APPENDIX J

NOISE IMPACT ANALYSIS

NOISE IMPACT ANALYSIS

LA ENTRADA SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

LSA

June 2013

NOISE IMPACT ANALYSIS

LA ENTRADA SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

Submitted to:

City of Coachella
Planning Department
Coachella, California 92236

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614-4731
(949) 553-0666

LSA Project No. CLA1201A

LSA

June 2013

TABLE OF CONTENTS

APPENDIX

FIGURES AND TABLES

FIGURES

TABLES

1.0 EXECUTIVE SUMMARY

This noise impact analysis provides a discussion of the proposed La Entrada Specific Plan project, the physical setting of the project area, and the regulatory framework for acoustics. The analysis provides data on the existing noise environment, evaluates potential noise impacts associated with the proposed project, and identifies mitigation measures where feasible.

Implementation of the proposed project includes the development of 7,800 residential units, elementary schools, parks and recreation uses, open space, and mixed uses. These land uses will add new daily trips to the local roadways. The addition of these vehicle trips would increase the noise levels along the roadways in the project vicinity. However, the proposed project would not expose existing off-site sensitive receptors to noise levels exceeding the City of Coachella's (City's) 60 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) exterior noise standard. Therefore, no mitigation measures are required to reduce the long-term off-site traffic noise impacts.

The proposed on-site residential uses would potentially be exposed to traffic noise levels exceeding the City's noise standards and require noise mitigation measures, including sound barriers, air conditioning systems, and building facade upgrades, such as windows with a sound transmission class (STC) rating higher than standard building construction provides.

There would be no on-site stationary sources that would generate noise levels at adjacent land uses such that the 65 dBA maximum instantaneous noise level (L_{max}) nighttime noise threshold (10:00 p.m.–7:00 a.m.) at the nearest sensitive receptor locations would be exceeded. Therefore, no mitigation measures are required to reduce the long-term on-site noise levels.

Construction of the proposed project would result in potentially high short-term intermittent noise levels reaching 86 dBA L_{max} at the closest sensitive receptor to the project site. Construction activities will be limited to the hours as specified in the City's noise control ordinance.

With the implementation of the mitigation measures listed in Section 4.2, as summarized below, all of the proposed project's potential noise impacts would be reduced to below a level of significance.

1.1 SHORT-TERM CONSTRUCTION-RELATED IMPACTS

Construction of the proposed project would potentially result in noise levels exceeding the maximum noise level allowed at the closest residences. The following measures would reduce short-term construction-related noise impacts associated with the proposed project:

1. The project contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
2. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors to the west of the site.

3. The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors to the west of the site during all project construction.
4. All construction, maintenance, or demolition activities within the City's boundary shall be limited to the hours as specified in the City's noise control ordinance.

   - **October 1st through April 30th**
     Monday-Friday: 6:00 a.m. to 5:30 p.m.
     Saturday: 8:00 a.m. to 5:00 p.m.
     Sunday: 8:00 a.m. to 5:00 p.m.
     Holidays: 8:00 a.m. to 5:00 p.m.
   - **May 1st through September 30th**
     Monday-Friday: 5:00 a.m. to 7:00 p.m.
     Saturday: 8:00 a.m. to 5:00 p.m.
     Sunday: 8:00 a.m. to 5:00 p.m.
     Holidays: 8:00 a.m. to 5:00 p.m.

1.2 LONG-TERM OPERATIONS-RELATED IMPACTS

The proposed project would potentially be exposed to traffic noise levels exceeding the maximum noise level allowed at the residences. The following measures would reduce long-term traffic noise impacts associated with the proposed project:

1. For dwelling units proposed in the medium density residential zone of G12 and the mixed-use zones of G9, G10, and G11, the following mitigation measures need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of Avenue 50 that are within the impact zone:

   - Areas exceeding 70 dBA CNEL (within 58 feet [ft] from centerline of Avenue 50): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 65 dBA CNEL (within 120 ft from centerline of Avenue 50): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 60 dBA CNEL (within 256 ft from centerline of Avenue 50): 5 ft for both ground floor and upper floor outdoor living areas;
   - Structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 68 ft of Avenue 50 centerline) would require upgrades, such as windows with STC ratings of STC-28 or higher; and
   - An air-conditioning system is required for residential structures directly adjacent to Avenue 50.
2. For residential units proposed within the G6 and G7 mixed-use zones that are potentially impacted by traffic noise from Avenue 50, the following mitigation measures would be required:

   - Areas exceeding 70 dBA CNEL (within 54 ft from centerline of Avenue 50): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;

- Areas exceeding 65 dBA CNEL (within 110 ft from centerline of Avenue 50): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
- Areas exceeding 60 dBA CNEL (within 235 ft from centerline of Avenue 50): 5 ft for both ground floor and upper floor outdoor living areas;
- Building facade upgrades are required for residential structures that are proposed within 63 ft of Avenue 50 centerline, such as windows with STC-28 or higher; and
- An air-conditioning system is required for residential structures directly adjacent to Avenue 50.

3. For dwelling units proposed in G5 (High Density Residential), G6 (Mixed Use), G7 (Mixed Use), G8 (High Density Residential), G19 (Medium Density Residential), and G20 (Low Density Residential) that be exposed to traffic noise exceeding the 60, 65, and 70 dBA CNEL, respectively, the following sound wall heights need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of Interstate 10 (I-10) that are within the impact zone:
   - Areas exceeding 70 dBA CNEL (within 619 ft from centerline of I-10): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 65 dBA CNEL (within 1,333 ft from centerline of I-10): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 60 dBA CNEL (within 2,871 ft from centerline of I-10): 5 ft for both ground floor and upper floor outdoor living areas;
   - Building facade upgrades are required for residential structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 722 ft of I-10 centerline), such as windows with STC-28 or higher; and
   - An air-conditioning system is required for residential structures directly adjacent to I-10.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The proposed La Entrada Specific Plan, a comprehensive amendment to and expansion of the previously approved McNaughton Specific Plan, is located in the City of Coachella, within the Coachella Valley region of the County of Riverside (County).

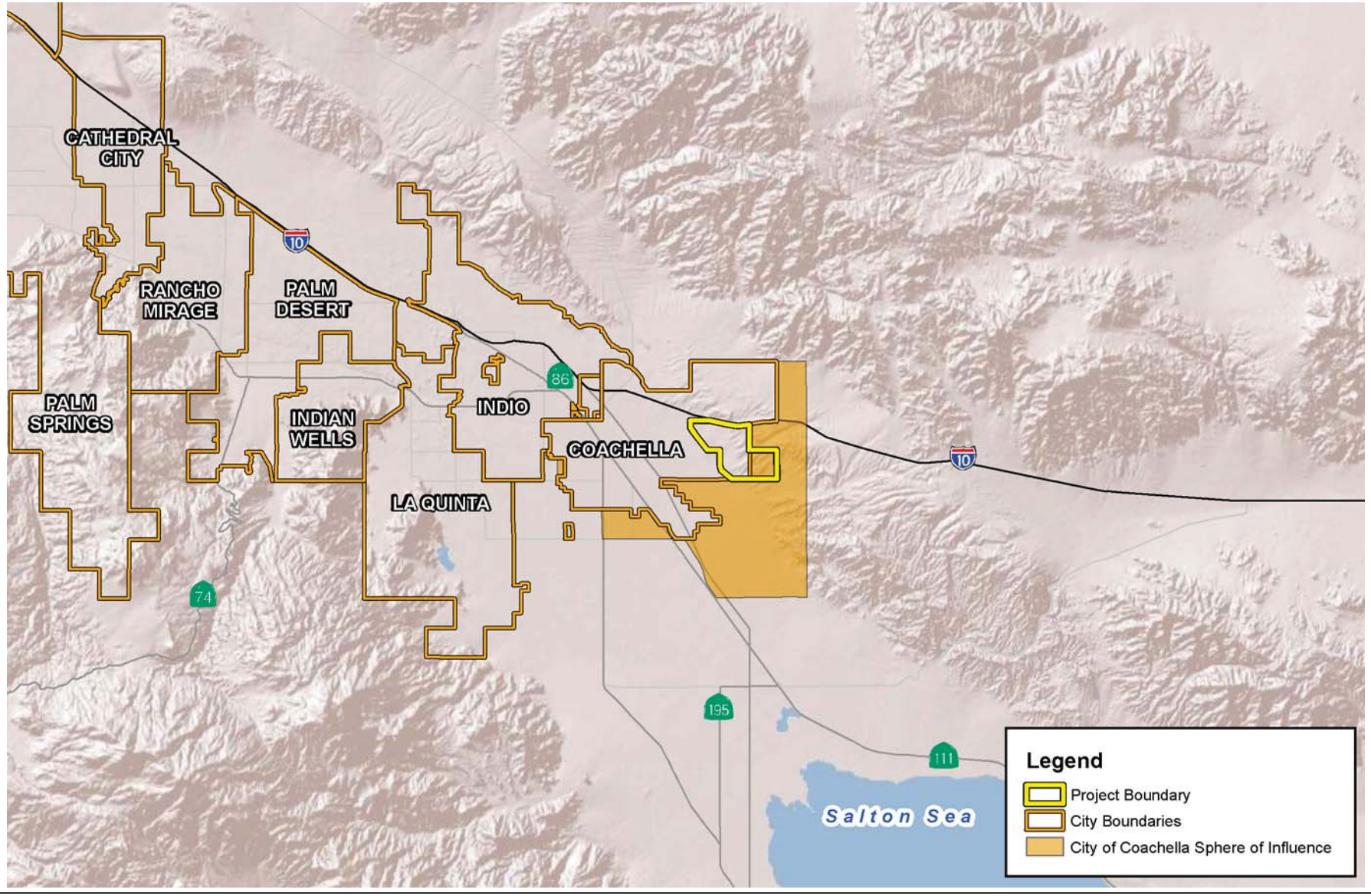
The project site is located along the foothills of the Little San Bernardino Mountains on the eastern flank of the Coachella Valley, north of the Salton Sea (refer to Figure 1, *Regional Location Map*). The site is located south of I-10 and north of the Coachella Branch of the All American Canal, both of which are presently barriers to vehicular access to the site (refer to Figure 2, *Project Vicinity Map*). The site consists of approximately 2,200 gross acres (ac), of which approximately 1,612 ac are currently in the City of Coachella and 588 ac are in unincorporated Riverside County but within the City of Coachella's Sphere of Influence (SOI) and the planning area of the City as identified in the City of Coachella General Plan.

