mira Mesa High School. No schools serving the project site are currently over capacity. Salk Elementary has no portable classrooms and is currently operating at full capacity. Mason Elementary School has 10 portable classrooms, and Walker Elementary has nine. Both Mason and Walker Elementary Schools currently have available capacity for 425 additional students. Challenger Middle has seven portable classrooms, and Wangenheim Middle has four portable classrooms. Challenger and Wangenheim Middle Schools currently have available capacity for approximately 750 additional students. Mira Mesa High School currently has capacity for approximately 200 additional students. Mira Mesa High has 44 portable classrooms will be undergoing a Whole Site Modernization in the near future, a goal of which is to replace portable classrooms with permanent classrooms. Mira Mesa schools are not subject to class size reduction.

Student generation rates vary based on the type of project, number of units, bedroom mix, neighborhood, and other factors. SDUSD does not have District-standard student generation rates. Instead, in order to estimate the number of students generated by the Stone Creek project, standard practice for SDUSD is to reference existing similar developments in the vicinity, if possible, and further afield in San Diego Unified School District when necessary. In this case, the best single Mira Mesa-area comparable project is Casa Mira View, a large apartment complex that has construction on-going since 2013. SDUSD also conducted a second analysis, which considered students generated by all existing single-family attached, multi-family, and mobile home housing units within the Mira Mesa Community Plan area. Based on the Casa Mira View and greater Mira Mesa generation rates, student generation rates for the project are shown in Table 5.14-1, *Estimated Generation Rates for Stone Creek*.

Table 5.14-1. *Estimated Generation Rates for Stone Creek*

School Level	Students per Unit	Number of Students
K-5	0.120-0.294	533-1,310
6-8	0.033-0.110	147-490
9-12	0.048-0.160	213-714
K-12	**0.201-0.566**	**893-2,512**

K - Kindergarten

Based on the above information and correspondence with SDUSD, the project would cause a direct impact on school facilities. The schools serving this project area are operating at between 70 percent and 100 percent of their capacity. Additional school facilities may be required as the project builds out. SDUSD identifies that a new elementary school may be needed in the future and should be ideally located within Stone Creek. Attendance boundary changes may also be necessary.

The Stone Creek Master Plan allows for the development of a public school facility within the Westside Neighborhood and locates a potential site for the School District to purchase for development of a future school facility, if necessitated by student generation rates as Stone Creek and other developments in Mira Mesa are built and occupied. (See Figure 3-4, *Stone Creek Land Use Map*.) An approximately 10-acre school site, shown in Figure 3-4, would be developed if/when SDUSD determines a school within Stone Creek is required. The site would be acquired and environmental effects would be evaluated at that time. Impacts would be less than significant. In addition, SDUSD may purchase a site within Stone Creek in the future for a new school if the need is determined, as identified in the Stone Creek Master Plan, and would evaluate the environmental effects of a future school on that site at that time.

Library

Per the Library System Improvements Program, the population of a given community may reach 18,000 to 20,000 residents before a permanent library facility is warranted, with anticipated growth to be at least 27,000 to 30,000 residents after twenty years. The maximum radius of a branch service area should be approximately two miles. Mira Mesa and Scripps Ranch Branch libraries both fall within that two-mile radius. Full build-out of the Stone Creek project would generate an estimated 11,024 new residents, based on a population projection of 2.48 persons per household for multi-family dwellings in the Mira Mesa community (SANDAG 2017 Survey). Therefore, a new library facility is not warranted. No impacts would occur.

Parks and Recreation

The project provides park and open space uses, including active and passive park opportunities, pocket parks, public trails, open space, and an enhanced creek corridor. Stone Creek Central Park, encompassing 43.16 acres, is proposed as an expansive park and includes the Carroll Canyon Creek Open Space Corridor. The 16.58-acre Westside Gardens park and open space would function as an extension of Stone Creek Central park west of Camino Ruiz. Additionally, a series of pocket parks, four located throughout the Westside Neighborhood and one within the Eastside Neighborhood, provide park spaces within convenient walking distance for residents and employees. (See Figure 3-13, *Conceptual Park Systems Plan*, for the locations of proposed parks.) Within the parks and landscaped reclaimed mine slopes would be a network of approximately four miles of rim trails. Additional trails would be provided within Stone Creek Central Park and Westside Gardens, including along the enhanced Carroll Canyon Creek.

The City of San Diego General Plan requires 2.8 acres of park space per 1,000 persons projected for a new development. For the Stone Creek project, full build-out of Stone Creek's residential neighborhoods would result in up to 4,445 residential units. Based on the City's population projection of 2.48 persons per household for multi-family dwellings in the Mira Mesa Community (SANDAG 2017 Survey), full build-out for Stone Creek would generate a population of 11,024. This population would result in a population-based park requirement of 30.87 acres. Stone Creek would meet population-based park requirements on-site.

The Mira Mesa Public Facilities Financing Plan calls for expansion to the Mira Mesa Recreation Center and construction of an aquatic complex to serve the community. The project would be required to contribute its fair share toward a recreation center facility and aquatic complex to serve the community.

The project provides population-based park space to meet the City's requirements and would not result in the need for new or altered population-based park services. The project would also be conditioned to contribute a fair share to a future aquatic complex. No impacts would result.

Roadways

The project consists of up to 4,445 residential units offered as a variety of "for sale" and/or "for rent" housing; up to 175 hotel guest rooms; approximately 135,000 square feet of business park use; 415,000 square feet of light industrial uses; approximately 174,000 square feet of commercial/retail use; approximately 200,000 square feet of office space; approximately 300,000 square feet of high technology uses; more than 104.31 acres of parks including, open space areas, trails, pocket parks, and the restored and enhanced Carroll Canyon Creek corridor, and nearly seven acres of piazzas. The project would complete circulation network roadways, as well as internal streets to serve the new development.

Traffic associated with the project would be added to existing and proposed roadways. The increase in vehicles travelling on the road segments in the study area would potentially affect roadway conditions for those segments. The impacts relating to traffic and roadways as a result of the project are discussed in detail in Section 5.2, *Transportation/Circulation and Parking*, of this EIR, as well as the Traffic Impact Analysis, provided as Appendix C of this EIR. The traffic impact analysis determined that the project would result in significant direct and cumulative impacts to area roadways due to the increased traffic to and from the site at project buildout.

Maintenance of existing and planned public streets would be the responsibility of the City of San Diego and would be funded by the City's General Fund. The project would be responsible for constructing new City streets. The project would not have a substantial effect on roadway maintenance.

Significance of Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment would not result in impacts to public services and facilities, as no structural development would occur and no population increase would result.

Stone Creek Project

With the exception of public schools, the Stone Creek Master Plan would not result in a substantial effect upon or result in the need for new or altered public services. Relative to public schools, the SDUSD has identified a direct impact on school facilities, which would be avoided through compliance with SB 50 and payment of school facilities fees. Additionally, the Stone Creek Master Plan allows for the development of a public school facility within the Westside Neighborhood and locates a potential site for the School District to purchase for development of a future school facility, if necessitated by student generation rates as *Stone Creek* and other developments in Mira Mesa are built and occupied. With the payment of school fees, impacts would be less than significant. In addition, SDUSD may purchase a site within Stone Creek in the future for a new school if the need is determined, as identified in the Stone Creek Master Plan, and would evaluate the environmental effects of a future school on that site at that time. Therefore, impacts to public facilities and services would not be significant.

