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SECTION 4.9 - NOISE

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4.9.1 INTRODUCTION

This section assesses potential noise impacts associated with implementation of the proposed Project and the alternatives. The RMDP component implements a resource management plan in conjunction with various infrastructure improvements required by the approved Specific Plan, while the SCP component provides for the conservation of San Fernando Valley spineflower within the Specific Plan site and the VCC and Entrada planning areas. Noise-sensitive receptors that may be affected by Project-generated noise are identified, as well as the standards that regulate noise levels at those receptors. The following discussion describes the results of a site reconnaissance, sound level measurements, acoustical predictions, and assessment of potential noise impacts. This section includes a determination of whether the proposed Project and the alternatives would: (1) expose people to noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies; (2) expose people to or generate excessive ground-borne noise levels or vibration; (3) result in a substantial permanent increase in ambient noise levels in the Project vicinity; and/or (4) result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity. Where appropriate, mitigation measures are proposed to reduce the magnitude of the identified noise impacts resulting from the proposed Project and alternatives.

4.9.1.1 Relationship of Proposed Project to Newhall Ranch Specific Plan Program EIR

This section (**Section 4.9**) provides a stand-alone assessment of the potentially significant noise impacts associated with the proposed Project; however, the previously certified Newhall Ranch environmental documentation provides important information and analysis for the RMDP and SCP components of the proposed Project. The Project components would require federal and state permitting, consultation, and agreements that are needed to facilitate development of the approved land uses within the Specific Plan site and that would establish spineflower preserves within the Project area, also facilitating development in the Specific Plan, VCC, and a portion of the Entrada planning area. Due to this relationship, the Newhall Ranch environmental documentation, findings, and mitigation, as they relate to noise, are summarized below to provide context for the proposed Project and alternatives.

Section 4.9 of the Newhall Ranch Revised Draft EIR (March 1999) identified and analyzed the existing conditions, potential impacts, and mitigation measures associated with noise for the entire Specific Plan area. In addition, Section 5.0 of the Newhall Ranch Revised Draft EIR (March 1999) identified and analyzed the potential noise impacts and mitigation measures associated with construction and operation of the approved WRP, which would treat the wastewater generated by the Specific Plan. The Newhall Ranch mitigation program was adopted by Los Angeles County in findings and in the revised Mitigation Monitoring Plans for the Specific Plan and WRP.

The Newhall Ranch Revised Draft EIR (March 1999) concluded that Specific Plan implementation would result in significant noise impacts. Specifically, the Newhall Ranch Revised Draft EIR (March 1999) determined that implementation of the adopted Specific Plan could expose on-site sensitive receptors to roadway and stationary noise levels that exceed County standards. Noise generated by construction activities affiliated with Specific Plan and WRP build-out primarily would affect the occupants of on-site uses constructed during earlier phases of development. Off-site residential uses susceptible to intrusive noise were identified along the northern border of the Specific Plan site in the southern portion of Val Verde, and, specifically at the Travel Village RV Park along SR-126.

The Newhall Ranch Revised Draft EIR (March 1999) recommended the implementation of Mitigation Measures SP-4.9-1 through SP-4.9-17 to address the significant noise impacts identified in the document.[1] In addition, the Newhall Ranch Revised Draft EIR (March 1999) recommended the implementation of Mitigation Measures SP 5.0-38 through 5.0-40, to mitigate noise impacts resulting from construction of the WRP. The Board of Supervisors found that adoption of the recommended mitigation measures would reduce the identified significant effects to less-than-significant levels.

Table 4.9-1 summarizes the Specific Plan's and the WRP's noise impacts, the applicable mitigation measures, and the significance findings after implementation of the mitigation.

Table 4.9-1
Impacts to Noise Caused By Implementation of the Specific Plan and WRP

Impact Description	Mitigation Measures	Finding After Mitigation
Specific Plan Noise Impacts - Construction activities could cause County noise standards to be exceeded for an extended period of time at existing off-site and future on-site residential uses, which would be a potentially significant impact. Noise levels following Specific Plan build-out would be from traffic generated by the Specific Plan, as well as on-site human activities. On-site residences and schools could potentially be exposed to roadway and stationary noise levels that exceed County noise standards, which would be a significant impact. The Travel Village RV Park along SR-126 also would be impacted significantly by traffic noise from Newhall Ranch.	• SP-4.9-1 (construction activity must comply with County standards); • SP-4.9-2 (construction activity is limited to specified operational hours and days); • SP-4.9-3 (additional noise reduction measures are required when construction occur adjacent to occupied residential areas); • SP-4.9-4 (on-site construction staging areas should be located to maximize distance from residential areas); • SP-4.9-5 (acoustical analysis required for residences within particular noise contours to document interior noise levels); • SP-4.9-6 (acoustical analysis required for single-family residences within particular noise contours to document exterior noise levels); • SP-4.9-7 (acoustical analysis required for multi-family housing within particular noise contours to document exterior noise levels);	Not significant

[1] References to mitigation measures included in the Newhall Ranch Specific Plan Program EIR are preceded by "SP" in this EIS/EIR to distinguish them from other mitigation measures discussed herein.

Table 4.9-1
Impacts to Noise Caused By Implementation of the Specific Plan and WRP

Impact Description	Mitigation Measures	Finding After Mitigation
	• SP-4.9-8 (acoustical analysis required at schools within particular noise contours to document exterior noise levels); • SP-4.9-9 (all residential air conditioning units must adhere to County standards); • SP-4.9-10 (all stationary and point noise sources must adhere to County standards); • SP-4.9-11 (loading, unloading, *etc.* occurring within specified hours must comply with County standards); • SP-4.9-12 (loading zones/trash receptacles in specified areas must be located away from adjacent residential areas); • SP-4.9-13 (acoustical analysis required on residential lots with a direct line of sight to the Six Flags Magic Mountain Amusement Park to document exterior noise levels); • SP-4.9-14 (after occupancy of Newhall Ranch, and when noise levels at the Travel Village RV Park reach 70 dB(A) CNEL, the applicant shall construct a noise abatement barrier); • SP-4.9-15 (applicant shall pay the Santa Clara Elementary School District the pro rata share of the cost of a sound attenuation wall between SR-126 and the Little Red School House); • SP-4.9-16 (applicant shall participate on a fair-share basis in noise attenuation programs developed by the city of Moorpark); and • SP-4.9-17 (acoustical analysis required prior to approval of any subdivision map and payment of impact fee).	

Table 4.9-1
Impacts to Noise Caused By Implementation of the Specific Plan and WRP

Impact Description	Mitigation Measures	Finding After Mitigation
Specific Plan Cumulative Noise Impacts - Build-out of the Specific Plan, in conjunction with other related development projects, would increase the traffic on local roadways to such an extent that noise levels at the Travel Village RV Park may exceed County standards.	• SP-4.9-14 (after occupancy of Newhall Ranch, and when noise levels at the Travel Village RV Park reach 70 dB(A) CNEL, the applicant shall construct a noise abatement barrier).	Not significant
WRP Noise Impacts - If any part of the WRP is constructed after planned residential development occurs in the western-most part of Newhall Ranch, construction noise could be an issue for residents located near the plant site, on the opposite (north) side of SR-126.	• SP-5.0-38 (all construction activity must comply with County noise standards); • SP-5.0-39 (all construction activity near occupied residences must be between the hours of 6:30 a.m. and 8:00 p.m., excluding all Sundays and legal public holidays); • SP-5.0-40 (all operational activity must comply with County noise standards).	Not significant

Source: Newhall Ranch Revised Draft EIR (March 1999) and Newhall Ranch Revised Additional Analysis (May 2003).

4.9.1.2 Relationship of Proposed Project to VCC and Entrada Planning Areas

4.9.1.2.1 VCC Planning Area

The SCP component of the proposed Project, if approved, would facilitate development in the VCC planning area. The VCC is reliant on the SCP and associated take authorizations, and would not be developed without the take authorizations due to grading constraints. The VCC planning area is the remaining undeveloped portion of the VCC commercial/industrial complex currently under development by the applicant. The VCC was the subject of an EIR certified by Los Angeles County in April 1990 (SCH No. 87-123005). The applicant has recently submitted to Los Angeles County the last tentative parcel map (TPM No. 18108) needed to complete build-out of the remaining undeveloped portion of the VCC planning area. The County will require preparation of an EIR in conjunction with the parcel map and related project approvals; however, the County has not yet issued a Notice of Preparation (NOP) of the EIR or released the EIR. **Table 4.9-2** summarizes the VCC's noise impacts, the applicable mitigation measures, and the significance findings after mitigation from the previously certified VCC EIR (April 1990).

Table 4.9-2
Impacts to Noise Caused By VCC Implementation

VCC Impact Description	VCC Mitigation Measures	Finding After Mitigation
Project Noise Impacts - On a short-term basis, temporary noise related to construction activity would occur. Further, on a long-term basis, the VCC project would result in increased noise from car and truck traffic along Backer Road. In addition, the nighttime noise affiliated with the truck traffic may disturb the sleep of some residents in second-story rooms.	• To mitigate short-term impacts, mitigation measures call for all construction equipment to be maintained properly, including the use of exhaust mufflers, and require construction activity to be limited to the hours of 7 a.m. to 7 p.m. on Monday through Saturday. • To mitigate long-term impacts, mitigation measures call for Backer Road to be realigned, in order to permit for the construction of a combination berm and wall between the homes and the road. In addition, a noise study must be undertaken, subsequent to the completion of Backer Road from Hasley Creek to SR-126, to determine if nighttime restrictions on truck traffic are required.	Not significant
Cumulative Noise Impacts - As traffic increases on SR-126, the existing noise contours would extend further west into the VCC project area. However, mitigation would not be possible until completion of the Backer Road overcrossing and freeway ramps, a freeway improvement project which may include sound attenuation walls and landscaping. Related projects would be required to pay a pro rata share of the cost for upgrading this interchange.	• No further mitigation recommended.	Not significant

Source: VCC EIR (April 1990).

4.9.1.2.2 Entrada Planning Area

The applicant is seeking approval from Los Angeles County for planned residential and nonresidential development within the Entrada planning area. The SCP component of the proposed Project would designate an area within Entrada as a spineflower preserve. If approved, the SCP component would include take authorization of spineflower populations in Entrada that are located outside of the designated spineflower preserve area. Thus, the planned residential and nonresidential development within portions of the Entrada planning area is reliant on the SCP and associated take authorizations, and those portions would not be developed without the take authorizations. The applicant has submitted to Los Angeles County Entrada development applications, which cover the portion of the Entrada planning area facilitated by the SCP component of the proposed Project. However, as of this writing, the County has not yet issued a NOP of an EIR or released an EIR for Entrada. As a result, there is no underlying local environmental documentation for the Entrada planning area at this time.

4.9.2 ENVIRONMENTAL NOISE AND VIBRATION BACKGROUND

4.9.2.1 Environmental Noise Background

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air and the ground, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and intensity. Frequency describes the sound's pitch and is measured in cycles per second, or hertz (Hz), whereas intensity describes the sound's loudness and is measured in decibels (dB).

A sound level of 0 dB is approximately the threshold of human hearing and barely is audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB. Sound levels above approximately 120 dB begin to be felt inside the human ear as uncomfortable and as pain at even higher levels.

The human ear does not respond uniformly to sounds at all frequencies; for example, it is less sensitive to low and high frequencies than it is to the medium frequencies that more closely correspond to human speech. In response to the sensitivity of the human ear to different frequencies, the A-weighted noise level (or scale), which corresponds better with an individual's subjective judgment of sound levels, has been developed. This A-weighted sound level, referenced in units of dB(A), is measured on a logarithmic scale, such that a doubling of sound energy results in a 3.0 dB(A) increase in noise level. In general, changes in a community noise level of less than 3.0 dB(A) typically are not noticed by the human ear.[2] Changes from 3.0 to 5.0 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. An increase greater than 5.0 dB(A) is readily noticeable, while the human ear perceives a 10.0 dB(A) increase in sound level to be a doubling of sound.

Because community noise fluctuates over time, a single measurement called the Equivalent Sound Level (L_{eq}) is often used to describe the energy-averaged A-weighted sound level during a measured time interval, such as 24 hours, one hour, 15 minutes, *etc*. The acoustic range of the noise source being measured is accomplished through the L_{max} and L_{min} indicators, which represent the root-mean-square maximum and minimum noise levels obtained during the measurement interval.

Another sound measurement is the Community Noise Equivalent Level (CNEL), which is an adjusted average A-weighted sound level for a 24-hour period. It is adjusted by adding 5 dB to measured sound levels during evening hours (7:00 p.m. to 10:00 p.m.) and 10 dB to measured sound levels during nighttime hours (10:00 p.m. to 7:00 a.m.). These adjustments compensate for the increased sensitivity of most individuals to noise during the typically quieter evening and nighttime hours. The CNEL is used by the state of California, Los Angeles County, and the city of Santa Clarita to evaluate land use compatibility with regard to noise.

Sound begins to be described as noise when it becomes loud, unpleasant, unexpected, and/or undesired. Although exposure to high noise levels may cause hearing loss, the principal response to environmental noise by both humans and animals is annoyance. The level of annoyance is individual, and is influenced by the type of noise, perceived importance or appropriateness of the noise, time of day, and sensitivity of the individual(s) exposed to the noise. **Table 4.9-3** provides sound levels common in the environment.

[2] Fed. Highway Admin., U.S. Dept. of Transportation, Highway Noise Fundamentals (Sept. 1980), p. 81.

Table 4.9-3
Sound Levels of Typical Noise Sources and Noise Environments

Noise Source (at Given Distance)	Noise Environment	A-Weighted Sound Level (dB(A))	Human Judgment of Noise Loudness (Relative to Reference Loudness of 70 dB(A)
Military Jet Takeoff with Afterburner (50 ft)	Carrier Flight Deck	140	128 times as loud
Civil Defense Siren (100 ft)		130	64 times as loud
Commercial Jet Take-off (200 ft)		120	32 times as loud (Threshold of Pain)
Pile Driver (50 ft)	Rock Music Concert Inside Subway Station (New York)	110	16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Gas Lawn Mower (3 ft)		100	8 times as loud (Very Loud)
Food Blender (3 ft) Propeller Plane Flyover (1,000 ft) Diesel Truck (150 ft)	Boiler Room Printing Press Plant	90	4 times as loud
Garbage Disposal (3 ft)	Higher Limit of Urban Ambient Sound	80	2 times as loud
Passenger Car, 65 mph (25 ft) Living Room Stereo (15 ft) Vacuum Cleaner (10 ft)		70	Reference Loudness (Moderately Loud)
Normal Conversation (5 ft) Air Conditioning Unit (100 ft)	Data Processing Center Department Store	60	1/2 as loud
Light Traffic (100 ft)	Large Business Office Quiet Urban Daytime	50	1/4 as loud
Bird Calls (distant)	Quiet Urban Nighttime	40	1/8 as loud (Quiet)
Soft Whisper (5 ft)	Library and Bedroom at Night Quiet Rural Nighttime	30	1/16 as loud
	Broadcast and Recording Studio	20	1/32 as loud (Just Audible)
		10	1/64 as loud
		0	1/128 as loud (Threshold of Hearing)

Source: Compiled by URS Corporation.

Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB(A) at

acoustically "soft" sites.[3] For example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dB(A) at 100 feet from the source and 48 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3.0 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for hard and soft sites, respectively.[4] Sound levels also can be attenuated by man-made or natural barriers (*e.g.*, sound walls, berms, ridges), as well as elevation differences, as illustrated in **Figure 4.9-1**.

Solid walls, berms, and wall/berm combinations may reduce noise levels by as much as 10.0 dB(A), depending on their height and distance relative to the noise source and the noise receptor.[5] Sound levels also may be attenuated 3.0 to 5.0 dB(A) by a first row of houses and 1.5 dB(A) for each additional row of houses.[6] The minimum noise attenuation provided by typical building construction in California is provided in **Table 4.9-4**.

Table 4.9-4
Outside to Inside Noise Attenuation (dB(A))

Building Type	Open Windows	Closed Windows
Residences	17	25
Schools	17	25
Churches	20	30
Hospitals/Convalescent Homes	17	25
Offices	17	25
Theaters	20	30
Hotels/Motels	17	25

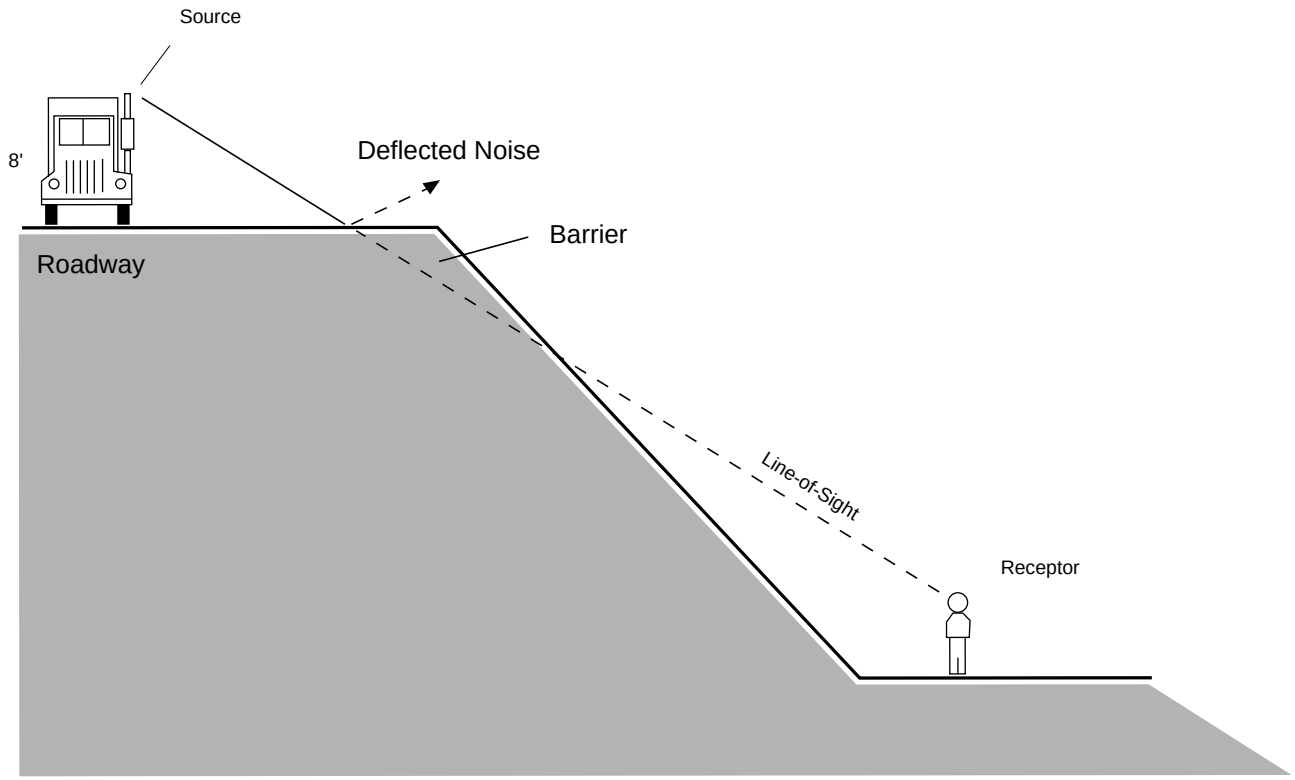
Source: Transportation Research Board, National Research Council, Highway Noise: A Design Guide for Highway Engineers (1971), National Cooperative Highway Research Program Report 117.

[3] Fed. Highway Admin., footnote 2, *supra*, p. 97. Examples of "hard" or reflective sites include asphalt, concrete, and hard and sparsely-vegetated soils. Examples of acoustically "soft" or absorptive sites include soft, sand, plowed farmland, grass, crops, heavy ground cover, *etc*.

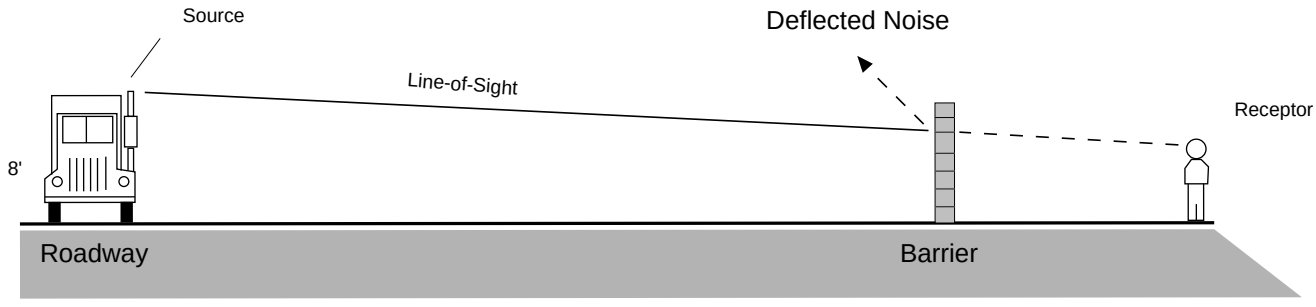
[4] Fed. Highway Admin., footnote 2, *supra*, p. 97.

