Appendix L. Noise Technical Report

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Noise Technical Report

Fanita Ranch Project

May 2020

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Table of Contents

Acronyms and Abbreviations ..... **v**

Section 1 Summary **1**

Section 2 Project Description **5**

2.1 Project Location and Regional Context 5
2.2 Fanita Ranch Project 5
2.2.1 Fanita Commons 6
2.2.2 Orchard Village 6
2.2.3 Vineyard Village 6
2.2.4 Habitat Preserve 13
2.2.5 Farm 13
2.2.6 Special Use Area 13
2.2.7 Parks, Trails, and Recreational Facilities 13
2.2.8 Mobility (On Site) 14
2.2.9 Mobility Improvements 14
2.2.10 Development Phasing 14

Section 3 Existing Conditions **17**

3.1 Noise Basics 17
3.1.1 Quantification of Noise 17
3.1.2 Noise Effects 19
3.2 Environmental Vibration Basics 19
3.3 Regulatory Framework 21
3.3.1 Federal 21
3.3.2 State 22
3.3.3 Local 22
3.4 Existing Noise Environment 27
3.4.1 Existing Conditions 27
3.4.2 Ambient Noise Monitoring 28
3.4.3 Transportation Noise Sources 35
3.4.4 Noise-Sensitive Land Uses 37
3.4.5 Vibration-Sensitive Land Uses 37

Section 4 Methods and Significance Criteria **39**

4.1 Methods 39
4.1.1 Excessive Noise Levels 39
4.1.2 Groundborne Vibration 39
4.1.3 Aircraft Noise 40
4.2 Significance Criteria 40

Section 5 Impact Analysis and Mitigation Measures 43
5.1 Impact Analysis 43
5.1.1 Threshold 1: Exceedance of Noise Standards 43
5.1.2 Threshold 2: Excessive Groundborne Vibration or Noise 104
5.1.3 Threshold 3: Aircraft Noise 109
Section 6 References 111

Figures

Figure 1. Regional Location 7
Figure 2. Project Site 9
Figure 3. Conceptual Land Use Plan 11
Figure 4. Conceptual Phasing Plan 15
Figure 5. Project Area Noise Monitoring Locations 31
Figure 6. Farm Noise Monitoring Locations 33
Figure 7. Noise Receptors and Sources 45
Figure 8. Noise Mitigation Locations 89

Tables

Table 1. Summary of Impacts 2
Table 2. Noise Mitigation Measure Equivalency Table 3
Table 3. Typical A-Weighted Noise Levels 17
Table 4. Human Response to Different Levels of Groundborne Vibration 20
Table 5. FTA Groundborne Vibration Impact Criteria 21
Table 6. Santee General Plan Land Use Compatibility Guidelines (Ldn) 24
Table 7. Ambient Sound Level Measurements (dBA) 29
Table 8. Existing Off-Site Roadway Noise Levels 36
Table 9. Existing + Project Traffic Noise Levels 60
Table 10. Near-Term Traffic Noise Levels 63
Table 11. Year 2035 Traffic Noise Levels 67
Table 12. Existing + Construction Traffic Noise Levels (Construction Activities Other than Building Construction) 73
Table 13. Existing + Building Construction Traffic Noise Levels 74
Table 14. Near-Term + Interim Operation and Construction Traffic Noise Levels (Construction Activities Other than Building Construction) 77
Table 15. Near Term + Interim Operation and Building Construction Traffic Noise Levels 80
Table 16. Significant Permanent Vehicle Noise Impact Summary 87
Table 17. Permanent Vehicle Noise Impact with Noise Barrier Installation Mitigation 93
Table 18. Interim Traffic Noise Impacts (Unmitigated) 95
Table 19. Mitigated Interim Traffic Noise Impacts 97

Table 20. Cumulative Traffic Noise Impacts 101
Table 21. Vibration Source Levels for Construction Equipment 106

Appendices

Appendix A. Site Utilization Plan Statistical Summary
Appendix B. FHWA Noise Prediction Model Results – Preferred Land Use Plan With School
Appendix C. FHWA Noise Prediction Model Results – Land Use Plan Without School
Appendix D. FHWA Noise Prediction Model Results – Average Construction Volumes
Appendix E. FHWA Noise Prediction Model Results – Building Construction Worst-Case Scenario
Appendix F. Roadway Construction Noise Model Results On Site
Appendix G. Roadway Construction Noise Model Results Off Site
Appendix H. Noise Barrier Height Estimates
Appendix I. Use of Asphalt Rubber as CEQA Mitigation Memorandum

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Acronyms and Abbreviations

ADT	average daily traffic
Caltrans	California Department of Transportation
CEQA	California Environmental Quality
CFR	Code of Federal Regulations
CNEL	community noise equivalent level
dB	decibels
dBA	A-weighted decibels
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
in/sec	inches per second
Ldn	day-night noise level
Leq	equivalent energy level
Lmax	maximum noise level
Lmin	minimum noise level
MCAS	Marine Corps Air Station
NSLU	noise-sensitive land use
PDMWD	Padre Dam Municipal Water District
PPV	peak particle velocity
RCNM	Roadway Construction Noise Model
RV	recreational vehicle
SR-	State Route
UTV	utility task vehicle
VdB	vibration decibels

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Section 1 Summary

This report assesses potential noise and vibration impacts associated with implementation of the Fanita Ranch Project (proposed project). This report examines the impacts of the proposed project and proposes mitigation measures where necessary and feasible to address significant noise impacts.

The noise and vibration analysis concluded that implementation of the proposed project would have the potential to result in five significant impacts: (1) nighttime nuisance noise from potential use of Special Use area, (2) excessive noise levels as a result of permanent increases in ambient noise levels, (3) exposure of new noise-sensitive land use (NSLU) to noise levels in excess of land use compatibility standards, (4) excessive noise levels during construction, and (5) groundborne vibration impacts during roadway construction. These impacts are summarized in Table 1. Mitigation Measure NOI-1 would reduce nuisance noise from the Special Use area to a less than significant level. Mitigation Measure NOI-2 would reduce impacts from traffic noise levels to certain receptors to less than significant but would not fully mitigate impacts to any entire segment due to infeasibility. Mitigation Measure NOI-3 would reduce operational impacts related to on-site noise compatibility to a less than significant level. Mitigation Measures NOI-4 and NOI-5 would reduce temporary ambient noise levels increases from construction vehicle trips to a less than significant level. Mitigation Measures NOI-6 and NOI-7 would reduce impacts related to construction equipment noise levels to a less than significant level. Mitigation Measures NOI-8 and NOI-9 would reduce groundborne vibration impacts to a less than significant level. Impacts related to aircraft operations would be less than significant without mitigation. Table 2 provides a crosswalk for mitigation measure numbering between the Fanita Ranch Draft Revised Environmental Impact Report, Section 4.13, Noise, and this Noise Technical Report.

Table 1. Summary of Impacts

Threshold	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Project Impacts				
Exceedance of Noise Standards	The proposed project would have the potential to generate substantial temporary noise during construction and permanent increases in ambient noise levels during operation.	Potentially significant	Special Use Area Noise Measures (NOI-1), Noise Barrier Installation (NOI-2), On-Site Ambient Noise Exposure (NOI-3), Construction Access Road Speed Limitations (NOI-4), Vendor Trip Route Limitations (NOI-5), Roadway Construction Notification (NOI-6), Nighttime Noise Sound Management Plan (NOI-7)	Significant and unavoidable (permanent increase in traffic noise levels); less than significant (construction and project operation)
Excessive Groundborne Vibration or Noise	Construction activities including blasting may result in substantial temporary increase in groundborne vibration and/or noise levels.	Potentially significant	Roadway Construction Notification (NOI-6), Nighttime Noise Sound Management Plan (NOI-7), Vibration Best Management Practices (NOI-8), Construction Vibration Notification (NOI-9)	Less than significant
Aircraft Noise	The proposed project would not expose people residing or working on the project site to excessive noise levels resulting from aircraft noise.	Less than significant	No mitigation required	Less than significant
Cumulative Impacts				
Exceedance of Noise Levels	A cumulatively considerable impact as a result of cumulative growth through Year 2035 would occur on a total of seven roadway segments.	Potentially significant	Noise Barrier Installation (NOI-2)	Cumulatively considerable and unavoidable
Excessive Groundborne Vibration	A significant cumulative vibration impact would not occur.	Less than significant	No mitigation required	Not cumulatively considerable
Aircraft Noise	A cumulative impact related to aircraft noise would not occur.	Less than significant	No mitigation required	Not cumulatively considerable

Table 2. Noise Mitigation Measure Equivalency Table

Noise Technical Report	Environmental Impact Report Section 4.12, Noise
NOI-1: Special Use Area Noise Measures	NOI-5
NOI-2: Noise Barrier Installation	NOI-6
NOI-3: On-Site Ambient Noise Exposure	NOI-7
NOI-4: Construction Access Road Speed Limitations	NOI-1
NOI-5: Vendor Trip Route Limitations	NOI-2
NOI-6: Roadway Construction Notification	NOI-3
NOI-7: Nighttime Noise Sound Management Plan	NOI-4
NOI-8: Vibration Best Management Practices	NOI-8
NOI-9: Construction Vibration Notification	NOI-9

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Section 2 Project Description

The main components of the proposed project are summarized below.

2.1 Project Location and Regional Context

The project site consists of approximately 2,638 acres in the northern portion of the City of Santee (City) in eastern County of San Diego (County). The City is located approximately 18 miles east of downtown San Diego and the Pacific Ocean (see Figure 1, Regional Location). The project site is north of State Route (SR-) 52 and west of SR-67 (see Figure 2, Project Site). Access to the project site would be provided by the northerly extension of Fanita Parkway and Cuyamaca Street and the extension of Magnolia Avenue to Cuyamaca Street. The project site is bordered by Marine Corps Air Station (MCAS) Miramar and Padre Dam Municipal Water District (PDMWD) facilities and Santee Lakes Recreation Preserve to the west; open space/recreational areas, including Goodan Ranch/Sycamore Canyon County Preserve, to the north and west; existing City residential neighborhoods to the south; and Eucalyptus Hills, an existing residential community in the County's jurisdiction, to the east.

2.2 Fanita Ranch Project

The proposed project proposes to develop a master planned community consisting of up to 2,949 residences under the preferred land use plan with school, or 3,008 units under the land use plan without school, up to 80,000 square feet of commercial uses, a school site, parks, open space, and agricultural uses (see Figure 3, Conceptual Land Use Plan, and Appendix A, Site Utilization Plan Statistical Summary). The proposed project would implement a Specific Plan that preserves approximately 63 percent of the project site as a permanent Habitat Preserve (approximately 1,650.4 acres). Development would be clustered within three villages: Fanita Commons, Orchard Village, and Vineyard Village. Each village would be defined by its unique design theme, location, physical characteristics, and mix of housing types and land uses. In addition to the villages, the Specific Plan would include a 31.9-acre Special Use area located in the southwest portion of the project site. The proposed project would provide approximately 78 acres of public and private parks distributed throughout the three villages, including a 31.2-acre Community Park, 30.4 acres of Neighborhood Parks, and approximately 16.4 acres of Mini-Parks and paseos. The Farm would be approximately 27.3 acres, with an additional 10.9 acres of agricultural land uses throughout the site. Approximately 256 acres of open space, outside of the Habitat Preserve, would include manufactured open space slopes, fuel modification areas, trails, water quality/hydromodification basins, pump stations, and water tanks.

Each village/development area and key project components are summarized below.

2.2.1 Fanita Commons

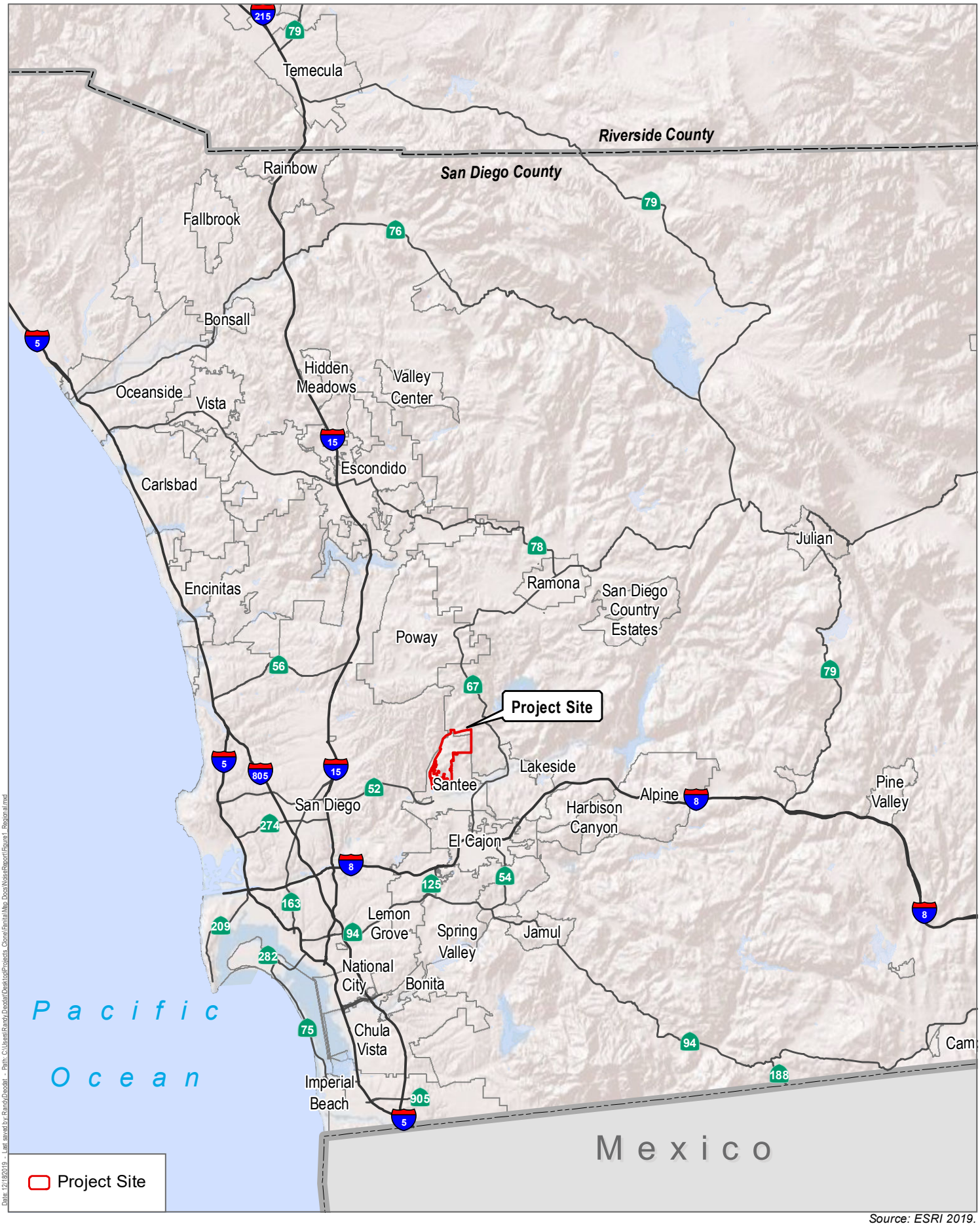
Fanita Commons would be in the northwest portion of the project site and is planned as the primary activity center for the proposed project. Fanita Commons would include a mixed-use Village Center, an Active Adult neighborhood, a K–8 school site, a Community Park, a working farm, and two preserved natural drainages with an adjoining Linear Park. With the Farm as its focal point, orchards, vineyards, fields, and a barn for community events would define this village. The mixed-use Village Center would allow for up to 40,000 square feet of commercial uses and residential, recreation, and civic uses, including a site for a new City fire station. A 15-acre school site would accommodate up to 700 students. If the Santee School District does not acquire the school site, the underlying Medium Density Residential land use designation would be implemented. In that case, the maximum total number of units permitted in the Specific Plan would increase by 59 units for a total of 3,008 units. Fanita Commons would include a total of 768 residential units, including 445 Active Adult residences and 323 residences within the mixed-use Village Center.

2.2.2 Orchard Village

Orchard Village would be located south of Fanita Commons and consists of residential land uses, Neighborhood and Mini-Parks, and a centrally located mixed-use Village Center. Orchard Village would provide a total of 855 residential units, including 454 Low Density Residential) residences, 368 Medium Density Residential residences and 33 residences within the mixed-use Village Center. Open space and a linear riparian area geographically and topographically would separate Orchard Village from Fanita Commons. Roadways, trails, and a pedestrian bridge would connect Orchard Village to Fanita Commons. A neighborhood-serving Village Center would include up to 10,000 square feet of retail, office, and commercial uses. Orchard Village would also include Neighborhood Parks and Mini-Parks.

2.2.3 Vineyard Village

Vineyard Village would be located in the northeastern portion of the project site. Vineyard Village would be separated from the other two villages by an open space/wildlife corridor within the Habitat Preserve. Two local streets would connect Vineyard Village to Fanita Commons and Orchard Village. Vineyard Village would provide a total of 1,326 residential units including 749 Low Density Residential residences, 498 Medium Density Residential residences, and 79 residences within the mixed-use Village Center. The neighborhood-serving Village Center would include up to 10,000 square feet of retail and office uses. Vineyard Village would also feature agricultural land planned for vineyards, as well as Neighborhood Parks and Mini-Parks.



Source: ESRI 2019.

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Figure 1

Regional Location

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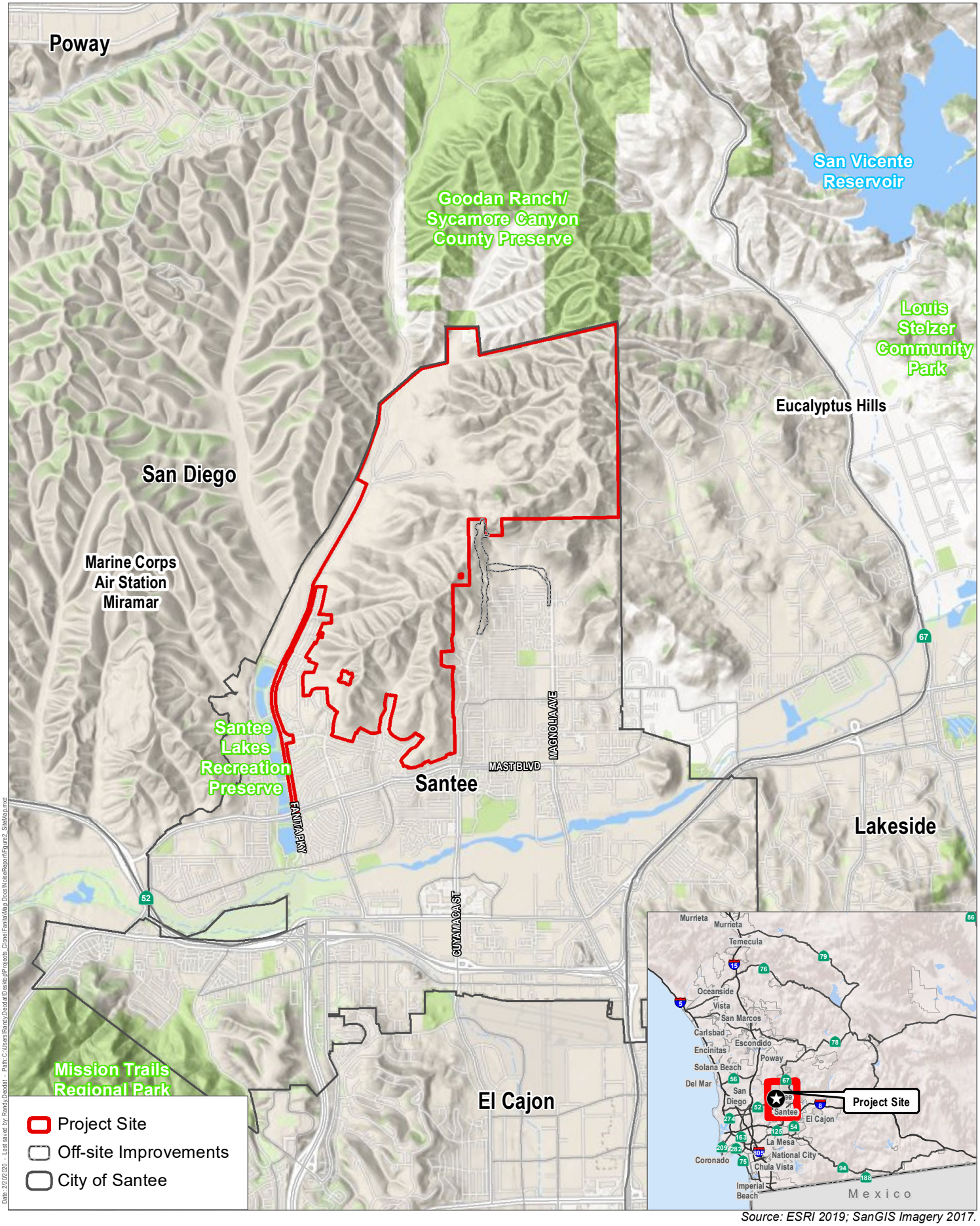

Source: ESRI 2019; SanGIS Imagery 2017.

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Figure 2

Project Site

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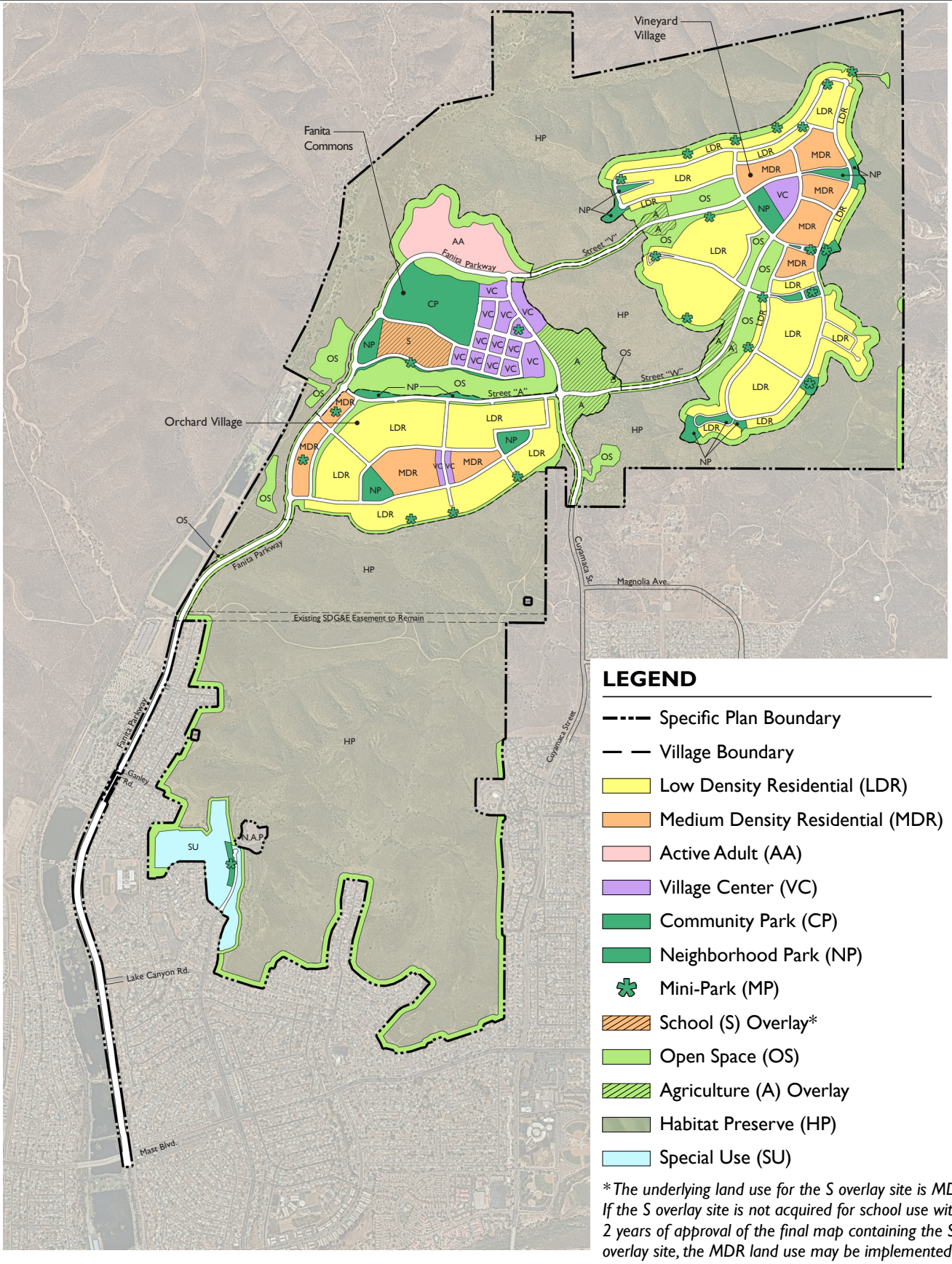

LEGEND

- Specific Plan Boundary
- Village Boundary
- Low Density Residential (LDR)
- Medium Density Residential (MDR)
- Active Adult (AA)
- Village Center (VC)
- Community Park (CP)
- Neighborhood Park (NP)
- Mini-Park (MP)
- School (S) Overlay*
- Open Space (OS)
- Agriculture (A) Overlay
- Habitat Preserve (HP)
- Special Use (SU)

*The underlying land use for the S overlay site is MDR. If the S overlay site is not acquired for school use within 2 years of approval of the final map containing the S overlay site, the MDR land use may be implemented on the S overlay site pursuant to Specific Plan.

Source: Fanita Ranch Specific Plan 2020.

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Figure 3

Conceptual Land Use Plan

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2.2.4 Habitat Preserve

The Habitat Preserve would be composed of approximately 1,650.4 acres of permanently preserved open space. The biological areas within the Habitat Preserve would be conserved and managed in perpetuity and protected through permanently funded management plans and funding mechanisms. Permitted uses within the Habitat Preserve would include water quality features, water reservoirs and pump stations, utilities and utility access roads, trails, and revegetated slopes. Restoration and management of the Habitat Preserve would be conducted as prescribed by the Natural Community Conservation Plan design guidelines and standards and City's 2018 Draft Multiple Species Conservation Program Subarea Plan.

2.2.5 Farm

The Farm would be the community focal point for the proposed project. The approximately 27.3-acre Farm would be located along the eastern edge of Fanita Commons, near the center of the proposed project. An event barn featuring iconic agrarian architecture would set the theme for the community and provide a venue for special events and farming operations. The working Farm is planned to include terraced vegetable fields, pasture lands, limited housing for employees, raised gardens, and small-scale animal husbandry. A community-supported agriculture program is planned for the Farm. Food grown on the Farm may be distributed to local schools, restaurants, and other institutional facilities, such as the congregate care and assisted living facilities.

2.2.6 Special Use Area

The Special Use area would be composed of approximately 31.9 acres in the southwestern corner of the project site east of Fanita Parkway and west of an existing PDMWD Carlton Hills water reservoir. Permitted uses for the Special Use area would include water quality basins, the extension of Carlton Hills Boulevard, a solar farm, recreational vehicle (RV) and boat storage, or aboveground agriculture. Access to the Special Use area would be provided by Carlton Hills Boulevard. A Mini-Park would be along the eastern perimeter of the Special Use area and provide trail staging and parking areas for trail users on the project site.

2.2.7 Parks, Trails, and Recreational Facilities

The proposed project would include a coordinated system of parks and non-motorized use trails that connect to the three villages, regional trails, and surrounding open space areas, including the Habitat Preserve. Approximately 78 acres of public and private parks would be distributed throughout the three villages. The Community Park, located in Fanita Commons, would provide for both active and passive recreation opportunities. Neighborhood Parks are planned in key locations to provide recreational opportunities within walking distance of all residences. Mini-Parks would provide trailheads, overlooks, and passive recreational opportunities. A series of trails and paths would connect the Farm to the villages in the proposed project.

2.2.8 Mobility (On Site)

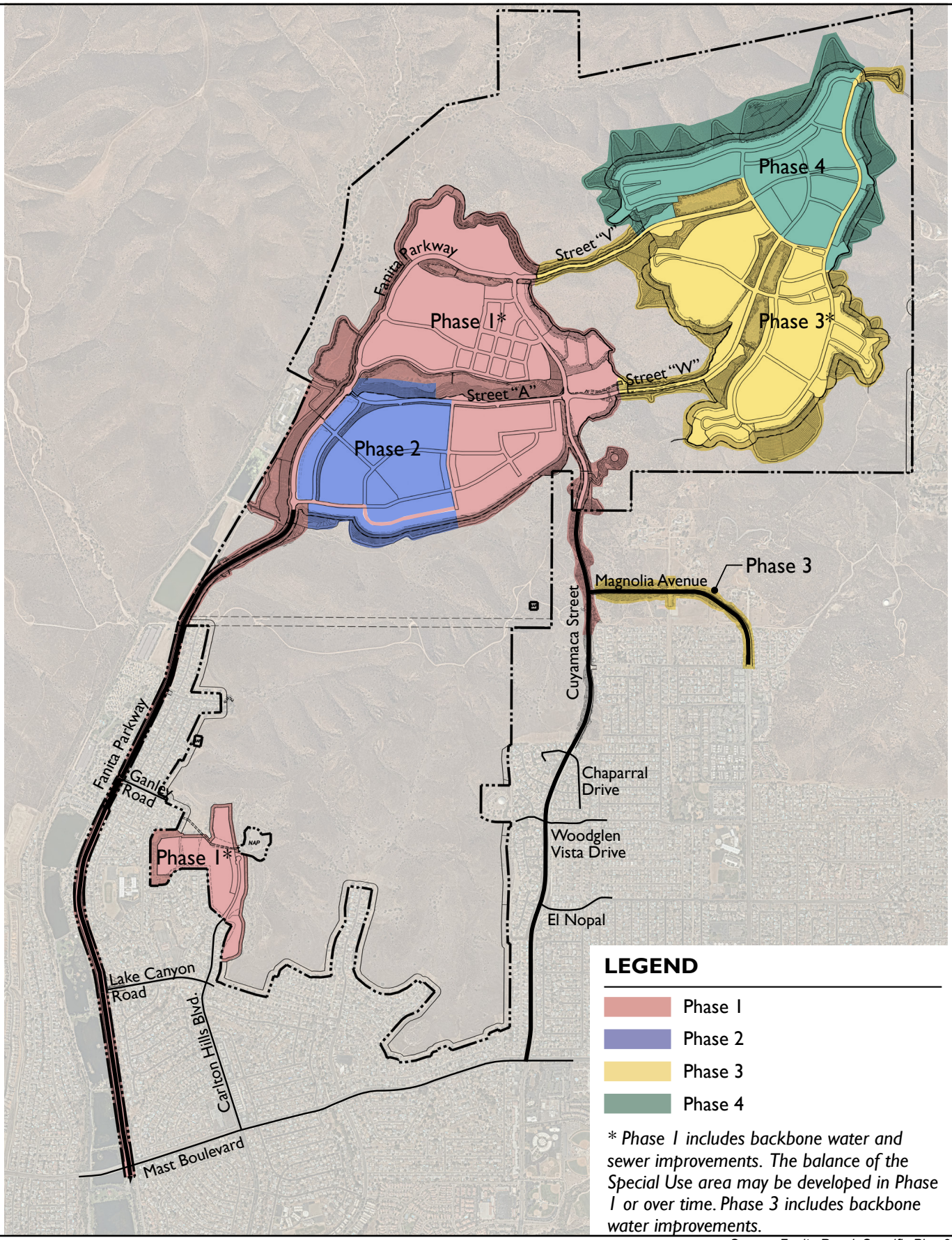
The Fanita Ranch Specific Plan would establish an on-site roadway network and street cross sections designed as a system of complete streets that support motorists, pedestrians, bicyclists, and transit users. On-site streets would generally be two lanes and include traffic calming measures such as gateways, roundabouts, narrowed travel lanes, on-street bike facilities and parking, a chicane, raised crosswalks, and intersection pop-outs. On-site streets that cross open space areas would be designed to minimize impacts to sensitive habitat and to accommodate wildlife crossings.

2.2.9 Mobility Improvements

Mobility improvements would include the extension of three roadways identified in the Santee General Plan Mobility Element: (1) the extension of Fanita Parkway from Ganley Road through the project site, (2) the extension of Cuyamaca Street from north of Chaparral Drive through the project site, and (3) the extension of Magnolia Avenue from its current northern limit to Cuyamaca Street. Additionally, the proposed project proposes to widen Fanita Parkway between Mast Boulevard and Lake Canyon Road and modify Cuyamaca Street from Mast Boulevard to Chaparral Drive to consist of a four-lane divided street with two travel lanes in each direction, bicycle lanes, and sidewalks.

2.2.10 Development Phasing

The proposed project would be developed in four phases over a 10- to 15-year period, as shown on Figure 4, Conceptual Phasing Plan. Phases would overlap or vary depending on market conditions and may be broken down into smaller subphases. Construction is anticipated to begin in 2021. The Special Use area would not be tied to development phasing and may be developed anytime during project buildout; however, water infrastructure in the Special Use area would be constructed during Phase 1.



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Source: Fanita Ranch Specific Plan 2020.

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Figure 4

Conceptual Phasing Plan

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Section 3 Existing Conditions

3.1 Noise Basics

3.1.1 Quantification of Noise

The California Department of Transportation (Caltrans) defines noise as sound that is loud, unpleasant, unexpected, or undesired. Further, for the purposes of noise analysis, noise only exists if a source, path, and receiver are present. Sound pressure waves must be produced by a source and transmitted through a medium, such as air. The sound must be perceived by, registered by, or affect a receptor, such as an ear or noise monitoring device (Caltrans 2013a).

Sound pressure levels are quantified using a logarithmic ratio of actual sound pressures to a reference pressure squared, called bels. A bel is typically divided into tenths, or decibels (dB). Sound pressure alone is not a reliable indicator of loudness because frequency (or pitch) also affects how receptors respond to the sound. To account for the pitch of sounds and the corresponding sensitivity of human hearing to them, the raw sound pressure level is adjusted with a frequency-dependent A-weighting scale that is stated in units of decibels (dBA) (Caltrans 2013a). Typical A-weighted noise levels are listed in Table 3.

Table 3. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet flyover at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night

Table 3. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013a.
Note: dBA = A-weighted decibel

A receptor's response to a given noise may vary depending on the sound level, duration of exposure, character of the noise sources, the time of day during which the noise is experienced, and the activity affected by the noise. Activities most affected by noise include rest, relaxation, recreation, study, and communications. In consideration of these factors, different measures of noise exposure have been developed to quantify the extent of the effects from a variety of noise levels. For example, some measures consider the 24-hour noise environment of a location by using a weighted average that penalizes noise levels during normal relaxation and sleep hours. Other measures consider an average noise level over a period of time that includes ambient noise and a steady-state noise source for a given period of time within the averaging period (Caltrans 2013a). The indices for measuring community noise levels that are used in this report are defined below:

Lmax, the maximum noise level, is the highest instantaneous noise level during a specified time period.

Lmin, the minimum noise level, is the lowest instantaneous noise level during a specified time period.

Leq, the equivalent energy level, provides an average acoustical or sound energy content of noise, measured during a prescribed period, such as 1 minute, 15 minutes, 1 hour, or 8 hours. The sound level may not be constant over the measured time period, but the average decibel sound level, given as dBA Leq, contains an equal amount of energy as the fluctuating sound level.

Ldn, the day-night noise level, is a 24-hour Leq, except that the nighttime hours (10:00 p.m. to 7:00 a.m.) are assessed a 10 dBA penalty. This penalty attempts to account for the fact that nighttime noise levels are potentially more disturbing than equal daytime noise levels. The community noise equivalent level (CNEL) is similar to Ldn, except an additional +5 dBA weighting is applied to all sound occurring between 7:00 p.m. and 10:00 p.m. The City uses Ldn to measure noise in the City; therefore, Ldn is used in this analysis (City of Santee 2003). Ldn and CNEL are typically within 1 dBA of each other and, for most intents and purposes, are interchangeable.

The decibel level of a sound decreases (or attenuates) as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by about 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line" source such as vehicular traffic, attenuates by approximately 3 dBA per doubling of distance. Other contributing factors that affect sound reception include ground absorption, topography that provides a natural barrier, meteorological conditions, or the presence of human-made obstacles such as buildings and sound barriers (Caltrans 2013a). Noise from roadways in environments with major ground effects may yield attenuation rates as high as 4.5 dBA for each doubling of distance due to vegetation and loose soils that would reduce noise levels by either absorbing or scattering the sound (WSDOT 2019).

3.1.2 Noise Effects

Reaction to a given sound varies depending on acoustical characteristics of the source and the environment of the receptor. The A-scale deemphasizes low-frequency sounds because humans are more sensitive to high-frequency sounds that are more likely to cause hearing damage. People tend to compare an intruding noise to existing background noise levels. If a new noise is considerably louder or noticeable above existing levels, it is generally considered objectionable. The activity that the receptor is engaged in also affects response. For example, the same noise source, such as constant freeway traffic, may be more objectionable to people sleeping than to workers in a factory. A 3 dBA change is the smallest increment that is perceptible by most receivers, and a 5 dBA change in community noise level is clearly noticeable. Generally, 1 to 2 dBA changes are not detectable, except under controlled laboratory conditions. A sound that is 10 dBA greater than the reference sound is typically perceived as twice as loud (Caltrans 2013a).

3.2 Environmental Vibration Basics

Vibration is defined as dynamic excitation of an elastic system, such as the ground or a structure, which results in oscillatory movement of the system (Caltrans 2013b). Typical human-made causes of earthborne vibration include trains and construction activities such as blasting, pile-driving, and operation of heavy earthmoving equipment (FTA 2018). The resulting waves transmitted through solid material are referred to as structureborne or groundborne vibration. Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. The vibration levels inside a building depend on the vibration energy that reaches the foundation and the characteristics of the structure that affect propagation of the vibration through it. A heavier building will typically experience lower vibration levels. The most common impact associated with vibration is annoyance resulting from the effects of vibration, such as building movement, rattling of windows, shaking of items on shelves or walls, and rumbling sounds. In more extreme cases, building damage may occur. Because the effects of vibration elicit a greater response than the vibration itself, vibration is typically only perceptible to people inside buildings (FTA 2018).

Vibration levels are typically expressed in terms of the peak particle velocity (PPV) and root mean square amplitude, both in inches per second (in/sec). PPV is most appropriate for evaluating building damage potential. Caltrans estimates that continuous vibration levels of less than 0.08 PPV and single-event vibration levels of less than 0.12 PPV do not result in damage to even the most fragile historic buildings (Caltrans 2013b). The Federal Transit Administration (FTA) has identified a maximum PPV of 0.2 in/sec for fragile buildings and 0.12 in/sec for extremely fragile historic buildings (FTA 2018).

PPV does not account for human response to vibration. The root mean square amplitude is used to represent average vibration amplitude, which accounts for the time it takes for the human body to respond to vibration signals. The root mean square amplitude is also given in decibel notation, referenced as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration relative to human response (FTA 2018). The general human response to different groundborne vibration velocity levels is described in Table 4.

Table 4. Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Noise Level		Human Reaction
	Low Frequency	Mid Frequency	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many people. Mid-frequency sound may disturb sleep.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is annoying. Mid-frequency noise disturbs sleep and is considered annoying in more quiet areas.
85 VdB	45 dBA	60 dBA	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise disturbs sleep and mid-frequency noise can be annoying to daytime NSLUs, such as schools.

Source: FTA 2018.

Note: dBA = A-weighted decibel; NSLU = noise-sensitive land use; VdB = vibration decibel

The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Like airborne noise, groundborne noise is measured in dBA. The sound level accompanying vibration is generally 25 to 40 dBA lower than the vibration velocity level in VdB, as shown in Table 4. Due to its low-frequency components, groundborne noise sounds louder than broadband noise with the same noise level (FTA 2018). Typical human response to groundborne noise levels are shown in Table 4. The background vibration velocity level in residential areas is usually around 50 VdB, which is below the 65 VdB threshold of human perception (FTA 2018). The same human reaction corresponds to a given vibration velocity level and its resulting noise level; therefore, for simplicity, this analysis refers only to a source's VdB to describe potential human response to groundborne vibration and noise.

3.3 Regulatory Framework

3.3.1 Federal

3.3.1.1 Federal Aviation Administration Standards

Enforced by the Federal Aviation Administration, Code of Federal Regulations, Title 14, Part 150, prescribes the procedures, standards, and methods governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. Title 14 also identifies those land uses which are normally compatible with various levels of exposure to noise by individuals. The Federal Aviation Administration considers residential land uses to be compatible with exterior noise levels at or less than 65 dBA Ldn.

3.3.1.2 Federal Transit Administration Standards

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018) are routinely used for projects proposed by local jurisdictions. The manual includes criteria for assessing the impacts of groundborne vibration, presented in Table 5.

Table 5. FTA Groundborne Vibration Impact Criteria

Land Use Category	Impact Levels (VdB)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: FTA 2018.

Notes: VdB = vibration decibel

Vibration levels are measured in or near the vibration-sensitive use.

[1] "Frequent Events" are defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" are defined as fewer than 30 vibration events of the same source per day.

3.3.1.3 Noise Control Act

The Noise Control Act of 1972 identified uncontrolled noise as a danger to health and welfare, particularly for people in urban areas. Responsibility for noise control remains primarily a state and local issue; however, the Noise Control Act established a means for effective coordination of federal research and noise control activities (USEPA 2019). The act included a directive that the U.S. Environmental Protection Agency develop and publish information on noise levels to protect public health and welfare with an adequate margin of safety. In 1974, the U.S. Environmental

Protection Agency published the document "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety." The document identifies an interior noise level of 45 dBA Ldn in indoor residential areas to be adequate to protect indoor activity from interference and annoyance. An exterior noise level of 55 dBA Ldn was identified as the maximum noise level to avoid interference and annoyance in residential areas and other areas in which quiet is a basis for use. A maximum 24-hour average outdoor noise level of 70 dBA Leq is recommended to prevent hearing loss (USEPA 1974).

3.3.2 State

3.3.2.1 California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, find that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare. Section 46050.1 of the act mandates development guidelines for the preparation and content of General Plan Noise Elements.

3.3.3 Local

3.3.3.1 Santee General Plan

The Noise Element of the Santee General Plan contains goals and policies to control and abate environmental noise and to protect the citizens of Santee from excessive exposure to noise. The Santee General Plan establishes an exterior ambient noise standard of 65 dBA Ldn for NSLUs. This criterion is applied at the rear yard areas of single-family residences and ground floor common areas and private patio areas for multi-family residences. For other NSLUs, such as libraries, schools, or hospitals, noise-sensitive areas shall be those areas that serve a significant function for the use that could be adversely affected by noise. For example, for schools, it is applied to outdoor teaching or discussion areas (does not include playgrounds or other active outdoor areas).

Table 6 presents the Noise Element guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. Normally acceptable noise levels are defined as satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. Conditionally acceptable noise levels indicate that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice. The Santee General Plan states

that these compatibility guidelines are not prohibitive but should be used as a guide and a resource.[1] Additionally, the Santee General Plan Noise Element contains the following objectives and policies that are applicable to new development in the City:

- **Objective 1.0:** Control noise from sources adjacent to residential, institutional and other noise-sensitive receptors.
  - **Policy 1.1:** The City shall support a coordinated program to protect and improve the acoustical environment of the City including development review for new public and private development and code compliance for existing development.
  - **Policy 1.2:** The City shall utilize noise studies and noise contour maps when evaluating development proposals during the discretionary review process.
  - **Policy 1.4:** The City shall promote alternative sound attenuation measures rather than traditional wall barrier wherever feasible; these may include glass or polycarbonate walls, berms, landscaping, and the siting of noise-sensitive uses on a parcel away from the roadway or other noise source.
  - **Policy 1.5:** The City shall review future projects with particular scrutiny regarding the reduction of unnecessary noise near noise-sensitive areas such as hospitals, schools, parks, etc.
- **Objective 2.0:** Ensure that future developments will be constructed to minimize interior and exterior noise levels.
  - **Policy 2.1:** The City shall adhere to planning guidelines and building codes which include noise control for the exterior and interior living space of all new residential developments within noise impacted areas.
  - **Policy 2.2:** The City should require new development to mitigate noise impacts to existing uses resulting from new development when: (1) such development adds traffic to existing City streets that necessitates the widening of the street; and (2) the additional traffic generated by new development causes the noise standard or significance thresholds to be exceeded.
  - **Policy 2.3:** The City should not require new development to mitigate noise impacts to existing uses when new development only adds traffic already anticipated by the City's General Plan to an existing street, but does not necessitate widening of that street.

[1] See page 7-14 of the Santee General Plan Noise Element in Section 8.1, Local Regulations.

Table 6. Santee General Plan Land Use Compatibility Guidelines (Ldn)

Land Use Category	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50–65	65–70	70–75	75–85
Residential – Multiple Family	50–65	65–70	70–75	75–85
Transient Lodging – Motel, Hotels	50–65	65–70	70–80	80–85
Schools, Libraries, Churches, Hospitals, Nursing Homes[1]	50–65	65–70	70–80	80–85
Auditoriums, Concert Halls, Amphitheaters	50–60	60–70	NA	70–85
Sports Arenas, Outdoor Spectator Sports	50–65	65–75	NA	75–85
Playgrounds, Neighborhood Parks	50–70	NA	70–75	75–85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50–75	NA	75–80	80–85
Office Buildings, Business Commercial, and Professional	50–70	70–75	75–85	NA
Industrial, Manufacturing, Utilities, Agriculture	50–75	75–80	80–85	NA

Source: City of Santee 2003.

Notes: Ldn = day-night noise level; NA = not applicable

[1] Applies to noise-sensitive areas which serve a significant function for the use which could be adversely affected by noise such as outside areas used primarily for instruction, meditation areas, rest and relaxation areas, and other areas where general peace and quiet are important.

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features must be included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

The Noise Element further states that when new development may result in the exposure of existing or future noise-sensitive uses to noise levels in excess of 65 dBA Ldn, an acoustical study will be required. If the acoustical study shows that the noise levels at any noise-sensitive area will exceed 65 dBA Ldn, the development should not be approved unless the following findings are made:

a. Modifications to the development have been, or will be made, which will reduce the exterior noise levels in noise-sensitive areas to 65 dB Ldn or less, or
b. If, with current noise abatement technology, it is not feasible to reduce the exterior noise levels to 65 dBA Ldn or less, then modifications to the development have been, or will be made, which reduce the exterior noise level to the maximum extent feasible and the interior noise level to 45 dB Ldn or less. Particular attention shall be given to noise-sensitive spaces such as bedrooms.

c. For rooms in noise-sensitive areas which are occupied only for a part of the day (schools, libraries, or similar), the interior 1-hour average sound level during occupation, due to noise outside, should not exceed 45 dBA Leq.

Further, noise impacts shall be considered significant if any of the following occur as a result of the proposed development:

1. If, as a direct result of the proposed development, noise levels for any existing or planned development will exceed the noise levels considered compatible for that use as identified in Table 6.
2. If, as a direct result of the proposed development, noise levels which already exceed the levels considered compatible for that use are increased by 3 dB or more.

If mitigation is necessary, the City, in Section 8.0 of the Noise Element, Implementation, lists the following measures that may be incorporated into a proposed project as mitigation measures. The following measures are not required, and mitigation is not limited to this list:

1. The use of site design techniques, such as the provision of buffers to increase distances between the noise source and receiver, siting of buildings and parking areas, and the careful siting of noise-sensitive outdoor features to minimize noise impacts
2. Provision of berms, landscaping, and other sound barriers, without the exclusive use of walls (e.g., a combination of a small wall and a berm in concert with the overall streetscape in the area could be appropriate)
3. Insulation of buildings against noise, including thicker-than-standard glazing and mechanical ventilation
4. Improvement of traffic circulation to "smooth" flow by such measures as interconnecting traffic signals
5. Consideration of the use of innovative construction technologies and materials in constructing or reconstructing streets
6. Setting of time limits on certain noisy activities
7. Purchasing of demonstrably quiet equipment for City use

3.3.3.2 City of Santee Noise Ordinance

The City's Noise Ordinance is found in Section 5.04 of the Santee Municipal Code (City of Santee 2020). Section 5.04.040, which establishes the City's noise regulation, generally prohibits nuisance noise and states that it is unlawful for any person to make, continue, or cause to be made or continued within City limits any disturbing, excessive, or offensive noise that causes discomfort or annoyance to reasonable persons of normal sensitivity residing in the area. This section details several specific sources of nuisance noise and outlines how it may be determined that the noise is in violation of the code. Specific sources of nuisance noise include, but are not limited to, devices for producing or reproducing sound, drums and other musical instruments, yelling, and animals.

Section 5.04.160 limits noise between 10:00 p.m. and 7:00 a.m. from sources that are not specifically addressed in the City's Noise Ordinance, or exempted from the ordinance, to levels that do not exceed average conversational levels at a distance of 50 feet from the property line from which the noise is being generated, or 50 feet from the source in a public area. The typical noise level for normal conversation is 65 dBA at 3 feet from the source (Caltrans 2013a).

Section 5.04.090, which specifically pertains to construction equipment, makes operation of any construction equipment outside the hours of 7:00 a.m. through 7:00 p.m., Monday through Saturday, except holidays, unlawful unless the operation is expressly approved by the Director of Development Services. Construction equipment with a manufacturer's noise rating of 85 dBA Lmax or greater may only operate at a specific location for 10 consecutive workdays. If work involving such equipment would involve more than 10 consecutive workdays, a notice must be provided to all property owners and residents within 300 feet of the site no later than 10 days before the start of construction. The notice must be approved by the City and describe the proposed project and the expected duration of work and provide a point of contact to resolve noise complaints.

The following noise sources are exempt in Section 5.04.170 of the City's Noise Ordinance:

A. Sporting, Entertainment, Public Events:
    1. Reasonable sounds emanating from school band, school athletic, and school entertainment events;
    2. Sporting, entertainment and public events which are conducted pursuant to a license or permit issued by the City for which noise has been a consideration;
    3. Reasonable sounds emanating from a sporting, entertainment, or public event; provided, however, it is unlawful to exceed the average noise level at or within the property lines of any property which is developed and used either in part or in whole for residential purposes unless an exception has been granted allowing sounds in excess of the levels.

B. Agricultural Operations. Equipment associated with agricultural operations may not exceed the average noise level, provided that all equipment and machinery powered by internal-combustion engines is equipped with a proper muffler and air intake silencer in good working order; and provided further, that:
    1. Motorized farm equipment operations do not take place between 7 p.m. and 7 a.m.;
    2. Such operations and equipment are used to protect or salvage agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or
    3. Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with all applicable laws, regulations and permits.

3.3.3.3 City of Santee Zoning Ordinance

Section 13.30.030 of the Zoning Ordinance, Performance Standards, applies to operation of land uses and states that no operation or activity is permitted which will create vibration noticeable without instruments at the perimeter of the subject property.

3.3.3.4 County of San Diego Noise Ordinance

Sensitive receptors east of the project site are in the unincorporated County. Section 36.404 of the County Municipal Code establishes hourly average sound level limits for non-construction noise. The daytime (7:00 a.m. to 10:00 p.m.) hourly average sound level limit for low-density residential areas is 50 dBA, and the nighttime (10:00 p.m. to 7:00 a.m.) hourly average sound limit is 45 dBA.

Section 36.409 of the County's Noise Ordinance establishes the following limit on construction: Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated that exceeds an average sound level of 75 dB for an 8-hour period between 7:00 a.m. and 7:00 p.m. when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

3.4 Existing Noise Environment

Existing noise sources that affect the project site are described below.

3.4.1 Existing Conditions

The project site is currently undeveloped and there are no noise-generating sources on the site. The primary existing sources of noise in the vicinity of the project site are vehicular traffic on local streets near the project site. The existing average daily traffic (ADT) volume ranges from 2,600 to 3,800 along Fanita Parkway, north of Mast Boulevard (LLG 2020). The existing traffic volume along Cuyamaca Street is 8,800 ADT between Mast Boulevard and El Nopal (LLG 2020). Other major area roadways include Mast Boulevard (7,700 to 26,000 ADT), Carlton Hills Boulevard (5,800 to 25,000 ADT), Magnolia Avenue (2,000 to 13,000 ADT north of Mast Boulevard), and SR-67 (77,000 to 93,000 ADT).

Land adjacent to the northern boundary of the property is under the jurisdiction of the County and is primarily undeveloped, with the exception of an aggregate mining facility (quarry), the westerly edge of which is located approximately 1,000 feet northeast of the project site on Slaughterhouse Canyon Road. Most of the quarry's operations occur on the eastern portion of the facility, separated from the project site by SR-67, more than 1 mile from the project site. Noise levels generated by equipment typical of mining in the County range from 50 to 91 dBA at 50 feet from the equipment (County of San Diego 2011). Due to distance and topography, the quarry is not a source of noise on the project site.

MCAS Miramar is north and west of the project site. This area includes thousands of acres of undeveloped land, much of it in its natural state. The portion adjacent to the proposed project is undeveloped. Aircraft noise generated from MCAS Miramar is described in Section 3.4.3, Transportation Noise Sources.

Land adjacent to the northwestern boundary of the project site development area is within the jurisdiction of the City of San Diego. These lands are designated for very-low-density residential, open space, and a sanitary landfill. Noise from the landfill operation to the project site is blocked by intervening topography. Due to the generally undeveloped nature of the land adjacent to the northern and western portions of the project site, existing noise levels within the northern portion of the project site are low. PDMWD facilities are located immediately to the west of the Fanita Parkway alignment, including Santee Lakes Recreation Preserve. This 190-acre area includes recreational facilities (boating, picnicking, camping, and fishing) and a wastewater treatment plant. The primary noise from this facility is the vehicle traffic on Fanita Parkway. A new residential neighborhood (Weston) is located west of the Santee Lakes Recreation Preserve recreational area.

Residential development occurs south of the project site in the City and east of the project site in the Eucalyptus Hills development in the unincorporated County. Noise levels in this area are also low, originating primarily from traffic in the residential areas.

3.4.2 Ambient Noise Monitoring

An ambient sound level survey was conducted on January 30, 2019, to quantify the noise environment within the project boundary and the surrounding vicinity. An additional survey was conducted on March 5, 2019, to characterize operational noise levels at the Coastal Roots Farm located at 441 Saxony Road in the City of Encinitas. This farm is similar to the proposed Farm and operated by the anticipated Farm manager. A total of 11 measurements were taken across the project site and in the residential neighborhoods surrounding the site. A total of three measurements were taken at the existing Coastal Roots Farm and surrounding residential neighborhood. The measurements were taken during the daytime (9:00 a.m. to 4:30 p.m.) and were 16 minutes in duration. A Larson Davis SoundExpert LxT Type I Integrating Sound Level Meter calibrated with a Larson Davis CAL200 calibrator was used to record ambient sound levels. Weather conditions during the measurements were calm with a mild temperature and partly-cloudy skies. Table 7 summarizes the measured Leq and noise sources for each monitoring location. The monitoring locations are shown on Figure 5, Project Area Noise Monitoring Locations, and Figure 6, Farm Noise Monitoring Locations.