Mitigation Measures

No mitigation measures would be required.

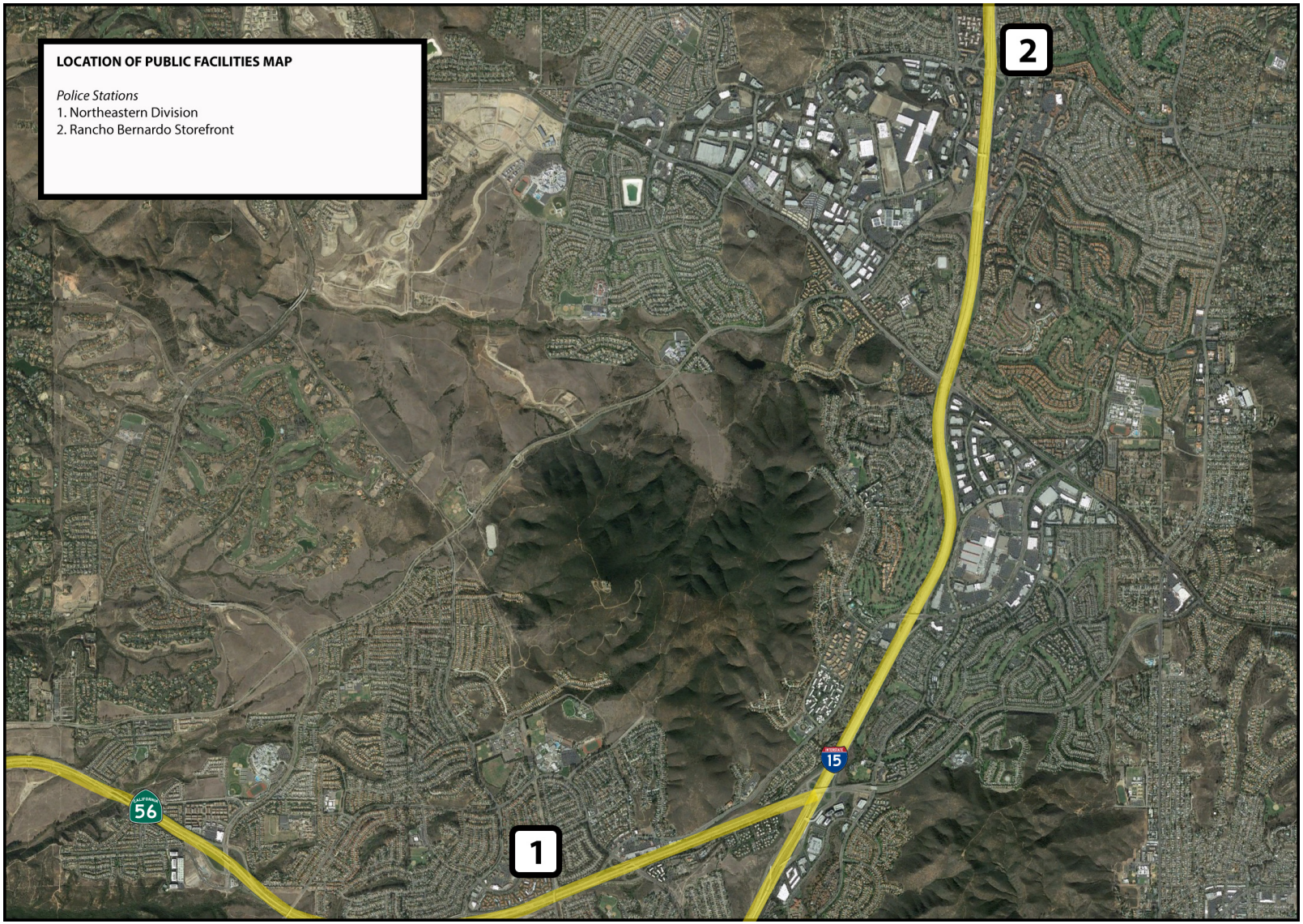


Figure 5.14-1a. *Location of Public Services*

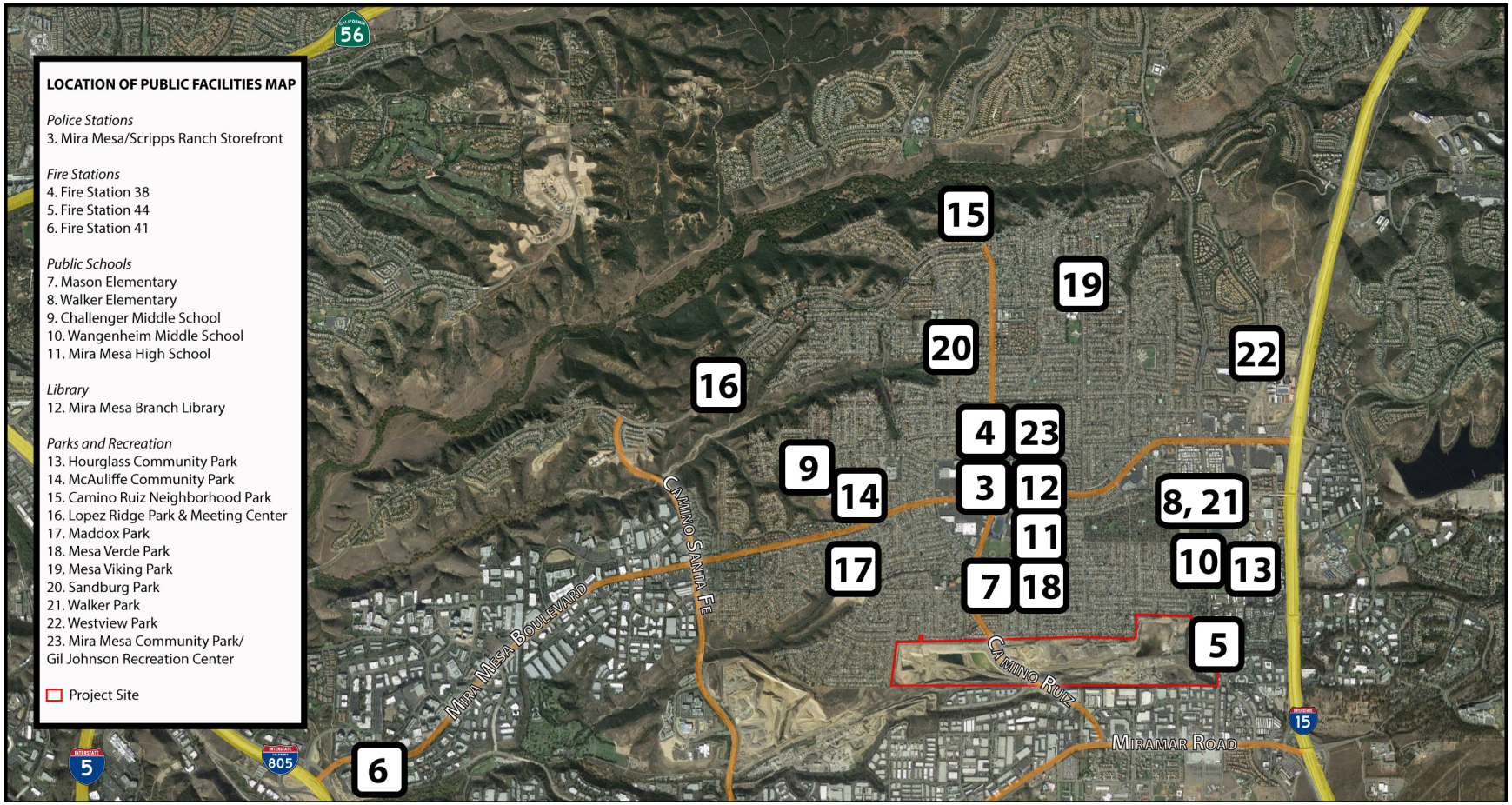


Figure 5.14-1b. *Location of Public Services*

5.15 PUBLIC UTILITIES

Public utilities include water, sewer, storm water drainage, solid waste management, and the provision of energy on a community-wide basis. These services would be provided to future residents, employees, and visitors to the Stone Creek project. (*NOTE:* Public utilities also include the provision of electricity and natural gas resources which would provide energy to the project. SDG&E will provide electricity and natural gas service to the project. Please see Section 5.8, *Energy*, for a discussion of SDG&E's ability to serve the project and the project's potential impact on energy resources.) BDS Engineering, Inc., prepared a *Sewer Study for Stone Creek* (January 21, 2016) and a *Water Study for Stone Creek* (January 21, 2016) and a *Recycled Water System Report* (January 18, 2007), include as Appendices J, K, and S, respectively.

Public Utilities Department prepared a Water Supply Assessment Report (*Water Supply Assessment Report for Stone Creek Development Project*, (April 14, 2015) and is included as Appendix M. A *Waste Management Plan* was prepared for the project by KLR Planning (November 2018) and is included as Appendix N. Additionally, public utilities providers were contacted during preparation of this EIR to identify potential impacts Stone Creek would have on utilities. All correspondence with utilities providers is contained in Appendix O.

A potential future school site has been identified as part of the Stone Creek project. Should the San Diego Unified School District acquire the site for development, project-level environmental analysis of public utilities impacts associated with the future school would be required at that time.

5.15.1 Existing Conditions

WATER

This section establishes current baseline water usage at the Stone Creek project site, describes existing water supply infrastructure, and summarizes the long-term water supply planning in place for the 2010 to 2030 period. This section describes the water supply reliability and diversification initiatives the Metropolitan Water District, Water Authority, and City Public Utilities Department are currently implementing, or plan to implement in future years, and explains why there is a sufficient water supply to serve the Stone Creek project.

Public Utilities Department

The Stone Creek project is located within the service area of the City's Public Utilities Department. The Public Utilities Department treats and delivers more than 200,000 acre-feet per year (AFY) of water to more than 1.3 million residents. The water system extends over 404 square miles, including 342 square miles within the City of San Diego. The Public Utilities Department's potable water system serves the City of San Diego and certain surrounding areas, including both retail and wholesale customers. In addition to delivering potable water, the City has a recycled water program. The City's objectives relative to the water system are to optimize the use of local water supplies, lessen the reliance on imported water, and free up capacity in the potable water system. Recycled water provides the City with a dependable, year-round, locally produced, and controlled water resource.

The Public Utilities Department relies on imported water as its major water supply source and is a member public agency of the San Diego County Water Authority (SDCWA). The SDCWA is a member agency of the Metropolitan Water District (MWD). The statutory relationships between the SDCWA and its member agencies, and MWD and its member agencies, respectively, establish the scope of the Public Utilities Department's entitlements to water from these two agencies. The Public Utilities Department currently purchases approximately 85 to 90 percent of its water from the SDCWA, which supplies the water (raw and treated) through two aqueducts consisting of five

pipelines. While the Public Utilities Department imports a majority of its water, it uses three local supply sources to meet or offset potable demands: local surface water, conservation, and recycled water.

Metropolitan Water District