[5] Fed. Highway Admin., footnote 2, *supra*, p. 18.

[6] Barry & Reagan, FHWA Highway Traffic Noise Prediction Model (Dec. 1978) FHWA-RD-77-108, p. 33.



"Barrier Effect" Resulting from Differences in Elevation.



"Barrier Effect" Resulting from Typical Soundwall.

SOURCE: Impact Sciences, Inc. – March 2006

FIGURE **4.9-1**

Noise Attenuation by Barriers and Elevation Differences

4.9.2.2 Environmental Vibration Background

Vibration consists of waves transmitted through solid material. The solid medium can be excited by forces, moments, or pressure fields. Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be comprised of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hz. Most environmental vibrations consist of a composite, or "spectrum" of many frequencies, and generally are classified as broadband or random vibrations. The normal frequency range of most ground-borne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration often is measured in terms of the peak particle velocity (PPV)[7] in inches per second (in/sec).

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease (attenuate) with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source the low frequencies tend to dominate. An example of high frequency vibration would be the ultrasound used in medicine, while sources of low frequency vibration include pumps, boilers, electrical installations, fans, and road and rail traffic. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings typically is perceived as rattling of windows or items on shelves, or the motion of building surfaces.

Ground-borne vibration can be perceived without instrumentation within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough ground-borne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low frequency airborne noise or ground characteristics.

Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans.

4.9.3 REGULATORY SETTING

4.9.3.1 Noise Criteria

4.9.3.1.1 State

California Environmental Quality Act. The State CEQA Guidelines § 15064 require that a lead agency prepare an EIR if there is substantial evidence that a project may have a significant effect on the environment. Appendix G of the State CEQA Guidelines specifies that a project normally will have a significant effect on the noise environment if it would result in any of the following:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

[7] Particle velocity is the velocity of a particle (real or imagined) in a medium as it transmits a wave.

- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels; and
- For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.

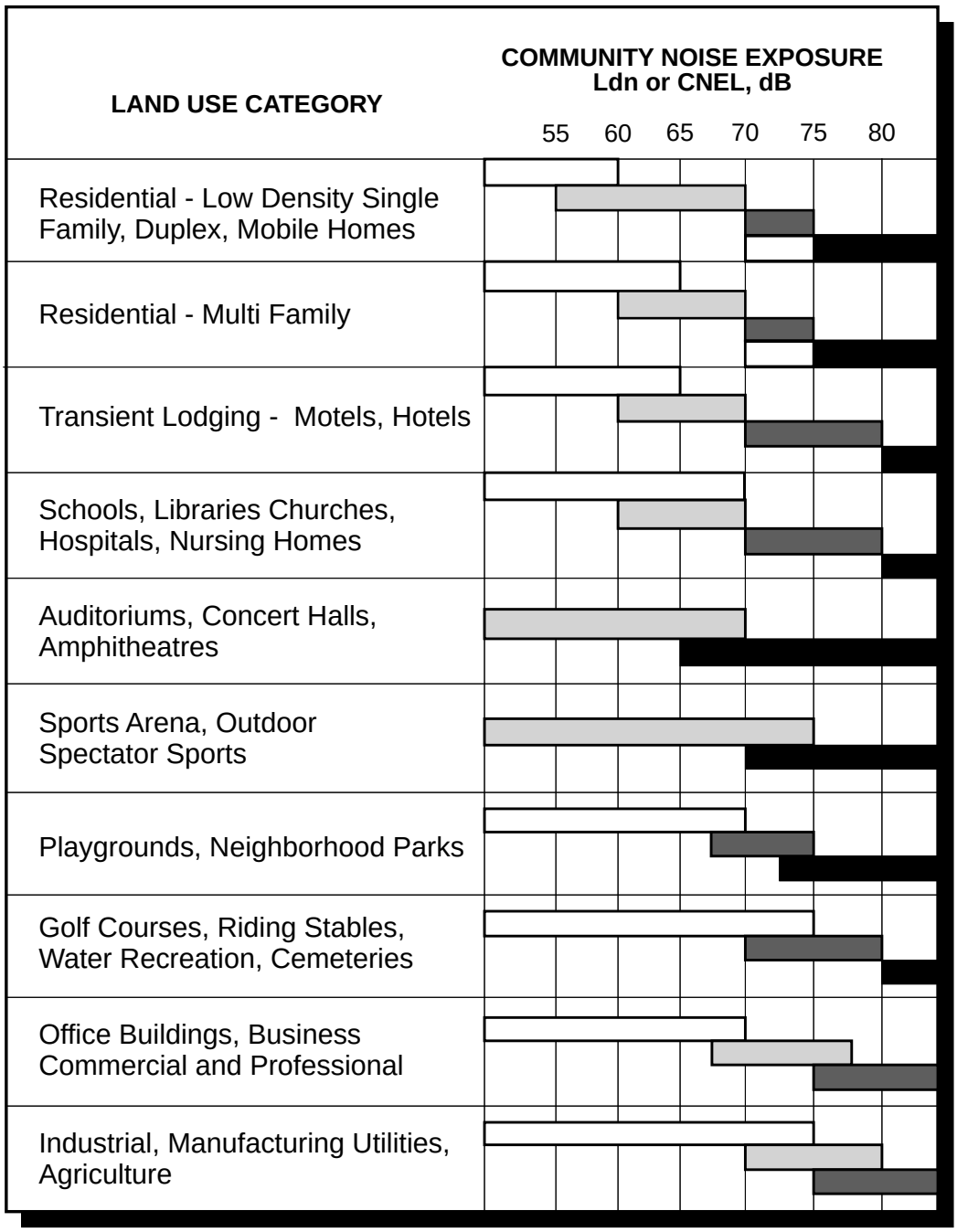
The State CEQA Guidelines do not define a substantial increase in ambient noise, and Appendix G does not provide an impact threshold for potential on-site noise impacts.

California Department of Health Services. The State of California, Department of Health Services (DHS), Office of Noise Control, has published recommended guidelines for noise and land use compatibility, referred to in this section as the State Land Use Compatibility Guidelines. The State Land Use Compatibility Guidelines are illustrated in **Figure 4.9-2**. The DHS does not mandate application of this compatibility matrix to development projects; however, each jurisdiction is required to consider the State Land Use Compatibility Guidelines when developing its general plan noise element and when determining acceptable noise levels within its community.[8]

In 1972, the United States Environmental Protection Agency (USEPA) determined that a yearly average day/night sound level (L_{dn}) of 45 dB(A) would permit adequate speech communication in the home. The USEPA also identified an indoor day/night level of 45 dB(A) as necessary to protect against sleep interference.[9]

[8] Gov. Code, § 65302, subd. (f). These Guidelines are also published by the Governor's Office of Planning and Research in the State of California General Plan Guidelines (2003).

[9] *Noise and Its Effects*, Alice H. Suter (November 1991), available online at http://www.nonoise.org/library/suter/suter.htm (last visited March 31, 2009).



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

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

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

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

SOURCE: California Governor's Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976

FIGURE **4.9-2**

State Land Use Compatibility Guidelines for Noise

Using this information and knowing that residential construction in California can attenuate noise by as much as 25 dB(A) with windows and doors closed (see **Table 4.9-4**), the DHS identified an exterior (outdoor) noise level of 60 dB(A) CNEL as an acceptable level for single-family, duplex, and mobile homes involving normal, conventional construction (normally acceptable noise levels). Exterior noise levels up to 65 dB(A) CNEL typically are considered acceptable for multifamily units and transient lodging. Between these values and 70 dB(A) CNEL, exterior noise levels typically are considered acceptable only if the buildings are conditioned to include noise insulation features (conditionally acceptable noise levels). An exterior noise level of 70 dB(A) CNEL is typically the dividing line between an acceptable and unacceptable exterior noise environment for all noise sensitive uses (also referred to as noise sensitive receptors), including schools, libraries, places of worship, hospitals, day care centers, and nursing homes of conventional construction. Noise levels above 75 dB(A) CNEL may be considered normally unacceptable for office, commercial, and industrial uses.

The California Noise Insulation Standards of 1988 (Cal. Code Regs., tit. 24, § 3501 *et seq*.) require that interior noise levels from exterior sources be 45 dB(A) or less in any habitable room of a multi-residential use facility (*e.g*., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Measurements are based on CNEL or Ldn, whichever is consistent with the noise element of the local general plan. Where exterior noise levels exceed 60 dB(A) CNEL or Ldn, an acoustical analysis for new development is required to show that the proposed construction will reduce interior noise levels to 45 dB(A) CNEL or L_{dn}. If the interior 45 dB(A) CNEL or L_{dn} limit can be achieved only with the windows closed, the building design must include mechanical ventilation that meets applicable Uniform Building Code requirements.

4.9.3.1.2 Local

Los Angeles County. Los Angeles County Code section 12.08 *et seq*., Noise Control (Los Angeles County Noise Ordinance), identifies community noise criteria, specifies noise restrictions, and provides for exemptions and variances for exterior stationary noise sources. Several sections of the Los Angeles County Noise Ordinance are applicable to the proposed Project, as discussed below.

The Los Angeles County Noise Ordinance states that exterior noise levels caused by point sources shall not exceed the levels identified in **Table 4.9-5**, or the ambient noise level, whichever is greater, when the ambient noise level is determined without the noise source operating. These standards would apply to the future residents and business owners within the Specific Plan and VCC developments. The Los Angeles County Noise Ordinance, section 12.08.400 also states that interior noise levels resulting from outside stationary sources within all residential units shall not exceed 45 dB(A) Leq between 7 a.m. and 10 p.m., and 40 dB(A) Leq between 10 p.m. and 7 a.m. in all multifamily units.

Table 4.9-5
Los Angeles County Exterior Noise Standards for Stationary Noise Sources

Noise Zone[1]	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level dB(A) L_{eq}
I	Noise Sensitive Area[2]	Anytime	45
II	Residential Properties	10:00 p.m. to 7:00 a.m. 7:00 a.m. to 10:00 p.m.	45 50
III	Commercial Properties	10:00 p.m. to 7:00 a.m. 7:00 a.m. to 10:00 p.m.	55 60
IV	Industrial Properties	Anytime	70

Notes:

[1] **Standard No. 1** shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L_{50} exceeds the forgoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level plus 5 dB(A); or, if the ambient L_{25} exceeds the forgoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level plus 20 dB(A); or, if the ambient $L_{8.3}$ exceeds the forgoing level, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.

Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level plus 15 dB(A); or, if the ambient $L_{1.7}$ exceeds the forgoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.

Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level plus 20 dB(A); or, if the ambient L_0 exceeds the forgoing level, then the ambient L_0 becomes the exterior noise level for Standard No. 5.

[2] Not defined in the Los Angeles County Noise Ordinance. To be designated by the County Health Officer.

Source: Los Angeles County Code § 12.08.390.

The Los Angeles County Noise Ordinance identifies specific exterior noise restrictions for construction activities. (Los Angeles County Code, § 12.08.440.) The operation of equipment used in construction, drilling, repair, alteration, or demolition work is prohibited between weekday hours of 7:00 p.m. to 7:00 a.m., and anytime on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real property line. The Los Angeles County Noise Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum exterior noise levels at the affected buildings will not exceed those listed in **Table 4.9-6**. All mobile and stationary internal combustion-powered equipment and machinery also are required to be equipped with suitable exhaust and air-intake silencers in proper working order.

Table 4.9-6
Los Angeles County Construction Equipment Noise Restrictions at Affected Buildings

	Residential Structures		
	Single-Family Residential	**Multi-Family Residential**	**Commercial**[1]
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75 dB(A) $_q$	80 dB(A)	85 dB(A)
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60 dB(A)	64 dB(A)	70 dB(A)
Stationary Equipment: Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60 dB(A)	65 dB(A)	70 dB(A)
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50 dB(A)	55 dB(A)	60 dB(A)

[1] Refers to residential structures within a commercial area. This standard does not apply to commercial structures.

Source: Los Angeles County Code § 12.08.440.

The County of Los Angeles General Plan Noise Element (1987) has established noise guidelines that are used for planning purposes. These guidelines are based in part on the community noise compatibility guidelines established by the State Department of Health Services and are intended for use in assessing the compatibility of various land use types with a range of noise levels. For land use compatibility issues, Los Angeles County uses the Land Use Compatibility Guidelines illustrated in **Figure 4.9-2** in its noise impact analyses.

City of Santa Clarita. The study area for the proposed Project's traffic overlies a portion of the city of Santa Clarita (see **Section 4.8**, Traffic); therefore, the city's Noise Element is discussed in this impact analysis. The Noise Element of the City of Santa Clarita General Plan has incorporated a slightly modified version of the State Land Use Compatibility Guidelines, as well as noise level control standards. The City's guidelines are illustrated in **Figure 4.9-3**. The City of Santa Clarita Land Use Compatibility Guidelines are the same as those used by the County of Los Angeles.

The city also has adopted standards in its municipal code (*i.e.*, the Santa Clarita Municipal Code) to control point source noise, which are available on the city's website at http://www.santa-clarita.com/cityhall/admin/code/ (last visited March 31, 2009). Due to the distance between the Project site and properties in the city of Santa Clarita, as well as I-5, which separates the site from the city, point source noises occurring within the Project site would not be audible within the city.

4.9.3.2 Vibration Criteria

4.9.3.2.1 Federal

Federal Transit Administration and Federal Railroad Administration. The Federal Transit Administration and Federal Railroad Administration have published guidelines for assessing the impacts of ground-borne vibration associated with construction activities, which have been applied by other jurisdictions to other types of projects. (Federal Transit Administration, 1998). The Federal Transit Administration measure of the threshold of architectural damage for conventional sensitive structures (*e.g.*, residential units) is 0.2 in/sec PPV. The vibration threshold of perception is 0.01 in/sec PPV.

There are no Federal Highway Administration (FHWA) standards for traffic-related vibrations. The FHWA position is that highway traffic and construction vibrations pose no threat to buildings and structures.[10]

4.9.3.2.2 State

California Department of Transportation (Caltrans). There are no state standards for traffic-related vibrations, and Caltrans' position is that highway traffic and construction vibrations pose no threat to buildings and structures.[11] With respect to pile driving, however, Caltrans considers the architectural damage risk level for continuous vibrations, including pile driving, to be a PPV somewhere between 0.2 and 2.0 in/sec.[12]

4.9.3.2.3 Local

Los Angeles County. The Los Angeles County Noise Ordinance states:

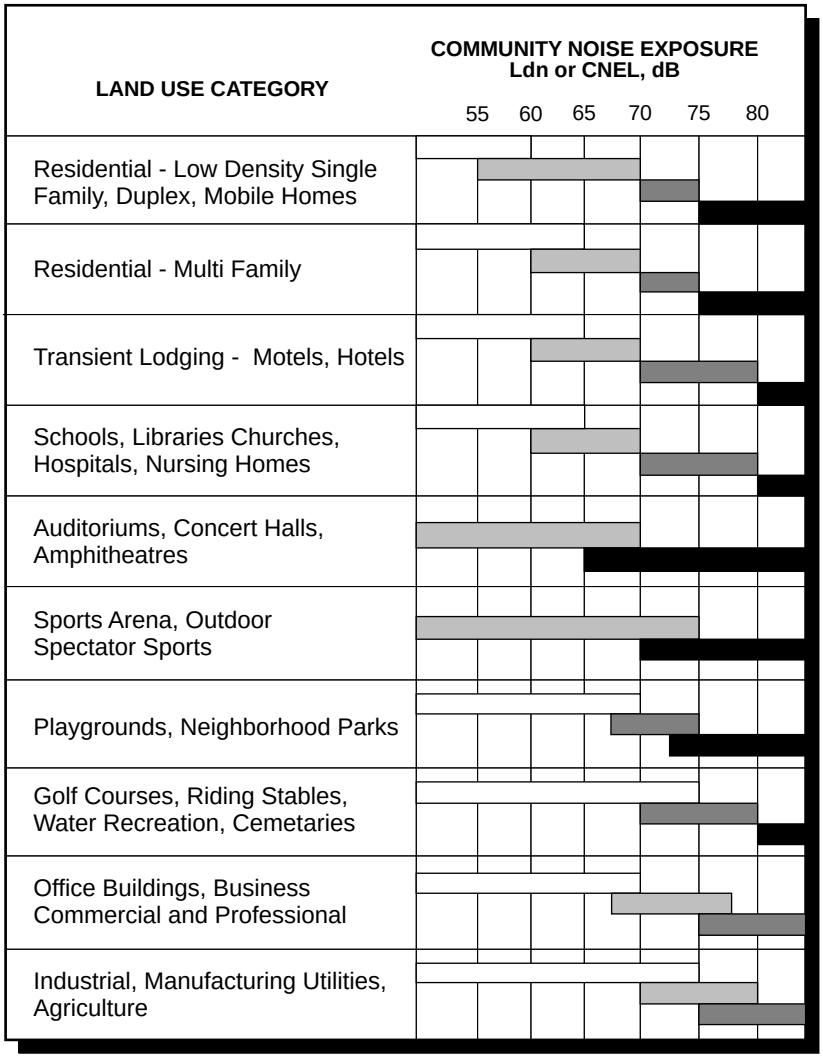
> Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

(Los Angeles County Code, § 12.08.560.)

[10] Cal. Dept. of Transportation, Transportation Related Earthborne Vibrations (Caltrans Experiences) (Feb. 2002) Vibration TAV-02-01-R9601, p. 10.

[11] Cal. Dept. of Transportation, footnote 10, *supra*, p. 10.

[12] Cal. Dept. of Transportation, footnote 10, *supra*, p. 12.



NORMALLY ACCEPTABLE

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

CONDITIONALLY ACCEPTABLE

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

NORMALLY UNACCEPTABLE

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

CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

SOURCE: City of Santa Clarita General Plan Noise Element (May 23, 2000) Exhibit N-2

FIGURE **4.9-3**

City of Santa Clarita Guidelines for Noise and Land Use Compatibility

4.9.4 EXISTING CONDITIONS

4.9.4.1 Noise Sources On and Adjacent to the Specific Plan Site

Vehicular traffic on SR-126 and at the I-5/SR-126 interchange is the dominant existing source of noise on and near the Newhall Ranch Specific Plan site. Other notable sources of noise include the Six Flags Magic Mountain Amusement Park, scattered on- and off-site agricultural operations, and activities associated with oil and natural gas production. Noise levels generated by operations at the Chiquita Canyon Landfill are 50 dB(A) or less at the landfill property boundary. These noise levels are not audible within the Specific Plan area because they are masked by existing traffic noise along SR-126 and Chiquito Canyon Road.

Six Flags Magic Mountain Amusement Park to the east of the Specific Plan site operates year-round, with most park activities occurring during the summer months. With a few exceptions, the park closes by 10:00 p.m., but may remain open as late as 1:00 a.m. Maintenance activities occur at the park both after closure and before opening hours. A series of noise measurements were taken along the northeastern boundary of the Specific Plan site and adjacent to the park. These are discussed in greater detail below.

The few agricultural and oil and natural gas activities on and near the Specific Plan site generate very little noise unless equipment is operating. Noise generated by mechanized agricultural equipment (*e.g.*, tractors, water trucks, *etc*.) can produce noise levels in the range of 75 to 85 dB(A) at 50 feet.[13] When operating near SR-126, however, the equipment noise largely is masked by highway noise, but periodically may be audible at the Travel Village RV Park adjacent to the Specific Plan site. Agricultural activities on the eastern portion of the Specific Plan site are separated from the existing Westridge and Stevenson Ranch developments by considerable distance and varied topography, and are inaudible at these two subdivisions.

4.9.4.2 Noise Sources On and Adjacent to the VCC Planning Area

Stationary and mobile source noise from surrounding development is audible on the VCC planning area. These noise sources include activities within the developed portion of the VCC planning area, activities at Castaic Junction immediately to the south, and traffic on Commerce Center Drive, Franklin Parkway, SR-126, and I-5. For most receptors in the VCC planning area, noise from vehicle traffic on SR-126 and I-5 exceeds noise from activities at Castaic Junction. Depending on the specific location, daytime noise levels on the VCC planning area range from approximately 60 to 68 dB(A) L_{eq} near roadways and from 55 to 62 dB(A) L_{eq} away from roadways.

4.9.4.3 Noise Sources On and Adjacent to the Entrada Planning Area

Noise in the vicinity of the Entrada planning area primarily is generated by vehicular traffic on I-5, SR-126, The Old Road, and Magic Mountain Parkway, and by activities occurring on nearby commercial properties (*e.g.*, fuel stations, restaurants, hotels) and Six Flags Magic Mountain Amusement Park. As specified below, noise levels on the Specific Plan site west of the park range from 93 to 97 dB(A) L_{max} during fireworks displays at the theme park. These noise levels drop off rapidly to an average hourly L_{eq}

13 Ventura County General Plan, Hazards Appendix (May 24, 1988).

that is at least 20 dB(A) less than the L_{max}. It is expected that the 60 dB(A) CNEL contour associated with the park extends from 100 to 800 feet onto the Entrada planning area. On portions of the Entrada planning area closer to I-5 and SR-126, daytime noise levels would range from approximately 60 to in excess of 70 dB(A) L_{eq} depending on the specific location.

