RETURN

EVERGREEN • EAST HILLS VISION STRATEGY

SAN JOSÉ, CALIFORNIA

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EIR

APPENDIX

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NOISE REPORT

EVERGREEN VISIONING PROJECT
EIR NOISE REPORT
SAN JOSE, CALIFORNIA

September 9, 2005

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INTRODUCTION

This report presents the results of the environmental noise assessment conducted for the Evergreen Visioning project in San Jose, California. This project would facilitate the development of approximately 544 acres on five sites in the Evergreen Area. The five sites include the Arcadia Property, the Pleasant Hills Golf Course Property, the Berg/IDS Property, the Legacy Partners Property, and the Evergreen Valley College Property. The project also includes a transportation improvement project that would widen portions of White Road from four-lanes to six-lanes between Ocala Avenue and Aborn Road. The report assesses the noise impacts resulting from the project's alternatives and presents mitigation measures to reduce significant noise impacts to less than significant levels.

The Setting section of the report presents a discussion of the fundamentals of environmental acoustics to assist those unfamiliar with acoustical terminology. A description of state regulations and local guidelines is then presented to establish the regulatory criteria applicable in the noise impact assessment. The results of the noise monitoring survey conducted for the project are then summarized. The Impact and Mitigation Measures section identifies project impacts, including noise and land use compatibility of the proposed uses, and substantial permanent or temporary noise level increases in the project vicinity that would occur as a result of the project. Where future noise levels exceed the applicable significance thresholds, a significant noise impact is identified. Recommendations are then presented for incorporation into the design of the project to achieve a compatible development with respect to the noise environment and surrounding land uses.

SETTING

Fundamentals of Environmental Acoustics

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its loudness. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. *A decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and

its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level or dBA.* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level, CNEL,* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level,* L_{dn}, is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

TABLE 1 Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, Leq	The average A-weighted noise level during the measurement period. The hourly Leq used for this report is denoted as dBA $L_{eq[h]}$.
Day-Night Level, L_{dn}	L_{dn} is the equivalent noise level for a continuous 24-hour period with a 10-decibel penalty imposed during nighttime and morning hours (10;00 pm to 7:00 am).
Community Noise Exposure Level, CNEL	CNEL is the equivalent noise level for a continuous 24-hour period with a 5-decibel penalty imposed in the evening (7:00 pm to 10:00 pm) and a 10-decibel penalty imposed during nighttime and morning hours (10:00 pm to 7:00am)
L_1, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	Quiet recording studio
	10 dBA	
Threshold of human hearing	0 dBA	Threshold of human hearing

Regulatory Background

The State of California, the Santa Clara County Airport Land Use Commission (ALUC), and the City of San Jose establish guidelines, regulations, and policies designed to limit noise exposure at noise sensitive land uses. Appendix G of the State CEQA Guidelines, the State of California Building Code, the Santa Clara County Airport Land Use Plan, and the City of San Jose's 2020 Plan present the following:

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. CEQA asks whether the proposed project would result in:

- 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?
- 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, would the project expose people residing or working in the project area to excessive noise levels?

CEQA does not define what noise level increase would be considered substantial. Typically, project-generated noise level increases of 3 DNL or greater would be considered significant where exterior noise levels would exceed the normally acceptable noise level standard (60 DNL). Where noise levels would remain below the normally acceptable noise level standard with the project, noise level increases of 5 DNL or greater would be considered significant.

Section 1208 of the 2001 California Building Code. New multi-family housing in the State of California is subject to the environmental noise limits set forth in Appendix Chapter 1208A.8.4 of the California Building Code. The noise limit is a maximum interior noise level of 45 DNL. Where exterior noise levels exceed 60 DNL, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

Santa Clara County Airport Land Use Plan. The Santa Clara County Airport Land Use Plan establishes airport noise and land use compatibility standards for development within the vicinity of the Reid-Hillview airport. CNEL noise contours presented in this plan are used to evaluate land use compatibility for the proposed developments, and the 65 CNEL noise contour is recognized as the residential and commercial land use "satisfactory" noise limit for compatible

land uses. Residential land uses proposed within this noise contour should be avoided unless they are related to airport service. Commercial land uses proposed within the 65 CNEL noise contour and the 75 CNEL noise contour should be reviewed carefully to ensure that the noise insulation features to maintain an acceptable interior noise environment are adequate.

Policies adopted by the ALUC that pertain to the project are as follows:

N-1: The CNEL noise contours, which have been developed for Reid-Hillview Airport, shall be used for general guidance in determining suitability for various types of land uses.

N-3: New residential uses within the 65 CNEL and 70 CNEL noise contours, which can be classified as infill, will be considered only if it is demonstrated that such structures can be adequately insulated to control interior noise, if the ALUC finds that exterior noise will not be intrusive, and if an avigation easement has been willingly granted to the jurisdiction owning the airport (i.e., City of San Jose).