2.2 PROJECT DESCRIPTION

The La Entrada Specific Plan, a comprehensive amendment to the McNaughton Specific Plan, proposes a master planned residential community on 2,200 ac within the City of Coachella and its approved SOI. The Specific Plan proposes:

- A mix of approximately 7,800 residential units (on approximately 980.9 ac); 135 ac of Mixed Use (High Density Residential, Commercial, Public Facilities, and other Non-Residential uses)
- 69.8 ac of elementary schools
- 344.7 ac of parks/recreation uses
- 112.2 ac of circulation uses (including on-site interchange grading)
- 556.9 ac of open space

Many of the land uses and planning areas in the Specific Plan will be linked by a village paseo approximately 50–100 ft wide, which will connect many of the park/recreation areas with the residential, mixed-use, and commercial areas. Table A, Land Use Summary, identifies land uses proposed as part of the Specific Plan. Figure 3 illustrates the land use plan for the proposed La Entrada Specific Plan.



LSA

FIGURE 1

N

0 2.5 5

MILES

SOURCE: RBF La Entrada Specific Plan

I:\CLA1201A\G\Regional Location.cdr (6/14/13)

La Entrada Specific Plan

Regional Project Location Map

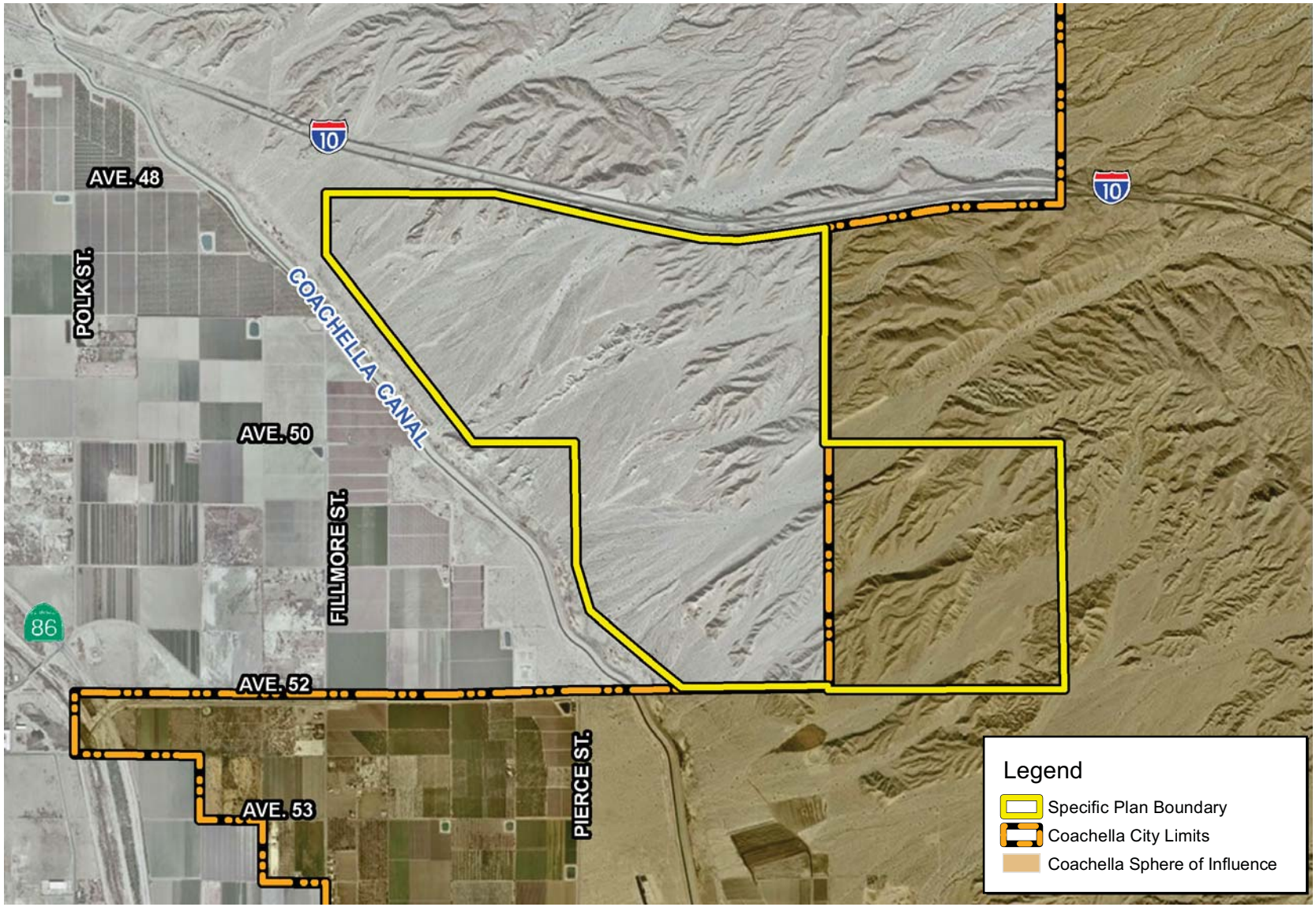


FIGURE 2

L S A

N

0 1500 3000

FEET

SOURCE: RBF La Entrada Specific Plan

I:\CLA1201A\G\Project Vicinity.cdr (6/14/13)