Table 7. Ambient Sound Level Measurements (dBA)

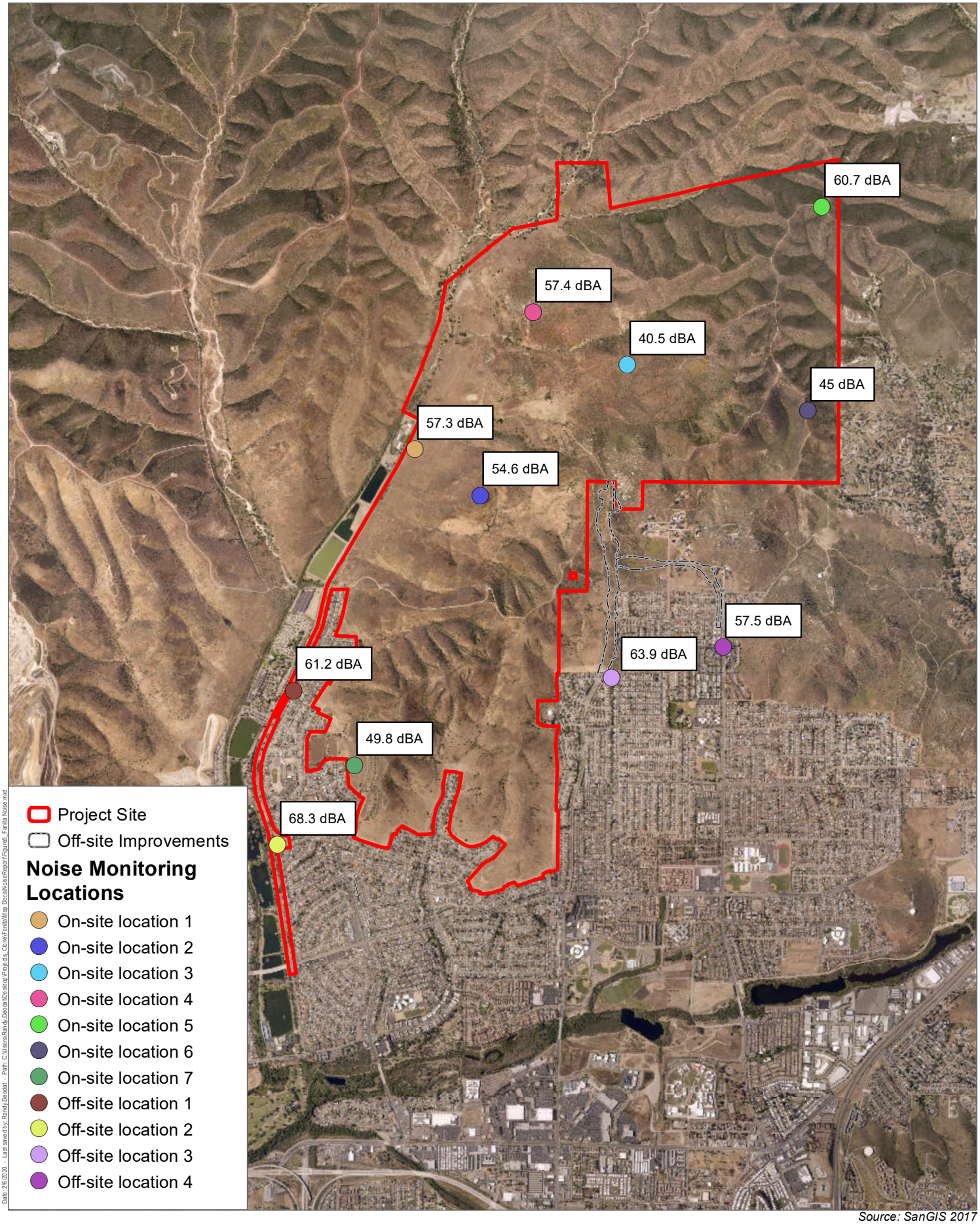
Site	Location	Observed Noise Sources	Date/Time	Leq	Lmax	Lmin
On-Site Proposed Project Noise Measurements						
1	PDMWD Wastewater Treatment Plant near western edge of project site at proposed Orchard Village location	Sounds from operation of the facility, including running water, squealing from equipment, and a small tractor. Helicopter and small plane flyovers, and human activities including talking and bicycling	1-30-2019/ 9:28 a.m.	57.3	72.8	50.5
2	Area proposed for Low Density Residential use at southern boundary of Orchard Village	Gunfire from a small arms range at MCAS Miramar, jet and plane flyovers	1-30-2019/ 10:04 a.m.	54.6	77.3	31.0
3	Proposed Habitat Preserve area in the center of the project site surrounded by Orchard Village, Street "V," Vineyard Village, and Street "W"	Jet flyover, gunfire from a small arms range at MCAS Miramar, distant emergency vehicle sirens, bicyclists, birds	1-30-2019/ 10:50 a.m.	40.5	57.6	27.7
4	Area proposed for Active Adult community at northern boundary of Orchard Village	Jet and plane flyovers, birds, talking from hikers	1-30-2019/ 11:16 a.m.	57.4	76.0	31.7
5	Area proposed for Low Density Residential use at the northeast edge of Vineyard Village	Plane flyovers, birds, traffic on SR-67	1-30-2019/ 11:53 a.m.	60.7	83.5	38.4
6	Area proposed for Low Density Residential use at the southeast edge of Vineyard Village	Rooster cawing, birds, dogs, jet flyovers	1-30-2019/ 12:25 p.m.	45.0	61.2	30.2
7	Western project boundary at proposed Special Use area	Children playing and talking outside at Sycamore Canyon School, dog barking, distant construction noise, jet flyover	1-30-2019/ 2:21 p.m.	49.8	61.6	42.6
Off-Site Santee Noise Measurements						
1	Intersection of Fanita Parkway and Ganley Road	Vehicle noise, pedestrian activity, dog barking, bicyclists, birds, distant plane flyover	1-30-2019/ 3:06 p.m.	61.2	80.0	38.2
2	Intersection of Fanita Parkway and Lake Canyon Road	Vehicle noise, small plane flyover, pedestrian activity	1-30-2019/ 3:25 p.m.	68.3	91.7	44.4
3	Intersection of Cuyamaca Street and El Nopal	Vehicle noise, helicopter flyovers	1-30-2019/ 3:50 p.m.	63.9	80.7	39.3
4	Intersection of Magnolia Avenue and Princess Joann Road	Vehicle noise, dogs barking, birds, pedestrian activity, helicopter flyovers	1-30-2019/ 4:12 p.m.	57.5	73.6	38.0

Table 7. Ambient Sound Level Measurements (dBA)

Site	Location	Observed Noise Sources	Date/Time	Leq	Lmax	Lmin
Off-Site Escondido Farm Noise Measurements						
1	Saxony Road, north of Ecke Ranch Road, adjacent to residences	Vehicle noise on Saxony Road, normal conversation, use of hand tools, and UTV operation on farm property	3-5-2019/9:49 a.m.	59.6	70.6	45.4
2	Coastal Road farm property in the center of the site, north of Ecke Ranch Road	Rooster cawing intermittently, vehicle noise, sprinkler operation, dumpster receptacle moving activity, normal conversation, birds	3-5-2019/10:12 a.m.	54.4	57.4	51.2
3	Saxony Road, south of Ecke Ranch Road, adjacent to residences	Vehicle noise on Saxony Road, operation of farm truck and farm equipment, UTV operation, bicyclists, birds	3-5-2019/10:43 a.m.	66.7	78.3	48.0

Note: dBA = A-weighted decibel; Leq = equivalent continuous sound level; Lmax = maximum sound level; Lmin = minimum sound level; PDMWD = Padre Dam Municipal Water District; UTV = utility task vehicle

Ambient measurements were 16 minutes in duration.



Source: SanGIS 2017

Harris & Associates

N

0 1,500 3,000

Feet

Figure 5

Project Area Noise Monitoring Locations

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Source: SanGIS 2017

Harris & Associates

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0 100 200

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Figure 6

Farm Noise Monitoring Locations

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The results of the ambient noise survey reflect daytime noise levels that range between 40.5 dBA Leq and 60.7 dBA Leq on the project site. The primary noise sources on the project site are birds, recreational use of the site, and intermittent flyovers. As described in Table 6, normally acceptable ambient community noise levels up to 65 dBA Ldn are considered compatible with residential development as specified in the Santee General Plan (City of Santee 2003). Ambient community noise levels of up to 70 dBA Ldn are acceptable for Neighborhood Parks and commercial buildings. Although the City's guidelines refer to 24-hour weighted average noise levels, daytime noise levels (Leq) were used in this study to screen for general noise compatibility. A daytime noise level that is within the General Plan compatible noise level range indicates general compatibility because this is when noise sources are at the highest levels. Based on these compatibility guidelines, ambient noise levels across the site are compatible with the proposed land uses. Measured noise levels at the off-site locations range from 57.5 dBA Leq to 68.3 dBA Leq. Daytime noise levels of 65 dBA Leq or less in the areas surrounding the project site would generally be considered normally acceptable under the City's compatibility guidelines, and all measurements are within the conditionally acceptable (acceptable with noise attenuation features) noise compatibility guideline of 70 dBA Ldn or below. Noise levels at the Coastal Roots Farm range between 54.4 dBA Leq and 66.7 dBA Leq, which is within the conditionally compatible noise standard for residences. However, the measurements and field notes indicate that the dominant noise source in the area of the Coastal Roots Farm is vehicle noise on Saxony Road. The result of the measurement taken at the center of the Coastal Roots Farm property was 54.4 dBA Leq, which is well within the normally compatibility guideline of 65 dBA Ldn for residential development.

3.4.3 Transportation Noise Sources

3.4.3.1 Aviation

MCAS Miramar is located adjacent to the west/northwestern boundary of the project site. The runways are located approximately 6 miles west of the project site. Aircraft currently flown at MCAS Miramar include F-35, F/A-18, KC-130, and C-12 aircraft, as well as CH-46 and CH-53 helicopters (MCAS Miramar 2018). The maximum presently authorized mission of the airfield is 112,242 annual aircraft operations. MCAS Miramar also typically hosts an annual air show that includes additional aircraft and higher than normal levels of aircraft operations during the event. As noise abatement measures for normal operations, fixed-wing aircraft and helicopter flight routes have been designed to follow major rail lines and highways or to remain over base property. The current Airport Land Use Compatibility Plan adopted by the County Airport Land Use Commission for MCAS Miramar indicates that the entire project site is outside the 60 dBA CNEL noise contour (SDCRAA 2011).

Gillespie Field airport operated by the County is also identified as a noise source in the Santee General Plan. This airport is located approximately 1.75 miles south of the project site in the City of El Cajon. Annual operations from Gillespie Field totaled approximately 233,969 flights in 2018 (County of San Diego 2020) and are projected to reach 294,050 by 2025 (SDCRAA 2010). The project site is located entirely outside of the 60 dBA CNEL noise contour for Gillespie Field; however, the Special Use area is within the overflight notification area (SDCRAA 2010).

3.4.3.2 Roadways

The proposed project lies north of SR-52 and west of SR-67 and would be accessed from the future northerly extensions of Fanita Parkway and Cuyamaca Street via Mast Boulevard and the future extension of Magnolia Avenue to Cuyamaca Street. There are no existing roadways on the project site. Table 8 shows the calculated existing noise levels generated by the roadways surrounding the project site. Existing noise levels were calculated using the methods described in Section 5.1.1.4. As shown in Table 8, existing noise levels from Mast Boulevard, Mission Gorge Road, Carlton Hills Boulevard, Cuyamaca Street, Magnolia Avenue, and SR-52 currently exceed the normally acceptable noise compatibility standard of 65 dBA Ldn for residences, schools, and other NSLUs. Noise generated along Mast Boulevard, Mission Gorge Road, Cuyamaca Street, and SR-52 currently exceeds the normally acceptable noise compatibility standard of 70 dBA Ldn for parks and commercial uses.

Table 8. Existing Off-Site Roadway Noise Levels

Roadway	Segment	Existing Average Daily Trips	Noise Level at 50 Feet from Roadway Centerline (dBA Ldn)
Mast Boulevard	SR-52 to West Hills Parkway	26,440	72
	West Hills Parkway to Medina Drive	19,540	70
	Pebble Beach Drive to Fanita Parkway	19,590	70
Mission Gorge Road	SR-125 to Fanita Drive	45,440	78
	Fanita Drive to Carlton Hills Boulevard	41,100	77
Fanita Parkway	Ganley Road to Lake Canyon Road	2,610	60
	Lake Canyon Road to Mast Boulevard	3,860	62
	Mast Boulevard to Carlton Oaks Drive	3,330	59
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	24,960	69
Cuyamaca Street	Chaparral Drive to Woodglen Vista Drive	670	54
	Woodglen Vista Drive to El Nopal	4,360	62
	El Nopal to Mast Boulevard	8,860	66
	Mast Boulevard to River Park Drive	19,600	69
	River Park Drive to Town Center Parkway	26,690	70
	Town Center Parkway to Mission Gorge Road	21,850	72
Magnolia Avenue	Princess Joann Road to Woodglen Vista Drive	2,020	60
	Woodglen Vista Drive to El Nopal	9,030	67
	El Nopal to Mast Boulevard	13,690	68
SR-52	Santo Road to Mast Boulevard	96,000	77[1]

Source: LLG 2020 (traffic data). See Appendix B for noise model assumptions and output.

Note: dBA = A-weighted decibel; Ldn = day-night noise level; SR- = State Route

[1] Noise level at 100 feet from centerline due to roadway width.

3.4.3.3 Railroads

The Green Line route of the San Diego Trolley operated by the Metropolitan Transit Service terminates in the Santee Town Center area at the northwest corner of Mission Gorge Road and Cuyamaca Street. It is not a significant noise generator in the City due to its intermittent operation and its alignment, which passes through a primarily commercial corridor on Cuyamaca Street (City of Santee 2003). Noise from the Green Line route typically does not exceed 60 dBA at 100 feet or more from the centerline of the track (RECON 2017). The route is located approximately 1 mile south of the project site and noise from operation of the Green Line is not audible at the project site.

3.4.4 Noise-Sensitive Land Uses

NSLUs are land uses that may be subject to stress or interference from excessive noise. The Santee General Plan defines NSLUs as areas containing residences, schools, hospitals, rest homes, or long-term medical or mental care facilities. Industrial and commercial land uses are generally not considered sensitive to noise. There are no NSLUs currently located on the project site. The nearest NSLUs to the project site are the single-family neighborhoods adjacent to the western, southern, and eastern boundaries of the project site and the campground and RV park at the Santee Lakes Recreation Preserve adjacent to the western boundary of the site. Other NSLUs in the project vicinity are Cajon Park, located approximately 0.6 mile east of the project site; Santana High School, located approximately 0.75 mile east of the project site; Edgemoor Skilled Nursing Facility, located approximately 0.6 mile southeast from the project site; Rio Seco School, located approximately 0.3 mile south of the project site; the Santee Public Library, located approximately 0.85 mile south of the project site; Sycamore Canyon School, located approximately 250 feet (0.05 mile) east of the Fanita Parkway improvement area; and West Hills High School, located approximately 1 mile southwest of the project site.

3.4.5 Vibration-Sensitive Land Uses

Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations, are considered vibration sensitive (FTA 2018). The degree of sensitivity depends on the specific equipment that would be affected by the groundborne vibration. Excessive levels of groundborne vibration of either a regular or an intermittent nature can result in annoyance to residential uses. The nearest vibration-sensitive land use to the project site is the Edgemoor Skilled Nursing Facility, located approximately 0.6 mile to the southeast of the project site.

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Section 4 Methods and Significance Criteria

4.1 Methods

4.1.1 Excessive Noise Levels

Impacts related to potential exposure to excessive noise levels from operation of the proposed project have been assessed based on a comparison of noise levels anticipated to be generated by the proposed project land uses (Figure 3) to the applicable City noise standard for existing off-site receptors. Estimated noise levels are based on a variety of sources, including noise technical reports for similar facilities. Noise levels at a particular receptor from a stationary noise source are based on an attenuation rate of 6 dBA for every doubling of distance. The compatibility of the proposed land uses with existing ambient noise levels is based on a comparison of the results of the ambient noise survey and existing traffic noise calculations to the Santee General Plan Land Use Compatibility Guidelines and the proposed project land uses.

The potential for implementation of the proposed project to permanently increase ambient noise levels as a result of increased traffic was assessed using standard noise modeling equations adapted from the Federal Highway Administration noise prediction model. The modeling calculations take into account the posted vehicle speed, ADT volume, and the estimated vehicle mix. The noise model assumes that roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway. Traffic data is provided in the project-specific traffic study prepared by Linscott, Law & Greenspan, Engineers (LLG 2020). Noise modeling for construction and operation assumes the Specific Plan design speed of 50 miles per hour for Fanita Parkway from Mast Boulevard to Ganley Street and for Cuyamaca Street from Mast Boulevard to Woodglen Vista Drive. This assumption is conservative because the posted speed limits of 40 miles per hour on Fanita Parkway and 35 miles per hour on Cuyamaca Street may be maintained by the City following project implementation.

Impacts related to temporary increases in ambient noise levels from construction of the proposed project were assessed using estimates of sound levels from typical construction equipment provided by the Federal Highway Administration in the Roadway Construction Noise Model (RCNM) (FHWA 2008), assuming an attenuation rate of 6 dBA per doubling of distance from the source. Impacts related to rock crushing and blasting activities resulting from construction were assessed using reference noise levels provided by noise analyses for similar equipment use (Shasta County 2011; FHWA 2006).

4.1.2 Groundborne Vibration

Groundborne vibration impacts were assessed based on the FTA vibration impact criteria listed in Table 5 and typical vibration source levels provided by the FTA (2018).

4.1.3 Aircraft Noise

Impacts related to aircraft noise were assessed based on a review of published noise contours and planning documents for area airports (SDCRAA 2010, 2011).

4.2 Significance Criteria

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines and significance criteria outlined in the Santee General Plan, Santee Municipal Code, County Noise Ordinance, and FTA guidance, implementation of the proposed project would result in a significant adverse impact if it would:

- **Threshold 1:** Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the proposed project in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies.

  New operational noise sources would be significant if these sources would expose off-site persons to or generate noise levels at off-site uses in excess of standards established in the Noise Element of the Santee General Plan or the City's Noise Ordinance (Section 5.04 of the Santee Municipal Code), as applicable.

  A substantial permanent increase in vehicle traffic noise would occur if implementation of the proposed project would result in an ambient noise level that exceeds the normally acceptable land use compatibility limits (Table 6) established in the Santee General Plan. If the normally acceptable standard would be exceeded without project implementation, an increase of more than 3 dBA would be considered significant.
  Temporary construction activity would be considered significant if it would violate the limits established in Section 5.04.090 of the Santee Municipal Code for receptors in the City and Section 36.409 of the County Municipal Code for receptors in unincorporated San Diego County. The City's Noise Ordinance prohibits operation of any construction equipment outside the hours of 7:00 a.m. through 7:00 p.m., Monday through Saturday. Also, construction equipment with a manufacturer's noise rating of 85 dBA Lmax or greater may only operate at a specific location for 10 consecutive workdays absent specific public notice. The County's Noise Ordinance prohibits the operation of construction equipment that would exceed an average sound level of 75 dB for an 8-hour period, between 7:00 a.m. and 7:00 p.m., on an occupied property where the noise is being received.

- **Threshold 2:** Generate excessive groundborne vibration or groundborne noise levels. Groundborne vibration is defined as in excess of the FTA criteria listed in Table 5. Additionally, an impact would occur related to architectural and structural damage to buildings if existing buildings were affected by a PPV in excess of 0.2 in/sec.

- **Threshold 3:** For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

  The proposed project would have a significant impact if it would construct residences within the 65 CNEL noise contour of an airport, or result in a change in air traffic patterns that would result in new noise exposure.

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Section 5 Impact Analysis and Mitigation Measures

5.1 Impact Analysis

Potential project-related noise and vibration impacts from construction and operation of the proposed project are discussed below. This analysis focuses on the potential for existing off-site sensitive receptors to be exposed to noise or vibration levels in excess of applicable thresholds. CEQA is intended to protect the existing environment from impacts that would result from the proposed project. Generally, CEQA does not consider impacts of the existing environment on a proposed land use to be significant (see Section 15126.2 of the CEQA Guidelines). Likewise, sensitive receptors proposed as part of the proposed project are not part of the existing environment, and impacts to these receptors from implementation of other project components are not addressed. The exception is the analysis of consistency with the Santee General Plan provided in Section 5.1.1. The Santee General Plan Noise Element specifically states that a significant impact would occur if noise levels at any planned development site would exceed the noise levels considered compatible for that use, as identified in Table 6. Therefore, the potential for ambient noise levels to impact the proposed project is addressed in the context of demonstrating consistency with the Santee General Plan.

5.1.1 Threshold 1: Exceedance of Noise Standards

Potential project-related noise impacts from operational sources, transportation sources, and construction activities are discussed below.

5.1.1.1 Impact Analysis

The proposed project would have the potential to generate excessive noise levels as defined in Table 7, as a result of increases in traffic volumes, developing new stationary sources of noise, and by increasing human activity throughout the project site. Proposed potential noise-generating land uses on site include commercial uses, agricultural uses, and public uses, including parks. The proposed project would also have the potential to result in temporary increases in noise levels during construction.

Operational Noise Generated by the Proposed Development

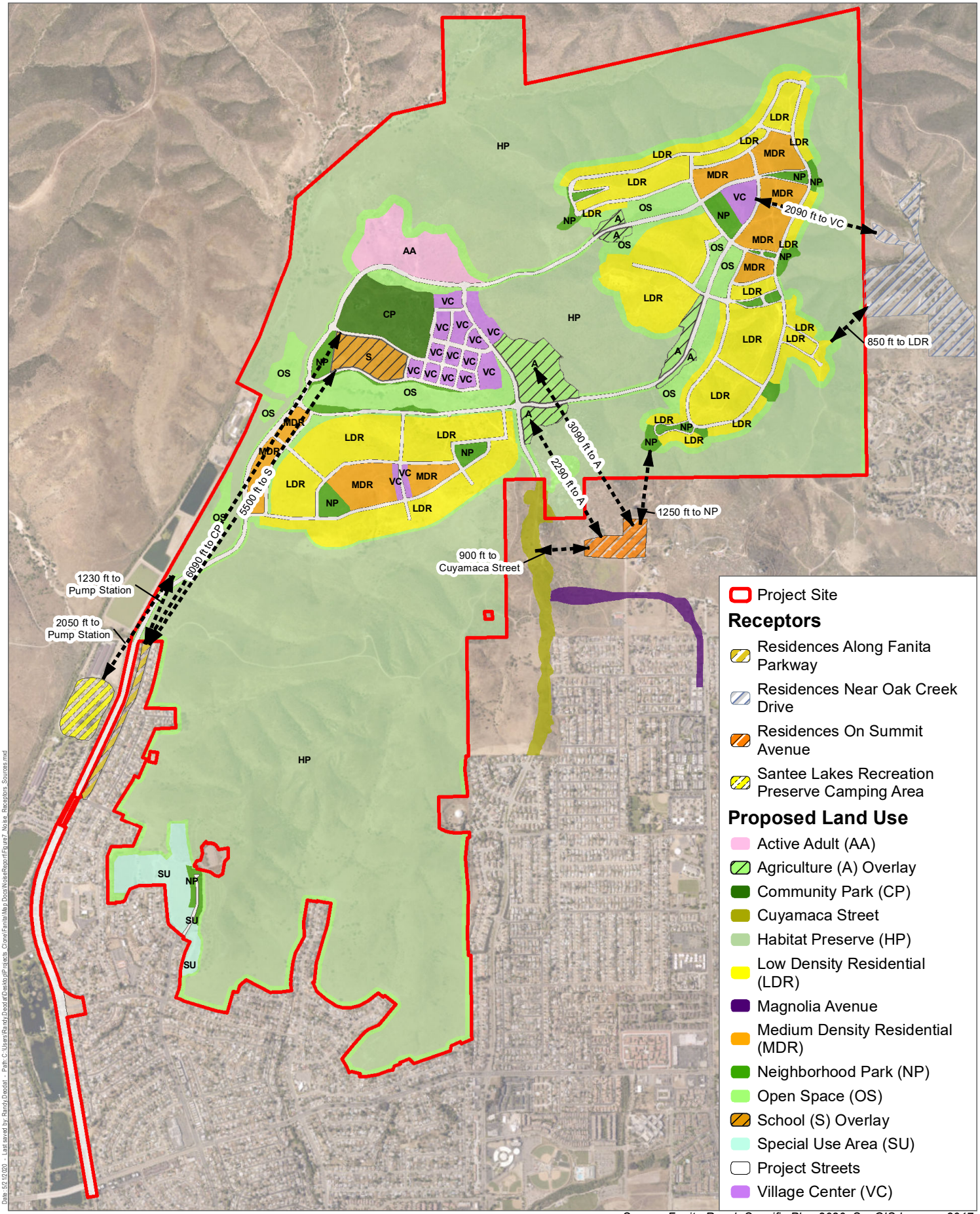
The proposed project would include a range of uses that have the potential to generate noise that may affect existing noise-sensitive receptors. These uses include commercial and retail development, residential development, agricultural operations, special events, recreational facilities, maintenance activities, a school, a fire station, special uses, and on-site infrastructure. Figure 7, Noise Receptors and Sources, summarizes the potential on-site noise sources and distance to the nearest NSLUs that are addressed below.

Commercial Development

Proposed commercial development would be located primarily in the areas designated as Village Center on the eastern side of Fanita Commons and in the middle of Vineyard and Orchard Villages. The Village Center component would comprise a total of approximately 36.5 acres across the site. The approximately 28-acre Village Center in Fanita Commons would accommodate commercial uses to serve the entire proposed development. The smaller Village Center areas in Vineyard and Orchard Villages would consist of smaller-scale mixed-use retail, service, or office spaces to serve the residents of the surrounding villages. Allowable uses would include retail stores, offices, retail nursery, restaurants, live entertainment establishments, craft breweries or other gourmet food shops, studios and galleries, pet services, business or trade schools, civic uses, health and wellness services, private recreation facilities, religious or spiritual facilities, daycare, tutoring facilities, museums or cultural facilities, and education or event facilities associated with the Farm.

The future mix of retail and office uses is currently unknown, along with the specific noise producing equipment associated with each use. The noise level generated by commercial uses on site would vary depending upon the specific types of commercial uses that would occupy available space. The exact noise level generated cannot be specifically quantified at this time because of many variables involved. These include the specific land use type, size of equipment, location and orientation of equipment, number and location of loading docks, and parking areas. Therefore, it is not possible to determine the level of noise impact of individual commercial uses at specific locations at this time. Thus, this analysis focuses on typical noise produced from commercial development including heating, ventilation, and air conditioning (HVAC) equipment; commercial truck deliveries at loading docks; parking lots; and evening or nighttime noise from dining or entertainment uses at worst-case distances from NSLUs. These noise sources are addressed below.

The specifications and locations of the HVAC systems that would be installed at commercial or mixed-use buildings are unknown at this time. Therefore, for the purposes of this analysis, it is assumed that the HVAC systems of a mixed-use commercial and residential project would be typical of a community-serving retail and office building (ABC Acoustics 2018). HVAC units not installed within an enclosure would have the potential to generate a noise level of up to 79 dBA Leq at the unit (approximately 3 feet). A single HVAC unit could have the potential to generate noise that may exceed typical conversation noise levels of 65 dBA up to 15 feet from the unit. As shown on Figure 7, the nearest existing NSLUs to the proposed Village Center areas on the project site are the off-site single-family residences located off Oak Creek Drive, approximately 2,090 feet east of the Village Center planned for Vineyard Village. Due to distance and intervening structures and topography, noise from HVAC units in the proposed Village Centers would not be audible at existing, off-site receptors and impacts would be less than significant.



Source: Fanita Ranch Specific Plan 2020; SanGIS Imagery 2017.

Harris & Associates

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0 1,000 2,000

Feet

Figure 7

Noise Receptors and Sources

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In addition to HVAC systems, commercial land uses also have the potential to generate noise from truck deliveries, such as engines idling and beeping from back up warning signals at commercial loading docks. Truck trips to the proposed project site would involve deliveries of supplies and products to commercial uses. State law (13 CCR 2485) currently prohibits heavy-duty diesel delivery trucks from idling more than five minutes. Therefore, noise from idling would be limited to five minutes during truck deliveries. Noise levels measured at a typical loading dock registered 78 dBA Leq at a distance of 5 feet outside an open loading dock (ABC Acoustics 2018). A loading dock that generates a noise level of 78 dBA at 5 feet would have the potential to generate noise that may exceed typical conversational noise levels of 65 dBA up to 25 feet from the unit. Noise levels would be reduced on the project site because the Land Use and Development Regulations in Chapter 3 of the Fanita Ranch Specific Plan require loading areas to be designed and located to minimize impacts on adjoining properties, including use of sound baffling. Additionally, as previously stated, the nearest existing NSLUs to a proposed Village Center are residences approximately 2,090 feet east of the Village Center planned for Vineyard Village. Due to design guidelines, distance, and intervening structures and topography, impacts to off-site NSLUs related to truck deliveries and loading would be less than significant**.**

Noise sources from parking areas include car alarms, door slams, radios, and tire squeals. These sources typically range from about 51 to 66 dBA at a distance of 10 feet (Gordon Bricken & Associates 2012), and are generally short-term and intermittent. Parking lots have the potential to generate noise levels that are audible above ambient levels depending on the location of the source; however, noise sources from a parking lot would be different from each other in kind, duration, and location, so that the overall effects would be separate and in most cases would not affect noise-sensitive receptors at the same time. Similar to truck delivery noise, due to distance and intervening structures and topography, impacts to the nearest off-site NSLUs related to parking areas would be less than significant**.**

Noise from human activity within outdoor seating areas, restaurants, and public gathering places would be limited to normal conversation noise levels, which would generally be consistent with the City's Noise Ordinance and Santee General Plan Noise Element compatibility standards for surrounding land uses. However, the proposed project would accommodate restaurant uses and live entertainment venues that would have the potential to result in intermittent noise that could exceed Noise Ordinance standards. This may include bars or nightclubs that operate into late night hours (10:00 p.m. to 2:00 a.m.). Section 5.22.130 of the Santee Municipal Code prohibits music at dancehalls between 2:00 a.m. and 11:00 a.m. If these establishments would include outdoor areas, nighttime use could result in loud conversation or amplified music that would be annoying or disturbing to nearby residents. Section 3.2.11.10(B) of the Fanita Ranch Specific Plan establishes performance standards for the sale of alcohol within the proposed project site. These standards require that all alcoholic beverages sales, offerings, and consumption be conducted completely within an enclosed building on premises, except for permitted outdoor seating areas. Nighttime

uses would mostly be located within enclosed buildings, although permitted patios may result in crowds or amplified sound that would exceed normal conversation levels. As shown on Figure 7, the nearest existing off-site NSLUs to a proposed Village Center are residences approximately 2,090 feet away in the unincorporated County. Reference noise levels for loud conversation and amplified music are available for indoor noisy restaurants (85 dBA) and school dances (100 dBA) (Center for Hearing and Communication 2020). Based on these reference noise levels, noise levels from loud conversation and amplified music in the proposed Village Center would be reduced to approximately 28 dBA and 43 dBA, respectively, at 2,090 feet away at the nearest off-site NSLUs. These noise levels would not exceed normal conversation levels at City receptors and would not exceed the County's nighttime hourly average sound level limit of 45 dBA at residences along Oak Creek Drive. Impacts would be less than significant.

Residential Development

A variety of residential densities would be accommodated in all three development villages. Noise generated from residential uses is generally described as nuisance noise. Nuisance noise is defined as intermittent or temporary neighborhood noise from sources such as amplified music, barking dogs, and landscape maintenance equipment that may be disturbing to receptors. Nuisance noise impacts are more likely to occur in higher density areas (such as Village Center and Medium Density Residential areas). Section 5.04.040 of the City's Noise Ordinance prohibits nuisance noise. Specific sources of nuisance noise covered by the City's Noise Ordinance include, but are not limited to, devices for producing or reproducing sound, drums and other musical instruments, yelling, and animals. Compliance with the City's Noise Ordinance would limit exposure to excessive nuisance noise. The County Sheriff's Department enforces the nuisance noise provisions of the City's Noise Ordinance, in accordance with Section 5.04.180 of the City's Noise Ordinance, Enforcement. Nuisance noises would also be different from each other in kind, duration, and location, so that the overall effects would be separate and in most cases would not affect the receptors at the same time. Nuisance noise would be a less than significant impact.

Residences may include HVAC units. As described previously for commercial uses, a single HVAC unit would generally not exceed typical conversation noise levels of 65 dBA beyond 15 feet from the unit. The nearest existing off-site receptors to a proposed residential area are the existing residences along Crazy Horse Drive in the County, approximately 700 feet east of Vineyard Village. Therefore, due to distance and the interment nature of noise sources, HVAC noise from proposed residential neighborhoods would not result in significant impact to existing receptors.

Agricultural Operations

The Farm is a central feature of the proposed land use plan. The working farm is planned to include terraced vegetable fields, pasture lands, limited housing for employees, raised gardens, and small-scale animal husbandry. Regular agricultural-related events would be hosted at the Farm, including

commercial and educational events. Other special events at the proposed event barn on the Farm are addressed below. The 27.3-acre Farm would be located along the eastern border of Fanita Commons near the center of the proposed development. Additional agricultural areas are designated at the entrances to Vineyard Village on either side of Street "V" and Street "W." Community gardens and community-supported agriculture are allowable land uses in all proposed development areas except the Special Use area. Orchards, vineyards, and crops are allowed in the Open Space designation.

Based on the noise survey conducted on March 5, 2019, and discussion with the farm operations manager (Farmer D Consulting, pers. comm. 2018), the primary sources of noise associated with agricultural use would be use of one or two tractors in agricultural fields and approximately two utility task vehicles (UTVs) across the Farm site. Fans, pumps, and generators may also be required. The proposed community-scale Farm would not require the use of industrial farm equipment for harvesting or processing. As observed at the Coastal Roots Farm in Encinitas, hand tools would generally be used on the Farm and would not generate noise. Equipment used in agricultural spaces outside the Farm, such as community gardens, would be limited to hand tools.

Regular events at the Farm would include farmers markets and farm-based education in the form of tours, volunteer opportunities, camps, workshops related to gardening and farmer training, nutrition, cooking, herbal medicines, home preservation of food, and more. Farmers market and educational activity hours would be limited of 7:00 a.m. and 7:00 p.m. on weekdays and 7:00 a.m. and 10:00 p.m. on weekends and are anticipated to be similar to nearby commercial uses in the Village Center. With the exception of farm equipment, noise associated with orchards and vineyards, regular events, and limited employee housing would be generally limited to normal conversation and occasional nuisance noise, similar to noise anticipated from surrounding proposed residential development, described above.

The design plan for the Farm includes a condition of operation that the use of mechanical equipment such as tractors, exhaust fans, circulating pumps, or generators, and other exterior noise-generating operations that result in a 1-hour average sound level of 50 dB or more, as measured at the nearest adjacent on-site residential property line, shall be limited to the hours of 7:00 a.m. and 7:00 p.m. every day (Farmer D Consulting 2020). Noise barriers shall be installed around any stationary noise-generating equipment if necessary to meet the required limitations. A tunnel would be constructed under Street "W" to connect the two sections of the Agricultural Overlay to allow for the movement of agriculture equipment to and from the Farm. Because conditions of operation would limit noise from farm equipment to less than nuisance levels on the project site, noise levels would be less than significant at off-site existing sensitive receptors.

The use of UTVs and tractors are anticipated to generate the highest equipment noise levels from farm operation. The average noise level for UTVs for farm use is 86 dBA and the average noise

level for a tractor is 92 dBA (Depczynski et al. 2005). Noise level is reported at the driver's seat. Noise levels from UTVs would be reduced to below normal conversation levels of 65 dBA approximately 35 feet from the source, and tractors approximately 70 feet from the equipment. Additionally, when UTVs are in use, they would be in motion across the Farm and individual receptors would only be exposed to UTV noise briefly during any given pass-by. Due to the modest size of the orchards and vineyards, duration of tractor use would be limited to a portion of a day, when needed. Therefore, use of farm equipment would not result in a significant impact.

The Farm would primarily be cultivated with crops but may include limited livestock, such as poultry, sheep, goats, or aquaponics (fish). Livestock would not exceed five animals per acre. Livestock noise would include intermittent animal noises that may occasionally be a source of nuisance noise. Intermittent poultry noise was observed during the March 5, 2019, noise survey at Coastal Roots Farm in Encinitas. Poultry activity consisted of several chickens roaming the property and was similar to the level anticipated for the proposed Farm. Noise levels with poultry noise did not exceed 54 dBA. However, poultry at the Farm may also include roosters. Rooster crowing can produce sound levels up to 100 dBA at 1 meter (3.3 feet) (Claes et al. 2018). The nearest existing receptors to the Farm are along Summit Avenue, approximately 2,290 feet from the Farm (see Figure 7). At this distance, noise from rooster crowing would be reduced to 43 dBA and would not exceed typical ambient noise levels. Due to the limited number of animals allowed, and because animals would be spread out across the pasture area throughout the day, intermittent animal noise would not be anticipated to exceed average ambient community noise levels. Regular Farm operations are not anticipated to be audible off site. A significant impact would not occur from Farm operation.

Special Events

The Farm is planned to include a large iconic barn that would set the architectural theme of the community and provide a venue for special events and Farm operations. The Farm would allow for a range of special events including farm-to-table events, community harvests, weddings, and other celebrations and festivals, such as pumpkin patches. Special events would potentially involve the use of amplified noise or crowds that would result in noise levels above typical conversation levels. As a condition of operation, events would be permitted between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 7:00 a.m. and 10:00 p.m. on weekends. Therefore, weekday events would not result in nighttime noise impacts, and weekend events would not extend into late night hours. The event barn and associated outdoor event areas would be located directly east of the Village Center, approximately 3,090 feet from the nearest existing residences, located along Summit Avenue (see Figure 7). Activity hours for events would be similar to the commercial uses in the Village Center.

Special and temporary event attendance would be limited to a maximum of 300 attendees. The reference noise level for the events anticipated to occur at the Farm is taken from a noise analysis conducted for the Point View Master Plan Project in the City of Rancho Palos Verdes, which included a similar venue for hosting public and private events. The event area was an existing

outdoor ceremony area with the capacity for 300 guests, including weddings, corporate parties, conferences, and charity events (City of Rancho Palos Verdes 2012). Therefore, the analysis for the similar event venue is considered representative of weddings or other special events proposed at the Farm. To determine the impact of the event venue on the community, the representative noise analysis for the Point View Master Plan Project recreated a maximum capacity event at the venue and recorded noise levels. The study determined that crowd noise from 300 guests could generate noise levels of up to 101 dBA at approximately 10 feet from the source. Crowd noise would be intermittent, such as at the end of speeches during a ceremony. The Initial Study/Mitigated Negative Declaration for the Point View Master Use Plan Project determined that crowd noise would generally not exceed 15 minutes in a 60-minute period (City of Rancho Palos Verdes 2013).

Based on the results of the analysis for the similar event venue, and conservatively assuming the existing measured ambient noise level is approximately 41 dBA in the Farm area, events attended by 300 guests would have the potential to result in a 1-hour average noise level of 95 dBA at 10 feet from the source. Event noise would have the potential to exceed the average conversation noise level of 65 dBA up to 315 feet from the event. As shown on Figure 7, the nearest existing NSLUs to the event area are the residences along Summit Avenue, approximately 3,090 feet south of the event area. Therefore, event noise would not exceed the noise level limits at off-site NSLUs. This impact would be less than significant.

Recreational Facilities

The proposed project would provide a variety of recreational opportunities, including the Community Park, Neighborhood Parks, Mini-Parks, and trails throughout the project site. According to the Santee Municipal Code, Section 8.08.150, parks are permitted to operate dawn to dusk or such alternative hours as designated by the Director of the Community Services Department. Therefore, it is assumed that all proposed recreational facilities would have similar operating hours of dawn to dusk, with the exception of trails. Trails would be available at all hours for transportation and access in the development area; however, nighttime use of open space primitive trails would be limited because lighting is not proposed. Recreational facilities are addressed by type below.

Community Park

Visitors to the Community Park in the center of Fanita Commons would participate in active and passive recreational activities. The Community Park would include two multipurpose ballfields, sport courts, restrooms, parking, playground, open play areas, and passive picnicking areas, and may include an aquatic element, community gathering plaza, and a dog park. Within the Community Park, a community center would provide multipurpose, flexible spaces to support recreation, learning, arts and crafts, social and service functions. The community center would also provide support spaces such as staff offices, reception area, restroom, and storage areas. The park is designed so that passive uses would occupy the eastern portion of the Community Park, adjacent

to the Village Center. The northern edge of the park would be bordered by a designated Open Space riparian area. Active uses would be concentrated in the southwestern portion of the park, including lighted sports fields adjacent to the proposed school.

Recreational activity participants are expected to generate a range of noise levels typical of recreational activities. Active uses such a playgrounds and sports fields typically generate incidental recreational noise such as cheering for sports activities or children at play. Passive recreational activities such as walking, reading, and dining in open turf and picnic areas typically generate lower noise levels as compared to active sports play.

Noise levels typically generated by multipurpose fields, one of the most active proposed uses, are assumed to be representative of worst-case noise levels from daily use of the Community Park. The noise impact analysis for the City of Lake Forest Sports Park and Recreation Center, which proposed a similar mix of active and passive uses, including multiple sports fields and play areas, determined that noise levels from simultaneous use of the sports fields would generate noise levels of 47 dBA at approximately 400 feet from the fields, or 59 dBA at 100 feet (City of Lake Forest 2010). Similarly, the noise analysis for a new 4-acre sports field complex in San José determined that average noise levels resulting from active use of the fields would be approximately 60 dBA at a distance of 100 feet from the center of the field, with maximum noise levels from shouting as high as 67 dBA (Illingworth & Rodkin 2016). The active Community Park uses would be located at the far west edge of development in Fanita Ranch, and active uses would be located more than 6,000 feet from existing residences on Strathmore Drive, which are the nearest existing receptors (see Figure 7). Due to distance, activity at the park would be reduced to below an audible level at the nearest existing receptors. Impacts would be less than significant.

Electronic amplification equipment would not be permanently installed at any of the parks, but temporary systems may be used in conjunction with permitted active sports leagues or events. Public events may also occur that require temporary permitted amplified noise. Activities that require permitted amplified noise would be limited to normal park operation hours in compliance with the Santee Municipal Code, Section 8.08.150. Additionally, amplified noise would not be a constant source of noise. Activities would occur on various dates and times and at varied locations and would typically not occur after dusk, in conformance with the Santee Municipal Code. Therefore, use of amplified noise from permitted uses would not result in a significant impact.

Future uses at the community center are unknown; however, activities would be enclosed within the center and would not be anticipated to generate excessive noise outside the facility. It can be reasonably assumed that the community center would require an HVAC unit. As described under the discussion of commercial development, HVAC equipment would have the potential to generate noise that may exceed conversational noise levels up to 15 feet from the unit. Due to distance, operation of the HVAC system at the community center would not be audible at the nearest off-

site NSLUs located along Fanita Parkway, more than 6,000 feet from the proposed Community Park (see Figure 7). Additionally, the Community Park would be separated from off-site receptors by on-site development that would provide a noise barrier to further attenuate noise levels. This impact would be less than significant.

Neighborhood Parks

Eight Neighborhood Parks are proposed throughout all three villages, as shown on Figure 3. Specifically, Neighborhood Parks 1 and 2 would be located between Medium Density Residential and Low Density Residential development in Orchard Village. Neighborhood Park 3 would be located adjacent to the riparian open space feature between Fanita Commons and Orchard Village. Neighborhood Park 4 would be located along the western edge of Vineyard Village. Parks 5 and 6 would be located on either side of the Village Center in Vineyard Village. Neighborhood Park 7 would be located at the southern edge of Vineyard Village, and 8 would be located adjacent to the School Overlay in Fanita Commons. Neighborhood Parks may be active-recreation oriented, or non-sports use oriented with more passive uses. Sports-oriented Neighborhood Parks would include amenities similar to the Community Park, but at a smaller scale, including open play fields, playgrounds, sport courts, gardens, picnic facilities, and restrooms. Neighborhood Park 5 adjacent to the Village Center in Vineyard Village would be a sports-oriented park, while Neighborhood Park 3 adjacent to the riparian area along Street "A" in Orchard Village would be a passive Linear Park. It is unknown which of the remaining Neighborhood Parks would be sports-oriented. Passive Neighborhood Parks would not be expected to generate noise other than general conversational levels and would not be expected to be audible outside of the park. However, noise levels for use of sports-oriented Neighborhood Parks are conservatively assumed to be 47 dBA at approximately 400 feet, as estimated for the Community Park described previously. The nearest off-site receptors to a Neighborhood Park are the residences located at the northern terminus of Summit Avenue, approximately 1,250 feet south of the proposed Neighborhood Park at the southwestern boundary of Vineyard Village. Due to distance, noise from the use of the Neighborhood Parks would not be audible off site. Noise impacts from Neighborhood Parks would be less than significant.

Other Recreational Facilities

Additional parks and trails would be located throughout the site, including Mini-Parks and trails such as the AgMeander circuit. The proposed trails would be used for walking and bicycling. Mini-Parks, with the exception of the Village Green discussed below, would include passive recreation features, such as seating, trail connections, and interpretive stations. These amenities would generally not support activities that generate noise levels higher than normal conservation. Therefore, these facilities would not generate noise levels that would result in excessive noise levels. Impacts from the trails and Mini-Parks would be less than significant.

Village Green

The Village Green would be a special Mini-Park located directly west of the Farm in Fanita Commons that would provide a public gathering and event space. The park would provide a large open turf area, with possible shade trellises and seating along the perimeter. When not in use for community events, the Village Green would provide passive use space for Fanita Commons residents and would not generate excessive noise levels, similar to the other Mini-Parks in the proposed project. However, the turf area would also serve as a multipurpose space to accommodate events such as performances, art fairs, outdoor movies and other social functions. In addition, it would potentially provide a focal point for larger community festivals and concerts, with connections to the Farm and farmers markets east of Cuyamaca Street, the mixed-use Village Center, and Community Park.

Similar to events at the Farm, regular ongoing events such as community gatherings, farmers markets, and art shows would generally not result in noise levels higher than normal conservation and would be similar to ongoing activity in the Village Center. It is not anticipated that the Village Green would be able to accommodate events with a larger capacity that events at the Farm event area. As discussed previously, special events at the Farm with up to 300 guests, such as weddings, would not result in noise levels that would exceed the City's Noise Ordinance limit of normal conversation levels (65 dBA) during the evening at any off-site NSLUs. Development in the Village Center would also provide a noise buffer between events in the Village Green and development outside the Village Center. As such, because events in the Village Green would be smaller and located farther from off-site receptors than the Farm, events would not be expected to exceed noise level limits at existing off-site NSLUs. This impact would be less than significant.

Trash Collection

Commercial and residential trash hauling would be provided by Waste Management, Inc., under a contractual franchise agreement with the City. Single-family residences would have individual trash and recycling bins subject to weekly pickup. Commercial and multi-family residences would be expected to have on-site garbage and recycling dumpsters that may require multiple pickups per week. As trash service would be provided by Waste Management, Inc., noise associated with operation of refuse collection vehicles is beyond the control of the proposed project. However, Waste Management, Inc., currently operates in Santee and is subject to Section 5.04.130 of the City's Noise Ordinance, Loading and Unloading Operations, which prohibits waste collection vehicles from operating between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance within or adjacent to a residential district. Additionally, individual pickup events would be short in duration and occur at most a few times per week in the vicinity of an individual receptor. Due to its intermittent nature, short duration, and compliance with the City's Noise Ordinance limitations, waste collection in the proposed project would not generate excessive noise levels at the nearest off-site NSLUs. This impact would be less than significant.

Landscape Equipment

Scheduled maintenance would occur on a regular basis across the proposed project, including maintenance of proposed recreational facilities, decorative landscaping, and private residences. Maintenance activities would potentially include the use of gasoline-powered mowers, trimmers, blowers, and edgers resulting in intermittent short-term temporary noise increases. Maintenance equipment would not be operating at any one location for more than a few minutes, and all equipment would not be operating simultaneously. Due to the limited amount of time equipment would be operating in one location, and distance to off-site receptors, operation of landscape equipment would generally not exceed average community ambient noise levels at a particular existing receptor. Therefore, landscape maintenance would result in a less than significant impact.

School

A school site land use overlay is proposed for the western portion of Fanita Commons, south of the proposed Community Park. If acquired by the Santee School District, the site could accommodate up to 700 students. A school would potentially generate amplified noise such as bells and loudspeaker announcements. Bells or other announcements would typically be brief and intermittent throughout the school day. Speaker volume would be audible above typical activity on the campus but not to a level that would be a nuisance or uncomfortable to staff and students on-site in the immediate vicinity of the speakers. As such, the use of the school announcement and bell system would not generate noise levels that would violate the City's Noise Ordinance by exceeding conversational noise levels at the nearest off-site NSLUs.

If developed, a school would also likely include recreational facilities such as playgrounds and play fields. The level of activity during recess and afterschool activities is assumed to be similar to active use of the sports fields at the Community Park, and no amplified speakers would be installed. Therefore, the proposed school would have the potential to generate noise levels up to 47 dBA at approximately 400 feet. Similar to the Community Park, the school site would be located at the western edge of development in the proposed project, approximately 5,500 feet north of the nearest sensitive receptors, located along Strathmore Drive (see Figure 7). Additionally, the school would be separated from off-site receptors by on-site development that would provide a noise barrier to further attenuate noise levels. Due to distance, activity at the school would not be audible off site at the nearest existing NSLUs. This impact would be less than significant.

Fire Station

A new fire station is proposed in the Village Center in Fanita Commons, although the precise location is currently unknown. Routine operations such as vehicle maintenance and periodic training activities would occur during daytime hours and would not be expected to generate noise levels above ambient noise levels in the active Village Center. Potential nuisance noise impacts of the fire station would primarily be limited to on-site emergency address systems and sirens from vehicles leaving the station, although not all emergency calls would require a siren, depending on traffic conditions. Similar to the school alarm or announcement system, the fire station address

system would be set at a volume loud enough to be clear and noticeable to fire station personnel, but not so loud to be harmful or an unnecessary nuisance to neighboring land uses. Additionally, the fire station would be located more than 0.5 mile from any off-site noise-sensitive uses and would not be expected to be audible off-site. Emergency vehicle sirens typically generate a noise level of 124 dBA at 10 feet (Daly 2017). As such, individual emergency sirens would be a potential noise nuisance, if required for a particular emergency, but would be short-term and intermittent in nature. Sirens would be less likely to be required at night, when receptors would be more sensitive to siren noise, due to lighter traffic conditions. However, off-site receptors are currently served by emergency services and occasional emergency sirens are an existing part of the ambient noise environment in the City. The occasional response of emergency service vehicles originating from the project site would be similar to existing conditions throughout the City and would not be a significant impact.

Off-Site Improvements

The infrastructure improvements associated with the proposed project include roadway improvements that would not generate operational noise themselves. However, these improvements would accommodate higher traffic volumes associated with the proposed project. The potential noise impacts associated with changes in traffic volume and roadway configuration are addressed under Permanent Increase in Traffic Noise Levels. Additionally, construction of these improvements is addressed under Temporary Noise Increase.

Special Use Area

The Special Use area is adjacent to an existing residential area on Carlton Hills Boulevard, Swanton Drive, Las Lomas Drive, and Settle Road. The specific use of the Special Use area in the southern area of the project site would be limited to primarily passive uses such as a solar farm, RV and boat storage, aboveground agriculture without irrigation, or other similar uses not exceeding a height of 35 feet. As such, utilization of this area would not be anticipated to generate noise levels at surrounding land uses in excess of average conversation noise levels. Any use of the site would likely include an automatic gate system for access. Newer model gates may generate minimal noise, 56 dBA or below, that would generally not be noticeable to surrounding existing residences (Consumer Mentor 2019). However, because gate specifications are currently unknown and existing receptors are located within 50 feet of the boundary of the Special Use area, this impact is considered potentially significant.

Likely uses for the Special Use area include vehicle or boat storage or a solar facility. RV storage would generate intermittent noise from vehicle loading and unloading. Similar to a parking lot, noise sources would be different from each other in kind, duration, and location. It is unlikely that existing residences in the neighborhood surrounding the Special Use area would be exposed to regular noise in excess of normal conversational levels. A noise analysis for a proposed RV facility in the City of Wildomar included noise monitoring at existing storage facilities. Measured noise sources from vehicle loading and unloading included RV idling, air brake operation, and vehicle movements. The reference measurement results showed a noise level of 62.4 dBA Leq at 50 feet, which is below

normal conversation levels (Urban Crossroads 2017). However, due to the close proximity of off-site NSLUs (within 50 feet of the project site boundary), activities at the Special Use area would be considered a potential nuisance if access would occur during nighttime hours in close proximity to sensitive receptors. Noise levels would have the potential to exceed 65 dBA within approximately 40 feet of pickup and drop-off activities. Assuming a 10 dBA penalty to account for nighttime sensitivity to noise, consistent with Ldn methods, pickup and drop-off noise would have the potential to exceed 55 dBA up to 125 feet from the source. This impact would be potentially significant.

Solar panels are passive; however, the associated inverters or transformers typically generate some noise. The noise is typically described as buzzing or humming white noise. The exact specifications of solar panels, if installed, at the Special Use area are unknown at this time. However, a similar project that proposed solar panels on an over 300-acre site in the County determined that noise levels from inverters and transformers would generate noise levels of up to 60 dBA at 5 feet (County of San Diego 2016). As such, operation of a solar facility on a smaller (approximately 32-acre) site would not be expected to generate noise levels that exceed 65 dBA at existing residences located adjacent to the Special Use area. A more conservative estimate of 70 dBA at 3 feet for transformer noise has also been reported (Nagel pers comm. 2019); however, noise levels would still be expected to attenuate to below 65 dBA less than 6 feet from the transformer. The limited impact of solar panels is further evidenced by the County's requirements for solar panels in residential zones; only a 3-foot setback from the property line is required for solar panels (County of San Diego 2014). This impact would be less than significant.

As noted, uses in the Special Use area are anticipated to be passive, and daytime impacts from the Special Use area would be less than significant. However, potential nuisance noise from nighttime access at the Special Use area is considered a potentially significant impact.

On-Site Water Infrastructure

Development of the proposed project would involve construction of water infrastructure improvements, including pipelines, storage tanks, and pump stations. Following construction, proposed underground pipelines and aboveground storage tanks would be passive and would not generate operational noise. However, two pump stations are proposed to provide potable water to the project site. One pump station would be located along Fanita Parkway, adjacent to the Santee Lakes Recreation Preserve. The second pump station would be located at the eastern edge of Fanita Commons at Street "W." The size and specifications of the pump stations are currently unknown. A review of a variety of pump stations proposed by PDMWD and other local jurisdictions indicate that typical pump station equipment generates a noise level of approximately 90 dBA at 3 feet. The proposed pump stations would be installed in a masonry enclosure to provide noise shielding to surrounding land uses. A typical equipment enclosure can provide 40 dBA or more of noise reduction (HUD 2009). As such, noise levels at each pump station would be approximately 50 dBA. The nearest pump station to existing NSLUs would be approximately 1,230 feet north of

residences on Strathmore Drive and approximately 2,050 feet north of the Santee Lakes Recreation Preserve camping area. Even without shielding, at this distance, noise levels would be reduced to 40 dBA or below, and impacts would be less than significant.

Open Space Preserve Area

The proposed project would retain 256 acres of Open Space and approximately 1,650.4 acres of Habitat Preserve, primarily along the perimeter of the project site, separating the proposed development area from off-site uses. These areas would be primarily passive, but would include existing and new trails for pedestrians and bicycles. Noise from these activities would be limited to normal conversation levels. Occasional maintenance activities would be required along the trails at the edge of development, such as vegetation and sediment removal; however, these activities would not require heavy construction equipment that would generate excessive noise. Occasional maintenance vehicle trips would not result in a substantial increase in noise levels. Therefore, impacts would be less than significant.

Permanent Increase in Traffic Noise Levels

The following analysis is based on traffic data provided in the project-specific traffic study prepared by LLG (2020). The potential for the proposed project to permanently increase traffic noise is addressed under the following traffic impact analysis scenarios: Existing + Project Buildout, Near-Term + Project Buildout, and Year 2035 + Project Buildout. The Near-Term scenario assumes development of the proposed project and cumulative development projects. Traffic levels for each roadway are provided in Appendix B.

A substantial permanent increase would occur if implementation of the proposed project were to result in an ambient noise level at 50 feet from the roadway centerline that exceeds the land use compatibility limits (Table 6) established in the Santee General Plan, including 65 dBA Ldn at the property line for residential properties and schools and 70 dBA Ldn for commercial uses and Neighborhood Parks. For conditions where the roadway exceeds the standard without project implementation, a significant impact would occur if the proposed project would result in an increase of 3 dBA or greater at 50 feet from the roadway centerline. The following presents a conservative analysis since actual noise levels at nearby receptors would decrease based on their distance from the roadway and would vary based on each individual receptor's location.