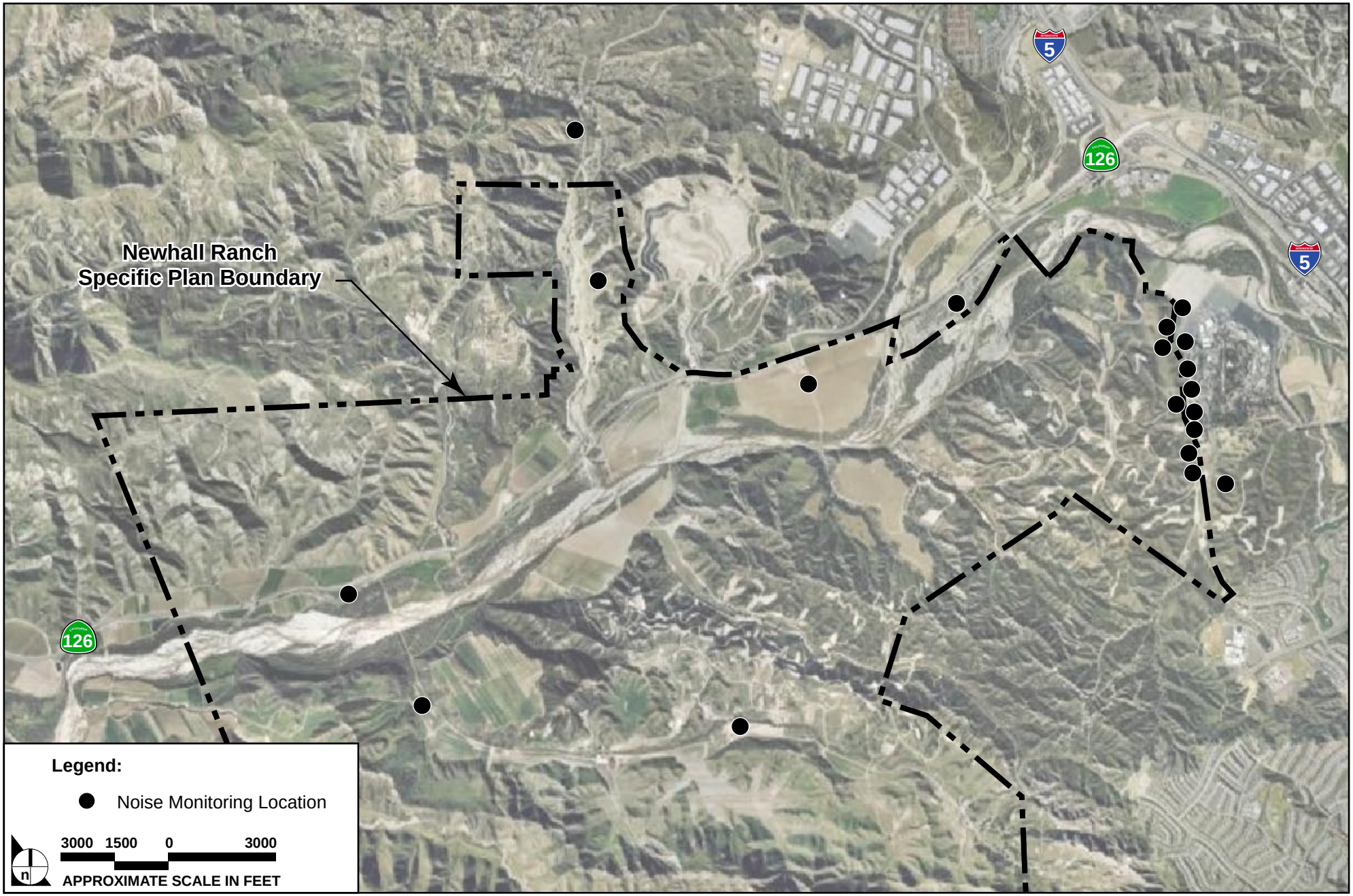
4.9.4.4 Noise Sensitive Receptors in the Project Vicinity

Some land uses are considered to be sensitive to noise. Noise sensitive land uses may be subject to stress and/or significant interference from noise, and typically include residential areas, hospitals, nursing homes, places of worship, schools, daycare facilities, libraries, and parks. Industrial, commercial, and agricultural land uses generally are considered less sensitive to noise. Noise sensitive land uses in the vicinity of the Project area include scattered single-family residences north of SR-126, residences in the community of Val Verde, single- and multi-family residential subdivisions to the east of the Project site, and the Travel Village RV Park along SR-126. Distance and variable terrain (*e.g.*, hills, valleys, plateaus) separate the Project site from the residences in the community of Val Verde and the single- and multi-family residential subdivisions to the east. These features play important roles in attenuating noise between the Project site and these land uses such that activities on the Project are not audible at these latter locations. Furthermore, noise from activities on the site south of SR-126 is masked by noise along SR-126. West of the Project site within Ventura County, noise sensitive land uses exist in the form of residential land uses. However, the uses that could be affected by noise generated by the proposed Project typically are located along SR-126, which is already a substantial source of vehicular noise for these uses.

4.9.4.5 Monitored Noise Levels

Noise levels were measured by Impact Sciences, Inc. staff at 18 locations within and adjacent to the Specific Plan site in 2004, 2005, and 2006. All measurements were taken using Larson Model 720 sound level meters, which satisfy the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. The sound meters were equipped with an omni directional microphone, calibrated before the day's measurements, and set at five feet above ground. Weather conditions generally were clear, with little to no wind during each measurement.

The locations of the monitoring are shown in **Figure 4.9-4**, and the results of the noise measurements are summarized in **Table 4.9-7**.



SOURCE: Impact Sciences, Inc. – February 2007

FIGURE **4.9-4**

Noise Monitoring Locations

Table 4.9-7
Noise Monitoring Results

Monitoring Location	Date	Duration (hours)	CNEL[a]	L_{max}[a]
1 - Travel Village RV Park	Wednesday, January 21, 2004	24	70	n/a
2 - West of Six Flags Magic Mountain Amusement Park	Friday, May 27 - Tuesday, May 31, 2005	95	62	n/a
3 - West of Six Flags Magic Mountain Amusement Park	Friday, May 27 - Tuesday, May 31, 2005	95	61	n/a
4 - West of Six Flags Magic Mountain Amusement Park	Friday, June 3 - Wednesday, June 8, 2005	113	59	n/a
5 - West of Six Flags Magic Mountain Amusement Park	Friday, June 3 - Wednesday, June 8, 2005	117	64	n/a
6 - West of Six Flags Magic Mountain Amusement Park	Friday, June 10 - Tuesday, June 14, 2005	97	54	n/a
7 - West of Six Flags Magic Mountain Amusement Park	Friday, June 10 - Tuesday, June 14, 2005	98	58	n/a
8 - West of Six Flags Magic Mountain Amusement Park	Thursday, June 16 - Monday, June 20, 2005	94	57	n/a
9 - West of Six Flags Magic Mountain Amusement Park	Thursday, September 1 - Tuesday, September 6, 2005	122	63[b]	93[b]
10 - West of Six Flags Magic Mountain Amusement Park	Thursday, September 1 - Sunday, September 4, 2005	68	71[b]	84[b]
11 - West of Six Flags Magic Mountain Amusement Park	Thursday, September 1 - Tuesday, September 6, 2005	122	64[b]	97[b]
12 - West of Hall Road	Monday, December 11 - Tuesday, December 12, 2006	24	73	85
13 - Center of Landmark Village	Monday, December 11 - Tuesday, December 12, 2006	24	64	84
14 - West of Magic Mountain Parkway	Tuesday, December 12 - Wednesday, December 13, 2006	24	60	71
15 - Val Verde South	Monday, December 11 - Tuesday, December 12, 2006	24	56	85
16 - Potrero Village	Tuesday, December 12 - Wednesday, December 13, 2006	24	47	68
17 - North Chiquito Canyon	Monday, December 11 - Tuesday, December 12, 2006	24	57	85
18 - Next to Gas Plant	Tuesday, December 12 - Wednesday, December 13, 2006	24	77	76

Notes:
See **Appendix 4.9** for Noise Monitoring Results: January 21, 2004 Noise Monitoring (Location 1); May and June 2005 Noise Monitoring (Locations 2 - 8); September 2005 Noise Monitoring (Locations 9 - 11); and, December 2006 Noise Monitoring (Locations 12 - 18).
n/a–interval data not available to calculate value
[a] Results are rounded to the nearest decibel.
[b] CNEL and L_{max} are calculated on Saturday, September 3, 2005, on daytime fireworks occurring at Six Flags Magic Mountain Amusement Park. L_{max} occurred during the 9:00-10:00 p.m. interval and during fireworks display.

Source: Impact Sciences, Inc.

4.9.4.5.1 January 21, 2004 Noise Monitoring (Location 1)

One 24-hour weekday noise measurement taken at Travel Village RV Park revealed a noise level at the RV Park of approximately 70 dB(A) L_{eq} (see **Appendix 4.9** for Noise Monitoring Results: January 21, 2004 Noise Monitoring (Location 1)). Interval data were not available to determine the L_{max}[14] or calculate a CNEL measurement for this location.

4.9.4.5.2 May and June 2005 Noise Monitoring (Locations 2 - 8)

Ambient noise levels were measured at four separate weekends at Locations 1 through 7 along the northeastern site boundary east of Six Flag Magic Mountain Amusement Park from May 27 to June 20, 2005. Roadway traffic, park operations and maintenance, and other activities in the Project vicinity contributed to the ambient noise levels. Results demonstrate that noise levels along the northeastern boundary of the Specific Plan site ranged from 54 to 64 dB(A) CNEL, with the higher noise levels occurring closest to the I-5/SR-126 interchange located directly to the north. Interval data were not available to determine L_{max} for each location.

4.9.4.5.3 September 2005 Noise Monitoring (Locations 9 - 11)

Periodic fireworks displays are permitted at Six Flags Magic Mountain Amusement Park through Los Angeles County, and they are expected to continue at this location in the long term. These displays occur predominantly during the summer months and at Thanksgiving and Christmas. With the exception of the display on July 4th, which typically lasts 15 minutes, the displays last between one and two minutes. All displays occur before 10:00 p.m. Fireworks are an impulsive noise source, which means, under Los Angeles County Code § 12.08.190, that it is of short duration, usually less than one second and of high intensity, with an abrupt onset and rapid decay.

On Saturday, September 3, 2005, three additional 24-hour noise measurements were taken along the northeastern boundary of the Specific Plan site east of Six Flags Magic Mountain Amusement Park in order to capture the maximum L_{eq} (L_{max}) from the fireworks at the park. Results of the monitoring indicate that maximum instantaneous on-site noise levels on the eastern portion of the Project site range from 93 to 97 dB(A) L_{max} during fireworks displays. These noise levels drop off rapidly to an average hourly L_{eq} that is at least 20 dB(A) less than the L_{max}. Over the 24-hour period, however, the CNEL at these locations ranged from 63 to 71 dB(A).

4.9.4.5.4 December 2006 Noise Monitoring (Locations 12 - 18)

Twenty-four hour weekday noise measurements were taken at seven locations throughout the Specific Plan site in December 2006. As shown in **Table 4.9-7**, noise levels throughout the Specific Plan site range from 47 dB(A) CNEL in the interior of the site to 73 dB(A) CNEL west of Hall Road.

[14] The summary of the measurement taken at Travel Village RV Park, provided in **Appendix 4.9** of this EIS/EIR, shows an L_{max} of 111 dB(A); however, interval data are not available and it is not possible to determine if this measurement occurred during monitor setup due to a dog barking, nearby car door slamming, car horn, *etc.*, or if it is typical of the midday ambient environment at the RV Park.

4.9.4.6 Modeled Off-Site Noise Levels

Using traffic data from the April 2007 traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), existing traffic noise levels at off-site noise sensitive receptors along roadway segments that would carry Project traffic were calculated. These roadways are illustrated in **Figure 4.9-5**. These sensitive receptors and the calculated existing average traffic noise levels at these receptor sites are listed in **Table 4.9-8**. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located farther from the roadways would experience lower noise levels.

Table 4.9-8
Existing (2006) Modeled Off-Site Roadway Noise Levels at Noise Sensitive Locations[1]

Roadway Segment (Land Use)	Noise Sensitive Land Use	CNEL[1] (2006)
MCBEAN PARKWAY		
I-5	California College of the Arts	67
e/o Tournament Road	Single-Family Residential	69
e/o Tournament Road	Church of Latter Day Saints	68
s/o Valencia Boulevard	Single-Family Residential	70*
s/o Valencia Boulevard	Multi-Family Residential	71*
s/o Valencia Boulevard	Hospital	63
n/o Newhall Ranch Road	Single-Family Residential	67
SR-126		
w/o Commerce Center Drive	Travel Village RV Park	71*
w/o Potrero Valley Road	Ventura County	72
VALENCIA BOULEVARD		
e/o Tourney Road	Single-Family Residential	66
e/o Tourney Road	Multi-Family Residential	68
w/o McBean Parkway	Multi-Family Residential	75*
w/o Magic Mountain Parkway	Valencia Library	73*
NEWHALL RANCH ROAD		
w/o Hillsborough Way	Single-Family Residential	66
w/o Hillsborough Way	Park	68
w/o Bouquet Canyon Road	Multi-Family Residential	68
MAGIC MOUNTAIN PARKWAY		
w/o San Fernando Road	Multi-Family Residential	69
ORCHARD VILLAGE DRIVE		
s/o McBean Parkway	Single-Family Residential	71*
s/o McBean Parkway	Pinecrest School	69
s/o Wiley Canyon Road	Single-Family Residential	72*
LYONS AVENUE		
e/o Wiley Canyon Road	Single-Family Residential	71*
e/o Wiley Canyon Road	Elementary School	66

Table 4.9-8
Existing (2006) Modeled Off-Site Roadway Noise Levels at Noise Sensitive Locations[1]

Roadway Segment (Land Use)	Noise Sensitive Land Use	CNEL[1] (2006)
e/o Orchard Village Drive	Church/School	75*
SAN FERNANDO ROAD/BOUQUET CANYON ROAD		
s/o Placerita Canyon Road	Mixed Residential	77**
ROCKWELL CANYON ROAD		
n/o McBean Parkway	Single-Family Residential	63
WILEY CANYON ROAD		
n/o Lyons Avenue	Single-Family Residential	70*
n/o Lyons Avenue	Day Care Facility	73*
e/o Tournament Road	Single-Family Residential	69
THE OLD ROAD		
s/o Magic Mountain Parkway	Multi-Family Residential	63
WESTRIDGE PARKWAY		
n/o Valencia Boulevard	Single-Family Residential	52[2]

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

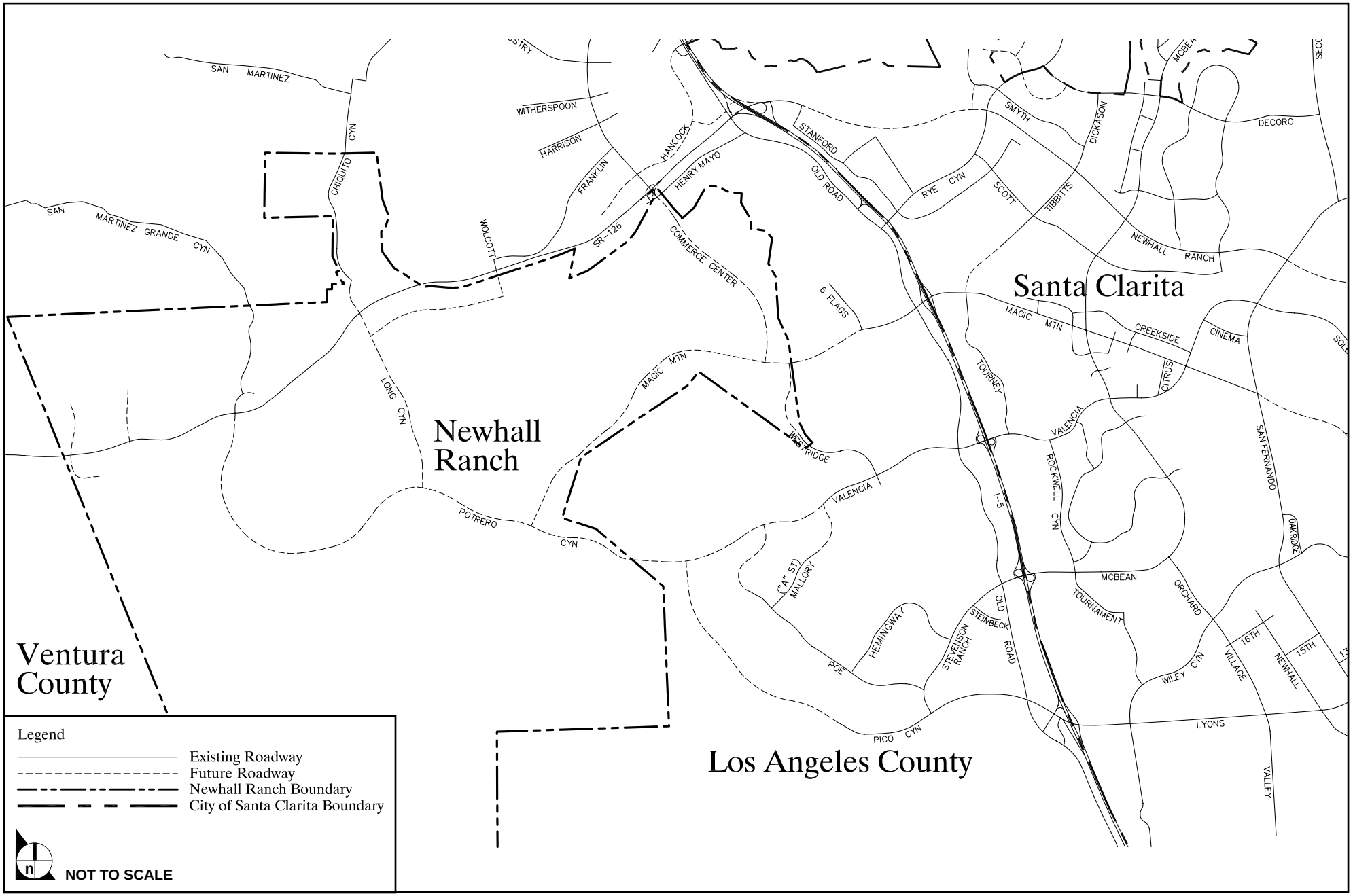
* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.

** Land uses with "**" currently experience a clearly unacceptable noise level under the county's or the city's guidelines.

[1] All numbers are rounded to the nearest first decimal point.

[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. on April 30, 2007. See **Appendix 4.9** for Existing Noise Levels: Existing (2006) Modeled Off-Site Roadway Noise Levels at Noise Sensitive Locations.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Existing Noise Levels: Existing (2006) Modeled Off-Site Roadway Noise Levels at Noise Sensitive Locations.



SOURCE: Austin-Foust Associates, Inc. – March 2006

FIGURE **4.9-5**

Affected Roadway Segments

As shown in **Table 4.9-8**, existing noise levels already are either normally or clearly unacceptable at noise sensitive receptors along the following roadway segments:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive; and
- Wiley Canyon Road north of Lyons Avenue.

Noise levels at San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road (mixed residential) which is located within the City of Santa Clarita are considered to be clearly unacceptable under City of Santa Clarita land use compatibility guidelines.[15]

4.9.5 IMPACT SIGNIFICANCE CRITERIA

The significance criteria listed below are from Appendix G of the State CEQA Guidelines. The Corps has agreed to use the CEQA criteria presented below for purposes of this EIS/EIR, although significance conclusions are not expressly required under NEPA. The Corps also has applied additional federal requirements as appropriate in this EIS/EIR. The impacts to noise would be significant if implementation of the proposed Project or its alternatives would result in any of the circumstances listed below:

Significance Criterion 1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.

Significance Criterion 2. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.

Significance Criterion 3. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the project.

Significance Criterion 4. A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the project.

[15] As indicated under Regulatory Setting, the study area for the proposed Project's traffic overlies a portion of the city of Santa Clarita and the County of Los Angeles. Please refer to **Section 4.8**, Traffic, and **Figure 4.9-5** for those portions of roadways located within the city and within the County areas.

Significance Criterion 5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure to people residing or working in a project area to excessive levels of noise.

Significance Criterion 6. For a project within the vicinity of a private airstrip, exposure to people residing or working in a project area to excessive levels of noise.

The proposed Project site is not located within an airport land use plan or in the vicinity of a private airstrip. Therefore, there would be no aircraft or airport noise impacts (Significance Criteria 5 and 6), and such criteria is not discussed any further in this EIS/EIR.