The MWD was formed in 1928 to develop, store, and distribute supplemental water in southern California for domestic and municipal purposes. The MWD is a wholesale supplier of water to its member agencies. It obtains supplies from local sources as well as the Colorado River via the Colorado River Aqueduct, which it owns and operates, and the Sacramento-San Joaquin Delta via the State Water Project. Planning documents such as the Regional Urban Water Management Plan (RUWMP) and Integrated Water Resources Plan (IWRP) help ensure the reliability of water supplies and the infrastructure necessary to provide water to southern California. MWD's 2010 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands. The 2010 RUWMP includes the resource targets included in the IWRP and contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single-dry year and multiple-dry year periods. As part of this process, MWD also uses SANDAG's regional growth forecast in calculating regional water demands. In accordance with State law, the RUWMP is updated every five years.

MWD's IWRP identifies a mix of resources (imported and local) that, when implemented, would provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The latest IWRP (2010) includes a planning buffer to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. The planning buffer is intended to ensure that the southern California region, including the City of San Diego, would have adequate water supplies to meet future demands.

San Diego County Water Authority

The SDCWA purchases water from the MWD that is delivered to the region through two aqueducts. Of the MWD's 24 member agencies, the SDCWA is the largest member agency in terms of deliveries and purchases about 25 percent of all the water the MWD delivered in fiscal year 2007. As a retail member agency of the SDCWA, the Public Utilities Department purchases water from the SDCWA for retail distribution within its service area.

The SDCWA's 2010 Urban Water Management Plan (UWMP), in accordance with State law and the RUWMP, contains a water supply reliability assessment that identified a diverse mix of imported and local supplies necessary to meet demands over the next 25 years in average, single-dry year and multiple-dry year periods. The UWMP is based on SANDAG's 2050 Regional Growth Forecast, which has been refined to include an economic outlook that factors in the current recession and local jurisdictions' general/specific plan updates. The UWMP documents that no shortages are anticipated within its service area. The SDCWA also prepared an annual water supply report for use by its members that provides updated documentation on existing and projected water supplies.

The SDWCA's 2010 UWMP provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasted residential development as part of its municipal and industrial sector demand projections. These housing units were identified by SANDAG in the course of its regional housing needs assessment, but are not yet included in existing general land use plans of local jurisdictions. The demand associated with accelerated forecasted residential development is intended to account for SANDAG's land use

development currently projected to occur between 2035 and 2050, but has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated forecasted residential development could occur within the planning horizon (2010 to 2035) of the 2010 UWMP. These units are not yet included in local jurisdiction's general plans, so their project demands are incorporated at a regional level. When necessary, this additional demand increment, termed Accelerated Forecasted Growth, can be used by member agencies to meet demands of development projects not identified in the general land use plans.

The SANDAG Series 12 2050 Regional Growth Forecast (SANDAG Series 12 Forecast) did not include the level of development of the project in the 20-year planning horizon required by SB 610 and SB 221. The difference between the planned and projected water demands of the project can be accounted for in the SDCWA's 2010 UWMP accelerated forecasted growth demand increment. As documented in the SDCWA's 2010 UWMP, SDCWA is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. SDCWA would also assist its member agencies in tracking the certified EIRs provided by the agencies that include water supply assessment that utilize the accelerated forecasted growth demand increment to demonstrate adequate supplies for the development. In addition, the next update of the demand forecast for the SDCWA 2015 UWMP will be based on SANDAG's most recently updated forecast, which would include the proposed Stone Creek project.

Challenges to Regional Water Supply

Water supply for southern California faces many short-term and long-term challenges, including restrictions for endangered species and other environmental protections, droughts, funding shortfalls for new projects, climate change, and others. The Public Utilities Department, SDCWA, and MWD prepare and revise their water supply and management plans as needed to ensure their continuing ability to serve the water supply needs of the region. These agencies continue to adopt measures and develop new programs, policies, and projects to provide a greater degree of certainty during periods of prolonged drought or to offset possible reductions in other sources of supply.