Existing + Project Scenario

Existing noise levels and future increases in traffic with implementation of the proposed project are provided in Table 9. As shown in this table, 12 of the 24 existing roadway segments currently generate noise levels at 50 feet from the roadway centerline that exceed applicable thresholds. A significant project-related traffic noise impact would occur on one of these already impacted segments, Magnolia Avenue from Woodglen Vista to El Nopal, because there would be an increase

in noise level of 3 dBA Ldn. An additional five roadway segments would be significantly impacted because the project-related traffic noise would cause the existing noise level to exceed the applicable threshold. Therefore, a total of six segments would be significantly impacted.

Table 9 also identifies three segments that exceed applicable thresholds but are not identified as significant. The segment of Cuyamaca Street from the project site to Magnolia Avenue currently does not exist. It would be constructed as part of the proposed project, and noise levels with project operation at 50 feet from the roadway would exceed the applicable threshold of 65 dBA Ldn with implementation of project. However, actual noise levels at the nearest receptors to the impacted segments of Cuyamaca Street would be reduced by distance compared to the estimated noise level in Table 9. The nearest residences, located on Summit Avenue, are located more than 900 feet east of the centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn and a significant impact would not occur to this segment. Noise levels on Cuyamaca Street from Chaparral Drive to El Nopal would exceed 65 dBA with operation of the proposed project. However, the existing residential subdivision on Cuyamaca Street north of El Nopal was constructed with masonry and glass barriers along the edge of development on Cuyamaca Street that would likely reduce noise levels compared to the estimated noise level in Table 9. At a minimum, noise barriers that break the line of sight to the source, such as the existing barriers, typically provide at least 5 dBA noise reduction (Caltrans 2013a). Therefore, the existing noise barriers at residences along Cuyamaca Street would reduce the estimated roadway noise level of 68 dBA Ldn on Cuyamaca Street from Chaparral Drive to Woodglen Vista Drive to the acceptable noise level of 63 dBA Ldn and the estimated roadway noise level of 69 dBA Ldn from Woodglen Vista Drive to El Nopal to the acceptable noise level of 64 dBA Ldn. Impacts to these segments would be less than significant.

In summary, as shown in Table 9, with the addition of project-related traffic, six roadway segments would result in a potentially significant noise impact under the Existing + Project scenario.

Table 9. Existing + Project Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (dBA Ldn)	Exceeds Threshold Without Project?	Existing + Project (dBA Ldn)	Increase in Noise Level from Existing	Significant Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	71	Yes	72	+1	No
	West Hills Parkway to Medina Drive	65	70	Yes	71	+1	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	71	+1	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	+1	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	0	No
Fanita Parkway	**On-Site Portion to Ganley Road**	**65**	**Does Not Exist**	**No**	**66**	**NA**	**Yes**
	Ganley Road to Lake Canyon Road	**65**	**59**	**No**	**69**	**+10**	**Yes**
	Lake Canyon Road to Mast Boulevard	**65**	**61**	**No**	**70**	**+9**	**Yes**
	Mast Boulevard to Carlton Oaks Drive	65	58	No	61	+3	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	+1	No
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	Does Not Exist	No	67	NA	No[1]
	Magnolia Avenue to Princess Joann Road	65	Does Not Exist	No	64	NA	No
	Princess Joann Road to Chaparral Drive	65	Does Not Exist	No	64	NA	No
	Chaparral Drive to Woodglen Vista Drive	65	54	No	68	+14	No[2]
	Woodglen Vista Drive to El Nopal	65	62	No	69	+7	No[2]
	El Nopal to Mast Boulevard	**65**	**65**	**No**	**71**	**+6**	**Yes**
	Mast Boulevard to River Park Drive	65	68	Yes	70	+2	No
	River Park Drive to Town Center Parkway	65	70	Yes	71	+1	No
	Town Center Parkway to Mission Gorge Road	70	72	Yes	73	+1	No

Table 9. Existing + Project Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (dBA Ldn)	Exceeds Threshold Without Project?	Existing + Project (dBA Ldn)	Increase in Noise Level from Existing	Significant Impact?
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	Does Not Exist	No	63	NA	No
	Princess Joann Road to Woodglen Vista Drive	**65**	**60**	**No**	**66**	**+6**	**Yes**
	Woodglen Vista Drive to El Nopal	**65**	**66**	**Yes**	**69**	**+3**	**Yes**
	El Nopal to Mast Boulevard	65	68	Yes	69	+1	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	76	0	No

Notes: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial permanent increase in vehicle traffic noise would occur if implementation of the proposed project would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without project implementation, an increase of more than 3 dBA would be considered significant.

The existing condition represents conditions in 2018. Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based on traffic data provided by LLG (2020). Traffic levels for each roadway are included in Appendix B. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix B for data sheets.

[1] The nearest residences, located on Summit Avenue, are more than 900 feet east of the centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn.

[2] Existing noise wall would reduce noise to an acceptable level.

Near-Term Scenario

The Near-Term scenario includes development of the proposed project and cumulative projects (LLG 2020). Near-term traffic noise levels, with and without the proposed project, are provided in Table 10. As shown in this table, 12 of the 24 study area roadway segments would exceed applicable thresholds without implementation of the proposed project.

Significant impacts are identified in Table 10 for project-related traffic noise increases that would cause noise along five roadway segments on Fanita Parkway, Magnolia Avenue, and Cuyamaca Street to exceed the applicable threshold. A significant impact is also identified for project-related traffic noise that would result in an increase in noise levels of 3 dBA Ldn along one roadway segment of Cuyamaca Street (Woodglen Vista Drive to El Nopal) that would exceed the applicable threshold without project implementation.

Table 10 also identifies three segments that exceed applicable thresholds but are not identified as significant. Cuyamaca Street from the project site to Magnolia Avenue currently does not exist and would exceed the applicable threshold of 65 dBA Ldn at 50 feet with implementation of project. However, due to distance, the actual noise levels at the nearest receptors to the proposed Cuyamaca Street alignment would be reduced compared to the noise level shown in Table 10. The nearest residences, located along Summit Avenue, would be more than 900 feet east of the proposed centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn, and a significant impact would not occur. As previously described, the existing barriers constructed at the subdivision on Cuyamaca Street north of El Nopal would reduce the estimated roadway noise level of 68 dBA Ldn from Chaparral Drive to Woodglen Vista Drive to the acceptable noise level of 63 dBA Ldn, and the estimated roadway noise level of 69 dBA Ldn from Woodglen Vista Drive to El Nopal would be reduced to the acceptable noise level of 64 dBA Ldn. Therefore, impacts to these segments would be less than significant.

In summary, six roadway segments would result in a potentially significant noise impact under the Near-Term scenario.

Table 10. Near-Term Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near-Term No Project (dBA Ldn)	Exceeds Threshold Without Project?	Near-Term + Project (dBA Ldn)	Increase in Noise Level from Near-Term No Project	Significant Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	72	Yes	73	+1	No
	West Hills Parkway to Medina Drive	65	70	Yes	72	+2	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	72	+2	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	+1	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	78	+1	No
Fanita Parkway	**On-Site Portion to Ganley Road**	**65**	**Does Not Exist**	**No**	**66**	**NA**	**Yes**
	Ganley Road to Lake Canyon Road	**65**	**60**	**No**	**70**	**+10**	**Yes**
	Lake Canyon Road to Mast Boulevard	**65**	**61**	**No**	**70**	**+9**	**Yes**
	Mast Boulevard to Carlton Oaks Drive	65	59	No	62	+3	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	+1	No

Table 10. Near-Term Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near-Term No Project (dBA Ldn)	Exceeds Threshold Without Project?	Near-Term + Project (dBA Ldn)	Increase in Noise Level from Near-Term No Project	Significant Impact?
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	Does Not Exist	No	67	NA	No[1]
	Magnolia Avenue to Princess Joann Road	65	Does Not Exist	No	64	NA	No
	Princess Joann Road to Chaparral Drive	65	Does Not Exist	No	64	NA	No
	Chaparral Drive to Woodglen Vista Drive	65	54	No	68	+14	No[2]
	Woodglen Vista Drive to El Nopal	65	62	No	69	+7	No[2]
	El Nopal to Mast Boulevard	**65**	**65**	**No**	**71**	**+6**	**Yes**
	Mast Boulevard to River Park Drive	65	69	Yes	70	+1	No
	River Park Drive to Town Center Parkway	65	70	Yes	71	+1	No
	Town Center Parkway to Mission Gorge Road	70	72	Yes	73	+1	No

Table 10. Near-Term Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near-Term No Project (dBA Ldn)	Exceeds Threshold Without Project?	Near-Term + Project (dBA Ldn)	Increase in Noise Level from Near-Term No Project	Significant Impact?
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	Does Not Exist	No	63	NA	No
	Princess Joann Road to Woodglen Vista Drive	**65**	**60**	**No**	**66**	**+6**	**Yes**
	Woodglen Vista Drive to El Nopal	**65**	**66**	**Yes**	**69**	**+3**	**Yes**
	El Nopal to Mast Boulevard	65	68	Yes	69	+1	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	77	+1	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial permanent increase in vehicle traffic noise would occur if implementation of the proposed project would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without project implementation, an increase of more than 3 dBA would be considered significant.

Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020). Traffic levels for each roadway are included in the Appendix B. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix B for data sheets.

[1] The nearest residences, located on Summit Avenue, are located more than 900 feet east of the centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn.

[2] Existing noise wall would reduce noise to an acceptable noise level.

Year 2035 Scenario

The Year 2035 scenario compares buildout of the adopted Santee General Plan and buildout of the Santee General Plan with the proposed project. Year 2035 traffic noise levels, with and without the proposed project, are provided in Table 11. As shown in this table, 17 of the 24 study area roadway segments would exceed applicable thresholds without implementation of the proposed project.

Table 11 identifies significant impacts from project-related traffic on three segments of Fanita Parkway. Table 11 also identifies two segments that would exceed applicable thresholds but are not ultimately identified as significant. Traffic noise on Cuyamaca Street from the project site to Magnolia Avenue would exceed 65 dBA Ldn with project implementation. However, the actual noise level at the nearest receptors to the proposed Cuyamaca Street extension would be reduced by distance compared to the noise level estimated in Table 11. These residences along Summit Avenue would be more than 900 feet from the proposed centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn, and a significant impact would not occur to this segment. Project-related traffic noise would result in an increase in noise levels of 3 dBA Ldn along one segment of Cuyamaca Street. As previously described, the existing barriers constructed at the subdivision on Cuyamaca Street north of El Nopal would reduce the estimated roadway noise level of 66 dBA Ldn from Princess Joann Road to Chaparral Drive to the acceptable noise level of 61 dBA. Therefore, impacts to this segment would be less than significant. Three roadway segments of Fanita Parkway would result in a potentially significant noise impact under the Year 2035 scenario.

Table 11. Year 2035 Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Year 2035 No Project (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 + Project (dBA Ldn)	Increase in Noise Level from Year 2035 No Project	Significant Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	72	Yes	72	0	No
	West Hills Parkway to Medina Drive	65	71	Yes	72	+1	No
	Pebble Beach Drive to Fanita Parkway	65	71	Yes	72	+1	No
Mission Gorge Road	SR-125 to Fanita Drive	70	78	Yes	78	0	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	78	+1	No
Fanita Parkway	**On-Site Portion to Ganley Road**	**65**	**64**	**No**	**66**	**+2**	**Yes**
	Ganley Road to Lake Canyon Road	**65**	**65**	**No**	**70**	**+5**	**Yes**
	Lake Canyon Road to Mast Boulevard	**65**	**66**	**Yes**	**70**	**+4**	**Yes**
	Mast Boulevard to Carlton Oaks Drive	65	61	No	62	+1	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	70	Yes	70	0	No

Table 11. Year 2035 Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Year 2035 No Project (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 + Project (dBA Ldn)	Increase in Noise Level from Year 2035 No Project	Significant Impact?
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	65	No	67	+2	No[1]
	Magnolia Avenue to Princess Joann Road	65	64	No	65	+1	No
	Princess Joann Road to Chaparral Drive	65	65	No	66	+1	No[2]
	Chaparral Drive to Woodglen Vista Drive	65	68	Yes	69	+1	No
	Woodglen Vista Drive to El Nopal	65	70	Yes	70	0	No
	El Nopal to Mast Boulevard	65	71	Yes	71	0	No
	Mast Boulevard to River Park Drive	65	70	Yes	70	0	No
	River Park Drive to Town Center Parkway	65	71	Yes	71	0	No
	Town Center Parkway to Mission Gorge Road	70	73	Yes	74	+1	No
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	61	No	63	+2	No
	Princess Joann Road to Woodglen Vista Drive	65	66	Yes	68	+2	No

Table 11. Year 2035 Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Year 2035 No Project (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 + Project (dBA Ldn)	Increase in Noise Level from Year 2035 No Project	Significant Impact?
	Woodglen Vista Drive to El Nopal	65	68	Yes	69	+1	No
	El Nopal to Mast Boulevard	65	71	Yes	71	0	No
SR-52	Santo Road to Mast Boulevard	70	77	Yes	77	0	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial permanent increase in vehicle traffic noise would occur if implementation of the proposed project would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without project implementation, an increase of more than 3 dBA would be considered significant.

Noise levels are calculated at 50 feet from roadway centerline except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020). Traffic levels for each roadway are included in the Appendix B. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix B for data sheets.

[1] The nearest residences, located on Summit Avenue, are located more than 900 feet east of the centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn.

[2] Existing noise wall would reduce noise to an acceptable level.

Land Use Plan Without School

If the proposed school is not developed on the project site as proposed in the preferred land use plan with school, the school site would be developed with 59 additional single-family units. Traffic noise levels for the land use plan without school have been analyzed to the same extent as the proposed project and are provided in Appendix C. Traffic noise level impacts under the land use plan without school would be identical to the preferred land use plan with school, with the exception of two segments:

- **Fanita Parkway from Ganley Road to Lake Canyon Road:** Noise levels under the land use plan without school are estimated to be 70 dBA Ldn under the Existing + Project scenario compared to 69 dBA Ldn under the preferred land use plan with school. Long-term noise levels under either land use plan are estimated to be 70 dBA Ldn. A potentially significant impact would occur under either land use plan.
- **Magnolia Avenue from Cuyamaca Street to Princess Joann Road:** Noise levels under the land use plan without school are estimated to be 64 dBA Ldn under the Year 2035 + Project scenario compared to 63 dBA Ldn under the preferred land use plan with school. A significant impact would not occur under either land use plan.

The potentially significant impacts identified previously for the preferred land use plan with school would also occur under the land use plan without school, and no additional significant impacts have been identified for this scenario.

On-Site Exposure to Ambient Noise Levels

This section addresses the potential for on-site sensitive receptors to be exposed to ambient noise levels in excess of the 65 dBA Ldn standard established in the Santee General Plan Noise Element. CEQA is intended to protect the existing environment from impacts that would result from the proposed project. Generally, CEQA does not consider impacts of the existing environment on a proposed land use to be significant (see Section 15126.2 of the CEQA Guidelines). However, the Santee General Plan Noise Element states that a significant impact would occur if noise levels at any planned development site would exceed the noise levels considered compatible for that use as identified in Table 6. Therefore, the potential for ambient noise levels, primarily from vehicle traffic, to impact the proposed project is addressed below.

As shown in Table 7, the results of the ambient noise survey reflect daytime noise levels that range between 40 dBA and 60 dBA Leq on the project site. As described previously in Table 6, a normally acceptable ambient community noise level of up to 65 dBA Ldn is considered compatible with residential developments as specified in the Santee General Plan and is the applicable threshold of significance for NSLUs (City of Santee 2003). An ambient community noise level of up to 70 dBA Ldn is the applicable significance threshold for Neighborhood Parks and commercial buildings. Based on these compatibility guidelines, existing ambient noise levels across the site are compatible with the proposed land uses.

Following development, vehicle noise is anticipated to be the dominant source of ambient noise on the project site. Table 11 shows future noise levels on the major proposed on-site roadways, including Fanita Parkway (on-site portion to Ganley Road) and Cuyamaca Street (on-site portion to Magnolia Avenue). As shown in Table 11, traffic noise levels along major roadways would be approximately 66 dBA Ldn at 50 feet from the centerline of Fanita Parkway and 67 dBA Ldn at 50 feet from the centerline of Cuyamaca Street. Ambient noise levels would be compatible with parks and commercial buildings. Noise levels at Fanita Parkway and Cuyamaca Street would attenuate to acceptable levels of 65 dBA Ldn beyond approximately 65 feet of the centerline of Fanita Parkway and 75 feet from the centerline of Cuyamaca Street. Noise levels on other roadways on the project site would serve fewer vehicles and would generate lower noise levels. Additionally, masonry and glass walls are proposed along roadways throughout neighborhoods that would provide additional noise attenuation at receptors. Therefore, noise levels throughout the project site more than 75 feet from Fanita Parkway and Cuyamaca Street would be compatible with the proposed development. However, development within 75 feet of these roadways would be potentially exposed to noise levels in excess of 65 dBA Ldn.

Low Density Residential units proposed along Cuyamaca Street in Orchard Village would be separated from Cuyamaca Street by more than 75 feet and would not be exposed to noise levels above acceptable limits from Cuyamaca Street. However, the Low Density Residential units and Active Adult units that would be located adjacent to Fanita Parkway, and multi-family residential units located adjacent to Cuyamaca Street in the Village Center in Fanita Commons, would potentially be exposed to conditionally compatible noise levels. According to the Santee General Plan, conventional construction with closed windows is typically sufficient for compatibility. However, noise insulation features would potentially be required for these residences for consistency with the Santee General Plan. This on-site impact would be potentially significant.

Temporary Noise Increase

Construction of the proposed project would have the potential to result in temporary noise level increases as a result of increased traffic volumes and the operation of heavy equipment. The potential for these sources to result in a significant temporary noise increase is addressed below.

Construction Traffic Noise

This section addresses the potential for construction of the proposed project to temporarily increase ambient noise levels as a result of increased traffic noise. Existing traffic volumes without construction, and near-term volumes without construction, are provided in the traffic impact analysis prepared by LLG (2020). In addition, traffic construction volumes are provided by the Air Quality Technical Analysis prepared by LSA (2020). Grading cut and fill would be balanced on the project site. Construction equipment would remain on the site once it has arrived. Therefore, off-site truck noise during these activities would be minimal. However, daily worker trips and vendor truck trips would be required and would have the potential to temporarily increase ambient noise levels.

The highest volumes of construction vehicle trips are anticipated during building construction activities. During building construction, approximately 1,099 worker trips and 312 vendor trips are estimated daily for Phase 1 (see Section 2.2.10, Development Phasing, for construction phasing). These volumes are assumed as the worst-case scenario for Phase 1 construction. Following Phase 1, when operation and construction would potentially overlap, the worst-case scenario for building construction trips would occur during Phase 4. The worst-case construction traffic scenario was determined based on daily truck traffic because truck trips are the primary noise concern for vehicle noise impacts. Approximately 838 worker trips and 235 vendor trips are estimated daily during building construction activities in Phase 4. Worker and vendor trips calculated by the California Emissions Estimator Model for the air quality analysis are based on the amount of building construction required (residential units or square footage) during each phase (LSA 2020). These estimates are anticipated to be conservative. For example, calculations based on estimated material requirements provided by the applicant estimate daily vendor trips on certain days would be less than 20 one-way trips per day (O'Connor pers comm. 2019).

During the other construction activities (e.g., grading, paving, coating) during all phases, a maximum of 150 worker trips and no vendor trips are anticipated. A substantial temporary increase would occur if construction trips would result in an ambient noise level that would exceed the applicable exterior land use compatibility criteria, or would result in an increase of more than 3 dBA if the roadway already exceeds the standard without the addition of construction traffic. During Phase 1 of construction, all construction trips would access the project site via Fanita Parkway because the extensions to Cuyamaca Street and Magnolia Avenue would not be completed prior to this phase. Therefore, the existing analysis does not include the off-site segments of Cuyamaca Street and Magnolia Avenue north of Mast Boulevard that are anticipated to serve the proposed project's operational traffic. The analysis of near-term conditions assumes that the Cuyamaca Street and Magnolia Avenue extensions would be accessible following Phase 1 and that construction trips may use any roadway. Following Phase 1, the analysis conservatively assumes 100 percent of construction traffic on each segment of Fanita Parkway, Cuyamaca Street, and Magnolia Avenue. This represents a worst-case scenario for Cuyamaca Parkway and Magnolia Avenue because construction traffic is anticipated to primarily access the site from Fanita Parkway.

Existing + Construction Scenario

Table 12 provides the estimated traffic noise levels for Phase 1 construction activities other than building construction, including site preparation, grading, paving, utilities installation, and surface improvements. Table 13 provides estimated traffic noise levels compared to existing noise levels during the building construction period of any phase. As shown in Table 12, no significant increase in traffic noise levels would occur during construction activities other than building construction during Phase 1. However, as shown in Table 13, the additional construction traffic that would occur during the building construction phase would cause a significant increase in traffic noise levels on two segments of Fanita Parkway. Therefore, building construction would result in a temporary significant increase in traffic noise to existing receptors on two roadway segments.

Table 12. Existing + Construction Traffic Noise Levels (Construction Activities Other than Building Construction)

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (dBA Ldn)	Exceeds Threshold Without Construction?	Existing + Construction (dBA Ldn)	Increase in Noise Level from Existing	Significant Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	71	Yes	71	0	No
	West Hills Parkway to Medina Drive	65	70	Yes	70	0	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	70	0	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	77	0	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	0	No
Fanita Parkway	On-Site Portion to Ganley Road	65	Does Not Exist	No	47	NA	No
	Ganley Road to Lake Canyon Road	65	59	No	62	+3	No
	Lake Canyon Road to Mast Boulevard	65	61	No	64	+3	No
	Mast Boulevard to Carlton Oaks Drive	65	58	No	59	+1	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	69	0	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	76	0	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial temporary increase in vehicle traffic noise would occur if implementation of proposed project construction would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without the addition of construction traffic, an increase of more than 3 dBA attributable to construction traffic would be considered significant.

The existing condition represents conditions in 2018. Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020) and LSA (2020). Traffic levels for each roadway are included in Appendix D. Decibel levels are rounded to the nearest whole number. See Appendix D for data sheets. Assumes 100 percent of construction traffic would access the site using Fanita Parkway; therefore, Cuyamaca Street and Magnolia Avenue are not included in the table.

Table 13. Existing + Building Construction Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (dBA Ldn)	Exceeds Threshold Without Construction?	Existing + Construction (dBA Ldn)	Increase in Noise Level from Existing	Significant Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	71	Yes	72	+1	No
	West Hills Parkway to Medina Drive	65	70	Yes	71	+1	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	71	+1	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	+1	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	0	No
Fanita Parkway	On-Site Portion to Ganley Road	65	Does Not Exist	No	64	NA	No
	Ganley Road to Lake Canyon Road	**65**	**59**	**No**	**67**	**+8**	**Yes**
	Lake Canyon Road to Mast Boulevard	**65**	**61**	**No**	**68**	**+7**	**Yes**
	Mast Boulevard to Carlton Oaks Drive	65	58	No	64	+6	No

Table 13. Existing + Building Construction Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (dBA Ldn)	Exceeds Threshold Without Construction?	Existing + Construction (dBA Ldn)	Increase in Noise Level from Existing	Significant Impact?
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	+1	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	76	0	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial temporary increase in vehicle traffic noise would occur if implementation of the proposed project construction would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without the addition of construction traffic, an increase of more than 3 dBA attributable to construction traffic would be considered significant.

The existing condition represents conditions in 2018. Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020) and LSA (2020). Traffic levels for each roadway are included in Appendix E. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix E for data sheets. Assumes 100 percent of construction traffic with access the site via Fanita Parkway; therefore, Cuyamaca Street and Magnolia Avenue are not included in the table.

Near-Term + Interim Operation + Construction Scenario

Following completion of Phase 1, area roadways would experience an increase in vehicle trips as a result of incremental increases in operational trips, as well as construction traffic through project buildout. The Near-Term + Interim Operation + Construction scenario assumes 50 percent of traffic volumes from full operation of the proposed project to determine whether construction would result in a significant temporary increase in noise level compared to noise levels without construction. Table 14 provides the estimated traffic noise levels for interim operation and construction activities other than building construction compared to near-term noise levels without the proposed project. Table 15 provides estimated traffic noise levels compared to near-term noise levels during a building construction period and interim operation. Normal construction activities from a later phase would have the potential to overlap with normal construction or building construction from a previous phase. A scenario that includes interim operation with a simultaneous normal construction period and building construction period was modeled and is included in Appendix D. Impacts were the same as those identified in Table 15. As such, Table 15 also represents potential impacts from potential overlap in construction phases.

As shown in Tables 14 and 15, compared to existing conditions, several roadways would experience a significant increase in noise level in the Near-Term + Interim Operation + Construction scenario. However, these increases would be primarily attributable to the increase in permanent operational traffic rather than construction traffic. As shown in Table 14, no significant impacts associated with construction traffic noise would occur during activities without building construction. As shown in Table 15, construction traffic noise levels during building construction would result in temporary significant noise impacts on one segment of Fanita Parkway and two segments of Magnolia Avenue.

Table 14. Near-Term + Interim Operation and Construction Traffic Noise Levels (Construction Activities Other than Building Construction)

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Interim Operation and Construction?	Near Term+ Interim Operation (dBA Ldn)	Near Term + Interim Operation + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	72	Yes	72	73	+1	No
	West Hills Parkway to Medina Drive	65	70	Yes	71	71	0	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	71	71	0	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	78	0	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	77	0	No
Fanita Parkway	On-Site Portion to Ganley Road	65	Does Not Exist	No	63	64	+1	No
	Ganley Road to Lake Canyon Road	65	60	No	67	67	0	No
	Lake Canyon Road to Mast Boulevard	65	61	No	68	68	0	No
	Mast Boulevard to Carlton Oaks Drive	65	59	No	60	61	+1	No
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	Does Not Exist	No	64	64	0	No
	Magnolia Avenue to Princess Joann Road	65	Does Not Exist	No	61	61	0	No
	Princess Joann Road to Chaparral Drive	65	Does Not Exist	No	61	61	0	No

Table 14. Near-Term + Interim Operation and Construction Traffic Noise Levels (Construction Activities Other than Building Construction)

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Interim Operation and Construction?	Near Term+ Interim Operation (dBA Ldn)	Near Term + Interim Operation + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
	Chaparral Drive to Woodglen Vista Drive	65	54	No	65	65	0	No
	Woodglen Vista Drive to El Nopal	65	62	No	68	68	0	No
	El Nopal to Mast Boulevard	65	65	No	70	70	0	No
	Mast Boulevard to River Park Drive	65	69	Yes	69	69	0	No
	River Park Drive to Town Center Parkway	65	70	Yes	70	70	0	No
	Town Center Parkway to Mission Gorge Road	65	72	Yes	73	73	0	No
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	Does Not Exist	No	60	60	0	No
	Princess Joann Road to Woodglen Vista Drive	65	60	No	64	64	0	No
	Woodglen Vista Drive to El Nopal	65	66	Yes	68	68	0	No
	El Nopal to Mast Boulevard	65	68	Yes	69	69	0	No

Table 14. Near-Term + Interim Operation and Construction Traffic Noise Levels (Construction Activities Other than Building Construction)

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Interim Operation and Construction?	Near Term+ Interim Operation (dBA Ldn)	Near Term + Interim Operation + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	70	0	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	76	76	0	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; SR- = State Route

Unless otherwise noted, a substantial temporary increase in vehicle traffic noise would occur if implementation of the proposed project construction would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without the addition of construction traffic, an increase of more than 3 dBA attributable to construction traffic would be considered significant.

The existing condition represents conditions in 2018. Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020) and LSA (2020). Traffic levels for each roadway are included in Appendix D. Decibel levels are rounded to the nearest whole number. See Appendix D for data sheets.

[1] In increase attributable to construction is the increase in noise level from Near-Term + Interim Operation to Near-Term + Interim Operation + Construction.

Table 15. Near Term + Interim Operation and Building Construction Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Construction?	Near Term + Interim Operation (dBA Ldn)	Near Term + Interim Project + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
Mast Boulevard	SR-52 to West Hills Parkway	70	72	Yes	72	73	+1	No
	West Hills Parkway to Medina Drive	65	70	Yes	71	72	+1	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	71	72	+1	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	78	0	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	78	+1	No
Fanita Parkway	**On-Site Portion to Ganley Road**	**65**	**Does Not Exist**	**No**	**63**	**66**	**+3**	**Yes**
	Ganley Road to Lake Canyon Road	65	60	No	67	69	+2	No
	Lake Canyon Road to Mast Boulevard	65	61	No	68	70	+2	No
	Mast Boulevard to Carlton Oaks Drive	65	59	No	60	64	+4	No

Table 15. Near Term + Interim Operation and Building Construction Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Construction?	Near Term + Interim Operation (dBA Ldn)	Near Term + Interim Project + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	Does Not Exist	No	64	66	+2	No[2]
	Magnolia Avenue to Princess Joann Road	65	Does Not Exist	No	61	65	+4	No
	Princess Joann Road to Chaparral Drive	65	Does Not Exist	No	61	65	+4	No
	Chaparral Drive to Woodglen Vista Drive	65	54	No	65	68	+3	No[3]
	Woodglen Vista Drive to El Nopal	65	62	No	68	70	+2	No
	El Nopal to Mast Boulevard	65	65	No	70	71	+1	No
	Mast Boulevard to River Park Drive	65	69	Yes	69	70	+1	No
	River Park Drive to Town Center Parkway	65	70	Yes	70	71	+1	No
	Town Center Parkway to Mission Gorge Road	65	72	Yes	73	74	+1	No

Table 15. Near Term + Interim Operation and Building Construction Traffic Noise Levels

Roadway	Segment	Applicable Threshold (dBA Ldn)	Near Term (dBA Ldn)	Exceeds Threshold Without Construction?	Near Term + Interim Operation (dBA Ldn)	Near Term + Interim Project + Construction (dBA Ldn)	Increase Attributable to Construction[1]	Significant Additional Impact?
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	Does Not Exist	No	60	64	+4	No
	Princess Joann Road to Woodglen Vista Drive	**65**	**60**	**No**	**64**	**67**	**+3**	**Yes**
	Woodglen Vista Drive to El Nopal	**65**	**66**	**Yes**	**68**	**69**	**+1**	**Yes**
	El Nopal to Mast Boulevard	65	68	Yes	69	70	+1	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	70	0	No
SR-52	Santo Road to Mast Boulevard	70	76	Yes	76	77	+1	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; NA = not applicable; SR- = State Route

Unless otherwise noted, a substantial temporary increase in vehicle traffic noise would occur if implementation of the proposed project construction would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded without the addition of construction traffic, an increase of more than 3 dBA attributable to construction traffic would be considered significant.

Noise levels are calculated at 50 feet from roadway centerline, except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020) and LSA (2020). Traffic levels for each roadway are included in Appendix E. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix E for data sheets.

[1] In increase attributable to construction is the increase in noise level from Near-Term + Interim Operation to Near-Term + Interim Operation + Construction

[2] The nearest residences, located on Summit Avenue, are located more than 900 feet east of the centerline of Cuyamaca Street. At this distance, noise levels would be reduced to less than 65 dBA Ldn.

[3] Existing noise wall would reduce noise to an acceptable level.

Construction Equipment Noise

Construction of the proposed project would generate noise that could expose nearby receptors to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. Sound levels from typical construction equipment range from 60 dBA to 90 dBA Leq at 50 feet from the source (FHWA 2008). Noise from construction equipment generally exhibits point source acoustical characteristics. Strictly speaking, a point source sound decays at a rate of 6 dBA per doubling of distance from the source. The rule applies to the propagation of sound waves with no ground interaction.

Construction of the proposed project is anticipated to begin in 2021 and would occur in four phases, with a buildout of approximately 10 to 15 years. The anticipated construction phasing for the proposed project is provided on Figure 4. Temporary construction activity noise would be considered significant if it would violate the limits established in Section 5.04.090 of the City's Noise Ordinance. The ordinance prohibits operation of any construction equipment outside the hours of 7:00 a.m. through 7:00 p.m., Monday through Saturday, excluding legal holidays, without approval from the Director of Development Services. Also, construction equipment with the potential to exceed 85 dBA at the construction site shall not be operated at the same location for more than 10 consecutive workdays without notification to properties within 300 feet of the site.

Construction Noise

Standard equipment, such as dozers, loaders, graders, backhoes, scrapers, and miscellaneous trucks would be required for most construction days. Some blasting may be required and is described separately below. Noise levels from construction on the project site were determined based on typical equipment noise levels determined by the RCNM (FHWA 2008). A semi-portable rock crushing/processing facility is anticipated to be used for aggregate plant operations during on-site grading activities so that excavated material may be used on site rather than exported. Aggregate plant operations are anticipated to be stationed in the northern portion of Fanita Commons during Phase 1 and Phase 2 of construction, in approximately the middle of the eastern boundary of Vineyard Village during Phase 3, and in approximately the northeast corner of Vineyard Village during Phase 4. Based on estimated noise levels for a quarry project that would include rock crushing and processing, noise levels from these activities would be approximately 85 dBA at a distance of 100 feet from equipment (91 dBA at 50 feet) (Shasta County 2011). The eight noisiest pieces of construction equipment (excavator, dozer, grader, dump truck, loader, scraper, rock crusher, and aggregate processing plant[2]) that could be required for on-site construction were assumed to operate in the same location, and would have the potential to generate noise levels up

[2] The RCNM model does not include an option for rock crushing or processing (aggregate plant). Sand blasting equipment, which is estimated to have an Lmax of 95.7 at 50 feet, is conservatively assumed to represent this equipment.

to approximately 92.7 dBA at 50 feet from the construction site. These estimates are conservative because construction equipment for a single construction activity would likely be spread out over several acres.

Standard construction operation would have the potential to exceed 85 dBA at the construction site for more than 10 consecutive workdays, and would require notification in accordance with the City's Noise Ordinance (Appendix F). However, the bulk of construction activities would occur within the three proposed villages, which would be separated from existing development by the Habitat Preserve. The closest sensitive receptors to the villages are located approximately 850 feet east of the proposed Vineyard Village boundary along Oak Creek Drive in the unincorporated County. Construction of phases would have the potential to overlap. However, due to the distance between the villages, it would be unlikely for noise from simultaneous construction to be simultaneously audible at a given receptor. Additionally, off-site residences would continue to be located outside the 300-foot notification boundary. Therefore, typical construction activities within the villages would not require construction notification because no City receptors would be located within the 300-foot notification boundary. Additionally, at this distance, noise levels from worst-case construction with rock crushing would attenuate to 68 dBA and would not exceed the County's Noise Ordinance limit of 75 dBA for construction. Construction within the villages would take place during the allowable City Noise Ordinance hours of 7:00 a.m. to 7:00 p.m. A significant impact would not occur to off-site receptors during the on-site construction of Phase 1 (Fanita Commons and the easterly portion of Orchard Village), or during construction of Phases 2, 3, or 4. The timing of the construction of Magnolia Avenue will be tied to the certificate of occupancy of the 1,500th equivalent dwelling unit[3] in the proposed project; however, the exact date of this is unknown.

However, on-site and off-site construction of Phase 1 would include development of new segments and improvements to Fanita Parkway and Cuyamaca Street, including the widening of Fanita Parkway north of Lake Canyon Drive, which would include construction adjacent to existing residential areas and near the campground at Santee Lakes Recreation Preserve. Construction of Magnolia Avenue would also be adjacent to existing residential and school areas. Additionally, dead-end roadway improvements along the southern boundary of the site in the existing neighborhood north of Mast Boulevard would potentially require some heavy construction equipment. Construction for roadway improvements would be linear and the active construction area would be much smaller than on-site land development. For roadway improvements, the four noisiest pieces of construction equipment (excavator, dozer, loader, and scraper) that are assumed for paving operations were anticipated to operate simultaneously in the same location. Construction of new segments and improvements to Fanita Parkway and Cuyamaca Street would

[3] Equivalent dwelling unit is a unit of measure that defines impact relative to a typical single-family residence. Based on the Traffic Impact Analysis (LLG 2020), every 8.91 daily trips that a proposed use would generate would be its dwelling unit equivalent.

have the potential to generate noise levels up to approximately 85 dBA at 50 feet from the construction area (Appendix G).

Operation of heavy equipment during roadway construction would potentially create a substantial short-term noise increase affecting residences near the construction site and notification would be required to comply with the City's Noise Ordinance. The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, and the condition of the equipment. The average sound level of the construction activity also depends upon the amount of time that the equipment operates and the intensity of the construction during the time period. Construction activities are anticipated to occur during the City's allowable hours of operation; however, some nighttime construction within roadways may be required to avoid traffic impacts. Existing residences are located within 300 feet of the construction areas along Fanita Parkway, Cuyamaca Street, and Magnolia Avenue, and dead-end roadway improvements on the southern boundary of the site. Because construction would be linear, individual receptors may not be exposed to construction noise for 10 consecutive workdays. However, operation of heavy equipment during construction would have the potential to create substantial short-term noise increases that require notification, and nighttime construction may be required that would conflict with the City's Noise Ordinance without approval from the Director of Development Services. This impact would be potentially significant.

Blasting Operation

Blasting may be required at locations within the development area (Hunsaker & Associates 2020). Construction blasting generates a maximum noise level of approximately 94 dB at a distance of 50 feet that is very short in duration (FHWA 2006). Drilling would also be necessary to bore holes for the blasting materials. Rock drills generate noise levels of approximately 85 dBA at a distance of 50 feet (FHWA 2006) and may be in operation for several hours in a day. It is anticipated that no more than one blast would occur in one area per day. However, even if more than one blast would occur in any one area per day, several hours would pass between blasts because of the time required to drill the holes and insert and connect the blasting materials.

Drilling and blasting are not anticipated to occur in the same area for more than 10 consecutive workdays. Additionally, the residences closest to village development are approximately 850 feet east of the proposed Vineyard Village boundary near Oak Creek Drive in the unincorporated County. At this distance, noise levels from blasting would be reduced to 69 dBA and would not exceed the County's Noise Ordinance limit of 75 dBA for construction noise. There are no existing City receptors within the 300 feet notification boundary for construction noise impacts. Additionally, drilling and blasting would occur during daytime hours. Therefore, temporary noise impacts as a result of drilling and blasting in the village development area would be consistent with the Noise Ordinance, and impacts would be less than significant.

5.1.1.2 Mitigation Measures

Implementation of the proposed project would have the potential to result in excessive noise levels as a result of potential nighttime nuisance noise at the Special Use area, temporary and permanent increases in ambient noise level, exposure of proposed NSLUs to noise levels in excess of Santee General Plan compatibility standards, and excessive noise levels during construction activities.

Operational Noise Mitigation Measures

Noise Exposure from Special Use Area

The following mitigation measure would eliminate commercial nighttime access in the Special Use area and reduce impacts to a less than significant level:

NOI-1: **Special Use Area Noise Measures.** The following requirements for the Special Use area shall be included as conditions of approval in the development review permit between the applicant and the City of Santee:

- Any electronic or automatic gate installed at Special Use area access points shall not generate noise levels that exceed 65 A-weighted decibels at the access point. The site operator shall provide specifications from the manufacturer prior to gate installation, and the site operator agreement shall include proper maintenance of the gate. Proper maintenance shall include response within 1 business day to complaints received by the site operator from residents or received from the City as a result of a complaint regarding nuisance noise as a result of disrepair. The response shall detail measures that the site operator will take to address the complaint and a timeline, such as a scheduled maintenance appointment.
- Use of the Special Use area as a storage facility shall limit access to the site to the hours of 7:00 a.m. to 7:00 p.m., with the exception of a special after-hours pickup and drop-off location. Stored property shall be relocated to or from the after-hours location during normal business hours because access to the regular storage facilities shall be restricted to 7:00 a.m. to 7:00 p.m. The after-hours location shall be secured with an additional access gate that can only be opened with a temporary gate code provided through pre-arrangement with the site operator. The after-hours location shall be more than 125 feet from the nearest existing receptors and shall be screened from existing receptors by the regular storage facilities.

Permanent Increase in Vehicle Noise

The proposed project would have the potential to result in significant vehicle noise impacts due to project operation. Table 16 provides a summary of the permanent vehicle impacts and where they would occur.

Table 16. Significant Permanent Vehicle Noise Impact Summary

Roadway	Segment	Scenario When Impact Would Occur	Maximum Noise Level at 50 Feet (dBA Ldn)
Fanita Parkway	On-Site Portion to Ganley Road	• Existing + Project • Near Term + Project • Year 2035 + Project • Cumulatively Considerable	66
	Ganley Road to Lake Canyon Road	• Existing + Project • Near Term + Project • Year 2035 + Project • Cumulatively Considerable	70
	Lake Canyon Road to Mast Boulevard	• Existing + Project • Near Term + Project • Year 2035 + Project • Cumulatively Considerable	70
Cuyamaca Street (Silver Country Estates)	El Nopal to Mast Boulevard	• Existing + Project • Near Term + Project	71
Magnolia Avenue	Princess Joann Road to Woodglen Vista Drive	• Existing + Project • Near Term + Project	68
	Woodglen Vista Drive to El Nopal	• Existing + Project • Near Term + Project	69

Sources: LLG 2020.
Notes: dBA = A-weighted decibel; Ldn = day-night average sound level

As shown in Table 16, vehicle noise levels on Fanita Parkway and Magnolia Avenue under all scenarios would be within the conditionally compatible noise level range of 70 dBA Ldn or below for residential development but would exceed the applicable threshold of significance of 65 dBA Ldn (the normally acceptable noise level). Noise levels on the segment of Cuyamaca Street from El Nopal to Mast Boulevard would also potentially exceed the conditionally compatible noise level range. Mitigation Measure NOI-2 requires the installation of a noise barrier on some impacted segments of Fanita Parkway, Cuyamaca Street, and Magnolia Avenue, as shown on Figure 8, Noise Mitigation Locations. Noise barriers that break the line of sight between receptors and the roadway would provide at least 5 dBA in noise reduction, and additional reductions can be achieved with additional height or material selection. Typical noise barriers constructed for the purpose of reducing vehicle noise can provide 30 dBA of noise reduction (Caltrans 2013a). Appendix H includes a sample noise barrier calculation for Fanita Parkway.

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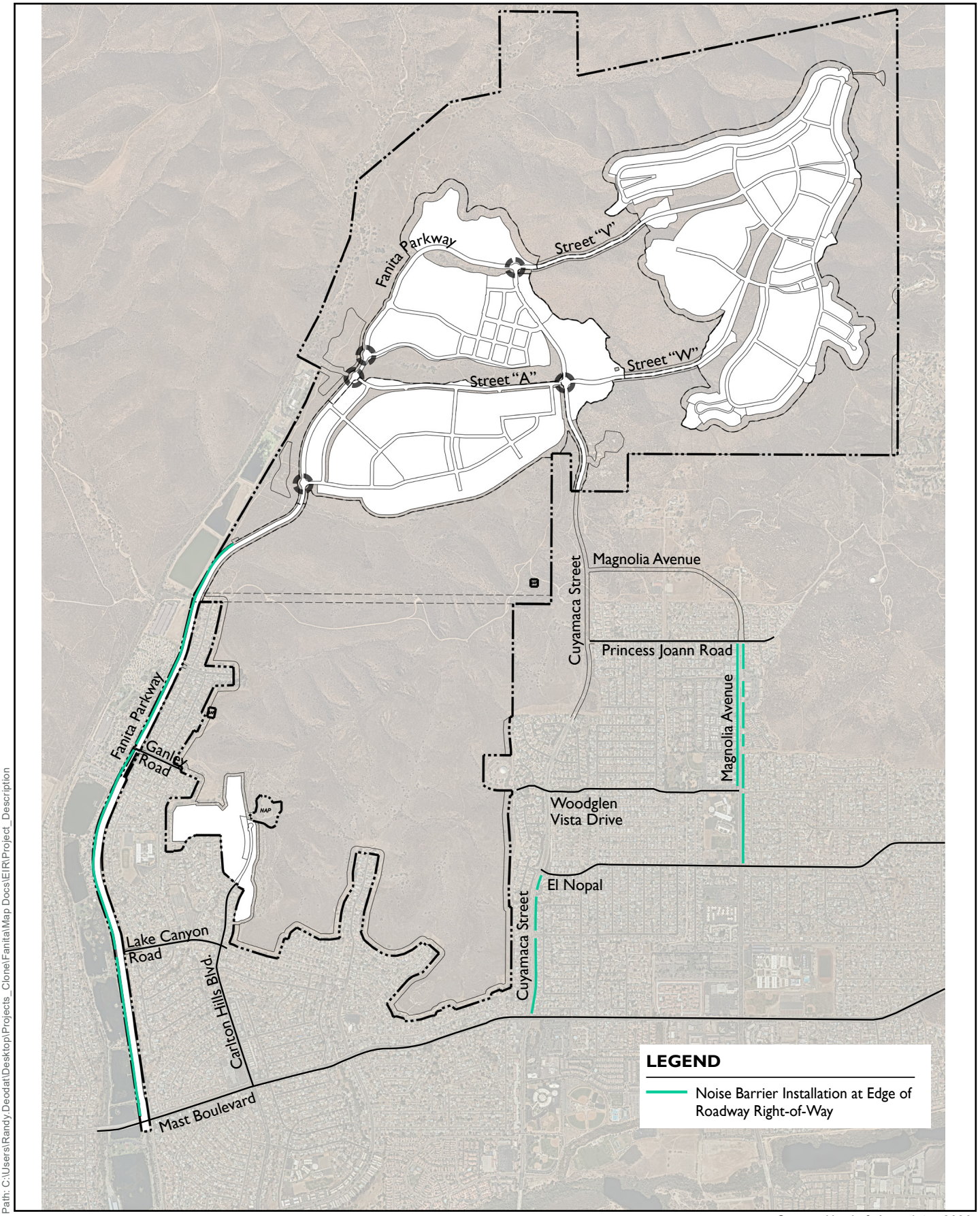

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Source: Harris & Associates 2020.

Harris & Associates

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Feet

Figure 8

Noise Mitigation Locations

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Due to the difference in elevation between the proposed Fanita Parkway improvements and the sensitive receptors at the Santee Lakes Recreation Preserve campground (vertical difference of approximately 12 feet), it is calculated that a 4-foot wall at the western edge of the Fanita Parkway roadway right-of-way for the entire length of the campground would break the line of sight between the source and receptor. Taking distance, change in elevation, and barrier height into account, a 4-foot wall at the roadway right-of-way is calculated to reduce noise levels to 60 dBA Ldn at the nearest campsites (Appendix H). Noise barriers in the roadway right-of-way are anticipated to be feasible on the western side of Fanita Parkway from the project entrance to Mast Boulevard (as mentioned previously), from El Nopal to Mast Boulevard on the eastern side of Cuyamaca Street, and at individual neighborhoods north of El Nopal on Magnolia Avenue.

However, it is not feasible to construct noise barriers on all impacted segments identified in Table 16 due to existing cross streets, driveways, and differences in grade between the roadways and receptors that would make barriers installed within the roadway right-of-way ineffective. Noise walls up to approximately 20 feet in height in the roadway right-of-way would be required on the eastern side of Fanita Parkway to break the line of sight and provide noise attenuation at adjacent receptors. Noise walls up to approximately 23 feet in height would be required on the western side of Cuyamaca Street (Appendix H). At these heights, noise walls would be visually incompatible with the surrounding community and above the Caltrans maximum noise barrier height of 14 to 16 feet, depending on distance from travel lanes (Caltrans 2017). Additionally, the City's Zoning Ordinance generally limits noise walls to a maximum height of 8 feet (Santee Municipal Code, Section 13.10.050[F][2]). Therefore, noise walls are not considered feasible along these segments of Fanita Parkway and Cuyamaca Street. Additional noise barriers may be feasible on Fanita Parkway and Cuyamaca Street if barriers can be negotiated with private property owners to be installed at existing fence lines rather than in the roadway right-of-way; however, such agreements cannot be guaranteed at this time, and even if some property owners agree, the barriers would need to be continuous across multiple properties to be effective. Therefore, this is not considered to be a feasible mitigation measure. Table 17 shows project noise levels with implementation of noise barriers on either side of impacted roadways, where feasible.

The installation of asphalt rubber pavement was considered for mitigation on impacted segments where installation of a noise barrier would not be feasible. As explained in detail in the Use of Asphalt Rubber as CEQA Mitigation Memorandum, provided as Appendix I, studies have demonstrated that asphalt rubber pavement can reduce on-board sound intensity (noise level where tire meets the pavement) by 3 dBA at the time of installation, although the reduction in sound intensity varied based on material (UCPRC 2012). In some instances, compared to traditional asphalt, asphalt rubber pavement has achieved community noise level reductions of 5 dBA and up to 14 dBA in several case studies (Putman and Amirkhanian 2005). The noise-reducing properties of asphalt rubber pavement cannot be demonstrated with certainty to reduce noise levels to below the threshold of 65 dBA Ldn, and the success of asphalt rubber to reduce noise levels varies between available case studies. Additionally, the noise-reducing properties of asphalt rubber pavement deteriorate over time, and the effectiveness of community noise reduction cannot be guaranteed prior to installation. Based on review of available research, it is

anticipated that asphalt rubber pavement would require replacement approximately every 7 to 9 years to maintain noise reduction benefits (UCPRC 2012). This replacement schedule would result in additional impacts compared to regular pavement, which the City currently replaces at an average of every 15 years or more. Unlike traditional pavement, the entire length of asphalt rubber would need to be removed and replaced rather than limiting maintenance to worn areas. More frequent replacement would cause nuisance impacts and disruption from more frequent street closures, additional exposure to construction noise, and additional criteria pollutant and greenhouse gas emissions. Finally, PDMWD has major water and sewer facilities within affected roadways that require frequent maintenance. PDMWD emailed comments to the City on March 10, 2020 (Mael pers comm. 2020), related to the frequency of maintenance and replacement of asphalt rubber pavement, including nuisance noise impacts to Santee Lakes Recreation Preserve campground and undue burden to PDMWD's operations and budget. Therefore, it was determined that the potential adverse impacts of asphalt rubber pavement outweigh the potential benefits in this circumstance. After careful consideration, weighing all the factors for the proposed project, the use of asphalt rubber pavement as a mitigation measure to reduce traffic noise levels has been determined to be infeasible. Impacts to some segments of Fanita Parkway, Cuyamaca Street, and Magnolia Avenue would remain significant and unavoidable.

NOI-2: **Noise Barrier Installation.** A permanent noise barrier shall be installed on the western side of Fanita Parkway from Mast Boulevard to the project site, on the eastern side of Cuyamaca Street from Mast Boulevard to El Nopal, and at individual neighborhoods on Magnolia Avenue north of El Nopal in conjunction with proposed improvements to these roadways. Installation of a noise barrier on Magnolia Avenue may interfere with current access from apartment buildings to the existing sidewalk. In these areas, noise barrier installation would include providing a new walkway adjacent to the wall to provide sidewalk access at existing driveways. The noise barriers shall be designed by a qualified acoustical engineer. The applicant shall submit an analysis to the Director of Development Services prior to the start of construction that demonstrates that the proposed noise barriers would reduce traffic noise exposure at residential receptors to 65-A-weighted-decibel community noise equivalent level or below on Fanita Parkway and Cuyamaca Street. The noise level on Magnolia Avenue is estimated to exceed 65 A-weighted decibels without project traffic. The barrier on Magnolia Avenue shall demonstrate a reduction in noise exposure to a 66-A-weighted-decibel day-night average sound level or below. Noise barriers shall be installed concurrently with the following proposed roadway improvements:

- Extension and widening of Fanita Parkway prior to the commencement of building construction activity on site
- Extension and widening of Cuyamaca Street prior to issuance of the first certificate of occupancy
- Extension of Magnolia Avenue prior to construction and certificate of occupancy of the 1,500th equivalent dwelling unit

Table 17. Permanent Vehicle Noise Impact with Noise Barrier Installation Mitigation

Roadway	Segment	Mitigation	Unmitigated Worst-Case Noise Level (dBA Ldn)	Worst Case + Project Noise Level with Mitigation (dBA Ldn)[1]	Significant Impact?
Fanita Parkway	On-Site Portion to Ganley Road – western side of street	Noise Barrier Installation (NOI-2)	66	61	No
	On-Site Portion to Ganley Road – eastern side of street	No feasible mitigation	**66**	**66**	**Yes**
	Ganley Road to Lake Canyon Road – western side of street	Noise Barrier Installation (NOI-2)	70	65	No
	Ganley Road to Lake Canyon Road – eastern side of street	No feasible mitigation	**70**	**70**	**Yes**
	Lake Canyon Road to Mast Boulevard – western side of street	Noise Barrier Installation (NOI-2)	70	65	No
	Lake Canyon Road to Mast Boulevard – eastern side of street	No feasible mitigation	**70**	**70**	**Yes**
Cuyamaca Street (Silver Country Estates)	**El Nopal to Mast Boulevard – western side of street**	No feasible mitigation	**71**	**71**	**Yes**
	El Nopal to Mast Boulevard – east side of street	Noise Barrier Installation (NOI-2)	71	65	No
Magnolia Avenue	Princess Joann Road to Woodglen Vista Drive	Noise Barrier Installation (NOI-2)	68	63	No
	Woodglen Vista Drive to El Nopal – residential neighborhoods	Noise Barrier Installation (NOI-2)	69	64	No
	Woodglen Vista Drive to El Nopal – schools	No feasible mitigation	**69**	**69**	**Yes[2]**

Note: dBA = A-weighted decibel; Ldn = day-night average sound level

Noise levels are calculated at 50 feet from roadway centerline. Noise levels are based upon traffic data provided by LLG (2020). Traffic levels for each roadway are included in Appendix B. Decibel levels are rounded to the nearest whole number. Significant and unavoidable impacts shown in **bold** and shading. See Appendix B for data sheets.

[1] Due to differences in topography between receptors and roadways along the impacted segments, required noise barrier height and design will vary. As previously stated, at a minimum, a noise reduction of 5 dBA would be achieved, and up to 30 dBA is typical. Table 17 assumes a 5 dBA reduction, or the minimum noise reduction required to mitigate impacts for the segment of Cuyamaca Street from El Nopal to Mast Boulevard (6 dBA reduction). Final barrier design may achieve higher reductions.

[2] Due to multiple driveway entrances, noise barriers are not considered feasible for schools on Magnolia Avenue.

On-Site Noise Compatibility

The following mitigation measures would minimize on-site exposure to noise generated from Fanita Parkway and Cuyamaca Street to achieve Santee General Plan compatibility. According to the Santee General Plan, conventional construction with closed windows and air conditioning is normally sufficient to achieve acceptable interior noise levels. As such, Mitigation Measure NOI-3 requires a detailed analysis to demonstrate that interior noise levels would be at or below 45 dBA Ldn, in accordance with federal and state guidance. Because the design of buildings is currently unknown, this level of analysis cannot be completed at this time. However, according to Caltrans, typical building construction with closed windows reduces interior exposure to exterior noise levels by approximately 30 dBA (Caltrans 2013a). Exterior noise levels are not predicted to exceed 67 dBA Ldn; therefore, it is reasonable to assume that an interior noise level of 45 dBA Ldn could be achieved and impacts would be reduced to a less than significant level with implementation of Mitigation Measure NOI-3.

NOI-3: **On-Site Ambient Noise Exposure.** Prior to issuance of a building permit for any first-row Low Density Residential units or Active Adult units that would be located adjacent to Fanita Parkway and first-row multi-family residential units located adjacent to Cuyamaca Street in the Village Center, the applicant shall prepare an acoustical analysis ensuring that interior noise levels due to exterior noise sources would be at or below 45-A-weighted-decibel day-night average sound level. The analysis shall be submitted to the Director of Development Services for approval. One or a combination of the following measures shall be incorporated as necessary to ensure interior noise would be at or below 45-A-weighted-decibel day-night average sound level:

1. Use non-noise-sensitive structures such as garages to shield noise-sensitive areas
2. Orient bedrooms away from noise sources
3. Limit opening and penetrations on portions of buildings impacted by noise
4. Apply noise insulation to walls, roofs, doors, windows, and other penetrations
5. Enclose patios or balconies using a clear material, such as glass
6. Install dual-paned windows

For some units, it may be necessary for the windows to be able to remain closed to ensure that interior noise levels meet the interior standard of 45-A-weighted-decibel day-night average sound level. Consequently, a ventilation or air conditioning system shall be required for these units to provide a habitable interior environment with the windows closed.