N–4: New land uses other than residential proposed within areas deemed incompatible are subject to case-by-case review, and can only be approved if the ALUC finds that adequate insulation for control of interior noise levels is designed into the plans and the single-event noise level for that new land use is compatible with the type of use proposed, and does not pose public health or safety issues.

N-8: Establishes the acoustical rating system, Sound Transmission Class (STC) as a guide to the acoustical performance of common building construction elements in determining noise transmission loss.

City of San Jose General Plan. The Noise Element of the City of San Jose's 2020 Plan identifies noise and land use compatibility standards for various land uses. The City's goal is to, "...minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies."

Residential land uses are considered "satisfactory" up to 60 DNL as the short-range exterior noise quality level, and 55 DNL as the long-range exterior noise quality level. The guidelines state that where the exterior DNL is above the "satisfactory" limit (between 60 and 70 DNL), and the project requires a full EIR, an acoustical analysis should be made indicating the amount of attenuation necessary to maintain an indoor level of less than or equal to 45 DNL (consistent with the State Building Code). Noise levels exceeding 70 DNL require that new development would only be permitted if uses are entirely indoors and the building design limits interior levels to less than or equal to 45 DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 DNL or less.

Policy 1. The City's acceptable noise level objectives are 55 DNL as the long-range exterior noise quality level, 60 DNL as the short-range exterior noise quality level, 45 DNL as the interior noise quality level, and 76 DNL as the maximum exterior noise level necessary to avoid

significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San Jose International Airport, the Downtown Core Area, and along major roadways may not be achieved in the time frame of this Plan. To achieve the noise objectives, the City should require appropriate site and building design, building construction and noise attenuation techniques in new residential development.

Policy 9. Construction operations should use available noise suppression devices and techniques.

Policy 11. When located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses, non-residential land uses should mitigate noise generation to meet the 55 DNL guideline at the property line.

The General Plan sets forth the following urban design policies regarding sound attenuation along city streets:

Policy 18. To the extent feasible, sound attenuation for development along city streets should be accomplished through the use of landscaping, setback, and building design rather than the use of sound attenuation walls. Where sound attenuation walls are deemed necessary, landscaping and an aesthetically pleasing design shall be used to minimize visual impact.

Policy 21. To promote safety and to minimize noise impacts in residential and working environments, development which is proposed adjacent to railroad lines should be designed to provide the maximum separation between the rail line and dwelling units, yards or common open space areas, offices, and other job locations, facilities for the storage of toxic or explosive materials and the like. To the extent possible, areas of development closest to an adjacent railroad line should be devoted to parking lots, public streets, peripheral landscaping, the storage of non-hazardous materials, and so forth.

City of San Jose Urgency Ordinance. The City of San Jose has adopted noise standards for the installation of new backup power generators. The maximum allowable noise level at the closest property line in a residential area is 55 dBA L_{eq}. Additionally, the City requires non-residential land uses to mitigate noise generation to meet the 55 dBA DNL guideline at the property line.

Existing Noise Environment

The Evergreen Area is located in southeast San Jose. The Project would facilitate the development of approximately 544 acres on five sites including the Arcadia Property, the Pleasant Hills Golf Course Property, the Berg/IDS Property, the Legacy Partners Property, and the Evergreen Valley College Property. The project also includes a transportation improvement

project that would also widen portions of White Road from four-lanes to six-lanes between Ocala Avenue and Aborn Road.

The existing noise environment in the environs of each of the five sites varies. The noise environment at sites located adjacent to major roadways such as Capitol Expressway, White Road, and Tully Road is more urban in nature as compared to the noise environment of sites away from major thoroughfares which has a suburban or semi-rural character. A survey of the existing noise environment at each of the five sites and along the White Road improvement corridor was conducted during June and July 2005. The noise monitoring survey included twelve long-term noise measurements (24-hours or more duration) and 12 short-term noise measurements. Long-term noise measurements were conducted to document the daily trend in noise levels generated by area roadways at representative receiver locations. Short-term noise monitoring locations were selected to quantify noise levels from a variety of noise sources identified in the field. The DNL was measured directly at the long-term sites and estimated at the short-term sites by correlation with a long-term measurement.

The noise environment at each of the five project sites and along the White Road corridor is described in detail below. A graphical summary of the data gathered at each of the long-term measurement sites is included in Appendix A.

Arcadia Property. The Arcadia Property is located south of the Eastridge Shopping Mall and is bounded by Quimby Road on the north and commercial uses and Capitol Expressway on the east. Single-family residential land uses border the site to the west, and Meadowfair Park, LeyVa Middle School, and a mobile-home park form the southernmost boundary of the project site. Figure 1 shows the project site and noise monitoring locations at the Arcadia Property.