Operation of the State Water Project along with the Central Valley Project in the San Joaquin Valley were challenged in 2007 in efforts to protect endangered species and habitat, resulting in reduction in the water delivery capacity of both projects. In efforts to ensure reliability of the Sacramento–San Joaquin Delta water supply, the MWD adopted a Delta Action Plan as a framework to address water supply risks in the Sacramento–San Joaquin Delta both for the near-, mid-, and long-term. In the near-term, MWD will continue to rely on plans and polices outlined in its RUWMP and IWRP to address water supply shortages and interruptions to meet water demands. Campaigns for voluntary water conservation, curtailment of replenishment water, and agricultural water delivery are some of the actions outlined in the RUWMP. If necessary, reduction in municipal and industrial water use and mandatory water allocation could also be implemented. MWD also entered into a series of agreements to ensure the stability of its Colorado River supplies and to gain substantial storage capacity in years with surplus supplies. As a result, MWD's water supply is anticipated to be restored to previous levels in the future.

At the local level, the SDCWA is in the process of minimizing the amount of water it purchases from MWD by diversifying its water supply portfolio. The SDCWA intends to increase its local water supplies to 40 percent of the region's water supplies by 2020 through conservation programs, recycling, and groundwater development projects.

Water Supply Assessment and Verification

California State SB 221 and SB 610 went into effect January 2002 with the intention of linking water supply availability to land use decisions made by cities and counties. SB 610 requires water suppliers to prepare a Water

Supply Assessment (WSA) report for inclusion by land use agencies within the CEQA process for new developments subject to SB 221. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of large-scale subdivisions. As defined in SB 221 and SB 610, large-scale projects include residential development projects of more than 500 residential units and/or shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space.

The project meets the threshold of SB 610 and SB 221 and, therefore, a WSA and verification is required for the project. A Water Supply Assessment/Verification has been prepared for the project and is included in Appendix M. According to the Water Supply Assessment prepared for the project, current existing water use at the Stone Creek project site is 29,035 gallons per day.

The Stone Creek project is located within the Mira Mesa community of San Diego. The Stone Creek project is within the Mira Mesa 625 Zone and the Miramar 712 Zone for water service. Pressure reducing stations exist in the area to supply water to the 625 Zone from the Miramar 712 Zone (located near the intersection of Camino Ruiz and Miralani Drive). Existing pipelines in the vicinity of the project consist of a 16-inch 625 Zone pipeline located in Camino Ruiz, a 16-inch 712 Zone pipeline located in Black Mountain Road/Carroll Canyon Road intersection, and a 12-inch 712 Zone pipeline located in Black Mountain Road/Maya Linda intersection.

SEWER

The City's Public Utilities Department provides wastewater transportation, treatment, and disposal services to the San Diego region. The system serves a population of 2.0 million from 16 cities and districts generating approximately 190 million gallons of wastewater per day (mgd). Planned improvements to the existing facilities will increase wastewater treatment capacity to serve an estimated population of 2.9 million through the year 2050. Nearly 340 mgd of wastewater will be generated by that year.

The City's Public Utilities Department treats the wastewater generated in a 450 square mile area stretching from Del Mar and Poway to the north, Alpine and Lakeside to the east, and south to the Mexican border. In addition, wastewater collection services are provided to the City of San Diego, including the Stone Creek project site.

The Stone Creek development lies within the tributary area for the Carroll Canyon Trunk Sewer #49. The trunk sewer runs off-site and adjacent to the southerly project boundary. The Carroll Canyon Trunk Sewer was built in 1970. The pipe material is Vitrified Clay (VC) and PVC and diameter ranges from 18-inch to 21-inch.

SOLID WASTE MANAGEMENT

Each county and city within the state of California must provide planning for, and achievement of, State-mandated waste reduction targets within their jurisdictions. The City of San Diego manages the collection, recycling/composting, and disposal of solid waste, by providing services directly or managing private franchises that provide the services. Six landfills are operating in San Diego County: Borrego Landfill, Otay Landfill, West Miramar Landfill, Sycamore Landfill, San Onofre, and Las Pulgas. Waste generated at the project site would most likely be taken to West Miramar Landfill, located at 5180 Convoy Street, which is owned and operated by the City of San Diego.

Currently, only two other landfills provide disposal capacity within the urbanized region of San Diego: the Sycamore and Otay Landfills. The Sycamore Landfill contains 324 disposal acres on a 491-acre site and is located to the east of Miramar, within the City of San Diego's boundaries. The Otay Landfill contains 230 disposal acres on a 464-acre site and is located within an unincorporated island of County land in the City of Chula Vista. The

Sycamore and Otay Landfills are privately owned by Allied Waste Industries, Inc.

The Sycamore Landfill is permitted to receive a maximum of 3,965 tons per day. The permitted capacity of the Sycamore landfill is 48,124,462 cubic yards. The Otay Landfill is permitted to receive 5,830 tons per day. Its permitted capacity is 62,377,974 cubic yards.

A Waste Management Plan (WMP) has been prepared for the project. The purpose of the WMP for the Stone Creek project in the City of San Diego is to provide analysis of the solid waste impacts anticipated for the Stone Creek project for both construction and operation and how these impacts would be mitigated. The goal of the WMP is to identify sufficient mitigation to reduce the potential impacts of the Stone Creek project on solid waste generation. In accordance with Council Policy 900-16, this goal would be met by striving for recycling of 100 percent of inert construction materials and striving for recycling a minimum 75 percent by weight all other materials. The Stone Creek WMP has been approved as part of the project entitlements.

GAS AND ELECTRICITY

SDG&E is the owner and operator of electricity transmission and distribution, and natural gas distribution infrastructure in San Diego County, and currently provides gas and electric services to the project site. SDG&E is regulated by CPUC, which sets gas and electricity rates for SDG&E. Currently, San Diego's major operating power plant is the Encina Power Plant, located in Carlsbad. As of January 2014, it was determined that the Encina Power Plant would be replaced by a newer power plant, the Carlsbad Energy Center Project, expected to be operational by the end of 2018. Additionally, several smaller power-generating plants that supplement the energy supply are located throughout the county.

WATER CONSERVATION

The Public Utilities Department emphasizes the importance of water conservation to minimize water demand and avoid excessive water use. In accordance with Municipal Code Section 147.04, all residential, commercial, and industrial buildings, prior to a change in ownership, are required to be certified as having water-conserving plumbing fixtures in place.

The Public Utilities Department's Water Conservation Program, established in 1985, accounts for approximately 32,000 AF of potable water savings per year. These savings have been achieved through creation of a water conservation ethic, and implementation of programs, policies, and ordinances designed to promote water conservation practices, including irrigation management. These programs undergo periodic reevaluation to ensure realization of forecasted savings. The Public Utilities Department also examines new water saving technologies and annually checks progress toward conservation goals, working collaboratively with the MWD and SDCWA to formulate new conservation initiatives.

In accordance with the Conservation Element of the City's General Plan (Policy CE-A.11), development projects shall implement sustainable landscape design such as planting *deciduous shade trees, evergreen trees, and drought-tolerant native vegetation, as appropriate, to contribute to sustainable development goals* and using *recycled water to meet the needs of development projects to the maximum extent feasible* to aid in water conservation.