Construction Noise Mitigation Measures

Temporary Construction Vehicle Noise

The proposed project would result in potentially significant temporary vehicle noise impacts on Fanita Parkway and Magnolia Avenue that would occur during project construction prior to mitigation. Table 18 provides a summary of the noise levels on the impacted roadways and during which scenarios these impacts would occur.

Table 18. Interim Traffic Noise Impacts (Unmitigated)

Roadway	Segment	Scenario When Impact Would Occur	Maximum Noise Level at 50 Feet (dBA Ldn)
Fanita Parkway	On-Site Portion to Ganley Road	Near Term + Interim Operation + Building Construction (see Table 15)	66
	Ganley Road to Lake Canyon Road	Existing + Building Construction (see Table 13)	67
	Lake Canyon Road to Mast Boulevard	Existing + Building Construction (see Table 13)	68
Magnolia Avenue	Princess Joann Road to Woodglen Vista Drive	Near Term + Interim Operation + Building Construction (see Table 15)	67
	Woodglen Vista Drive to El Nopal	Near Term + Interim Operation + Building Construction (see Table 15)	69

Sources: Hunsaker and Associates 2020; LLG 2020.
Notes: dBA = A-weighted decibel; Ldn = day-night average sound level

Mitigation Measure NOI-4 would limit the speed on construction access routes. However, a limit on the maximum number of truck trips on Fanita Parkway during this phase would also be required. The anticipated increase in noise levels on Fanita Parkway and Magnolia Avenue during interim operation and construction would primarily be a result of the increase in vendor truck trips during building construction. Mitigation Measure NOI-5 would prohibit medium- and heavy-duty truck trips on Magnolia Avenue and require all truck traffic to use Fanita Parkway and Cuyamaca Street only for site access. Vendor truck trips would be allowed but limited on Fanita Parkway. Worker vehicle trips would be allowable on all roadways. Diversion of truck trips from Fanita Parkway and Magnolia Avenue to Cuyamaca Street would not result in an impact to Cuyamaca Street because, as shown in Table 15, use of Cuyamaca Street for 100 percent of all construction traffic would not result in a significant increase in ambient noise levels.

NOI-4: **Construction Access Road Speed Limitations.** As a condition of approval for the proposed project, the applicant shall not seek to increase the posted speed limit on Fanita Parkway south of Ganley Road from the existing posted speed limit of 40 miles per hour to the post-project improvement design speed of 50 miles per hour until the building construction phase of Phase 1 is complete. The speed limit for construction-related traffic shall be stipulated in project construction documents,

including the grading plans and the contract with the construction contractor. Construction-related traffic shall not exceed existing posted speed limits.

NOI-5: **Vendor Trip Route Limitations.** During building construction activities, the construction contractor shall prohibit the use of Magnolia Avenue for medium- and heavy-duty truck trips. During building construction activities, all trucks shall access the site via Fanita Parkway and Cuyamaca Street only. Additionally, medium- and heavy-duty truck trips shall be limited on Fanita Parkway. Truck trips shall be limited to 170 one-way trips (85 two-way trips) on Fanita Parkway during Phase 1 building construction activities and to a maximum of 140 one-way trips (70 two-way trips) on Fanita Parkway during simultaneous building construction activities and project operation. These requirements shall be included in project construction documents, including the grading plan and the contract with the construction contractor. Prior to issuance of a grading permit, temporary signage prohibiting proposed project truck access shall be installed at the Magnolia Avenue and Mast Boulevard intersection.

As shown in Table 19, implementation of Mitigation Measures NOI-4 and NOI-5 would reduce temporary impacts to Fanita Parkway and Magnolia Avenue to a less than significant level during building construction.

Table 19. Mitigated Interim Traffic Noise Impacts

Roadway	Segment	Applicable Threshold (dBA Ldn)	Conditions without Construction (dBA Ldn)	Conditions Exceed Threshold Without Construction?	Mitigated Construction Noise Level (dBA Ldn)	Increase in Noise Level	Significant Impact?
Fanita Parkway	On-Site Portion to Ganley Road (NOI-5)	65	Does Not Exist	No	65	—	No
	Ganley Road to Lake Canyon Road (NOI-4 and NOI-5)	65	59	No	64	+5	No
	Lake Canyon Road to Mast Boulevard (NOI-4 and NOI-5)	65	61	No	65	+4	No
Magnolia Avenue	Princess Joann Road to Woodglen Vista Drive (NOI-5)	65	64	No	65	+1	No
	Woodglen Vista Drive to El Nopal (NOI-5)	65	68	Yes	68	0	No

Notes: dBA = A-weighted decibel; Ldn = day-night average sound level

Noise levels are calculated at 50 feet from roadway centerline. Noise levels are based upon traffic data provided by LLG (2020) and LSA (2020). Traffic levels for each roadway are included in Appendix E. Decibel levels are rounded to the nearest whole number. See Appendix E for data sheets.

Temporary Construction Equipment Noise

Implementation of Mitigation Measures NOI-6 and NOI-7 would minimize temporary construction noise from operation of heavy equipment to a less than significant level.

NOI-6: **Roadway Construction Notification.** In accordance with Section 5.04.090 of the Santee Municipal Code, the construction contractor shall provide written notification to any existing uses within 300 feet of roadway construction activities. The notification shall be provided no later than 10 days before the start of construction activities. The notice shall describe the nature of the construction activities, including the expected duration, and provide a point of contact to resolve noise complaints. If a complaint is received, construction noise shall be monitored by a qualified acoustical consultant at the nearest affected receptor for the duration of a normal day of construction. If the hourly average monitored noise level from construction exceeds a normal conversation level (65 A-weighted decibels) at the nearest sensitive receptor, or the ambient noise level at the receptor if the ambient noise level exceeds 65 A-weighted decibels, construction activities in the immediate area of the affected receptor shall cease. Construction shall not resume until activities can be adjusted or noise reduction measures are implemented to reduce noise at the affected receptor to below normal conversation levels (65 A-weighted decibels) or the ambient noise level at the receptor if the ambient noise level exceeds 65 A-weighted decibels. Measures to reduce noise shall include but not be limited to the following:

- Stationary construction noise sources, such as temporary generators, shall be located as far from nearby noise-sensitive receptors as possible.
- Trucks shall be prohibited from idling along streets serving the construction site where noise-sensitive residences are located.
- Construction equipment shall be outfitted with properly maintained, manufacturer-approved or recommended sound abatement tools on air intakes, combustion exhausts, heat dissipation vents, and the interior surfaces of engine hoods and power train enclosures.
- Construction laydown and vehicle staging areas shall be positioned (to the extent practical) as far from noise-sensitive land uses as feasible.
- Simultaneous operation of construction equipment shall be limited, or construction time within an hour shall be limited, to reduce the average noise level.
- Temporary noise barriers, such as noise blankets, shall be implemented around the perimeter of the construction area to minimize construction noise at affected receptors.

NOI-7: **Nighttime Noise Sound Management Plan.** The construction contractor shall be required to obtain authorization from the Director of Development Services for any construction activities that would occur between 7:00 p.m. and 7:00 a.m. As part of the authorization process, the construction contractor shall prepare a Sound Management Plan to be included in construction documents, including the grading plan and construction contract. The Sound Management Plan shall include all or a combination of the measures listed in Mitigation Measure NOI-6, as deemed necessary by a qualified acoustical engineer, to minimize noise at nearby receptors. In addition to the measures listed in Mitigation Measure NOI-6, construction activities that must take place between 7:00 p.m. and 7:00 a.m. that could generate high noise levels at residences shall be scheduled during times that would have the least impact on sensitive receptor locations, such as the evening hours between 7:00 p.m. and 10:00 p.m. rather than the nighttime hours between 10:00 p.m. and 7:00 a.m.

5.1.1.3 Significance After Mitigation

Future operational noise levels at the Special Use area would be compatible with existing land uses with implementation of the noise attenuation proposed in Mitigation Measure NOI-1. Implementation of Mitigation Measure NOI-2 would reduce vehicle noise impacts to certain receptors to less than significant but would not fully mitigate impacts to any entire road segment due to infeasibility. This impact would be potentially significant and unavoidable. On-site land use compatibility impacts would be reduced to a less than significant level with Mitigation Measure NOI-3. Mitigation Measures NOI-4 and NOI-5 would reduce noise levels from temporary construction traffic to a less than significant level. Mitigation Measures NOI-6 and NOI-7 would implement construction noise management programs to reduce construction equipment noise to a less than significant level.

5.1.1.4 Cumulative Impacts

The cumulative analysis below addresses the potential cumulative impacts that would result from noise generated by proposed land uses, permanent increases in vehicle traffic noise, and temporary construction impacts from other planned projects in the City in combination with the proposed project.

Operational Impacts

Approved or planned projects in the City are considered in the cumulative analysis for the proposed project. This analysis incorporates the cumulative projects assumed in the traffic impact analysis for the proposed project (LLG 2020). These approved or planned projects include multi-family and single-family residential development, commercial uses, light industrial use, and a church. Similar to the proposed project, residential land uses would generate nuisance noise that would not be considered a significant impact. However, some of the cumulative development projects would potentially include HVAC systems that would have the potential to result in significant impacts to NSLUs up to 275 feet from the source, as well as nuisance noise from parking lots and increased human activity. Industrial

uses may result in localized impacts from equipment operation. The nearest cumulative projects to the proposed development area are proposed at the existing northern terminus of the Summit Avenue public right-of-way, approximately 1,200 feet from the nearest on-site development area. Therefore, noise from operation of the proposed project is unlikely to combine with noise from operation of cumulative projects. A cumulative impact would not occur related to operational noise.

Permanent Increase in Ambient Noise Levels

A cumulative permanent ambient noise impact would occur if development associated with cumulative regional land use projects would result in an increase in ambient noise that would exceed the City's noise standards. Buildout of the proposed project, along with the cumulative projects and buildout of the Santee General Plan, would result in increases in traffic that would cumulatively increase traffic noise. An individual project would result in a cumulatively considerable contribution to a significant cumulative impact if the increase in noise attributable to the proposed project would cause a roadway to exceed the applicable noise standards or would be 3 dBA or higher on a roadway that would exceed the threshold without the proposed project. The potential noise impacts that would result from cumulative projects and regional growth are included in the Year 2035 scenario.

Table 20 compares Year 2035 traffic noise levels to existing conditions. The proposed project's contribution to cumulative noise impacts is based on the increase in traffic noise attributable to the proposed project under the Year 2035 scenario. Implementation of the proposed project would result in a cumulatively considerable noise level increase on three impacted roadways of Fanita Parkway. Specifically, the proposed project's contribution to noise level at a new roadway is enough to push the noise level over the applicable threshold compared to conditions without the proposed project. Therefore, implementation of the proposed project would result in cumulatively considerable contribution to a significant cumulative roadway noise impact.

Similar to the proposed project, implementation of Mitigation Measure NOI-2 would reduce noise levels to receptors on the western side of Fanita Parkway to below the normally acceptable noise level for sensitive receptors (65 dBA Ldn). Therefore, with implementation of Mitigation Measure NOI-2, the proposed project's contribution to a significant cumulative traffic noise impact would be reduced but not to below a cumulatively considerable level. This impact would be cumulatively considerable and unavoidable.

Table 20. Cumulative Traffic Noise Impacts

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (No Project) (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 (dBA Ldn)	Year 2035 + Project (dBA Ldn)	Increase in Noise Level (Existing to Year 2035 + Project)	Significant Cumulative Impact?	Increase in Noise Level Attributable to Project (Year 2035 to Year 2035 + Project)	Cumulatively Considerable Contribution?
Mast Boulevard	SR-52 to West Hills Parkway	70	71	Yes	72	72	+1	No	0	No
	West Hills Parkway to Medina Drive	65	70	Yes	71	72	+2	No	+1	No
	Pebble Beach Drive to Fanita Parkway	65	70	Yes	71	72	+2	No	+1	No
Mission Gorge Road	SR-125 to Fanita Drive	70	77	Yes	78	78	+1	No	0	No
	Fanita Drive to Carlton Hills Boulevard	70	77	Yes	77	78	+1	No	+1	No
Fanita Parkway	**On-Site Portion to Ganley Road**	**65**	**Does Not Exist**	**No**	**64**	**66**	**Does Not Exist**	**Yes**	**+2**	**Yes**
	Ganley Road to Lake Canyon Road	**65**	**59**	**No**	**65**	**70**	**+11**	**Yes**	**+5**	**Yes**
	Lake Canyon Road to Mast Boulevard	**65**	**61**	**No**	**66**	**70**	**+9**	**Yes**	**+4**	**Yes**
	Mast Boulevard to Carlton Oaks Drive	65	58	No	61	62	+4	No	+1	No
Carlton Hills Boulevard	Carlton Oaks Drive to Mission Gorge Road	65	69	Yes	70	70	+1	No	0	No

Table 20. Cumulative Traffic Noise Impacts

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (No Project) (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 (dBA Ldn)	Year 2035 + Project (dBA Ldn)	Increase in Noise Level (Existing to Year 2035 + Project)	Significant Cumulative Impact?	Increase in Noise Level Attributable to Project (Year 2035 to Year 2035 + Project)	Cumulatively Considerable Contribution?
Cuyamaca Street	On-Site Portion to Magnolia Avenue	65	Does Not Exist	No	65	67	Does Not Exist	No[1]	+2	No
	Magnolia Avenue to Princess Joann Road	65	Does Not Exist	No	64	65	Does Not Exist	No	+1	No
	Princess Joann Road to Chaparral Drive	65	Does Not Exist	No	65	66	Does Not Exist	No[1]	+1	No
	Chaparral Drive to Woodglen Vista Drive	65	54	No	68	69	+15	No[1]	+1	No
	Woodglen Vista Drive to El Nopal	65	62	No	70	70	+18	No[1]	0	No
	El Nopal to Mast Boulevard	**65**	**65**	**No**	71	**71**	**+6**	**Yes**	**0**	**No[2]**
	Mast Boulevard to River Park Drive	65	68	Yes	70	70	+2	No	0	No
	River Park Drive to Town Center Parkway	65	70	Yes	71	71	+1	No	0	No
	Town Center Parkway to Mission Gorge Road	70	72	Yes	73	74	+2	No	+1	No

Table 20. Cumulative Traffic Noise Impacts

Roadway	Segment	Applicable Threshold (dBA Ldn)	Existing (No Project) (dBA Ldn)	Exceeds Threshold Without Project?	Year 2035 (dBA Ldn)	Year 2035 + Project (dBA Ldn)	Increase in Noise Level (Existing to Year 2035 + Project)	Significant Cumulative Impact?	Increase in Noise Level Attributable to Project (Year 2035 to Year 2035 + Project)	Cumulatively Considerable Contribution?
Magnolia Avenue	Cuyamaca Street to Princess Joann Road	65	Does Not Exist	No	61	63	Does Not Exist	No	+2	No
	Princess Joann Road to Woodglen Vista Drive	**65**	**60**	**No**	66	**68**	**+8**	**Yes**	**+2**	**No[2]**
	Woodglen Vista Drive to El Nopal	**65**	**66**	**Yes**	68	**69**	**+3**	**Yes**	**+1**	**No[2]**
	El Nopal to Mast Boulevard	**65**	**68**	**Yes**	71	**71**	**+3**	**Yes**	**0**	**No[2]**
SR-52	Santo Road to Mast Boulevard	70	76	Yes	77	77	+1	No	0	No

Note: dBA = A-weighted decibel; Ldn = day-night average sound level; SR- = State Route

Unless otherwise noted, a cumulative impact would occur if vehicle traffic noise would result in an ambient noise level that exceeds the applicable threshold established in the Santee General Plan. If the normally acceptable standard would be exceeded in the existing condition, an increase of more than 3 dBA would be considered a cumulative impact. A cumulatively considerable contribution to a cumulative impact would be a 3 dBA or more increase attributable to the project.

The existing condition represents conditions in 2018. Noise levels are calculated at 50 feet from roadway centerline except SR-52 (100 feet from centerline due to roadway width). Noise levels are based upon traffic data provided by LLG (2020). Traffic levels for each roadway are included in the Appendix B. Decibel levels are rounded to the nearest whole number. Significant impacts shown in **bold** and shading**.** See Appendix B for data sheets.

[1] Distance or existing noise wall would reduce noise to an acceptable level.

[2] Cumulative projects would result in a significant increase in noise level on this segment compared to existing conditions. However, cumulative growth would cause the roadway to exceed the threshold without project implementation. The proposed project's contribution to the increase is less than 3 dBA and is, therefore, not cumulatively considerable.

Construction

Construction noise impacts are localized in nature because they are limited to the construction site where construction equipment is operating. As discussed previously, noise levels from on-site construction would attenuate to 75 dBA approximately 375 feet from the active construction area, and noise from off-site construction would attenuate to 75 dBA approximately 160 feet from the construction area. Due to the length of the construction period for the proposed project, it is likely that construction of multiple cumulative projects would occur simultaneously with the proposed project.

The nearest cumulative projects to the proposed area for on-site development are proposed at the existing northern terminus of the Summit Avenue public right-of-way, approximately 1,200 feet from the nearest on-site development area. Therefore, noise from construction of these projects is unlikely to combine with noise from construction of the proposed land uses.

In addition, a cumulative project (Santee View Estates) would potentially be within 160 feet of the proposed Cuyamaca Street extension. Similar to the proposed project, construction of this cumulative project would occur over a large area so that exposure of individual receptors to construction noise would vary depending on the location of construction activities during a certain day or phase. Construction of either project would only occur at the property line, within 160 feet of the other project, for a limited time. Due to the linear nature of the construction of Cuyamaca Street extension, it is unlikely that the two project's construction noise would combine simultaneously such that impacts from each project would affect the same receptors.

Additionally, cumulative projects and the proposed project would be subject to the construction limitations in the City's Noise Ordinance, which prohibits noise generated by construction activities between the hours of 7:00 p.m. and 7:00 a.m. and on Sundays and holidays without approval from the Director of Development Services. Similar to the proposed project, cumulative projects would be required to implement noise control best management practices in order to comply with the ordinance, such as those listed in Mitigation Measure NOI-7. Distance between projects and compliance with the City's Noise Ordinance would reduce impacts to a less than significant cumulative impact.

5.1.2 Threshold 2: Excessive Groundborne Vibration or Noise

5.1.2.1 Impact Analysis

The main concerns associated with groundborne vibration from this type of project are annoyance and damage; however, vibration-sensitive instruments and operations can be disrupted at much lower levels than would typically affect other uses. In extreme cases, the vibration can cause damage to buildings, particularly those that are old or otherwise fragile.

Groundborne vibration occurring as part of the proposed project would result from construction equipment and blasting. Following construction, the proposed residential and commercial uses would not require heavy equipment anticipated to generate groundborne vibration. However, the use of tractors is anticipated to be required for the proposed Farm and is included in the analysis of heavy equipment below. The City uses the FTA groundborne vibration impact criteria, provided in Table 5, to determine whether vibration impacts would be significant.

Farm Equipment

Farm use would occur regularly in the limited Farm area; therefore, farm equipment use is subject to the frequent event FTA criteria. The project site is surrounded by residences where people normally sleep (Land Use Category 2). Therefore, operation of farm equipment would result in a significant impact if it would generate vibration levels greater than 72 VdB at the nearest existing residence.

FTA reference vibration levels are not available for the small tractor anticipated for Farm use. The typical vibration level for a small bulldozer provided in Table 21 is assumed to be representative of small tractor use. As shown in Table 21, small bulldozer use would not exceed 72 VdB at 25 feet from the source. There are no existing receptors within 25 feet of the proposed Farm area. Therefore, operational impacts from farm equipment would be less than significant.

Construction Equipment

Typical vibration levels for construction equipment required for the proposed project are provided in Table 21. Vibration levels for operation of a rock crusher are represented by drill operation because the FTA does not provide a specific reference noise level for rock crushing equipment. Construction vibration is subject to the infrequent event criteria because operation of vibration-generating equipment is anticipated to be intermittent throughout the day in the vicinity of an individual receptor. In accordance with the City's Noise Ordinance, construction would generally occur during the daytime and would not disturb sleep. However, residences may be occupied during daytime construction and construction may result in a nuisance to daily activities. Additionally, nighttime construction may be required for roadway improvements. Therefore, an impact would occur if construction would generate vibration levels greater than 80 VdB at the nearest existing residence.

As shown in Table 21, vibration levels from all construction equipment would be reduced to 80 VdB or below beyond 75 feet from construction. The residences closest to the boundary of a village development area are approximately 850 feet east of the proposed Vineyard Village boundary near Oak Creek Drive. Therefore, due to distance to the nearest sensitive receptors, construction for on-site land development would not result in potentially significant vibration. However, some residences are located within 75 feet of the construction area for the extensions and off-site improvements to Fanita Parkway, Cuyamaca Street, and Magnolia Avenue, and dead-end roadway improvements at the southern boundary of the site. As shown in Table 21, at 45 feet from

construction, only operation of equipment equal to a vibratory roller would have the potential to exceed the significance criteria of 80 VdB at surrounding land uses during typical construction. Vibration levels would have the potential to exceed the applicable FTA criteria; therefore, construction activities that would require the use of a vibratory roller would have the potential to exceed the vibration impact criteria related to human response and result in a significant impact.

In addition to human annoyance, an impact related to architectural and structural damage to buildings would occur if existing buildings were affected by a PPV in excess of 0.2 in/sec. As shown in Table 21, vibration levels from vibratory construction equipment would be reduced to below 0.2 in/sec within 45 feet of the construction area. There are no existing structures within 45 feet of construction areas requiring use of vibratory equipment. Therefore, although construction would have the potential to result in significant nuisance impacts, as described previously, project construction equipment would not result in a significant impact related to structural damage.

Blasting

Blasting during construction would be infrequent and subject to the event criteria of 80 VdB at the nearest existing residence. As shown in Table 21, vibration levels from blasting would be reduced to 80 VdB or below beyond 235 feet from the blast area. No existing receptors are within 235 feet of potential blast areas. Due to distance to the nearest sensitive receptors, blasting would not exceed the applicable FTA criteria and would not result in a potentially significant vibration impact.

Table 21. Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate PPV/VdB at 25 Feet	Approximate PPV/VdB at 45 Feet[1]	Approximate PPV/VdB at 75 Feet[1]	Approximate PPV/VdB at 235 Feet[1]
Blasting for construction projects	0.400[2]/**109**	0.166/**101**	0.077/**95**	0.014/**80**
Large bulldozer	0.089/**87**	0.037/79	0.017/73	0.003/58
Caisson drilling	0.089/**87**	0.037/79	0.017/73	0.003/58
Loaded trucks	0.076/**86**	0.031/78	0.015/72	0.003/57
Small bulldozer	0.003/58	0.001/50	0.001/44	0.0001/29
Vibratory roller	0.21/**94**	0.087/**86**	0.04/**80**	0.007/65

Source: FTA 2018.

Notes: PPV = peak particle velocity; VdB = vibration decibel

For impacts related to human annoyance, the threshold for construction equipment is 80 VdB at the nearest existing residence because use would be temporary and intermittent. Due to ongoing use, the threshold for operation of farm equipment is 72 VdB at the nearest existing residence. Vibration levels up to or that exceed the applicable threshold are in **bold.**

For impacts related to building damage, the threshold is 0.2 in/sec. Vibration levels up to or that exceed the threshold are in *italics.*

[1] Based on attenuation formulas provided by the FTA (2018)

[2] Source: FRA 2017.

Regarding structural damage, the details for individual project blasting operations cannot be known at this time, but would comply with applicable specifications prepared by the U.S. Bureau of Mines or Office of Surface Mining and Reclamation Enforcement. The estimated vibration from hard rock blasting for a major rail tunnel construction project has been used as a reference level for this analysis (FRA 2017). As shown in Table 21, vibration levels from blasting would be reduced to below 0.2 in/sec within 45 feet of the construction area. There are no existing structures within 45 feet of construction areas requiring blasting. Therefore, blasting would not result in a potentially significant impact related to structural damage.

5.1.2.2 Mitigation Measures

Implementation of Mitigation Measures NOI-8 and NOI-9, in addition to Mitigation Measures NOI-6 and NOI-7, would minimize temporary groundborne vibration impacts from construction activities at the nearby receptors.

NOI-8: **Vibration Best Management Practices.** Prior to the commencement of construction activities that would involve use of a vibratory roller (or equivalent equipment) within 75 feet of a residence, the applicant shall retain a qualified acoustician to identify best management practices to be implemented by the construction contractor to reduce vibration levels to below 80 vibration decibels at the nearest residence. The best management practices shall be included in project construction documents, including the grading plan and contract with the construction contractor. Practices may include but are not limited to the following:

- Use only properly maintained equipment with vibratory isolators
- Operate equipment as far from sensitive receptors as possible
- Use rubber-tired vehicles as opposed to tracked vehicles

NOI-9: **Construction Vibration Notification.** The construction contractor shall provide written notification to receptors within 75 feet of construction activities at least 3 weeks prior to the start of any construction activities that would require the use of a vibratory roller or equivalent equipment. The notice would inform them of the estimated start date and duration of daytime vibration-generating construction activities. This notification shall include information warning about the potential for impacts related to vibration-sensitive equipment. The City of Santee shall provide a phone number for the affected receptors to call if they have vibration-sensitive equipment on their property. If a complaint is received, a vibration monitoring program will be implemented within 2 working days to reduce vibration to below 80 vibration decibels at the nearest receptor. The vibration monitoring plan shall be prepared and administered by a qualified vibration consultant and submitted to the Director of Development Services for approval. The vibration

monitoring plan shall include the location of the vibration monitor, the vibration instrumentation used, a data acquisition and retention plan, and an exceedance notification and reporting procedures. The program shall include but not be limited to the following:

- Monitor vibration during construction activities with a seismograph or other instrument capable of measuring and recording displacement and frequency, particle velocity, or acceleration at the closest residence to the construction area
- Use equipment that includes dampeners or other modifications to reduce vibration
- Use alternative non-vibratory equipment where available
- Limit simultaneous operation of equipment

5.1.2.3 Significance After Mitigation

Implementation of Mitigation Measures NOI-6 through NOI-9 would reduce nuisance impacts from groundborne vibration impacts to a less than significant level. In addition, vibration impacts would be temporary and would cease following construction. Therefore, impacts related to groundborne vibration during construction would be less than significant after mitigation.

5.1.2.4 Cumulative Impacts

Similar to noise effects, vibration is a localized phenomenon and is progressively reduced as the distance from the source increases. Therefore, the area of projects that would be considered for the vibration cumulative analysis would be only those projects close to the project site. As discussed previously, vibration levels from typical construction would attenuate to below 80 VdB approximately 75 feet from the active construction area, and blasting from vibration would attenuate to 80 VdB approximately 235 feet from the construction area. Due to the length of the construction period for the proposed project, it is likely that construction of multiple cumulative projects would occur simultaneously with the proposed project.

The nearest cumulative projects are proposed at the existing northern terminus of the Summit Avenue public right-of-way, approximately 1,200 feet from the nearest on-site development area. Therefore, vibration from on-site construction is unlikely to combine with vibration from construction of the proposed project. A cumulative project would potentially be located within 235 feet of the proposed Cuyamaca Street extension: the Santee View Estates project proposed north of the existing terminus of Cuyamaca Street. Similar to the proposed project, construction of this cumulative project would occur over a large area so that exposure of individual receptors to construction vibration would vary depending on the location of construction activities during a certain day or phase. Construction would only occur within 235 feet of the proposed Cuyamaca Street extension for a limited time. Due to the linear nature of the construction of Cuyamaca Street, it is unlikely that construction noise from the two projects would combine simultaneously such that impacts from both projects would affect the same receptor. Distance between projects

would reduce impacts to a less than significant cumulative impact. Once constructed, the proposed land use would not generate a significant source of vibration during normal operation. Therefore, a significant cumulative vibration impact would not occur.

5.1.3 Threshold 3: Aircraft Noise

5.1.3.1 Impact Analysis

MCAS Miramar is located adjacent to the west/northwestern boundary of the project site. The runways are located approximately 6 miles west of the project site. Additionally, Gillespie Field is located approximately 1.75 miles south of the project site. The project site is currently subject to periodic, audible overflights, particularly from MCAS Miramar. However, the proposed project site is not within the 60 dBA CNEL noise contour of either airport (SDCRAA 2010, 2011). Additionally, the proposed project does not include any components that would increase air traffic or require changes to existing air traffic patterns. As such, overflights are anticipated to continue to be audible at the project site; however, the proposed project is not anticipated to increase exposure to excessive noise levels from airport operation. Therefore, impacts would be less than significant.

5.1.3.2 Mitigation Measures

Impacts related to aircraft noise would be less than significant; therefore, no mitigation measures are required.

5.1.3.3 Significance After Mitigation

Impacts related to aircraft noise would be less than significant without mitigation.

5.1.3.4 Cumulative Impacts

No additional aviation uses are planned to be introduced in the immediate vicinity of the project site. In addition, the proposed project does not propose any new or air traffic patterns. No NSLUs would be exposed to excessive noise levels from aviation as a result of the proposed project. Impacts related to nuisance noise within noise contour areas are site specific and are not cumulative in nature. Therefore, a cumulative impact related to aircraft noise would not occur.

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Section 6 References

ABC Acoustics, Inc. 2018. Acoustical Analysis Report, 101 Coast Mixed Use, Solana Beach, CA. April 13.

Caltrans (California Department of Transportation). 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.

Caltrans. 2013b. Transportation and Construction Vibration Guidance Manual. September.

Caltrans. 2017. "Section 1102.3: Noise Barrier Height and Position." In Highway Design Manual. November 20.

Center for Hearing and Communication. 2020. "Common Environmental Noise Levels." Accessed May 2020. https://chchearing.org/noise/common-environmental-noise-levels/.

City of Lake Forest. 2010. City of Lake Forest Sports Park and Recreation Center Draft Environmental Impact Report (SCH No. 2009061020). Prepared by ICF International. December.

City of Rancho Palos Verdes. 2013. Point View Master Use Plan Final Initial Study/Mitigated Negative Declaration. Prepared by PCR Service Corporation. January.

City of Santee. 2003. Santee General Plan. Adopted August 27.

City of Santee. 2020. Santee Municipal Code.

Claes, Raf, Pieter G.G. Muyshondtc Joris J.J. Dirckx, and Peter Aertsad. 2018. "Do High Sound Pressure Levels of Crowing in Roosters Necessitate Passive Mechanisms for Protection Against Self-Vocalization?" Zoology 126 (February 2018): 65–70.

Consumer Mentor. 2019. "Best Gate Opener – The Complete Guide with Reviews Our Top 5 Picks." Last updated November 16, 2019. Accessed May 2020. https://www.consumermentor.com/best-gate-opener/.

County of San Diego. 2011. San Diego County General Plan Update Program Environmental Impact Report (SCH No. 2002111067). August.

County of San Diego. 2014. Applicant's Guide for a Solar Energy System. November.

County of San Diego. 2016. "Section 2.5: Noise." In Jacumba Solar Energy Project Environmental Impact Report (SCH No. 2014091034). April.

County of San Diego. 2020. "Operations Counts." Accessed May 2020. https://www.sandiegocounty.gov/content/sdc/dpw/airports/airportsmain/operations.html.

Daly, Chris. 2017. "Siren Limitation Training." Fire Apparatus and Emergency Equipment, Issue 4, Volume 22. April 4.

Depczynski, J., J.R.C. Franklin, K. Challinor, W. Williams, and L.J. Fragar. 2005. Farm Noise Emissions During Common Agricultural Activities. Journal of Agricultural Safety and Health 11(3): 325−334.

Farmer D Consulting. 2018. Meeting with City of Santee; HomeFed Fanita Rancho, LLC; and Harris & Associates at City of Santee offices, September 12.

Farmer D Consulting. 2020. Fanita Ranch Farm Vision. March.

FHWA (Federal Highway Administration). 2006. Construction Noise Handbook. Accessed May 2020. https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook00.cfm.

FHWA. 2008. Federal Highway Administration's Roadway Construction Noise Model (RCNM). Version 1.1. December 8.

FRA (Federal Railroad Administration). 2017. Hudson Tunnel Project Draft Environmental Impact Statement and Draft Section 4(f) Evaluation. June.

FTA (Federal Transit Administration). 2018. Transit Noise & Vibration Impact Assessment. Office of Planning and Environment. September.

Gordon Bricken and Associates. 2012. Acoustical Analysis Bundy Canyon Site, City of Wildomar. January 17.

HUD (U.S. Department of Housing and Urban Development). 2009. The Noise Guidebook. March.

Hunsaker and Associates. 2019. Environmental Impact Report Sound Study Dimensions – Fanita Ranch. February 25.

Hunsaker and Associates. 2020. Fanita Ranch Hard Rock Areas. March 14.

Illingworth & Rodkin, Inc. 2016. Del Monte Park Phase II, San Jose, CA – Noise Assessment. February 16.

LLG (Linscott Law and Greenspan, Engineers). 2020. Transportation Impact Analysis, Fanita Ranch, Santee, California. March 25.

LSA (LSA Associates). 2020. Air Quality Analysis for the Fanita Ranch Specific Plan. May.

MCAS Miramar (Miramar Marine Corps Air Station). 2018. "FY18006 – MCAS Miramar Breaks Ground on F-35 Hangar." Office of Communication. March 15. Accessed May 2020. https://www.miramar.marines.mil/News/Press-Release-View/Article/1467255/fy18006-mcas-miramar-breaks-ground-on-f-35-hangar/.

Mael, Courtney. 2020. "Fanita Ranch (204020)." Email from Courtney Mael (Engineering Manager, Development and Construction, Padre Dam Municipal Water District) to Scott Johnson (Principal City Engineer, City of Santee). March 10.

Nagel, Jamie Nichole. 2019. "Inverters." Email from Jamie Nichole Nagel (Interim Manager, Project Development, ZGlobal) to James E. Whalen (President, J. Whalen Associates, Inc). July 24.

O'Connor, Jeff. 2019. "2nd Revision for Vehicle Trips." Email from Jeff O'Connor (Director of Operations, HomeFed Corporation) to Kelsey Hawkins (Environmental Analyst, Harris & Associates). December 29.

Putman, B.J., and S.N. Amirkhanian. 2005. "Rubberized Asphalt Mixtures: A Novel Approach to Pavement Noise Reduction." WIT Transactions on the Built Environment (77), Urban Transport, 541–549.

RECON Environmental, Inc. 2017. Noise Analysis for the Colony Park Project San Diego, California. May 3.

SDCRAA (San Diego County Regional Airport Authority). 2010. Gillespie Field Airport Land Use Compatibility Plan. Adopted January, amended December 20.

SDCRAA. 2011. MCAS Miramar Airport Land Use Compatibility Plan. Adopted October 2008, Amended December 2010 and November 2011.

Shasta County. 2011. Moody Flats Quarry Project Noise Analysis. Department of Resource Management Prepared by Benchmark Resources. February.

UCPRC (University of California Pavement Research Center). 2012. Investigation of Noise and Ride Quality Trends for Asphaltic Pavement Surface Types: Five-Year Results. Research Report: UCPRC-RR-2012-04. Prepared for the California Department of Transportation. August.

Urban Crossroads. 2017. Smith Ranch Self-Storage, Noise Impact Analysis, City of Wildomar. August 9, 2017.

USEPA (U.S. Environmental Protection Agency). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March.

USEPA. 2019. Laws and Regulations – Summary of the Noise Control Act. Last updated November 6. Accessed May 2020. https://www.epa.gov/laws-regulations/summary-noise-control-act.

WSDOT (Washington State Department of Transportation). 2019. "Chapter 7.0: Construction Noise Impact Assessment." In Assessment Biological Assessment Preparation for Transportation Projects – Advanced Training Manual. Chapter updated August.

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Appendix A. Site Utilization Plan Statistical Summary

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Table 3.2: Site Utilization Plan Statistical Summary

Planning Area[2]	Area (Acres)[1]	Target Dwelling Units[2]	Target Density (Du/Ac)	Commercial Square Feet[2]
RESIDENTIAL				
LOW DENSITY RESIDENTIAL (LDR)				
Orchard Village				
R-2	12.3	79	6	N/A
R-3	10.7	53	5	
R-4	11.3	56	5	
R-5	18.5	80	4	
R-6	9.1	53	6	
R-7	9.9	50	5	
R-8	16.8	83	5	
LDR Subtotal - Orchard Village	*88.6*	*454*		
Vineyard Village				
R-9	9.5	48	5	N/A
R-10	17.7	59	3	
R-11	6.0	33	6	
R-12	10.0	52	5	
R-13	12.8	43	3	
R-14	8.7	41	5	
R-15	6.4	26	4	
R-16	6.4	30	5	
R-17	15.8	52	3	
R-18	12.0	67	6	
R-19	16.2	67	4	
R-20	3.8	28	7	
R-21	6.8	70	10	
R-22	3.1	28	9	
R-23	2.4	20	8	
R-24	7.0	57	8	
R-25a	3.5	13	4	
R-25b	4.2	15	4	
LDR Subtotal - Vineyard Village	*152.2*	*749*		
LOW DENSITY RES. TOTAL	**240.8**	**1,203**		

Table 3.2: Site Utilization Plan Statistical Summary (continued)

Planning Area[2]	Area (Acres)[1]	Target Dwelling Units[2]	Target Density (Du/Ac)	Commercial Square Feet[2]
RESIDENTIAL				
MEDIUM DENSITY RESIDENTIAL (MDR)				
Orchard Village				
M-1	6.1	102	17	N/A
M-2	8.9	111	13	
M-3	6.5	79	12	
M-9	5.6	76	14	
MDR Subtotal - Orchard Village	*27.2*	*368*		
Vineyard Village				
M-4	8.5	106	13	N/A
M-5	9.4	117	13	
M-6	6.8	85	13	
M-7	10.3	129	13	
M-8	4.9	61	13	
MDR Subtotal - Vineyard Village	*39.8*	*498*		
MED. DENSITY RES. TOTAL	**67.0**	**866**		
ACTIVE ADULT (AA)				
Fanita Commons				
AC-1	31.0	445	14	N/A
ACTIVE ADULT TOTAL	**31.0**	**445**		

Table 3.2: Site Utilization Plan Statistical Summary (continued)

Planning Area[2]	Area (Acres)[1]	Target Dwelling Units[2]	Target Density (Du/Ac)	Commercial Square Feet[2]
VILLAGE CENTER				
VILLAGE CENTER (VC)				
Fanita Commons				
VC-1	2.6	323	Up to 50	40,000
VC-2[3]	1.5			
VC-3	1.4			
VC-4	2.4			
VC-5	1.5			
VC-6	1.5			
VC-7	1.5			
VC-8	1.7			
VC-9	2.7			
VC-10	1.7			
VC-11	1.5			
VC-12	1.5			
VC-13	1.6			
VC-14	2.8			
VC-15	1.9			
VC Subtotal - Fanita Commons	*27.7*	*323*		*40,000*
Orchard Village				
VC-16a	0.7	33	Up to 50	10,000
VC-16b	0.7			
VC-17a	0.6			
VC-17b	0.6			
VC Subtotal - Orchard Village	*2.6*	*33*		*10,000*
Vineyard Village				
VC-18	6.1	79	Up to 50	10,000
VC Subtotal - Vineyard Village	6.1	79		*10,000*
VILLAGE CENTER TOTAL	**36.5**	**435**		**60,000**
RESIDENTIAL & VILLAGE CENTER TOTAL	**375.3**	**2,949**		**60,000**

Table 3.2: Site Utilization Plan Statistical Summary (continued)

Planning Area[2]	Area (Acres)[1]	Target Dwelling Units[2]	Commercial Square Feet[2]
OTHER USES			
PARKS			
COMMUNITY PARK (CP)			
CP-1 (Active)	19.7	N/A	N/A
CP-1 (Passive)	11.5		
CP Total	**31.2**		
NEIGHBORHOOD PARK (NP)			
NP-1	4.6	N/A	N/A
NP-2	3.3		
NP-3	3.2		
NP-4	2.6		
NP-5	5.3		
NP-6	3.4		
NP-7	3.8		
NP-8	4.2		
NP Total	**30.4**		
MINI-PARK (MP)			
All MPs[4]	16.4	N/A	N/A
MP Total	**16.4**		
PARK TOTAL	**78.0**		
SCHOOL (S) OVERLAY[6]			
S-1 (School)	15.0	0	N/A
SCHOOL OVERLAY TOTAL	**15.0**		
SPECIAL USE (SU)			
SU-1	31.9	0	N/A
SPECIAL USE TOTAL	**31.9**		
OPEN SPACE (OS)			
OS (Open Space)	210.7	N/A	N/A
OS-B (Open Space - Basin)	37.8		
OS-PS (Open Space - Pump Station)	2.5		
OS-WT (Open Space - Water Tank)	5.0		
OPEN SPACE TOTAL	**256.0**		

Table 3.2: Site Utilization Plan Statistical Summary (continued)

Planning Area[2]	Area (Acres)[1]	Target Dwelling Units[2]	Commercial Square Feet[2]
OTHER USES			
AGRICULTURE (A) OVERLAY[7]			
Fanita Commons			
A-1	3.4	0	20,000
A-2	5.7		
A-3	3.8		
A-4	8.2		
A-5	6.3		
A Overlay Subtotal - Fanita Commons	*27.3*		*20,000*
Vineyard Village			
A-6	1.8	0	0
A-7	5.3		
A-8	2.0		
A-9	1.8		
A Overlay Subtotal - Vineyard Village	*10.9*		*0*
AGRICULTURE OVERLAY TOTAL	**38.2**		**20,000**
HABITAT PRESERVE (HP)			
HP	1,650.4	N/A	N/A
HABITAT PRESERVE TOTAL	**1,650.4**		
ROADWAYS			
Major Roadways	56.4	N/A	N/A
Neighborhood Roadways	136.8		
ROADWAY TOTAL[5]	**193.3**		
OTHER USES TOTAL	**2,262.8**		**20,000**
SPECIFIC PLAN TOTAL	**2,638.1**	**2,949[6]**	**80,000**

Notes:

1. Acreage reflects the rounding of numbers to the 1/10th of an acre and may vary slightly from the calculated total.
2. The planning areas in the Site Utilization Plan correspond to the neighborhoods and lots in the Tentative Map for Fanita Ranch. The transfer of residential dwelling units and commercial square feet within the Specific Plan Area is permitted, subject to the provisions set forth in *Section 10.7.1: Administrative Amendments (Minor Modifications)*.
3. VC-2 reserves a 1.5-acre fire station site.
4. There are 31 mini-parks on approximately 16.4 acres distributed throughout the Specific Plan Area, including the Village Green located in Fanita Commons.
5. Does not include approximately 28.6 acres of off-site roadway improvements.
6. The underlying land use for the S-1 planning area is MDR. If the reserved school site is not acquired for school use within 2 years of approval of the final map containing the S-1 planning area, the MDR land use may be implemented on the S-1 planning area and the maximum total number of units in the Specific Plan Area shall be 3,008 units - see *Section 3.2.5: School (S) Overlay* and *Section 10.7.1: Administrative Amendments (Minor Modifications)*.
7. The underlying land use for the A overlay planning areas is OS. If an A overlay planning area is not developed with agricultural related uses described in *Section 3.2.8: Agriculture (A) Overlay*, the OS land use shall be implemented on the A overlay planning areas.

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Appendix B. FHWA Noise Prediction Model Results – Preferred Land Use Plan With School

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 1501144001
Project Name: Fanita Ranch - Proposed Project (with school)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, January 2019
Community Noise Descriptor: L_{dn}: X CNEL: ____