The predominant sources of noise affecting the Arcadia Property include vehicular traffic along Capitol Expressway and Quimby Road as well as aircraft overflights associated with operations at Reid-Hillview Airport. Noise measurement LT-1 was conducted to document the daily trend in noise levels generated by vehicular traffic along Quimby Road and aircraft overflights from operations at Reid-Hillview Airport. Noise measurement LT-2 quantified the daily trend in noise levels along Capitol Expressway. Long-term noise measurement LT-3 documented existing ambient noise levels at existing residential receiver locations west of the Arcadia Property. Data gathered at these locations are summarized in Tables 3 and 4.

TABLE 3 Arcadia Property – Long Term Noise Measurement Summary

	Noise Level (dBA)		
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**	**Range of Nighttime $L_{eq's}$**	**DNL**
LT-1 - 105 feet from the Center of Quimby Road. (June 1-3, 2005 / 13:00 to 12:00)	60-65	50-61	64-65

LT-2 - 90 feet from the Center of Capitol Expressway. (June 1-3, 2005 / 14:00 to 12:00)	72-74	59-72	75
LT-3 - Easternmost Terminus of Brahms Avenue. (June 2-3, 2005 / 15:00 to 12:00)	52-56	41-55	~57

FIGURE 1 – Noise Measurement Locations at the Arcadia Property

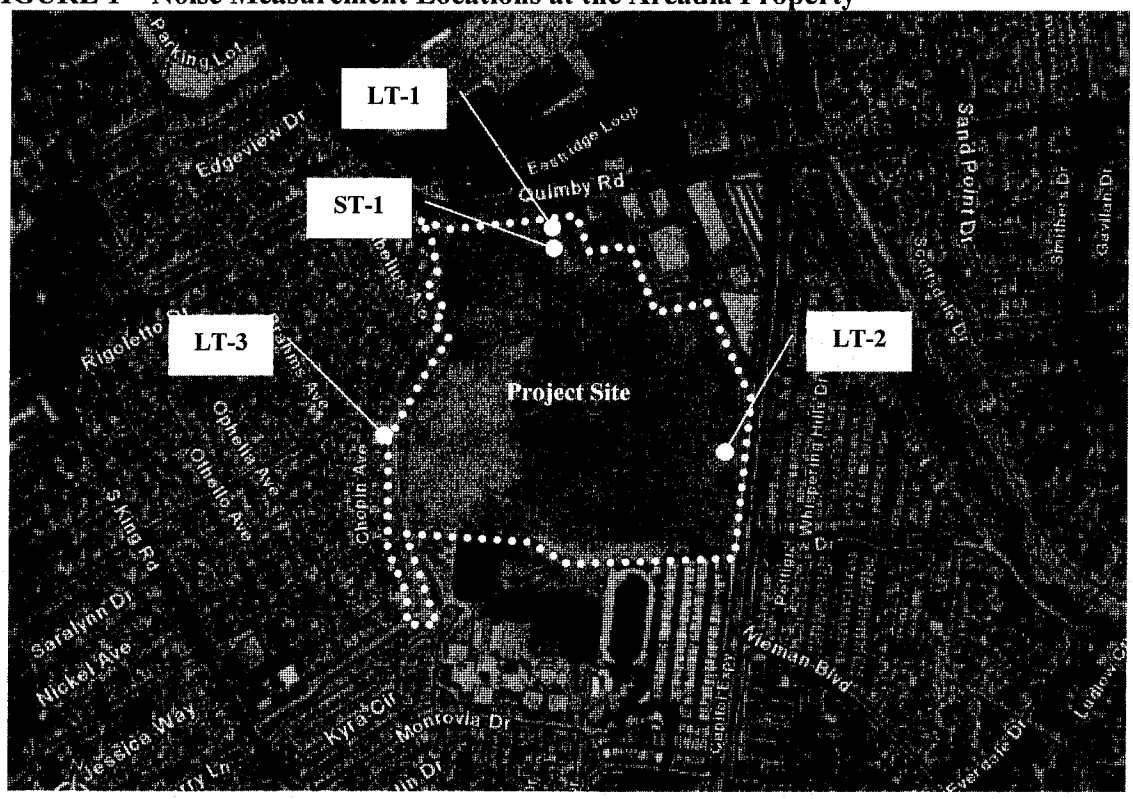


TABLE 4 Arcadia Property – Short Term Aircraft Noise Measurement Summary

ST-1 North End of Arcadia Property Under Flight Path – Aircraft Departing to South. (June 16, 2005 / 12:25 to 12:35)	**Duration (sec)**	**Noise Level (dBA)**		
		SEL	**L_{eq}**	**L_{max}**
Short duration; Airplane directly overhead	2	74	71	72
Airplane directly overhead	12	78	67	69
Airplane to East	21	76	63	65
Airplane directly overhead	25	81	67	71
Two airplanes; one directly overhead and one to east	19	74	62	64
Airplane directly overhead	28	83	68	72
Airplane to East	18	75	63	65
Airplane to East	20	77	64	66

Pleasant Hills Golf Course Property. The Pleasant Hills Golf Course is located at the northeast quadrant of the White Road/Tully Road intersection. Single-family residential uses bound the site to the north. The site is bordered to the east by Flint Avenue, Vista Verde Drive, and single-family residential uses. Tully Road and single-family residences bound the site to the south, and White Road and Lake Cunningham Park border the site to the west. Figure 2 shows the project site and noise monitoring locations at the Pleasant Hills Golf Course Property.