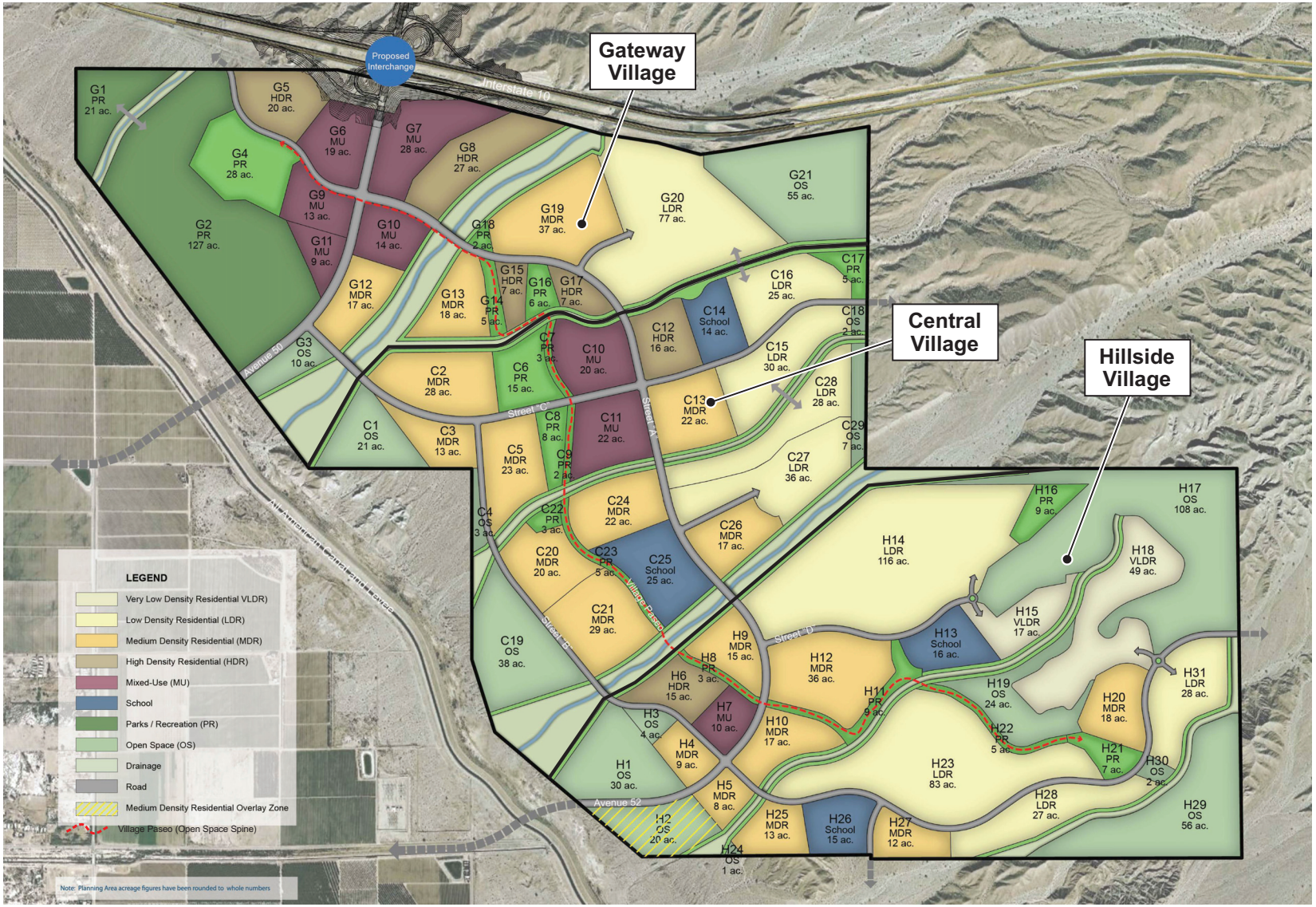
La Entrada Specific Plan

Project Vicinity Map

Table A: Land Use Summary

Land Use	Gross Acres (ac)	% Area	DU/AC	DU	FAR	Size (sf)
Residential						
Very Low-Density Residential (VLDR)	66.4	3.02%	0.5–2.9	133	-	-
Low-Density Residential (LDR)	448.7	20.40 %	3.0–5.9	2,055		
Medium-Density Residential (MDR)	374.2	17.01 %	6.0–12.9	3,060	-	-
High-Density Residential (HDR)	91.6	4.16 %	13.0–25	1832	-	-
Subtotal Residential	980.9	444.6 %	7.1	7,080	-	-
Mixed Use (MU)						
Retail Commercial	99.0	4.5 %	-	-	0.35	1,260,879
Office Commercial			-	-		250,000
High-Density Residential (HDR)	36.0	1.64 %	13.0–25	720	-	-
Community/Public Facilities	*	-	-	-	-	-
Subtotal Mixed Use	135.0	6.14 %	-	720	0.35	1,510,879
School						
Elementary School	44.8	2.04 %	-	-	-	-
Middle School	25	1.14 %				
Subtotal School	69.8	3.2 %				
Parks/Recreation						
Regional Park	176.6	8.03 %	-	-	-	-
Community Parks	44.4	2.03 %	-	-	-	-
Neighborhood Parks/Vista Points	14.1	0.64 %	-	-	-	-
Village Paseo/Linear Park	27.8	1.26 %	-	-	-	-
Desert Wash Paseos/Linear Parks	81.8	3.72 %	-	-	-	-
Subtotal Parks/Recreation	344.7	15.67 %	-	-	-	-
Open Space						
Open Space	381.1	17.33 %	-	-	-	-
Drainage/Wash	175.8	7.99 %	-	-	-	-
Subtotal Open Space	556.9	25.32 %	-	-	-	-
Roadways						
Right of Way	99.9	4.54 %	-	-	-	-
Interchange Grading	12.3	0.56 %	-	-	-	-
Subtotal Roadways	112.2	5.1 %	-	-	-	-
Specific Plan Totals	**2,199.5**	**100** %	**3.5**	**7,800**		**1,510,879**

Source: La Entrada Draft Specific Plan (April 2013).
* Community/Public Facilities in mixed-use areas may include police station, fire station, places of worship, community center, farmer's market, etc.
ac = acres
DU = dwelling units
FAR = Floor Area Ratio
sf = square feet



LSA

FIGURE 3

N

0 1000 2000

FEET

SOURCE: RBF La Entrada Specific Plan

I:\CLA1201A\G\Land Use Plan.cdr (6/14/13)

La Entrada Specific Plan

Land Use Plan

2.3 PROJECT PHASING

Development of the project would occur in a series of phases and be coordinated closely with the construction/extension of the regional roadway network (Avenue 52 and Avenue 50) over the Coachella Branch of the All American Canal and the future new proposed interchange along the I-10. Development of the proposed project is anticipated to occur in five master phases, based on future development patterns and existing and future availability of infrastructure. Streets, emergency vehicle access, utilities, and off-site improvements would be constructed as part of each corresponding phase. The phasing plan does not prohibit the simultaneous development of more than one phase of development. Each master phase of the Specific Plan can also be divided into sub-phases if the market demand dictates that one portion be developed prior to others. Each overall phase would be designed as independent of other phases, so subsequent phases could commence prior to the completion of previous phases. Ultimate timing of phases would be based upon infrastructure requirements, market demand, and City approval.

3.0 SETTING

3.1 CHARACTERISTICS OF SOUND

Sound is increasing to such disagreeable levels in the environment that it can threaten quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves, combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

3.2 MEASUREMENT OF SOUND

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units, such as inches or pounds, decibels (dB) are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 dB are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. Thirty dB represent 1,000 times as much acoustic energy as 1 dB. The dB scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The dB system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source, and their dB level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source, noise in a relatively flat environment with absorptive vegetation, decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and CNEL or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally exchangeable.

Other noise-rating scales of importance when assessing the annoyance factor include L_{max}, which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dB or greater since this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

3.3 PHYSIOLOGICAL EFFECTS OF NOISE

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dB, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dB, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160–165 dB will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying less developed areas.

Table B lists "Definitions of Acoustical Terms," and Table C shows "Common Sound Levels and Their Noise Sources."

Table B: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of sound level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L_{01}, L_{10}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, 1991.

Table C: Common Sound Levels and their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	
Average Office	60	Quiet	½ times as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	¼ times as loud
Large Transformer	45	Quiet	
Average Residence without Stereo Playing	40	Faint	⅛ times as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	
Human Breathing	10	Very Faint	Threshold of Hearing
	0	Very Faint	

Source: Compiled by LSA Associates, Inc., 2002.

3.3.1 Vibration

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but without the effects associated with the shaking of a building there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumble noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Building damage is not a factor for normal transportation projects, including rail projects, with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., blasting, pile driving and operating heavy duty earth-moving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with groundborne vibration and noise from these sources are usually localized to areas within approximately 100 ft from the vibration source, although there are examples of groundborne vibration causing interference out to distances greater than 200 ft (FTA 1995). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that groundborne vibration from street traffic will not exceed the impact criteria; however, both construction of the project and the freight train operations could result in groundborne vibration that could be perceptible and annoying. Groundborne noise is not likely to be a problem because noise arriving via the normal airborne path usually will be greater than groundborne noise.

Groundborne vibration has the potential to disturb people as well as to damage buildings. Although it is very rare for train-induced groundborne vibration to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 1995). Groundborne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). RMS is best for characterizing human response to building vibration and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the velocity in decibels (VdB), V is the RMS velocity amplitude, and V_{ref} is the reference velocity amplitude, or 1×10^{-6} inches/second used in the USA.

Factors that influence groundborne vibration and noise include the following:

- **Vibration Source:** Vehicle suspension, wheel types and condition, track/roadway surface, track support system, speed, transit structure, and depth of vibration source
- **Vibration Path:** soil type, rock layers, soil layering, depth to water table, and frost depth
- **Vibration Receiver:** foundation type, building construction, and acoustical absorption

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Experience with groundborne vibration is that vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at large distances from the track. Factors such as layering of the soil and depth to water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

3.4 EXISTING CONDITIONS

3.4.1 Land Uses on the Project Site and in the Project Vicinity

The property is currently vacant and undeveloped. Human-made features include an abandoned segment of old U.S. Highways 60/70 (replaced by I-10) along the northwestern portion of the site, an electrical transmission line adjacent to the southwestern border, and a smaller power line in the central portion of the property. There are no existing residences in the immediate vicinity of the project site.

The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. The resultant noise levels were weighted and summed over a 24-hour period in order to determine the CNEL values. CNEL contours are derived through a series of computerized iterations to isolate the 60, 65, and 70 dBA CNEL contours for traffic noise levels in the project area. Table D lists the existing traffic noise levels on roadway segments in the project vicinity. Table D shows that traffic noise in the project vicinity is low, except along Interstate 10 (I-10).

Table D: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	710	< 50	< 50	< 50	53.5
Avenue 50 between Polk St. and Fillmore St. (Secondary)	450	< 50	< 50	< 50	51.5
Avenue 50 between Fillmore St. and Street C (Secondary)	40	< 50	< 50	< 50	41.0
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	310	< 50	< 50	< 50	49.9
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	770	< 50	< 50	< 50	53.8
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	720	< 50	< 50	< 50	53.5
Fillmore St. south of Airport Blvd. (Arterial)	830	< 50	< 50	< 50	54.1
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	40	< 50	< 50	< 50	41.0
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	120	< 50	< 50	< 50	45.8
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	20	< 50	< 50	< 50	38.0
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	100	< 50	< 50	< 50	45.0
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	180	< 50	< 50	< 50	47.5
I-10 Freeway	29,000	420	905	1,948	81.7

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

3.5 FEDERAL, STATE, AND LOCAL NOISE STANDARDS

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The following summarizes noise standards from the federal, state, and local government agencies.

3.5.1 United States Environmental Protection Agency

In 1972, Congress enacted the Noise Control Act. This act authorized the EPA to publish descriptive data on the effects of noise and establish levels of sound "requisite to protect the public welfare with an adequate margin of safety." These levels are separated into health (hearing loss levels) and welfare (annoyance levels), as shown in Table E. The EPA cautions that these identified levels are not standards because they do not take into account the cost or feasibility of the levels.

Table E: Summary of EPA Noise Levels

Effect	Level	Area
Hearing loss	$L_{eq}(24) \leq 70$ dB	All areas.
Outdoor activity interference and annoyance	$L_{dn} \leq 55$ dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	$L_{eq}(24) \leq 55$ dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	$L_{eq} \leq 45$ dB	Indoor residential areas.
	$L_{eq}(24) \leq 45$ dB	Other indoor areas with human activities such as schools, etc.

Source: United States Environmental Protection Agency, 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March.
dB = decibels
EPA = Environmental Protection Agency
L_{dn} = day-night average noise level
L_{eq} = equivalent continuous sound level

For protection against hearing loss, 96 percent of the population would be protected if sound levels are less than or equal to an L_{eq} (24) of 70 dBA. The "(24)" signifies an L_{eq} duration of 24 hours. The EPA activity and interference guidelines are designed to ensure reliable speech communication at approximately 5 ft in the outdoor environment. For outdoor and indoor environments, interference with activity and annoyance should not occur if levels are below 55 dBA and 45 dBA, respectively.

The noise effects associated with an outdoor L_{dn} of 55 dBA are summarized in Table F. At 55 dBA L_{dn}, 95 percent sentence clarity (intelligibility) may be expected at 11 ft, and no substantial community reaction. However, 1 percent of the population may complain about noise at this level, and 17 percent may indicate annoyance.