4.9.5.1 Construction Noise Significance Criteria

Significance Criterion 7. A significant construction noise impact would occur if occupants of the proposed Project or occupants of off-site uses were subject to Project-related construction noise levels in excess of the Los Angeles County Noise Ordinance standards for construction noise. For mobile equipment (*e.g.*, heavy truck traffic) in unincorporated Los Angeles County, this threshold is 75 dB(A) L_{max} for single-family residences, 80 dB(A) L_{max} for multi-family residences, and 85 dB(A) L_{max} for persons in commercial areas every day between 7:00 a.m. to 8:00 p.m., except Sundays and legal holidays. At all other times, the noise thresholds for these uses would be 60, 64, and 70 dB(A) L_{max}, respectively. For stationary equipment (*e.g.*, graders, pavers, bulldozers, *etc.* that generally operate in one area at a time), the threshold is 60 dB(A) L_{max} for single-family residences, 65 dB(A) L_{max} for multi-family residences, and 70 dB(A) L_{max} for residences in commercial areas every day between 7:00 a.m. to 8:00 p.m., except Sundays and legal holidays. At all other times, the noise thresholds for these uses would be 50, 55, and 60 dB(A) L_{max}, respectively. Because the duration of most construction activities at on- and off-site locations is unknown (*e.g.*, the number of days construction equipment would operate west of Travel Village RV Park is unknown), all construction activities are assumed to be of long-term duration (10 days or more) so that the long-term noise restrictions apply (see **Table 4.9-6**).

Vibrations transmitted through the ground during construction operations may annoy people, and detrimentally affect structures and sensitive devices. Where construction vibration does cause structural damage, it is through direct damage and/or vibration-induced settlement. Structural damage depends upon the frequency of the vibration at the structure, as well as the condition of the structure and its foundation.

Ground vibrations generated by construction sources can be roughly separated into two categories: transient and steady-state vibrations. Impact pile drivers represent a source of transient vibrations, while vibratory pile drivers and heavy machinery represent a source of steady-state vibrations.

Significance Criterion 8. The vibration threshold of perception for people is 0.01 in/sec. Normally, construction activities do not cause structural damage; however, Caltrans considers the architectural damage risk level for continuous vibrations, including pile driving, to be a PPV somewhere between 0.2 and 2.0 in/sec.[16] Therefore, should construction activity, including vibratory and impact pile driving,

[16] Cal. Dept of Transportation, footnote 10, *supra*, p. 12.

cause a PPV greater than 0.01 in/sec at sensitive receptors or between 0.2 and 2.0 in/sec at nearby structures that do not contain sensitive receptors for any length of time, a significant impact would occur.

4.9.5.2 Operational Noise Significance Criteria

4.9.5.2.1 On-Site Significance Criteria

Significance Criterion 9. A significant on-site noise impact would occur if on-site exterior frequent use areas for noise-sensitive receptors were to be exposed to a line noise source such as motor vehicles above the normally acceptable levels identified in the State Land Use Compatibility Guidelines utilized by Los Angeles County (*i.e.*, 60 dB(A) CNEL for single-family, 65 dB(A) CNEL for multi-family, and 70 dB(A) CNEL for schools and parks uses, as identified in **Figure 4.9-2**). [17] Residences located within mixed-use/commercial areas would not have an exterior frequent use area (*e.g.*, backyards or parks); therefore, the interior standard of 45 dB(A) would apply as a criteria of significance for those uses.

Significance Criterion 10. If occupants of the proposed Project were to be subject to stationary/point source noise levels originating on- or off- site that are above the Los Angeles County Noise Ordinance standards identified in **Tables 4.9-5** and **4.9-6** for the types of uses proposed, a significant on-site noise impact would occur.

4.9.5.2.2 Off-Site Significance Criteria

Off-site line source noise impacts from motor vehicles are assessed via the State Land Use Compatibility Guidelines identified in **Figure 4.9-2** for noise sensitive receptors in unincorporated Los Angeles County, the City of Santa Clarita Guidelines for Noise and Land Use Compatibility identified in **Figure 4.9-3** for uses located within the city of Santa Clarita, and community responses to changes in noise levels. Changes in a noise level of less than 3 dB(A) typically are not noticed by the human ear. Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dB(A) increase is readily noticeable. Based on this information, a significant off-site noise impact would occur if any of the following criteria are met:

Significance Criterion 11. An increase of 5 dB(A) or greater in ambient noise levels occurs from project-related activities, even if levels remain within the same land use compatibility classification (*e.g.*, noise levels remain within the normally acceptable range).

Significance Criterion 12. An increase of 3 dB(A) or greater in ambient noise levels occurs from project-related activities, which results in a change in land use compatibility classification (*e.g.*, noise levels change from normally acceptable to conditionally acceptable).

Significance Criterion 13. Any increase in ambient noise levels occur where existing noise levels are already considered unacceptable under the State Land Use Compatibility Guidelines for uses within

[17] A frequent use area is an exterior location in which people would congregate for recreation or other purposes. Frequent use areas include backyards of single-family residences, recreation areas in condominium and apartment complexes, active or passive recreational areas in parks, play areas at schools, and specified areas of other uses, such as churches.

unincorporated Los Angeles County, and under City of Santa Clarita Guidelines for Noise and Land Use Compatibility for uses within the city of Santa Clarita. As shown in **Figure 4.9-2** and **4.9-3**, 70 dB(A) and above is defined as unacceptable for all uses except for auditoriums, concert halls, amphitheaters (65 dB(A) and above); playgrounds and neighborhood parks (approximately 67 dB(A) and above); and office buildings, business commercial and professional, industrial, manufacturing, utilities, and agriculture (75 dB(A) and above).

4.9.6 IMPACTS OF THE PROPOSED PROJECT AND ALTERNATIVES

The purpose of this subsection is to describe the noise and vibration impacts of the proposed Project and alternatives both during and after construction.

4.9.6.1 Impacts of Alternative 1 (No Action/No Project)

Under Alternative 1, no action would be taken and the Project would not be developed. Therefore, under this alternative, there would be no construction of bridges, bank stabilization, grade control structures, detention basins, storm drains, or the WRP. Consequently, Alternative 1 would not result in any direct impacts to the environment. Therefore, Alternative 1 would not result in construction or operational activities that would have the potential to affect noise levels in the Project area, indirectly or otherwise. Consequently, this alternative would not result in any noise-related impacts associated with development and implementation of the other Project alternatives (Significance Criteria 1 through 13).

Accordingly, with the No Action/No Project alternative, ordinary vehicular traffic (*i.e.*, not vehicular traffic attributable to the Project) would continue to be the primary noise source in the Project vicinity. Even without the proposed Project, traffic noise would increase due to the increased traffic volumes on local roadways associated with regional growth in the Santa Clarita Valley. The distances from the centerline of SR-126 to the 60, 65, and 70 dB(A) CNEL contours are provided in **Table 4.9-9**. All noise contour distances were rounded to the nearest five-foot increment. Based on the modeled noise contours, even under Alternative 1 (No Action/No Project), some occupants at the Travel Village RV Park may experience noise levels attributable to SR-126 traffic that exceed 70 dB(A), which would be significant under the No Project/No Action alternative.

The FHWA Traffic Noise Model version 2.5 was used to calculate future on-site traffic noise level contours resulting from projected vehicular traffic on SR-126 associated with build-out of the Santa Clarita Valley. Assumptions used in the model for this alternative and all other alternatives include a roadway speed of 65 miles per hour (mph), receiver heights of five-feet above ground level, and "hard" site conditions. The modeling was based on traffic volume inputs generated for the proposed Project's traffic analysis (Austin-Foust Associates, Inc., December 2008; see **Appendix 4.8**.), and the peak-hour traffic volume was assumed to be 10 percent of the average daily traffic (ADT) volumes on each roadway. In addition, the noise attenuating effects of existing natural or proposed man-made barriers and terrain lines between the roadways and receptor were not considered. Therefore, the modeled results are considered to be a worst-case scenario.

Table 4.9-9
Distances to Contours from Centerline: Alternative 1 (No Action/No Project Alternative)

Roadway Segment	Highest Peak Hour Volumes	Distance to Contour From Centerline (to nearest 5 feet)			
		Speed Limit	60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,560	65	260	180	110
SR-126 w/o Long Canyon Road	2,640	65	270	185	115
SR-126 w/o Commerce Center Drive	2,720	65	275	185	120

Notes:
n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available
* Highest Peak Hour is 8% of ADTs
** 70 dB(A) CNEL Contour is within road right-of-way

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 1, Distances to Contours from Centerline: Alternative 1 (No Action/No Project Alternative).

4.9.6.2 Impacts of Alternative 2 (Proposed Project)

4.9.6.2.1 Direct Impacts

RMDP Direct Impacts. Direct noise impacts would occur during the construction and/or installation of the bridges, bank stabilization, grade control structures, detention basins, storm drains, and the WRP outfall, and during various restoration and maintenance activities in and around jurisdictional waters and streambeds within the Specific Plan site. These activities would require construction workers and equipment to access the site, and would require the use of construction equipment on the Specific Plan site. Such activities potentially could result in significant noise impacts.

Construction activities primarily would include grading and excavation, installation of bank stabilization and other drainage facility-related construction, and the construction of new bridges. During grading, the movement of earthen materials to allow for ultimate installation of improvements would occur throughout the northern portion of the Specific Plan site. No off-site import or export of earthen materials is anticipated during this stage of Project construction. Grading would be followed by the installation of drains, bank stabilization, concrete bridges, *etc*. Once installed, certain Project components would be covered with earthen materials. Those include portions of the bank stabilization, drains within the proposed development area of the Specific Plan site, piers for bridges, and necessary utilities, including the Utility Corridor.[18]

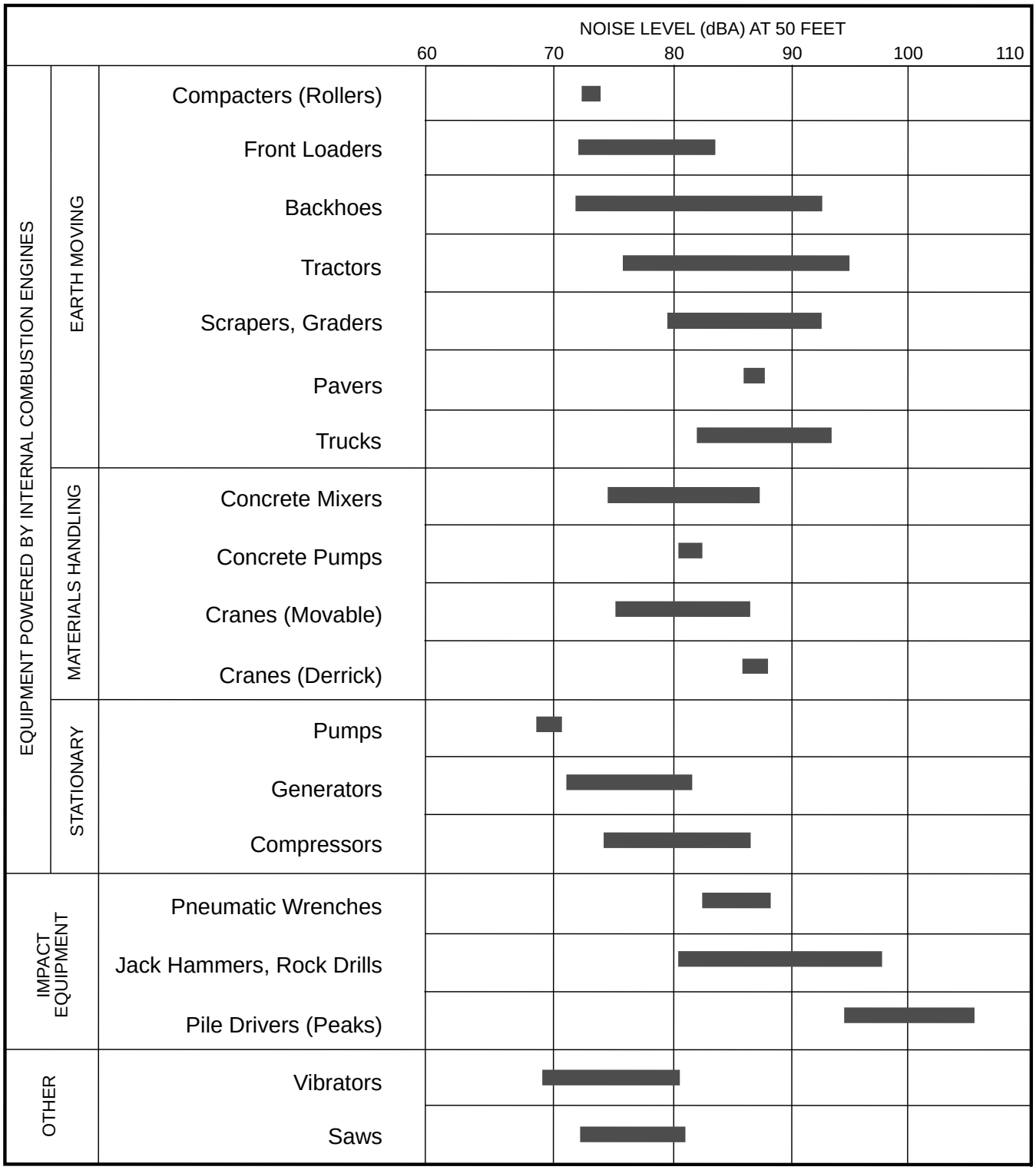
[18] The Utility Corridor would extend from the existing WRP on the Old Road, located east of the Newhall Ranch Specific Plan and south of the SR-126 right-of-way, to the proposed WRP within the Specific Plan site. The corridor would also extend north of SR-126, up Chiquita Canyon and Wolcott Road, to the proposed water tank sites.

Construction activities typically involve the use of heavy equipment (*e.g.*, haul trucks, scrapers, tractors, loaders, concrete mixers, cranes). On-road trucks also would be used to deliver equipment and building materials, and to haul away waste materials. Smaller equipment (*e.g.*, jackhammers, pneumatic tools, saws, hammers) also would be used throughout the site during the construction phase. In addition, piles would be driven into the riverbed of the Santa Clara River during construction of the Potrero Canyon Road, Long Canyon Road, and Commerce Center Drive bridges. This equipment would generate both steady-state and episodic noise that may be heard within and outside the Project area. Pile driving equipment also would generate steady-state and transient vibration that could be felt within the vicinity of the pile driving. Hard pile driving in the upper layers of sandy and clayey soils to the depth of about 10 meters may induce adverse transient ground vibrations.[19]

The USEPA has compiled data on the noise-generating characteristics of specific types of construction equipment. (See **Figure 4.9-6**). As shown, noise levels generated by heavy equipment can range from approximately 68 to 100 dB(A) when measured at 50 feet. Noise levels from the operation of heavy-duty trucks, scrapers, graders, backhoes, and front-end loaders can range from approximately 75 to 95 dB(A) at a distance of 50 feet from individual pieces of equipment. However, as previously noted, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6.0 dB(A) and 7.5 dB(A) per doubling of distance for hard and soft sites, respectively. For example, assuming a "hard" site, a noise level of 68 dB(A) measured at 50 feet from the noise source to the receptor would reduce to 62 dB(A) at 100 feet from the source to the receptor, and further reduce by another 6.0 dB(A) to 56 dB(A) at 200 feet from the source to the receptor.

Heavy-duty on-road trucks that would be used to move construction equipment onto the Project area and into construction areas typically have a noise level of approximately 90 dB(A) at 50 feet. Future on-site sensitive receptors constructed during the earlier phases of Project development and off-site sensitive receptors located along the truck routes that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to approximately 90 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the truck route, and any intervening topography and/or structures that may exist between them and the noise source. Because the heavy equipment would remain at the construction sites for the duration of the construction phase, the noise impact would occur only when the equipment is moved onto and off the construction sites, and would be temporary and instantaneous as noise levels would diminish rapidly with distance. In short, heavy-duty construction truck traffic would be periodic and restricted to daytime hours, is expected along highways and major arterials where less noise sensitive uses are or would be located, and is not expected to traverse residential areas. As such, short-term construction truck traffic passbys would not result in a substantial temporary or periodic increase in ambient noise levels along traversed roadways, and therefore, would not result in a significant noise impact (Significance Criteria 1, 4 and 7).

[19] *Environmental Vibration Problems During Construction*, Mark Svinkin, available online at http://www.vulcanhammer.net/svinkin/ (last visited March 31, 2009).



Note: Based on limited available data samples.

SOURCE: United States Environmental Protection Agency, 1971, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," NTID 300-1.

FIGURE **4.9-6**

Noise Levels of Typical Construction Equipment

Although the daily transportation of construction workers is expected to cause some increases in noise levels along roadways in the Project vicinity, this traffic, which would be comprised largely of passenger vehicles and pickup trucks, would not represent a substantial percentage of daily volumes in the area over the course of infrastructure installation and construction, and would contribute substantially less than 3 dB(A) to the ambient noise environment. Because this noise contribution would be inaudible to the typical human ear, noise associated with the construction-worker traffic noise would be less-than-significant (Significance Criteria 1, 2, 4, 7, and 8).

Exceedance of the Noise Ordinance at Sensitive Receptors. Project construction would generate noise that may be audible at on- and off-site locations. No residences currently exist within the Specific Plan site, but depending on the phasing of RMDP-related improvements, construction noise could affect future residents developed on the Specific Plan site. The nearest existing off-site noise-sensitive receptors are the Travel Village RV Park along SR-126, which is located approximately 200 feet west of the nearest proposed bridge location at Commerce Center Drive, and single-family residences located at the northwest intersection of SR-126 and Chiquito Canyon Road, which are approximately 1-mile from proposed bridge locations. More distant noise sensitive receptors include residents in southern Val Verde, to the north, and Westridge to the east. On-site construction noise resulting from the development of RMDP improvements would not likely be audible at the more distant sensitive receptor locations because of the distance between construction sites and the off-site areas, traffic noise along SR-126 that would "drown" out construction noise, and intervening topography (Significance Criteria 1, 4, and 7). Travel Village is located approximately 925 feet from the nearest proposed graded area on the Specific Plan site. Assuming the operation of a tractor with a decibel level of 95 dB(A) at 50 feet at the eastern boundary of the site, the noise level at the westernmost boundary of Travel Village would be approximately 70 dB(A) assuming a drop-off rate of 6.0 decibels per doubling of distance. Occupants of Travel Village, located further away, would experience less noise due to their greater distance from the construction operations and any intervening structures that may exist between them and the noise source. The Noise Ordinance (as presented in **Table 4.9-6**) does not include maximum construction noise levels for transient occupancy (*i.e.*, Travel Village RV Park), but does specify a maximum daily construction noise level for semi-residential/commercial uses (*i.e.*, residential uses within a commercial area (refer to **Table 4.9-6**, above]) of 85 dB(A) for mobile equipment and 70 dB(A) for stationary equipment between the hours of 7:00 AM and 8:00 PM, except on Sundays. Given that the Noise Ordinance maximum noise levels are greater or equal to projected construction noise levels at Travel Village, no significant construction noise impacts to the RV park are anticipated. Occupants of the Travel Village RV Park and the nearby single-family residences occasionally may hear noise generated during Project construction, but this short term impact would not be significant. Potential noise impacts to sensitive receptors resulting from short-term pile driving operations required to construct bridges across the Santa Clara River are evaluated below.

No noise-sensitive land uses in Ventura County are located close enough to the Project area to be impacted by construction activities. Therefore, no discussion of direct impacts to sensitive receptors within Ventura County is provided below. As the Specific Plan site builds out, construction noise would be audible at on-site residences constructed in the earlier development stages of the Project. It is expected that on-site noise-sensitive receptors would be exposed to some level of construction noise throughout build-out of the Project.

Utility Corridor. Construction activity within the Utility Corridor is expected to utilize concrete saws, scrapers, excavators/trenchers, cranes, pavers and other paving equipment, rollers, heavy-duty trucks, water and other heavy-duty trucks, signal boards (possibly diesel-fueled), and other construction equipment. The loudest equipment would generate noise levels up to 93 dB(A) at 50 feet from the noise source.

As shown in **Figure 2.0-30**, the Utility Corridor would extend from the existing WRP on The Old Road, located east of the Project area, to the proposed WRP, located west of the proposed Landmark Village site. The corridor also would also extend north of SR-126, up Chiquito Canyon and Wolcott Road, to the proposed water tank sites. Within Landmark Village, the Utility Corridor would follow predominantly the alignment of proposed "A" Street. The Utility Corridor through Landmark Village would be constructed prior to occupancy of that tract, so noise from its construction would not have a noise impact on future residents of Landmark Village. Construction of the Utility Corridor would, however, be audible at off-site locations.