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway	Distance to Contour					Traffic Volumes									Ref. Energy Leve			Dist	Ld				Le				Ln				DISTANCE TO CONTOUR (2)			
Roadway, Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Medium Trucks	Heavy Trucks	Ldn at 50 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn	Calc Dist	Day	Eve	Night	MTd	HTd	MTe	HTe	MTn	HTn	A	MT	HT	Adj	A	MT	HT	Total	A	MT	HT	Total	A	MT	HT	Total	70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-52 to West Hills Parkway, existing	4	25	26,440	40	0.5	3.0%	2.0%	**71**	62	134	288	620	50	20,544	3,358	2,538	693	471	40	15	60	43	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.2	66.6	56.4	57.0	67.4	55.6	54.6	57.9	61.0	62	134	288	620
SR-52 to West Hills Parkway, existing + project	4	25	33,010	40	0.5	3.0%	2.0%	**72**	72	155	334	719	50	25,649	4,192	3,169	866	588	50	19	74	53	67.4	76.3	81.2	1.4	70.5	65.0	68.1	73.2	67.6	57.4	58.0	68.4	56.5	55.5	58.9	62.0	72	155	334	719
SR-52 to West Hills Parkway, Near Term	4	25	30,730	40	0.5	3.0%	2.0%	**72**	69	148	318	685	50	23,877	3,903	2,950	806	548	47	17	69	50	67.4	76.3	81.2	1.4	70.2	64.7	67.8	72.9	67.3	57.1	57.7	68.1	56.2	55.2	58.6	61.7	69	148	318	685
SR-52 to West Hills Parkway, Near Term + project	4	25	37,300	40	0.5	3.0%	2.0%	**73**	78	168	362	780	50	28,982	4,737	3,581	978	665	57	21	84	60	67.4	76.3	81.2	1.4	71.0	65.5	68.7	73.7	68.1	57.9	58.5	68.9	57.1	56.1	59.4	62.5	78	168	362	780
SR-52 to West Hills Parkway, Year 2035	4	25	30,500	40	0.5	3.0%	2.0%	**72**	68	147	316	682	50	23,699	3,874	2,928	800	544	46	17	69	49	67.4	76.3	81.2	1.4	70.1	64.6	67.8	72.8	67.3	57.0	57.6	68.1	56.2	55.2	58.6	61.7	68	147	316	682
SR-52 to West Hills Parkway, Year 2035 + project	4	25	33,930	40	0.5	3.0%	2.0%	**72**	73	158	340	732	50	26,364	4,309	3,257	890	605	51	19	77	55	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.7	57.5	58.1	68.5	56.6	55.6	59.0	62.1	73	158	340	732
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
West Hills Parkway to Medina Drive, existing	4	15	19,540	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,183	2,482	1,876	513	348	30	11	44	31	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
West Hills Parkway to Medina Drive, existing + project	4	15	29,000	40	0.5	3.0%	2.0%	**71**	61	131	282	607	50	22,533	3,683	2,784	761	517	44	16	65	47	67.4	76.3	81.2	0.9	69.4	63.9	67.0	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	607
West Hills Parkway to Medina Drive, Near Term	4	15	22,962	40	0.5	3.0%	2.0%	**70**	52	112	241	520	50	17,841	2,916	2,204	602	409	35	13	52	37	67.4	76.3	81.2	0.9	68.4	62.9	66.0	71.1	65.5	55.3	55.9	66.3	54.4	53.4	56.8	59.9	52	112	241	520
West Hills Parkway to Medina Drive, Near Term + project	4	15	32,422	40	0.5	3.0%	2.0%	**72**	65	141	304	654	50	25,192	4,118	3,113	850	578	49	18	73	52	67.4	76.3	81.2	0.9	69.9	64.4	67.5	72.6	67.0	56.8	57.4	67.8	55.9	54.9	58.3	61.4	65	141	304	654
West Hills Parkway to Medina Drive, Year 2035	4	15	29,000	40	0.5	3.0%	2.0%	**71**	61	131	282	607	50	22,533	3,683	2,784	761	517	44	16	65	47	67.4	76.3	81.2	0.9	69.4	63.9	67.0	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	607
West Hills Parkway to Medina Drive, Year 2035 + project	4	15	34,540	40	0.5	3.0%	2.0%	**72**	68	147	317	682	50	26,838	4,387	3,316	906	616	52	20	78	56	67.4	76.3	81.2	0.9	70.1	64.6	67.8	72.9	67.3	57.1	57.6	68.1	56.2	55.2	58.6	61.7	68	147	317	682
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	4	15	19,590	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,221	2,488	1,881	514	349	30	11	44	32	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + project	4	15	29,050	40	0.5	3.0%	2.0%	**71**	61	131	282	608	50	22,572	3,689	2,789	762	518	44	17	66	47	67.4	76.3	81.2	0.9	69.4	63.9	67.1	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	608
Pebble Beach Drive to Fanita Parkway, Near Term	4	15	21,361	40	0.5	3.0%	2.0%	**70**	-	107	230	495	50	16,597	2,713	2,051	560	381	32	12	48	34	67.4	76.3	81.2	0.9	68.1	62.6	65.7	70.8	65.2	55.0	55.6	66.0	54.1	53.1	56.5	59.6	50	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + project	4	15	30,821	40	0.5	3.0%	2.0%	**72**	63	136	294	632	50	23,948	3,914	2,959	808	549	47	18	70	50	67.4	76.3	81.2	0.9	69.7	64.1	67.3	72.4	66.8	56.6	57.1	67.6	55.7	54.7	58.1	61.2	63	136	294	632
Pebble Beach Drive to Fanita Parkway, Year 2035	4	15	29,000	40	0.5	3.0%	2.0%	**71**	61	131	282	607	50	22,533	3,683	2,784	761	517	44	16	65	47	67.4	76.3	81.2	0.9	69.4	63.9	67.0	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	607
Pebble Beach Drive to Fanita Parkway, Year 2035 + project	4	15	34,380	40	0.5	3.0%	2.0%	**72**	68	147	316	680	50	26,713	4,366	3,300	902	613	52	20	78	55	67.4	76.3	81.2	0.9	70.1	64.6	67.8	72.8	67.2	57.0	57.6	68.1	56.2	55.2	58.5	61.6	68	147	316	680
Mission Gorge Road														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-125 to Fanita Drive, existing	6	15	45,440	45	0.5	5.0%	3.0%	**77**	151	325	699	1,507	50	35,307	5,771	4,362	1,986	1,215	115	39	171	110	69.3	77.6	82.1	2.6	74.4	70.6	72.9	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.4	151	325	699	1507
SR-125 to Fanita Drive, existing + project	6	15	51,220	45	0.5	5.0%	3.0%	**78**	163	352	758	1,632	50	39,798	6,505	4,917	2,239	1,369	129	44	193	124	69.3	77.6	82.1	2.6	74.9	71.1	73.5	78.2	72.1	63.5	63.3	73.2	63.3	61.6	64.2	68.0	163	352	758	1632
SR-125 to Fanita Drive, Near Term	6	15	48,026	45	0.5	5.0%	3.0%	**77**	156	337	726	1,563	50	37,316	6,099	4,610	2,099	1,284	121	41	181	116	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.9	63.1	61.3	63.9	67.7	156	337	726	1563
SR-125 to Fanita Drive, Near Term + project	6	15	53,806	45	0.5	5.0%	3.0%	**78**	169	363	783	1,686	50	41,807	6,833	5,165	2,352	1,438	136	46	202	130	69.3	77.6	82.1	2.6	75.1	71.3	73.7	78.4	72.3	63.7	63.5	73.4	63.6	61.8	64.4	68.2	169	363	783	1686
SR-125 to Fanita Drive, Year 2035	6	15	49,200	45	0.5	5.0%	3.0%	**78**	159	342	737	1,589	50	38,228	6,248	4,723	2,151	1,315	124	42	185	119	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	71.9	63.3	63.1	73.0	63.2	61.5	64.1	67.8	159	342	737	1589
SR-125 to Fanita Drive, Year 2035 + project	6	15	52,630	45	0.5	5.0%	3.0%	**78**	166	358	771	1,662	50	40,894	6,684	5,052	2,301	1,407	133	45	198	127	69.3	77.6	82.1	2.6	75.0	71.2	73.6	78.3	72.2	63.6	63.4	73.3	63.5	61.7	64.3	68.1	166	358	771	1662
Mission Gorge Road														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	6	15	41,100	45	0.5	5.0%	3.0%	**77**	141	304	654	1,409	50	31,935	5,220	3,946	1,797	1,099	104	35	155	99	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.5	62.3	72.2	62.4	60.7	63.3	67.0	141	304	654	1409
Fanita Drive to Carlton Hills Boulevard, existing + project	6	15	47,670	45	0.5	5.0%	3.0%	**77**	156	335	722	1,556	50	37,040	6,054	4,576	2,084	1,274	120	41	179	115	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.8	63.0	61.3	63.9	67.7	156	335	722	1556
Fanita Drive to Carlton Hills Boulevard, Near Term	6	15	43,029	45	0.5	5.0%	3.0%	**77**	145	313	674	1,453	50	33,434	5,465	4,131	1,881	1,150	109	37	162	104	69.3	77.6	82.1	2.6	74.1	70.3	72.7	77.4	71.4	62.7	62.5	72.4	62.6	60.9	63.5	67.2	145	313	674	1453
Fanita Drive to Carlton Hills Boulevard, Near Term + project	6	15	49,599	45	0.5	5.0%	3.0%	**78**	160	344	741	1,597	50	38,538	6,299	4,762	2,168	1,326	125	42	186	120	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	72.0	63.4	63.2	73.0	63.2	61.5	64.1	67.8	160	344	741	1597
Fanita Drive to Carlton Hills Boulevard, Year 2035	6	15	48,700	45	0.5	5.0%	3.0%	**77**	158	340	732	1,578	50	37,840	6,185	4,675	2,129	1,302	123	41	183	118	69.3	77.6	82.1	2.6	74.7	70.9	73.2	78.0	71.9	63.3	63.1	72.9	63.1	61.4	64.0	67.7	158	340	732	1578
Fanita Drive to Carlton Hills Boulevard, Year 2035 + project	6	15	52,440	45	0.5	5.0%	3.0%	**78**	166	357	769	1,658	50	40,746	6,660	5,034	2,292	1,402	132	45	197	127	69.3	77.6	82.1	2.6	75.0	71.2	73.6	78.3	72.2	63.6	63.4	73.3	63.4	61.7	64.3	68.1	166	357	769	1658
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Ganley Drive, existing	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, existing + project	2	14	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	288	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.4	62.1	50.1	52.4	62.7	49.1	48.2	53.3	55.6	29	62	134	288
Project Site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, Near Term + project	2	14	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	288	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.4	62.1	50.1	52.4	62.7	49.1	48.2	53.3	55.6	29	62	134	288
Project Site to Ganley Drive, Year 2035	2	15	7,380	40	0.5	2.0%	2.0%	**64**	-	44	95	205	50	5,734	937	708	129	132	7	4	11	12	67.4	76.3	81.2	0.1	62.8	55.4	60.4	65.2	59.8	47.9	50.2	60.5	46.8	46.0	51.1	53.4	20	44	95	205
Project Site to Ganley Drive, Year 2035 + project	2	14	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	288	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.4	62.1	50.1	52.4	62.7	49.1	48.2	53.3	55.6	29	62	134	288
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	2	0	2,610	40	0.5	2.0%	2.0%	**59**	-	-	46	99	50	2,028	331	251	46	47	3	1	4	4	67.4	76.3	81.2	-0.1	58.0	50.7	55.7	60.5	55.1	43.1	45.5	55.8	42.1	41.3	46.4	48.7	10	21	46	99
Ganley Drive to Lake Canyon Road, existing + project	3	14	14,960	50	0.5	2.0%	2.0%	**69**	46	99	214	462	50	11,624	1,900	1,436	262	267	15	8	22	24	71.1	78.8	83.0	0.4	68.9	60.3	64.6	70.7	66.0	52.7	54.4	66.4	53.0	50.8	55.4	58.2	46	99	214	462
Ganley Drive to Lake Canyon Road, Near Term	2	0	2,782	40	0.5	2.0%	2.0%	**60**	-	-	48	104	50	2,162	353	267	49	50	3	2	4	4	67.4	76.3	81.2	-0.1	58.3	51.0	55.9	60.8	55.4	43.4	45.8	56.1	42.4	41.5	46.7	48.9	10	22	48	104
Ganley Drive to Lake Canyon Road, Near Term + project	3	14	15,132	50	0.5	2.0%	2.0%	**70**	47	100	216	465	50	11,758	1,922	1,453	265	270	15	9	23	24	71.1	78.8	83.0	0.4	68.9	60.3	64.6	70.7	66.0	52.7	54.5	66.5	53.0	50.9	55.4	58.3	47	100	216	465
Ganley Drive to Lake Canyon Road, Year 2035	2	0	9,920	40	0.5	2.0%	2.0%	**65**	-	52	112	242	50	7,708	1,260	952	173	177	10	6	15	16	67.4	76.3	81.2	-0.1	63.8	56.5	61.5	66.3	60.9	48.9	51.3	61.6	47.9	47.1	52.2	54.5	24	52	112	242
Ganley Drive to Lake Canyon Road, Year 2035 + project	3	14	15,130	50	0.5	2.0%	2.0%	**70**	47	100	216	465	50	11,756	1,922	1,452	265	270	15	9	23	24	71.1	78.8	83.0	0.4	68.9	60.3	64.6	70.7	66.0	52.7	54.5	66.5	53.0	50.9	55.4	58.3	47	100	216	465
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	2	0	3,860	40	0.5	2.0%	2.0%	**61**	-	-	60	129	50	2,999	490	371	67	69	4	2	6	6	67.4	76.3	81.2	-0.1	59.7	52.4	57.4	62.2	56.8	44.8	47.2	57.5	43.8	43.0	48.1	50.4	13	28	60	129
Lake Canyon Road to Mast Boulevard, existing + project	4	14	15,160	50	0.5	2.0%	2.0%	**70**	-	107	231	497	50	11,779	1,925	1,455	265	270	15	9	23	24	71.1	78.8	83.0	0.8	69.4	60.8	65.1	71.2	66.5	53.2	54.9	66.9	53.4	51.3	55.8	58.7	50	107	231	497
Lake Canyon Road to Mast Boulevard, Near Term	2	0	4,158	40	0.5	2.0%	2.0%	**61**	-	-	63	135	50	3,231	528	399	73	74	4	2	6	7	67.4	76.3	81.2	-0.1	60.1	52.7	57.7	62.5	57.2	45.2	47.5	57.8	44.1	43.3	48.4	50.7	14	29	63	135
Lake Canyon Road to Mast Boulevard, Near Term + project	4	14	15,458	50	0.5	2.0%	2.0%	**70**	-	109	234	504	50	12,011	1,963	1,484	270	275	16	9	23	25	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.2	66.5	53.3	55.0	67.0	53.5	51.4	55.9	58.8	50	109	234	504
Lake Canyon Road to Mast Boulevard, Year 2035	2	0	10,910	40	0.5	2.0%	2.0%	**66**	-	56	120	258	50	8,477	1,386	1,047	191	194	11	6	16	18	67.4	76.3	81.2	-0.1	64.3	56.9	61.9	66.7	61.3	49.4	51.7	62.0	48.3	47.5	52.6	54.9	26	56	120	258
Lake Canyon Road to Mast Boulevard, Year 2035 + project	4	14	15,460	50	0.5	2.0%	2.0%	**70**	-	109	234	504	50	12,012	1,963	1,484	270	275	16	9	23	25	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.2	66.5	53.3	55.0	67.0	53.5	51.4	55.9	58.8	50	109	234	504
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	2	0	3,330	35	0.5	2.0%	1.0%	**58**	-	-	39	84	50	2,587	423	320	58	30	3	1	5	3	65.1	74.8	80.0	-0.1	57.5	50.9	53.2	59.5	54.5	43.3	43.0	55.1	41.7	41.4	43.9	47.3	8	18	39	84
Mast Boulevard to Carlton Oaks Drive, existing + project	2	0	6,750	35	0.5	2.0%	1.0%	**61**	-	-	62	134	50	5,245	857	648	118	60	7	2	10	5	65.1	74.8	80.0	-0.1	60.6	53.9	56.2	62.6	57.6	46.4	46.1	58.2	44.8	44.5	47.0	50.4	13	29	62	134
Mast Boulevard to Carlton Oaks Drive, Near Term	2	0	3,713	35	0.5	2.0%	1.0%	**59**	-	-	42	90	50	2,885	472	356	65	33	4	1	6	3	65.1	74.8	80.0	-0.1	58.0	51.4	53.6	60.0	55.0	43.8	43.5	55.6	42.2	41.9	44.4	47.8	9	19	42	90
Mast Boulevard to Carlton Oaks Drive, Near Term + project	2	0	7,133	35	0.5	2.0%	1.0%	**62**	-	-	65	139	50	5,542	906	685	125	64	7	2	11	6	65.1	74.8	80.0	-0.1	60.8	54.2	56.5	62.8	57.8	46.6	46.3	58.4	45.1	44.7	47.2	50.6	14	30	65	139
Mast Boulevard to Carlton Oaks Drive, Year 2035	2	0	6,000	35	0.5	2.0%	1.0%	**61**	-	-	58	124	50	4,662	762	576	105	53	6	2	9	5	65.1	74.8	80.0	-0.1	60.0	53.4	55.7	62.1	57.1	45.9	45.6	57.7	44.3	44.0	46.5	49.8	12	27	58	124
Mast Boulevard to Carlton Oaks Drive, Year 2035 + project	2	0	7,380	35	0.5	2.0%	1.0%	**62**	-	-	66	143	50	5,734	937	708	129	66	7	2	11	6	65.1	74.8	80.0	-0.1	60.9	54.3	56.6	63.0	58.0	46.8	46.5	58.6	45.2	44.9	47.4	50.7	14	31	66	143
Carlton Hills Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	4	0	24,960	35	0.5	3.0%	2.0%	**69**	-	92	199	428	50	19,394	3,170	2,396	655	445	38	14	56	40	65.1	74.8	80.0	0.3	66.5	61.8	65.3	69.7	63.7	54.2	55.2	64.6	52.6	52.3	56.1	58.8	43	92	199	428
Carlton Oaks Drive to Mission Gorge Road, existing + project	4	0	29,430	35	0.5	3.0%	2.0%	**70**	48	103	222	478	50	22,867	3,738	2,825	772	524	45	17	66	47	65.1	74.8	80.0	0.3	67.3	62.5	66.0	70.5	64.4	54.9	55.9	65.4	53.3	53.1	56.8	59.5	48	103	222	478
Carlton Oaks Drive to Mission Gorge Road, Near Term	4	0	25,993	35	0.5	3.0%	2.0%	**69**	-	95	204	440	50	20,197	3,301	2,495	682	463	39	15	59	42	65.1	74.8	80.0	0.3	66.7	62.0	65.5	69.9	63.8	54.4	55.3	64.8	52.8	52.5	56.3	59.0	44	95	204	440
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	4	0	30,463	35	0.5	3.0%	2.0%	**70**	49	105	227	489	50	23,670	3,869	2,924	799	543	46	17	69	49	65.1	74.8	80.0	0.3	67.4	62.7	66.2	70.6	64.5	55.1	56.0	65.5	53.4	53.2	57.0	59.7	49	105	227	489
Carlton Oaks Drive to Mission Gorge Road, Year 2035	4	0	32,800	35	0.5	3.0%	2.0%	**70**	51	111	238	514	50	25,486	4,166	3,149	860	584	50	19	74	53	65.1	74.8	80.0	0.3	67.7	63.0	66.5	70.9	64.8	55.4	56.4	65.8	53.8	53.5	57.3	60.0	51	111	238	514
Carlton Oaks Drive to Mission Gorge Road, Year 2035 + project	4	0	33,820	35	0.5	3.0%	2.0%	**70**	52	113	243	524	50	26,278	4,295	3,247	887	603	51	19	76	55	65.1	74.8	80.0	0.3	67.9	63.1	66.7	71.1	65.0	55.5	56.5	66.0	53.9	53.7	57.4	60.1	52	113	243	524
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Magnolia Avenue, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, existing + project	2	10	13,920	40	0.5	2.0%	2.0%	**67**	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Project Site to Magnolia Avenue, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, Near Term + project	2	10	13,920	40	0.5	2.0%	2.0%	**67**	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Project Site to Magnolia Avenue, Year 2035	2	10	8,630	40	0.5	2.0%	2.0%	**65**	-	48	104	224	50	6,706	1,096	828	151	154	9	5	13	14	67.4	76.3	81.2	0.1	63.4	56.0	61.0	65.8	60.4	48.4	50.8	61.1	47.4	46.6	51.7	54.0	22	48	104	224
Project Site to Magnolia Avenue, Year 2035 + project	2	10	13,920	40	0.5	2.0%	2.0%	**67**	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Magnolia Avenue to Princess Joann Road, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, existing + project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Magnolia Avenue to Princess Joann Road, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, Near Term + project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Magnolia Avenue to Princess Joann Road, Year 2035	2	10	6,800	40	0.5	2.0%	2.0%	**64**	-	41	89	191	50	5,284	864	653	119	121	7	4	10	11	67.4	76.3	81.2	0.1	62.3	55.0	59.9	64.8	59.4	47.4	49.8	60.1	46.4	45.5	50.7	52.9	19	41	89	191
Magnolia Avenue to Princess Joann Road, Year 2035 + project	2	10	8,930	40	0.5	2.0%	2.0%	**65**	-	49	107	229	50	6,939	1,134	857	156	159	9	5	13	14	67.4	76.3	81.2	0.1	63.5	56.2	61.1	66.0	60.6	48.6	50.9	61.3	47.6	46.7	51.9	54.1	23	49	107	229
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Chaparral Drive, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, existing + project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Princess Joann Road to Chaparral Drive, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, Near Term + project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Princess Joann Road to Chaparral Drive, Year 2035	2	10	9,400	40	0.5	2.0%	2.0%	**65**	-	51	110	237	50	7,304	1,194	902	164	168	9	5	14	15	67.4	76.3	81.2	0.1	63.7	56.4	61.3	66.2	60.8	48.8	51.2	61.5	47.8	46.9	52.1	54.3	24	51	110	237
Princess Joann Road to Chaparral Drive, Year 2035 + project	2	10	11,530	40	0.5	2.0%	2.0%	**66**	-	59	126	272	50	8,959	1,464	1,107	202	205	12	7	17	19	67.4	76.3	81.2	0.1	64.6	57.3	62.2	67.1	61.7	49.7	52.1	62.4	48.7	47.8	53.0	55.2	27	59	126	272
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, existing	2	40	670	35	0.5	3.0%	2.0%	**54**	-	-	-	-	50	521	85	64	18	12	1	0	2	1	65.1	74.8	80.0	0.9	51.4	46.7	50.2	54.6	48.5	39.1	40.0	49.5	37.4	37.2	41.0	43.7	4	9	19	42
Chaparral Drive to Woodglen Vista Drive, existing + project	4	16	8,290	50	0.5	3.0%	2.0%	**68**	-	77	167	359	50	6,441	1,053	796	217	148	13	5	19	13	71.1	78.8	83.0	0.9	66.8	60.0	62.5	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	167	359
Chaparral Drive to Woodglen Vista Drive, Near Term	2	40	683	35	0.5	3.0%	2.0%	**54**	-	-	-	-	50	531	87	66	18	12	1	0	2	1	65.1	74.8	80.0	0.9	51.5	46.7	50.3	54.7	48.6	39.2	40.1	49.6	37.5	37.3	41.0	43.8	4	9	20	42
Chaparral Drive to Woodglen Vista Drive, Near Term + project	4	16	8,303	50	0.5	3.0%	2.0%	**68**	-	77	167	359	50	6,451	1,054	797	218	148	13	5	19	13	71.1	78.8	83.0	0.9	66.8	60.0	62.6	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	167	359
Chaparral Drive to Woodglen Vista Drive, Year 2035	4	16	9,400	50	0.5	3.0%	2.0%	**68**	-	84	181	390	50	7,304	1,194	902	247	168	14	5	21	15	71.1	78.8	83.0	0.9	67.3	60.5	63.1	69.3	64.4	53.0	52.9	65.0	53.4	51.1	53.9	57.7	39	84	181	390
Chaparral Drive to Woodglen Vista Drive, Year 2035 + project	4	16	11,530	50	0.5	3.0%	2.0%	**69**	-	96	208	447	50	8,959	1,464	1,107	302	205	17	7	26	19	71.1	78.8	83.0	0.9	68.2	61.4	64.0	70.2	65.3	53.8	53.8	65.9	54.3	52.0	54.7	58.6	45	96	208	447
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	2	40	4,360	35	0.5	3.0%	2.0%	**62**	-	-	68	146	50	3,388	554	419	114	78	7	2	10	7	65.1	74.8	80.0	0.9	59.5	54.8	58.3	62.7	56.6	47.2	48.2	57.6	45.6	45.3	49.1	51.8	15	31	68	146
Woodglen Vista Drive to El Nopal, existing + project	4	16	11,980	50	0.5	3.0%	2.0%	**69**	-	99	213	459	50	9,308	1,521	1,150	314	213	18	7	27	19	71.1	78.8	83.0	0.9	68.4	61.6	64.1	70.4	65.5	54.0	54.0	66.1	54.4	52.1	54.9	58.8	46	99	213	459
Woodglen Vista Drive to El Nopal, Near Term	2	40	4,472	35	0.5	3.0%	2.0%	**62**	-	-	69	149	50	3,475	568	429	117	80	7	3	10	7	65.1	74.8	80.0	0.9	59.6	54.9	58.4	62.9	56.8	47.3	48.3	57.7	45.7	45.4	49.2	51.9	15	32	69	149
Woodglen Vista Drive to El Nopal, Near Term + project	4	16	12,092	50	0.5	3.0%	2.0%	**69**	-	99	214	462	50	9,395	1,536	1,161	317	215	18	7	27	19	71.1	78.8	83.0	0.9	68.4	61.6	64.2	70.4	65.5	54.1	54.0	66.1	54.5	52.2	54.9	58.8	46	99	214	462
Woodglen Vista Drive to El Nopal, Year 2035	4	16	12,600	50	0.5	3.0%	2.0%	**70**	-	102	220	474	50	9,790	1,600	1,210	330	225	19	7	28	20	71.1	78.8	83.0	0.9	68.6	61.8	64.4	70.6	65.7	54.2	54.2	66.3	54.6	52.4	55.1	59.0	47	102	220	474
Woodglen Vista Drive to El Nopal, Year 2035 + project	4	16	14,730	50	0.5	3.0%	2.0%	**70**	53	113	244	527	50	11,445	1,871	1,414	386	262	22	8	33	24	71.1	78.8	83.0	0.9	69.3	62.5	65.0	71.3	66.4	54.9	54.9	67.0	55.3	53.0	55.8	59.7	53	113	244	527
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	3	30	8,860	35	0.5	3.0%	2.0%	**65**	-	-	110	238	50	6,884	1,125	851	232	158	13	5	20	14	65.1	74.8	80.0	1.0	62.7	58.0	61.5	65.9	59.8	50.4	51.3	60.8	48.8	48.5	52.3	55.0	24	51	110	238
El Nopal to Mast Boulevard, existing + project	4	16	16,480	50	0.5	3.0%	2.0%	**71**	57	122	263	567	50	12,805	2,093	1,582	432	294	25	9	37	27	71.1	78.8	83.0	0.9	69.8	63.0	65.5	71.8	66.9	55.4	55.4	67.5	55.8	53.5	56.3	60.1	57	122	263	567
El Nopal to Mast Boulevard, Near Term	3	30	9,173	35	0.5	3.0%	2.0%	**65**	-	-	113	244	50	7,127	1,165	881	241	163	14	5	21	15	65.1	74.8	80.0	1.0	62.9	58.1	61.7	66.1	60.0	50.5	51.5	61.0	48.9	48.7	52.4	55.1	24	52	113	244
El Nopal to Mast Boulevard, Near Term + project	4	16	16,793	50	0.5	3.0%	2.0%	**71**	57	124	267	575	50	13,048	2,133	1,612	440	299	25	10	38	27	71.1	78.8	83.0	0.9	69.9	63.1	65.6	71.9	67.0	55.5	55.4	67.5	55.9	53.6	56.4	60.2	57	124	267	575
El Nopal to Mast Boulevard, Year 2035	4	16	16,500	50	0.5	3.0%	2.0%	**71**	57	122	264	568	50	12,821	2,096	1,584	433	294	25	9	37	27	71.1	78.8	83.0	0.9	69.8	63.0	65.5	71.8	66.9	55.4	55.4	67.5	55.8	53.5	56.3	60.1	57	122	264	568
El Nopal to Mast Boulevard, Year 2035 + project	4	16	18,630	50	0.5	3.0%	2.0%	**71**	62	133	286	616	50	14,476	2,366	1,788	489	332	28	11	42	30	71.1	78.8	83.0	0.9	70.3	63.5	66.1	72.3	67.4	55.9	55.9	68.0	56.3	54.1	56.8	60.7	62	133	286	616
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to River Park Drive, existing	4	15	19,600	35	0.5	3.0%	2.0%	**68**	-	85	184	395	50	15,229	2,489	1,882	514	349	30	11	44	32	65.1	74.8	80.0	0.9	66.0	61.3	64.8	69.2	63.1	53.7	54.6	64.1	52.1	51.8	55.6	58.3	40	85	184	395
Mast Boulevard to River Park Drive, existing + project	4	15	25,380	35	0.5	3.0%	2.0%	**70**	-	101	218	470	50	19,720	3,223	2,436	666	452	38	14	57	41	65.1	74.8	80.0	0.9	67.1	62.4	65.9	70.3	64.3	54.8	55.8	65.2	53.2	52.9	56.7	59.4	47	101	218	470
Mast Boulevard to River Park Drive, Near Term	4	15	20,527	35	0.5	3.0%	2.0%	**69**	-	88	189	408	50	15,949	2,607	1,971	538	366	31	12	46	33	65.1	74.8	80.0	0.9	66.2	61.5	65.0	69.4	63.3	53.9	54.8	64.3	52.3	52.0	55.8	58.5	41	88	189	408
Mast Boulevard to River Park Drive, Near Term + project	4	15	26,307	35	0.5	3.0%	2.0%	**70**	-	104	223	481	50	20,441	3,341	2,525	690	469	40	15	59	42	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.5	64.4	55.0	55.9	65.4	53.3	53.1	56.9	59.6	48	104	223	481
Mast Boulevard to River Park Drive, Year 2035	4	15	26,600	35	0.5	3.0%	2.0%	**70**	-	104	225	485	50	20,668	3,378	2,554	698	474	40	15	60	43	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.6	64.5	55.0	56.0	65.4	53.4	53.1	56.9	59.6	48	104	225	485
Mast Boulevard to River Park Drive, Year 2035 + project	4	15	27,510	35	0.5	3.0%	2.0%	**70**	-	107	230	496	50	21,375	3,494	2,641	722	490	42	16	62	44	65.1	74.8	80.0	0.9	67.5	62.7	66.3	70.7	64.6	55.2	56.1	65.6	53.5	53.3	57.0	59.8	50	107	230	496
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
River Park Drive to Town Center Parkway, existing	4	15	26,690	35	0.5	3.0%	2.0%	**70**	-	105	225	486	50	20,738	3,390	2,562	700	476	40	15	60	43	65.1	74.8	80.0	0.9	67.4	62.6	66.2	70.6	64.5	55.0	56.0	65.5	53.4	53.2	56.9	59.6	49	105	225	486
River Park Drive to Town Center Parkway, existing + project	4	15	32,210	35	0.5	3.0%	2.0%	**71**	55	119	256	551	50	25,027	4,091	3,092	845	574	49	18	73	52	65.1	74.8	80.0	0.9	68.2	63.4	67.0	71.4	65.3	55.8	56.8	66.3	54.2	54.0	57.7	60.4	55	119	256	551
River Park Drive to Town Center Parkway, Near Term	4	15	28,084	35	0.5	3.0%	2.0%	**70**	-	108	233	503	50	21,821	3,567	2,696	737	500	43	16	63	45	65.1	74.8	80.0	0.9	67.6	62.8	66.4	70.8	64.7	55.3	56.2	65.7	53.6	53.4	57.1	59.8	50	108	233	503
River Park Drive to Town Center Parkway, Near Term + project	4	15	33,604	35	0.5	3.0%	2.0%	**71**	57	122	263	566	50	26,110	4,268	3,226	881	599	51	19	76	54	65.1	74.8	80.0	0.9	68.4	63.6	67.2	71.6	65.5	56.0	57.0	66.5	54.4	54.2	57.9	60.6	57	122	263	566
River Park Drive to Town Center Parkway, Year 2035	4	15	31,700	35	0.5	3.0%	2.0%	**71**	54	117	253	545	50	24,631	4,026	3,043	831	565	48	18	72	51	65.1	74.8	80.0	0.9	68.1	63.4	66.9	71.3	65.2	55.8	56.7	66.2	54.1	53.9	57.7	60.4	54	117	253	545
River Park Drive to Town Center Parkway, Year 2035 + project	4	15	32,670	35	0.5	3.0%	2.0%	**71**	56	120	258	556	50	25,385	4,149	3,136	857	582	49	19	74	53	65.1	74.8	80.0	0.9	68.2	63.5	67.0	71.4	65.4	55.9	56.9	66.3	54.3	54.0	57.8	60.5	56	120	258	556
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Town Center Parkway to Mission Gorge Road, existing	6	15	21,850	35	0.5	5.0%	3.0%	**72**	68	147	317	684	50	16,977	2,775	2,098	955	584	55	19	82	53	65.1	74.8	80.0	2.6	68.0	65.7	68.8	72.5	65.3	58.1	58.6	66.8	56.5	56.2	59.5	62.5	68	147	317	684
Town Center Parkway to Mission Gorge Road, existing + project	6	15	26,840	35	0.5	5.0%	3.0%	**73**	78	169	364	784	50	20,855	3,409	2,577	1,173	717	68	23	101	65	65.1	74.8	80.0	2.6	68.9	66.6	69.7	73.3	66.2	59.0	59.5	67.6	57.4	57.1	60.4	63.4	78	169	364	784
Town Center Parkway to Mission Gorge Road, Near Term	6	15	24,245	35	0.5	5.0%	3.0%	**72**	73	158	340	733	50	18,838	3,079	2,328	1,060	648	61	21	91	59	65.1	74.8	80.0	2.6	68.5	66.1	69.2	72.9	65.7	58.5	59.0	67.2	56.9	56.7	60.0	62.9	73	158	340	733
Town Center Parkway to Mission Gorge Road, Near Term + proj	6	15	29,235	35	0.5	5.0%	3.0%	**73**	83	179	385	830	50	22,716	3,713	2,807	1,278	781	74	25	110	71	65.1	74.8	80.0	2.6	69.3	66.9	70.0	73.7	66.5	59.4	59.9	68.0	57.8	57.5	60.8	63.7	83	179	385	830
Town Center Parkway to Mission Gorge Road, Year 2035	6	15	30,100	35	0.5	5.0%	3.0%	**73**	85	182	393	846	50	23,388	3,823	2,890	1,316	805	76	26	113	73	65.1	74.8	80.0	2.6	69.4	67.1	70.2	73.8	66.7	59.5	60.0	68.1	57.9	57.6	60.9	63.9	85	182	393	846
Town Center Parkway to Mission Gorge Road, Year 2035 + proje	6	15	31,640	35	0.5	5.0%	3.0%	**74**	88	189	406	875	50	24,584	4,018	3,037	1,383	846	80	27	119	77	65.1	74.8	80.0	2.6	69.7	67.3	70.4	74.1	66.9	59.7	60.2	68.4	58.1	57.8	61.1	64.1	88	189	406	875
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Cuyamaca Street to Princess Joann Road, existing	2	12	DNE	35	0.5	3.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, existing + project	2	12	6,310	35	0.5	3.0%	2.0%	**63**	-	-	76	165	50	4,903	801	606	166	112	10	4	14	10	65.1	74.8	80.0	0.1	60.3	55.6	59.1	63.5	57.4	48.0	48.9	58.4	46.3	46.1	49.9	52.6	16	35	76	165
Cuyamaca Street to Princess Joann Road, Near Term	2	12	DNE	35	0.5	3.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, Near Term + project	2	12	6,310	35	0.5	3.0%	2.0%	**63**	-	-	76	165	50	4,903	801	606	166	112	10	4	14	10	65.1	74.8	80.0	0.1	60.3	55.6	59.1	63.5	57.4	48.0	48.9	58.4	46.3	46.1	49.9	52.6	16	35	76	165
Cuyamaca Street to Princess Joann Road, Year 2035	2	12	4,300	35	0.5	3.0%	2.0%	**61**	-	-	59	127	50	3,341	546	413	113	77	7	2	10	7	65.1	74.8	80.0	0.1	58.6	53.9	57.4	61.8	55.8	46.3	47.3	56.7	44.7	44.4	48.2	50.9	13	27	59	127
Cuyamaca Street to Princess Joann Road, Year 2035 + project	2	12	7,470	35	0.5	3.0%	2.0%	**63**	-	40	85	184	50	5,804	949	717	196	133	11	4	17	12	65.1	74.8	80.0	0.1	61.0	56.3	59.8	64.2	58.2	48.7	49.7	59.1	47.1	46.8	50.6	53.3	18	40	85	184
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, existing	4	15	2,020	40	0.5	3.0%	2.0%	**60**	-	-	-	103	50	1,570	257	194	53	36	3	1	5	3	67.4	76.3	81.2	0.9	57.8	52.3	55.5	60.5	54.9	44.7	45.3	55.7	43.9	42.9	46.2	49.3	10	22	48	103
Princess Joann Road to Woodglen Vista Drive, existing + project	4	15	8,330	40	0.5	3.0%	2.0%	**66**	-	57	123	264	50	6,472	1,058	800	218	148	13	5	19	13	67.4	76.3	81.2	0.9	64.0	58.5	61.6	66.7	61.1	50.9	51.5	61.9	50.0	49.0	52.4	55.5	26	57	123	264
Princess Joann Road to Woodglen Vista Drive, Near Term	4	15	2,204	40	0.5	3.0%	2.0%	**60**	-	-	-	109	50	1,713	280	212	58	39	3	1	5	4	67.4	76.3	81.2	0.9	58.2	52.7	55.9	60.9	55.3	45.1	45.7	56.1	44.2	43.2	46.6	49.7	11	23	51	109
Princess Joann Road to Woodglen Vista Drive, Near Term + proj	4	15	8,514	40	0.5	3.0%	2.0%	**66**	-	58	125	268	50	6,615	1,081	817	223	152	13	5	19	14	67.4	76.3	81.2	0.9	64.1	58.6	61.7	66.8	61.2	51.0	51.6	62.0	50.1	49.1	52.5	55.6	27	58	125	268
Princess Joann Road to Woodglen Vista Drive, Year 2035	4	15	9,500	40	0.5	3.0%	2.0%	**66**	-	62	134	289	50	7,382	1,207	912	249	169	14	5	21	15	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.7	51.4	52.0	62.5	50.6	49.6	53.0	56.1	29	62	134	289
Princess Joann Road to Woodglen Vista Drive, Year 2035 + proj	4	15	12,670	40	0.5	3.0%	2.0%	**68**	-	75	162	350	50	9,845	1,609	1,216	332	226	19	7	29	20	67.4	76.3	81.2	0.9	65.8	60.3	63.5	68.5	62.9	52.7	53.3	63.7	51.8	50.8	54.2	57.3	35	75	162	350
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	4	15	9,030	40	0.5	3.0%	2.0%	**66**	-	60	129	279	50	7,016	1,147	867	237	161	14	5	20	15	67.4	76.3	81.2	0.9	64.3	58.8	62.0	67.0	61.4	51.2	51.8	62.2	50.4	49.4	52.7	55.8	28	60	129	279
Woodglen Vista Drive to El Nopal, existing + project	4	15	15,340	40	0.5	3.0%	2.0%	**69**	-	86	184	397	50	11,919	1,948	1,473	402	273	23	9	35	25	67.4	76.3	81.2	0.9	66.6	61.1	64.3	69.3	63.7	53.5	54.1	64.5	52.7	51.7	55.0	58.1	40	86	184	397
Woodglen Vista Drive to El Nopal, Near Term	4	15	9,415	40	0.5	3.0%	2.0%	**66**	-	62	133	287	50	7,315	1,196	904	247	168	14	5	21	15	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.6	51.4	52.0	62.4	50.5	49.5	52.9	56.0	29	62	133	287
Woodglen Vista Drive to El Nopal, Near Term + project	4	15	15,725	40	0.5	3.0%	2.0%	**69**	-	87	187	404	50	12,218	1,997	1,510	412	280	24	9	35	25	67.4	76.3	81.2	0.9	66.7	61.2	64.4	69.4	63.8	53.6	54.2	64.7	52.8	51.8	55.2	58.2	40	87	187	404
Woodglen Vista Drive to El Nopal, Year 2035	4	15	13,600	40	0.5	3.0%	2.0%	**68**	-	79	170	367	50	10,567	1,727	1,306	357	242	21	8	31	22	67.4	76.3	81.2	0.9	66.1	60.6	63.8	68.8	63.2	53.0	53.6	64.0	52.1	51.1	54.5	57.6	37	79	170	367
Woodglen Vista Drive to El Nopal, Year 2035 + project	4	15	16,770	40	0.5	3.0%	2.0%	**69**	-	91	196	421	50	13,030	2,130	1,610	440	299	25	10	38	27	67.4	76.3	81.2	0.9	67.0	61.5	64.7	69.7	64.1	53.9	54.5	64.9	53.1	52.0	55.4	58.5	42	91	196	421
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	4	15	13,690	40	0.5	3.0%	2.0%	**68**	-	79	171	368	50	10,637	1,739	1,314	359	244	21	8	31	22	67.4	76.3	81.2	0.9	66.1	60.6	63.8	68.8	63.2	53.0	53.6	64.1	52.2	51.2	54.6	57.6	37	79	171	368
El Nopal to Mast Boulevard, existing + project	4	15	17,370	40	0.5	3.0%	2.0%	**69**	-	93	200	431	50	13,496	2,206	1,668	456	310	26	10	39	28	67.4	76.3	81.2	0.9	67.2	61.7	64.8	69.9	64.3	54.1	54.7	65.1	53.2	52.2	55.6	58.7	43	93	200	431
El Nopal to Mast Boulevard, Near Term	4	15	14,291	40	0.5	3.0%	2.0%	**68**	-	82	176	379	50	11,104	1,815	1,372	375	255	22	8	32	23	67.4	76.3	81.2	0.9	66.3	60.8	64.0	69.0	63.4	53.2	53.8	64.2	52.4	51.4	54.7	57.8	38	82	176	379
El Nopal to Mast Boulevard, Near Term + project	4	15	17,971	40	0.5	3.0%	2.0%	**69**	-	95	205	441	50	13,963	2,282	1,725	471	320	27	10	41	29	67.4	76.3	81.2	0.9	67.3	61.8	65.0	70.0	64.4	54.2	54.8	65.2	53.4	52.3	55.7	58.8	44	95	205	441
El Nopal to Mast Boulevard, Year 2035	4	15	27,300	40	0.5	3.0%	2.0%	**71**	58	126	271	583	50	21,212	3,467	2,621	716	486	41	16	62	44	67.4	76.3	81.2	0.9	69.1	63.6	66.8	71.8	66.2	56.0	56.6	67.0	55.2	54.2	57.5	60.6	58	126	271	583
El Nopal to Mast Boulevard, Year 2035 + project	4	15	28,310	40	0.5	3.0%	2.0%	**71**	60	129	277	598	50	21,997	3,595	2,718	743	504	43	16	64	46	67.4	76.3	81.2	0.9	69.3	63.8	66.9	72.0	66.4	56.2	56.8	67.2	55.3	54.3	57.7	60.8	60	129	277	598
State Route 52														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Santo Road to Mast Boulevard, existing	6	60	96,000	65	0.5	2.0%	0.6%	**76**	246	531	1,143	2,462	100	74,592	12,192	9,216	1,679	513	97	16	144	46	75.5	81.7	85.2	-3.2	76.7	66.6	64.9	77.4	73.8	59.0	54.7	74.0	61.1	57.1	55.7	63.3	246	531	1143	2462
Santo Road to Mast Boulevard, existing + project	6	60	106,531	65	0.5	2.0%	0.6%	**76**	264	569	1,225	2,639	100	82,775	13,529	10,227	1,863	570	108	18	160	52	75.5	81.7	85.2	-3.2	77.2	67.0	65.4	77.8	74.2	59.4	55.2	74.4	61.5	57.6	56.1	63.8	264	569	1225	2639
Santo Road to Mast Boulevard, Near Term	6	60	104,092	65	0.5	2.0%	0.6%	**76**	260	560	1,206	2,599	100	80,879	13,220	9,993	1,820	556	105	18	157	50	75.5	81.7	85.2	-3.2	77.1	66.9	65.3	77.7	74.1	59.3	55.1	74.3	61.4	57.5	56.0	63.7	260	560	1206	2599
Santo Road to Mast Boulevard, Near Term + project	6	60	114,066	65	0.5	2.0%	0.6%	**77**	276	595	1,282	2,762	100	88,629	14,486	10,950	1,995	610	115	19	172	55	75.5	81.7	85.2	-3.2	77.5	67.3	65.7	78.1	74.5	59.7	55.5	74.7	61.8	57.9	56.4	64.1	276	595	1282	2762
Santo Road to Mast Boulevard, Year 2035	6	60	129,451	65	0.5	2.0%	0.6%	**77**	301	648	1,395	3,006	100	######	16,440	12,427	2,264	692	131	22	195	63	75.5	81.7	85.2	-3.2	78.0	67.9	66.2	78.7	75.1	60.3	56.0	75.3	62.4	58.4	57.0	64.6	301	648	1395	3006
Santo Road to Mast Boulevard, Year 2035 + project	6	60	133,589	65	0.5	2.0%	0.6%	**77**	307	661	1,425	3,069	100	######	16,966	12,825	2,336	714	135	23	201	65	75.5	81.7	85.2	-3.2	78.2	68.0	66.3	78.8	75.2	60.4	56.2	75.4	62.5	58.5	57.1	64.8	307	661	1425	3069

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Appendix C. FHWA Noise Prediction Model Results – Land Use Plan Without School

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 1501144001
Project Name: Fanita Ranch - No School Option

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, January 2019
Community Noise Descriptor: L_{dn}: X CNEL: ____

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition / Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Distance from Centerline of Roadway: Ldn at 50 Feet	Distance to Contour: 70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard												
SR-52 to West Hills Parkway, existing	4	25	26,440	40	0.5	3.0%	2.0%	**71**	62	134	288	620
SR-52 to West Hills Parkway, existing + project	4	25	33,050	40	0.5	3.0%	2.0%	**72**	72	155	334	719
SR-52 to West Hills Parkway, Near Term	4	25	30,730	40	0.5	3.0%	2.0%	**72**	69	148	318	685
SR-52 to West Hills Parkway, Near Term + project	4	25	37,340	40	0.5	3.0%	2.0%	**73**	78	168	362	780
SR-52 to West Hills Parkway, Year 2035	4	25	30,500	40	0.5	3.0%	2.0%	**72**	68	147	316	682
SR-52 to West Hills Parkway, Year 2035 + project	4	25	33,970	40	0.5	3.0%	2.0%	**72**	73	158	340	733
Mast Boulevard												
West Hills Parkway to Medina Drive, existing	4	15	19,540	40	0.5	3.0%	2.0%	**70**	-	101	217	467
West Hills Parkway to Medina Drive, existing + project	4	15	29,060	40	0.5	3.0%	2.0%	**71**	61	131	282	608
West Hills Parkway to Medina Drive, Near Term	4	15	22,962	40	0.5	3.0%	2.0%	**70**	52	112	241	520
West Hills Parkway to Medina Drive, Near Term + project	4	15	32,482	40	0.5	3.0%	2.0%	**72**	65	141	304	655
West Hills Parkway to Medina Drive, Year 2035	4	15	29,000	40	0.5	3.0%	2.0%	**71**	61	131	282	607
West Hills Parkway to Medina Drive, Year 2035 + project	4	15	34,600	40	0.5	3.0%	2.0%	**72**	68	147	317	683
Mast Boulevard												
Pebble Beach Drive to Fanita Parkway, existing	4	15	19,590	40	0.5	3.0%	2.0%	**70**	-	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + project	4	15	29,110	40	0.5	3.0%	2.0%	**71**	61	131	283	609
Pebble Beach Drive to Fanita Parkway, Near Term	4	15	21,361	40	0.5	3.0%	2.0%	**70**	-	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + project	4	15	30,881	40	0.5	3.0%	2.0%	**72**	63	136	294	633
Pebble Beach Drive to Fanita Parkway, Year 2035	4	15	29,000	40	0.5	3.0%	2.0%	**71**	61	131	282	607
Pebble Beach Drive to Fanita Parkway, Year 2035 + project	4	15	34,440	40	0.5	3.0%	2.0%	**72**	68	147	316	681
Mission Gorge Road												
SR-125 to Fanita Drive, existing	6	15	45,440	45	0.5	5.0%	3.0%	**77**	151	325	699	1,507
SR-125 to Fanita Drive, existing + project	6	15	51,260	45	0.5	5.0%	3.0%	**78**	163	352	758	1,633
SR-125 to Fanita Drive, Near Term	6	15	48,026	45	0.5	5.0%	3.0%	**77**	156	337	726	1,563
SR-125 to Fanita Drive, Near Term + project	6	15	53,846	45	0.5	5.0%	3.0%	**78**	169	364	783	1,687
SR-125 to Fanita Drive, Year 2035	6	15	49,200	45	0.5	5.0%	3.0%	**78**	159	342	737	1,589
SR-125 to Fanita Drive, Year 2035 + project	6	15	52,670	45	0.5	5.0%	3.0%	**78**	166	358	772	1,663
Mission Gorge Road												
Fanita Drive to Carlton Hills Boulevard, existing	6	15	41,100	45	0.5	5.0%	3.0%	**77**	141	304	654	1,409
Fanita Drive to Carlton Hills Boulevard, existing + project	6	15	47,710	45	0.5	5.0%	3.0%	**77**	156	335	722	1,557
Fanita Drive to Carlton Hills Boulevard, Near Term	6	15	43,029	45	0.5	5.0%	3.0%	**77**	145	313	674	1,453
Fanita Drive to Carlton Hills Boulevard, Near Term + project	6	15	49,639	45	0.5	5.0%	3.0%	**78**	160	344	742	1,598
Fanita Drive to Carlton Hills Boulevard, Year 2035	6	15	48,700	45	0.5	5.0%	3.0%	**77**	158	340	732	1,578
Fanita Drive to Carlton Hills Boulevard, Year 2035 + project	6	15	52,670	45	0.5	5.0%	3.0%	**78**	166	358	772	1,663
Fanita Parkway												
Project Site to Ganley Drive, existing	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, existing + project	2	15	12,430	40	0.5	2.0%	2.0%	**66**	-	62	135	290
Project Site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, Near Term + project	2	15	12,430	40	0.5	2.0%	2.0%	**66**	-	62	135	290
Project Site to Ganley Drive, Year 2035	2	15	7,380	40	0.5	2.0%	2.0%	**64**	-	44	95	205
Project Site to Ganley Drive, Year 2035 + project	2	15	12,430	40	0.5	2.0%	2.0%	**66**	-	62	135	290
Fanita Parkway												
Ganley Drive to Lake Canyon Road, existing	2	0	2,610	40	0.5	2.0%	2.0%	**59**	-	-	46	99
Ganley Drive to Lake Canyon Road, existing + project	4	14	15,040	50	0.5	2.0%	2.0%	**70**	-	107	230	495
Ganley Drive to Lake Canyon Road, Near Term	2	0	2,782	40	0.5	2.0%	2.0%	**60**	-	-	48	104
Ganley Drive to Lake Canyon Road, Near Term + project	4	14	15,212	50	0.5	2.0%	2.0%	**70**	-	107	231	499
Ganley Drive to Lake Canyon Road, Year 2035	2	0	9,920	40	0.5	2.0%	2.0%	**65**	-	52	112	242
Ganley Drive to Lake Canyon Road, Year 2035 + project	4	14	15,210	50	0.5	2.0%	2.0%	**70**	-	107	231	499
Fanita Parkway												
Lake Canyon Road to Mast Boulevard, existing	2	0	3,860	40	0.5	2.0%	2.0%	**61**	-	-	60	129
Lake Canyon Road to Mast Boulevard, existing + project	4	14	15,230	50	0.5	2.0%	2.0%	**70**	-	107	232	499
Lake Canyon Road to Mast Boulevard, Near Term	2	0	4,158	40	0.5	2.0%	2.0%	**61**	-	-	63	135
Lake Canyon Road to Mast Boulevard, Near Term + project	4	14	15,528	50	0.5	2.0%	2.0%	**70**	-	109	235	505
Lake Canyon Road to Mast Boulevard, Year 2035	2	0	10,910	40	0.5	2.0%	2.0%	**66**	-	56	120	258
Lake Canyon Road to Mast Boulevard, Year 2035 + project	4	14	15,530	50	0.5	2.0%	2.0%	**70**	-	109	235	505
Fanita Parkway												
Mast Boulevard to Carlton Oaks Drive, existing	2	0	3,330	35	0.5	2.0%	1.0%	**58**	-	-	39	84
Mast Boulevard to Carlton Oaks Drive, existing + project	2	0	6,770	35	0.5	2.0%	1.0%	**61**	-	-	62	135
Mast Boulevard to Carlton Oaks Drive, Near Term	2	0	3,713	35	0.5	2.0%	1.0%	**59**	-	-	42	90
Mast Boulevard to Carlton Oaks Drive, Near Term + project	2	0	7,153	35	0.5	2.0%	1.0%	**62**	-	-	65	140
Mast Boulevard to Carlton Oaks Drive, Year 2035	2	0	6,000	35	0.5	2.0%	1.0%	**61**	-	-	58	124
Mast Boulevard to Carlton Oaks Drive, Year 2035 + project	2	0	7,400	35	0.5	2.0%	1.0%	**62**	-	-	66	143
Carlton Hills Boulevard												
Carlton Oaks Drive to Mission Gorge Road, existing	4	0	24,960	35	0.5	3.0%	2.0%	**69**	-	92	199	428
Carlton Oaks Drive to Mission Gorge Road, existing + project	4	0	29,460	35	0.5	3.0%	2.0%	**70**	48	103	222	478
Carlton Oaks Drive to Mission Gorge Road, Near Term	4	0	25,993	35	0.5	3.0%	2.0%	**69**	-	95	204	440
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	4	0	30,493	35	0.5	3.0%	2.0%	**70**	49	105	227	489
Carlton Oaks Drive to Mission Gorge Road, Year 2035	4	0	32,800	35	0.5	3.0%	2.0%	**70**	51	111	238	514
Carlton Oaks Drive to Mission Gorge Road, Year 2035 + project	4	0	33,850	35	0.5	3.0%	2.0%	**70**	52	113	244	525
Cuyamaca Street												
Project Site to Magnolia Avenue, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, existing + project	2	10	14,020	40	0.5	2.0%	2.0%	**67**	-	67	144	310
Project Site to Magnolia Avenue, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, Near Term + project	2	10	14,020	40	0.5	2.0%	2.0%	**67**	-	67	144	310
Project Site to Magnolia Avenue, Year 2035	2	10	8,630	40	0.5	2.0%	2.0%	**65**	-	48	104	224
Project Site to Magnolia Avenue, Year 2035 + project	2	10	14,020	40	0.5	2.0%	2.0%	**67**	-	67	144	310
Cuyamaca Street												
Magnolia Avenue to Princess Joann Road, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, existing + project	2	10	7,670	40	0.5	2.0%	2.0%	**64**	-	45	96	207
Magnolia Avenue to Princess Joann Road, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, Near Term + project	2	10	7,670	40	0.5	2.0%	2.0%	**64**	-	45	96	207
Magnolia Avenue to Princess Joann Road, Year 2035	2	10	6,800	40	0.5	2.0%	2.0%	**64**	-	41	89	191
Magnolia Avenue to Princess Joann Road, Year 2035 + project	2	10	8,980	40	0.5	2.0%	2.0%	**65**	-	50	107	230
Cuyamaca Street												
Princess Joann Road to Chaparral Drive, existing	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, existing + project	2	10	7,670	40	0.5	2.0%	2.0%	**64**	-	45	96	207
Princess Joann Road to Chaparral Drive, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, Near Term + project	2	10	7,670	40	0.5	2.0%	2.0%	**64**	-	45	96	207
Princess Joann Road to Chaparral Drive, Year 2035	2	10	9,400	40	0.5	2.0%	2.0%	**65**	-	51	110	237
Princess Joann Road to Chaparral Drive, Year 2035 + project	2	10	11,580	40	0.5	2.0%	2.0%	**66**	-	59	127	273
Cuyamaca Street												
Chaparral Drive to Woodglen Vista Drive, existing	2	40	670	35	0.5	3.0%	2.0%	**54**	-	-	-	-
Chaparral Drive to Woodglen Vista Drive, existing + project	4	16	8,340	50	0.5	3.0%	2.0%	**68**	-	78	167	360
Chaparral Drive to Woodglen Vista Drive, Near Term	2	40	683	35	0.5	3.0%	2.0%	**54**	-	-	-	-
Chaparral Drive to Woodglen Vista Drive, Near Term + project	4	16	8,353	50	0.5	3.0%	2.0%	**68**	-	78	167	361
Chaparral Drive to Woodglen Vista Drive, Year 2035	4	16	9,400	50	0.5	3.0%	2.0%	**68**	-	84	181	390
Chaparral Drive to Woodglen Vista Drive, Year 2035 + project	4	16	11,580	50	0.5	3.0%	2.0%	**69**	-	97	208	449
Cuyamaca Street												
Woodglen Vista Drive to El Nopal, existing	2	40	4,360	35	0.5	3.0%	2.0%	**62**	-	-	68	146
Woodglen Vista Drive to El Nopal, existing + project	4	16	12,030	50	0.5	3.0%	2.0%	**69**	-	99	214	460
Woodglen Vista Drive to El Nopal, Near Term	2	40	4,472	35	0.5	3.0%	2.0%	**62**	-	-	69	149
Woodglen Vista Drive to El Nopal, Near Term + project	4	16	12,142	50	0.5	3.0%	2.0%	**69**	-	100	215	463
Woodglen Vista Drive to El Nopal, Year 2035	4	16	12,600	50	0.5	3.0%	2.0%	**70**	-	102	220	474
Woodglen Vista Drive to El Nopal, Year 2035 + project	4	16	14,780	50	0.5	3.0%	2.0%	**70**	53	114	245	528
Cuyamaca Street												
El Nopal to Mast Boulevard, existing	3	30	8,860	35	0.5	3.0%	2.0%	**65**	-	-	110	238
El Nopal to Mast Boulevard, existing + project	4	16	16,530	50	0.5	3.0%	2.0%	**71**	57	123	264	569
El Nopal to Mast Boulevard, Near Term	3	30	9,173	35	0.5	3.0%	2.0%	**65**	-	-	113	244
El Nopal to Mast Boulevard, Near Term + project	4	16	16,843	50	0.5	3.0%	2.0%	**71**	58	124	267	576
El Nopal to Mast Boulevard, Year 2035	4	16	16,500	50	0.5	3.0%	2.0%	**71**	57	122	264	568
El Nopal to Mast Boulevard, Year 2035 + project	4	16	18,680	50	0.5	3.0%	2.0%	**71**	62	133	286	617
Cuyamaca Street												
Mast Boulevard to River Park Drive, existing	4	15	19,600	35	0.5	3.0%	2.0%	**68**	-	85	184	395
Mast Boulevard to River Park Drive, existing + project	4	15	25,420	35	0.5	3.0%	2.0%	**70**	-	101	218	470
Mast Boulevard to River Park Drive, Near Term	4	15	20,527	35	0.5	3.0%	2.0%	**69**	-	88	189	408
Mast Boulevard to River Park Drive, Near Term + project	4	15	26,347	35	0.5	3.0%	2.0%	**70**	-	104	224	482
Mast Boulevard to River Park Drive, Year 2035	4	15	26,600	35	0.5	3.0%	2.0%	**70**	-	104	225	485
Mast Boulevard to River Park Drive, Year 2035 + project	4	15	27,550	35	0.5	3.0%	2.0%	**70**	-	107	230	496
Cuyamaca Street												
River Park Drive to Town Center Parkway, existing	4	15	26,690	35	0.5	3.0%	2.0%	**70**	-	105	225	486
River Park Drive to Town Center Parkway, existing + project	4	15	32,240	35	0.5	3.0%	2.0%	**71**	55	119	256	551
River Park Drive to Town Center Parkway, Near Term	4	15	28,084	35	0.5	3.0%	2.0%	**70**	-	108	233	503
River Park Drive to Town Center Parkway, Near Term + project	4	15	33,634	35	0.5	3.0%	2.0%	**71**	57	122	263	567
River Park Drive to Town Center Parkway, Year 2035	4	15	31,700	35	0.5	3.0%	2.0%	**71**	54	117	253	545
River Park Drive to Town Center Parkway, Year 2035 + project	4	15	32,700	35	0.5	3.0%	2.0%	**71**	56	120	258	556
Cuyamaca Street												
Town Center Parkway to Mission Gorge Road, existing	6	15	21,850	35	0.5	5.0%	3.0%	**72**	68	147	317	684
Town Center Parkway to Mission Gorge Road, existing + project	6	15	26,870	35	0.5	5.0%	3.0%	**73**	78	169	364	785
Town Center Parkway to Mission Gorge Road, Near Term	6	15	24,245	35	0.5	5.0%	3.0%	**72**	73	158	340	733
Town Center Parkway to Mission Gorge Road, Near Term + proj	6	15	29,265	35	0.5	5.0%	3.0%	**73**	83	179	386	831
Town Center Parkway to Mission Gorge Road, Year 2035	6	15	30,100	35	0.5	5.0%	3.0%	**73**	85	182	393	846
Town Center Parkway to Mission Gorge Road, Year 2035 + proje	6	15	31,670	35	0.5	5.0%	3.0%	**74**	88	189	406	876
Magnolia Avenue												
Cuyamaca Street to Princess Joann Road, existing	2	12	DNE	35	0.5	3.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, existing + project	2	12	6,350	35	0.5	3.0%	2.0%	**63**	-	-	77	165
Cuyamaca Street to Princess Joann Road, Near Term	2	12	DNE	35	0.5	3.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, Near Term + project	2	12	6,350	35	0.5	3.0%	2.0%	**63**	-	-	77	165
Cuyamaca Street to Princess Joann Road, Year 2035	2	12	4,300	35	0.5	3.0%	2.0%	**61**	-	-	59	127
Cuyamaca Street to Princess Joann Road, Year 2035 + project	2	12	7,510	35	0.5	3.0%	2.0%	**64**	-	40	86	185
Magnolia Avenue												
Princess Joann Road to Woodglen Vista Drive, existing	4	15	2,020	40	0.5	3.0%	2.0%	**60**	-	-	-	103
Princess Joann Road to Woodglen Vista Drive, existing + project	4	15	8,370	40	0.5	3.0%	2.0%	**66**	-	57	123	265
Princess Joann Road to Woodglen Vista Drive, Near Term	4	15	2,204	40	0.5	3.0%	2.0%	**60**	-	-	-	109
Princess Joann Road to Woodglen Vista Drive, Near Term + proj	4	15	8,554	40	0.5	3.0%	2.0%	**66**	-	58	125	269
Princess Joann Road to Woodglen Vista Drive, Year 2035	4	15	9,500	40	0.5	3.0%	2.0%	**66**	-	62	134	289
Princess Joann Road to Woodglen Vista Drive, Year 2035 + proj	4	15	12,710	40	0.5	3.0%	2.0%	**68**	-	75	163	350
Magnolia Avenue												
Woodglen Vista Drive to El Nopal, existing	4	15	9,030	40	0.5	3.0%	2.0%	**66**	-	60	129	279
Woodglen Vista Drive to El Nopal, existing + project	4	15	15,380	40	0.5	3.0%	2.0%	**69**	-	86	185	398
Woodglen Vista Drive to El Nopal, Near Term	4	15	9,415	40	0.5	3.0%	2.0%	**66**	-	62	133	287
Woodglen Vista Drive to El Nopal, Near Term + project	4	15	15,765	40	0.5	3.0%	2.0%	**69**	-	87	188	404
Woodglen Vista Drive to El Nopal, Year 2035	4	15	13,600	40	0.5	3.0%	2.0%	**68**	-	79	170	367
Woodglen Vista Drive to El Nopal, Year 2035 + project	4	15	16,810	40	0.5	3.0%	2.0%	**69**	-	91	196	422
Magnolia Avenue												
El Nopal to Mast Boulevard, existing	4	15	13,690	40	0.5	3.0%	2.0%	**68**	-	79	171	368
El Nopal to Mast Boulevard, existing + project	4	15	17,390	40	0.5	3.0%	2.0%	**69**	-	93	200	432
El Nopal to Mast Boulevard, Near Term	4	15	14,291	40	0.5	3.0%	2.0%	**68**	-	82	176	379
El Nopal to Mast Boulevard, Near Term + project	4	15	17,991	40	0.5	3.0%	2.0%	**69**	-	95	205	442
El Nopal to Mast Boulevard, Year 2035	4	15	27,300	40	0.5	3.0%	2.0%	**71**	58	126	271	583
El Nopal to Mast Boulevard, Year 2035 + project	4	15	28,330	40	0.5	3.0%	2.0%	**71**	60	129	277	598
State Route 52												
Santo Road to Mast Boulevard, existing	6	60	96,000	65	0.5	2.0%	0.6%	**76**	246	531	1,143	2,462
Santo Road to Mast Boulevard, existing + project	6	60	103,669	65	0.5	2.0%	0.6%	**76**	259	558	1,203	2,592
Santo Road to Mast Boulevard, Near Term	6	60	104,092	65	0.5	2.0%	0.6%	**76**	260	560	1,206	2,599
Santo Road to Mast Boulevard, Near Term + project	6	60	111,761	65	0.5	2.0%	0.6%	**77**	273	587	1,265	2,725
Santo Road to Mast Boulevard, Year 2035	6	60	129,451	65	0.5	2.0%	0.6%	**77**	301	648	1,395	3,006
Santo Road to Mast Boulevard, Year 2035 + project	6	60	137,120	65	0.5	2.0%	0.6%	**77**	312	673	1,450	3,123