Table F: Summary of Human Effects in Areas Exposed to 55 dBA L_{dn}

Type of Effect	Magnitude of Effect
Speech – Indoors	100 percent sentence intelligibility (average) with a 5 dB margin of safety.
Speech – Outdoors	100 percent sentence intelligibility (average) at 0.35 meter. 99 percent sentence intelligibility (average) at 1.0 meter. 95 percent sentence intelligibility (average) at 3.5 meters.
Average Community Reaction	None evident; 7 dB below level of significant complaints and threats of legal action and at least 16 dB below "vigorous action."
Complaints	1 percent dependent on attitude and other non-level related factors.
Annoyance	17 percent dependent on attitude and other non-level related factors.
Attitude Towards Area	Noise essentially the least important of various factors.

Source: United States Environmental Protection Agency, 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March.
dB = decibels
dBA = A-weighted decibels
L_{dn} = day-night average noise level

3.5.2 State of California

The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. The "State Noise Insulation Standard" requires noise-sensitive land uses to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the building. The State has also established land use compatibility guidelines for determining acceptable noise levels for specified land uses.

3.5.3 City of Coachella

The City, in its adopted Coachella General Plan 2020 (City of Coachella, September 1996), has an Environmental Hazards & Safety Element that contains noise standards. One of its policies states that "The City shall require noise control plans for new development located within the 60 CNEL contour (approximately 550 ft) of the centerline of major arterial roadways, 370 ft of the centerline of arterial roadways and 225 ft of collectors." Another policy states that "The City may require an acoustical analysis in compliance with the California Administrative Code Title 25, for proposed residential developments. The analysis shall be prepared under the supervision of a person experienced in the field of acoustical engineering and shall evaluate existing and projected noise levels, as well as, recommend noise attenuation measures." Figure 53 in the Environmental Hazards & Safety Element depicts the Design Noise Levels for City of Coachella.

The City in its Municipal Code, Chapter 7.04 – Noise Control established the sound level limits as related to fixed noise sources, as shown in Table G. It states that "Regardless of whether an objective measurement by sound level meter is involved, it shall be unlawful for any person to make, continue, or cause to be made or continued, within the City limits any disturbing excessive or offensive noise or vibration which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area of that is plainly audible at a distance greater than 50 ft from the sources point for any purpose. The following ten-minute average sound level limits , unless otherwise specifically indicated, shall apply as indicated in the following table as it relates to a fixed noise source or leaf blowers pursuant to Section 7.04.075."

Table G: Sound Level Limits as Related to Fixed Noise Sources

Zone	Time	Applicable Ten-Minute Average Decibel Limit (A-weighted)
Residential – All zones	6:00 a.m. to 10:00 p.m. 10:00 p.m. to 6:00 a.m.	55 45
Commercial – All zones	6:00 a.m. to 10:00 p.m. 10:00 p.m. to 6:00 a.m.	65 55

Source: City of Coachella Municipal Code, Chapter 7.04.

It also states that, "If the measured ambient noise level exceeds the applicable limit as noted in the table in subsection (A) of this section, the allowable average sound level shall be the ambient noise level. The ambient noise level shall be measured when the alleged noise violation sources are not operating." Finally, it states that, "The sound level limit between two zoning districts shall be measured at the higher allowable district."

The City's Municipal Code noise level limits have special provisions to exempt certain activities or events, including construction activities. Sub-Chapter 7.04.070 – Construction Activities states that "No person shall perform, nor shall any person be employed, nor shall any person cause any other person to be employed to work for which a building permit is required by the City in any work of construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road, or improvement to realty except between the hours as set forth as follows:

- **October 1st through April 30th**
  Monday-Friday: 6:00 a.m. to 5:30 p.m.
  Saturday: 8:00 a.m. to 5:00 p.m.
  Sunday: 8:00 a.m. to 5:00 p.m.
  Holidays: 8:00 a.m. to 5:00 p.m.
- **May 1st through September 30th**
  Monday-Friday: 5:00 a.m. to 7:00 p.m.
  Saturday: 8:00 a.m. to 5:00 p.m.
  Sunday: 8:00 a.m. to 5:00 p.m.
  Holidays: 8:00 a.m. to 5:00 p.m.

Emergency work and/or unusual conditions may cause work to be permitted with the consent of the City manager, or his or her designee, upon recommendation of the building director or the City engineer."

3.5.4 Vibration Impact Criteria

The criteria for environmental impact from groundborne vibration and noise are based on the maximum levels for a single event.

Federal Transit Administration and Federal Railroad Administration. Both the Federal Transit Administration (FTA) in its *Transit Noise and Vibration Impact Assessment* (FTA, May 2006) and

the Federal Railroad Administration (FRA) in its High-Speed Ground Transportation Noise and Vibration Impact Assessment (FRA, December 1998) included groundborne vibration and noise impact criteria guidance, as shown in Table 4.12.H. The criteria presented in Table 4.12.H account for variation in project types, as well as the frequency of events, which differ widely among transit projects. Most experience is with the community response to groundborne vibration from rail rapid transit systems, with typical headways in the range of three to ten minutes and each vibration event lasting less than ten seconds. It is intuitive that when there will be fewer events each day, as is typical for commuter rail projects, it should take higher vibration levels to evoke the same community response. This is accounted for in the criteria by distinguishing between projects with frequent and infrequent events, where the term "frequent events" is defined as more than 70 events per day. Most commuter rail projects will fall into the infrequent event category, although some commuter rail lines serving major cities are in the frequent event category.

Table H: Groundborne Vibration and Noise Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB re 1 micro inch/sec)		Groundborne Noise Impact Levels (dB re 20 micro Pascals)	
	Frequent[1] Events	Infrequent[2] Events	Frequent[1] Events	Infrequent[2] Events
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[3]	65 VdB[3]	[4]	[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	83 VdB	40 dBA	48 dBA

Source: Federal Transit Administration 2006.

[1] Frequent Events are defined as more than 70 events per day.

[2] Infrequent Events are defined as fewer than 70 events per day.

[3] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilation, and air conditioning (HVAC) systems and stiffened floors.

[4] Vibration-sensitive equipment is not sensitive to groundborne noise.

dBA = A-weighted decibels
inch/sec = inch per second
VdB - vibration velocity decibel

4.0 IMPACTS AND MITIGATION MEASURES

4.1 IMPACTS

4.1.1 Short-Term Construction-Related Impacts

Short-term noise impacts would be associated with project excavation, grading, and construction. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area, but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction crew commute and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA L_{max} at 50 ft from passing trucks, causing possible short-term intermittent annoyances, the effect of long-term (1 hour or 24 hours) ambient noise levels would be less than 1 dBA when averaged over a longer period of time. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would result in a less than significant impact on noise- sensitive receptors along the access routes.

The second type of short-term noise impact is related to noise generated during excavation, grading, and construction. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated and, therefore, the noise levels along the project alignment as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table I lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor.

Typical noise levels at 50 ft from an active construction area range up to 91 dBA L_{max} during the noisiest construction phases. The site preparation phase, which includes grading and paving, tends to generate the highest noise levels, since the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3–4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of scrapers, bulldozers, motor grader, and water and pickup trucks. Noise associated with the use of construction equipment is estimated to reach between 79 and 89 dBA L_{max} at a distance of 50 ft from the active construction area for the grading phase. As seen in Table E, the maximum noise level generated by each scraper is assumed to be approximately 87 dBA L_{max} at 50 ft from the scraper in operation. Each bulldozer would also generate approximately 85 dBA L_{max} at 50 ft. The maximum noise level generated by

Table I: Typical Construction Equipment Maximum Noise Levels

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 ft)	Suggested Maximum Sound Levels for Analysis (dBA at 50 ft)
Pile Drivers, 12,000 to 18,000 ft-lb/blow	81 to 96	93
Rock Drills	83 to 99	96
Jack Hammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Dozers	77 to 90	85
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

Source: Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek & Newman, 1987.
dBA = A-weighted decibels
ft = foot/feet
ft-lb/blow = foot-pounds per blow

the sound sources with equal strength increases the noise level by 3 dBA. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level during this phase of construction would be 91 dBA L_{max} at a distance of 50 ft from an active construction area. The closest sensitive receptors to the project's construction area are located at a distance of 100 ft. At this distance, these receptor locations would be exposed to construction noise levels of up to 85 dBA L_{max}. No significant construction noise impacts would occur if construction of the proposed project occurs within the permitted hours and standard construction noise measures are implemented as listed in Section 4.2.1.

Construction Vibration. Groundborne noise and vibration from construction activity would be mostly low to moderate except if pavement breaking or sheet pile vibration is used on site. Bulldozers and other heavy-tracked construction equipment generate approximately 92 VdB of ground-borne vibration when measured at 50 ft, based on Transit Noise and Vibration Impact Assessment (FTA, May 2006). This level of ground-borne vibration exceeds the threshold of human perception, which is around 65 VdB. Based on the California Department of Transportation↘s (Caltrans) Transportation Related Earthborne Vibration, Technical Advisory (Rudy Hendricks, July 24, 1992), vibration level at 100 ft is approximately 6 VdB lower than the vibration level at 50 ft. Vibration at 200 ft from the source is more than 6 VdB lower than the vibration level at 100 ft, or more than 12 VdB lower than

the vibration level at 50 ft. Therefore, receptors at 100 and 200 ft from the construction activity may be exposed to ground-borne vibration up to 86 and 80 VdB, respectively. Although this range of ground-borne vibration levels would result in potential annoyance at the nearest residences adjacent to the project site, they would not cause any damage to the buildings. Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities, such as those in the park adjacent to the project corridor.

4.1.2 Long-Term Traffic Noise Impacts

The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. The resultant noise levels were weighted and summed over a 24-hour period in order to determine the CNEL values. CNEL contours are derived through a series of computerized iterations to isolate the 60, 65, and 70 dBA CNEL contour for traffic noise levels in the project area.