Occupants of the Travel Village RV Park could be as close as 75 feet from the planned Utility Corridor, and would be exposed to intermittent noise levels up to 93 dB(A) during Utility Corridor construction. Assuming a drop-off rate of 6 dB(A) per doubling of distance from the noise source and no other sources of attenuation, residences within approximately 1,500 feet of the construction activity with an uninterrupted line of sight to the construction noise sources, including those within the community of Val Verde, would be exposed to intermittent and temporary noise levels that would exceed the Los Angeles Count Noise Ordinance limits (see **Table 4.9-6**). Because the construction activities would exceed the Los Angeles Noise Ordinance limits for 10 days or more at existing off-site residential uses, construction noise impacts are considered significant prior to mitigation. Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by Los Angeles County in connection with its approval of the Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors (Significance Criteria 1, 4, and 7).

Pile Driving Noise Impacts. Construction of bridges across the Santa Clara River at Potrero Canyon Road, Long Canyon Road, and Commerce Center Drive would involve pile driving. Off-site residential areas that could be affected by noise from pile driving operations would include single-family residences located northwest of the SR-126/Chiquito Canyon Road intersection, and residences in the southern portion of the Val Verde community. Both of these residential areas are approximately 1-mile from bridge locations. The Travel Village RV Park, which is located a minimum of approximately 200 feet from the previously approved bridge location at Commerce Center Drive, would be affected by noise from pile driving. Noise-sensitive receptors constructed on the Specific Plan site prior to the start of pile driving operations could also be adversely affected by noise impacts.

Pile driving would generate impulsive noise levels of approximately 105 dB(A) at a distance of 50 feet from proposed bridge locations. Assuming a noise attenuation rate of 7.5 dB(A) per doubling of distance across the soft, sandy river bottom, and no other sources of attenuation, noise from the pile driving may exceed the Los Angeles County Noise Ordinance limit of 65 dB(A) for multi-family residences within approximately 2,500 feet of the pile driving, and exceed the limit of 60 dB(A) for single-family residences within 3,200 feet of the pile driving. However, the actual sound level is expected to be less

than the calculated level due to the noise reduction afforded by intervening topography and structures, and by atmospheric absorption. As new single- and multi-family residences are developed on the Specific Plan site in the vicinity of proposed bridge locations, pile driving activities have the potential to result in temporary and significant noise impacts to those residences (Significance Thresholds 4 and 7). Temporary noise impacts to residences located on the Specific Plan site resulting from pile driving activities would be reduced to a less-than-significant level by implementing existing Specific Plan mitigation measures SP-4.9-1 through SP-4.9-4, which include requirements to limit the hours and days that construction activities and pile driving operations occur.

Existing single-family residences located adjacent to the Specific Plan site are more than one mile from the proposed bridge locations. Due to this separation distance, noise from pile driving activities would attenuate to levels below the Los Angeles County Noise Ordinance exterior noise threshold of 60 dB(A), and would not result in a significant noise impact at the existing residence locations.

Pile driving operations to construct the previously approved Commerce Center Drive Bridge would occur a minimum of approximately 200 feet from the western edge of the Travel Village RV Park. The Los Angeles County Noise Ordinance exterior noise threshold of 70 dB(A) for construction activities more than 10 days in duration is the threshold most applicable to the proposed bridge project and land uses conducted at the RV park. The 70 dB(A) threshold is also equal to the reported ambient exterior noise conditions at the RV park (see **Table 4.9-7**, Noise Monitoring Results). Based on peak noise level conditions at the bridge construction site of 105 dB(A) and an attenuation rate of 7.5 dB(A) per doubling of distance, areas within approximately 1,300 feet of the Commerce Center Bridge site would be exposed to noise levels of 70 dB(A) or above. The implementation of Specific Plan Mitigation Measures SP-4.9-1 through SP-4.9-4 would minimize the pile driving-related noise impacts primarily by limiting construction operations to daytime hours, but these measures would not reduce noise impacts to the existing off-site RV park resulting from the construction of the previously approved bridge to a less-than-significant level. No additional feasible mitigation measures to reduce noise generated by pile driving operations can be identified. Therefore, short-term pile driving operations required to construct the Commerce Center Drive bridge would result in a short-term significant and unavoidable impact to the western portion of the Travel Village trailer park (Significance Criteria 4 and 7).

Vibration Impacts. An increased level of vibration would be expected during construction. The level of vibration depends on the type of soil and the energy generating capability of the construction equipment. Clay soils provide resistance to vibration and, therefore, generate higher vibration levels near the source than for sandy soils. However, vibration in clay soils tends to drop off more rapidly with distance than it does in sandy soils.[20] Hard pile driving in the upper layers of sandy and clayey soils to the depth of about 10 meters may induce adverse transient ground vibrations.[21]

Typical intensities of vibration from operation of construction equipment are presented in **Figure 4.9-7** and **Table 4.9-10**. Construction activities that typically generate the highest levels of vibration are blasting, impact pile driving, and pavement breaking. No blasting would occur during site development. As shown in **Table 4.9-10**, impact pile driving can generate a PPV between 0.644 and 1.518 in/sec at 25

[20] Cal. Dept. of Transportation, footnote 10, *supra*, p. 16.

[21] Svinkin, footnote 18, *supra*, p. 2455.

feet. The threshold of perception for vibration is 0.01 in/sec based on County standards and risk level for architectural damage during continuous vibrations has been identified as 0.2 in/sec.[22] Caltrans considers the risk level for architectural damage to be conservative and believes that the threshold level for pile driving is somewhere between 0.2 and 2.0 in/sec.[23] Although the upper PPV level for pile driving of 1.518 in/sec falls within this risk level, no buildings exist or are proposed within 25 feet of proposed pile driving, and the level of vibration is expected to drop off rapidly before reaching locations of existing and proposed buildings. Therefore, the potential for architectural damage due to pile driving vibration impacts would be less than significant. The closest locations where pile driving would cause vibration impacts to sensitive receptors would be Travel Village, which is within 200 feet of the Commerce Center Bridge. Pile driving could result in vibration levels above 0.01 in/sec. Implementation of Mitigation Measure NOI-1 which includes adjusting vibration amplitudes of the pile driving would reduce potential short-term vibration impacts to less than significant at sensitive receptor locations (Significance Criteria 2 and 8).

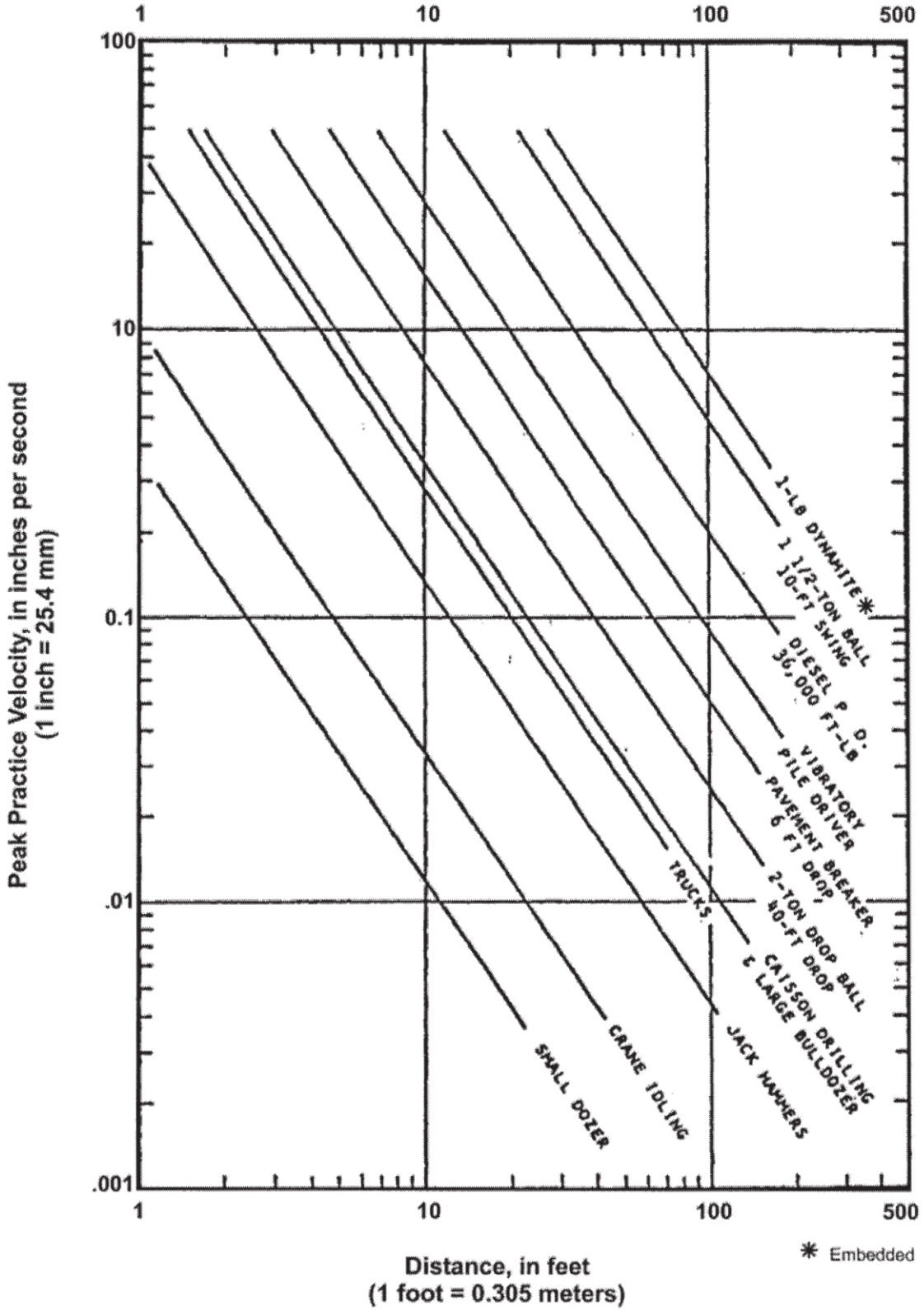
Table 4.9-10
Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft (in/sec)
Pile driver (impact)	Upper Range	1.518
	Typical	0.644
Pile driver (vibratory)	Upper Range	0.734
	Typical	0.170
Clam shovel drop (slurry wall)		0.202
Hydromill (slurry wall)	In soil	0.008
	In rock	0.017
Large bulldozer		0.089
Caisson drilling		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003
PPV = peak particle velocity		

Source: Office of Planning and Environment, Federal Transit Administration, Transit Noise and Vibration Impact Assessment (May 2006) FTA-VA-90-1003-06, p. 12-9.

[22] Cal. Dept. of Transportation, footnote 10, *supra*, p. 10.

[23] Cal. Dept. of Transportation, footnote 10, *supra*, p. 12.



SOURCE: WISS – 1981

FIGURE **4.9-7**

Typical Intensities of Vibration from Operation of Construction Equipment

Conclusion. In summary, implementation of the proposed RMDP would result in short-term construction-related impacts. Installation of the proposed improvements would occur at different time intervals throughout build-out of the Specific Plan. Construction sounds may be audible to off-site sensitive receptors; however, no sensitive receptors exist within the Project area. As the Specific Plan site builds out, construction noise would be audible to on-site residents constructed in the earlier development stages of the Project, but this potential impact is not considered to be significant. Construction activities associated with the development of the proposed Utility Corridor and pile driving operations, would exceed the Los Angeles County Noise Ordinance limit for 10 days or more at existing off-site residential uses, and are considered significant prior to mitigation. No buildings are proposed within 25 feet of pile driving activities. Therefore, impacts to buildings related to ground-bourne vibration are considered less than significant. Vibrations to persons in the vicinity of pile driving operations could be significant but can be reduced to a less-than-significant level.

SCP Direct Impacts. The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to access the preserve sites. While this theoretically would create some traffic and its associated noise, the low number of trips created by the proposed SCP (*i.e.*, approximately one visit per month for periodic inspection and maintenance) would have a negligible effect on noise conditions. In other words, these vehicle trips would not result in a doubling of trips on project affected roadways and as such increases would be less than 3 dBA. The proposed SCP, therefore, will not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.2.2 Indirect Impacts

RMDP Indirect Impacts. Implementation of the proposed RMDP would facilitate build-out of the Specific Plan. The following describes the noise impacts that would be generated by the construction and operation of the land uses (*e.g.*, homes, commercial development) proposed as part of the Newhall Ranch Specific Plan.

Construction Impacts. Development of the Newhall Ranch Specific Plan would occur on a tract-by-tract basis over approximately a 20-year period. Construction activities associated with the development of land uses that would be allowed by the Specific Plan primarily would include grading and excavation, Utility Corridor construction, installation of utility infrastructure throughout the development portion of the site, construction of new roadways, realignment and improvement of existing roadways (within and outside of the Project area), and building construction.

A detailed analysis of the construction-related impacts associated with the development of the Specific Plan was presented in Section 4.9, Noise, of the Newhall Ranch Specific Plan Program EIR. (See **Subsection 4.9.1.1.**) To summarize from that EIR, construction activities could result in noise above the Los Angeles County Noise Ordinance standards for an extended period of time (over 10 days) at existing off-site and future on-site residential uses. Construction noise was determined to be significant prior to mitigation. Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by Los Angeles County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce construction noise impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors. With implementation of adopted mitigation measures, potentially significant construction noise impacts

resulting from the development of previously approved land uses on the Specific Plan site would be reduced to a less-than-significant level under the requirements of Significance Criteria 1, 4, and 7.

Operational Impacts.

On-Site Noise Impacts. As the land uses allowed by the Specific Plan develop, on- and off-site noise impacts would result from Project-generated traffic, as well as from human activity on the Project site itself. This would result in potential impacts to the on-site land uses from roadway noise, potential impacts to existing off-site uses from roadway noise, and potential impacts to on-site uses from on- and off-site noise sources.

Vehicular traffic noise levels for the proposed Project (Alternative 2), including traffic associated with the land uses that will be allowed by the Specific Plan, were calculated as described in **Subsection 4.9.6.1**, Impacts of Alternative 1 (No Action/No Project). Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, Potrero Canyon Road, Wolcott Road, and Westridge Parkway. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are provided in **Table 4.9-11**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas of noise sensitive uses occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur unless mitigated. Actual setbacks and other noise attenuating features are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-11** assume no attenuation by either natural or man-made barriers and, as such, represent maximum, worst-case noise levels. If the affected uses would be located far enough from the roadways so that noise levels would not exceed Los Angeles County's noise standards for those uses (*e.g.*, single-family structures are located farther from the roadway centerline than the 60 dB(A) CNEL contour distances identified **Table 4.9-11**), or if typical attenuation measures, such as walls, berms, double-glazing on windows, building orientation, *etc.*, are incorporated into project design at the tract map stage of project development to reduce the exterior and interior noise levels to the recommended standards, interior and exterior noise impacts would not be significant (Significance Criteria 1, 3, and 9). Previously adopted Specific Plan Mitigation Measures SP-4.9-5, 4.9-6, 4.9-7, 4.9-8, and 4.9-17 require that necessary noise attenuation measures be provided to ensure that subsequent development projects comply with adopted noise compatibility requirements.

The Specific Plan EIR identified a variety of potentially significant long-term noise impacts to sensitive receptors that could be caused by urban development and activities that would occur on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Magic Mountain Theme Park. Previously adopted Specific Plan Mitigation Measures SP-4.9-9, 4.9-10, 4.9-11, 4.9-12, 4.9-13, and 4.9-17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Off-Site Noise Impacts. Cumulative off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area due to build-out of Alternative 2 and other development in the Santa Clarita Valley. As shown in **Table 4.9-12**, cumulative development would result in noise level increases up to 6 dB(A) CNEL in the Project area, as compared to Alternative 1. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126 west of Commerce Center Drive, which would increase by 4 dB(A), and along Westridge Parkway just east of the Specific Plan site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108),. Noise calculations are provided in **Appendix 4.9** --see Alternative 2, Distances to Contours from Centerlines: Alternative 2 (Proposed Project), and Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Table 4.9-11
Distances to Contours from Centerlines: Alternative 2 (Proposed Project)

Roadway Segment	Highest Peak Hour Volumes	Distance to Contour From Centerline (to nearest 5 feet)			
		Speed Limit	60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,625	65	270	185	115
SR-126 w/o Long Canyon Road	3,760	65	310	195	125
SR-126 w/o Commerce Center Drive	6,800	65	455	260	170
Commerce Center Drive n/o Magic Mountain Parkway	3,520	50	230	145	85
Commerce Center Drive s/o SR-126	3,440	50	225	140	80
Long Canyon Road. s/o SR-126	2,960	45	200	115	70
Long Canyon Road n/o Potrero Valley Road	1,680	45	160	95	55
Magic Mountain Parkway e/o Commerce Center Drive	4,640	50	275	175	100
Magic Mountain Parkway e/o Potrero Valley Road	1,120	45	120	80	**
Magic Mountain Parkway w/o Commerce Center Drive	2,720	45	195	110	70
Potrero Valley Road e/o Long Canyon Road	3,360	45	230	135	85
Potrero Valley Road e/o Magic Mountain Parkway	1,680	45	160	95	55
Potrero Valley Road s/o SR-126	1,440	45	145	90	50
Potrero Valley Road w/o Long Canyon Road	3,840	45	245	145	90

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Highest Peak Hour is 8% of ADTs

** 70 dB(A) CNEL Contour is within road right-of-way.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9**-- see Alternative 2, Distances to Contours from Centerlines: Alternative 2 (Proposed Project), and Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Table 4.9-12
Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 2 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	71	1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	72	<1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	77	4
w/o Potrero Valley Road	Ventura County	72	73	73	<1
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1

Table 4.9-12
Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 2 CNEL	Project dB Contribution[3]
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/ BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	65	<1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:

n/o = north of, e/o = east of, s/o = south of, w/o = west of, n/a = not available

* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.

** Land uses with "**" currently experience a clearly unacceptable noise level under the county's or the city's guidelines.

[1] All numbers are rounded to the nearest first decimal point.

[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. staff on April 30, 2007. Noise monitoring data are provided in **Appendix 4. 9 --** Alternative 2, Distances to Contours from Centerlines: Alternative 2 (Proposed Project), and Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 2 CNEL.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- Alternative 2, Distances to Contours from Centerlines: Alternative 2 (Proposed Project), and Predicted Alternative 2 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and are already either normally or clearly unacceptable based on land use compatibility guidelines:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive;
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road; and
- Wiley Canyon Road north of Lyons Avenue.

Project noise would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11 because there would be no change in land use compatibility classification, but there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted Specific Plan Mitigation Measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

SCP Indirect Impacts. Implementation of the proposed SCP would indirectly facilitate development on the Specific Plan site and within portions of the VCC and Entrada planning areas, which would indirectly create both construction and operational noise. Noise impacts of the Specific Plan are discussed above.

Approximately 3.4 msf of nonresidential development would be facilitated in the VCC planning area. Noise impacts associated with build-out of the approved commercial development were analyzed in the certified VCC EIR (April 1990). (See **Subsection 4.9.1.2.1.**) To summarize, noise impacts associated with development of the VCC planning area would consist of noise from construction and traffic. Traffic from this development, along with traffic from other future land uses in the area, would create a noise impact to existing residents that live along Backer Road. Additionally, construction activity would be audible from these homes as well. The VCC EIR concluded that the recommended mitigation measures (see **Table 4.9-2**) would reduce significant impacts to a less-than-significant level. Accordingly, implementation of those mitigation measures adopted in connection with approval of the VCC would reduce noise impacts to a less-than-significant level (Significance Criteria 1 through 13).

Implementation of the proposed SCP also would facilitate the development of approximately 1,725 residential dwelling units and approximately 450,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-use residential and commercial development would be constructed on the site. The Entrada planning area is located close to I-5 and SR-126, and adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the proposed development could expose future on-site sensitive receptors to high levels of noise exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, Project-related vehicle trips could increase existing ambient noise conditions potentially affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it assumed that traditional noise mitigation measures (*e.g.*, noise walls, double-pane windows, berms, *etc.*) would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.2.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of the RMDP component of the proposed Project would result in temporary and permanent increases to the off-site noise environment as a result of construction activities and an increase in traffic to the local roadways. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors is described above in **Subsections 4.9.6.2.1** and **4.9.6.2.2**. Construction-related activities including vibration are considered significant prior to mitigation, (Significance Criteria 1, 2, 4, 7, and 8). In addition, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways, as described above in **Subsection 4.9.6.2.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of the proposed Project would result in significant secondary impacts. Application of mitigation measures adopted in connection with approval of the Specific Plan as well as Mitigation Measure NOI-1, discussed in **Subsection 4.9.7**, would reduce secondary noise impacts to a less-than-significant level.