Roadway, Segment	Calc Dist	Traffic Volumes: Day	Eve	Night	MTd	HTd	MTe	HTe	MTn	HTn
Mast Boulevard		0	0	0	0	0	0	0	0	0
SR-52 to West Hills Parkway, existing	50	20,544	3,358	2,538	693	471	40	15	60	43
SR-52 to West Hills Parkway, existing + project	50	25,680	4,197	3,173	867	589	50	19	75	53
SR-52 to West Hills Parkway, Near Term	50	23,877	3,903	2,950	806	548	47	17	69	50
SR-52 to West Hills Parkway, Near Term + project	50	29,013	4,742	3,585	979	665	57	21	84	60
SR-52 to West Hills Parkway, Year 2035	50	23,699	3,874	2,928	800	544	46	17	69	49
SR-52 to West Hills Parkway, Year 2035 + project	50	26,395	4,314	3,261	891	605	51	19	77	55
Mast Boulevard		0	0	0	0	0	0	0	0	0
West Hills Parkway to Medina Drive, existing	50	15,183	2,482	1,876	513	348	30	11	44	31
West Hills Parkway to Medina Drive, existing + project	50	22,580	3,691	2,790	762	518	44	17	66	47
West Hills Parkway to Medina Drive, Near Term	50	17,841	2,916	2,204	602	409	35	13	52	37
West Hills Parkway to Medina Drive, Near Term + project	50	25,239	4,125	3,118	852	579	49	18	73	52
West Hills Parkway to Medina Drive, Year 2035	50	22,533	3,683	2,784	761	517	44	16	65	47
West Hills Parkway to Medina Drive, Year 2035 + project	50	26,884	4,394	3,322	908	617	52	20	78	56
Mast Boulevard		0	0	0	0	0	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	50	15,221	2,488	1,881	514	349	30	11	44	32
Pebble Beach Drive to Fanita Parkway, existing + project	50	22,618	3,697	2,795	764	519	44	17	66	47
Pebble Beach Drive to Fanita Parkway, Near Term	50	16,597	2,713	2,051	560	381	32	12	48	34
Pebble Beach Drive to Fanita Parkway, Near Term + project	50	23,995	3,922	2,965	810	550	47	18	70	50
Pebble Beach Drive to Fanita Parkway, Year 2035	50	22,533	3,683	2,784	761	517	44	16	65	47
Pebble Beach Drive to Fanita Parkway, Year 2035 + project	50	26,760	4,374	3,306	903	614	52	20	78	56
Mission Gorge Road		0	0	0	0	0	0	0	0	0
SR-125 to Fanita Drive, existing	50	35,307	5,771	4,362	1,986	1,215	115	39	171	110
SR-125 to Fanita Drive, existing + project	50	39,829	6,510	4,921	2,241	1,370	129	44	193	124
SR-125 to Fanita Drive, Near Term	50	37,316	6,099	4,610	2,099	1,284	121	41	181	116
SR-125 to Fanita Drive, Near Term + project	50	41,838	6,838	5,169	2,354	1,439	136	46	202	130
SR-125 to Fanita Drive, Year 2035	50	38,228	6,248	4,723	2,151	1,315	124	42	185	119
SR-125 to Fanita Drive, Year 2035 + project	50	40,925	6,689	5,056	2,302	1,408	133	45	198	127
Mission Gorge Road		0	0	0	0	0	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	50	31,935	5,220	3,946	1,797	1,099	104	35	155	99
Fanita Drive to Carlton Hills Boulevard, existing + project	50	37,071	6,059	4,580	2,086	1,275	120	41	179	115
Fanita Drive to Carlton Hills Boulevard, Near Term	50	33,434	5,465	4,131	1,881	1,150	109	37	162	104
Fanita Drive to Carlton Hills Boulevard, Near Term + project	50	38,570	6,304	4,765	2,170	1,327	125	42	187	120
Fanita Drive to Carlton Hills Boulevard, Year 2035	50	37,840	6,185	4,675	2,129	1,302	123	41	183	118
Fanita Drive to Carlton Hills Boulevard, Year 2035 + project	50	40,925	6,689	5,056	2,302	1,408	133	45	198	127
Fanita Parkway		0	0	0	0	0	0	0	0	0
Project Site to Ganley Drive, existing	50	######	######	######	######	######	######	######	######	######
Project Site to Ganley Drive, existing + project	50	9,658	1,579	1,193	217	222	13	7	19	20
Project Site to Ganley Drive, Near Term	50	######	######	######	######	######	######	######	######	######
Project Site to Ganley Drive, Near Term + project	50	9,658	1,579	1,193	217	222	13	7	19	20
Project Site to Ganley Drive, Year 2035	50	5,734	937	708	129	132	7	4	11	12
Project Site to Ganley Drive, Year 2035 + project	50	9,658	1,579	1,193	217	222	13	7	19	20
Fanita Parkway		0	0	0	0	0	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	50	2,028	331	251	46	47	3	1	4	4
Ganley Drive to Lake Canyon Road, existing + project	50	11,686	1,910	1,444	263	268	15	9	23	24
Ganley Drive to Lake Canyon Road, Near Term	50	2,162	353	267	49	50	3	2	4	4
Ganley Drive to Lake Canyon Road, Near Term + project	50	11,820	1,932	1,460	266	271	15	9	23	25
Ganley Drive to Lake Canyon Road, Year 2035	50	7,708	1,260	952	173	177	10	6	15	16
Ganley Drive to Lake Canyon Road, Year 2035 + project	50	11,818	1,932	1,460	266	271	15	9	23	25
Fanita Parkway		0	0	0	0	0	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	50	2,999	490	371	67	69	4	2	6	6
Lake Canyon Road to Mast Boulevard, existing + project	50	11,834	1,934	1,462	266	271	15	9	23	25
Lake Canyon Road to Mast Boulevard, Near Term	50	3,231	528	399	73	74	4	2	6	7
Lake Canyon Road to Mast Boulevard, Near Term + project	50	12,065	1,972	1,491	272	277	16	9	23	25
Lake Canyon Road to Mast Boulevard, Year 2035	50	8,477	1,386	1,047	191	194	11	6	16	18
Lake Canyon Road to Mast Boulevard, Year 2035 + project	50	12,067	1,972	1,491	272	277	16	9	23	25
Fanita Parkway		0	0	0	0	0	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	50	2,587	423	320	58	30	3	1	5	3
Mast Boulevard to Carlton Oaks Drive, existing + project	50	5,260	860	650	118	60	7	2	10	5
Mast Boulevard to Carlton Oaks Drive, Near Term	50	2,885	472	356	65	33	4	1	6	3
Mast Boulevard to Carlton Oaks Drive, Near Term + project	50	5,558	908	687	125	64	7	2	11	6
Mast Boulevard to Carlton Oaks Drive, Year 2035	50	4,662	762	576	105	53	6	2	9	5
Mast Boulevard to Carlton Oaks Drive, Year 2035 + project	50	5,750	940	710	129	66	7	2	11	6
Carlton Hills Boulevard		0	0	0	0	0	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	50	19,394	3,170	2,396	655	445	38	14	56	40
Carlton Oaks Drive to Mission Gorge Road, existing + project	50	22,890	3,741	2,828	773	525	45	17	66	47
Carlton Oaks Drive to Mission Gorge Road, Near Term	50	20,197	3,301	2,495	682	463	39	15	59	42
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	50	23,693	3,873	2,927	800	543	46	17	69	49
Carlton Oaks Drive to Mission Gorge Road, Year 2035	50	25,486	4,166	3,149	860	584	50	19	74	53
Carlton Oaks Drive to Mission Gorge Road, Year 2035 + project	50	26,301	4,299	3,250	888	603	51	19	76	55
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Project Site to Magnolia Avenue, existing	50	######	######	######	######	######	######	######	######	######
Project Site to Magnolia Avenue, existing + project	50	10,894	1,781	1,346	245	250	14	8	21	23
Project Site to Magnolia Avenue, Near Term	50	######	######	######	######	######	######	######	######	######
Project Site to Magnolia Avenue, Near Term + project	50	10,894	1,781	1,346	245	250	14	8	21	23
Project Site to Magnolia Avenue, Year 2035	50	6,706	1,096	828	151	154	9	5	13	14
Project Site to Magnolia Avenue, Year 2035 + project	50	10,894	1,781	1,346	245	250	14	8	21	23
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Magnolia Avenue to Princess Joann Road, existing	50	######	######	######	######	######	######	######	######	######
Magnolia Avenue to Princess Joann Road, existing + project	50	5,960	974	736	134	137	8	4	12	12
Magnolia Avenue to Princess Joann Road, Near Term	50	######	######	######	######	######	######	######	######	######
Magnolia Avenue to Princess Joann Road, Near Term + project	50	5,960	974	736	134	137	8	4	12	12
Magnolia Avenue to Princess Joann Road, Year 2035	50	5,284	864	653	119	121	7	4	10	11
Magnolia Avenue to Princess Joann Road, Year 2035 + project	50	6,977	1,140	862	157	160	9	5	14	14
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Princess Joann Road to Chaparral Drive, existing	50	######	######	######	######	######	######	######	######	######
Princess Joann Road to Chaparral Drive, existing + project	50	5,960	974	736	134	137	8	4	12	12
Princess Joann Road to Chaparral Drive, Near Term	50	######	######	######	######	######	######	######	######	######
Princess Joann Road to Chaparral Drive, Near Term + project	50	5,960	974	736	134	137	8	4	12	12
Princess Joann Road to Chaparral Drive, Year 2035	50	7,304	1,194	902	164	168	9	5	14	15
Princess Joann Road to Chaparral Drive, Year 2035 + project	50	8,998	1,471	1,112	202	206	12	7	17	19
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, existing	50	521	85	64	18	12	1	0	2	1
Chaparral Drive to Woodglen Vista Drive, existing + project	50	6,480	1,059	801	219	149	13	5	19	13
Chaparral Drive to Woodglen Vista Drive, Near Term	50	531	87	66	18	12	1	0	2	1
Chaparral Drive to Woodglen Vista Drive, Near Term + project	50	6,490	1,061	802	219	149	13	5	19	13
Chaparral Drive to Woodglen Vista Drive, Year 2035	50	7,304	1,194	902	247	168	14	5	21	15
Chaparral Drive to Woodglen Vista Drive, Year 2035 + project	50	8,998	1,471	1,112	304	206	18	7	26	19
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	50	3,388	554	419	114	78	7	2	10	7
Woodglen Vista Drive to El Nopal, existing + project	50	9,347	1,528	1,155	316	214	18	7	27	19
Woodglen Vista Drive to El Nopal, Near Term	50	3,475	568	429	117	80	7	3	10	7
Woodglen Vista Drive to El Nopal, Near Term + project	50	9,434	1,542	1,166	318	216	18	7	27	20
Woodglen Vista Drive to El Nopal, Year 2035	50	9,790	1,600	1,210	330	225	19	7	28	20
Woodglen Vista Drive to El Nopal, Year 2035 + project	50	11,484	1,877	1,419	388	263	22	8	33	24
Cuyamaca Street		0	0	0	0	0	0	0	0	0
El Nopal to Mast Boulevard, existing	50	6,884	1,125	851	232	158	13	5	20	14
El Nopal to Mast Boulevard, existing + project	50	12,844	2,099	1,587	434	295	25	9	37	27
El Nopal to Mast Boulevard, Near Term	50	7,127	1,165	881	241	163	14	5	21	15
El Nopal to Mast Boulevard, Near Term + project	50	13,087	2,139	1,617	442	300	26	10	38	27
El Nopal to Mast Boulevard, Year 2035	50	12,821	2,096	1,584	433	294	25	9	37	27
El Nopal to Mast Boulevard, Year 2035 + project	50	14,514	2,372	1,793	490	333	28	11	42	30
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Mast Boulevard to River Park Drive, existing	50	15,229	2,489	1,882	514	349	30	11	44	32
Mast Boulevard to River Park Drive, existing + project	50	19,751	3,228	2,440	667	453	39	14	57	41
Mast Boulevard to River Park Drive, Near Term	50	15,949	2,607	1,971	538	366	31	12	46	33
Mast Boulevard to River Park Drive, Near Term + project	50	20,472	3,346	2,529	691	470	40	15	59	42
Mast Boulevard to River Park Drive, Year 2035	50	20,668	3,378	2,554	698	474	40	15	60	43
Mast Boulevard to River Park Drive, Year 2035 + project	50	21,406	3,499	2,645	723	491	42	16	62	44
Cuyamaca Street		0	0	0	0	0	0	0	0	0
River Park Drive to Town Center Parkway, existing	50	20,738	3,390	2,562	700	476	40	15	60	43
River Park Drive to Town Center Parkway, existing + project	50	25,050	4,094	3,095	846	575	49	18	73	52
River Park Drive to Town Center Parkway, Near Term	50	21,821	3,567	2,696	737	500	43	16	63	45
River Park Drive to Town Center Parkway, Near Term + project	50	26,134	4,272	3,229	882	599	51	19	76	54
River Park Drive to Town Center Parkway, Year 2035	50	24,631	4,026	3,043	831	565	48	18	72	51
River Park Drive to Town Center Parkway, Year 2035 + project	50	25,408	4,153	3,139	858	583	50	19	74	53
Cuyamaca Street		0	0	0	0	0	0	0	0	0
Town Center Parkway to Mission Gorge Road, existing	50	16,977	2,775	2,098	955	584	55	19	82	53
Town Center Parkway to Mission Gorge Road, existing + project	50	20,878	3,412	2,580	1,175	718	68	23	101	65
Town Center Parkway to Mission Gorge Road, Near Term	50	18,838	3,079	2,328	1,060	648	61	21	91	59
Town Center Parkway to Mission Gorge Road, Near Term + proj	50	22,739	3,717	2,809	1,279	782	74	25	110	71
Town Center Parkway to Mission Gorge Road, Year 2035	50	23,388	3,823	2,890	1,316	805	76	26	113	73
Town Center Parkway to Mission Gorge Road, Year 2035 + proje	50	24,608	4,022	3,040	1,384	847	80	27	119	77
Magnolia Avenue		0	0	0	0	0	0	0	0	0
Cuyamaca Street to Princess Joann Road, existing	50	######	######	######	######	######	######	######	######	######
Cuyamaca Street to Princess Joann Road, existing + project	50	4,934	806	610	167	113	10	4	14	10
Cuyamaca Street to Princess Joann Road, Near Term	50	######	######	######	######	######	######	######	######	######
Cuyamaca Street to Princess Joann Road, Near Term + project	50	4,934	806	610	167	113	10	4	14	10
Cuyamaca Street to Princess Joann Road, Year 2035	50	3,341	546	413	113	77	7	2	10	7
Cuyamaca Street to Princess Joann Road, Year 2035 + project	50	5,835	954	721	197	134	11	4	17	12
Magnolia Avenue		0	0	0	0	0	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, existing	50	1,570	257	194	53	36	3	1	5	3
Princess Joann Road to Woodglen Vista Drive, existing + project	50	6,503	1,063	804	220	149	13	5	19	13
Princess Joann Road to Woodglen Vista Drive, Near Term	50	1,713	280	212	58	39	3	1	5	4
Princess Joann Road to Woodglen Vista Drive, Near Term + proj	50	6,646	1,086	821	224	152	13	5	19	14
Princess Joann Road to Woodglen Vista Drive, Year 2035	50	7,382	1,207	912	249	169	14	5	21	15
Princess Joann Road to Woodglen Vista Drive, Year 2035 + proj	50	9,876	1,614	1,220	333	226	19	7	29	20
Magnolia Avenue		0	0	0	0	0	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	50	7,016	1,147	867	237	161	14	5	20	15
Woodglen Vista Drive to El Nopal, existing + project	50	11,950	1,953	1,476	403	274	23	9	35	25
Woodglen Vista Drive to El Nopal, Near Term	50	7,315	1,196	904	247	168	14	5	21	15
Woodglen Vista Drive to El Nopal, Near Term + project	50	12,249	2,002	1,513	414	281	24	9	36	25
Woodglen Vista Drive to El Nopal, Year 2035	50	10,567	1,727	1,306	357	242	21	8	31	22
Woodglen Vista Drive to El Nopal, Year 2035 + project	50	13,061	2,135	1,614	441	300	25	10	38	27
Magnolia Avenue		0	0	0	0	0	0	0	0	0
El Nopal to Mast Boulevard, existing	50	10,637	1,739	1,314	359	244	21	8	31	22
El Nopal to Mast Boulevard, existing + project	50	13,512	2,209	1,669	456	310	26	10	39	28
El Nopal to Mast Boulevard, Near Term	50	11,104	1,815	1,372	375	255	22	8	32	23
El Nopal to Mast Boulevard, Near Term + project	50	13,979	2,285	1,727	472	321	27	10	41	29
El Nopal to Mast Boulevard, Year 2035	50	21,212	3,467	2,621	716	486	41	16	62	44
El Nopal to Mast Boulevard, Year 2035 + project	50	22,012	3,598	2,720	743	505	43	16	64	46
State Route 52		0	0	0	0	0	0	0	0	0
Santo Road to Mast Boulevard, existing	100	74,592	12,192	9,216	1,679	513	97	16	144	46
Santo Road to Mast Boulevard, existing + project	100	80,551	13,166	9,952	1,813	554	105	18	156	50
Santo Road to Mast Boulevard, Near Term	100	80,879	13,220	9,993	1,820	556	105	18	157	50
Santo Road to Mast Boulevard, Near Term + project	100	86,838	14,194	10,729	1,954	597	113	19	168	54
Santo Road to Mast Boulevard, Year 2035	100	######	16,440	12,427	2,264	692	131	22	195	63
Santo Road to Mast Boulevard, Year 2035 + project	100	######	17,414	13,164	2,398	733	138	23	206	66

Roadway, Segment	Ref. Energy Leve: A	MT	HT	Dist: Adj	Ld: A	MT	HT	Total	Le: A	MT	HT	Total	Ln: A	MT	HT	Total	DISTANCE TO CONTOUR (2): 70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-52 to West Hills Parkway, existing	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.2	66.6	56.4	57.0	67.4	55.6	54.6	57.9	61.0	62	134	288	620
SR-52 to West Hills Parkway, existing + project	67.4	76.3	81.2	1.4	70.5	65.0	68.1	73.2	67.6	57.4	58.0	68.4	56.5	55.5	58.9	62.0	72	155	334	719
SR-52 to West Hills Parkway, Near Term	67.4	76.3	81.2	1.4	70.2	64.7	67.8	72.9	67.3	57.1	57.7	68.1	56.2	55.2	58.6	61.7	69	148	318	685
SR-52 to West Hills Parkway, Near Term + project	67.4	76.3	81.2	1.4	71.0	65.5	68.7	73.7	68.1	57.9	58.5	68.9	57.1	56.1	59.4	62.5	78	168	362	780
SR-52 to West Hills Parkway, Year 2035	67.4	76.3	81.2	1.4	70.1	64.6	67.8	72.8	67.3	57.0	57.6	68.1	56.2	55.2	58.6	61.7	68	147	316	682
SR-52 to West Hills Parkway, Year 2035 + project	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.7	57.5	58.1	68.5	56.7	55.6	59.0	62.1	73	158	340	733
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
West Hills Parkway to Medina Drive, existing	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
West Hills Parkway to Medina Drive, existing + project	67.4	76.3	81.2	0.9	69.4	63.9	67.1	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	608
West Hills Parkway to Medina Drive, Near Term	67.4	76.3	81.2	0.9	68.4	62.9	66.0	71.1	65.5	55.3	55.9	66.3	54.4	53.4	56.8	59.9	52	112	241	520
West Hills Parkway to Medina Drive, Near Term + project	67.4	76.3	81.2	0.9	69.9	64.4	67.5	72.6	67.0	56.8	57.4	67.8	55.9	54.9	58.3	61.4	65	141	304	655
West Hills Parkway to Medina Drive, Year 2035	67.4	76.3	81.2	0.9	69.4	63.9	67.0	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	607
West Hills Parkway to Medina Drive, Year 2035 + project	67.4	76.3	81.2	0.9	70.2	64.6	67.8	72.9	67.3	57.1	57.6	68.1	56.2	55.2	58.6	61.7	68	147	317	683
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + project	67.4	76.3	81.2	0.9	69.4	63.9	67.1	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	283	609
Pebble Beach Drive to Fanita Parkway, Near Term	67.4	76.3	81.2	0.9	68.1	62.6	65.7	70.8	65.2	55.0	55.6	66.0	54.1	53.1	56.5	59.6	50	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + project	67.4	76.3	81.2	0.9	69.7	64.2	67.3	72.4	66.8	56.6	57.2	67.6	55.7	54.7	58.1	61.2	63	136	294	633
Pebble Beach Drive to Fanita Parkway, Year 2035	67.4	76.3	81.2	0.9	69.4	63.9	67.0	72.1	66.5	56.3	56.9	67.3	55.4	54.4	57.8	60.9	61	131	282	607
Pebble Beach Drive to Fanita Parkway, Year 2035 + project	67.4	76.3	81.2	0.9	70.1	64.6	67.8	72.8	67.3	57.0	57.6	68.1	56.2	55.2	58.6	61.6	68	147	316	681
Mission Gorge Road	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-125 to Fanita Drive, existing	69.3	77.6	82.1	2.6	74.4	70.6	72.9	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.4	151	325	699	1507
SR-125 to Fanita Drive, existing + project	69.3	77.6	82.1	2.6	74.9	71.1	73.5	78.2	72.1	63.5	63.3	73.2	63.3	61.6	64.2	68.0	163	352	758	1633
SR-125 to Fanita Drive, Near Term	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.9	63.1	61.3	63.9	67.7	156	337	726	1563
SR-125 to Fanita Drive, Near Term + project	69.3	77.6	82.1	2.6	75.1	71.3	73.7	78.4	72.3	63.7	63.5	73.4	63.6	61.8	64.4	68.2	169	364	783	1687
SR-125 to Fanita Drive, Year 2035	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	71.9	63.3	63.1	73.0	63.2	61.5	64.1	67.8	159	342	737	1589
SR-125 to Fanita Drive, Year 2035 + project	69.3	77.6	82.1	2.6	75.0	71.2	73.6	78.3	72.2	63.6	63.4	73.3	63.5	61.7	64.3	68.1	166	358	772	1663
Mission Gorge Road	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.5	62.3	72.2	62.4	60.7	63.3	67.0	141	304	654	1409
Fanita Drive to Carlton Hills Boulevard, existing + project	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.8	63.0	61.3	63.9	67.7	156	335	722	1557
Fanita Drive to Carlton Hills Boulevard, Near Term	69.3	77.6	82.1	2.6	74.1	70.3	72.7	77.4	71.4	62.7	62.5	72.4	62.6	60.9	63.5	67.2	145	313	674	1453
Fanita Drive to Carlton Hills Boulevard, Near Term + project	69.3	77.6	82.1	2.6	74.8	70.9	73.3	78.0	72.0	63.4	63.2	73.0	63.2	61.5	64.1	67.8	160	344	742	1598
Fanita Drive to Carlton Hills Boulevard, Year 2035	69.3	77.6	82.1	2.6	74.7	70.9	73.2	78.0	71.9	63.3	63.1	72.9	63.1	61.4	64.0	67.7	158	340	732	1578
Fanita Drive to Carlton Hills Boulevard, Year 2035 + project	69.3	77.6	82.1	2.6	75.0	71.2	73.6	78.3	72.2	63.6	63.4	73.3	63.5	61.7	64.3	68.1	166	358	772	1663
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Ganley Drive, existing	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, existing + project	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.5	62.8	49.1	48.2	53.4	55.6	29	62	135	290
Project Site to Ganley Drive, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Ganley Drive, Near Term + project	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.5	62.8	49.1	48.2	53.4	55.6	29	62	135	290
Project Site to Ganley Drive, Year 2035	67.4	76.3	81.2	0.1	62.8	55.4	60.4	65.2	59.8	47.9	50.2	60.5	46.8	46.0	51.1	53.4	20	44	95	205
Project Site to Ganley Drive, Year 2035 + project	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.5	62.8	49.1	48.2	53.4	55.6	29	62	135	290
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	67.4	76.3	81.2	-0.1	58.0	50.7	55.7	60.5	55.1	43.1	45.5	55.8	42.1	41.3	46.4	48.7	10	21	46	99
Ganley Drive to Lake Canyon Road, existing + project	71.1	78.8	83.0	0.8	69.3	60.7	65.0	71.1	66.4	53.1	54.9	66.9	53.4	51.3	55.8	58.7	49	107	230	495
Ganley Drive to Lake Canyon Road, Near Term	67.4	76.3	81.2	-0.1	58.3	51.0	55.9	60.8	55.4	43.4	45.8	56.1	42.4	41.5	46.7	48.9	10	22	48	104
Ganley Drive to Lake Canyon Road, Near Term + project	71.1	78.8	83.0	0.8	69.4	60.8	65.1	71.2	66.5	53.2	54.9	66.9	53.5	51.3	55.9	58.7	50	107	231	499
Ganley Drive to Lake Canyon Road, Year 2035	67.4	76.3	81.2	-0.1	63.8	56.5	61.5	66.3	60.9	48.9	51.3	61.6	47.9	47.1	52.2	54.5	24	52	112	242
Ganley Drive to Lake Canyon Road, Year 2035 + project	71.1	78.8	83.0	0.8	69.4	60.8	65.1	71.2	66.5	53.2	54.9	66.9	53.5	51.3	55.9	58.7	50	107	231	499
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	67.4	76.3	81.2	-0.1	59.7	52.4	57.4	62.2	56.8	44.8	47.2	57.5	43.8	43.0	48.1	50.4	13	28	60	129
Lake Canyon Road to Mast Boulevard, existing + project	71.1	78.8	83.0	0.8	69.4	60.8	65.1	71.2	66.5	53.2	54.9	67.0	53.5	51.3	55.9	58.7	50	107	232	499
Lake Canyon Road to Mast Boulevard, Near Term	67.4	76.3	81.2	-0.1	60.1	52.7	57.7	62.5	57.2	45.2	47.5	57.8	44.1	43.3	48.4	50.7	14	29	63	135
Lake Canyon Road to Mast Boulevard, Near Term + project	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.3	66.6	53.3	55.0	67.0	53.5	51.4	55.9	58.8	51	109	235	505
Lake Canyon Road to Mast Boulevard, Year 2035	67.4	76.3	81.2	-0.1	64.3	56.9	61.9	66.7	61.3	49.4	51.7	62.0	48.3	47.5	52.6	54.9	26	56	120	258
Lake Canyon Road to Mast Boulevard, Year 2035 + project	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.3	66.6	53.3	55.0	67.0	53.5	51.4	55.9	58.8	51	109	235	505
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	65.1	74.8	80.0	-0.1	57.5	50.9	53.2	59.5	54.5	43.3	43.0	55.1	41.7	41.4	43.9	47.3	8	18	39	84
Mast Boulevard to Carlton Oaks Drive, existing + project	65.1	74.8	80.0	-0.1	60.6	54.0	56.2	62.6	57.6	46.4	46.1	58.2	44.8	44.5	47.0	50.4	13	29	62	135
Mast Boulevard to Carlton Oaks Drive, Near Term	65.1	74.8	80.0	-0.1	58.0	51.4	53.6	60.0	55.0	43.8	43.5	55.6	42.2	41.9	44.4	47.8	9	19	42	90
Mast Boulevard to Carlton Oaks Drive, Near Term + project	65.1	74.8	80.0	-0.1	60.8	54.2	56.5	62.8	57.8	46.6	46.3	58.4	45.1	44.7	47.3	50.6	14	30	65	140
Mast Boulevard to Carlton Oaks Drive, Year 2035	65.1	74.8	80.0	-0.1	60.0	53.4	55.7	62.1	57.1	45.9	45.6	57.7	44.3	44.0	46.5	49.8	12	27	58	124
Mast Boulevard to Carlton Oaks Drive, Year 2035 + project	65.1	74.8	80.0	-0.1	61.0	54.3	56.6	63.0	58.0	46.8	46.5	58.6	45.2	44.9	47.4	50.8	14	31	66	143
Carlton Hills Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	65.1	74.8	80.0	0.3	66.5	61.8	65.3	69.7	63.7	54.2	55.2	64.6	52.6	52.3	56.1	58.8	43	92	199	428
Carlton Oaks Drive to Mission Gorge Road, existing + project	65.1	74.8	80.0	0.3	67.3	62.5	66.1	70.5	64.4	54.9	55.9	65.4	53.3	53.1	56.8	59.5	48	103	222	478
Carlton Oaks Drive to Mission Gorge Road, Near Term	65.1	74.8	80.0	0.3	66.7	62.0	65.5	69.9	63.8	54.4	55.3	64.8	52.8	52.5	56.3	59.0	44	95	204	440
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	65.1	74.8	80.0	0.3	67.4	62.7	66.2	70.6	64.5	55.1	56.0	65.5	53.5	53.2	57.0	59.7	49	105	227	489
Carlton Oaks Drive to Mission Gorge Road, Year 2035	65.1	74.8	80.0	0.3	67.7	63.0	66.5	70.9	64.8	55.4	56.4	65.8	53.8	53.5	57.3	60.0	51	111	238	514
Carlton Oaks Drive to Mission Gorge Road, Year 2035 + project	65.1	74.8	80.0	0.3	67.9	63.1	66.7	71.1	65.0	55.5	56.5	66.0	53.9	53.7	57.4	60.1	52	113	244	525
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Magnolia Avenue, existing	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, existing + project	67.4	76.3	81.2	0.1	65.5	58.1	63.1	67.9	62.5	50.6	52.9	63.2	49.5	48.7	53.8	56.1	31	67	144	310
Project Site to Magnolia Avenue, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, Near Term + project	67.4	76.3	81.2	0.1	65.5	58.1	63.1	67.9	62.5	50.6	52.9	63.2	49.5	48.7	53.8	56.1	31	67	144	310
Project Site to Magnolia Avenue, Year 2035	67.4	76.3	81.2	0.1	63.4	56.0	61.0	65.8	60.4	48.4	50.8	61.1	47.4	46.6	51.7	54.0	22	48	104	224
Project Site to Magnolia Avenue, Year 2035 + project	67.4	76.3	81.2	0.1	65.5	58.1	63.1	67.9	62.5	50.6	52.9	63.2	49.5	48.7	53.8	56.1	31	67	144	310
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Magnolia Avenue to Princess Joann Road, existing	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, existing + project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.1	51.2	53.5	21	45	96	207
Magnolia Avenue to Princess Joann Road, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, Near Term + project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.1	51.2	53.5	21	45	96	207
Magnolia Avenue to Princess Joann Road, Year 2035	67.4	76.3	81.2	0.1	62.3	55.0	59.9	64.8	59.4	47.4	49.8	60.1	46.4	45.5	50.7	52.9	19	41	89	191
Magnolia Avenue to Princess Joann Road, Year 2035 + project	67.4	76.3	81.2	0.1	63.5	56.2	61.1	66.0	60.6	48.6	51.0	61.3	47.6	46.8	51.9	54.1	23	50	107	230
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Chaparral Drive, existing	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, existing + project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.1	51.2	53.5	21	45	96	207
Princess Joann Road to Chaparral Drive, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, Near Term + project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.1	51.2	53.5	21	45	96	207
Princess Joann Road to Chaparral Drive, Year 2035	67.4	76.3	81.2	0.1	63.7	56.4	61.3	66.2	60.8	48.8	51.2	61.5	47.8	46.9	52.1	54.3	24	51	110	237
Princess Joann Road to Chaparral Drive, Year 2035 + project	67.4	76.3	81.2	0.1	64.6	57.3	62.2	67.1	61.7	49.7	52.1	62.4	48.7	47.9	53.0	55.2	27	59	127	273
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, existing	65.1	74.8	80.0	0.9	51.4	46.7	50.2	54.6	48.5	39.1	40.0	49.5	37.4	37.2	41.0	43.7	4	9	19	42
Chaparral Drive to Woodglen Vista Drive, existing + project	71.1	78.8	83.0	0.9	66.8	60.0	62.6	68.8	63.9	52.4	52.4	64.5	52.9	50.6	53.3	57.2	36	78	167	360
Chaparral Drive to Woodglen Vista Drive, Near Term	65.1	74.8	80.0	0.9	51.5	46.7	50.3	54.7	48.6	39.2	40.1	49.6	37.5	37.3	41.0	43.8	4	9	20	42
Chaparral Drive to Woodglen Vista Drive, Near Term + project	71.1	78.8	83.0	0.9	66.8	60.0	62.6	68.8	63.9	52.4	52.4	64.5	52.9	50.6	53.3	57.2	36	78	167	361
Chaparral Drive to Woodglen Vista Drive, Year 2035	71.1	78.8	83.0	0.9	67.3	60.5	63.1	69.3	64.4	53.0	52.9	65.0	53.4	51.1	53.9	57.7	39	84	181	390
Chaparral Drive to Woodglen Vista Drive, Year 2035 + project	71.1	78.8	83.0	0.9	68.2	61.4	64.0	70.2	65.4	53.9	53.8	65.9	54.3	52.0	54.8	58.6	45	97	208	449
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	65.1	74.8	80.0	0.9	59.5	54.8	58.3	62.7	56.6	47.2	48.2	57.6	45.6	45.3	49.1	51.8	15	31	68	146
Woodglen Vista Drive to El Nopal, existing + project	71.1	78.8	83.0	0.9	68.4	61.6	64.2	70.4	65.5	54.0	54.0	66.1	54.4	52.2	54.9	58.8	46	99	214	460
Woodglen Vista Drive to El Nopal, Near Term	65.1	74.8	80.0	0.9	59.6	54.9	58.4	62.9	56.8	47.3	48.3	57.7	45.7	45.4	49.2	51.9	15	32	69	149
Woodglen Vista Drive to El Nopal, Near Term + project	71.1	78.8	83.0	0.9	68.4	61.7	64.2	70.4	65.6	54.1	54.0	66.1	54.5	52.2	55.0	58.8	46	100	215	463
Woodglen Vista Drive to El Nopal, Year 2035	71.1	78.8	83.0	0.9	68.6	61.8	64.4	70.6	65.7	54.2	54.2	66.3	54.6	52.4	55.1	59.0	47	102	220	474
Woodglen Vista Drive to El Nopal, Year 2035 + project	71.1	78.8	83.0	0.9	69.3	62.5	65.1	71.3	66.4	54.9	54.9	67.0	55.3	53.1	55.8	59.7	53	114	245	528
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	65.1	74.8	80.0	1.0	62.7	58.0	61.5	65.9	59.8	50.4	51.3	60.8	48.8	48.5	52.3	55.0	24	51	110	238
El Nopal to Mast Boulevard, existing + project	71.1	78.8	83.0	0.9	69.8	63.0	65.5	71.8	66.9	55.4	55.4	67.5	55.8	53.5	56.3	60.2	57	123	264	569
El Nopal to Mast Boulevard, Near Term	65.1	74.8	80.0	1.0	62.9	58.1	61.7	66.1	60.0	50.5	51.5	61.0	48.9	48.7	52.4	55.1	24	52	113	244
El Nopal to Mast Boulevard, Near Term + project	71.1	78.8	83.0	0.9	69.9	63.1	65.6	71.9	67.0	55.5	55.5	67.6	55.9	53.6	56.4	60.2	58	124	267	576
El Nopal to Mast Boulevard, Year 2035	71.1	78.8	83.0	0.9	69.8	63.0	65.5	71.8	66.9	55.4	55.4	67.5	55.8	53.5	56.3	60.1	57	122	264	568
El Nopal to Mast Boulevard, Year 2035 + project	71.1	78.8	83.0	0.9	70.3	63.5	66.1	72.3	67.4	55.9	55.9	68.0	56.4	54.1	56.8	60.7	62	133	286	617
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to River Park Drive, existing	65.1	74.8	80.0	0.9	66.0	61.3	64.8	69.2	63.1	53.7	54.6	64.1	52.1	51.8	55.6	58.3	40	85	184	395
Mast Boulevard to River Park Drive, existing + project	65.1	74.8	80.0	0.9	67.1	62.4	65.9	70.4	64.3	54.8	55.8	65.2	53.2	52.9	56.7	59.4	47	101	218	470
Mast Boulevard to River Park Drive, Near Term	65.1	74.8	80.0	0.9	66.2	61.5	65.0	69.4	63.3	53.9	54.8	64.3	52.3	52.0	55.8	58.5	41	88	189	408
Mast Boulevard to River Park Drive, Near Term + project	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.5	64.4	55.0	55.9	65.4	53.3	53.1	56.9	59.6	48	104	224	482
Mast Boulevard to River Park Drive, Year 2035	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.6	64.5	55.0	56.0	65.4	53.4	53.1	56.9	59.6	48	104	225	485
Mast Boulevard to River Park Drive, Year 2035 + project	65.1	74.8	80.0	0.9	67.5	62.8	66.3	70.7	64.6	55.2	56.1	65.6	53.5	53.3	57.1	59.8	50	107	230	496
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
River Park Drive to Town Center Parkway, existing	65.1	74.8	80.0	0.9	67.4	62.6	66.2	70.6	64.5	55.0	56.0	65.5	53.4	53.2	56.9	59.6	49	105	225	486
River Park Drive to Town Center Parkway, existing + project	65.1	74.8	80.0	0.9	68.2	63.4	67.0	71.4	65.3	55.8	56.8	66.3	54.2	54.0	57.7	60.4	55	119	256	551
River Park Drive to Town Center Parkway, Near Term	65.1	74.8	80.0	0.9	67.6	62.8	66.4	70.8	64.7	55.3	56.2	65.7	53.6	53.4	57.1	59.8	50	108	233	503
River Park Drive to Town Center Parkway, Near Term + project	65.1	74.8	80.0	0.9	68.4	63.6	67.2	71.6	65.5	56.0	57.0	66.5	54.4	54.2	57.9	60.6	57	122	263	567
River Park Drive to Town Center Parkway, Year 2035	65.1	74.8	80.0	0.9	68.1	63.4	66.9	71.3	65.2	55.8	56.7	66.2	54.1	53.9	57.7	60.4	54	117	253	545
River Park Drive to Town Center Parkway, Year 2035 + project	65.1	74.8	80.0	0.9	68.2	63.5	67.0	71.4	65.4	55.9	56.9	66.3	54.3	54.0	57.8	60.5	56	120	258	556
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Town Center Parkway to Mission Gorge Road, existing	65.1	74.8	80.0	2.6	68.0	65.7	68.8	72.5	65.3	58.1	58.6	66.8	56.5	56.2	59.5	62.5	68	147	317	684
Town Center Parkway to Mission Gorge Road, existing + project	65.1	74.8	80.0	2.6	68.9	66.6	69.7	73.3	66.2	59.0	59.5	67.7	57.4	57.1	60.4	63.4	78	169	364	785
Town Center Parkway to Mission Gorge Road, Near Term	65.1	74.8	80.0	2.6	68.5	66.1	69.2	72.9	65.7	58.5	59.0	67.2	56.9	56.7	60.0	62.9	73	158	340	733
Town Center Parkway to Mission Gorge Road, Near Term + proj	65.1	74.8	80.0	2.6	69.3	66.9	70.0	73.7	66.5	59.4	59.9	68.0	57.8	57.5	60.8	63.7	83	179	386	831
Town Center Parkway to Mission Gorge Road, Year 2035	65.1	74.8	80.0	2.6	69.4	67.1	70.2	73.8	66.7	59.5	60.0	68.1	57.9	57.6	60.9	63.9	85	182	393	846
Town Center Parkway to Mission Gorge Road, Year 2035 + proje	65.1	74.8	80.0	2.6	69.7	67.3	70.4	74.1	66.9	59.7	60.2	68.4	58.1	57.8	61.1	64.1	88	189	406	876
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Cuyamaca Street to Princess Joann Road, existing	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, existing + project	65.1	74.8	80.0	0.1	60.3	55.6	59.1	63.5	57.4	48.0	49.0	58.4	46.4	46.1	49.9	52.6	17	36	77	165
Cuyamaca Street to Princess Joann Road, Near Term	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, Near Term + project	65.1	74.8	80.0	0.1	60.3	55.6	59.1	63.5	57.4	48.0	49.0	58.4	46.4	46.1	49.9	52.6	17	36	77	165
Cuyamaca Street to Princess Joann Road, Year 2035	65.1	74.8	80.0	0.1	58.6	53.9	57.4	61.8	55.8	46.3	47.3	56.7	44.7	44.4	48.2	50.9	13	27	59	127
Cuyamaca Street to Princess Joann Road, Year 2035 + project	65.1	74.8	80.0	0.1	61.1	56.3	59.9	64.3	58.2	48.7	49.7	59.2	47.1	46.9	50.6	53.3	18	40	86	185
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, existing	67.4	76.3	81.2	0.9	57.8	52.3	55.5	60.5	54.9	44.7	45.3	55.7	43.9	42.9	46.2	49.3	10	22	48	103
Princess Joann Road to Woodglen Vista Drive, existing + project	67.4	76.3	81.2	0.9	64.0	58.5	61.6	66.7	61.1	50.9	51.5	61.9	50.0	49.0	52.4	55.5	27	57	123	265
Princess Joann Road to Woodglen Vista Drive, Near Term	67.4	76.3	81.2	0.9	58.2	52.7	55.9	60.9	55.3	45.1	45.7	56.1	44.2	43.2	46.6	49.7	11	23	51	109
Princess Joann Road to Woodglen Vista Drive, Near Term + proj	67.4	76.3	81.2	0.9	64.1	58.6	61.7	66.8	61.2	51.0	51.6	62.0	50.1	49.1	52.5	55.6	27	58	125	269
Princess Joann Road to Woodglen Vista Drive, Year 2035	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.7	51.4	52.0	62.5	50.6	49.6	53.0	56.1	29	62	134	289
Princess Joann Road to Woodglen Vista Drive, Year 2035 + proj	67.4	76.3	81.2	0.9	65.8	60.3	63.5	68.5	62.9	52.7	53.3	63.7	51.8	50.8	54.2	57.3	35	75	163	350
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	67.4	76.3	81.2	0.9	64.3	58.8	62.0	67.0	61.4	51.2	51.8	62.2	50.4	49.4	52.7	55.8	28	60	129	279
Woodglen Vista Drive to El Nopal, existing + project	67.4	76.3	81.2	0.9	66.6	61.1	64.3	69.3	63.7	53.5	54.1	64.6	52.7	51.7	55.1	58.1	40	86	185	398
Woodglen Vista Drive to El Nopal, Near Term	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.6	51.4	52.0	62.4	50.5	49.5	52.9	56.0	29	62	133	287
Woodglen Vista Drive to El Nopal, Near Term + project	67.4	76.3	81.2	0.9	66.7	61.2	64.4	69.4	63.9	53.6	54.2	64.7	52.8	51.8	55.2	58.3	40	87	188	404
Woodglen Vista Drive to El Nopal, Year 2035	67.4	76.3	81.2	0.9	66.1	60.6	63.8	68.8	63.2	53.0	53.6	64.0	52.1	51.1	54.5	57.6	37	79	170	367
Woodglen Vista Drive to El Nopal, Year 2035 + project	67.4	76.3	81.2	0.9	67.0	61.5	64.7	69.7	64.1	53.9	54.5	64.9	53.1	52.1	55.4	58.5	42	91	196	422
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	67.4	76.3	81.2	0.9	66.1	60.6	63.8	68.8	63.2	53.0	53.6	64.1	52.2	51.2	54.6	57.6	37	79	171	368
El Nopal to Mast Boulevard, existing + project	67.4	76.3	81.2	0.9	67.2	61.7	64.8	69.9	64.3	54.1	54.7	65.1	53.2	52.2	55.6	58.7	43	93	200	432
El Nopal to Mast Boulevard, Near Term	67.4	76.3	81.2	0.9	66.3	60.8	64.0	69.0	63.4	53.2	53.8	64.2	52.4	51.4	54.7	57.8	38	82	176	379
El Nopal to Mast Boulevard, Near Term + project	67.4	76.3	81.2	0.9	67.3	61.8	65.0	70.0	64.4	54.2	54.8	65.2	53.4	52.4	55.7	58.8	44	95	205	442
El Nopal to Mast Boulevard, Year 2035	67.4	76.3	81.2	0.9	69.1	63.6	66.8	71.8	66.2	56.0	56.6	67.0	55.2	54.2	57.5	60.6	58	126	271	583
El Nopal to Mast Boulevard, Year 2035 + project	67.4	76.3	81.2	0.9	69.3	63.8	66.9	72.0	66.4	56.2	56.8	67.2	55.3	54.3	57.7	60.8	60	129	277	598
State Route 52	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Santo Road to Mast Boulevard, existing	75.5	81.7	85.2	-3.2	76.7	66.6	64.9	77.4	73.8	59.0	54.7	74.0	61.1	57.1	55.7	63.3	246	531	1143	2462
Santo Road to Mast Boulevard, existing + project	75.5	81.7	85.2	-3.2	77.1	66.9	65.2	77.7	74.1	59.3	55.1	74.3	61.4	57.4	56.0	63.7	259	558	1203	2592
Santo Road to Mast Boulevard, Near Term	75.5	81.7	85.2	-3.2	77.1	66.9	65.3	77.7	74.1	59.3	55.1	74.3	61.4	57.5	56.0	63.7	260	560	1206	2599
Santo Road to Mast Boulevard, Near Term + project	75.5	81.7	85.2	-3.2	77.4	67.2	65.6	78.1	74.4	59.6	55.4	74.6	61.7	57.8	56.3	64.0	273	587	1265	2725
Santo Road to Mast Boulevard, Year 2035	75.5	81.7	85.2	-3.2	78.0	67.9	66.2	78.7	75.1	60.3	56.0	75.3	62.4	58.4	57.0	64.6	301	648	1395	3006
Santo Road to Mast Boulevard, Year 2035 + project	75.5	81.7	85.2	-3.2	78.3	68.1	66.5	78.9	75.3	60.5	56.3	75.5	62.6	58.7	57.2	64.9	312	673	1450	3123

Proposed Project Trip % on SR-52 29%
No School Trip Generation 26445
No School Scenarion Trips on SR-52 7669

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Appendix D. FHWA Noise Prediction Model Results – Average Construction Volumes

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 1501144001
Project Name: Fanita Ranch - Proposed Project (with school)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, January 2019
Community Noise Descriptor: L_{dn}: X CNEL: ____