Off-Site Traffic Noise Impacts. The project-related vehicle trips would be distributed to area roadways. Tables J, K, L, M, N, O, P, Q, and R list the traffic noise levels for the existing, 2020, 2030, and 2035 without and with project scenarios, respectively. Tables H and I also show the without and with I-10 Interchange at Avenue 50 scenarios. Tables J, K, N, P, and R show the project-related traffic noise level increases along roadway segments in the project vicinity that are affected by the proposed project. Due to the existing vacant land condition on the project site and in the immediate project vicinity, the vehicular traffic volumes are small and less than 1,000 vehicles a day along roadway segments in the project vicinity. If all project-related vehicular traffic is imposed to these roadway segments, the scenarios of existing plus project traffic conditions would result in substantial increases in traffic noise levels along the majority of the roadway segments leading to the project site, ranging up to a 27.1 dBA increase along Avenue 52 between Fillmore Street and Pierce Street under the Without I-10 Interchange scenario and up to a 24.8 dBA increase along the same roadway segment under the With I-10 Interchange scenario. However, as the project will be developed in phases gradually over a period of time (approximately 20 years), these existing plus project traffic scenarios would not likely occur for roadway segments in the project vicinity.

For the future (2020, 2030, and 2035) with project scenarios, the following off-site roadway segments would experience traffic noise level increases exceeding 3 dBA:

- Avenue 50 between Tyler Street and Polk Street: 2020 (+3.3 dBA)
- Avenue 50 between Polk Street and Fillmore Street: 2020 (+3.3 dBA)
- Avenue 50 between Fillmore Street and Street C: 2020 (+4.7 dBA), 2030 (+4.6 dBA), 2035 (+4.5 dBA)
- Avenue 52 between Fillmore Street and Pierce Street: 2020 (+4.5 dBA), 2030 (+4.2 dBA), 2035 (+4.2 dBA)

However, there are no existing noise sensitive land uses along Avenue 50 between Fillmore Street and Street C, along Avenue 50 between Polk Street and Fillmore Street, and along Avenue 52

between Fillmore Street and Pierce Street. Therefore, no potential traffic noise impacts would occur along these roadway segments.

Table J: Existing With Project Phases I-IV Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	17,200	69	146	312	70.2	16.7
Avenue 50 between Polk St. and Fillmore St. (Secondary)	17,800	71	149	319	70.3	18.8
Avenue 50 between Fillmore St. and Street C (Secondary)	7,400	< 50	84	178	66.5	25.5
Avenue 50 between Street C and Street A (Secondary)	8,800	< 50	94	200	67.2	N/A
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	530	< 50	< 50	< 50	52.2	2.3
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	3,100	< 50	< 50	55	59.9	6.1
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	2,200	< 50	< 50	< 50	58.4	4.9
Fillmore St. south of Airport Blvd. (Arterial)	830	< 50	< 50	< 50	54.1	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	14,600	< 50	71	153	66.6	25.6
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	250	< 50	< 50	< 50	48.9	3.1
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	980	< 50	< 50	< 50	54.9	16.9
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	930	< 50	< 50	< 50	54.6	9.6
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	910	< 50	< 50	< 50	54.5	7.0
I-10 Freeway	29,100	421	907	1,952	81.7	0.0

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
N/A = No comparison possible because road segment does not exist.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table K: Existing With Project Phases I-V Without I-10 Interchange Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	43,400	126	269	578	74.2	20.7
Avenue 50 between Polk St. and Fillmore St. (Secondary)	43,400	126	269	578	74.2	22.7
Avenue 50 between Fillmore St. and Street C (Secondary)	10,400	< 50	105	223	68.0	27.0
Avenue 50 between Street C and Street A (Secondary)	7,700	< 50	87	183	66.7	N/A
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	10,300	< 50	104	222	67.9	N/A
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	3,100	< 50	< 50	55	59.9	10.0
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	3,200	< 50	< 50	56	60.0	6.2
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	2,400	< 50	< 50	< 50	58.8	5.3
Fillmore St. south of Airport Blvd. (Arterial)	830	< 50	< 50	< 50	54.1	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	20,800	< 50	90	194	68.1	27.1
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	120	< 50	< 50	< 50	45.8	0.0
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	830	< 50	< 50	< 50	54.1	16.1
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	780	< 50	< 50	< 50	53.9	8.9
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	690	< 50	< 50	< 50	53.3	5.8
I-10 Freeway	31,600	445	958	2,063	82.0	0.3

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
N/A = No comparison possible because road segment does not exist.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table L: Existing With Project Phases I-V With I-10 Interchange Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	11,100	53	109	233	68.3	14.8
Avenue 50 between Polk St. and Fillmore St. (Secondary)	13,400	60	124	264	69.1	17.6
Avenue 50 between Fillmore St. and Street C (Secondary)	6,100	< 50	75	157	65.7	24.7
Avenue 50 between Street C and Street A (Secondary)	9,100	< 50	96	205	67.4	N/A
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	22,800	83	175	376	71.4	N/A
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	3,100	< 50	< 50	55	59.9	10.0
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	3,200	< 50	< 50	56	60.0	6.2
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	2,400	< 50	< 50	< 50	58.8	5.3
Fillmore St. south of Airport Blvd. (Arterial)	830	< 50	< 50	< 50	54.1	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	12,200	< 50	63	136	65.8	24.8
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	120	< 50	< 50	< 50	45.8	0.0
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	830	< 50	< 50	< 50	54.1	16.1
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	780	< 50	< 50	< 50	53.9	8.9
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	690	< 50	< 50	< 50	53.3	5.8
I-10 Freeway	37,700	501	1,077	2,320	82.8	1.1

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
N/A = No comparison possible because road segment does not exist.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table M: 2020 Without Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	10,800	< 50	108	229	68.1
Avenue 50 between Polk St. and Fillmore St. (Secondary)	11,200	54	110	235	68.3
Avenue 50 between Fillmore St. and Street C (Secondary)	1,700	< 50	< 50	69	60.1
Avenue 50 between Street C and Street A (Secondary)	1,700	< 50	< 50	69	60.1
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	1,400	< 50	< 50	61	59.3
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	7,700	< 50	< 50	100	63.8
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	5,400	< 50	< 50	79	62.3
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	4,300	< 50	< 50	68	61.3
Fillmore St. south of Airport Blvd. (Arterial)	4,200	< 50	< 50	67	61.2
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	3,700	< 50	< 50	62	60.6
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	1,200	< 50	< 50	< 50	55.8
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	6,400	< 50	< 50	89	63.0
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	6,700	< 50	< 50	91	63.2
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	6,500	< 50	< 50	90	63.1
I-10 Freeway	35,900	485	1,043	2,246	82.6

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table N: 2020 With Project Phases I-II Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	22,800	83	175	376	71.4	3.3
Avenue 50 between Polk St. and Fillmore St. (Secondary)	23,800	85	180	387	71.6	3.3
Avenue 50 between Fillmore St. and Street C (Secondary)	5,000	< 50	66	138	64.8	4.7
Avenue 50 between Street C and Street A (Secondary)	8,100	< 50	89	189	66.9	6.8
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	1,400	< 50	< 50	61	59.3	0.0
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	7,800	< 50	< 50	101	63.9	0.1
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	6,400	< 50	< 50	89	63.0	0.7
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	4,900	< 50	< 50	74	61.9	0.6
Fillmore St. south of Airport Blvd. (Arterial)	4,200	< 50	< 50	67	61.2	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	10,400	< 50	57	122	65.1	4.5
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	1,200	< 50	< 50	< 50	55.8	0.0
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	7,000	< 50	< 50	94	63.4	0.4
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	7,300	< 50	< 50	97	63.6	0.4
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	6,900	< 50	< 50	93	63.3	0.2
I-10 Freeway	35,900	485	1,043	2,246	82.6	0.0

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information. ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table O: 2030 Without Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	25,200	88	187	402	71.8
Avenue 50 between Polk St. and Fillmore St. (Secondary)	26,500	91	194	416	72.0
Avenue 50 between Fillmore St. and Street C (Secondary)	3,900	< 50	57	117	63.7
Avenue 50 between Street C and Street A (Secondary)	4,000	< 50	58	119	63.8
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	3,200	< 50	< 50	103	62.9
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	18,200	< 50	83	178	67.6
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	11,900	< 50	62	134	65.7
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	9,400	< 50	53	114	64.7
Fillmore St. south of Airport Blvd. (Arterial)	8,900	< 50	52	110	64.5
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	8,700	< 50	51	109	64.4
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	2,600	< 50	< 50	< 50	59.1
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	15,400	< 50	74	159	66.8
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	16,100	< 50	76	164	67.0
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	15,400	< 50	74	159	66.8
I-10 Freeway	45,600	568	1,223	2,634	83.6

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table P: 2030 With Project Phases I-IV Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	41,600	122	261	561	74.0	2.2
Avenue 50 between Polk St. and Fillmore St. (Secondary)	43,800	126	270	581	74.2	2.2
Avenue 50 between Fillmore St. and Street C (Secondary)	11,200	54	110	235	68.3	4.6
Avenue 50 between Street C and Street A (Secondary)	12,800	58	120	256	68.9	5.1
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	3,200	< 50	< 50	103	62.9	0.0
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	18,500	< 50	84	180	67.6	0.0
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	14,200	< 50	70	151	66.5	0.8
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	10,900	< 50	59	126	65.3	0.6
Fillmore St. south of Airport Blvd. (Arterial)	8,900	< 50	52	110	64.5	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	23,300	< 50	97	209	68.6	4.2
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	2,700	< 50	< 50	< 50	59.3	0.2
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	16,300	< 50	77	165	67.1	0.3
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	16,900	< 50	79	169	67.2	0.2
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	16,100	< 50	76	164	67.0	0.2
I-10 Freeway	45,700	569	1,225	2,638	83.6	0.0