Existing water usage is 29,035 gallons per day, which would remain the same as building occurs. Reclaimed water would be used for continuing mining operations and irrigation purposes.

For purposes of analysis, the baseline conditions are the implemented 1981 Reclamation Plan represented by the reclaimed site (see Figure 2-4, *1981 Reclamation Plan)*. The evaluation of impacts to Public Utilities assumes this baseline would not differ from the Existing Conditions as presented above.

5.15.2 Regulatory Framework

Applicable regulations and the associated agencies with regulatory authority and oversight are described below.

STATE

Assembly Bill 939

AB 939 (Chapter 1095, Statutes of 1989), also known as the Integrated Waste Management Act of 1989, requires that each city and county in California Source Reduction and Recycling Elements to divert 25 percent of its waste stream by 1995, and 50 percent by 2000, with the base year set as 1990. The passage of SB 1016 changed the way that waste diversion is measured. As of 2007, the diversion requirement is measured in a uniquely calculated pounds per person per day that is different for each jurisdiction and relates back to the original 50 percent diversion target (CalRecycle 2010). The goal of AB 939 is to reduce dependence on landfills for waste disposal. The act established a hierarchy of priority for waste management: (1) source reduction (waste prevention), to reduce the amount of waste generated at its source; (2) recycling (or reuse) and composting; (3) transformation; and (4) disposal by landfilling. The IWMP for the County of San Diego provides a summary of the Source Reduction and Recycling Elements of all of the County's jurisdictions and provides a Siting Element addressing the requirement for 15 years of disposal capacity within the County.

Assembly Bill 341

As stated above, AB 939 required that cities, counties, and regional agencies develop a source reduction and recycling element of an IWMP to divert 50 percent of all solid waste from landfill disposal or transformation by January 1, 2000. AB 341 amended that act to require that the State of California must set a policy goal that no less than 75 percent of solid waste is source reduced, recycled, or composted by 2020.

Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

LOCAL

San Diego Regional Municipal Storm Water Permit

An MS4 is defined as a conveyance or system of conveyances (e.g., municipal streets, catch basins, gutters, storm drains, etc.) used for collecting or conveying storm water that is not a combined sewer or connected to a publicly owned treatment network. The San Diego Municipal Storm Water Permit (Order R9-2013-0001) (as amended by Order No. R9-2015-0001) (Municipal Permit) regulates the conditions under which storm water and non-storm water discharges into and from MS4s are prohibited or limited. The 18 cities, County government, San Diego

County Regional Airport Authority, San Diego Unified Port District, Del Mar Fairgrounds, and UCSD each owns or operates an MS4, through which it discharges storm water and non-storm water into waters of the U.S. within the San Diego region. These entities are the San Diego County Co-Permittees (Co-Permittees) which, along with the Orange County Co-Permittees, are subject to the requirements of the permit. The Caltrans storm water system is regulated separately under the Caltrans NPDES Permit, as described below. This permit requires each of the Co-Permittees to prepare a Jurisdictional Urban Runoff Management Program (JURMP) to control the contribution of pollutants to and the discharges from the MS4. Each of these JURMPs includes a component addressing construction activities, development planning, and existing development.

Solid Waste

Solid waste services in the project area are provided by the City of San Diego Environmental Services Department (ESD) and private collectors. The City provides refuse collection for single-family and multi-family residences located on public streets that meet City safe storage and access requirements; collection services for all other developments must be contracted-out by franchised private hauling companies.

ESD pursues waste management strategies that emphasize waste reduction and recycling, composting, and environmentally-sound landfill management to meet the City's long-term management needs. ESD ensures that all Federal, State, and local mandates relating to waste management are met in an efficient and financially sound manner. ESD developed a Source Reduction and Recycling Element (SRRE), as required by the PRC, to reduce wastes disposed of in landfills by 50 percent compared to 1990 base year tonnages. The SRRE describes the programs, activities, and strategies the City plans to carry out to achieve the mandated waste reduction and is updated each year in annual reports to CalRecycle. The City of San Diego has achieved a 68 percent diversion rate as of reporting year 2010. The City has adopted a Zero Waste Plan. The solid waste management system infrastructure provides an essential public service to the citizens of California. There are three basic components in the solid waste management system: collection; processing to remove recyclable and compostable materials; and disposal of waste that cannot be recycled.

Collection Facilities

Timely and adequate collection of solid waste protects public health and safety, and the environment. An effective collection system prevents unsightly, vector-propagating, and odorous waste accumulation outside residences and businesses. This also results in minimizing illegal disposal, discharge of waste to surface water bodies, and impacts to ecologically sensitive habitats. The effectiveness of California’s recycling efforts begins at the source of generation, at the households and businesses, where many collection companies provide multiple bins that allow source separation of recyclables and green waste from the waste stream. Public education and outreach programs are essential elements of the solid waste management system, which brings awareness to the public in their recycling efforts and the positive outcomes achieved.

Materials Recovery, Composting, and Processing Facilities

Processing of waste involves the systematic separation and recovery of valuable recyclable materials and removal of illegally disposed hazardous waste from the waste stream at Materials Recovery Facilities (MRFs), composting facilities, and conventional recycling centers prior to landfilling of residual waste. Processing also includes recovery of energy from the waste streams using waste-to-energy and a variety of conversion technologies, such as anaerobic digestion, gasification, and other technologies.

Disposal Facilities

Due to potential environmental impacts of landfills, the state's disposal system is heavily regulated by a multitude of regulatory agencies. As a result, landfill operators are required to implement best management practices and abide by permit conditions that ensure environmentally safe and sound operation of their landfills now and into the future.

Policies and Programs

In most of California, but not in San Diego, which is governed by a Municipal Code section enacted by voters in 1919, user fees have been the primary funding source for development of California's solid waste management system infrastructure, for implementation of waste reduction programs, and educational campaigns. In San Diego, the City's General Fund pays for collection from most single-family homes on public streets. The solid waste infrastructure continues to be challenged with new regulations and mandates, making it even more costly to manage waste. These fiscal constraints, coupled with challenges siting new solid waste management facilities, would require decision makers to continue finding creative solutions to meet solid waste management needs.

5.15.3 Impact Analysis

Thresholds of Significance

Water and Sewer

The City of San Diego's CEQA *Significance Determination Thresholds* states a project has the potential to have a significant effect on water if it would:

- Use excessive amounts of potable water.
- Proposes predominantly non-drought resistant landscaping and excessive water usage for irrigation and other purposes.

Water Supply. For certain types of large projects, SB 610 requires that the environmental document prepared for each project contain a discussion regarding the availability of water to meet the projected water demands of the project for a 20-year planning horizon, including single and multiple dry years. Prior to approving a project, SB 221 requires the decision-maker to make a finding that the project's water demands for the planning horizon would be met.

The types of projects subject to SB 610 and SB 221 are the following:

- Residential developments of more than 500 units;
- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people, occupy more than 40 acres of land, or have more than 650,000 square feet of floor space;
- Mixed use projects that include one or more of the above types of projects;
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water

required by a 500 dwelling unit project.

Sewer. The City of San Diego's CEQA *Significance Determination Thresholds* states a project has the potential to have a significant effect on sewer if it would:

- Result in a need for new systems, or require substantial alterations to existing sewer utilities which would create physical impacts.