Vehicular traffic along local roadways surrounding the site is the predominant noise source affecting the existing noise environment. The site is also subject to intermittent aircraft overflights associated with operations at Reid-Hillview Airport. Three long-term noise measurements and one short-term noise measurement were conducted to document the existing noise environment at the Pleasant Hills Golf Course site. Noise measurement LT-4 was conducted to document the daily trend in noise levels generated by vehicular traffic along White Road. Noise measurement LT-5 quantified the daily trend in noise levels along Tully Road. The noise measurement made at LT-6 quantified noise levels along Flint Avenue. A short-term noise measurement (ST-2) documented existing ambient noise levels at residential receiver locations along Vista Verde Drive. Data gathered at these locations are summarized in Table 5.

FIGURE 2 – Noise Measurement Locations at the Pleasant Hills Golf Course Property

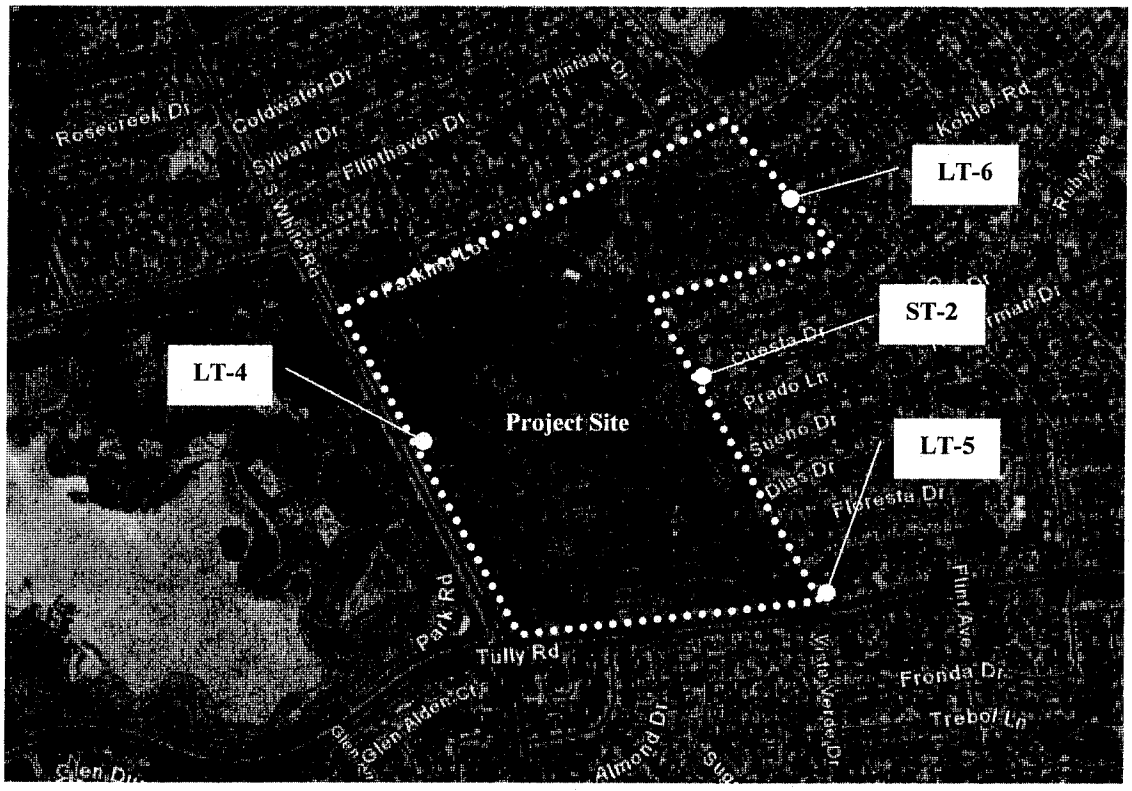


TABLE 5 Pleasant Hills Golf Course – Noise Measurement Summary

	Noise Level (dBA)					
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**		**Range of Nighttime $L_{eq's}$**		**DNL**	
LT-4 - 60 feet from the Center of White Road. (June 13-16, 2005 / 14:00 to 15:00)	69-73		58-71		73-74	
LT-5 - 120 feet from the Center of Tully Road at Vista Verde Drive. (July 6-7, 2005 / 11:00 to 11:00)	62-67		51-64		66	
LT-6 – 21 feet from the Center of Flint Avenue. (June 13-15, 2005 / 13:00 to 11:00)	63-67		52-66		67-68	
	L_{eq}	**L_{max}**	**L_{10}**	**L_{50}**	**L_{90}**	**DNL (Est.)**
ST-2 – Vista Verde Drive near Cuesta Drive. (June 13, 2005 / 13:00 to 13:10)	56	74	59	48	43	57