SCP Secondary Impacts. Implementation of the SCP component of the proposed Project would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.2.2**. Construction-related activities are considered significant prior to mitigation and vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.2.2** (Significance Criteria 1 and 3). Given this, implementation of the proposed Project could result in significant secondary impacts (Significance Criteria 1 through 13). Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.6.3 Impacts of Alternative 3 (Elimination of Planned Potrero Bridge and Additional Spineflower Preserves)

4.9.6.3.1 Direct Impacts

RMDP Direct Impacts. The RMDP component of Alternative 3 would result in a reduction in the amount of infrastructure developed on the Specific Plan site. This reduction would result in the shortening of the period of time needed to construct the RMDP components. Additional information describing the characteristics of Alternative 3 is provided in **Section 3.0** of this EIS/EIR. Construction noise and vibration impacts associated with this alternative would be less than Alternative 2 because the bridge across the Santa Clara River at Potrero Canyon would not be developed. However, the previously approved bridge at Commerce Center Drive would be developed under this alternative, which would result in a short-term but significant and unavoidable construction noise impact to the western portion of the Travel Village RV Park (Significance Thresholds 4 and 7). Once in place, the structures constructed under this alternative would generate no noise or vibration, and would not result in significant long-term noise impacts (Significance Criteria 1 through 13).

SCP Direct Impacts. The SCP component of Alternative 3 would result in the establishment of 221.8 acres of spineflower preserves on the Specific Plan and Entrada Project sites, representing a 54-acre increase when compared to the proposed Project (Alternative 2). Areas within designated spineflower preserves in the Specific Plan area and Entrada planning area would be undisturbed and preserved in perpetuity.

The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to occasionally access the preserve sites. While this theoretically would create some traffic and its associated noise, the low number of trips created by the proposed SCP would have a negligible effect on noise conditions. In other words, these vehicle trips would not result in a doubling of trips on project affected roadway and as such increases would be less than 3 dBA. The proposed SCP would, therefore, not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.3.2 Indirect Impacts

RMDP Indirect Impacts.

Construction Impacts. Implementation of Alternative 3 would facilitate development of the Specific Plan. Construction on the Specific Plan site under this alternative would generate noise and vibration impacts of the same character as those expected under Alternative 2, although on a somewhat smaller scale. For example, a total of 20,433 dwelling units would be provided on the Specific Plan site, 452 units less than Alternative 2. As is the case with Alternative 2, construction noise impacts are significant without mitigation (Significance Criteria 1, 2, 4, 7, and 8). Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors. (Significance Criteria 1, 4, 7, and 8).

Operational Impacts.

On-Site Noise Impacts. Vehicular traffic noise levels for this alternative were calculated as described in **Subsection 4.9.6.1**. Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, and Potrero Canyon Road. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are shown in **Table 4.9-13**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur unless mitigated. Actual setbacks and other noise attenuating features in the Specific Plan area are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-13** assume no attenuation by either natural or man-made barriers and, as such, represent maximum, worst-case noise levels. If the affected uses would be located far enough from the roadways so that noise levels would not exceed the Los Angeles County noise standards for those uses, or if typical attenuation measures are incorporated into the tract map, impacts would not be significant (Significance Criteria 1, 3 and 9). The development of urban uses of the Specific Plan would have the potential to result in significant long-term noise impacts to sensitive receptors located on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Magic Mountain Theme Park. Previously adopted Specific Plan Mitigation Measures SP-4.9-9, 4.9-10, 4.9-11, 4.9-12, 4.9-13, and 4.9-17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Table 4.9-13
Distances to Contours from Centerlines: Alternative 3

Roadway Segment	Highest Peak Hour Volumes	Speed Limit	Distance to Contour From Centerline (to nearest 5 feet)		
			60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,625	65	270	185	115
SR-126 w/o Long Canyon Road	3,810	65	330	210	130
SR-126 w/o Commerce Center Drive	7,800	65	520	310	180
Commerce Center Drive n/o Magic Mountain Parkway	3,275	50	225	140	80
Commerce Center Drive s/o SR-126	4,220	50	260	170	95
Long Canyon Road s/o SR-126	4,420	45	250	145	90
Long Canyon Rd. n/o Potrero Valley Road	1,770	45	165	100	60
Magic Mountain Parkway e/o Commerce Center Drive	4,155	50	255	165	90
Magic Mountain Parkway e/o Potrero Valley Road	1,150	45	125	85	**
Magic Mountain Parkway w/o Commerce Center Drive	2,465	45	190	110	70
Potrero Valley Road e/o Long Canyon Road	3,105	45	210	125	80
Potrero Valley Road e/o Magic Mountain Parkway	2,045	45	180	105	65
Potrero Valley Road s/o SR-126	590	45	100	55	**
Potrero Valley Road w/o Long Canyon Road	3,040	45	205	120	75

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Highest Peak Hour is 8% of ADTs

** 70 dB(A) CNEL Contour is within road right-of-way.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9**-- see Alternative 3, Distances to Contours from Centerlines: Alternative 3, and Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Off-Site Noise Impacts. Cumulative off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area due to build-out of Alternative 3 and other development in the Santa Clarita Valley. As shown in **Table 4.9-14**, cumulative development would result in noise level increases up to 6 dB(A) CNEL in the Project area, as compared to the baseline condition or Alternative 1. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126 west of Commerce Center Drive, which would increase by 4 dB(A), and along Westridge Parkway just east of the Specific Plan site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic

Table 4.9-14
Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 3 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	71	1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	73	1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	77	4
w/o Potrero Valley Road	Ventura County	72	73	73	<1
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1

Table 4.9-14
Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 3 CNEL	Project dB Contribution[3]
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/ BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	66	1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Land uses with "*" currently experience a normally unacceptable noise level under the County's or the City's guidelines.

** Land uses with "**" currently experience a clearly unacceptable noise level under the County's or the City's guidelines.

[1] All numbers are rounded to the nearest first decimal point.

[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. staff on April 30, 2007. Noise monitoring data are provided in **Appendix 4.9**-- see Alternative 3, Distances to Contours from Centerlines: Alternative 3, and Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 3 CNEL.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 3, Distances to Contours from Centerlines: Alternative 3, and Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise calculations are provided in **Appendix 4.9**-- see Alternative 3, Distances to Contours from Centerlines: Alternative 3, and Predicted Alternative 3 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and are already either normally or clearly unacceptable based on land use compatibility guidelines.

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive;
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road; and
- Wiley Canyon Road north of Lyons Avenue.

Project noise contribution would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11 even though there would be no change in land use compatibility classification, because there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted mitigation measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

SCP Indirect Impacts. Implementation of the Alternative 3 SCP would indirectly facilitate development on the Specific Plan site, and on portions of the VCC and Entrada planning areas. Alternative 3 would result in less Specific Plan-related development than the proposed Project (Alternative 2). Impacts of this alternative to noise would be reduced slightly when compared to the proposed Project. Potential noise impacts of the Specific Plan are discussed above.

The implementation of Alternative 3 also would facilitate build-out of the VCC, but would not affect the amount of previously approved development that may subsequently occur in the VCC planning area. Impacts to noise resulting from development on the VCC planning area were previously evaluated by the EIR prepared for the VCC project, and that analysis is summarized in **Subsection 4.9.1.2.1** of this EIS/EIR.

Implementation of the Alternative 3 SCP would facilitate development of 1,125 residential units and approximately 450,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-use residential and commercial development would be constructed on the site. The Entrada planning area is located in proximity to I-5 and SR-126, and is adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the proposed development would potentially expose future on-site sensitive receptors to high levels of noise, exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, project-related vehicle trips would potentially increase existing ambient noise conditions, affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it is assumed that traditional noise mitigation measures (*e.g.*, noise walls, double-pane windows, berms, *etc.*) would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.3.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of Alternative 3 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.3.2**. Construction-related activities including vibration are considered significant prior to mitigation (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.3.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of the proposed Project would result in significant secondary impacts. Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

SCP Secondary Impacts. Implementation of Alternative 3 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.3.2**. Construction-related activities are considered significant prior to mitigation and vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.3.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of Alternative 3 would result in significant secondary impacts. Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.6.4 Impacts of Alternative 4 (Elimination of Planned Potrero Bridge and Addition of VCC Spineflower Preserve)

4.9.6.4.1 Direct Impacts

RMDP Direct Impacts. The RMDP component of Alternative 4 would result in a reduction in the amount of infrastructure developed on the Specific Plan site. This reduction would result in the shortening of the period of time needed to construct RMDP components. Additional information describing the characteristics of Alternative 4 is provided in **Section 3.0** of this EIS/EIR. Construction noise and vibration impacts associated with this alternative would be less than Alternative 2 because the bridge across the Santa Clara River at Potrero Canyon would not be developed. However, the previously approved bridge at Commerce Center Drive would be developed under this alternative, which would result in a short-term but significant and unavoidable construction noise impact to the western portion of the Travel Village RV Park (Significance Thresholds 4 and 7). Once in place, the structures constructed under this alternative would generate no noise or vibration, and would not result in significant long-term noise impacts (Significance Criteria 1 through 13).

SCP Direct Impacts. The SCP component of Alternative 4 would create approximately 259.9 acres of spineflower preserves, representing a 92-acre increase when compared to the proposed Project (Alternative 2). Under this alternative, a spineflower preserve also would be established in the VCC planning area.

The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to access the preserve sites. While this theoretically would create some traffic and its associated noise, the low number of trips created by the proposed SCP would have a negligible effect on noise conditions. In other words, these vehicle trips would not result in a doubling of trips on project affected roadways and as such increases would be less than 3 dBA. The proposed SCP would not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.4.2 Indirect Impacts

RMDP Indirect Impacts.

Construction Impacts. Construction on the Newhall Ranch Specific Plan site under this alternative would generate noise and vibration impacts of the same in character as those expected under Alternative 2, although on a somewhat smaller scale. For example, a total of 20,721 dwelling units would be constructed on the Specific Plan site under this alternative, 164 fewer units than provided under Alternative 2. As with Alternative 2, noise impacts are significant without mitigation (Significance Criteria 1, 2, 4, 7, and 8). Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors.

Operational Impacts.

On-Site Noise Impacts. Vehicular traffic noise levels for this alternative were calculated as described in **Subsection 4.9.6.1**. Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, and Potrero Canyon Road. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are shown in **Table 4.9-15**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas of noise sensitive uses occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur unless mitigated. Actual set-backs and other noise attenuating features are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-15** assume no attenuation by either natural or man-made barriers and as such, represent maximum, worst-case noise levels. If the affected uses would be located far enough from the roadways so that noise levels would not exceed the Los Angeles County noise standards for those uses, or if typical attenuation measures are incorporated into the tract map, impacts would not be significant (Significance Criteria 1, 3, and 9).

The development of urban uses of the Specific Plan would have the potential to result in significant long-term noise impacts to sensitive receptors located on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Magic Mountain Theme Park. Previously adopted Specific Plan Mitigation Measures SP-4.9-9, 4.9-10, 4.9-11, 4.9-12, 4.9-13, and 4.9-17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Table 4.9-15
Distances to Contours from Centerlines: Alternative 4

Roadway Segment	Highest Peak Hour Volumes	Speed Limit	Distance to Contour from Centerline (to nearest 5 feet)		
			60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,625	65	270	185	115
SR-126 w/o Long Canyon Road	3,570	65	300	190	125
SR-126 w/o Commerce Center Drive	7,790	65	520	310	180
Commerce Center Drive n/o Magic Mountain Parkway	3,295	50	225	140	80
Commerce Center Drive s/o SR-126	3,925	50	245	150	90
Long Canyon Road s/o SR-126	4,610	45	255	145	95
Long Canyon Road n/o Potrero Valley Road	1,840	45	165	100	60
Magic Mountain Parkway e/o Commerce Center Drive	4,165	50	255	165	90
Magic Mountain Parkway e/o Potrero Valley Road	1,140	45	120	80	**
Magic Mountain Parkway w/o Commerce Center Drive	2,550	45	195	110	70
Potrero Valley Road e/o Long Canyon Road	3,500	45	240	140	90
Potrero Valley Road e/o Magic Mountain Parkway	1,795	45	165	100	60
Potrero Valley Road s/o SR-126	780	45	115	70	**
Potrero Valley Road w/o Long Canyon Road	3,060	45	205	120	80

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Highest Peak Hour is 8% of ADTs; ** 70 dB(A) CNEL Contour is within road right-of-way.

** 70 dB(A) CNEL Contour is within road right-of-way.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9**-- see Alternative 4, Distances to Contours from Centerlines: Alternative 4, and Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Off-Site Noise Impacts. Cumulative off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area due to build-out of Alternative 4 and other development in the Santa Clarita Valley. As shown in **Table 4.9-16**, cumulative development would increase noise levels up to 4 dB(A) CNEL in the Project area, as compared to Alternative 1. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126 west of Commerce Center Drive, which would increase by 4 dB(A), and along Westridge Parkway just east of the Newhall Ranch site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise calculations are provided in **Appendix 4.9**-- see Alternative 4, Distances to Contours from Centerlines: Alternative 4, and Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Table 4.9-16
Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 4 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	71	1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	73	1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	77	4
w/o Potrero Valley Road	Ventura County	72	73	73	
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1

Table 4.9-16
Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 4 CNEL	Project dB Contribution[3]
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/ BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	65	<1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.

** Land uses with "**" currently experience a clearly unacceptable noise level under the county's or the city's guidelines.

[1] All numbers are rounded to the nearest first decimal point.

[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. staff on April 30, 2007. Noise monitoring data are provided in **Appendix 4.9** -- see Alternative 4, Distances to Contours from Centerlines: Alternative 4, and Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 4 CNEL.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 4, Distances to Contours from Centerlines: Alternative 4, and Predicted Alternative 4 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and are already either normally or clearly unacceptable based on land use compatibility guidelines:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive (church/school);
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road (mixed residential); and
- Wiley Canyon Road north of Lyons Avenue.

Project noise contribution would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11, even though there would be no change in land use compatibility classification, because there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted Specific Plan Mitigation Measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

SCP Indirect Impacts. Implementation of the Alternative 4 SCP would indirectly facilitate development on the Specific Plan site and on a portion of the Entrada planning area. Alternative 4 would result in less Specific Plan-related development than the proposed Project (Alternative 2). Impacts of this alternative to noise would be reduced slightly when compared to the proposed Project. Potential noise impacts of the Specific Plan development are discussed above.

The implementation of the Alternative 4 SCP would preclude build-out of the VCC because the establishment of a spineflower preserve on the VCC planning area would make grading required to develop the remainder of the VCC infeasible. Although Alternative 4 would preclude build-out of the VCC, the resulting reduction in noise impacts, as compared to the proposed Project, would not be substantial.

Implementation of the Alternative 4 SCP also would facilitate development of 1,125 residential units and approximately 450,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-

use residential and commercial development would be constructed on the site. The Entrada planning area is located in close proximity to I-5 and SR-126, and is adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the proposed development would expose future on-site sensitive receptors to high levels of noise exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, project-related vehicle trips would increase existing ambient noise conditions, thereby affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it assumed that traditional noise mitigation measures would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.4.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of Alternative 4 would result in temporary and permanent increases to the off-site noise environment as a result of construction activities and an increase in traffic to the local roadways with build-out of the Specific Plan. Construction and traffic noise would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors is described above in **Subsection 4.9.6.4.2**. As discussed, construction-related activities including vibration are considered significant prior to mitigation. (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways identified in **Subsection 4.9.6.4.2** (Significance Criteria 1, 3, 11, and 33). Given this, implementation of Alternative 4 would result in significant secondary impacts.

SCP Secondary Impacts. Implementation of Alternative 4 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.4.2**. Construction-related activities are considered significant prior to mitigation and potential vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways, as described above in **Subsection 4.9.6.4.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of the proposed Project could result in significant secondary impacts. Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.6.5 Impacts of Alternative 5 (Widen Tributary Drainages and Addition of VCC Spineflower Preserve)

4.9.6.5.1 Direct Impacts

RMDP Direct Impacts. The RMDP component of Alternative 5 would result in a reduction in the amount of infrastructure developed on the Specific Plan site. This reduction would result in the shortening of the period of time needed to construct the RMDP components. Additional information describing the characteristics of Alternative 5 is provided in **Section 3.0** of this EIS/EIR. Construction noise and vibration impacts associated with bridge development under this alternative would be of the same character as Alternative 2, and a short-term but significant unavoidable construction noise impact would occur at the Travel Village RV Park (Significance Thresholds 4 and 7). Once the proposed RMDP

improvements are in place, they would generate no noise or vibration, and would not result in significant long-term noise impacts (Significance Criteria 1 through 13).

SCP Direct Impacts. The SCP component of Alternative 5 would result in approximately 338.6 acres of spineflower preserves, representing a 171-acre increase when compared to the proposed Project (Alternative 2). Under this alternative, a spineflower preserve would be established in the VCC planning area.

The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to access the preserve sites. While this theoretically would create some traffic and its associated noise, the low number of trips created by the proposed SCP would have a negligible effect on noise conditions. In other words, these vehicle trips would not result in a doubling of trips on project affected roadways and as such increases would be less than 3 dBA. The proposed SCP, therefore, would not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.5.2 Indirect Impacts

RMDP Indirect Impacts.

Construction Impacts. Construction on the Newhall Ranch Specific Plan site under Alternative 5 would generate noise and vibration impacts of the same character as those expected under Alternative 2, although on a somewhat smaller scale. For example, a total of 20,196 dwelling units would be constructed on the Specific Plan site, 689 units less than would be provided under Alternative 2. As with Alternative 2, construction noise impacts are significant without mitigation (Significance Criteria 1, 2, 4, 7, and 8). Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors.

Operational Impacts.

On-Site Noise Impacts. Vehicular traffic noise levels for this alternative were calculated as described in **Subsection 4.9.6.1**). Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, and Potrero Canyon Road. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are shown in **Table 4.9-17**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas of noise sensitive uses occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur unless mitigated. Actual set-backs and other noise attenuating features are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-17** assume no attenuation by either natural or man-made barriers and, as such, represent maximum, worst-case noise levels. If the affected uses would be located far enough from the roadways so that noise levels would not exceed the Los Angeles County noise standards for those uses, or if typical attenuation

measures are incorporated into the tract map, impacts would not be significant (Significance Criteria 1, 3, and 9).

Table 4.9-17
Distances to Contours from Centerlines - Alternative 5

Roadway Segment	Highest Peak Hour Volumes	Speed Limit	Distance to Contour From Centerline (to nearest 5 feet)		
			60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,625	65	270	185	115
SR-126 w/o Long Canyon Road	3,770	65	320	200	125
SR-126 w/o Commerce Center Dr.	7,640	65	475	280	175
Commerce Center Drive n/o Magic Mountain Parkway	3,160	50	225	135	80
Commerce Center Drive s/o SR-126	3,980	50	245	150	90
Long Canyon Road s/o SR-126	3,030	45	205	115	75
Long Canyon Road n/o Potrero Valley Road	1,520	45	151	95	55
Magic Mountain Parkway e/o Commerce Center Drive	4,070	50	250	160	90
Magic Mountain Parkway e/o Potrero Valley Road	1,130	45	120	80	**
Magic Mountain Parkway w/o Commerce Center Drive	2,520	45	190	110	70
Potrero Valley Road e/o Long Canyon Road	3,985	45	250	145	90
Potrero Valley Road e/o Magic Mountain Parkway	3,620	45	240	140	90
Potrero Valley Road s/o SR-126	1,410	45	140	90	**
Potrero Valley Road w/o Long Canyon Road	3,050	45	205	120	75

Notes:

n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available

* Highest Peak Hour is 8% of ADTs

** 70 dB(A) CNEL Contour is within road right-of-way.

Source: Impact Sciences, Inc. Noise calculations are provided in **Appendix 4.9** -- see Alternative 5, Distances to Contours from Centerlines: Alternative 5, and Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

The development of urban uses of the Specific Plan would have the potential to result in significant long-term noise impacts to sensitive receptors located on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Magic Mountain Theme Park. Previously adopted Specific Plan mitigation measures SP-4.9-9, 10, 11, 12, 13, and 17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Off-Site Noise Impacts. Off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area due to build-out of Alternative 5 and other projects in

the Santa Clarita Valley. As shown in **Table 4.9-18**, cumulative development would increase noise levels up to 4 dB(A) CNEL in the Project area, as compared to baseline. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126 west of Commerce Center Drive, which would increase by 4 dB(A), and along Westridge Parkway just east of the Specific Plan site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise calculations are provided in **Appendix 4.9** -- see Alternative 5, Distances to Contours from Centerlines: Alternative 5, and Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and are already either normally or clearly unacceptable based on land use compatibility guidelines:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive (church/school);
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road (mixed residential); and
- Wiley Canyon Road north of Lyons Avenue.

Project noise contribution would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11, even though there would be no change in land use compatibility classification, because there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted Specific Plan Mitigation Measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

Table 4.9-18
Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 5 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	71	1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	73	1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	77	4
w/o Potrero Valley Road	Ventura County	72	73	73	<1
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/					

Table 4.9-18
Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 5 CNEL	Project dB Contribution[3]
BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	65	<1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:
n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available
* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.
** Land uses with "**" currently experience a clearly unacceptable noise level under the county's or the city's guidelines.
[1] All numbers are rounded to the nearest first decimal point.
[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. staff on April 30, 2007. Noise monitoring data are provided in **Appendix 4.9** -- see Alternative 5, Distances to Contours from Centerlines: Alternative 5, and Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations.
[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 5 CNEL.
Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 5, Distances to Contours from Centerlines: Alternative 5, and Predicted Alternative 5 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

SCP Indirect Impacts. Implementation of the Alternative 5 SCP would indirectly facilitate development on the Specific Plan site and on a portion of the Entrada planning area. Alternative 5 would result in less Specific Plan-related development than the proposed Project (Alternative 2). Impacts of this alternative to noise would be reduced slightly when compared to the proposed Project. Impacts of the Specific Plan development on noise are discussed above.