Solid Waste

The City of San Diego's CEQA *Significance Determination Thresholds* states a project has the potential to have a significant effect on solid waste management if it would:

- Include the construction, demolition, or renovation of 1,000,000 square feet or more of building space, which may generate approximately 1,500 tons of waste or more. Such projects are considered to have direct impacts on solid waste management.
- Include the construction, demolition, and/or renovation of 40,000 square feet or more of building space, which may generate approximately 60 tons of waste or more. Such projects are considered to have cumulative impacts on solid waste management.

Gas and Electricity

As stated in the City's Significance Determination Thresholds, electrical power and natural gas services are generally provided to the San Diego metropolitan area by SDG&E. SDG&E handles power and gas requirements for upcoming development projects on a case-by-case basis and consults with developers to incorporate energy saving devices into project design, where feasible. SDG&E forecasts future electric power and natural gas consumption demand continuously. In situations where projects with large power loads are planned, these new large power loads are considered together with other existing or anticipated future loads in the project vicinity, and electrical substations are upgraded or new substations are built if the capacities of existing substations are exceeded. Direct impacts to electrical and natural gas facilities are addressed and mitigated by SDG&E at the time incoming development projects occur and are not typically evaluated by City staff. The specific thresholds related to excessive energy and power use are addressed in Section 5.8, Energy.

Water Conservation

In terms of water conservation, the following factors should be considered (list is not inclusive) in determining baseline impacts on water conservation:

- The project would use excessive amounts of potable water.
- A project proposes predominantly non-drought resistant landscaping and excessive water usage for irrigation and other purposes. See Section 142.0401 regarding the use of drought-tolerant landscaping.

ISSUE 1

Would the proposed project result in the need for new systems or require substantial alterations to existing utilities including those necessary for water, sewer, storm drains, and solid waste management?

Significance thresholds:

Water

- If a project would result in a need for new systems, or require substantial alterations to existing water utilities which would create physical impacts.

Sewer

- If a project would result in a need for new systems, or require substantial alterations to existing sewer utilities which would create physical impacts.

Solid Waste

- Projects that include the construction, demolition, or renovation of 1,000,000 square feet or more of building space may generate approximately 1,500 tons of waste or more and are considered to have direct impacts on solid waste facilities.
- Projects that include the construction, demolition, and/or renovation of 40,000 square feet or more of building space may generate approximately 60 tons of waste or more, and are considered to have cumulative impacts on solid waste facilities.

Impacts

CUP/Reclamation Plan Amendment

Water

Water lines are in place to serve the CUP/Reclamation Plan Amendment. No new facilities or expansion of existing service would be required. Reclaimed water would be available to serve the CUP/Reclamation Plan Amendment. No impacts would result.

The proposed CUP/Reclamation Plan Amendment would not meet the requirements of SB 610 or SB 221 and a WSA would not be required. Water would be available to serve the proposed CUP/Reclamation Plan Amendment. No impacts would result.

Sewer

The CUP/Reclamation Plan Amendment would continue to be served by existing sewer facilities. No new or expanded sewer service would be required. No impacts would result.

Solid Waste

As noted above, the City's threshold for determining if a project would have a significant direct impact associated with solid waste generation is a project that includes the construction, demolition, and/or renovation of 40,000 square feet or more of building space that may generate approximately 60 tons of waste or more per year. The CUP/Reclamation Plan Amendment would not exceed the City's threshold for direct impacts and, therefore, would not contribute to a significant cumulative impact associated with solid waste.

Gas and Electricity

For a discussion of the CUP/Reclamation Plan Amendment impacts relative to gas and electricity, please see Section 5.8, *Energy.*

Stone Creek Project

Water

The Stone Creek Master Plan proposes to be served by the Mira Mesa 625 Zone system and the Miramar 712 Zone and a new 570 pressure zone. The range of pad elevations on the project, 329 feet to 427 feet, results in static pressures on the project that range between 67 and 122 pounds per square inch (psi). Service to the Stone Creek project would be provided by connecting to the existing system at seven locations and constructing two 712/625 Zone pressure reducing stations and two 625/570 pressure reducing stations. Connections would be made at the following locations:

- Camino Ruiz and B Street East (16-inch connection)
- Camino Ruiz and A Street East (16-inch connection)
- Camino Ruiz and B Street West (12-inch connection with 625/570 pressure reducing station)
- Camino Ruiz and A Street West (12-inch connection with 625/570 pressure reducing station)
- Camino Ruiz and Carroll Canyon Road (16-inch connection)
- Black Mountain Road and Carroll Canyon Road (16-inch connection with 712/625 pressure reducing station)
- Black Mountain Road and Maya Linda Road (16-inch connection with 712/625 pressure reducing station)

Figure 5.15-1, *Proposed Water Facilities*, provides the general layout and connections for Stone Creek's proposed water lines. Construction of and connections to water facilities would occur as part of grading and development of the project. Water facilities would be located within newly constructed streets. Additionally, the project proposes recycled water piping throughout the project. (See Figure 5.15-2, *Proposed Recycled Water Facilities.*) Recycled water would be used to irrigate open space and park areas, as permitted by City policies. No impacts beyond those evaluated in other sections of this EIR would occur as a result in installing water lines and connections to existing facilities.

Water Supply

In accordance with the requirements of SB 610, the City of San Diego Water Department prepared a WSA to assess the availability of water supplies for the Stone Creek project. No water supply verification was required because the project is exempt from SB 221 pursuant to Government Code § 66473.7(i). The WSA evaluates water supplies for a 20-year period that are or would be available during normal single-dry year and multiple dry water years to meet existing demands, projected demands of Stone Creek, and future water demands served by the Water Department. The projected water demand for Stone Creek is shown in Table 5.16-1, *Stone Creek – Current and Projected Water Usage.* The WSA concludes that there are sufficient water supplies to meet the project demand of the project and the existing and other planned development projects within the service area of the Water Department, during a twenty-year projection.

The projected level of water use for the Stone Creek project is within the regional water resource planning documents of the City, the Water Authority, and the Metropolitan Water District. Current and future water supplies, as well as the actions necessary to develop these supplies, have been identified in the water resources

planning documents of the Department, the Water Authority, and Metropolitan Water District to serve the project demands of the Stone Creek project, in addition to existing and planned future water demands of the Department.

Sewer

The project would require three connections to the existing trunk sewer located south of the project site, as shown in Figure 5.15-3, *Proposed Sewer Facilities*. A new connection to the existing 18-inch Carroll Canyon Trunk Sewer would occur at a point along the southerly boundary east of Camino Ruiz. This new connection would be generating a peak dry weather flow (PDWF) of 0.297 mgd. The total flow in the trunk sewer, including the 0.297 mgd from the development, would be 5.409 mgd. The ratio of depth of flow to pipe diameter, d_n/D, is calculated to be 0.57, which is less than the maximum allowed ratio of 0.75 in a trunk sewer.

A new connection to the existing 21-inch Carroll Canyon Trunk Sewer would also occur near the intersection of Carroll Canyon Road and Camino Ruiz. This new connection would be generating a peak dry weather flow of 0.887 mgd. The total flow in the trunk sewer, including the additional flows of 0.297 and 0.887 mgd, at this point would be 5.269 mgd. The ratio of depth of flow to pipe diameter, d_n/D, is calculated to be 0.47, which is less than the maximum allowed ratio of 0.75 in a trunk sewer. An additional new connection to the 21-inch Carroll Canyon Trunk Sewer would occur at a point along the southerly boundary west of Camino Ruiz. This connection would be generating a peak dry weather flow of 0.933 mgd. The total flow in the trunk sewer at this point, including the additional flow of 1.184 mgd flow from the Stone Creek development upstream and the existing flow of 4.518 mgd, would be a total of 6.636 mgd. The ratio of depth of flow to pipe diameter, d_n/D, is calculated to be 0.67, which is less than the maximum allowed ratio of 0.75 in a trunk sewer.