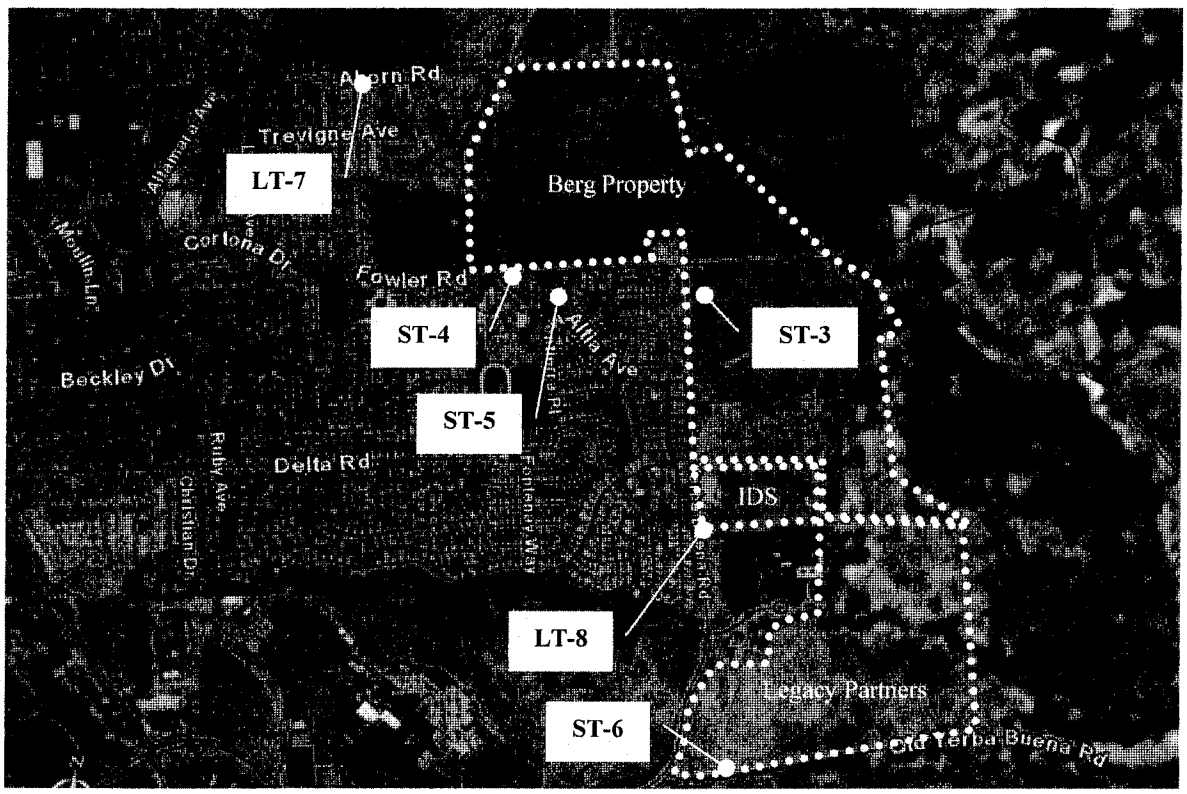
Berg/IDS/ Legacy Partners Properties. The Berg/IDS/Legacy Partners Properties are generally located south of Aborn Road and east of Voltaire Street, Altia Avenue, and Yerba Buena Road. San Jose's Urban Growth Boundary bounds these sites to the east. A campus industrial site (Hitachi Headquarters) is located between the Berg/IDS Properties and the Legacy Partners Property. Single-family residential land uses and Montgomery Hill Park border these sites to the west. Figure 3 shows the noise monitoring locations conducted for these three projects.

The noise environment at these properties results primarily from local vehicular traffic. Away from local roadways, the noise environment at portions of these sites had a semi-rural character. Two long-term noise measurements and four short-term noise measurement were conducted to document the existing noise environment in the vicinity of these three sites. Noise measurement LT-7 was conducted to document the daily trend in noise levels at existing single-family residential land uses generated by vehicular traffic along Aborn Road. Noise measurement LT-8 quantified the daily trend in noise levels along Yerba Buena Road. Short-term noise measurements (ST-3 to ST-6) documented existing ambient noise levels in adjacent residential areas. Data gathered at these locations are summarized in Table 6.