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table Q: 2035 General Plan Buildout Without Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	33,800	107	228	489	73.1
Avenue 50 between Polk St. and Fillmore St. (Secondary)	19,000	74	156	333	70.6
Avenue 50 between Fillmore St. and Street C (Secondary)	3,200	< 50	< 50	103	62.9
Avenue 50 between Street C and Street A (Secondary)	2,000	< 50	< 50	76	60.8
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	11,200	54	110	235	68.3
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	33,300	58	123	266	70.2
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	17,200	< 50	80	171	67.3
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	12,300	< 50	64	137	65.9
Fillmore St. south of Airport Blvd. (Arterial)	12,000	< 50	63	135	65.8
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	7,300	< 50	< 50	97	63.6
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	4,500	< 50	< 50	70	61.5
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	17,500	< 50	81	173	67.4
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	18,400	< 50	83	179	67.6
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	17,300	< 50	80	172	67.3
I-10 Freeway	45,300	566	1,218	2,622	83.6

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

Table R: 2035 General Plan Buildout With Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Avenue 50 between Tyler St. and Polk St. (Secondary)	40,000	119	254	547	73.8	0.7
Avenue 50 between Polk St. and Fillmore St. (Secondary)	31,000	101	215	462	72.7	2.1
Avenue 50 between Fillmore St. and Street C (Secondary)	9,100	< 50	96	205	67.4	4.5
Avenue 50 between Street C and Street A (Secondary)	12,400	57	118	251	68.7	7.9
Avenue 50 between Street A and I-10 Eastbound Ramp (Secondary)	30,000	99	210	452	72.6	4.3
Fillmore St. between Avenue 50 and Avenue 52 (Arterial)	37,300	62	133	287	70.7	0.5
Fillmore St. between Avenue 52 and Avenue 53 (Arterial)	18,000	< 50	82	176	67.5	0.2
Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)	12,800	< 50	65	141	66.0	0.1
Fillmore St. south of Airport Blvd. (Arterial)	12,000	< 50	63	135	65.8	0.0
Avenue 52 between Fillmore St. and Pierce St. (Arterial)	19,200	< 50	86	184	67.8	4.2
Avenue 53 between Fillmore St. and Pierce St. (Arterial)	4,600	< 50	< 50	71	61.6	0.1
Pierce St. between Avenue 52 and Avenue 53 (Arterial)	21,500	< 50	92	199	68.3	0.9
Pierce St. between Avenue 53 and Avenue 54 (Arterial)	22,100	< 50	94	202	68.4	0.8
Pierce St. between Avenue 54 and Airport Blvd. (Arterial)	19,100	< 50	85	183	67.8	0.5
I-10 Freeway	51,900	619	1,333	2,871	84.2	0.6

Source: LSA Associates, Inc., June 2013.
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
I-10 = Interstate 10

There are three existing residences along Avenue 50 between Tyler Street and Polk Street. Two of them are more than 200 ft away from the centerline of Avenue 50 and would not be impacted by the projected 65 dBA CNEL traffic noise contour under the 2020 scenario. The other one has its front edge approximately 100 ft from the centerline of Avenue 50. However, there is no noise-sensitive outdoor living area between the structure and the road. The backyard is shielded by the off-site residences and would not be exposed to traffic noise exceeding 65 dBA CNEL under the year 2020 scenario. Therefore, no significant off-site traffic noise impacts would occur as a result of the proposed project, and no mitigation measures would be required for off-site sensitive land uses.

On-Site Traffic Noise Impacts. For the future (2020, 2030, and 2035) with project scenarios, the following on-site roadway segments would experience traffic noise level increases exceeding 3 dBA:

- **Avenue 50 between Street C and Street A:** 2020 (+6.8 dBA), 2030 (+5.1 dBA), 2035, (+7.9 dBA)
- **Avenue 50 between Street A and I-10 eastbound ramp:** 2035 (+4.3 dBA)

There are no existing noise-sensitive land uses on the project site; therefore, no land uses would be exposed to substantial traffic noise level increases, and no potential substantial traffic noise level increase impacts would occur along these roadway segments.

For the proposed project, the following street segments would have potential traffic noise impacts on the proposed on-site uses: Avenue 50 between Fillmore Street and Street C (G3 Open Space and G2 Parks/Recreation), Avenue 50 between Street C and Street A (G2 Parks/Recreation, G12 Medium Density Residential, and G9, G10, and G11, Mixed Use), Avenue 50 between Street A and the I-10 Eastbound Ramp (G7 and G8 Mixed Use), and I-10 (G1 Parks/Recreation, G5 High Density Residential, G6 Mixed Use, G7 Mixed Use, G8 High Density Residential, G19 Medium Density Residential, G20 Low Density Residential, and G21 Open Space).

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions along the roadway and freeway segments in the project's immediate vicinity. To determine the potential traffic noise impact on the proposed residential uses, the noise impact analysis was conducted using the projected traffic volumes along the roads that abut the proposed project site. Table N under the year 2030 scenario yields the highest traffic volumes along Avenue 50 between Fillmore Street and Street A, and Table P under the Year 2035 scenario yields the highest traffic volume along Avenue 50 between Street A and the I-10 eastbound ramp and I-10 in the project vicinity. Therefore, potential on-site traffic noise impacts use the projected traffic noise levels along these roadway segments under their respective future scenario to determine the impacts on the proposed land uses along these roadway segments. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and model printouts are provided in Appendix A.

Avenue 50. Based on Table M, dwelling units proposed in the medium density residential zone of G12 that are within 256 ft, 120 ft, and 58 ft of the Avenue 50 centerline would be exposed to traffic noise exceeding the 60, 65, and 70 dBA CNEL, respectively, exterior noise standards for residential uses. In order to reduce exterior noise levels to 60 dBA CNEL or lower, the following sound wall heights need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of Avenue 50 that are within the impact zone:

- **Areas Exceeding 70 dBA CNEL (within 58 ft from centerline of Avenue 50):** 8 ft for ground level outdoor living areas such as backyards or patios and 5 ft for upper floor outdoor living areas such as balconies or decks;
- **Areas Exceeding 65 dBA CNEL (within 120 ft from centerline of Avenue 50):** 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas; and

- **Areas Exceeding 60 dBA CNEL (within 256 ft from centerline of Avenue 50):** 5 ft for both ground floor and upper floor outdoor living areas.

Based on the data provided in the Environmental Protection Agency's (EPA) Protective Noise Levels (EPA 550/9-79-100, November 1979), standard homes in Southern California provide at least 12 dBA of exterior-to-interior noise attenuation with windows open and 24 dBA with windows closed. Therefore, building facade upgrades are required for residential structures that would experience interior noise levels exceeding the 45 dBA CNEL noise standard when windows are closed. Structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 68 ft of Avenue 50 centerline) would require upgrades. For example, outdoor walls would be constructed to attenuate higher levels of noise, and/or double-paned windows and air conditioning units would be installed.

Since it is not known at this time what types of mixed-uses would be proposed within the mixed-use zones (G7, G8, G9, G10, and G11) along Avenue 50, it is not feasible to identify mitigation measures for the land uses directly adjacent to Avenue 50. However, if there are residential uses proposed within G9, G10, and G11 that are within the noise impact zones identified above, these residential units would be subject to the same sound wall or building façade enhancements as described above. Commercial uses and open space are not considered noise-sensitive and would not be required to have any mitigation measures along Avenue 50. Depending on the location of the recreational facility within the parks/recreation zone, sound wall or building façade enhancements may be required if they are located within the 65 dBA CNEL impact areas.

For residential units proposed within the G6 and G7 mixed-use zones that are potentially impacted by traffic noise from Avenue 50, the following mitigation measures would be required:

- **Areas Exceeding 70 dBA CNEL (within 54 ft from centerline of Avenue 50):** 8 ft for ground level outdoor living areas such as backyards or patios and 5 ft for upper floor outdoor living areas such as balconies or decks;
- **Areas Exceeding 65 dBA CNEL (within 110 ft from centerline of Avenue 50):** 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas; and
- **Areas Exceeding 60 dBA CNEL (within 235 ft from centerline of Avenue 50):** 5 ft for both ground floor and upper floor outdoor living areas.

Building facade upgrades are required for residential structures that would experience interior noise levels exceeding the 45 dBA CNEL noise standard when windows are closed. Structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 63 ft of Avenue 50 centerline) would require upgrades.

Even with the recommended sound walls implemented, residential units along Avenue 50 would still be exposed to traffic noise exceeding 57 dBA CNEL. With windows open, rooms exposed to traffic noise higher than 57 dBA CNEL would not meet the 45 dBA CNEL interior noise standard (with 12 dBA exterior-to-interior noise attenuation provided by the building shell). In order to ensure that windows can remain closed for prolonged periods of time, a mechanical ventilation system, such as an air-conditioning system, would be required to achieve the interior noise standard of 45 dBA CNEL. Since all frontline dwelling units along Avenue 50 are expected to be exposed to traffic noise

higher than 57 dBA CNEL, an air-conditioning system is required for residential structures directly adjacent to Avenue 50.

I-10. Based on Table P, dwelling units proposed in G5 (High Density Residential), G8 (High Density Residential), G19 (Medium Density Residential), and G20 (Low Density Residential) that are within 2,638 ft, 1,225 ft, and 569 ft of the I-10 centerline would be exposed to traffic noise exceeding the 60, 65, and 70 dBA CNEL, respectively, exterior noise standards for residential uses. In order to reduce exterior noise levels to 60 dBA CNEL or lower, the following sound wall heights need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of I-10 that are within the impact zone:

- **Areas Exceeding 70 dBA CNEL (within 619 ft from centerline of I-10):** 8 ft for ground level outdoor living areas such as backyards or patios and 5 ft for upper floor outdoor living areas such as balconies or decks;
- **Areas Exceeding 65 dBA CNEL (within 1,333 ft from centerline of I-10):** 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas; and
- **Areas Exceeding 60 dBA CNEL (within 2,871 ft from centerline of I-10):** 5 ft for both ground floor and upper floor outdoor living areas.