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition / Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Ldn at 50 Feet	Distance to Contour 70 Ldn	65 Ldn	60 Ldn	55 Ldn	Calc Dist	Traffic Volumes Day	Eve	Night	MTd	HTd	MTe	HTe	MTn	HTn	Ref. Energy Leve A	MT	HT	Dist Adj	Ld A	MT	HT	Total	Le A	MT	HT	Total	Ln A	MT	HT	Total	DISTANCE TO CONTOUR (2) 70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-52 to West Hills Parkway, existing	4	25	26,440	40	0.5	3.0%	2.0%	71	62	134	288	620	50	20,544	3,358	2,538	693	471	40	15	60	43	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.2	66.6	56.4	57.0	67.4	55.6	54.6	57.9	61.0	62	134	288	620
SR-52 to West Hills Parkway, existing + construction	4	25	26,590	40	0.5	3.0%	2.0%	71	62	134	289	622	50	20,660	3,377	2,553	697	474	40	15	60	43	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.3	66.7	56.5	57.0	67.5	55.6	54.6	58.0	61.1	62	134	289	622
SR-52 to West Hills Parkway, Near Term	4	25	30,730	40	0.5	3.0%	2.0%	72	69	148	318	685	50	23,877	3,903	2,950	806	548	47	17	69	50	67.4	76.3	81.2	1.4	70.2	64.7	67.8	72.9	67.3	57.1	57.7	68.1	56.2	55.2	58.6	61.7	69	148	318	685
SR-52 to West Hills Parkway, Near Term + 50 % project	4	25	34,015	40	0.5	3.0%	2.0%	72	73	158	340	733	50	26,430	4,320	3,265	892	606	52	19	77	55	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.7	57.5	58.1	68.5	56.7	55.7	59.0	62.1	73	158	340	733
SR-52 to West Hills Parkway, Near Term + project	4	25	37,300	40	0.5	3.0%	2.0%	73	78	168	362	780	50	28,982	4,737	3,581	978	665	57	21	84	60	67.4	76.3	81.2	1.4	71.0	65.5	68.7	73.7	68.1	57.9	58.5	68.9	57.1	56.1	59.4	62.5	78	168	362	780
SR-52 to West Hills Parkway, Near Term + 50% project + constru	4	25	34,165	40	0.5	3.0%	2.0%	73	74	158	341	735	50	26,546	4,339	3,280	896	609	52	19	77	55	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.8	57.5	58.1	68.6	56.7	55.7	59.1	62.1	74	158	341	735
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
West Hills Parkway to Medina Drive, existing	4	15	19,540	40	0.5	3.0%	2.0%	70	-	101	217	467	50	15,183	2,482	1,876	513	348	30	11	44	31	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
West Hills Parkway to Medina Drive, existing + construction	4	15	19,690	40	0.5	3.0%	2.0%	70	-	101	218	469	50	15,299	2,501	1,890	516	351	30	11	44	32	67.4	76.3	81.2	0.9	67.7	62.2	65.4	70.4	64.8	54.6	55.2	65.6	53.8	52.7	56.1	59.2	47	101	218	469
West Hills Parkway to Medina Drive, Near Term	4	15	22,962	40	0.5	3.0%	2.0%	70	52	112	241	520	50	17,841	2,916	2,204	602	409	35	13	52	37	67.4	76.3	81.2	0.9	68.4	62.9	66.0	71.1	65.5	55.3	55.9	66.3	54.4	53.4	56.8	59.9	52	112	241	520
West Hills Parkway to Medina Driv, Near Term + 50 % project	4	15	27,692	40	0.5	3.0%	2.0%	71	59	127	273	589	50	21,517	3,517	2,658	726	493	42	16	62	45	67.4	76.3	81.2	0.9	69.2	63.7	66.8	71.9	66.3	56.1	56.7	67.1	55.2	54.2	57.6	60.7	59	127	273	589
West Hills Parkway to Medina Drive, Near Term + project	4	15	32,422	40	0.5	3.0%	2.0%	72	65	141	304	654	50	25,192	4,118	3,113	850	578	49	18	73	52	67.4	76.3	81.2	0.9	69.9	64.4	67.5	72.6	67.0	56.8	57.4	67.8	55.9	54.9	58.3	61.4	65	141	304	654
West Hills Parkway to Medina Driv, Near Term + 50% project + c	4	15	27,842	40	0.5	3.0%	2.0%	71	59	127	274	591	50	21,633	3,536	2,673	730	496	42	16	63	45	67.4	76.3	81.2	0.9	69.2	63.7	66.9	71.9	66.3	56.1	56.7	67.1	55.3	54.2	57.6	60.7	59	127	274	591
Mast Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	4	15	19,590	40	0.5	3.0%	2.0%	70	-	101	217	467	50	15,221	2,488	1,881	514	349	30	11	44	32	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + construction	4	15	19,740	40	0.5	3.0%	2.0%	70	-	101	218	470	50	15,338	2,507	1,895	518	352	30	11	45	32	67.4	76.3	81.2	0.9	67.7	62.2	65.4	70.4	64.8	54.6	55.2	65.6	53.8	52.8	56.1	59.2	47	101	218	470
Pebble Beach Drive to Fanita Parkway, Near Term	4	15	21,361	40	0.5	3.0%	2.0%	70	-	107	230	495	50	16,597	2,713	2,051	560	381	32	12	48	34	67.4	76.3	81.2	0.9	68.1	62.6	65.7	70.8	65.2	55.0	55.6	66.0	54.1	53.1	56.5	59.6	50	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + 50 % projec	4	15	26,091	40	0.5	3.0%	2.0%	71	57	122	263	566	50	20,273	3,314	2,505	684	465	40	15	59	42	67.4	76.3	81.2	0.9	68.9	63.4	66.6	71.6	66.0	55.8	56.4	66.9	55.0	54.0	57.4	60.4	57	122	263	566
Pebble Beach Drive to Fanita Parkway, Near Term + project	4	15	30,821	40	0.5	3.0%	2.0%	72	63	136	294	632	50	23,948	3,914	2,959	808	549	47	18	70	50	67.4	76.3	81.2	0.9	69.7	64.1	67.3	72.4	66.8	56.6	57.1	67.6	55.7	54.7	58.1	61.2	63	136	294	632
Pebble Beach Drive to Fanita Parkway, Near Term + 50% projec	4	15	26,241	40	0.5	3.0%	2.0%	71	57	122	264	568	50	20,389	3,333	2,519	688	468	40	15	59	42	67.4	76.3	81.2	0.9	69.0	63.4	66.6	71.7	66.1	55.9	56.4	66.9	55.0	54.0	57.4	60.5	57	122	264	568
Mission Gorge Road														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-125 to Fanita Drive, existing	6	15	45,440	45	0.5	5.0%	3.0%	77	151	325	699	1,507	50	35,307	5,771	4,362	1,986	1,215	115	39	171	110	69.3	77.6	82.1	2.6	74.4	70.6	72.9	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.4	151	325	699	1507
SR-125 to Fanita Drive, existing + construction	6	15	45,590	45	0.5	5.0%	3.0%	77	151	325	701	1,510	50	35,423	5,790	4,377	1,993	1,219	115	39	171	110	69.3	77.6	82.1	2.6	74.4	70.6	73.0	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.5	151	325	701	1510
SR-125 to Fanita Drive, Near Term	6	15	48,026	45	0.5	5.0%	3.0%	77	156	337	726	1,563	50	37,316	6,099	4,610	2,099	1,284	121	41	181	116	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.9	63.1	61.3	63.9	67.7	156	337	726	1563
SR-125 to Fanita Drive, Near Term + 50 % project	6	15	50,916	45	0.5	5.0%	3.0%	78	163	350	755	1,626	50	39,562	6,466	4,888	2,226	1,361	129	43	191	123	69.3	77.6	82.1	2.6	74.9	71.1	73.4	78.2	72.1	63.5	63.3	73.1	63.3	61.6	64.2	67.9	163	350	755	1626
SR-125 to Fanita Drive, Near Term + project	6	15	53,806	45	0.5	5.0%	3.0%	78	169	363	783	1,686	50	41,807	6,833	5,165	2,352	1,438	136	46	202	130	69.3	77.6	82.1	2.6	75.1	71.3	73.7	78.4	72.3	63.7	63.5	73.4	63.6	61.8	64.4	68.2	169	363	783	1686
SR-125 to Fanita Drive, Near Term + 50% project + construction	6	15	51,066	45	0.5	5.0%	3.0%	78	163	351	756	1,629	50	39,678	6,485	4,902	2,232	1,365	129	44	192	123	69.3	77.6	82.1	2.6	74.9	71.1	73.4	78.2	72.1	63.5	63.3	73.1	63.3	61.6	64.2	68.0	163	351	756	1629
Mission Gorge Road														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	6	15	41,100	45	0.5	5.0%	3.0%	77	141	304	654	1,409	50	31,935	5,220	3,946	1,797	1,099	104	35	155	99	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.5	62.3	72.2	62.4	60.7	63.3	67.0	141	304	654	1409
Fanita Drive to Carlton Hills Boulevard, existing + construction	6	15	41,250	45	0.5	5.0%	3.0%	77	141	304	656	1,413	50	32,051	5,239	3,960	1,803	1,103	104	35	155	100	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.6	62.4	72.2	62.4	60.7	63.3	67.0	141	304	656	1413
Fanita Drive to Carlton Hills Boulevard, Near Term	6	15	43,029	45	0.5	5.0%	3.0%	77	145	313	674	1,453	50	33,434	5,465	4,131	1,881	1,150	109	37	162	104	69.3	77.6	82.1	2.6	74.1	70.3	72.7	77.4	71.4	62.7	62.5	72.4	62.6	60.9	63.5	67.2	145	313	674	1453
Fanita Drive to Carlton Hills Boulevard, Near Term + 50 % projec	6	15	46,314	45	0.5	5.0%	3.0%	77	153	329	708	1,526	50	35,986	5,882	4,446	2,025	1,238	117	39	174	112	69.3	77.6	82.1	2.6	74.5	70.6	73.0	77.7	71.7	63.1	62.9	72.7	62.9	61.2	63.8	67.5	153	329	708	1526
Fanita Drive to Carlton Hills Boulevard, Near Term + project	6	15	49,599	45	0.5	5.0%	3.0%	78	160	344	741	1,597	50	38,538	6,299	4,762	2,168	1,326	125	42	186	120	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	72.0	63.4	63.2	73.0	63.2	61.5	64.1	67.8	160	344	741	1597
Fanita Drive to Carlton Hills Boulevard, Near Term + 50% project	6	15	46,464	45	0.5	5.0%	3.0%	77	153	329	710	1,529	50	36,103	5,901	4,461	2,031	1,242	117	40	175	112	69.3	77.6	82.1	2.6	74.5	70.7	73.0	77.8	71.7	63.1	62.9	72.7	62.9	61.2	63.8	67.5	153	329	710	1529
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project site to Ganley Drive, existing	2	15	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, existing + construction	2	15	150	40	0.5	2.0%	2.0%	47	-	-	-	-	50	117	19	14	3	3	0	0	0	0	67.4	76.3	81.2	0.1	45.8	38.5	43.4	48.3	42.9	30.9	33.3	43.6	29.9	29.1	34.2	36.5	2	3	7	15
Project site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, Near Term + 50 % project	2	15	6,175	40	0.5	2.0%	2.0%	63	-	-	84	182	50	4,798	784	593	108	110	6	4	9	10	67.4	76.3	81.2	0.1	62.0	54.7	59.6	64.4	59.1	47.1	49.4	59.8	46.1	45.2	50.4	52.6	18	39	84	182
Project site to Ganley Drive, Near Term + project	2	15	12,350	40	0.5	2.0%	2.0%	66	-	62	134	289	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.4	62.8	49.1	48.2	53.4	55.6	29	62	134	289
Project site to Ganley Drive, Near Term + 50% project + construc	2	15	6,325	40	0.5	2.0%	2.0%	64	-	40	86	185	50	4,915	803	607	111	113	6	4	10	10	67.4	76.3	81.2	0.1	62.1	54.8	59.7	64.5	59.2	47.2	49.5	59.9	46.2	45.3	50.5	52.7	18	40	86	185
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	2	0	2,610	40	0.5	2.0%	2.0%	59	-	-	46	99	50	2,028	331	251	46	47	3	1	4	4	67.4	76.3	81.2	-0.1	58.0	50.7	55.7	60.5	55.1	43.1	45.5	55.8	42.1	41.3	46.4	48.7	10	21	46	99
Ganley Drive to Lake Canyon Road, existing + construction	3	14	2,760	50	0.5	2.0%	2.0%	62	-	-	69	150	50	2,145	351	265	48	49	3	2	4	4	71.1	78.8	83.0	0.4	61.5	52.9	57.2	63.3	58.6	45.4	47.1	59.1	45.6	43.5	48.0	50.9	15	32	69	150
Ganley Drive to Lake Canyon Road, Near Term	2	0	2,782	40	0.5	2.0%	2.0%	60	-	-	48	104	50	2,162	353	267	49	50	3	2	4	4	67.4	76.3	81.2	-0.1	58.3	51.0	55.9	60.8	55.4	43.4	45.8	56.1	42.4	41.5	46.7	48.9	10	22	48	104
Ganley Drive to Lake Canyon Road, Near Term + 50 % project	3	14	8,957	50	0.5	2.0%	2.0%	67	-	71	152	328	50	6,960	1,138	860	157	160	9	5	13	14	71.1	78.8	83.0	0.4	66.7	58.1	62.4	68.4	63.7	50.5	52.2	64.2	50.7	48.6	53.1	56.0	33	71	152	328
Ganley Drive to Lake Canyon Road, Near Term + project	3	14	15,132	50	0.5	2.0%	2.0%	70	47	100	216	465	50	11,758	1,922	1,453	265	270	15	9	23	24	71.1	78.8	83.0	0.4	68.9	60.3	64.6	70.7	66.0	52.7	54.5	66.5	53.0	50.9	55.4	58.3	47	100	216	465
Ganley Drive to Lake Canyon Road, Near Term + 50% project +	3	14	9,107	50	0.5	2.0%	2.0%	67	-	71	154	332	50	7,076	1,157	874	159	162	9	5	14	15	71.1	78.8	83.0	0.4	66.7	58.1	62.4	68.5	63.8	50.5	52.3	64.3	50.8	48.7	53.2	56.0	33	71	154	332
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	2	0	3,860	40	0.5	2.0%	2.0%	61	-	-	60	129	50	2,999	490	371	67	69	4	2	6	6	67.4	76.3	81.2	-0.1	59.7	52.4	57.4	62.2	56.8	44.8	47.2	57.5	43.8	43.0	48.1	50.4	13	28	60	129
Lake Canyon Road to Mast Boulevard, existing + construction	4	14	4,010	50	0.5	2.0%	2.0%	64	-	-	95	205	50	3,116	509	385	70	71	4	2	6	6	71.1	78.8	83.0	0.8	63.6	55.0	59.3	65.4	60.7	47.4	49.1	61.2	47.7	45.5	50.1	52.9	20	44	95	205
Lake Canyon Road to Mast Boulevard, Near Term	2	0	4,158	40	0.5	2.0%	2.0%	61	-	-	63	135	50	3,231	528	399	73	74	4	2	6	7	67.4	76.3	81.2	-0.1	60.1	52.7	57.7	62.5	57.2	45.2	47.5	57.8	44.1	43.3	48.4	50.7	14	29	63	135
Lake Canyon Road to Mast Boulevard, Near Term + 50 % projec	4	14	9,808	50	0.5	2.0%	2.0%	68	-	80	173	372	50	7,621	1,246	942	172	175	10	6	15	16	71.1	78.8	83.0	0.8	67.5	58.9	63.2	69.3	64.6	51.3	53.0	65.0	51.6	49.4	53.9	56.8	37	80	173	372
Lake Canyon Road to Mast Boulevard, Near Term + project	4	14	15,458	50	0.5	2.0%	2.0%	70	-	109	234	504	50	12,011	1,963	1,484	270	275	16	9	23	25	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.2	66.5	53.3	55.0	67.0	53.5	51.4	55.9	58.8	50	109	234	504
Lake Canyon Road to Mast Boulevard, Near Term + 50% project	4	14	9,958	50	0.5	2.0%	2.0%	68	-	81	174	376	50	7,737	1,265	956	174	177	10	6	15	16	71.1	78.8	83.0	0.8	67.5	58.9	63.3	69.3	64.6	51.4	53.1	65.1	51.6	49.5	54.0	56.9	38	81	174	376
Fanita Parkway														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	2	0	3,330	35	0.5	2.0%	1.0%	58	-	-	39	84	50	2,587	423	320	58	30	3	1	5	3	65.1	74.8	80.0	-0.1	57.5	50.9	53.2	59.5	54.5	43.3	43.0	55.1	41.7	41.4	43.9	47.3	8	18	39	84
Mast Boulevard to Carlton Oaks Drive, existing + construction	2	0	3,480	35	0.5	2.0%	1.0%	59	-	-	40	86	50	2,704	442	334	61	31	4	1	5	3	65.1	74.8	80.0	-0.1	57.7	51.1	53.4	59.7	54.7	43.5	43.2	55.3	41.9	41.6	44.1	47.5	9	19	40	86
Mast Boulevard to Carlton Oaks Drive, Near Term	2	0	3,713	35	0.5	2.0%	1.0%	59	-	-	42	90	50	2,885	472	356	65	33	4	1	6	3	65.1	74.8	80.0	-0.1	58.0	51.4	53.6	60.0	55.0	43.8	43.5	55.6	42.2	41.9	44.4	47.8	9	19	42	90
Mast Boulevard to Carlton Oaks Drive, Near Term + 50 % projec	2	0	5,423	35	0.5	2.0%	1.0%	60	-	-	54	116	50	4,214	689	521	95	48	5	2	8	4	65.1	74.8	80.0	-0.1	59.6	53.0	55.3	61.6	56.6	45.4	45.1	57.2	43.9	43.5	46.1	49.4	12	25	54	116
Mast Boulevard to Carlton Oaks Drive, Near Term + project	2	0	7,133	35	0.5	2.0%	1.0%	62	-	-	65	139	50	5,542	906	685	125	64	7	2	11	6	65.1	74.8	80.0	-0.1	60.8	54.2	56.5	62.8	57.8	46.6	46.3	58.4	45.1	44.7	47.2	50.6	14	30	65	139
Mast Boulevard to Carlton Oaks Drive, Near Term + 50% project	2	0	5,573	35	0.5	2.0%	1.0%	61	-	-	55	118	50	4,330	708	535	97	50	6	2	8	4	65.1	74.8	80.0	-0.1	59.7	53.1	55.4	61.7	56.8	45.5	45.2	57.4	44.0	43.7	46.2	49.5	12	25	55	118
Carlton Hills Boulevard														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	4	0	24,960	35	0.5	3.0%	2.0%	69	-	92	199	428	50	19,394	3,170	2,396	655	445	38	14	56	40	65.1	74.8	80.0	0.3	66.5	61.8	65.3	69.7	63.7	54.2	55.2	64.6	52.6	52.3	56.1	58.8	43	92	199	428
Carlton Oaks Drive to Mission Gorge Road, existing + constructic	4	0	25,110	35	0.5	3.0%	2.0%	69	-	93	200	430	50	19,510	3,189	2,411	659	447	38	14	57	40	65.1	74.8	80.0	0.3	66.6	61.8	65.4	69.8	63.7	54.2	55.2	64.7	52.6	52.4	56.1	58.8	43	93	200	430
Carlton Oaks Drive to Mission Gorge Road, Near Term	4	0	25,993	35	0.5	3.0%	2.0%	69	-	95	204	440	50	20,197	3,301	2,495	682	463	39	15	59	42	65.1	74.8	80.0	0.3	66.7	62.0	65.5	69.9	63.8	54.4	55.3	64.8	52.8	52.5	56.3	59.0	44	95	204	440
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50 % p	4	0	28,228	35	0.5	3.0%	2.0%	70	46	100	216	465	50	21,933	3,585	2,710	740	503	43	16	64	46	65.1	74.8	80.0	0.3	67.1	62.3	65.9	70.3	64.2	54.7	55.7	65.2	53.1	52.9	56.6	59.3	46	100	216	465
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	4	0	30,463	35	0.5	3.0%	2.0%	70	49	105	227	489	50	23,670	3,869	2,924	799	543	46	17	69	49	65.1	74.8	80.0	0.3	67.4	62.7	66.2	70.6	64.5	55.1	56.0	65.5	53.4	53.2	57.0	59.7	49	105	227	489
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50% pr	4	0	28,378	35	0.5	3.0%	2.0%	70	47	101	217	467	50	22,050	3,604	2,724	744	506	43	16	64	46	65.1	74.8	80.0	0.3	67.1	62.3	65.9	70.3	64.2	54.8	55.7	65.2	53.1	52.9	56.7	59.4	47	101	217	467
State Route 52														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Santo Road to Mast Boulevard, existing	6	60	96,000	65	0.5	2.0%	0.6%	76	246	531	1,143	2,462	100	74,592	12,192	9,216	1,679	513	97	16	144	46	75.5	81.7	85.2	-3.2	76.7	66.6	64.9	77.4	73.8	59.0	54.7	74.0	61.1	57.1	55.7	63.3	246	531	1143	2462
Santo Road to Mast Boulevard, existing + construction	6	60	96,150	65	0.5	2.0%	0.6%	76	247	531	1,144	2,465	100	74,709	12,211	9,230	1,681	514	97	16	145	46	75.5	81.7	85.2	-3.2	76.7	66.6	64.9	77.4	73.8	59.0	54.8	74.0	61.1	57.1	55.7	63.4	247	531	1144	2465
Santo Road to Mast Boulevard, Near Term	6	60	104,092	65	0.5	2.0%	0.6%	76	260	560	1,206	2,599	100	80,879	13,220	9,993	1,820	556	105	18	157	50	75.5	81.7	85.2	-3.2	77.1	66.9	65.3	77.7	74.1	59.3	55.1	74.3	61.4	57.5	56.0	63.7	260	560	1206	2599
Santo Road to Mast Boulevard, Near Term + 50 % project	6	60	109,079	65	0.5	2.0%	0.6%	76	268	578	1,245	2,681	100	84,754	13,853	10,472	1,907	583	110	19	164	53	75.5	81.7	85.2	-3.2	77.3	67.1	65.5	77.9	74.3	59.5	55.3	74.5	61.6	57.7	56.2	63.9	268	578	1245	2681
Santo Road to Mast Boulevard, Near Term + project	6	60	114,066	65	0.5	2.0%	0.6%	77	276	595	1,282	2,762	100	88,629	14,486	10,950	1,995	610	115	19	172	55	75.5	81.7	85.2	-3.2	77.5	67.3	65.7	78.1	74.5	59.7	55.5	74.7	61.8	57.9	56.4	64.1	276	595	1282	2762
Santo Road to Mast Boulevard, Near Term + 50% project + cons	6	60	109,229	65	0.5	2.0%	0.6%	76	268	578	1,246	2,684	100	84,871	13,872	10,486	1,910	584	110	19	164	53	75.5	81.7	85.2	-3.2	77.3	67.1	65.5	78.0	74.3	59.5	55.3	74.5	61.6	57.7	56.2	63.9	268	578	1246	2684
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Magnolia Avenue, existing	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, existing + project	2	10	13,920	40	0.5	2.0%	2.0%	67	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Project Site to Magnolia Avenue, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, Near Term + 50% project	2	10	6,960	40	0.5	2.0%	2.0%	64	-	42	90	194	50	5,408	884	668	122	124	7	4	10	11	67.4	76.3	81.2	0.1	62.4	55.1	60.0	64.9	59.5	47.5	49.9	60.2	46.5	45.6	50.8	53.0	19	42	90	194
Project Site to Magnolia Avenue, Near Term + Project	2	10	13,920	40	0.5	2.0%	2.0%	67	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Project Site to Magnolia Avenue, Near Term + 50% project + con	2	10	7,110	40	0.5	2.0%	2.0%	64	-	42	92	197	50	5,524	903	683	124	127	7	4	11	11	67.4	76.3	81.2	0.1	62.5	55.2	60.1	65.0	59.6	47.6	50.0	60.3	46.6	45.7	50.9	53.1	20	42	92	197
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Magnolia Avenue to Princess Joann Road, existing	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, existing + project	2	10	7,620	40	0.5	2.0%	2.0%	64	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Magnolia Avenue to Princess Joann Road, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	2	10	3,810	40	0.5	2.0%	2.0%	61	-	-	60	130	50	2,960	484	366	67	68	4	2	6	6	67.4	76.3	81.2	0.1	59.8	52.5	57.4	62.3	56.9	44.9	47.2	57.6	43.9	43.0	48.2	50.4	13	28	60	130
Magnolia Avenue to Princess Joann Road, Near Term + Project	2	10	7,620	40	0.5	2.0%	2.0%	64	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	2	10	3,960	40	0.5	2.0%	2.0%	61	-	-	62	133	50	3,077	503	380	69	71	4	2	6	6	67.4	76.3	81.2	0.1	60.0	52.6	57.6	62.4	57.1	45.1	47.4	57.7	44.0	43.2	48.3	50.6	13	29	62	133
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Chaparral Drive, existing	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, existing + project	2	10	7,620	40	0.5	2.0%	2.0%	64	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Princess Joann Road to Chaparral Drive, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	2	10	3,810	40	0.5	2.0%	2.0%	61	-	-	60	130	50	2,960	484	366	67	68	4	2	6	6	67.4	76.3	81.2	0.1	59.8	52.5	57.4	62.3	56.9	44.9	47.2	57.6	43.9	43.0	48.2	50.4	13	28	60	130
Princess Joann Road to Chaparral Drive, Near Term + Project	2	10	7,620	40	0.5	2.0%	2.0%	64	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	2	10	3,960	40	0.5	2.0%	2.0%	61	-	-	62	133	50	3,077	503	380	69	71	4	2	6	6	67.4	76.3	81.2	0.1	60.0	52.6	57.6	62.4	57.1	45.1	47.4	57.7	44.0	43.2	48.3	50.6	13	29	62	133
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, existing	2	40	670	35	0.5	3.0%	2.0%	54	-	-	-	-	50	521	85	64	18	12	1	0	2	1	65.1	74.8	80.0	0.9	51.4	46.7	50.2	54.6	48.5	39.1	40.0	49.5	37.4	37.2	41.0	43.7	4	9	19	42
Chaparral Drive to Woodglen Vista Drive, existing + project	4	16	8,290	50	0.5	3.0%	2.0%	68	-	77	167	359	50	6,441	1,053	796	217	148	13	5	19	13	71.1	78.8	83.0	0.9	66.8	60.0	62.5	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	167	359
Chaparral Drive to Woodglen Vista Drive, Near Term	2	40	683	35	0.5	3.0%	2.0%	54	-	-	-	-	50	531	87	66	18	12	1	0	2	1	65.1	74.8	80.0	0.9	51.5	46.7	50.3	54.7	48.6	39.2	40.1	49.6	37.5	37.3	41.0	43.8	4	9	20	42
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	4	16	4,493	50	0.5	3.0%	2.0%	65	-	-	111	239	50	3,491	571	431	118	80	7	3	10	7	71.1	78.8	83.0	0.9	64.1	57.3	59.9	66.1	61.2	49.8	49.7	61.8	50.2	47.9	50.6	54.5	24	51	111	239
Chaparral Drive to Woodglen Vista Drive, Near Term + Project	4	16	8,303	50	0.5	3.0%	2.0%	68	-	77	167	359	50	6,451	1,054	797	218	148	13	5	19	13	71.1	78.8	83.0	0.9	66.8	60.0	62.6	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	167	359
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	4	16	4,643	50	0.5	3.0%	2.0%	65	-	53	113	244	50	3,608	590	446	122	83	7	3	10	7	71.1	78.8	83.0	0.9	64.3	57.5	60.0	66.3	61.4	49.9	49.9	62.0	50.3	48.0	50.8	54.6	24	53	113	244
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	2	40	4,360	35	0.5	3.0%	2.0%	62	-	-	68	146	50	3,388	554	419	114	78	7	2	10	7	65.1	74.8	80.0	0.9	59.5	54.8	58.3	62.7	56.6	47.2	48.2	57.6	45.6	45.3	49.1	51.8	15	31	68	146
Woodglen Vista Drive to El Nopal, existing + project	4	16	11,980	50	0.5	3.0%	2.0%	69	-	99	213	459	50	9,308	1,521	1,150	314	213	18	7	27	19	71.1	78.8	83.0	0.9	68.4	61.6	64.1	70.4	65.5	54.0	54.0	66.1	54.4	52.1	54.9	58.8	46	99	213	459
Woodglen Vista Drive to El Nopal, Near Term	2	40	4,472	35	0.5	3.0%	2.0%	62	-	-	69	149	50	3,475	568	429	117	80	7	3	10	7	65.1	74.8	80.0	0.9	59.6	54.9	58.4	62.9	56.8	47.3	48.3	57.7	45.7	45.4	49.2	51.9	15	32	69	149
Woodglen Vista Drive to El Nopal, Near Term + 50% project	4	16	8,282	50	0.5	3.0%	2.0%	68	-	77	166	359	50	6,435	1,052	795	217	148	13	5	19	13	71.1	78.8	83.0	0.9	66.8	60.0	62.5	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	166	359
Woodglen Vista Drive to El Nopal, Near Term + Project	4	16	12,092	50	0.5	3.0%	2.0%	69	-	99	214	462	50	9,395	1,536	1,161	317	215	18	7	27	19	71.1	78.8	83.0	0.9	68.4	61.6	64.2	70.4	65.5	54.1	54.0	66.1	54.5	52.2	54.9	58.8	46	99	214	462
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	4	16	8,432	50	0.5	3.0%	2.0%	68	-	78	168	363	50	6,552	1,071	809	221	150	13	5	19	14	71.1	78.8	83.0	0.9	66.9	60.1	62.6	68.9	64.0	52.5	52.5	64.6	52.9	50.6	53.4	57.2	36	78	168	363
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	3	30	8,860	35	0.5	3.0%	2.0%	65	-	-	110	238	50	6,884	1,125	851	232	158	13	5	20	14	65.1	74.8	80.0	1.0	62.7	58.0	61.5	65.9	59.8	50.4	51.3	60.8	48.8	48.5	52.3	55.0	24	51	110	238
El Nopal to Mast Boulevard, existing + project	4	16	16,480	50	0.5	3.0%	2.0%	71	57	122	263	567	50	12,805	2,093	1,582	432	294	25	9	37	27	71.1	78.8	83.0	0.9	69.8	63.0	65.5	71.8	66.9	55.4	55.4	67.5	55.8	53.5	56.3	60.1	57	122	263	567
El Nopal to Mast Boulevard, Near Term	3	30	9,173	35	0.5	3.0%	2.0%	65	-	-	113	244	50	7,127	1,165	881	241	163	14	5	21	15	65.1	74.8	80.0	1.0	62.9	58.1	61.7	66.1	60.0	50.5	51.5	61.0	48.9	48.7	52.4	55.1	24	52	113	244
El Nopal to Mast Boulevard, Near Term + 50% project	4	16	12,983	50	0.5	3.0%	2.0%	70	-	104	225	484	50	10,088	1,649	1,246	341	231	20	7	29	21	71.1	78.8	83.0	0.9	68.7	61.9	64.5	70.7	65.9	54.4	54.3	66.4	54.8	52.5	55.3	59.1	48	104	225	484
El Nopal to Mast Boulevard, Near Term + Project	4	16	16,793	50	0.5	3.0%	2.0%	71	57	124	267	575	50	13,048	2,133	1,612	440	299	25	10	38	27	71.1	78.8	83.0	0.9	69.9	63.1	65.6	71.9	67.0	55.5	55.4	67.5	55.9	53.6	56.4	60.2	57	124	267	575
El Nopal to Mast Boulevard, Near Term + 50% project + construc	4	16	13,133	50	0.5	3.0%	2.0%	70	-	105	226	488	50	10,204	1,668	1,261	344	234	20	7	30	21	71.1	78.8	83.0	0.9	68.8	62.0	64.5	70.8	65.9	54.4	54.4	66.5	54.8	52.5	55.3	59.2	49	105	226	488
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to River Park Drive, existing	4	15	19,600	35	0.5	3.0%	2.0%	68	-	85	184	395	50	15,229	2,489	1,882	514	349	30	11	44	32	65.1	74.8	80.0	0.9	66.0	61.3	64.8	69.2	63.1	53.7	54.6	64.1	52.1	51.8	55.6	58.3	40	85	184	395
Mast Boulevard to River Park Drive, existing + project	4	15	25,380	35	0.5	3.0%	2.0%	70	-	101	218	470	50	19,720	3,223	2,436	666	452	38	14	57	41	65.1	74.8	80.0	0.9	67.1	62.4	65.9	70.3	64.3	54.8	55.8	65.2	53.2	52.9	56.7	59.4	47	101	218	470
Mast Boulevard to River Park Drive, Near Term	4	15	20,527	35	0.5	3.0%	2.0%	69	-	88	189	408	50	15,949	2,607	1,971	538	366	31	12	46	33	65.1	74.8	80.0	0.9	66.2	61.5	65.0	69.4	63.3	53.9	54.8	64.3	52.3	52.0	55.8	58.5	41	88	189	408
Mast Boulevard to River Park Drive, Near Term + 50% project	4	15	23,417	35	0.5	3.0%	2.0%	69	-	96	207	445	50	18,195	2,974	2,248	614	417	35	13	53	38	65.1	74.8	80.0	0.9	66.8	62.0	65.6	70.0	63.9	54.5	55.4	64.9	52.8	52.6	56.3	59.1	45	96	207	445
Mast Boulevard to River Park Drive, Near Term + Project	4	15	26,307	35	0.5	3.0%	2.0%	70	-	104	223	481	50	20,441	3,341	2,525	690	469	40	15	59	42	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.5	64.4	55.0	55.9	65.4	53.3	53.1	56.9	59.6	48	104	223	481
Mast Boulevard to River Park Drive, Near Term + 50% project + (	4	15	23,567	35	0.5	3.0%	2.0%	69	-	96	208	447	50	18,312	2,993	2,262	618	420	36	13	53	38	65.1	74.8	80.0	0.9	66.8	62.1	65.6	70.0	63.9	54.5	55.4	64.9	52.9	52.6	56.4	59.1	45	96	208	447
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
River Park Drive to Town Center Parkway, existing	4	15	26,690	35	0.5	3.0%	2.0%	70	-	105	225	486	50	20,738	3,390	2,562	700	476	40	15	60	43	65.1	74.8	80.0	0.9	67.4	62.6	66.2	70.6	64.5	55.0	56.0	65.5	53.4	53.2	56.9	59.6	49	105	225	486
River Park Drive to Town Center Parkway, existing + project	4	15	32,210	35	0.5	3.0%	2.0%	71	55	119	256	551	50	25,027	4,091	3,092	845	574	49	18	73	52	65.1	74.8	80.0	0.9	68.2	63.4	67.0	71.4	65.3	55.8	56.8	66.3	54.2	54.0	57.7	60.4	55	119	256	551
River Park Drive to Town Center Parkway, Near Term	4	15	28,084	35	0.5	3.0%	2.0%	70	-	108	233	503	50	21,821	3,567	2,696	737	500	43	16	63	45	65.1	74.8	80.0	0.9	67.6	62.8	66.4	70.8	64.7	55.3	56.2	65.7	53.6	53.4	57.1	59.8	50	108	233	503
River Park Drive to Town Center Parkway, Near Term + 50% prc	4	15	30,844	35	0.5	3.0%	2.0%	70	53	115	248	535	50	23,966	3,917	2,961	809	550	47	18	70	50	65.1	74.8	80.0	0.9	68.0	63.2	66.8	71.2	65.1	55.7	56.6	66.1	54.0	53.8	57.5	60.3	53	115	248	535
River Park Drive to Town Center Parkway, Near Term + Project	4	15	33,604	35	0.5	3.0%	2.0%	71	57	122	263	566	50	26,110	4,268	3,226	881	599	51	19	76	54	65.1	74.8	80.0	0.9	68.4	63.6	67.2	71.6	65.5	56.0	57.0	66.5	54.4	54.2	57.9	60.6	57	122	263	566
River Park Drive to Town Center Parkway, Near Term + 50% prc	4	15	30,994	35	0.5	3.0%	2.0%	70	54	116	249	537	50	24,082	3,936	2,975	813	552	47	18	70	50	65.1	74.8	80.0	0.9	68.0	63.3	66.8	71.2	65.1	55.7	56.6	66.1	54.1	53.8	57.6	60.3	54	116	249	537
Cuyamaca Street														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Town Center Parkway to Mission Gorge Road, existing	6	15	21,850	35	0.5	5.0%	3.0%	72	68	147	317	684	50	16,977	2,775	2,098	955	584	55	19	82	53	65.1	74.8	80.0	2.6	68.0	65.7	68.8	72.5	65.3	58.1	58.6	66.8	56.5	56.2	59.5	62.5	68	147	317	684
Town Center Parkway to Mission Gorge Road, existing + project	6	15	26,840	35	0.5	5.0%	3.0%	73	78	169	364	784	50	20,855	3,409	2,577	1,173	717	68	23	101	65	65.1	74.8	80.0	2.6	68.9	66.6	69.7	73.3	66.2	59.0	59.5	67.6	57.4	57.1	60.4	63.4	78	169	364	784
Town Center Parkway to Mission Gorge Road, Near Term	6	15	24,245	35	0.5	5.0%	3.0%	72	73	158	340	733	50	18,838	3,079	2,328	1,060	648	61	21	91	59	65.1	74.8	80.0	2.6	68.5	66.1	69.2	72.9	65.7	58.5	59.0	67.2	56.9	56.7	60.0	62.9	73	158	340	733
Town Center Parkway to Mission Gorge Road, Near Term + 50%	6	15	26,740	35	0.5	5.0%	3.0%	73	78	169	363	782	50	20,777	3,396	2,567	1,169	715	68	23	101	65	65.1	74.8	80.0	2.6	68.9	66.6	69.6	73.3	66.2	59.0	59.5	67.6	57.4	57.1	60.4	63.3	78	169	363	782
Town Center Parkway to Mission Gorge Road, Near Term + Proj	6	15	29,235	35	0.5	5.0%	3.0%	73	83	179	385	830	50	22,716	3,713	2,807	1,278	781	74	25	110	71	65.1	74.8	80.0	2.6	69.3	66.9	70.0	73.7	66.5	59.4	59.9	68.0	57.8	57.5	60.8	63.7	83	179	385	830
Town Center Parkway to Mission Gorge Road, Near Term + 50%	6	15	26,890	35	0.5	5.0%	3.0%	73	79	169	364	785	50	20,894	3,415	2,581	1,175	719	68	23	101	65	65.1	74.8	80.0	2.6	68.9	66.6	69.7	73.4	66.2	59.0	59.5	67.7	57.4	57.1	60.4	63.4	79	169	364	785
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Cuyamaca Street to Princess Joann Road, existing	2	15	DNE	35	0.5	3.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, existing + project	2	15	6,310	35	0.5	3.0%	2.0%	63	-	-	77	166	50	4,903	801	606	166	112	10	4	14	10	65.1	74.8	80.0	0.1	60.4	55.6	59.2	63.6	57.5	48.0	49.0	58.5	46.4	46.2	49.9	52.6	17	36	77	166
Cuyamaca Street to Princess Joann Road, Near Term	2	15	DNE	35	0.5	3.0%	2.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, Near Term + 50% prc	2	15	3,155	35	0.5	3.0%	2.0%	60	-	-	49	105	50	2,451	401	303	83	56	5	2	7	5	65.1	74.8	80.0	0.1	57.3	52.6	56.1	60.6	54.5	45.0	46.0	55.5	43.4	43.1	46.9	49.6	10	23	49	105
Cuyamaca Street to Princess Joann Road, Near Term + Project	2	15	6,310	35	0.5	3.0%	2.0%	63	-	-	77	166	50	4,903	801	606	166	112	10	4	14	10	65.1	74.8	80.0	0.1	60.4	55.6	59.2	63.6	57.5	48.0	49.0	58.5	46.4	46.2	49.9	52.6	17	36	77	166
Cuyamaca Street to Princess Joann Road, Near Term + Project ·	2	15	3,305	35	0.5	3.0%	2.0%	60	-	-	50	108	50	2,568	420	317	87	59	5	2	7	5	65.1	74.8	80.0	0.1	57.6	52.8	56.3	60.8	54.7	45.2	46.2	55.7	43.6	43.4	47.1	49.8	11	23	50	108
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, existing	4	15	2,020	40	0.5	3.0%	2.0%	60	-	-	-	103	50	1,570	257	194	53	36	3	1	5	3	67.4	76.3	81.2	0.9	57.8	52.3	55.5	60.5	54.9	44.7	45.3	55.7	43.9	42.9	46.2	49.3	10	22	48	103
Princess Joann Road to Woodglen Vista Drive, existing + project	4	15	8,330	40	0.5	3.0%	2.0%	66	-	57	123	264	50	6,472	1,058	800	218	148	13	5	19	13	67.4	76.3	81.2	0.9	64.0	58.5	61.6	66.7	61.1	50.9	51.5	61.9	50.0	49.0	52.4	55.5	26	57	123	264
Princess Joann Road to Woodglen Vista Drive, Near Term	4	15	2,204	40	0.5	3.0%	2.0%	60	-	-	-	109	50	1,713	280	212	58	39	3	1	5	4	67.4	76.3	81.2	0.9	58.2	52.7	55.9	60.9	55.3	45.1	45.7	56.1	44.2	43.2	46.6	49.7	11	23	51	109
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	4	15	5,359	40	0.5	3.0%	2.0%	64	-	-	91	197	50	4,164	681	514	141	95	8	3	12	9	67.4	76.3	81.2	0.9	62.1	56.5	59.7	64.8	59.2	49.0	49.5	60.0	48.1	47.1	50.5	53.6	20	42	91	197
Princess Joann Road to Woodglen Vista Drive, Near Term + Pro	4	15	8,514	40	0.5	3.0%	2.0%	66	-	58	125	268	50	6,615	1,081	817	223	152	13	5	19	14	67.4	76.3	81.2	0.9	64.1	58.6	61.7	66.8	61.2	51.0	51.6	62.0	50.1	49.1	52.5	55.6	27	58	125	268
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	4	15	5,509	40	0.5	3.0%	2.0%	64	-	-	93	201	50	4,280	700	529	144	98	8	3	12	9	67.4	76.3	81.2	0.9	62.2	56.7	59.8	64.9	59.3	49.1	49.7	60.1	48.2	47.2	50.6	53.7	20	43	93	201
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, existing	4	15	9,030	40	0.5	3.0%	2.0%	66	-	60	129	279	50	7,016	1,147	867	237	161	14	5	20	15	67.4	76.3	81.2	0.9	64.3	58.8	62.0	67.0	61.4	51.2	51.8	62.2	50.4	49.4	52.7	55.8	28	60	129	279
Woodglen Vista Drive to El Nopal, existing + project	4	15	15,340	40	0.5	3.0%	2.0%	69	-	86	184	397	50	11,919	1,948	1,473	402	273	23	9	35	25	67.4	76.3	81.2	0.9	66.6	61.1	64.3	69.3	63.7	53.5	54.1	64.5	52.7	51.7	55.0	58.1	40	86	184	397
Woodglen Vista Drive to El Nopal, Near Term	4	15	9,415	40	0.5	3.0%	2.0%	66	-	62	133	287	50	7,315	1,196	904	247	168	14	5	21	15	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.6	51.4	52.0	62.4	50.5	49.5	52.9	56.0	29	62	133	287
Woodglen Vista Drive to El Nopal, Near Term + 50% project	4	15	12,570	40	0.5	3.0%	2.0%	68	-	75	161	348	50	9,767	1,596	1,207	330	224	19	7	28	20	67.4	76.3	81.2	0.9	65.8	60.2	63.4	68.5	62.9	52.7	53.2	63.7	51.8	50.8	54.2	57.3	35	75	161	348
Woodglen Vista Drive to El Nopal, Near Term + Project	4	15	15,725	40	0.5	3.0%	2.0%	69	-	87	187	404	50	12,218	1,997	1,510	412	280	24	9	35	25	67.4	76.3	81.2	0.9	66.7	61.2	64.4	69.4	63.8	53.6	54.2	64.7	52.8	51.8	55.2	58.2	40	87	187	404
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	4	15	12,720	40	0.5	3.0%	2.0%	68	-	76	163	351	50	9,883	1,615	1,221	334	227	19	7	29	21	67.4	76.3	81.2	0.9	65.8	60.3	63.5	68.5	62.9	52.7	53.3	63.7	51.9	50.8	54.2	57.3	35	76	163	351
Magnolia Avenue														0	0	0	0	0	0	0	0	0	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, existing	4	15	13,690	40	0.5	3.0%	2.0%	68	-	79	171	368	50	10,637	1,739	1,314	359	244	21	8	31	22	67.4	76.3	81.2	0.9	66.1	60.6	63.8	68.8	63.2	53.0	53.6	64.1	52.2	51.2	54.6	57.6	37	79	171	368
El Nopal to Mast Boulevard, existing + project	4	15	17,370	40	0.5	3.0%	2.0%	69	-	93	200	431	50	13,496	2,206	1,668	456	310	26	10	39	28	67.4	76.3	81.2	0.9	67.2	61.7	64.8	69.9	64.3	54.1	54.7	65.1	53.2	52.2	55.6	58.7	43	93	200	431
El Nopal to Mast Boulevard, Near Term	4	15	14,291	40	0.5	3.0%	2.0%	68	-	82	176	379	50	11,104	1,815	1,372	375	255	22	8	32	23	67.4	76.3	81.2	0.9	66.3	60.8	64.0	69.0	63.4	53.2	53.8	64.2	52.4	51.4	54.7	57.8	38	82	176	379
El Nopal to Mast Boulevard, Near Term + 50% project	4	15	16,131	40	0.5	3.0%	2.0%	69	-	88	191	411	50	12,534	2,049	1,549	423	287	24	9	36	26	67.4	76.3	81.2	0.9	66.8	61.3	64.5	69.5	64.0	53.7	54.3	64.8	52.9	51.9	55.3	58.4	41	88	191	411
El Nopal to Mast Boulevard, Near Term + Project	4	15	17,971	40	0.5	3.0%	2.0%	69	-	95	205	441	50	13,963	2,282	1,725	471	320	27	10	41	29	67.4	76.3	81.2	0.9	67.3	61.8	65.0	70.0	64.4	54.2	54.8	65.2	53.4	52.3	55.7	58.8	44	95	205	441
El Nopal to Mast Boulevard, Near Term + 50% project + construc	4	15	16,281	40	0.5	3.0%	2.0%	69	-	89	192	413	50	12,650	2,068	1,563	427	290	25	9	37	26	67.4	76.3	81.2	0.9	66.9	61.4	64.5	69.6	64.0	53.8	54.4	64.8	52.9	51.9	55.3	58.4	41	89	192	413

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Appendix E. FHWA Noise Prediction Model Results – Building Construction Worst-Case Scenario

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 1501144001
Project Name: Fanita Ranch - Proposed Project (with school)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, January 2019
Community Noise Descriptor: L_{dn}: X CNEL:

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Analysis Condition / Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Ldn at 50 Feet	Distance from Centerline of Roadway to Contour: 70 Ldn	65 Ldn	60 Ldn	55 Ldn	Calc Dist	Traffic Volumes: Day	Eve	Night	MTd	HTd	MTe	HTe	MTn	HTn	Ref. Energy Level	Dist Adj	Ld: A	MT	HT	Le: A	MT	HT	Ln: A	MT	HT	Total	DISTANCE TO CONTOUR (2): 70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard														0	0	0	0	0	0	0	0	0	#####		#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
SR-52 to West Hills Parkway, existing	4	25	26,440	40	0.5	3.0%	2.0%	**71**	62	134	288	620	50	20,544	3,358	2,538	693	471	40	15	60	43	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.2	66.6	56.4	57.0	67.4	55.6	54.6	57.9	61.0	62	134	288	620
SR-52 to West Hills Parkway, existing + construction	4	25	27,851	40	0.5	3.0%	3.1%	**72**	72	156	335	723	50	21,640	3,537	2,674	731	774	42	25	63	70	67.4	76.3	81.2	1.4	69.7	64.2	69.3	73.1	66.9	56.7	59.2	67.9	55.6	54.8	60.1	62.3	72	156	335	723
SR-52 to West Hills Parkway, Near Term	4	25	30,730	40	0.5	3.0%	2.0%	**72**	69	148	318	685	50	23,877	3,903	2,950	806	548	47	17	69	50	67.4	76.3	81.2	1.4	70.2	64.7	67.8	72.9	67.3	57.1	57.7	68.1	56.2	55.2	58.6	61.7	69	148	318	685
SR-52 to West Hills Parkway, Near Term + 50 % project	4	25	34,015	40	0.5	3.0%	2.0%	**72**	73	158	340	733	50	26,430	4,320	3,265	892	606	52	19	77	55	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.7	57.5	58.1	68.5	56.7	55.7	59.0	62.1	73	158	340	733
SR-52 to West Hills Parkway, Near Term + project	4	25	37,300	40	0.5	3.0%	2.0%	**73**	78	168	362	780	50	28,982	4,737	3,581	978	665	57	21	84	60	67.4	76.3	81.2	1.4	71.0	65.5	68.7	73.7	68.1	57.9	58.5	68.9	57.1	56.1	59.4	62.5	78	168	362	780
SR-52 to West Hills Parkway, Near Term + 50% project + constru	4	25	35,088	40	0.5	3.0%	2.7%	**73**	81	174	374	806	50	27,263	4,456	3,368	920	835	53	27	79	76	67.4	76.3	81.2	1.4	70.7	65.2	69.7	73.9	67.9	57.7	59.5	68.8	56.7	55.8	60.4	62.9	81	174	374	806
Mast Boulevard														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
West Hills Parkway to Medina Drive, existing	4	15	19,540	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,183	2,482	1,876	513	348	30	11	44	31	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
West Hills Parkway to Medina Drive, existing + construction	4	15	20,951	40	0.5	3.0%	3.5%	**71**	57	123	265	570	50	16,279	2,661	2,011	550	651	32	21	47	59	67.4	76.3	81.2	0.9	67.9	62.5	68.1	71.6	65.1	54.9	57.9	66.2	53.8	53.0	58.8	60.8	57	123	265	570
West Hills Parkway to Medina Driv, Near Term	4	15	22,962	40	0.5	3.0%	2.0%	**70**	52	112	241	520	50	17,841	2,916	2,204	602	409	35	13	52	37	67.4	76.3	81.2	0.9	68.4	62.9	66.0	71.1	65.5	55.3	55.9	66.3	54.4	53.4	56.8	59.9	52	112	241	520
West Hills Parkway to Medina Driv, Near Term + 50 % project	4	15	27,692	40	0.5	3.0%	2.0%	**71**	59	127	273	589	50	21,517	3,517	2,658	726	493	42	16	62	45	67.4	76.3	81.2	0.9	69.2	63.7	66.8	71.9	66.3	56.1	56.7	67.1	55.2	54.2	57.6	60.7	59	127	273	589
West Hills Parkway to Medina Drive, Near Term + project	4	15	32,422	40	0.5	3.0%	2.0%	**72**	65	141	304	654	50	25,192	4,118	3,113	850	578	49	18	73	52	67.4	76.3	81.2	0.9	69.9	64.4	67.5	72.6	67.0	56.8	57.4	67.8	55.9	54.9	58.3	61.4	65	141	304	654
West Hills Parkway to Medina Driv, Near Term + 50% project + c	4	15	28,765	40	0.5	3.0%	2.8%	**72**	66	142	306	660	50	22,350	3,653	2,761	754	722	44	23	65	65	67.4	76.3	81.2	0.9	69.3	63.8	68.5	72.6	66.5	56.3	58.3	67.4	55.3	54.4	59.3	61.6	66	142	306	660
Mast Boulevard														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	4	15	19,590	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,221	2,488	1,881	514	349	30	11	44	32	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + construction	4	15	21,001	40	0.5	3.0%	3.5%	**71**	57	123	265	571	50	16,318	2,667	2,016	551	652	32	21	47	59	67.4	76.3	81.2	0.9	67.9	62.5	68.1	71.6	65.1	54.9	57.9	66.2	53.8	53.0	58.8	60.8	57	123	265	571
Pebble Beach Drive to Fanita Parkway, Near Term	4	15	21,361	40	0.5	3.0%	2.0%	**70**	-	107	230	495	50	16,597	2,713	2,051	560	381	32	12	48	34	67.4	76.3	81.2	0.9	68.1	62.6	65.7	70.8	65.2	55.0	55.6	66.0	54.1	53.1	56.5	59.6	50	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + 50 % projec	4	15	26,091	40	0.5	3.0%	2.0%	**71**	57	122	263	566	50	20,273	3,314	2,505	684	465	40	15	59	42	67.4	76.3	81.2	0.9	68.9	63.4	66.6	71.6	66.0	55.8	56.4	66.9	55.0	54.0	57.4	60.4	57	122	263	566
Pebble Beach Drive to Fanita Parkway, Near Term + project	4	15	30,821	40	0.5	3.0%	2.0%	**72**	63	136	294	632	50	23,948	3,914	2,959	808	549	47	18	70	50	67.4	76.3	81.2	0.9	69.7	64.1	67.3	72.4	66.8	56.6	57.1	67.6	55.7	54.7	58.1	61.2	63	136	294	632
Pebble Beach Drive to Fanita Parkway, Near Term + 50% projec	4	15	27,164	40	0.5	3.0%	2.9%	**72**	64	138	296	638	50	21,106	3,450	2,608	712	693	41	22	61	63	67.4	76.3	81.2	0.9	69.1	63.6	68.3	72.3	66.2	56.0	58.2	67.2	55.0	54.1	59.1	61.4	64	138	296	638
Mission Gorge Road														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
SR-125 to Fanita Drive, existing	6	15	45,440	45	0.5	5.0%	3.0%	**77**	151	325	699	1,507	50	35,307	5,771	4,362	1,986	1,215	115	39	171	110	69.3	77.6	82.1	2.6	74.4	70.6	72.9	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.4	151	325	699	1507
SR-125 to Fanita Drive, existing + construction	6	15	46,851	45	0.5	5.0%	3.7%	**78**	161	348	749	1,615	50	36,403	5,950	4,498	2,048	1,530	118	49	176	138	69.3	77.6	82.1	2.6	74.5	70.7	73.9	78.1	71.7	63.1	63.8	72.9	62.9	61.2	64.7	67.9	161	348	749	1615
SR-125 to Fanita Drive, Near Term	6	15	48,026	45	0.5	5.0%	3.0%	**77**	156	337	726	1,563	50	37,316	6,099	4,610	2,099	1,284	121	41	181	116	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.9	63.1	61.3	63.9	67.7	156	337	726	1563
SR-125 to Fanita Drive, Near Term + 50 % project	6	15	50,916	45	0.5	5.0%	3.0%	**78**	163	350	755	1,626	50	39,562	6,466	4,888	2,226	1,361	129	43	191	123	69.3	77.6	82.1	2.6	74.9	71.1	73.4	78.2	72.1	63.5	63.3	73.1	63.3	61.6	64.2	67.9	163	350	755	1626
SR-125 to Fanita Drive, Near Term + project	6	15	53,806	45	0.5	5.0%	3.0%	**78**	169	363	783	1,686	50	41,807	6,833	5,165	2,352	1,438	136	46	202	130	69.3	77.6	82.1	2.6	75.1	71.3	73.7	78.4	72.3	63.7	63.5	73.4	63.6	61.8	64.4	68.2	169	363	783	1686
SR-125 to Fanita Drive, Near Term + 50% project + construction	6	15	51,989	45	0.5	5.0%	3.5%	**78**	170	367	791	1,704	50	40,395	6,603	4,991	2,273	1,599	131	51	195	145	69.3	77.6	82.1	2.6	74.9	71.1	74.1	78.5	72.2	63.6	64.0	73.3	63.4	61.7	64.9	68.3	170	367	791	1704
Mission Gorge Road														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	6	15	41,100	45	0.5	5.0%	3.0%	**77**	141	304	654	1,409	50	31,935	5,220	3,946	1,797	1,099	104	35	155	99	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.5	62.3	72.2	62.4	60.7	63.3	67.0	141	304	654	1409
Fanita Drive to Carlton Hills Boulevard, existing + construction	6	15	42,511	45	0.5	5.0%	3.7%	**77**	152	328	706	1,521	50	33,031	5,399	4,081	1,858	1,414	107	45	160	128	69.3	77.6	82.1	2.6	74.0	70.3	73.6	77.7	71.3	62.7	63.4	72.4	62.5	60.8	64.4	67.6	152	328	706	1521
Fanita Drive to Carlton Hills Boulevard, Near Term	6	15	43,029	45	0.5	5.0%	3.0%	**77**	145	313	674	1,453	50	33,434	5,465	4,131	1,881	1,150	109	37	162	104	69.3	77.6	82.1	2.6	74.1	70.3	72.7	77.4	71.4	62.7	62.5	72.4	62.6	60.9	63.5	67.2	145	313	674	1453
Fanita Drive to Carlton Hills Boulevard, Near Term + 50 % projec	6	15	46,314	45	0.5	5.0%	3.0%	**77**	153	329	708	1,526	50	35,986	5,882	4,446	2,025	1,238	117	39	174	112	69.3	77.6	82.1	2.6	74.5	70.6	73.0	77.7	71.7	63.1	62.9	72.7	62.9	61.2	63.8	67.5	153	329	708	1526
Fanita Drive to Carlton Hills Boulevard, Near Term + project	6	15	49,599	45	0.5	5.0%	3.0%	**78**	160	344	741	1,597	50	38,538	6,299	4,762	2,168	1,326	125	42	186	120	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	72.0	63.4	63.2	73.0	63.2	61.5	64.1	67.8	160	344	741	1597
Fanita Drive to Carlton Hills Boulevard, Near Term + 50% project	6	15	47,387	45	0.5	5.0%	3.5%	**78**	161	346	746	1,607	50	36,820	6,018	4,549	2,072	1,476	120	47	178	134	69.3	77.6	82.1	2.6	74.5	70.7	73.8	78.1	71.8	63.2	63.6	72.9	63.0	61.3	64.6	67.9	161	346	746	1607
Fanita Parkway														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Project site to Ganley Drive, existing	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, existing + construction	2	15	1,411	40	0.5	2.0%	24.1%	**64**	-	41	87	188	50	1,096	179	135	25	282	1	8	2	22	67.4	76.3	81.2	0.1	54.4	48.3	63.7	64.3	52.5	40.7	53.0	66.9	24.0	38.8	53.8	53.9	19	41	87	188
Project site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, Near Term + 50 % project	2	15	6,175	40	0.5	2.0%	2.0%	**63**	-	-	84	182	50	4,798	784	593	108	110	6	4	9	10	67.4	76.3	81.2	0.1	62.0	54.7	59.6	64.4	59.1	47.1	49.4	59.8	46.1	45.2	50.4	52.6	18	39	84	182
Project site to Ganley Drive, Near Term + project	2	15	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	289	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.4	62.8	49.1	48.2	53.4	55.6	29	62	134	289
Project site to Ganley Drive, Near Term + 50% project + construc	2	15	7,248	40	0.5	2.0%	5.2%	**66**	-	60	129	279	50	5,632	920	696	127	339	7	11	11	31	67.4	76.3	81.2	0.1	62.5	55.4	64.5	66.9	59.7	47.8	54.3	61.0	45.9	45.9	55.2	56.1	28	60	129	279
Fanita Parkway														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	2	0	2,610	40	0.5	2.0%	2.0%	**59**	-	-	46	99	50	2,028	331	251	46	47	3	1	4	4	67.4	76.3	81.2	-0.1	58.0	50.7	55.7	60.5	55.1	43.1	45.5	55.8	42.1	41.3	46.4	48.7	10	21	46	99
Ganley Drive to Lake Canyon Road, existing + construction	3	14	4,021	40	0.5	2.0%	6.2%	**64**	-	45	98	211	50	3,124	511	386	70	223	4	7	6	20	67.4	76.3	81.2	0.4	60.2	53.1	62.9	65.1	57.4	45.5	52.8	58.9	43.3	43.6	53.7	54.4	21	45	98	211
Fanita Parkway (Mitigated)														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	2	0	3,860	40	0.5	2.0%	2.0%	**61**	-	-	60	129	50	2,999	490	371	67	69	4	2	6	6	67.4	76.3	81.2	-0.1	59.7	52.4	57.4	62.2	56.8	44.8	47.2	57.5	43.8	43.0	48.1	50.4	13	28	60	129
Lake Canyon Road to Mast Boulevard, existing + construction	4	14	5,271	40	0.5	2.0%	5.2%	**65**	-	54	116	250	50	4,096	669	506	92	245	5	8	8	22	67.4	76.3	81.2	0.8	61.8	54.7	63.8	66.2	59.0	47.1	53.6	60.3	45.2	45.2	54.5	55.4	25	54	116	250
Fanita Parkway (Mitigated)														0	0	0	0	0	0	0	0	0	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0	0	0	0
Project site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######	67.4	76.3	81.2	0.1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, Near Term + 50 % project	2	15	6,175	40	0.5	2.0%	2.0%	**63**	-	-	84	182	50	4,798	784	593	108	110	6	4	9	10	67.4	76.3	81.2	0.1	62.0	54.7	59.6	64.4	59.1	47.1	49.4	59.8	46.1	45.2	50.4	52.6	18	39	84	182
Project site to Ganley Drive, Near Term + project	2	15	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	289	50	9,596	1,568	1,186	216	220	12	7	19	20	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.4	62.8	49.1	48.2	53.4	55.6	29	62	134	289
Project site to Ganley Drive, Near Term + 50% project + construc	2	15	7,248	40	0.5	2.0%	3.9%	**65**	-	54	116	249	50	5,632	920	696	127	254	7	8	11	23	67.4	76.3	81.2	0.1	62.6	55.4	63.2	66.3	59.7	47.8	53.1	60.8	46.3	45.9	54.0	55.2	25	54	116	249

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 1501144001
Project Name: Fanita Ranch - Proposed Project (with school)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, January 2019
Community Noise Descriptor: L_{dn}: X CNEL:

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

	Trucks	'assenger
Building Construction	312.0	1099.0
Other Building Construction	235.0	838.0
NT Overlap	312.0	1249.0
LT Overlap	235.0	988.0