TABLE 6 Berg/IDS/Legacy Partners – Noise Measurement Summary

	Noise Level (dBA)					
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**		**Range of Nighttime $L_{eq's}$**		**DNL**	
LT-7 - 70 feet from the Center of Aborn Road. (June 2-3, 2005 / 13:00 to 13:00)	59-66		45-62		64	
LT-8 - 75 feet from the Center of Yerba Buena Road. (June 2-3, 2005 / 13:00 to 13:00)	55-65		42-55		62	
	L_{eq}	**L_{max}**	**L_{10}**	**L_{50}**	**L_{90}**	**DNL (Est.)**
ST-3 – 55 feet from Diesel Generator at Northwest Corner of Fowler Road Reservoir. (June 15, 2005 / 13:30)	55	--	--	--	--	--
ST-4 – 60 feet from the Center of Fowler Road. (June 3, 2005 / 13:30 to 13:40)	58	69	62	52	46	58
ST-5 – 50 feet from the Center of Altia Avenue. (June 3, 2005 / 13:45 to 13:55)	61	76	65	57	48	60
ST-6 – 175 feet from the Center of Yerba Buena Road along Old Yerba Buena Road. (June 3, 2005 / 14:08 to 14:18)	55	72	58	49	42	58

FIGURE 3 – Noise Measurement Locations at the Berg/IDS/Legacy Properties



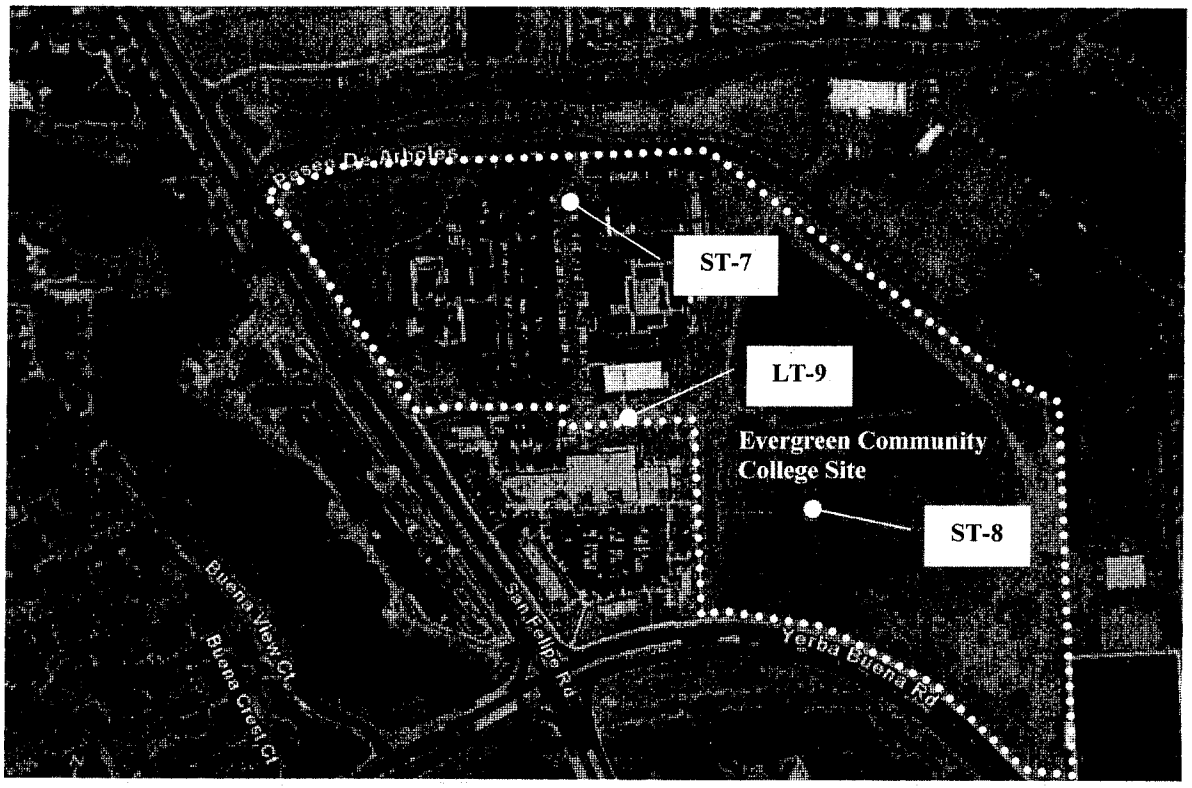
Evergreen Valley College Property. The Evergreen Valley College Property is located at the northeast quadrant of the San Felipe Road / Yerba Buena Road intersection. West Gateway Drive and residential land uses bound the site to the north. San Felipe Drive forms the site's westernmost boundary. Yerba Buena Road and a shopping center bound the site to the south, and Evergreen Valley College bounds the site to the east. Figure 4 shows the noise monitoring locations at the Evergreen Community College project site.