Building facade upgrades are required for residential structures that would experience interior noise levels exceeding the 45 dBA CNEL noise standard when windows are closed. Structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 722 ft of I-10 centerline) would require upgrades.

Since it is not known at this time what types of mixed-uses would be proposed within the mixed-use zones (G6 and G7) along I-10, it is not feasible to identify mitigation measures for the land uses directly adjacent to I-10. However, if there are residential uses proposed within G6 and G7 that are within the noise impact zones identified above, these residential units would be subject to the same noise mitigation measures as described above. Commercial uses and open space are not considered noise-sensitive and would not be required to have any mitigation measures along I-10. Depending on the location of the recreational facility within the parks/recreation zone, mitigation measures may be required if they are located with the 65 dBA CNEL impact areas.

Even with the recommended sound walls implemented, residential units along I-10 would still be exposed to traffic noise exceeding 57 dBA CNEL. With windows open, rooms exposed to traffic noise higher than 57 dBA CNEL would not meet the 45 dBA CNEL interior noise standard (with 12 dBA exterior-to-interior noise attenuation provided by the building shell). In order to ensure that windows can remain closed for prolonged periods of time, a mechanical ventilation system, such as an air-conditioning system, would be required to achieve the interior noise standard of 45 dBA CNEL. Since all frontline dwelling units along I-10 are expected to be exposed to traffic noise higher than 57 dBA CNEL, an air-conditioning system is required for residential structures directly adjacent to I-10.

Groundborne Noise and Vibration from Vehicular Traffic. Because the rubber tires and suspension systems of buses and other on-road vehicles provide vibration isolation and reduce noise, it is unusual for on-road vehicles to cause groundborne noise or vibration problems. When on-road vehicles cause effects such as rattling of windows, the source is almost always airborne noise. Most problems with on-road vehicle-related noise and vibration can be directly related to a pothole, bump, expansion joint, or other discontinuity in the road surface. Smoothing the bump or filling the pothole will usually solve the problem. The proposed project would have new roads with smooth pavement and would not result in significant groundborne noise or vibration impacts from vehicular traffic.

4.2 MITIGATION MEASURES

4.2.1 Short-Term Construction-Related Impacts

Construction of the proposed project would potentially result in noise levels exceeding the maximum noise level allowed at the closest residences. The following measures would reduce short-term construction-related noise impacts associated with the proposed project:

1. The project contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
2. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors to the west of the site.
3. The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors to the west of the site during all project construction.
4. All construction, maintenance, or demolition activities within the City of Coachella's (City) boundary shall be limited to the following hours:

    - **October 1st through April 30th**
      Monday-Friday: 6:00 a.m. to 5:30 p.m.
      Saturday: 8:00 a.m. to 5:00 p.m.
      Sunday: 8:00 a.m. to 5:00 p.m.
      Holidays: 8:00 a.m. to 5:00 p.m.
    - **May 1st through September 30th**
      Monday-Friday: 5:00 a.m. to 7:00 p.m.
      Saturday: 8:00 a.m. to 5:00 p.m.
      Sunday: 8:00 a.m. to 5:00 p.m.
      Holidays: 8:00 a.m. to 5:00 p.m.

4.2.2 Long-Term Traffic Noise Impacts

The proposed project would potentially be exposed to traffic noise levels exceeding the maximum noise level allowed at the residences. The following measures would reduce long-term traffic noise impacts associated with the proposed project:

1. For dwelling units proposed in the medium density residential zone of G12 and the mixed-use zones of G9, G10, and G11, the following mitigation measures need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of Avenue 50 that are within the impact zone:
   - Areas exceeding 70 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) (within 58 ft from centerline of Avenue 50): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 65 dBA CNEL (within 120 ft from centerline of Avenue 50): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 60 dBA CNEL (within 256 ft from centerline of Avenue 50): 5 ft for both ground floor and upper floor outdoor living areas;
   - Structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 68 ft of Avenue 50 centerline) would require upgrades, such as windows with sound transmission class (STC; An STC rating is a single number rating used to compare the sound insulation properties of walls, floors, ceilings, windows, or doors. The sound transmission class is derived from measurements in 16 test frequency bands) ratings of STC-28 or higher; and
   - An air-conditioning system is required for residential structures directly adjacent to Avenue 50.
2. For residential units proposed within the G6 and G7 mixed-use zones that are potentially impacted by traffic noise from Avenue 50, the following mitigation measures would be required:
   - Areas exceeding 70 dBA CNEL (within 54 ft from centerline of Avenue 50): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 65 dBA CNEL (within 110 ft from centerline of Avenue 50): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 60 dBA CNEL (within 235 ft from centerline of Avenue 50): 5 ft for both ground floor and upper floor outdoor living areas;
   - Building facade upgrades are required for residential structures that are proposed within 63 ft of Avenue 50 centerline, such as windows with STC-28 or higher; and
   - An air-conditioning system is required for residential structures directly adjacent to Avenue 50.
3. For dwelling units proposed in G5 (High Density Residential), G6 (Mixed Use), G7 (Mixed Use), G8 (High Density Residential), G19 (Medium Density Residential), and G20 (Low Density Residential) that would be exposed to traffic noise exceeding the 60, 65, and 70 dBA CNEL, respectively, the following sound wall heights need to be implemented for residential units with outdoor living areas (backyard, patio, balcony, or deck) along this segment of I-10 that are within the impact zone:
   - Areas exceeding 70 dBA CNEL (within 569 ft from centerline of I-10): 8 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;
   - Areas exceeding 65 dBA CNEL (within 1,225 ft from centerline of I-10): 6 ft for ground level outdoor living areas and 5 ft for upper floor outdoor living areas;

- Areas exceeding 60 dBA CNEL (within 2,638 ft from centerline of I-10): 5 ft for both ground floor and upper floor outdoor living areas;
- Building facade upgrades are required for residential structures that would be exposed to exterior noise exceeding 69 dBA CNEL (within 663 ft of I-10 centerline), such as windows with STC-28 or higher; and
- An air-conditioning system is required for residential structures directly adjacent to I-10.

4.3 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the identified mitigation measures, potential short-term construction noise impacts would be reduced to below a level of significance.

Table S provides a summary of all impacts evaluated and associated mitigation measures, if required.

Table S: Noise Impact Significance Findings

Category	Significance before Mitigation	Mitigation Measures	Significance After Mitigation
Construction Noise	Potentially Significant Impact	Mitigation Measures (Section 4.2) 1, 2, 3, and 4	Less than Significant Impact
Construction Vibration	Less than Significant Impact	Not Required	Less than Significant Impact
Traffic Noise Impacts on Off-site Land Uses	Less than Significant Impact	Not Required	Less than Significant Impact
Traffic Noise Impacts on On-site Land Uses	Potentially Significant Impact	Mitigation Measures (Section 4.3) 1, 2, and 3	Less than Significant Impact

APPENDIX A

FHWA HIGHWAY TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 710 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 450 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 51.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 40 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 40.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 0 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 22.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	0.0	0.0	0.0	0.0

TABLE Existing-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 0 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 22.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	0.0	0.0	0.0	0.0

TABLE Existing-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 310 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 770 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 720 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.53

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 40 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 40.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 120 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 45.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 37.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 100 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 44.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 180 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29000 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 81.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
420.5	904.6	1947.9	4195.6

TABLE Existing - Phases I-IV-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
69.5	145.7	312.0	671.1

TABLE Existing - Phases I-IV-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.0	149.0	319.2	686.6

TABLE Existing - Phases I-IV-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	84.4	178.5	382.9

TABLE Existing - Phases I-IV-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.3	200.1	429.6

TABLE Existing - Phases I-IV-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 0 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 25.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-IV-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 530 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-IV-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	54.9	117.7

TABLE Existing - Phases I-IV-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2200 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	93.8

TABLE Existing - Phases I-IV-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-IV-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14600 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	71.4	153.4	330.3

TABLE Existing - Phases I-IV-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 250 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES		
DAY	EVENING	NIGHT
AUTOS		
73.60	13.60	10.22
M-TRUCKS		
0.90	0.04	0.90
H-TRUCKS		
0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 48.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-IV-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 980 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	54.9

TABLE Existing - Phases I-IV-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 930 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	53.0

TABLE Existing - Phases I-IV-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 910 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	52.3

TABLE Existing - Phases I-IV-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - Existing - Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29100 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 81.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
421.5	906.7	1952.4	4205.3

TABLE Existing - Phases I-V - No Interchange-01

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 43400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
125.7	268.6	577.5	1243.5

TABLE Existing - Phases I-V - No Interchange-02

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 43400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
125.7	268.6	577.5	1243.5

TABLE Existing - Phases I-V - No Interchange-03

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.0	223.5	480.2

TABLE Existing - Phases I-V - No Interchange-04

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	86.5	183.2	393.1

TABLE Existing - Phases I-V - No Interchange-05

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	104.3	222.1	477.1

TABLE Existing - Phases I-V - No Interchange-06

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	54.9	117.7

TABLE Existing - Phases I-V - No Interchange-07

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.01

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	56.1	120.2

TABLE Existing - Phases I-V - No Interchange-08

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	99.3

TABLE Existing - Phases I-V - No Interchange-09

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - No Interchange-10

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20800 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	90.3	194.2	418.2

TABLE Existing - Phases I-V - No Interchange-11

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 120 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 45.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - No Interchange-12

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - No Interchange-13

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 780 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - No Interchange-14