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Ldn at 50 Feet	Distance to Contour 70 Ldn	65 Ldn	60 Ldn	55 Ldn	Calc Dist	Traffic Volumes Day	Eve	Night	MTd	HTd	MTe	HTe	MTn	HTn
Mast Boulevard														0	0	0	0	0	0	0	0	0
SR-52 to West Hills Parkway, existing	4	25	26,440	40	0.5	3.0%	2.0%	**71**	62	134	288	620	50	20,544	3,358	2,538	693	471	40	15	60	43
SR-52 to West Hills Parkway, existing + construction	4	25	28,001	40	0.5	3.0%	3.1%	**72**	72	156	336	725	50	21,757	3,556	2,688	734	777	42	25	63	70
SR-52 to West Hills Parkway, Near Term	4	25	30,730	40	0.5	3.0%	2.0%	**72**	69	148	318	685	50	23,877	3,903	2,950	806	548	47	17	69	50
SR-52 to West Hills Parkway, Near Term + 50 % project	4	25	34,015	40	0.5	3.0%	2.0%	**72**	73	158	340	733	50	26,430	4,320	3,265	892	606	52	19	77	55
SR-52 to West Hills Parkway, Near Term + project	4	25	37,300	40	0.5	3.0%	2.0%	**73**	78	168	362	780	50	28,982	4,737	3,581	978	665	57	21	84	60
SR-52 to West Hills Parkway, Near Term + 50% project + constru	4	25	35,238	40	0.5	3.0%	2.7%	**73**	81	174	375	808	50	27,380	4,475	3,383	924	837	53	27	79	76
Mast Boulevard														0	0	0	0	0	0	0	0	0
West Hills Parkway to Medina Drive, existing	4	15	19,540	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,183	2,482	1,876	513	348	30	11	44	31
West Hills Parkway to Medina Drive, existing + construction	4	15	21,101	40	0.5	3.0%	3.5%	**71**	57	123	266	572	50	16,395	2,680	2,026	553	654	32	21	48	59
West Hills Parkway to Medina Drive, Near Term	4	15	22,962	40	0.5	3.0%	2.0%	**70**	52	112	241	520	50	17,841	2,916	2,204	602	409	35	13	52	37
West Hills Parkway to Medina Driv, Near Term + 50 % project	4	15	27,692	40	0.5	3.0%	2.0%	**71**	59	127	273	589	50	21,517	3,517	2,658	726	493	42	16	62	45
West Hills Parkway to Medina Drive, Near Term + project	4	15	32,422	40	0.5	3.0%	2.0%	**72**	65	141	304	654	50	25,192	4,118	3,113	850	578	49	18	73	52
West Hills Parkway to Medina Driv, Near Term + 50% project + c	4	15	28,915	40	0.5	3.0%	2.8%	**72**	66	143	307	662	50	22,467	3,672	2,776	758	725	44	23	65	66
Mast Boulevard														0	0	0	0	0	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	4	15	19,590	40	0.5	3.0%	2.0%	**70**	-	101	217	467	50	15,221	2,488	1,881	514	349	30	11	44	32
Pebble Beach Drive to Fanita Parkway, existing + construction	4	15	21,151	40	0.5	3.0%	3.5%	**71**	57	123	266	573	50	16,434	2,686	2,030	555	655	32	21	48	59
Pebble Beach Drive to Fanita Parkway, Near Term	4	15	21,361	40	0.5	3.0%	2.0%	**70**	-	107	230	495	50	16,597	2,713	2,051	560	381	32	12	48	34
Pebble Beach Drive to Fanita Parkway, Near Term + 50 % projec	4	15	26,091	40	0.5	3.0%	2.0%	**71**	57	122	263	566	50	20,273	3,314	2,505	684	465	40	15	59	42
Pebble Beach Drive to Fanita Parkway, Near Term + project	4	15	30,821	40	0.5	3.0%	2.0%	**72**	63	136	294	632	50	23,948	3,914	2,959	808	549	47	18	70	50
Pebble Beach Drive to Fanita Parkway, Near Term + 50% projec	4	15	27,314	40	0.5	3.0%	2.9%	**72**	64	138	297	640	50	21,223	3,469	2,622	716	696	41	22	62	63
Mission Gorge Road														0	0	0	0	0	0	0	0	0
SR-125 to Fanita Drive, existing	6	15	45,440	45	0.5	5.0%	3.0%	**77**	151	325	699	1,507	50	35,307	5,771	4,362	1,986	1,215	115	39	171	110
SR-125 to Fanita Drive, existing + construction	6	15	47,001	45	0.5	5.0%	3.7%	**78**	162	349	751	1,618	50	36,520	5,969	4,512	2,055	1,534	119	49	177	139
SR-125 to Fanita Drive, Near Term	6	15	48,026	45	0.5	5.0%	3.0%	**77**	156	337	726	1,563	50	37,316	6,099	4,610	2,099	1,284	121	41	181	116
SR-125 to Fanita Drive, Near Term + 50 % project	6	15	50,916	45	0.5	5.0%	3.0%	**78**	163	350	755	1,626	50	39,562	6,466	4,888	2,226	1,361	129	43	191	123
SR-125 to Fanita Drive, Near Term + project	6	15	53,806	45	0.5	5.0%	3.0%	**78**	169	363	783	1,686	50	41,807	6,833	5,165	2,352	1,438	136	46	202	130
SR-125 to Fanita Drive, Near Term + 50% project + construction	6	15	52,139	45	0.5	5.0%	3.5%	**78**	171	368	793	1,708	50	40,512	6,622	5,005	2,279	1,603	132	51	196	145
Mission Gorge Road														0	0	0	0	0	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	6	15	41,100	45	0.5	5.0%	3.0%	**77**	141	304	654	1,409	50	31,935	5,220	3,946	1,797	1,099	104	35	155	99
Fanita Drive to Carlton Hills Boulevard, existing + construction	6	15	42,661	45	0.5	5.0%	3.7%	**77**	152	328	707	1,524	50	33,148	5,418	4,095	1,865	1,418	108	45	160	128
Fanita Drive to Carlton Hills Boulevard, Near Term	6	15	43,029	45	0.5	5.0%	3.0%	**77**	145	313	674	1,453	50	33,434	5,465	4,131	1,881	1,150	109	37	162	104
Fanita Drive to Carlton Hills Boulevard, Near Term + 50 % projec	6	15	46,314	45	0.5	5.0%	3.0%	**77**	153	329	708	1,526	50	35,986	5,882	4,446	2,025	1,238	117	39	174	112
Fanita Drive to Carlton Hills Boulevard, Near Term + project	6	15	49,599	45	0.5	5.0%	3.0%	**78**	160	344	741	1,597	50	38,538	6,299	4,762	2,168	1,326	125	42	186	120
Fanita Drive to Carlton Hills Boulevard, Near Term + 50% project	6	15	47,537	45	0.5	5.0%	3.5%	**78**	161	347	748	1,611	50	36,936	6,037	4,564	2,078	1,480	120	47	179	134
Fanita Parkway														0	0	0	0	0	0	0	0	0
Project site to Ganley Drive, existing	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Project site to Ganley Drive, existing + construction	2	15	1,561	40	0.5	2.0%	19.0%	**64**	-	41	88	191	50	1,213	198	150	27	264	2	8	2	24
Project site to Ganley Drive, Near Term	2	15	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Project site to Ganley Drive, Near Term + 50 % project	2	15	6,175	40	0.5	2.0%	2.0%	**63**	-	-	84	182	50	4,798	784	593	108	110	6	4	9	10
Project site to Ganley Drive, Near Term + project	2	15	12,350	40	0.5	2.0%	2.0%	**66**	-	62	134	289	50	9,596	1,568	1,186	216	220	12	7	19	20
Project site to Ganley Drive, Near Term + 50% project + construc	2	15	7,398	40	0.5	2.0%	5.2%	**66**	-	61	131	281	50	5,748	940	710	129	341	7	11	11	31
Fanita Parkway														0	0	0	0	0	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	2	0	2,610	40	0.5	2.0%	2.0%	**59**	-	-	46	99	50	2,028	331	251	46	47	3	1	4	4
Ganley Drive to Lake Canyon Road, existing + construction	3	14	4,171	50	0.5	2.0%	9.5%	**67**	-	69	149	322	50	3,241	530	400	73	352	4	11	6	32
Ganley Drive to Lake Canyon Road, Near Term	2	0	2,782	40	0.5	2.0%	2.0%	**60**	-	-	48	104	50	2,162	353	267	49	50	3	2	4	4
Ganley Drive to Lake Canyon Road, Near Term + 50 % project	3	14	8,957	50	0.5	2.0%	2.0%	**67**	-	71	152	328	50	6,960	1,138	860	157	160	9	5	13	14
Ganley Drive to Lake Canyon Road, Near Term + project	3	14	15,132	50	0.5	2.0%	2.0%	**70**	47	100	216	465	50	11,758	1,922	1,453	265	270	15	9	23	24
Ganley Drive to Lake Canyon Road, Near Term + 50% project +	3	14	10,180	50	0.5	2.0%	4.3%	**69**	-	93	201	433	50	7,910	1,293	977	178	391	10	12	15	35
Fanita Parkway														0	0	0	0	0	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	2	0	3,860	40	0.5	2.0%	2.0%	**61**	-	-	60	129	50	2,999	490	371	67	69	4	2	6	6
Lake Canyon Road to Mast Boulevard, existing + construction	4	14	5,421	50	0.5	2.0%	7.8%	**68**	-	81	175	376	50	4,212	688	520	95	375	5	12	8	34
Lake Canyon Road to Mast Boulevard, Near Term	2	0	4,158	40	0.5	2.0%	2.0%	**61**	-	-	63	135	50	3,231	528	399	73	74	4	2	6	7
Lake Canyon Road to Mast Boulevard, Near Term + 50 % projec	4	14	9,808	50	0.5	2.0%	2.0%	**68**	-	80	173	372	50	7,621	1,246	942	172	175	10	6	15	16
Lake Canyon Road to Mast Boulevard, Near Term + project	4	14	15,458	50	0.5	2.0%	2.0%	**70**	-	109	234	504	50	12,011	1,963	1,484	270	275	16	9	23	25
Lake Canyon Road to Mast Boulevard, Near Term + 50% project	4	14	11,031	50	0.5	2.0%	4.1%	**70**	-	104	224	482	50	8,571	1,401	1,059	193	406	11	13	17	37
Fanita Parkway														0	0	0	0	0	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	2	0	3,330	35	0.5	2.0%	1.0%	**58**	-	-	39	84	50	2,587	423	320	58	30	3	1	5	3
Mast Boulevard to Carlton Oaks Drive, existing + construction	2	0	4,891	35	0.5	2.0%	7.4%	**64**	-	46	100	215	50	3,800	621	470	86	322	5	10	7	29
Mast Boulevard to Carlton Oaks Drive, Near Term	2	0	3,713	35	0.5	2.0%	1.0%	**59**	-	-	42	90	50	2,885	472	356	65	33	4	1	6	3
Mast Boulevard to Carlton Oaks Drive, Near Term + 50 % projec	2	0	5,423	35	0.5	2.0%	1.0%	**60**	-	-	54	116	50	4,214	689	521	95	48	5	2	8	4
Mast Boulevard to Carlton Oaks Drive, Near Term + project	2	0	7,133	35	0.5	2.0%	1.0%	**62**	-	-	65	139	50	5,542	906	685	125	64	7	2	11	6
Mast Boulevard to Carlton Oaks Drive, Near Term + 50% project	2	0	6,646	35	0.5	2.0%	4.5%	**64**	-	45	98	210	50	5,164	844	638	116	269	7	9	10	24
Carlton Hills Boulevard														0	0	0	0	0	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	4	0	24,960	35	0.5	3.0%	2.0%	**69**	-	92	199	428	50	19,394	3,170	2,396	655	445	38	14	56	40
Carlton Oaks Drive to Mission Gorge Road, existing + constructic	4	0	26,521	35	0.5	3.0%	3.2%	**70**	51	111	238	513	50	20,607	3,368	2,546	696	751	40	24	60	68
Carlton Oaks Drive to Mission Gorge Road, Near Term	4	0	25,993	35	0.5	3.0%	2.0%	**69**	-	95	204	440	50	20,197	3,301	2,495	682	463	39	15	59	42
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50 % p	4	0	28,228	35	0.5	3.0%	2.0%	**70**	46	100	216	465	50	21,933	3,585	2,710	740	503	43	16	64	46
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	4	0	30,463	35	0.5	3.0%	2.0%	**70**	49	105	227	489	50	23,670	3,869	2,924	799	543	46	17	69	49
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50% pr	4	0	29,451	35	0.5	3.0%	2.8%	**70**	53	114	245	528	50	22,883	3,740	2,827	772	734	45	23	66	66
State Route 52														0	0	0	0	0	0	0	0	0
Santo Road to Mast Boulevard, existing	6	60	96,000	65	0.5	2.0%	0.6%	**76**	246	531	1,143	2,462	100	74,592	12,192	9,216	1,679	513	97	16	144	46
Santo Road to Mast Boulevard, existing + construction	6	60	97,561	65	0.5	2.0%	0.9%	**76**	255	549	1,183	2,549	100	75,805	12,390	9,366	1,706	800	99	25	147	72
Santo Road to Mast Boulevard, Near Term	6	60	104,092	65	0.5	2.0%	0.6%	**76**	260	560	1,206	2,599	100	80,879	13,220	9,993	1,820	556	105	18	157	50
Santo Road to Mast Boulevard, Near Term + 50 % project	6	60	109,079	65	0.5	2.0%	0.6%	**76**	268	578	1,245	2,681	100	84,754	13,853	10,472	1,907	583	110	19	164	53
Santo Road to Mast Boulevard, Near Term + project	6	60	114,066	65	0.5	2.0%	0.6%	**77**	276	595	1,282	2,762	100	88,629	14,486	10,950	1,995	610	115	19	172	55
Santo Road to Mast Boulevard, Near Term + 50% project + cons	6	60	110,302	65	0.5	2.0%	0.8%	**77**	275	591	1,274	2,745	100	85,705	14,008	10,589	1,929	799	111	25	166	72
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Project Site to Magnolia Avenue, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Project Site to Magnolia Avenue, Near Term + 50% project	2	10	6,960	40	0.5	2.0%	2.0%	**64**	-	42	90	194	50	5,408	884	668	122	124	7	4	10	11
Project Site to Magnolia Avenue, Near Term + Project	2	10	13,920	40	0.5	2.0%	2.0%	**67**	-	66	143	309	50	10,816	1,768	1,336	243	248	14	8	21	22
Project Site to Magnolia Avenue, Near Term + 50% project + cor	2	10	8,183	40	0.5	2.0%	4.9%	**66**	-	62	134	290	50	6,358	1,039	786	143	355	8	11	12	32
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Magnolia Avenue to Princess Joann Road, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	2	10	3,810	40	0.5	2.0%	2.0%	**61**	-	-	60	130	50	2,960	484	366	67	68	4	2	6	6
Magnolia Avenue to Princess Joann Road, Near Term + Project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	2	10	5,033	40	0.5	2.0%	6.7%	**65**	-	52	111	239	50	3,911	639	483	88	299	5	10	8	27
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Princess Joann Road to Chaparral Drive, Near Term	2	10	DNE	40	0.5	2.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	2	10	3,810	40	0.5	2.0%	2.0%	**61**	-	-	60	130	50	2,960	484	366	67	68	4	2	6	6
Princess Joann Road to Chaparral Drive, Near Term + Project	2	10	7,620	40	0.5	2.0%	2.0%	**64**	-	44	96	206	50	5,921	968	732	133	136	8	4	11	12
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	2	10	5,033	40	0.5	2.0%	6.7%	**65**	-	52	111	239	50	3,911	639	483	88	299	5	10	8	27
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, Near Term	2	40	683	35	0.5	3.0%	2.0%	**54**	-	-	-	-	50	531	87	66	18	12	1	0	2	1
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	4	16	4,493	50	0.5	3.0%	2.0%	**65**	-	-	111	239	50	3,491	571	431	118	80	7	3	10	7
Chaparral Drive to Woodglen Vista Drive, Near Term + Project	4	16	8,303	50	0.5	3.0%	2.0%	**68**	-	77	167	359	50	6,451	1,054	797	218	148	13	5	19	13
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	4	16	5,716	50	0.5	3.0%	6.1%	**68**	-	81	174	374	50	4,441	726	549	150	311	9	10	13	28
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Woodglen Vista Drive to El Nopal, Near Term	2	40	4,472	35	0.5	3.0%	2.0%	**62**	-	-	69	149	50	3,475	568	429	117	80	7	3	10	7
Woodglen Vista Drive to El Nopal, Near Term + 50% project	4	16	8,282	50	0.5	3.0%	2.0%	**68**	-	77	166	359	50	6,435	1,052	795	217	148	13	5	19	13
Woodglen Vista Drive to El Nopal, Near Term + Project	4	16	12,092	50	0.5	3.0%	2.0%	**69**	-	99	214	462	50	9,395	1,536	1,161	317	215	18	7	27	19
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	4	16	9,505	50	0.5	3.0%	4.5%	**70**	-	102	220	475	50	7,385	1,207	912	249	379	14	12	21	34
Cuyamaca Street														0	0	0	0	0	0	0	0	0
El Nopal to Mast Boulevard, Near Term	3	30	9,173	35	0.5	3.0%	2.0%	**65**	-	-	113	244	50	7,127	1,165	881	241	163	14	5	21	15
El Nopal to Mast Boulevard, Near Term + 50% project	4	16	12,983	50	0.5	3.0%	2.0%	**70**	-	104	225	484	50	10,088	1,649	1,246	341	231	20	7	29	21
El Nopal to Mast Boulevard, Near Term + Project	4	16	16,793	50	0.5	3.0%	2.0%	**71**	57	124	267	575	50	13,048	2,133	1,612	440	299	25	10	38	27
El Nopal to Mast Boulevard, Near Term + 50% project + construc	4	16	14,206	50	0.5	3.0%	3.7%	**71**	59	126	272	587	50	11,038	1,804	1,364	373	463	22	15	32	42
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Mast Boulevard to River Park Drive, Near Term	4	15	20,527	35	0.5	3.0%	2.0%	**69**	-	88	189	408	50	15,949	2,607	1,971	538	366	31	12	46	33
Mast Boulevard to River Park Drive, Near Term + 50% project	4	15	23,417	35	0.5	3.0%	2.0%	**69**	-	96	207	445	50	18,195	2,974	2,248	614	417	35	13	53	38
Mast Boulevard to River Park Drive, Near Term + Project	4	15	26,307	35	0.5	3.0%	2.0%	**70**	-	104	223	481	50	20,441	3,341	2,525	690	469	40	15	59	42
Mast Boulevard to River Park Drive, Near Term + 50% project + (	4	15	24,640	35	0.5	3.0%	3.0%	**70**	52	111	240	517	50	19,145	3,129	2,365	646	648	37	21	56	59
Cuyamaca Street														0	0	0	0	0	0	0	0	0
River Park Drive to Town Center Parkway, Near Term	4	15	28,084	35	0.5	3.0%	2.0%	**70**	-	108	233	503	50	21,821	3,567	2,696	737	500	43	16	63	45
River Park Drive to Town Center Parkway, Near Term + 50% pro	4	15	30,844	35	0.5	3.0%	2.0%	**70**	53	115	248	535	50	23,966	3,917	2,961	809	550	47	18	70	50
River Park Drive to Town Center Parkway, Near Term + Project	4	15	33,604	35	0.5	3.0%	2.0%	**71**	57	122	263	566	50	26,110	4,268	3,226	881	599	51	19	76	54
River Park Drive to Town Center Parkway, Near Term + 50% pro	4	15	32,067	35	0.5	3.0%	2.7%	**71**	60	130	279	601	50	24,916	4,073	3,078	841	781	49	25	72	71
Cuyamaca Street														0	0	0	0	0	0	0	0	0
Town Center Parkway to Mission Gorge Road, Near Term	6	15	24,245	35	0.5	5.0%	3.0%	**72**	73	158	340	733	50	18,838	3,079	2,328	1,060	648	61	21	91	59
Town Center Parkway to Mission Gorge Road, Near Term + 50%	6	15	26,740	35	0.5	5.0%	3.0%	**73**	78	169	363	782	50	20,777	3,396	2,567	1,169	715	68	23	101	65
Town Center Parkway to Mission Gorge Road, Near Term + Proj	6	15	29,235	35	0.5	5.0%	3.0%	**73**	83	179	385	830	50	22,716	3,713	2,807	1,278	781	74	25	110	71
Town Center Parkway to Mission Gorge Road, Near Term + 50%	6	15	27,963	35	0.5	5.0%	3.8%	**74**	87	188	404	870	50	21,727	3,551	2,684	1,222	957	71	30	105	87
Magnolia Avenue														0	0	0	0	0	0	0	0	0
Cuyamaca Street to Princess Joann Road, Near Term	2	15	DNE	35	0.5	3.0%	2.0%	**#VALUE!**	#VALUE!	#VALUE!	#VALUE!	#VALUE!	50	######	######	######	######	######	######	######	######	######
Cuyamaca Street to Princess Joann Road, Near Term + 50% prc	2	15	3,155	35	0.5	3.0%	2.0%	**60**	-	-	49	105	50	2,451	401	303	83	56	5	2	7	5
Cuyamaca Street to Princess Joann Road, Near Term + Project	2	15	6,310	35	0.5	3.0%	2.0%	**63**	-	-	77	166	50	4,903	801	606	166	112	10	4	14	10
Cuyamaca Street to Princess Joann Road, Near Term + Project ·	2	15	4,378	35	0.5	3.0%	7.4%	**64**	-	46	98	211	50	3,402	556	420	115	287	7	9	10	26
Magnolia Avenue														0	0	0	0	0	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, Near Term	4	15	2,204	40	0.5	3.0%	2.0%	**60**	-	-	-	109	50	1,713	280	212	58	39	3	1	5	4
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	4	15	5,359	40	0.5	3.0%	2.0%	**64**	-	-	91	197	50	4,164	681	514	141	95	8	3	12	9
Princess Joann Road to Woodglen Vista Drive, Near Term + Pro	4	15	8,514	40	0.5	3.0%	2.0%	**66**	-	58	125	268	50	6,615	1,081	817	223	152	13	5	19	14
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	4	15	6,582	40	0.5	3.0%	5.6%	**67**	-	67	145	312	50	5,114	836	632	173	327	10	10	15	30
Magnolia Avenue														0	0	0	0	0	0	0	0	0
Woodglen Vista Drive to El Nopal, Near Term	4	15	9,415	40	0.5	3.0%	2.0%	**66**	-	62	133	287	50	7,315	1,196	904	247	168	14	5	21	15
Woodglen Vista Drive to El Nopal, Near Term + 50% project	4	15	12,570	40	0.5	3.0%	2.0%	**68**	-	75	161	348	50	9,767	1,596	1,207	330	224	19	7	28	20
Woodglen Vista Drive to El Nopal, Near Term + Project	4	15	15,725	40	0.5	3.0%	2.0%	**69**	-	87	187	404	50	12,218	1,997	1,510	412	280	24	9	35	25
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	4	15	13,793	40	0.5	3.0%	3.7%	**69**	-	95	204	440	50	10,717	1,752	1,324	362	455	21	15	31	41
Magnolia Avenue														0	0	0	0	0	0	0	0	0
El Nopal to Mast Boulevard, Near Term	4	15	14,291	40	0.5	3.0%	2.0%	**68**	-	82	176	379	50	11,104	1,815	1,372	375	255	22	8	32	23
El Nopal to Mast Boulevard, Near Term + 50% project	4	15	16,131	40	0.5	3.0%	2.0%	**69**	-	88	191	411	50	12,534	2,049	1,549	423	287	24	9	36	26
El Nopal to Mast Boulevard, Near Term + Project	4	15	17,971	40	0.5	3.0%	2.0%	**69**	-	95	205	441	50	13,963	2,282	1,725	471	320	27	10	41	29
El Nopal to Mast Boulevard, Near Term + 50% project + construc	4	15	17,354	40	0.5	3.0%	3.4%	**70**	-	107	230	497	50	13,484	2,204	1,666	455	519	26	17	39	47

Roadway, Segment	Ref. Energy Leve A	MT	HT	Dist Adj	Ld A	MT	HT	Total	Le A	MT	HT	Total	Ln A	MT	HT	Total	DISTANCE TO CONTOUR (2) 70 Ldn	65 Ldn	60 Ldn	55 Ldn
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-52 to West Hills Parkway, existing	67.4	76.3	81.2	1.4	69.5	64.0	67.2	72.2	66.6	56.4	57.0	67.4	55.6	54.6	57.9	61.0	62	134	288	620
SR-52 to West Hills Parkway, existing + construction	67.4	76.3	81.2	1.4	69.7	64.3	69.4	73.1	66.9	56.7	59.2	67.9	55.6	54.8	60.1	62.3	72	156	336	725
SR-52 to West Hills Parkway, Near Term	67.4	76.3	81.2	1.4	70.2	64.7	67.8	72.9	67.3	57.1	57.7	68.1	56.2	55.2	58.6	61.7	69	148	318	685
SR-52 to West Hills Parkway, Near Term + 50 % project	67.4	76.3	81.2	1.4	70.6	65.1	68.3	73.3	67.7	57.5	58.1	68.5	56.7	55.7	59.0	62.1	73	158	340	733
SR-52 to West Hills Parkway, Near Term + project	67.4	76.3	81.2	1.4	71.0	65.5	68.7	73.7	68.1	57.9	58.5	68.9	57.1	56.1	59.4	62.5	78	168	362	780
SR-52 to West Hills Parkway, Near Term + 50% project + constru	67.4	76.3	81.2	1.4	70.7	65.3	69.7	73.9	67.9	57.7	59.5	68.8	56.7	55.8	60.4	62.9	81	174	375	808
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
West Hills Parkway to Medina Drive, existing	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
West Hills Parkway to Medina Drive, existing + construction	67.4	76.3	81.2	0.9	67.9	62.5	68.1	71.6	65.1	54.9	57.9	66.2	53.8	53.0	58.8	60.8	57	123	266	572
West Hills Parkway to Medina Drive, Near Term	67.4	76.3	81.2	0.9	68.4	62.9	66.0	71.1	65.5	55.3	55.9	66.3	54.4	53.4	56.8	59.9	52	112	241	520
West Hills Parkway to Medina Driv, Near Term + 50 % project	67.4	76.3	81.2	0.9	69.2	63.7	66.8	71.9	66.3	56.1	56.7	67.1	55.2	54.2	57.6	60.7	59	127	273	589
West Hills Parkway to Medina Drive, Near Term + project	67.4	76.3	81.2	0.9	69.9	64.4	67.5	72.6	67.0	56.8	57.4	67.8	55.9	54.9	58.3	61.4	65	141	304	654
West Hills Parkway to Medina Driv, Near Term + 50% project + c	67.4	76.3	81.2	0.9	69.3	63.9	68.5	72.6	66.5	56.3	58.3	67.4	55.3	54.4	59.3	61.6	66	143	307	662
Mast Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Pebble Beach Drive to Fanita Parkway, existing	67.4	76.3	81.2	0.9	67.7	62.2	65.3	70.4	64.8	54.6	55.2	65.6	53.7	52.7	56.1	59.2	47	101	217	467
Pebble Beach Drive to Fanita Parkway, existing + construction	67.4	76.3	81.2	0.9	67.9	62.5	68.1	71.6	65.1	54.9	57.9	66.2	53.8	53.1	58.8	60.8	57	123	266	573
Pebble Beach Drive to Fanita Parkway, Near Term	67.4	76.3	81.2	0.9	68.1	62.6	65.7	70.8	65.2	55.0	55.6	66.0	54.1	53.1	56.5	59.6	50	107	230	495
Pebble Beach Drive to Fanita Parkway, Near Term + 50 % projec	67.4	76.3	81.2	0.9	68.9	63.4	66.6	71.6	66.0	55.8	56.4	66.9	55.0	54.0	57.4	60.4	57	122	263	566
Pebble Beach Drive to Fanita Parkway, Near Term + project	67.4	76.3	81.2	0.9	69.7	64.1	67.3	72.4	66.8	56.6	57.1	67.6	55.7	54.7	58.1	61.2	63	136	294	632
Pebble Beach Drive to Fanita Parkway, Near Term + 50% projec	67.4	76.3	81.2	0.9	69.1	63.6	68.3	72.4	66.2	56.0	58.2	67.2	55.0	54.2	59.1	61.4	64	138	297	640
Mission Gorge Road	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
SR-125 to Fanita Drive, existing	69.3	77.6	82.1	2.6	74.4	70.6	72.9	77.7	71.6	63.0	62.8	72.6	62.8	61.1	63.7	67.4	151	325	699	1507
SR-125 to Fanita Drive, existing + construction	69.3	77.6	82.1	2.6	74.5	70.7	74.0	78.1	71.7	63.1	63.8	72.9	62.9	61.3	64.7	68.0	162	349	751	1618
SR-125 to Fanita Drive, Near Term	69.3	77.6	82.1	2.6	74.6	70.8	73.2	77.9	71.8	63.2	63.0	72.9	63.1	61.3	63.9	67.7	156	337	726	1563
SR-125 to Fanita Drive, Near Term + 50 % project	69.3	77.6	82.1	2.6	74.9	71.1	73.4	78.2	72.1	63.5	63.3	73.1	63.3	61.6	64.2	67.9	163	350	755	1626
SR-125 to Fanita Drive, Near Term + project	69.3	77.6	82.1	2.6	75.1	71.3	73.7	78.4	72.3	63.7	63.5	73.4	63.6	61.8	64.4	68.2	169	363	783	1686
SR-125 to Fanita Drive, Near Term + 50% project + construction	69.3	77.6	82.1	2.6	74.9	71.2	74.1	78.5	72.2	63.6	64.0	73.3	63.4	61.7	64.9	68.3	171	368	793	1708
Mission Gorge Road	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Fanita Drive to Carlton Hills Boulevard, existing	69.3	77.6	82.1	2.6	73.9	70.1	72.5	77.2	71.2	62.5	62.3	72.2	62.4	60.7	63.3	67.0	141	304	654	1409
Fanita Drive to Carlton Hills Boulevard, existing + construction	69.3	77.6	82.1	2.6	74.1	70.3	73.6	77.7	71.3	62.7	63.5	72.5	62.5	60.8	64.4	67.6	152	328	707	1524
Fanita Drive to Carlton Hills Boulevard, Near Term	69.3	77.6	82.1	2.6	74.1	70.3	72.7	77.4	71.4	62.7	62.5	72.4	62.6	60.9	63.5	67.2	145	313	674	1453
Fanita Drive to Carlton Hills Boulevard, Near Term + 50 % projec	69.3	77.6	82.1	2.6	74.5	70.6	73.0	77.7	71.7	63.1	62.9	72.7	62.9	61.2	63.8	67.5	153	329	708	1526
Fanita Drive to Carlton Hills Boulevard, Near Term + project	69.3	77.6	82.1	2.6	74.7	70.9	73.3	78.0	72.0	63.4	63.2	73.0	63.2	61.5	64.1	67.8	160	344	741	1597
Fanita Drive to Carlton Hills Boulevard, Near Term + 50% project	69.3	77.6	82.1	2.6	74.5	70.8	73.8	78.1	71.8	63.2	63.6	72.9	63.0	61.3	64.6	67.9	161	347	748	1611
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project site to Ganley Drive, existing	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, existing + construction	67.4	76.3	81.2	0.1	55.0	48.7	63.4	64.1	52.9	41.1	53.2	56.2	26.8	39.2	54.2	54.3	19	41	88	191
Project site to Ganley Drive, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project site to Ganley Drive, Near Term + 50 % project	67.4	76.3	81.2	0.1	62.0	54.7	59.6	64.4	59.1	47.1	49.4	59.8	46.1	45.2	50.4	52.6	18	39	84	182
Project site to Ganley Drive, Near Term + project	67.4	76.3	81.2	0.1	65.0	57.7	62.6	67.5	62.1	50.1	52.4	62.8	49.1	48.2	53.4	55.6	29	62	134	289
Project site to Ganley Drive, Near Term + 50% project + construc	67.4	76.3	81.2	0.1	62.6	55.4	64.5	67.0	59.8	47.9	54.3	61.1	46.0	46.0	55.3	56.2	28	61	131	281
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Ganley Drive to Lake Canyon Road, existing	67.4	76.3	81.2	-0.1	58.0	50.7	55.7	60.5	55.1	43.1	45.5	55.8	42.1	41.3	46.4	48.7	10	21	46	99
Ganley Drive to Lake Canyon Road, existing + construction	71.1	78.8	83.0	0.4	62.9	54.7	65.8	67.8	60.3	47.1	55.6	61.8	45.0	45.3	56.6	57.2	32	69	149	322
Ganley Drive to Lake Canyon Road, Near Term	67.4	76.3	81.2	-0.1	58.3	51.0	55.9	60.8	55.4	43.4	45.8	56.1	42.4	41.5	46.7	48.9	10	22	48	104
Ganley Drive to Lake Canyon Road, Near Term + 50 % project	71.1	78.8	83.0	0.4	66.7	58.1	62.4	68.4	63.7	50.5	52.2	64.2	50.7	48.6	53.1	56.0	33	71	152	328
Ganley Drive to Lake Canyon Road, Near Term + project	71.1	78.8	83.0	0.4	68.9	60.3	64.6	70.7	66.0	52.7	54.5	66.5	53.0	50.9	55.4	58.3	47	100	216	465
Ganley Drive to Lake Canyon Road, Near Term + 50% project +	71.1	78.8	83.0	0.4	67.1	58.6	66.3	70.0	64.3	51.0	56.1	65.1	50.7	49.2	57.0	58.5	43	93	201	433
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Lake Canyon Road to Mast Boulevard, existing	67.4	76.3	81.2	-0.1	59.7	52.4	57.4	62.2	56.8	44.8	47.2	57.5	43.8	43.0	48.1	50.4	13	28	60	129
Lake Canyon Road to Mast Boulevard, existing + construction	71.1	78.8	83.0	0.8	64.6	56.3	66.5	68.9	61.9	48.7	56.3	63.1	47.3	46.8	57.3	58.0	38	81	175	376
Lake Canyon Road to Mast Boulevard, Near Term	67.4	76.3	81.2	-0.1	60.1	52.7	57.7	62.5	57.2	45.2	47.5	57.8	44.1	43.3	48.4	50.7	14	29	63	135
Lake Canyon Road to Mast Boulevard, Near Term + 50 % projec	71.1	78.8	83.0	0.8	67.5	58.9	63.2	69.3	64.6	51.3	53.0	65.0	51.6	49.4	53.9	56.8	37	80	173	372
Lake Canyon Road to Mast Boulevard, Near Term + project	71.1	78.8	83.0	0.8	69.5	60.9	65.2	71.2	66.5	53.3	55.0	67.0	53.5	51.4	55.9	58.8	50	109	234	504
Lake Canyon Road to Mast Boulevard, Near Term + 50% project	71.1	78.8	83.0	0.8	67.9	59.4	66.8	70.7	65.0	51.8	56.7	65.8	51.5	49.9	57.6	59.1	48	104	224	482
Fanita Parkway	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to Carlton Oaks Drive, existing	65.1	74.8	80.0	-0.1	57.5	50.9	53.2	59.5	54.5	43.3	43.0	55.1	41.7	41.4	43.9	47.3	8	18	39	84
Mast Boulevard to Carlton Oaks Drive, existing + construction	65.1	74.8	80.0	-0.1	58.8	52.5	63.5	65.0	56.1	45.0	53.4	58.2	41.6	43.1	54.3	54.8	21	46	100	215
Mast Boulevard to Carlton Oaks Drive, Near Term	65.1	74.8	80.0	-0.1	58.0	51.4	53.6	60.0	55.0	43.8	43.5	55.6	42.2	41.9	44.4	47.8	9	19	42	90
Mast Boulevard to Carlton Oaks Drive, Near Term + 50 % projec	65.1	74.8	80.0	-0.1	59.6	53.0	55.3	61.6	56.6	45.4	45.1	57.2	43.9	43.5	46.1	49.4	12	25	54	116
Mast Boulevard to Carlton Oaks Drive, Near Term + project	65.1	74.8	80.0	-0.1	60.8	54.2	56.5	62.8	57.8	46.6	46.3	58.4	45.1	44.7	47.2	50.6	14	30	65	139
Mast Boulevard to Carlton Oaks Drive, Near Term + 50% project	65.1	74.8	80.0	-0.1	60.3	53.9	62.7	65.0	57.5	46.3	52.6	58.9	43.8	44.4	53.5	54.4	21	45	98	210
Carlton Hills Boulevard	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Carlton Oaks Drive to Mission Gorge Road, existing	65.1	74.8	80.0	0.3	66.5	61.8	65.3	69.7	63.7	54.2	55.2	64.6	52.6	52.3	56.1	58.8	43	92	199	428
Carlton Oaks Drive to Mission Gorge Road, existing + constructic	65.1	74.8	80.0	0.3	66.7	62.1	67.6	70.8	63.9	54.5	57.4	65.2	52.7	52.6	58.4	60.2	51	111	238	513
Carlton Oaks Drive to Mission Gorge Road, Near Term	65.1	74.8	80.0	0.3	66.7	62.0	65.5	69.9	63.8	54.4	55.3	64.8	52.8	52.5	56.3	59.0	44	95	204	440
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50 % p	65.1	74.8	80.0	0.3	67.1	62.3	65.9	70.3	64.2	54.7	55.7	65.2	53.1	52.9	56.6	59.3	46	100	216	465
Carlton Oaks Drive to Mission Gorge Road, Near Term + project	65.1	74.8	80.0	0.3	67.4	62.7	66.2	70.6	64.5	55.1	56.0	65.5	53.4	53.2	57.0	59.7	49	105	227	489
Carlton Oaks Drive to Mission Gorge Road, Near Term + 50% pr	65.1	74.8	80.0	0.3	67.2	62.5	67.5	71.0	64.4	54.9	57.3	65.5	53.2	53.1	58.3	60.3	53	114	245	528
State Route 52	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Santo Road to Mast Boulevard, existing	75.5	81.7	85.2	-3.2	76.7	66.6	64.9	77.4	73.8	59.0	54.7	74.0	61.1	57.1	55.7	63.3	246	531	1143	2462
Santo Road to Mast Boulevard, existing + construction	75.5	81.7	85.2	-3.2	76.8	66.6	66.8	77.6	73.8	59.0	56.7	74.1	61.1	57.2	57.6	63.8	255	549	1183	2549
Santo Road to Mast Boulevard, Near Term	75.5	81.7	85.2	-3.2	77.1	66.9	65.3	77.7	74.1	59.3	55.1	74.3	61.4	57.5	56.0	63.7	260	560	1206	2599
Santo Road to Mast Boulevard, Near Term + 50 % project	75.5	81.7	85.2	-3.2	77.3	67.1	65.5	77.9	74.3	59.5	55.3	74.5	61.6	57.7	56.2	63.9	268	578	1245	2681
Santo Road to Mast Boulevard, Near Term + project	75.5	81.7	85.2	-3.2	77.5	67.3	65.7	78.1	74.5	59.7	55.5	74.7	61.8	57.9	56.4	64.1	276	595	1282	2762
Santo Road to Mast Boulevard, Near Term + 50% project + cons	75.5	81.7	85.2	-3.2	77.3	67.2	66.8	78.1	74.4	59.6	56.7	74.6	61.6	57.7	57.6	64.2	275	591	1274	2745
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Project Site to Magnolia Avenue, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Project Site to Magnolia Avenue, Near Term + 50% project	67.4	76.3	81.2	0.1	62.4	55.1	60.0	64.9	59.5	47.5	49.9	60.2	46.5	45.6	50.8	53.0	19	42	90	194
Project Site to Magnolia Avenue, Near Term + Project	67.4	76.3	81.2	0.1	65.4	58.1	63.0	67.9	62.5	50.5	52.9	63.2	49.5	48.7	53.8	56.0	31	66	143	309
Project Site to Magnolia Avenue, Near Term + 50% project + cor	67.4	76.3	81.2	0.1	63.0	55.8	64.6	67.2	60.2	48.2	54.4	61.4	46.4	46.3	55.4	56.3	29	62	134	290
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Magnolia Avenue to Princess Joann Road, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	67.4	76.3	81.2	0.1	59.8	52.5	57.4	62.3	56.9	44.9	47.2	57.6	43.9	43.0	48.2	50.4	13	28	60	130
Magnolia Avenue to Princess Joann Road, Near Term + Project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Magnolia Avenue to Princess Joann Road, Near Term + 50% prc	67.4	76.3	81.2	0.1	60.8	53.7	63.9	65.9	58.0	46.1	53.7	59.6	43.8	44.2	54.6	55.3	24	52	111	239
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Chaparral Drive, Near Term	67.4	76.3	81.2	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	67.4	76.3	81.2	0.1	59.8	52.5	57.4	62.3	56.9	44.9	47.2	57.6	43.9	43.0	48.2	50.4	13	28	60	130
Princess Joann Road to Chaparral Drive, Near Term + Project	67.4	76.3	81.2	0.1	62.8	55.5	60.4	65.3	59.9	47.9	50.3	60.6	46.9	46.0	51.2	53.4	21	44	96	206
Princess Joann Road to Chaparral Drive, Near Term + 50% proje	67.4	76.3	81.2	0.1	60.8	53.7	63.9	65.9	58.0	46.1	53.7	59.6	43.8	44.2	54.6	55.3	24	52	111	239
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Chaparral Drive to Woodglen Vista Drive, Near Term	65.1	74.8	80.0	0.9	51.5	46.7	50.3	54.7	48.6	39.2	40.1	49.6	37.5	37.3	41.0	43.8	4	9	20	42
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	71.1	78.8	83.0	0.9	64.1	57.3	59.9	66.1	61.2	49.8	49.7	61.8	50.2	47.9	50.6	54.5	24	51	111	239
Chaparral Drive to Woodglen Vista Drive, Near Term + Project	71.1	78.8	83.0	0.9	66.8	60.0	62.6	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	167	359
Chaparral Drive to Woodglen Vista Drive, Near Term + 50% proj	71.1	78.8	83.0	0.9	64.9	58.4	65.8	68.8	62.2	50.8	55.6	63.3	50.5	48.9	56.5	58.1	37	81	174	374
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, Near Term	65.1	74.8	80.0	0.9	59.6	54.9	58.4	62.9	56.8	47.3	48.3	57.7	45.7	45.4	49.2	51.9	15	32	69	149
Woodglen Vista Drive to El Nopal, Near Term + 50% project	71.1	78.8	83.0	0.9	66.8	60.0	62.5	68.8	63.9	52.4	52.4	64.5	52.8	50.5	53.3	57.2	36	77	166	359
Woodglen Vista Drive to El Nopal, Near Term + Project	71.1	78.8	83.0	0.9	68.4	61.6	64.2	70.4	65.5	54.1	54.0	66.1	54.5	52.2	54.9	58.8	46	99	214	462
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	71.1	78.8	83.0	0.9	67.2	60.6	66.6	70.4	64.5	53.0	56.5	65.4	53.0	51.1	57.4	59.4	47	102	220	475
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, Near Term	65.1	74.8	80.0	1.0	62.9	58.1	61.7	66.1	60.0	50.5	51.5	61.0	48.9	48.7	52.4	55.1	24	52	113	244
El Nopal to Mast Boulevard, Near Term + 50% project	71.1	78.8	83.0	0.9	68.7	61.9	64.5	70.7	65.9	54.4	54.3	66.4	54.8	52.5	55.3	59.1	48	104	225	484
El Nopal to Mast Boulevard, Near Term + Project	71.1	78.8	83.0	0.9	69.9	63.1	65.6	71.9	67.0	55.5	55.4	67.5	55.9	53.6	56.4	60.2	57	124	267	575
El Nopal to Mast Boulevard, Near Term + 50% project + construc	71.1	78.8	83.0	0.9	69.0	62.3	67.5	71.9	66.2	54.8	57.3	67.0	54.9	52.9	58.3	60.7	59	126	272	587
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Mast Boulevard to River Park Drive, Near Term	65.1	74.8	80.0	0.9	66.2	61.5	65.0	69.4	63.3	53.9	54.8	64.3	52.3	52.0	55.8	58.5	41	88	189	408
Mast Boulevard to River Park Drive, Near Term + 50% project	65.1	74.8	80.0	0.9	66.8	62.0	65.6	70.0	63.9	54.5	55.4	64.9	52.8	52.6	56.3	59.1	45	96	207	445
Mast Boulevard to River Park Drive, Near Term + Project	65.1	74.8	80.0	0.9	67.3	62.6	66.1	70.5	64.4	55.0	55.9	65.4	53.3	53.1	56.9	59.6	48	104	223	481
Mast Boulevard to River Park Drive, Near Term + 50% project + (	65.1	74.8	80.0	0.9	67.0	62.3	67.5	70.9	64.1	54.7	57.3	65.3	52.9	52.8	58.3	60.2	52	111	240	517
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
River Park Drive to Town Center Parkway, Near Term	65.1	74.8	80.0	0.9	67.6	62.8	66.4	70.8	64.7	55.3	56.2	65.7	53.6	53.4	57.1	59.8	50	108	233	503
River Park Drive to Town Center Parkway, Near Term + 50% pro	65.1	74.8	80.0	0.9	68.0	63.2	66.8	71.2	65.1	55.7	56.6	66.1	54.0	53.8	57.5	60.3	53	115	248	535
River Park Drive to Town Center Parkway, Near Term + Project	65.1	74.8	80.0	0.9	68.4	63.6	67.2	71.6	65.5	56.0	57.0	66.5	54.4	54.2	57.9	60.6	57	122	263	566
River Park Drive to Town Center Parkway, Near Term + 50% pro	65.1	74.8	80.0	0.9	68.1	63.4	68.3	71.9	65.3	55.8	58.1	66.4	54.1	54.0	59.1	61.2	60	130	279	601
Cuyamaca Street	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Town Center Parkway to Mission Gorge Road, Near Term	65.1	74.8	80.0	2.6	68.5	66.1	69.2	72.9	65.7	58.5	59.0	67.2	56.9	56.7	60.0	62.9	73	158	340	733
Town Center Parkway to Mission Gorge Road, Near Term + 50%	65.1	74.8	80.0	2.6	68.9	66.6	69.6	73.3	66.2	59.0	59.5	67.6	57.4	57.1	60.4	63.3	78	169	363	782
Town Center Parkway to Mission Gorge Road, Near Term + Proj	65.1	74.8	80.0	2.6	69.3	66.9	70.0	73.7	66.5	59.4	59.9	68.0	57.8	57.5	60.8	63.7	83	179	385	830
Town Center Parkway to Mission Gorge Road, Near Term + 50%	65.1	74.8	80.0	2.6	69.1	66.7	70.9	74.0	66.3	59.2	60.7	68.0	57.5	57.3	61.7	64.1	87	188	404	870
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Cuyamaca Street to Princess Joann Road, Near Term	65.1	74.8	80.0	0.1	####	####	####	####	####	####	####	####	####	####	####	####	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cuyamaca Street to Princess Joann Road, Near Term + 50% prc	65.1	74.8	80.0	0.1	57.3	52.6	56.1	60.6	54.5	45.0	46.0	55.5	43.4	43.1	46.9	49.6	10	23	49	105
Cuyamaca Street to Princess Joann Road, Near Term + Project	65.1	74.8	80.0	0.1	60.4	55.6	59.2	63.6	57.5	48.0	49.0	58.5	46.4	46.2	49.9	52.6	17	36	77	166
Cuyamaca Street to Princess Joann Road, Near Term + Project ·	65.1	74.8	80.0	0.1	58.5	54.0	63.2	64.9	55.8	46.4	53.1	58.0	43.9	44.6	54.0	54.8	21	46	98	211
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Princess Joann Road to Woodglen Vista Drive, Near Term	67.4	76.3	81.2	0.9	58.2	52.7	55.9	60.9	55.3	45.1	45.7	56.1	44.2	43.2	46.6	49.7	11	23	51	109
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	67.4	76.3	81.2	0.9	62.1	56.5	59.7	64.8	59.2	49.0	49.5	60.0	48.1	47.1	50.5	53.6	20	42	91	197
Princess Joann Road to Woodglen Vista Drive, Near Term + Pro	67.4	76.3	81.2	0.9	64.1	58.6	61.7	66.8	61.2	51.0	51.6	62.0	50.1	49.1	52.5	55.6	27	58	125	268
Princess Joann Road to Woodglen Vista Drive, Near Term + 50%	67.4	76.3	81.2	0.9	62.8	57.4	65.1	67.5	60.0	49.9	54.9	61.5	48.4	48.0	55.8	57.1	31	67	145	312
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
Woodglen Vista Drive to El Nopal, Near Term	67.4	76.3	81.2	0.9	64.5	59.0	62.2	67.2	61.6	51.4	52.0	62.4	50.5	49.5	52.9	56.0	29	62	133	287
Woodglen Vista Drive to El Nopal, Near Term + 50% project	67.4	76.3	81.2	0.9	65.8	60.2	63.4	68.5	62.9	52.7	53.2	63.7	51.8	50.8	54.2	57.3	35	75	161	348
Woodglen Vista Drive to El Nopal, Near Term + Project	67.4	76.3	81.2	0.9	66.7	61.2	64.4	69.4	63.8	53.6	54.2	64.7	52.8	51.8	55.2	58.2	40	87	187	404
Woodglen Vista Drive to El Nopal, Near Term + 50% project + cc	67.4	76.3	81.2	0.9	66.1	60.7	66.5	69.9	63.3	53.1	56.3	64.4	51.9	51.2	57.3	59.1	44	95	204	440
Magnolia Avenue	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####	0	0	0	0
El Nopal to Mast Boulevard, Near Term	67.4	76.3	81.2	0.9	66.3	60.8	64.0	69.0	63.4	53.2	53.8	64.2	52.4	51.4	54.7	57.8	38	82	176	379
El Nopal to Mast Boulevard, Near Term + 50% project	67.4	76.3	81.2	0.9	66.8	61.3	64.5	69.5	64.0	53.7	54.3	64.8	52.9	51.9	55.3	58.4	41	88	191	411
El Nopal to Mast Boulevard, Near Term + Project	67.4	76.3	81.2	0.9	67.3	61.8	65.0	70.0	64.4	54.2	54.8	65.2	53.4	52.3	55.7	58.8	44	95	205	441
El Nopal to Mast Boulevard, Near Term + 50% project + construc	67.4	76.3	81.2	0.9	67.1	61.6	67.1	70.7	64.3	54.1	56.9	65.3	53.0	52.2	57.8	59.9	50	107	230	497

Appendix F. Roadway Construction Noise Model Results On Site

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F_Fanita Onsite 03 27 2019.txt
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/29/2019
Case Description: Fanita On Site

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residence	Commercial	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Scraper	No	40		83.6	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0
Dump Truck	No	40		76.5	50.0	0.0
Sand Blasting (Single Nozzel)	No	20		95.7	50.0	0.0
Sand Blasting (Single Nozzel)	No	20		95.7	50.0	0.0

Results

Noise Limits (dBA)	Noise Limit Exceedance (dBA)	
Calculated (dBA)	Day	Evening

Equipment	Day		Evening		Night		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A
Sand Blasting (Single Nozzel)	95.7	88.7	N/A	N/A	N/A	N/A	N/A	N/A
Sand Blasting (Single Nozzel)	95.7	88.7	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.7	92.7	N/A	N/A	N/A	N/A	N/A	N/A

Appendix G. Roadway Construction Noise Model Results Off Site

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G_Fanita offsite 03 27 2019.txt
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 03/28/2019
Case Description: Fanita On Site

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residence	Commercial	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Scraper	No	40		83.6	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Excavator	No	40		80.7	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA) Day Evening Night Day Evening Night

Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	85.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix H. Noise Barrier Height Estimates

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SOUND BARRIER LOSS ESTIMATION*

Scenario: Fanita Parkway at Santee Lakes Campground

DATA	INPUT	
Barrier Top Elevation, feet	429	
Source Ground Elevation, feet	425	
Height of Source above Ground, feet:	3	
Observer Elevation at ground or floor	413	
Distance from source to barrier, feet:	35	
Distance from barrier to observer, feet:	80	

BARRIER EFFECT RESULT

Infinite Barrier Attenuation:	-8.0	dBA
Is Observer at Ground Level (yes or no):	yes	
Adjustment for Loss of Ground Attenuation:	2.0	dBA
Infinite Barrier Insertion Loss:	-6.0	dBA
Finite Barrier Adjustment		
Enter angle subtended by barrier :	180	degrees
Enter Noise Level Without Barrier:	70	dBA
Enter Reference Distance for Noise Level:	50	feet
Noise level including insertion loss of Barrier:	60.4	dBA
Noise Level of barrier gaps:	0.0	dBA
SUMMED AVERAGE LEVEL:	60.4	dBA

* Assumes a sound wavelength of 2 feet (about 550 Hz).
Methodology Source: Harris, C.M. (1979), Handbook of Noise Control, 2nd. Ed.

SOUND BARRIER LOSS ESTIMATION*

Scenario: Fanita Parkway Section A-A (Project Site to Ganley)

DATA	INPUT	
Barrier Top Elevation, feet	455	
Source Ground Elevation, feet	435	
Height of Source above Ground, feet:	3	
Observer Elevation at ground or floor	480	
Distance from source to barrier, feet:	61	
Distance from barrier to observer, feet:	116	

BARRIER EFFECT RESULT

Infinite Barrier Attenuation:	-4.9	dBA
Is Observer at Ground Level (yes or no):	yes	
Adjustment for Loss of Ground Attenuation:	1.0	dBA
Infinite Barrier Insertion Loss:	-3.9	dBA
Finite Barrier Adjustment		
Enter angle subtended by barrier :	180	degrees
Enter Noise Level Without Barrier:	66	dBA
Enter Reference Distance for Noise Level:	50	feet
Noise level including insertion loss of Barrier:	56.6	dBA
Noise Level of barrier gaps:	0.0	dBA
SUMMED AVERAGE LEVEL:	56.6	dBA

* Assumes a sound wavelength of 2 feet (about 550 Hz).
Methodology Source: Harris, C.M. (1979), Handbook of Noise Control, 2nd. Ed.

SOUND BARRIER LOSS ESTIMATION*

Scenario: Cuyamaca Section A-A (El Nopal to Beck Drive)

DATA	INPUT	
Barrier Top Elevation, feet	508	
Source Ground Elevation, feet	485	
Height of Source above Ground, feet:	3	
Observer Elevation at ground or floor	520	
Distance from source to barrier, feet:	87	
Distance from barrier to observer, feet:	75	

BARRIER EFFECT RESULT

Infinite Barrier Attenuation:	-4.8	dBA
Is Observer at Ground Level (yes or no):	yes	
Adjustment for Loss of Ground Attenuation:	0.0	dBA
Infinite Barrier Insertion Loss:	-4.8	dBA
Finite Barrier Adjustment		
Enter angle subtended by barrier :	180	degrees
Enter Noise Level Without Barrier:	71	dBA
Enter Reference Distance for Noise Level:	50	feet
Noise level including insertion loss of Barrier:	61.1	dBA
Noise Level of barrier gaps:	0.0	dBA
SUMMED AVERAGE LEVEL:	61.1	dBA

* Assumes a sound wavelength of 2 feet (about 550 Hz).
Methodology Source: Harris, C.M. (1979), Handbook of Noise Control, 2nd. Ed.

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Appendix I. Use of Asphalt Rubber as CEQA Mitigation Memorandum

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Harris & Associates

MEMORANDUM

To: Marni Borg, Principal Environmental Planner, City of Santee
From: Sharon Toland, Project Manager
RE: Use of Asphalt Rubber as CEQA Mitigation
Date: May 20, 2020
CC: Melanie Kush, Director of Planning, City of Santee

This memorandum documents the feasibility of asphalt rubber for mitigation of roadway noise impacts associated with the Fanita Ranch Project that are evaluated in the project-specific Noise Technical Report and Environmental Impact Report (EIR).

In early drafts of the Noise Technical Report that Harris prepared for the Fanita Ranch Project, Harris suggested the potential installation of asphalt rubber pavement to mitigate potential impacts to segments of Fanita Parkway, Cuyamaca Street, and Magnolia Avenue where installation of a noise barrier would not be feasible. Studies have demonstrated community noise level reductions in some instances of 5 A-weighted decibels (dBA), and up to 14 dBA, compared to traditional asphalt.[1,2] Additional personal communication with the California Department of Transportation indicated that research from the University of California Pavement Research Center (UCPRC) would be most applicable for our analysis. The most recent study from UCPRC related to asphalt rubber demonstrated that use of asphalt rubber pavement could reduce on-board sound intensity (noise level where tire meets the pavement) by 3 dBA at the time of installation, although reduction in sound intensity varied based on material.[3] Because a noticeable (3 dBA or more) reduction was demonstrated at the source (on-board sound intensity), and case studies demonstrated noticeable reductions in community noise level as a result of asphalt rubber installation, we identified asphalt rubber as a mitigation measure for the proposed project. However, because of the uncertainties in determining the potential reduction in community noise level from asphalt rubber over time, we concluded that with mitigation of asphalt rubber impacts resulting from project-generated traffic would not be reduced to below the significance threshold and would continue to be significant and unavoidable.

We have considered additional factors to asphalt rubber installation and longevity and received input from Harris and City of Santee (City) engineers, and project stakeholders at Padre Dam Municipal Water District. As a result of this additional consideration, we have concluded that asphalt rubber is not a feasible mitigation measure in the Noise Technical Report. Based on discussion with Harris engineers and review of UCPRC research, the noise reducing properties of asphalt rubber vary as a result of pavement type, as well as installation methods and experience of the construction contractor. The effectiveness of noise reductions could not be assessed prior to installation, and performance compared to existing asphalt could not be demonstrated without expensive, specialized equipment to measure on-board sound levels. Comparison of ambient community noise levels to future noise levels with asphalt rubber would not accurately isolate the effect of asphalt rubber, as traffic volumes would increase compared to existing, ambient conditions as a result of cumulative growth, as well as the proposed

[1] Putman, B.J., and S.N. Amirkhanian. 2005. "Rubberized Asphalt Mixtures: A Novel Approach to Pavement Noise Reduction." WIT Transactions on the Built Environment 77 (Urban Transport): 541–549.

[2] Sacramento County Department of Environmental Review and Assessment and Bollard & Brennan, Inc. 1999. Report of the Status of Rubberized Asphalt Traffic Noise Reduction in Sacramento County.

[3] UCPRC (University of California Pavement Research Center). 2012. Investigation of Noise and Ride Quality Trends for Asphaltic Pavement Surface Types: Five-Year Results. Research Report: UCPRC-RR-2012-04. Prepared for the California Department of Transportation. August.

project. Additionally, the noise-reducing properties of asphalt rubber deteriorate over time.[4] Similar to comparing future noise levels to existing noise levels, the City would not be able to accurately measure the deterioration in performance of asphalt rubber without measuring on-board sound levels because community noise level would be affected by changes in traffic volumes and asphalt rubber performance could not be isolated.

In addition to difficulties in determining whether the mitigation is effective, asphalt rubber would result in a maintenance burden compared to traditional asphalt. The UCPRC found that rubberized hot-mix asphalt open graded pavement, which is the pavement type that demonstrated a 3 dBA reduction compared to traditional pavement, provided noise reduction for several years after application, but noise benefit generally diminished noticeably after 7 to 9 years.[5] Asphalt rubber did not provide a reduction of 3 dBA or more after 9 years. Results were similar for other case studies.[6] Therefore, it is assumed that asphalt rubber would need to be replaced at least every 9 years to maintain noise benefits. This replacement schedule would result in additional impacts compared to regular pavement, which the City currently replaces at an average of every 15 years or more. Unlike traditional pavement, the entire length of asphalt rubber would need to be removed and replaced rather than limiting maintenance to worn areas. More frequent replacement would cause nuisance impacts and disruption from more frequent road closures, additional exposure to construction noise, and additional criteria pollutant and greenhouse gas emissions.

Finally, Padre Dam Municipal Water District has major water and sewer facilities within affected roadways that require frequent maintenance. Padre Dam Municipal Water District emailed comments to the City on March 10, 2020,[7] that expressed several concerns related to asphalt rubber:

- Increased roadway maintenance frequency and loss of effectiveness of asphalt rubber over time would result in nuisance noise to the Santee Lakes Recreation Preserve campground.
- The need to repair and replace the roadway with asphalt rubber pavement after each maintenance event would cause undue burden to its operations and budget.
- Due to temperature requirements for asphalt rubber installation, asphalt replacement would likely be limited to spring and summer, when potential nuisance noise exposure at the Santee Lakes Recreation Preserve campground would be at its peak.

Therefore, it was determined that the potential adverse impacts of asphalt rubber pavement outweigh the potential benefits. After careful consideration, in this circumstance, weighing all the factors for the proposed project, the use of asphalt rubber pavement as a mitigation measure to reduce traffic noise levels has been determined to be infeasible in the Noise Technical Report and EIR.

[4] UCPRC 2012.

[5] UCPRC 2012.

[6] Freitas, Elisabete F. 2012. “The effect of time on the contribution of asphalt rubber mixtures to noise abatement.” Noise Control Engineering Journal. January–February 2012.

[7] Mael, Courtney. 2020. “Fanita Ranch (204020).” Email from Courtney Mael (Engineering Manager, Development and Construction, Padre Dam Municipal Water District) to Scott Johnson (Principal Civil Engineer, City of Santee). March 10.

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