The noise environment at the Evergreen Valley College Property results primarily from local vehicular traffic along San Felipe Road and Yerba Buena Road. Intermittent noise from activities at the adjacent shopping center also contributes to the noise environment at the site. One long-term noise measurement and two short-term noise measurements were conducted to document the existing noise environment near locations of proposed noise-sensitive land uses. Noise measurement LT-9 documented the daily trend in noise levels at the rear of the shopping center adjacent to the Longs Drugstore receiving docks. Short-term noise measurements (ST-7 and ST-8) documented existing ambient noise levels generated by area roadways. Data gathered at these locations are summarized in Table 7.

TABLE 7 Evergreen Valley College – Noise Measurement Summary

	Noise Level (dBA)					
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**		**Range of Nighttime $L_{eq's}$**		**DNL**	
LT-9 - Common Property Line Between Shopping Center and Evergreen College. (June 2-4, 2005 / 13:00 to 13:00)	51-60		41-55		57	
	L_{eq}	**L_{max}**	**L_{10}**	**L_{50}**	**L_{90}**	**DNL (Est.)**
ST-7 – Approximate Setback of Proposed Residential uses near San Felipe Road. (June 3, 2005 / 15:00 to 15:10)	54	72	55	50	49	54
ST-8 – Approximate Setback of Proposed Residential uses near Yerba Buena Road. (June 3, 2005 / 15:20 to 15:30)	54	72	57	49	45	54

FIGURE 4 – Noise Measurement Locations at the Evergreen College Property



White Road Corridor. Portions of White Road between Ocala Avenue and Aborn Road would be widened or re-striped from four to six lanes as part of the project. Existing noise level trends along the roadway were monitored at three locations as part of this study. Four short-term, concurrent noise measurements were also made during the White Road noise monitoring survey. DNL noise levels throughout the corridor ranged from about 68 to 70 dBA at representative receiver locations. The data gathered during the White Road noise monitoring are summarized below in Table 8.

TABLE 8 White Road Corridor – Noise Measurement Summary

	Noise Level (dBA)					
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**		**Range of Nighttime $L_{eq's}$**		**DNL**	
LT-10 - 72 feet from the Center of White Road (6-Lane Section). (June 15-16, 2005 / 14:00 to 14:00)	67-72		54-66		70	
LT-11 - 110 feet from the Center of White Road at Westbranch Road (6-Lane Section). (June 15-16, 2005 / 15:00 to 15:00)	63-70		51-64		68	
LT-12 - 100 feet from the Center of White Road at Allenwood Drive (4-Lane Section). (June 15-16, 2005 / 15:00 to 15:00)	63-67		52-64		68	
	L_{eq}	**L_{max}**	**L_{10}**	**L_{50}**	**L_{90}**	**DNL (Est.)**
ST-9 – 80 feet from the Center of White Road at Flinthaven Drive. (June 16, 2005 / 13:20 to 13:30)	66	78	70	63	55	69
ST-10 – 80 feet from the Center of White Road at Quest Lane. (June 16, 2005 / 14:00 to 14:10)	67	80	71	63	55	69
ST-11 – 60 feet from the Center of White Road at Castleton Drive. (June 16, 2005 / 14:30 to 14:40)	67	78	71	66	57	69
ST-12 – 110 feet from the Center of White Road at Westbranch Road. (June 16, 2005 / 14:50 to 15:00)	65	77	68	63	57	68

PROJECT IMPACT AND MITIGATION MEASURES

Significance Criteria

- A significant impact would be identified for a proposed land use if it would be exposed to noise levels exceeding the City's established guidelines for noise and land use compatibility. For the proposed project, a significant impact would be identified if noise-sensitive receivers proposed by the project would be exposed to noise levels exceeding the City's established guidelines for "satisfactory" noise and land use compatibility.

- According to CEQA, a significant noise impact would result if noise levels increase substantially at existing noise-sensitive land uses (e.g., residences) as a result of the project. A substantial increase to noise levels would occur if the project resulted in an increase of 3 dBA or greater at noise-sensitive land uses where noise levels already exceed 60 DNL.

- Construction noise levels would be treated somewhat differently because they are temporary. Significant noise impacts would result from construction if noise levels are sufficiently high to interfere with speech, sleep, or normal residential activities. Construction-related hourly average noise levels received at noise-sensitive land uses exceeding 60 dBA $L_{eq(hr)}$, and at least 5 dBA above the ambient, would be considered significant if the noise-generating construction affected the noise environment at a sensitive receiver for more than 12 months.