Construction of and connections to sewer facilities would occur as part of grading and development of the project. Sewer facilities would, for the most part, be located within newly constructed streets. Connections to the existing sewer in Carroll Canyon would occur in easements within areas proposed for grading as part of the project. As such, no impacts beyond those evaluated in other sections of this EIR would occur as a result of installing sewer lines and connections to existing facilities.

Solid Waste

As described in Section 3.0, *Project Description*, ultimate build-out of the Stone Creek project would provide up to 4,445 multi-family residential units; approximately 174,000 square feet of retail commercial space; up to 175 hotel rooms; approximately 200,000 square feet of commercial office space; approximately 135,000 square feet of business park uses; approximately 415,000 square feet of light industrial uses; a potential school site; and approximately 300,000 square feet of high technology uses surrounded by more than 37 acres of re-landscaped mined slopes. More than 66 acres of parks, open space, and recreational amenities would also be provided, including the restored Carroll Canyon Creek and adjacent corridor. The resultant estimate of solid waste to be generated by the project is approximately 9,911 tons per year, as shown in Table 5.16-2, *Estimated Solid Waste Generation from the Stone Creek Project – Occupancy Phase.*

The City's threshold for determining if a project would have a significant direct impact associated with solid waste generation is a project that includes the construction, demolition, or renovation of 1,000,000 square feet or more of building space that may generate approximately 1,500 tons of waste or more per year. The project would exceed the City's threshold for direct impacts as it would construct greater than 1,000,000 square feet of building space.

The project prepared a WMP, which has been approved by the City's Environmental Services Department. (The

approved WMP for the project is included in Appendix N to this EIR). Implementation of the WMP would ensure that the project would reduce waste by a minimum of 75 percent of construction-related waste and would implement waste reduction measures during the operational/occupied phase of the project. Measures identified in the WMP would be conditions of the project permit and, when implemented, would ensure that potential impacts to solid waste management facilities, including landfills, materials recovery facilities, and transfer stations, as well as services, including collection, would be below a level of significance.

Gas and Electricity

For a discussion of the Stone Creek project's impacts relative to gas and electricity, please see Section 5.8, *Energy.*

Significance of Impacts

CUP/Reclamation Plan Amendment

Current operations do not result in significant impacts to water, sewer, storm water drainage, electricity, and natural gas. In addition, continued activities would not exceed the City's threshold for direct impacts and, therefore, would not contribute to a significant direct impact associated with solid waste. Overall, impacts to public utilities would be less than significant.

Stone Creek Project

The project would not result in significant impacts to water, sewer, storm water drainage, electricity, and natural gas. Additionally, the project would not result in impacts associated with solid waste. Overall, impacts to public utilities would be less than significant.

Mitigation Measures

No mitigation measures would be required.

ISSUE 2

Would the project result in the use of excessive amounts of water?

ISSUE 3

Would the project result in landscaping that is predominantly non-drought resistant vegetation?

Significance thresholds:

- Result in the use of excessive amounts of water.
- Result in landscaping that is predominantly non-drought resistant vegetation.

Impacts

CUP/Reclamation Plan Amendment

The CUP/Reclamation Plan Amendment proposes landscaping that is predominantly drought-resistant. Minimal landscaping occurs as part of the on-going mining operations, because mining is constantly changing the landform. Where vegetation does occur around the site perimeter, plant materials are already established and primarily use rainwater for irrigation. Landscaping proposed as part of the Reclamation Plan Amendment for mined slopes, reclaimed areas, and the Carroll Canyon Creek Corridor would include shrubs, groundcovers, trees, and hydroseeded areas. Low-water use, native and naturalized plant species have been selected for the Reclamation Plan Amendment landscaping. Temporary irrigation would be installed to ensure that plant material is established. Once established, landscaped areas would be irrigated by rainwater.

Stone Creek Project

The Stone Creek project would result in landscaping that is predominantly drought-resistant. The project includes landscaping for mined slopes, public streets, parks, and the Carroll Canyon Creek Corridor. Landscaped materials have been selected to reflect San Diego's climate and native plant palette. Drought-resistant plant materials are proposed for slopes, where irrigation would be temporary until plant material is established. A variety of trees are proposed to landscape public streets, with a focus on drought tolerant species. Once established, street trees would need minimal water. While pocket parks may have landscaped areas, hardscape would also be featured, reducing the amount of landscaping that would need watered. Turf areas are proposed for public park lands, along with large canopy trees, which would shade turf areas and reduce the amount of water evaporation. Landscaping within the Carroll Canyon Creek Corridor would feature riparian tree species, with root systems that are able to tap into groundwater at maturity. Recycled water is proposed to irrigate all common landscaped areas, further reducing the use of potable water for irrigation purposes.

Significance of Impacts

CUP/Reclamation Plan Amendment

Landscaping for the CUP/Reclamation Plan Amendment would be predominantly drought-resistant. Because irrigation would be temporary, the CUP/Reclamation Plan Amendment would not result in excessive amounts of water use. Impacts would be less than significant.

Stone Creek Project

The project would not result in excessive amounts of water use. Additionally, the project would be landscaped with predominantly drought-resistant landscaping. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Table 5.15-1, *Stone Creek – Current and Projected Water Usage*

	Existing Daily Use (Gallons per Day)	Projected Daily Use (Gallons per Day)	Net Increase in Water Demand (Gallons per Day)
Entire Project Site	29,035	1,844,898	1,815,863
Less Reclaimed Water Usage [1]			-169,342
		TOTAL	1,646,521

[1] Reclaimed water use for parks and slopes

Table 5.15-2. *Estimated Solid Waste Generation from the Stone Creek Project – Occupancy Phase*

Use	Intensity	Waste Generation Rate	Estimated Waste Generated (tons/year)
Residential	4,445 units	1.2 tons/year/unit	5,334
Commercial – General Retail	174,000 sq. ft.	0.0028 tons/year/sq. ft.	487
Commercial - Office	200,000 sq. ft.	0.0017/tons/year/sq. ft.	340
Hotel	175 rooms	0.0045 tons/year/sq. ft.	518
Business Park	135,000 sq. ft.	0.0017 tons/year/sq. ft.	229
Light Industrial	415,000 sq. ft.	0.0042 tons/year/sq. ft.	1,743
High Technology	300,000 sq. ft.	0.0042 tons/year/sq. ft.	1,260
		TOTAL	**9,911**