The implementation of the Alternative 5 SCP would preclude build-out of the VCC because the establishment of a spineflower preserve on the VCC planning area would make grading required to develop the remainder of the VCC infeasible. Although Alternative 5 would preclude build-out of the VCC, the resulting reduction in noise impacts, as compared to the proposed Project, would not be substantial.

Implementation of the Alternative 5 SCP would facilitate development of approximately 959 residential units and approximately 450,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-use residential and commercial development would be constructed on the site. The Entrada planning area is located in proximity to I-5 and SR-126, and is adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the

proposed development could expose future on-site sensitive receptors to high levels of noise exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, project-related vehicle trips could increase existing ambient noise conditions potentially affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it assumed that traditional noise mitigation measures (*e.g.*, noise walls, double-pane windows, berms, *etc.*) would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.5.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of Alternative 5 would result in temporary and permanent increases to the off-site noise environment as a result of construction activities and an increase in traffic to the local roadways with build-out of the Specific Plan. Construction and traffic noise would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors is described above in **Subsection 4.9.6.5.2**. As discussed, construction-related activities including vibration are considered significant prior to mitigation (Significance Criteria 1, 2, 4, 7, and 8. However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.5.2** (Significance Criteria 1 and 3). Given this, implementation of the Alternative 5 would result in significant secondary impacts. Application of mitigation measures adopted in connection with approval of the Specific Plan as well as Mitigation Measure NOI-1, discussed in **Subsection 4.9.7**. below, would reduce secondary noise impacts to a less-than-significant level.

SCP Secondary Impacts. Implementation of Alternative 5 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.5.2**. Construction-related activities are considered significant prior to mitigation and potential vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.5.2** (Significance Criteria 13, 11, and 13). Given this, implementation of the Alternative 5 could result in significant secondary impacts (Significance Criteria 1 through 13). Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.6.6 Impacts of Alternative 6 (Elimination of Planned Commerce Center Drive Bridge and Maximum Spineflower Expansion/Connectivity)

4.9.6.6.1 Direct Impacts

RMDP Direct Impacts. The RMDP component of Alternative 6 would result in a reduction in the amount of infrastructure developed on the Specific Plan site. This reduction would result in the shortening of the period of time needed to construct the RMDP components. Additional information describing the characteristics of Alternative 6 is provided in **Section 3.0** of this EIS/EIR. Construction noise impacts associated with this alternative would be of the same character as Alternative 2. Noise and vibration impacts resulting from bridge development would be reduced under this alternative because the Commerce Center Drive Bridge would not be developed. As a result, this alternative would avoid the

short-term but significant and unavoidable construction noise impact to the Travel Village RV Park that would occur with the implementation of Alternative 2. Once the infrastructure improvements are in place, they would generate no noise or vibration, and would not result in significant long-term noise impacts (Significance Criteria 1 through 13).

SCP Direct Impacts. The SCP component of Alternative 6 would dedicate approximately 891.2 acres of spineflower preserves, representing a 724-acre increase when compared to the proposed Project (Alternative 2). Under this alternative, a spineflower preserve would be established in the VCC planning area.

The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to access the preserve sites. While this would create some traffic and its associated noise, the low number of trips created by the proposed SCP would have a negligible effect on noise conditions. In other word, these vehicle trips would not result in a doubling of trips of project affected roadway and as such increases would be less than 3 dBA. The proposed SCP, therefore, would not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.6.2 Indirect Impacts

RMDP Indirect Impacts.

Construction Impacts. Construction on the Newhall Ranch Specific Plan site under this Alternative 6 would generate noise and vibration impacts of the same character as those expected under Alternative 2, although on a somewhat smaller scale. For example, a total of 19,787 dwelling units would be constructed on the Specific Plan site under Alternative 6, 1,098 fewer dwelling units than would be provided under Alternative 2. As with Alternative 2, noise impacts are significant without mitigation (Significance Criteria 1, 2, 4, 7, and 8). Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors.

Operational Impacts.

On-Site Noise Impacts. Vehicular traffic noise levels for this alternative were calculated as described in **Subsection 4.9.6.1**). Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, and Potrero Canyon Road. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are shown in **Table 4.9-19**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas of noise sensitive uses occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur. Actual set-backs and other noise attenuating features are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-19** assume no attenuation by either natural or man-made barriers and, as such, represent maximum, worst-case noise

levels. If the affected uses would be located far enough from the roadways so that noise levels would not exceed the Los Angeles County noise standards for those uses, or if typical attenuation measures are incorporated into the tract map, impacts would not be significant (Significance Criteria 1, 3, and 9).

Table 4.9-19
Distances to Contours from Centerlines: Alternative 6

Roadway Segment	Highest Peak Hour Volumes	Speed Limit	Distance to Contour From Centerline (to nearest 5 feet)		
			60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,945	65	290	190	120
SR-126 w/o Long Canyon Road	3,890	65	345	220	135
SR-126 w/o Commerce Center Drive.	7,750	65	500	300	175
Long Canyon Road s/o SR-126	3,230	45	220	130	85
Long Canyon Road n/o Potrero Valley Road	1,970	45	175	105	65
Magic Mountain Parkway e/o Commerce Center Drive	5,530	50	330	180	105
Magic Mountain Parkway e/o Potrero Valley Road	1,690	45	160	95	55
Magic Mountain Parkway w/o Commerce Center Drive.	2,465	45	190	110	70
Potrero Valley Road e/o Long Canyon Road	3,620	45	240	140	90
Potrero Valley Road e/o Magic Mountain Parkway	5,100	45	260	150	100
Potrero Valley Road s/o SR-126	1,450	45	145	90	50
Potrero Valley Road w/o Long Canyon Road	3,000	45	200	115	75

Notes:
n/o = north of; e/o = east of, s/o = south of, w/o = west of, n/a = not available
* Highest Peak Hour is 8% of ADTs
** 70 dB(A) CNEL Contour is within road right-of-way.
Source: Impact Sciences, Inc.

The development of urban uses of the Specific Plan would have the potential to result in significant long-term noise impacts to sensitive receptors located on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Magic Mountain Theme Park. Previously adopted Specific Plan Mitigation Measures SP-4.9-9, 10, 11, 12, 13, and 17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Off-Site Noise Impacts. Cumulative off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area due to build-out of Alternative 6 and other development in the Santa Clarita Valley. As shown in **Table 4.9-20**, cumulative development would increase noise levels up to 4 dB(A) CNEL in the Project area, as compared to baseline. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway. Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to

these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126, west of Commerce Center Drive, which would increase by 4 dB(A), and along Westridge Parkway just east of the Newhall Ranch Specific Plan site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise calculations are provided in **Appendix 4.9** -- see Alternative 6, Distances to Contours from Centerlines: Alternative 6, and Predicted Alternative 6 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and are already either normally or clearly unacceptable based on land use compatibility guidelines:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive;
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road; and
- Wiley Canyon Road north of Lyons Avenue.

Table 4.9-20
Predicted Alternative 6 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 6 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	71	1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	73	1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	77	4
w/o Potrero Valley Road	Ventura County	72	73	73	<1
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/ BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1

Table 4.9-20
Predicted Alternative 6 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 6 CNEL	Project dB Contribution[3]
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	65	<1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:
n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available
* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.
** Land uses with "**" currently experience a clearly unacceptable noise levels under the county's or the city's guidelines.
[1] All numbers are rounded to the nearest first decimal point.
[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. on April 30, 2007. Noise monitoring data are provided in **Appendix 4.9** -- see Alternative 6, Distances to Contours from Centerlines: Alternative 6, and Predicted Alternative 6 Cumulative Roadway Noise Levels at Noise Sensitive Locations.
[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 6 CNEL.
Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9**-- see Alternative 6, Distances to Contours from Centerlines: Alternative 6, and Predicted Alternative 6 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11, even though there would be no change in land use compatibility classification, because there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted Specific Plan Mitigation Measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

SCP Indirect Impacts. Implementation of the Alternative 6 SCP would indirectly facilitate development on the Specific Plan site and on a portion of the Entrada planning area. Alternative 6 would result in less Specific Plan-related development than the proposed Project (Alternative 2). Impacts of this alternative to noise would be reduced slightly when compared to the proposed Project. Impacts of the Specific Plan development on noise are discussed above.

Implementation of the Alternative 6 SCP would preclude build-out of the VCC because the establishment of a spineflower preserve on the VCC planning area would make grading required to develop the remainder of the VCC infeasible. Although Alternative 6 would preclude build-out of the VCC, the resulting reduction in noise impacts, as compared to the proposed Project, would not be substantial.

Implementation of the Alternative 6 SCP would facilitate development of 425 residential units and approximately 450,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-use residential and commercial development would be constructed on the site. The Entrada planning area is located in proximity to I-5 and SR-126, and is adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the proposed development could expose future on-site sensitive receptors to high levels of noise exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, project-related vehicle trips would increase existing ambient noise conditions, potentially affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it assumed that traditional noise mitigation measures (*e.g.*, noise walls, double-pane windows, berms, *etc.*) would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.6.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of Alternative 6 would result in temporary and permanent increases to the off-site noise environment as a result of construction activities and an increase in traffic to the local roadways with build-out of the Specific Plan. Construction and traffic noise would be audible to off-site sensitive receptors in the Project vicinity. The impact to off-site sensitive receptors is described above in **Subsection 4.9.6.6.2**. As discussed, construction-related noise is considered significant prior to mitigation, and potential vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.6.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of Alternative 6 would result in significant secondary impacts.

SCP Secondary Impacts. Implementation of Alternative 6 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.6.2**. Construction-related activities are considered significant prior to mitigation, and potential vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways, as described above in **Subsection 4.9.6.6.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of Alternative 6 could result in significant secondary impacts. Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.6.7 Impacts of Alternative 7 (Avoidance of 100-Year Floodplain, Elimination of Two Planned Bridges, and Avoidance of Spineflower)

4.9.6.7.1 Direct Impacts

RMDP Direct Impacts. The RMDP component of Alternative 7 would reduce the amount of infrastructure developed on the Specific Plan site. Additional information describing the characteristics of Alternative 7 is provided in **Subsection 3.0** of this EIS/EIR. Noise and vibration impacts resulting from bridge development would be reduced under this alternative because the bridges across the Santa

Clara River at Commerce Center Drive and Potrero Valley would not be developed. As a result, this alternative would avoid the short-term but significant and unavoidable construction noise impact to the Travel Village RV Park that would occur with the implementation of Alternative 2. Once the infrastructure improvements are in place, they would generate no noise or vibration, and would not result in significant long-term noise impacts (Significance Criteria 1 through 13).

SCP Direct Impacts. The SCP component of Alternative 7 would result in the establishment of 660.6 acres of spineflower preserves, representing a 493-acre increase, when compared to the proposed Project (Alternative 2). Under this alternative, a spineflower preserve would be established in the VCC planning area.

The SCP is a conservation plan, and does not include any development or intrusive land uses. However, some components of the SCP, such as construction of split rail fences around the preserve perimeter, and management and monitoring activities, would require workers to access the preserve sites. While this theoretically would create some traffic and associated noise, the low number of trips created by the SCP would have a negligible effect on noise conditions. In other words, these vehicle trips would not result in a doubling of trips on project affected roadways and as such increases would be less than 3 dBA. The SCP, therefore, would not result in significant direct noise impacts (Significance Criteria 1 through 13).

4.9.6.7.2 Indirect Impacts

RMDP Indirect Impacts.

Construction Impacts. Construction on the Newhall Ranch Specific Plan site under Alternative 7 would generate noise and vibration impacts of the same character as those expected under Alternative 2, although on a smaller scale. For example, a total of 16,471 dwelling units would be constructed on the Specific Plan site, 4,414 fewer units than would be provided under Alternative 2. Consequently, the duration or period of time that construction would occur is shorter. As with the proposed Project, noise impacts are significant without mitigation (Significance Criteria 1, 2, 4, 7, and 8). Mitigation Measures SP-4.9-1 through SP-4.9-4 were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan in order to reduce impacts to a level below significant, and these measures still apply to the Specific Plan development facilitated by the RMDP. These mitigation measures include complying with County standards such as hours of construction and maximizing distances between construction activities and sensitive receptors.

Operational Impacts.

On-Site Noise Impacts. Vehicular traffic noise levels for this alternative were calculated as described in **Subsection 4.9.6.1**. Roadways assessed included SR-126, Commerce Center Drive, Long Canyon Road, Magic Mountain Parkway, and Potrero Canyon Road. The roadway speeds were assumed to be 65 mph on SR-126, 50 mph on Magic Mountain Parkway east of Commerce Center Drive, and 45 mph on all other roadway segments.

The distances from the roadway centerlines to the 60, 65, and 70 dB(A) CNEL contours are shown in **Table 4.9-21**. All contour distances were rounded to the nearest 5-foot increment. Should future frequent use areas of noise sensitive uses occur within on-site noise contours that exceed the normally acceptable noise level for that use, a significant noise impact would occur unless mitigated. Actual set-backs and other noise attenuating features are not known at this time and, therefore, it is not possible to determine which, if any, uses would actually be significantly affected. The noise levels in **Table 4.9-21**

assume no attenuation by either natural or man-made barriers and, as such, represent maximum, worst-case noise levels. If the affected uses are located far enough from the roadways, so that noise levels would not exceed the Los Angeles County noise standards, or if typical attenuation measures are incorporated into the tract map, impacts would not be significant (Significance Criteria 1, 3, and 9).

Table 4.9-21
Distances to Contours from Centerlines: Alternative 7

Roadway Segment	Highest Peak Hour Volumes	Speed Limit	Distance to Contour from Centerline (to nearest 5 feet)		
			60 dB(A) CNEL	65 dB(A) CNEL	70 dB(A) CNEL
SR-126 w/o Potrero Valley Road	2,465	65	250	180	110
SR-126 w/o Long Canyon Road	3,265	65	290	190	120
SR-126 w/o Commerce Center Drive	5,940	65	400	235	155
Long Canyon Road s/o SR-126	3,050	45	205	120	75
Long Canyon Road n/o Potrero Valley Road	2,670	45	195	110	70
Magic Mountain Parkway e/o Commerce Center Drive	4,585	50	270	175	100
Magic Mountain Parkway e/o Potrero Valley Road	1,075	45	120	80	**
Magic Mountain Parkway w/o Commerce Center Drive	2,605	45	195	110	70
Potrero Valley Road e/o Long Canyon Road	3,920	45	250	145	90
Potrero Valley Road e/o Magic Mountain Parkway	3,405	45	235	135	85
Potrero Valley Road w/o Long Canyon Road	3,985	45	250	145	90

Notes:
n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available
* Highest Peak Hour is 8% of ADTs
** 70 dB(A) CNEL contour is within road right-of-way.
Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 7, Distances to Contours from Centerlines: Alternative 7, and Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

The development of urban uses of the Specific Plan would have the potential to result in significant long-term noise impacts to sensitive receptors located on the Specific Plan site. These impacts would result from activities such as the use of air conditioners, operations at commercial centers, and operations at the Six Flags Magic Mountain Amusement Park. Previously adopted Specific Plan Mitigation Measures SP-4.9-9, 10, 11, 12, 13, and 17 would reduce these potential noise-related impacts to a less-than-significant level (Significance Criteria 1 and 3).

Off-Site Noise Impacts. Cumulative off-site noise impacts primarily would occur as a result of increased traffic on SR-126 and other roadways within the Project area following build-out of Alternative 7 and other development in the Santa Clarita Valley. As shown in **Table 4.9-22**, cumulative development would increase noise levels up to 6 dB(A) CNEL in the Project area, as compared to Alternative 1. The noise levels shown are calculated from the nearest edge of the nearest existing building to the roadway.

Table 4.9-22
Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 7 CNEL	Project dB Contribution[3]
MCBEAN PARKWAY					
e/o I-5	California College of the Arts	67	67	68	1
e/o Tournament Road	Single-Family Residential	69	70*	70	<1
e/o Tournament Road	Church of Latter Day Saints	68	70*	70	<1
s/o Valencia Boulevard	Single-Family Residential	70*	71*	71	<1
s/o Valencia Boulevard	Multi-Family Residential	71*	72*	73	1
s/o Valencia Boulevard	Hospital	63	64	64	<1
n/o Newhall Ranch Road	Single-Family Residential	67	68	68	<1
SR-126					
w/o Commerce Center Drive	Travel Village RV Park	71*	73*	76	3
w/o Potrero Valley Road	Ventura County	72	73	73	<1
VALENCIA BOULEVARD					
e/o Tourney Road	Single-Family Residential	66	68	68	<1
e/o Tourney Road	Multi-Family Residential	68	70*	70	<1
w/o McBean Parkway	Multi-Family Residential	75*	76**	76	<1
w/o Magic Mountain Parkway	Valencia Library	73*	74*	75	1
NEWHALL RANCH ROAD					
w/o Hillsborough Way	Single-Family Residential	66	69	69	<1
w/o Hillsborough Way	Park	68	71	71	<1
w/o Bouquet Canyon Road	Multi-Family Residential	68	71*	71	<1
MAGIC MOUNTAIN PARKWAY					
w/o San Fernando Road	Multi-Family Residential	69	75**	75	<1
ORCHARD VILLAGE DRIVE					
s/o McBean Parkway	Single-Family Residential	71*	76**	77	1
s/o McBean Parkway	Pinecrest School	69	72*	72	<1
s/o Wiley Canyon Road	Single-Family Residential	72*	75**	75	<1
LYONS AVENUE					
e/o Wiley Canyon Road	Single-Family Residential	71*	72*	72	<1
e/o Wiley Canyon Road	Elementary School	66	66	67	1
e/o Orchard Village Drive	Church/School	75*	76*	76	<1
SAN FERNANDO ROAD/ BOUQUET CANYON ROAD					
s/o Placerita Canyon Road	Mixed Residential	77**	79**	79	<1
ROCKWELL CANYON ROAD					
n/o McBean Parkway	Single-Family Residential	63	67	67	<1
WILEY CANYON ROAD					
n/o Lyons Avenue	Single-Family Residential	70*	74*	74	<1
n/o Lyons Avenue	Day Care Facility	73*	76*	76	<1
e/o Tournament Road	Single-Family Residential	69	74*	74	<1
THE OLD ROAD					
s/o Magic Mountain Parkway	Multi-Family Residential	63	65	65	<1
WESTRIDGE PARKWAY					
n/o Old Rock Road	Single-Family Residential	56[2]	56	62	6

Notes:
n/o = north of; e/o = east of; s/o = south of; w/o = west of; n/a = not available
* Land uses with "*" currently experience a normally unacceptable noise level under the county's or the city's guidelines.
** Land uses with "**" currently experience a clearly unacceptable noise level under the county's or the city's guidelines.

Table 4.9-22
Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment (Land Use)	Noise Sensitive Land Use	Existing CNEL (2006)	Alt 1 CNEL	Alt 7 CNEL	Project dB Contribution[3]

[1] All numbers are rounded to the nearest first decimal point.

[2] This noise level is based upon noise monitoring performed by Impact Sciences, Inc. staff on April 30, 2007. Noise monitoring data are provided in **Appendix 4.9** -- see Alternative 7, Distances to Contours from Centerlines: Alternative 7, and Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

[3] Project noise contribution is calculated by subtracting Alternative 1 (No Action/No Project Alternative) CNEL from Alternative 7 CNEL.

Source: Impact Sciences, Inc. Calculations are provided in **Appendix 4.9** -- see Alternative 7, Distances to Contours from Centerlines: Alternative 7, and Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Buildings located further away from the roadway would have lower noise levels. Project traffic contribution to these noise levels would be 1 dB(A) or less, with the exception of roadway noise levels at the Travel Village RV Park along SR-126 west of Commerce Center Drive, which would increase by 3 dB(A), and along Westridge Parkway just east of the Newhall Ranch Specific Plan site, which would increase by 6 dB(A). These noise levels were calculated using traffic data from the traffic report and the highway traffic noise prediction method specified in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise calculations are provided in **Appendix 4.9** -- see Alternative 7, Distances to Contours from Centerlines: Alternative 7, and Predicted Alternative 7 Cumulative Roadway Noise Levels at Noise Sensitive Locations.

Project noise contribution would result in a significant impact at the following locations under Significance Criterion 3 because noise levels at these locations would result in a substantial permanent increase in ambient noise levels and already are either normally or clearly unacceptable based on land use compatibility guidelines:

- McBean Parkway south of Valencia Boulevard;
- SR-126 west of Commerce Center Drive;
- Valencia Boulevard west of McBean Parkway;
- Valencia Boulevard west of Magic Mountain Parkway;
- Orchard Village Drive south of McBean Parkway;
- Orchard Village Drive south of Wiley Canyon Road;
- Lyons Avenue east of Wiley Canyon Road;
- Lyons Avenue east of Orchard Village Drive;
- San Fernando Road/Bouquet Canyon Road south of Placerita Canyon Road; and
- Wiley Canyon Road north of Lyons Avenue.