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 690 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - No Interchange-15

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - Existing - Phases I-V - No Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31600 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 82.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
445.2	957.8	2062.7	4442.8

TABLE Existing - Phases I-V - With Interchange-01

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
53.3	109.5	233.3	501.3

TABLE Existing - Phases I-V - With Interchange-02

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.07

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
59.6	123.7	264.3	568.3

TABLE Existing - Phases I-V - With Interchange-03

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.65

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	74.7	157.1	336.7

TABLE Existing - Phases I-V - With Interchange-04

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	96.3	204.6	439.3

TABLE Existing - Phases I-V - With Interchange-05

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
83.0	175.4	376.3	809.8

TABLE Existing - Phases I-V - With Interchange-06

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	54.9	117.7

TABLE Existing - Phases I-V - With Interchange-07

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.01

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	56.1	120.2

TABLE Existing - Phases I-V - With Interchange-08

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	99.3

TABLE Existing - Phases I-V - With Interchange-09

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - With Interchange-10

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	63.4	136.2	293.1

TABLE Existing - Phases I-V - With Interchange-11

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 120 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 45.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - With Interchange-12

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 830 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - With Interchange-13

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 780 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - With Interchange-14

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 690 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE Existing - Phases I-V - With Interchange-15

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - Existing - Phases I-V - With Interchange

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37700 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 82.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
500.6	1077.4	2320.2	4997.5

TABLE 2020 Without Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	107.6	229.1	492.4

TABLE 2020 Without Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
53.5	110.1	234.7	504.3

TABLE 2020 Without Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	69.0	144.6

TABLE 2020 Without Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	69.0	144.6

TABLE 2020 Without Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.26

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	61.2	127.3

TABLE 2020 Without Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	100.3	215.7

TABLE 2020 Without Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	79.2	170.3

TABLE 2020 Without Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	68.2	146.4

TABLE 2020 Without Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	67.1	144.1

TABLE 2020 Without Project-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3700 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	61.7	132.4

TABLE 2020 Without Project-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 55.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	62.7

TABLE 2020 Without Project-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	88.7	190.7

TABLE 2020 Without Project-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6700 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.22

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	91.4	196.6

TABLE 2020 Without Project-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6500 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	89.6	192.7

TABLE 2020 Without Project-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2020 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 35900 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 82.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
484.6	1042.8	2245.8	4837.2

TABLE 2020 With Project Phases I-II-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
83.0	175.4	376.3	809.8

TABLE 2020 With Project Phases I-II-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
85.3	180.5	387.2	833.3

TABLE 2020 With Project Phases I-II-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	66.0	137.9	295.0

TABLE 2020 With Project Phases I-II-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	0.0	89.4	189.4	406.6

TABLE 2020 With Project Phases I-II-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.26

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	61.2	127.3

TABLE 2020 With Project Phases I-II-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7800 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	101.2	217.6

TABLE 2020 With Project Phases I-II-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	88.7	190.7

TABLE 2020 With Project Phases I-II-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	74.3	159.6

TABLE 2020 With Project Phases I-II-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	67.1	144.1

TABLE 2020 With Project Phases I-II-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	57.1	122.4	263.5

TABLE 2020 With Project Phases I-II-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1200 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 55.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	62.7

TABLE 2020 With Project Phases I-II-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7000 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	94.1	202.4

TABLE 2020 With Project Phases I-II-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	96.8	208.2

TABLE 2020 With Project Phases I-II-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	93.2	200.5

TABLE 2020 With Project Phases I-II-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2020 With Project Phases I-II

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 35900 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 82.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
484.6	1042.8	2245.8	4837.2

TABLE 2030 Without Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
88.4	187.4	402.2	865.6

TABLE 2030 Without Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
91.3	193.7	415.9	895.1

TABLE 2030 Without Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	56.7	117.2	250.2

TABLE 2030 Without Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	57.6	119.2	254.4

TABLE 2030 Without Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.85

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	103.1	219.5

TABLE 2030 Without Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	82.7	177.7	382.6

TABLE 2030 Without Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	62.4	133.9	288.2

TABLE 2030 Without Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	53.4	114.5	246.3

TABLE 2030 Without Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	51.5	110.4	237.5

TABLE 2030 Without Project-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8700 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	50.8	108.7	233.9

TABLE 2030 Without Project-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2600 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	104.8

TABLE 2030 Without Project-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	74.0	159.0	342.3

TABLE 2030 Without Project-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	76.2	163.8	352.6

TABLE 2030 Without Project-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	74.0	159.0	342.3

TABLE 2030 Without Project-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2030 Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 45600 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 83.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
568.2	1223.0	2633.9	5673.3

TABLE 2030 With Project Phases I-IV-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.99

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
122.3	261.2	561.5	1208.9

TABLE 2030 With Project Phases I-IV-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 43800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
126.5	270.2	581.1	1251.2

TABLE 2030 With Project Phases I-IV-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
53.5	110.1	234.7	504.3

TABLE 2030 With Project Phases I-IV-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
58.0	120.1	256.4	551.2

TABLE 2030 With Project Phases I-IV-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.85

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	103.1	219.5

TABLE 2030 With Project Phases I-IV-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18500 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	83.6	179.6	386.8

TABLE 2030 With Project Phases I-IV-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.48

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	70.1	150.6	324.3

TABLE 2030 With Project Phases I-IV-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	58.9	126.3	271.9

TABLE 2030 With Project Phases I-IV-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	51.5	110.4	237.5

TABLE 2030 With Project Phases I-IV-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	97.4	209.5	451.1

TABLE 2030 With Project Phases I-IV-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2700 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.27

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	107.4

TABLE 2030 With Project Phases I-IV-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.08

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	76.8	165.1	355.5

TABLE 2030 With Project Phases I-IV-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16900 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	78.7	169.1	364.1

TABLE 2030 With Project Phases I-IV-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	76.2	163.8	352.6

TABLE 2030 With Project Phases I-IV-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2030 With Project Phases I-IV

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 45700 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 83.65

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
569.0	1224.8	2637.8	5681.6

TABLE 2035 General Plan Buildout Without Project-01

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
106.8	227.6	489.0	1052.7

TABLE 2035 General Plan Buildout Without Project-02

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
74.0	155.6	333.3	717.1

TABLE 2035 General Plan Buildout Without Project-03

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.85

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	103.1	219.5

TABLE 2035 General Plan Buildout Without Project-04

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	76.4	160.9

TABLE 2035 General Plan Buildout Without Project-05

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
53.5	110.1	234.7	504.3

TABLE 2035 General Plan Buildout Without Project-06

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
57.6	123.5	265.7	572.2

TABLE 2035 General Plan Buildout Without Project-07

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17200 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.6	171.1	368.4

TABLE 2035 General Plan Buildout Without Project-08

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	63.8	136.9	294.7

TABLE 2035 General Plan Buildout Without Project-09

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12000 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	62.7	134.7	289.9

TABLE 2035 General Plan Buildout Without Project-10

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	96.8	208.2

TABLE 2035 General Plan Buildout Without Project-11

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4500 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	70.2	150.8

TABLE 2035 General Plan Buildout Without Project-12

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17500 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	80.5	173.1	372.7

TABLE 2035 General Plan Buildout Without Project-13

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18400 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.61

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	83.3	179.0	385.4

TABLE 2035 General Plan Buildout Without Project-14

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.9	171.8	369.9

TABLE 2035 General Plan Buildout Without Project-15

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout Without Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 45300 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 83.61

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
565.7	1217.6	2622.4	5648.4

TABLE 2035 General Plan Buildout With Project-01

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Tyler St. and Polk St. (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 40000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 73.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
119.2	254.4	547.0	1177.7

TABLE 2035 General Plan Buildout With Project-02

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Polk St. and Fillmore St. (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
101.0	214.9	461.6	993.7

TABLE 2035 General Plan Buildout With Project-03

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Fillmore St. and Street C (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	96.3	204.6	439.3

TABLE 2035 General Plan Buildout With Project-04

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street C and Street A (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
56.9	117.6	251.1	539.7

TABLE 2035 General Plan Buildout With Project-05

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 50 between Street A and I-10 EB Ramp (Secondary)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 30000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
98.9	210.3	451.7	972.3

TABLE 2035 General Plan Buildout With Project-06

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 50 and Avenue 52 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37300 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.68

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.0	133.1	286.5	617.1

TABLE 2035 General Plan Buildout With Project-07

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18000 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	82.1	176.4	379.8

TABLE 2035 General Plan Buildout With Project-08

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. between Avenue 53 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	65.5	140.6	302.6

TABLE 2035 General Plan Buildout With Project-09

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Fillmore St. south of Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12000 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	62.7	134.7	289.9

TABLE 2035 General Plan Buildout With Project-10

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 52 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19200 SPEED (MPH): 30 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.7	184.1	396.5

TABLE 2035 General Plan Buildout With Project-11

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Avenue 53 between Fillmore St. and Pierce St. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4600 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	71.3	153.1

TABLE 2035 General Plan Buildout With Project-12

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 52 and Avenue 53 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 21500 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	92.3	198.5	427.5

TABLE 2035 General Plan Buildout With Project-13

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 53 and Avenue 54 (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.0	202.2	435.4

TABLE 2035 General Plan Buildout With Project-14

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: Pierce St. between Avenue 54 and Airport Blvd. (Arterial)
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19100 SPEED (MPH): 30 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.77

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.4	183.5	395.1

TABLE 2035 General Plan Buildout With Project-15

FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 06/20/2013
ROADWAY SEGMENT: I-10 Freeway
NOTES: La Entrada Specific Plan - 2035 General Plan Buildout With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 51900 SPEED (MPH): 65 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	50.69	8.44	6.27
M-TRUCKS	4.40	0.25	0.54
H-TRUCKS	25.44	0.79	3.18

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 84.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
619.3	1333.1	2871.2	6184.4