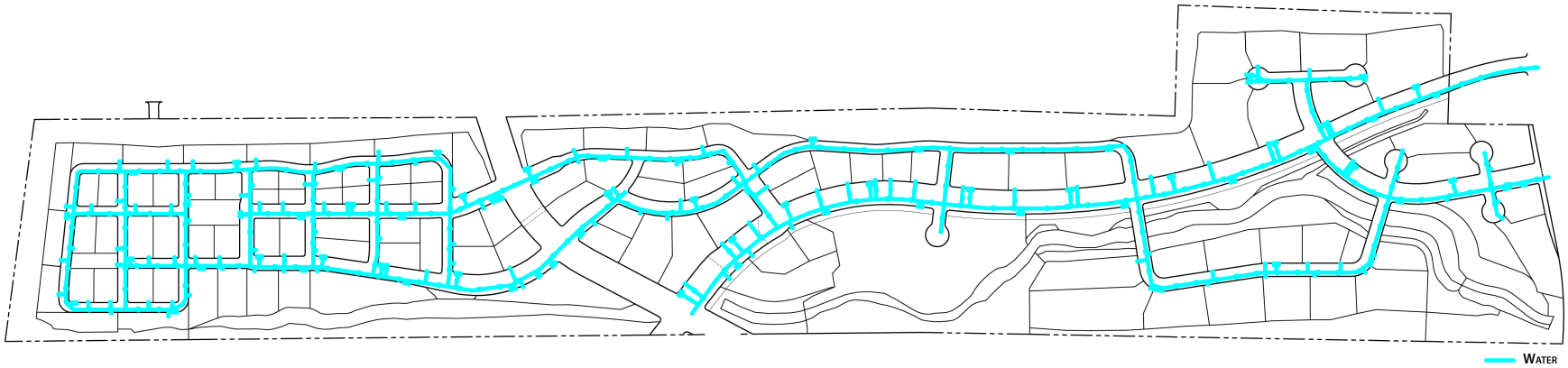


Figure 5.15-1. ***Proposed Water Facilities***

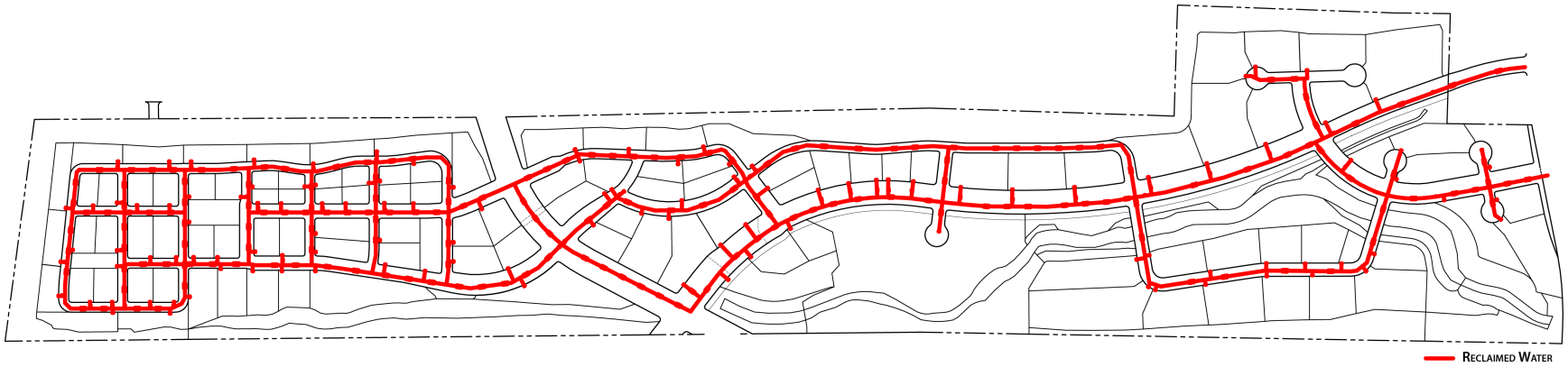


Figure 5.15-2. ***Proposed Recycled Water Facilities***

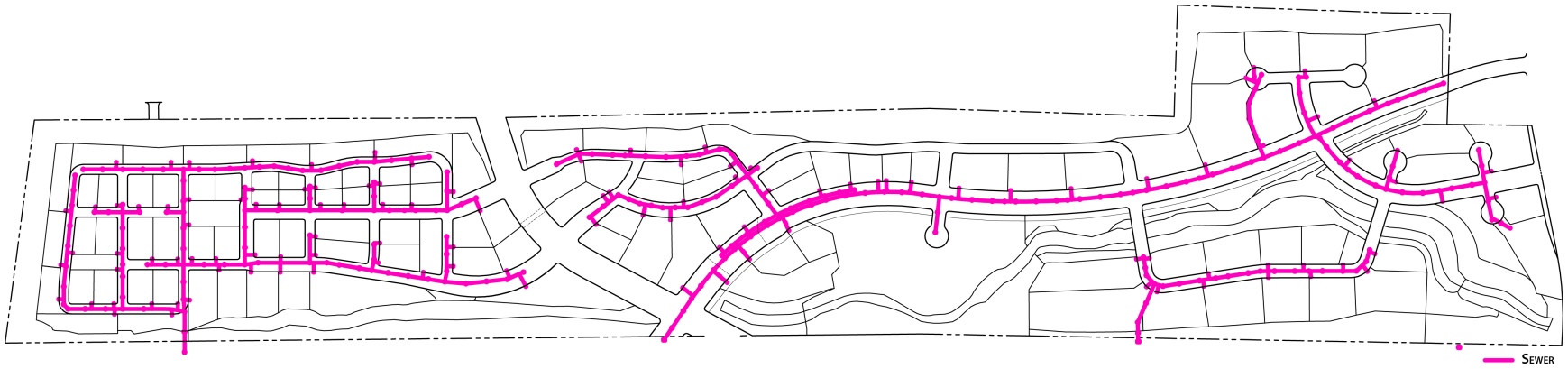


Figure 5.15-3. ***Proposed Sewer Facilities***

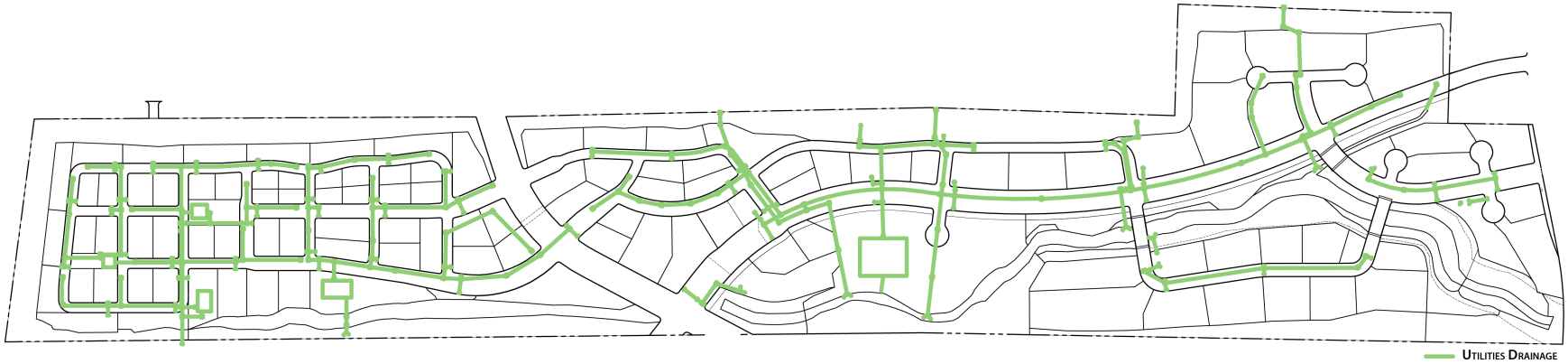


Figure 5.15-4. ***Proposed Storm Drain Facilities***