Project noise contribution would result in a significant impact at sensitive receptors along Westridge Parkway north of Old Rock Road under Significance Criterion 11, even though there would be no change in land use compatibility classification, because there would be a noise increase greater than 5 dB(A). The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and

the street segments listed above would be the construction of a noise wall adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact. Project-related traffic would result in a significant noise impact to the Travel Village RV Park under the requirements of Significance Criterion 13. The implementation of previously adopted Specific Plan Mitigation Measure SP-4.9-14 would require the future installation of a noise control barrier to reduce this impact to a less-than-significant level.

SCP Indirect Impacts. Implementation of the Alternative 7 SCP would indirectly facilitate development on the Specific Plan site and on a portion of the Entrada planning area. Alternative 7 would result in less Specific Plan-related development than the proposed Project (Alternative 2). Impacts of this alternative to noise would be reduced slightly when compared to the proposed Project. Potential impacts of the Specific Plan development on noise are discussed above.

Implementation of the Alternative 7 SCP would preclude build-out of the VCC because the establishment of a spineflower preserve on the VCC planning area would make grading required to develop the remainder of the VCC infeasible. Although Alternative 7 would preclude build-out of the VCC, the resulting reduction in noise impacts would not be substantial, as compared to the proposed Project.

Implementation of the Alternative 7 SCP would facilitate development of 852 residential units and approximately 51,000 sf of commercial development on the Entrada planning area. The design of the Entrada project is in preliminary form at this time; however, it is expected that an urban-density, mixed-use residential and commercial development would be constructed on the site. The Entrada planning area is located in proximity to I-5 and SR-126, and is adjacent to Magic Mountain Parkway and Six Flags Magic Mountain Amusement Park, which are high noise sources. Given its location, the proposed development could expose future on-site sensitive receptors to high levels of noise, exceeding standards established by the Los Angeles County Noise Ordinance. Additionally, Project-related vehicle trips could increase existing ambient noise conditions, potentially affecting sensitive receptors located adjacent to roadways in the Project vicinity. While there is limited information regarding the build-out of Entrada, it assumed that traditional noise mitigation measures would reduce construction-related and operational noise impacts to less than significant. No bridges are proposed for the Entrada site, therefore, it is not likely that the Entrada project would result in significant vibration-related impacts.

4.9.6.7.3 Secondary Impacts

RMDP Secondary Impacts. Implementation of Alternative 7 would result in temporary and permanent increases to the off-site noise environment as a result of construction activities and an increase in traffic to the local roadways with build-out of the Specific Plan. Construction and traffic noise would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors is described above in **Subsection 4.9.6.7.2**. As discussed, construction-related noise and vibration are considered significant prior to mitigation (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways, as described above in **Subsection 4.9.6.7.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of Alternative 7 would result in significant secondary impacts.

SCP Secondary Impacts. Implementation of Alternative 7 would facilitate development on the Specific Plan site and on portions of the VCC and Entrada planning areas. This new development would result in

temporary and permanent increases to the off-site noise environment. This noise increase would be audible to off-site sensitive receptors in the Project vicinity. The potential impact to off-site sensitive receptors related to the development of the Specific Plan site and VCC and Entrada planning areas are evaluated above in **Subsection 4.9.6.7.2**. Construction-related activities are considered significant prior to mitigation and potential vibration impacts are considered less-than-significant (Significance Criteria 1, 2, 4, 7, and 8). However, Project noise contribution would result in a significant impact to off-site sensitive receptors along several roadways as described above in **Subsection 4.9.6.7.2** (Significance Criteria 1, 3, 11, and 13). Given this, implementation of Alternative 7 could result in significant secondary impacts. Due to the limited amount of project information for the Entrada development, it is not possible to determine the significance of off-site noise impacts potentially created by that project.

4.9.7 MITIGATION MEASURES

4..9.7.1 Mitigation Measures Already Required by the Adopted Newhall Ranch Specific Plan EIR

Los Angeles County previously adopted imposed mitigation measures to minimize noise impacts within the Specific Plan area as part of its adoption of the Specific Plan and WRP. These measures are found in the previously certified Newhall Ranch Specific Plan Program EIR and the adopted Mitigation Monitoring Plans for the Specific Plan and WRP (May 2003).

The previously approved mitigation measures also are summarized above in **Table 4.9-1**. In addition, these mitigation measures are set forth in full below, and preceded by "SP," which stands for Specific Plan.

Specific Plan

SP-4.9-1 All construction activity occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the "County of Los Angeles Construction Equipment Noise Standards," County of Los Angeles Ordinance No. 11743, § 12.08.440 as identified in **Table 4.9-3**.

SP-4.9-2 Limit all construction activities near occupied residences to between the hours of 6:30 A.M. and 8:00 P.M., and exclude all Sundays and legal holidays pursuant to County Department of Public Works, Construction Division standards.

SP-4.9-3 When construction operations occur adjacent to occupied residential areas, implement appropriate additional noise reduction measures that include changing the location of stationary construction equipment, shutting off idling equipment, notifying adjacent residences in advance of construction work, and installing temporary acoustic barriers around stationary construction noise sources.

SP-4.9-4 Locate construction staging areas on-site to maximize the distance between staging areas and occupied residential areas.

SP-4.9-5 Where new single family residential buildings are to be constructed within an exterior noise contour of 60 dB(A) CNEL or greater, or where any multi-family buildings are to be constructed within an exterior noise contour of 65 dB(A) CNEL or greater, an acoustic analysis shall be completed prior to approval of building permits. The acoustical analysis shall show that the building is designed so that interior noise levels resulting from outside sources will be no greater than 45 dB(A) CNEL.

SP-4.9-6 For single family residential lots located within the 60 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 60 dB(A) CNEL or less.

SP-4.9-7 For multi-family residential lots located within the 65 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 65 dB(A) CNEL or less.

SP-4.9-8 For school sites located within the 70 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that noise at exterior play areas will be reduced to 70 dB(A) CNEL or less.

SP-4.9-9 All residential air conditioning equipment installed within the Newhall Ranch Specific Plan site shall adhere to the requirements of the County of Los Angeles Residential Air Conditioning and Refrigeration Noise Standards, County of Los Angeles Ordinance No. 11743, § 12.08.530.

SP-4.9-10 All stationary and point sources of noise occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the County of Los Angeles Ordinance No. 11743, § 12.08.390 as identified in **Table 4.9-2**, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources.

SP-4.9-11 Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 P.M. and 6:00 A.M. in such a manner as to cause a noise disturbance is prohibited in accordance with the County of Los Angeles Ordinance No. 11743, § 12.08.460.

SP-4.9-12 Loading zones and trash receptacles in commercial and Business Park areas shall be located away from adjacent residential areas, or provide attenuation so that noise levels at residential uses do not exceed the standards identified in § 12.08.460 of the Ordinance No. 11743.

SP-4.9-13 Where residential lots are located with direct lines of sight to the Magic Mountain Theme Park, an acoustic analysis shall be submitted to show that exterior noise on the residential lots generated by activities at the park do not exceed the standards identified in § 12.08.390 of the Ordinance No. 11743 as identified in **Table 4.9-2**, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources.

SP-4.9-14 After the time that occupancy of uses on the Newhall Ranch Specific Plan site occurs, and when noise levels at the Travel Village RV Park reach 70 dB(A) CNEL at locations where recreational vehicles are inhabited, the applicant shall construct a noise abatement barrier to reduce noise levels at the RV Park to 70 dB(A) CNEL or less.

SP-4.9-15 Despite the absence of a significant impact, applicants for all building permits of Residential, Mixed-Use, Commercial, and Business Park land uses (Project) shall pay to the Santa Clara Elementary School District, prior to issuance of building permits, the project's pro rata share of the cost of a sound wall to be located between SR-126 and the Little Red School House. The project's pro rata share shall be determined by multiplying the estimated cost of the sound wall by the ratio of the project's estimated contribution of average daily trips on SR-126 (ADT) at the Little Red School House (numerator) to the total projected cumulative ADT

increase at that location (denominator).[24] The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-126[25] from the projected cumulative trips as shown in Table 1 of Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County after adding the total Newhall Ranch ADT traveling west of the City of Fillmore.

SP-4.9-16 Despite the absence of a significant impact, the applicant for all building permits of Residential, Mixed-Use, Commercial and Business Park land uses (Project) shall participate on a fair-share basis in noise attenuation programs developed and implemented by the City of Moorpark to attenuate vehicular noise on SR-23 just north of Casey Road for the existing single-family homes which front SR-23. The mitigation criteria shall be to reduce noise levels to satisfy State noise compatibility standards. The project's pro rata share shall be determined by multiplying the estimated cost of attenuation by the ratio of the project's estimated contribution of average daily trips on SR-23 (ADT) north of the intersection of SR-23 and Casey Road (numerator) to the total projected cumulative ADT increase at that location (denominator).[26] The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-23 north of Casey Road[27] from the projected cumulative trips as shown in Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County after adding the total Newhall Ranch ADT traveling south of the City of Fillmore.

SP-4.9-17 Prior to the approval of any subdivision map which permits construction within the Specific Plan area, the applicant for that map shall prepare an acoustical analysis assessing project and cumulative development (including an existing plus project analysis, and an existing plus cumulative development analysis including the project). The acoustical analysis shall be based upon State noise land use compatibility criteria and shall be approved by the Los Angeles County Department of Health Services.

Water Reclamation Plant

SP-5.0-38 All construction activity occurring on the water reclamation plant site shall adhere to the requirements of the "County of Los Angeles Construction Equipment Noise Standards," County of Los Angeles Ordinance No. 11743.

SP-5.0-39 Limit all construction activities occurring near occupied residences to between the hours of 6:30 A.M. and 8:00 P.M., and exclude all Sundays and legal public holidays, pursuant to County Construction Section standards.

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[24] Cost of Sound Wall X (Project ADT on SR-126 @ LRSH*/Total Projected Cumulative ADT Increase on SR-126 @ LRSH*) * LRSH = Little Red School House.

[25] 25,165 ADT using linear extrapolation from Table 1 of [Newhall Ranch Specific Plan EIR] Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County.

[26] Cost of mitigation x (Project ADT on SR-23 north of Casey Road/Total Projected cumulative ADT Increase on SR-23 north of Casey Road).

[27] ADT using linear extrapolation from Table 1 of Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County.

SP-5.0-40 All operational activity occurring on the water reclamation plant site shall adhere to the requirements of the "County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources," pursuant to § 12.08.390 of County of Los Angeles Ordinance No. 11743.

4.9.7.2 Mitigation Measures Already Required by the Adopted VCC EIR

The previously certified VCC EIR (April 1990) analyzed noise impacts associated with implementation of the VCC project. As part of its approval of the VCC project, the County adopted mitigation measures to reduce temporary noise impacts within the VCC planning area from construction activities and installation of noise barrier walls. These measures are found in the previously certified VCC EIR (April 1990), and are summarized above in **Table 4.9-2**. In addition, these mitigation measures are set forth in full below, and preceded by "VCC-NOI," which stands for Valencia Commerce Center - Noise.

At the time of adoption, the VCC mitigation measures represented the best available mitigation imposed by Los Angeles County. Moreover, as noted in **Subsection 4.9.1.2.1,** above, additional environmental review will be conducted by Los Angeles County with respect to the VCC planning area, because the applicant recently submitted the last tentative parcel map for build-out of the VCC planning area. Implementation of the previously-adopted, applicable VCC mitigation measures and additional mitigation requirements (*e.g.*, measures similar to those previously adopted for the Specific Plan area and/or recommended for the proposed Project) would ensure that potential noise impacts within the VCC planning area are reduced to the extent feasible.

VCC-NOI-1 All equipment will be properly maintained and use exhaust mufflers.

VCC-NOI-2 Construction activity will be limited to the hours of 7 a.m. to 7 p.m. Monday - Saturday.

VCC-NOI-3 Backer Road will be realigned to the north a maximum distance of 50' and average distance of 25' to allow for the construction of an 11' combination berm and wall between the homes and the road.

VCC-NOI-4 A noise study will be conducted subsequent to the completion of Becker Road from Haley Creek to SR-126 to determine whether restrictions to nighttime truck traffic are warranted because of single event noise impacts to residents along Backer Road.

4.9.7.3 Mitigation Measures Relating to the Entrada Planning Area

The County of Los Angles has not yet prepared or released a draft EIR for the proposed development within the portion of the Entrada planning area that would be facilitated by approval of the SCP component of the proposed Project. As a result, there are no previously adopted mitigation measures for the Entrada planning area. However, the adoption and implementation of measures similar to those previously adopted for the Specific Plan area and/or recommended for the proposed Project would ensure that potential noise impacts within the Entrada planning area are reduced to the extent feasible.

4.9.7.4 Additional Mitigation Measures Proposed by this EIS/EIR

Based on the analysis above, the following mitigation measure is proposed to minimize the potential for vibration-related impacts. This proposed mitigation measure is to be implemented in addition to those previously adopted by the County of Los Angeles in connection with its approval of the Specific Plan, WRP, and VCC projects.

NOI-1 Pile driving vibration due to the development of the Commerce Center Drive bridge shall be reduced by:

- identifying all uses in the vicinity that may be adversely affected by the vibrations, including Travel Village, residences built in earlier phases of Mission Village and Landmark Village, and non-residential land uses that may use vibration-sensitive *etc.*; and
- installing seismographs at the aforementioned sensitive locations to ensure that Section 12.08.560 of the County's *Noise Ordinance* is not exceeded, and/or that the pile driving would not cause structural damage or adversely affect vibration-sensitive equipment; and
- adjusting vibration amplitudes of the pile driving on the conditions of the affected structures, the sensitivity of equipment, and/or human tolerance; and/or
- To the extent feasible, the Project developer should utilize cast-in-drilled-hole (CIDH) piles in lieu of pile driving.

4.9.8 SUMMARY OF SIGNIFICANCE FINDINGS

Table 4.9-23 presents a summary of the significance criteria relating to each of the Project alternatives, and the reduced level of impact that would be achieved for each alternative by applying the above mitigation measures.

Table 4.9-23
Summary of Significant Noise Impacts - Pre- and Post-Mitigation

Significance Criteria	Applicable Mitigation Measures	Planning Area	Impact of Alternatives - Pre/Post-Mitigation						
			Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Project would expose people to noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies.	SP-4.9-1 through 4.9-17, NOI-1	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Project would expose people to excessive ground-borne noise levels or vibration.	NOI-1	NRSP	NI	SI/M	SI/M	SI/M	SI/M	NS	NS
		VCC	NI	NS	NS	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Project would result in a substantial permanent increase in ambient noise levels in the Project vicinity.	SP-4.9-5 through SP-4.9-17	NRSP	NI	SI/SU	SI/SU	SI/SU	SI/SU	SI/SU	SI/SU
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Project would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity.	SP-4.9-1 through SP-4.9-4	NRSP	NI	SI/SU	SI/SU	SI/SU	SI/SU	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M

Table 4.9-23
Summary of Significant Noise Impacts - Pre- and Post-Mitigation

Significance Criteria	Applicable Mitigation Measures	Planning Area	Impact of Alternatives - Pre/Post-Mitigation						
			Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure to people residing or working in the Project area to excessive levels of noise.	No mitigation required	NRSP	NI	NI	NI	NI	NI	NI	NI
		VCC	NI	NI	NI	NI	NI	NI	NI
		Entrada	NI	NI	NI	NI	NI	NI	NI
For a project within the vicinity of a private airstrip, exposure to people residing or working in the Project area to excessive levels of noise.	No mitigation required	NRSP	NI	NI	NI	NI	NI	NI	NI
		VCC	NI	NI	NI	NI	NI	NI	NI
		Entrada	NI	NI	NI	NI	NI	NI	NI
Exposure of occupants of the proposed Project or occupants of off-site uses to Project-related construction noise levels in excess of the Los Angeles County Noise Ordinance standards for construction noise.	SP-4.9-1 through SP-4.9-4	NRSP	NI	SI/SU	SI/SU	SI/SU	SI/SU	SI/M	SI/M
		VCC	NI	NS	NS	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Construction activity, including vibratory and impact pile driving, causing a PPV of above 0.01 in/sec. at sensitive receptor location and/or between 0.2 and 2.0 in/sec at nearby structures for any length of time.	NOI-1	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	NS	NS	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M

Table 4.9-23
Summary of Significant Noise Impacts - Pre- and Post-Mitigation

Significance Criteria	Applicable Mitigation Measures	Planning Area	Impact of Alternatives - Pre/Post-Mitigation						
			Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Exposure of on-site exterior frequent use areas for noise-sensitive receptors to noise levels above the normally acceptable levels identified in the State Land Use Compatibility Guidelines utilized by Los Angeles County (*i.e.*, 60 dB(A) CNEL for single-family, 65 dB(A) CNEL for multi-family, and 70 dB(A) CNEL for schools and parks uses); or exposure of residences located within mixed-use/commercial areas (*i.e.*, residences with no backyards or parks as an exterior frequent use area), to interior noise levels above 45 dB(A).	SP-4.9-5 through SP-4.9-13, SP-4.9-17	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Exposure of occupants of the proposed Project to noise levels originating on or off site that are above the Los Angeles County Noise Ordinance standards identified in **Tables 4.9-5** and **4.9-6** for the types of uses proposed.	SP-4.9-5 through SP-4.9-13, SP-4.9-17	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Exposure of off-site sensitive receptors to an increase of 5 dB(A) or greater in noise level from Project-related activities, even if levels remain within the same land use compatibility classification (*e.g.*, noise levels remain within the normally acceptable range). (State Land Use	SP-4.9-5 through SP-4.9-13, SP-4.9-17	NRSP	NI	SI/SU	SI/SU	SI/SU	SI/SU	SI/SU	SI/SU
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI

Table 4.9-23
Summary of Significant Noise Impacts - Pre- and Post-Mitigation

Significance Criteria	Applicable Mitigation Measures	Planning Area	Impact of Alternatives - Pre/Post-Mitigation						
			Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Compatibility Guidelines for uses within unincorporated Los Angeles County, and under City of Santa Clarita Guidelines for Noise and Land Use Compatibility for uses within the City of Santa Clarita.)		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Exposure of off-site sensitive receptors to an increase of 3 dB(A) or greater in noise level from Project-related activities, which results in a change in land use compatibility classification (*e.g.*, noise levels change from normally acceptable to conditionally acceptable). (State Land Use Compatibility Guidelines for uses within unincorporated Los Angeles County, and under City of Santa Clarita Guidelines for Noise and Land Use Compatibility for uses within the City of Santa Clarita.)	SP-4.9-5 through SP-4.9-13, SP-4.9-17	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
Exposure of off-site sensitive receptors to an increase in noise levels greater than one dB(A) where existing noise levels are already considered unacceptable under the State Land Use Compatibility Guidelines for uses within unincorporated Los Angeles County, and under City of Santa Clarita Guidelines for Noise and Land Use Compatibility for uses within the City of Santa Clarita.	SP-4.9-5 through SP-4.9-13, SP-4.9-17	NRSP	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M
		VCC	NI	SI/M	SI/M	NI	NI	NI	NI
		Entrada	NI	SI/M	SI/M	SI/M	SI/M	SI/M	SI/M

Table 4.9-23
Summary of Significant Noise Impacts - Pre- and Post-Mitigation

Significance Criteria	Applicable Mitigation Measures	Planning Area	Impact of Alternatives - Pre/Post-Mitigation						
			Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7

SU = Significant unavoidable impact
SI/M = Significant impact, but mitigated to less-than-significant level
NS = Not significant or adverse. No mitigation required.
NI = No impact, and no mitigation required
SI = Significant Impact

4.9.9 SIGNIFICANT UNAVOIDABLE IMPACTS

The only feasible mitigation measure for traffic noise impacts to receptors along Westridge Parkway and other identified street segments would be to construct noise walls adjacent to the affected roadways. However, installation of off-site noise walls could not be implemented by the Project applicant. Therefore, the proposed Project's contribution to future cumulative traffic noise impacts along the identified roadways is considered a significant and unavoidable impact.

Pile driving operations that would be required to construct the previously approved Commerce Center Drive bridge across the Santa Clara River under Alternatives 2, 3, 4 and 5 would result in noise levels at the western portion of the Travel Village RV Park that exceed construction noise threshold standards established by the Los Angeles County Noise Ordinance. Mitigation measures adopted as part of the previously approved Specific Plan (Mitigation Measures SP-4.9-1 through SP-4.9-4) would minimize the effects of this short-term noise impact, but would not reduce the impact to a less-than-significant level under the requirements of Significance Thresholds 4 and 7. Therefore, short-term construction noise impacts of the RMDP component associated with construction of the Commerce Center Drive bridge would be significant and unavoidable.