- A significant noise impact would occur if the project located noise sensitive land uses in the vicinity of the Reid-Hillview Airport and noise levels exceeded the applicable standards of the Santa Clara County ALUC.

Noise impacts resulting from the proposed project fall into four major categories:

(1) The potential effects of environmental noise on the developability of the sites;
(2) Potential increases in traffic noise resulting from project-generated traffic;
(3) Short-term noise impacts resulting from construction;
(4) Effects of environmental noise generated by the Reid-Hillview Airport on proposed noise-sensitive receivers.

Noise impacts and mitigation measures have been identified for each development scenario (Scenarios I through VI).

Impact 1: Noise and Land Use Compatibility.
Scenarios I-VI would introduce noise-sensitive uses into noise environments that exceed the "satisfactory" level for new construction. **This is a potentially significant impact.**

Arcadia Property

Transportation noise sources including vehicular traffic and aircraft predominate the noise environment at the Arcadia Property, and would continue to do so in the future. Quimby Road borders the Arcadia Property on the north and commercial uses and Capitol Expressway border the site to the east. A light-rail station and tracks are proposed along Capital Expressway. Aircraft also fly over the site on approach to or departure from Reid-Hillview Airport. Light industrial uses, Meadowfair Park, and LeyVa Middle School would also continue to contribute to the noise environment at the project site. Future noise levels are calculated to be 66 to 67 DNL along Quimby Road at a distance of 100 feet from the roadway centerline. Future noise levels are projected to range from 76 to 77 DNL along Capital Expressway at a distance of 100 feet from the roadway centerline.

217 residential units could be constructed on the Arcadia Property under the No Project Alternative. 1,500 to 2,025 residential units are proposed under Scenarios II through VI. The specific locations of these proposed residential units is not known at this time, however, given the variety of noise sources affecting the site and that future noise levels would exceed the City's criteria for acceptability, and the potential for land use conflicts between existing and proposed uses, it is anticipated that all development Scenarios I-VI would result in a potentially significant noise impact at residential land uses proposed at the Arcadia Property.

Pleasant Hills Golf Course Property

Vehicular traffic and aircraft would continue to dominate the noise environment at this property in the future. White Road would generate future noise levels of approximately 73 to 74 DNL at a distance of 100 feet from the roadway centerline. Tully Road would generate noise levels of approximately 68 to 69 DNL at 100 feet from the roadway centerline. Noise levels generated by Flint Avenue are anticipated to increase to 64 to 65 DNL at a distance of 50 feet from the roadway center.

Scenario I, the No Project Alternative, would not result in significant noise impacts at this site because no new residential uses would be constructed. Under Scenarios II-VI, however, approximately 540 to 825 residential units are proposed. Residential units are proposed along White Road, Tully Road, Flint Avenue, and Vista Verde Drive. Environmental noise levels affecting the nearest proposed receivers would exceed 60 DNL, thereby requiring both exterior and interior noise attenuating measures to be included into the design of the developments.

Berg/IDS/ Legacy Partners Properties

The future noise environment at the Berg/IDS/Legacy Partners Properties would primarily result from vehicular traffic along Aborn Road, Fowler Road, and Yerba Buena Road. Away from local roadways, the noise environment at portions of these sites would generally be compatible with the proposed uses. Future noise levels are calculated to be approximately 67 to 70 DNL at a distance of 75 feet from Aborn Road, 58 DNL at a distance of 75 feet from Fowler Road, and 64 to 68 DNL at a distance of 75 feet from Yerba Buena Road.

Noise-sensitive uses would not be constructed on these properties under Scenarios I and VI. Under these scenarios, campus industrial uses would be built. The noise environment at these sites would be compatible with campus industrial uses and would not result in significant noise impacts at this site. Residential land uses are proposed under Scenarios II-V. Residential units adjacent to Aborn Road and Yerba Buena Road would be exposed to environmental noise levels exceeding 60 DNL, thereby requiring both exterior and interior noise attenuating measures to be included into the design of the developments.

A diesel generator is located at the northwest corner of the Yerba Buena Road / Fowler Road intersection adjacent to residential land uses proposed at the Berg property. This generator runs intermittently and generates noise levels of about 55 dBA L_{eq} at a distance of 55 feet. The City of San Jose has adopted noise standards for the installation of new backup power generators. The maximum allowable noise level at the closest property line in a residential area is 55 dBA L_{eq}. Additionally, the City requires non-residential land uses to mitigate noise generation to meet the 55 dBA DNL guideline at the property line. The analysis assumes that, conversely, residential properties proposed adjacent to a backup generator be located in areas below 55 dBA Leq and meet the 55 dBA DNL guideline at the property line. Residential land uses proposed within 55 feet of the diesel generator would be exposed to exterior noise levels exceeding 55 dBA $L_{eq.}$ Given the intermittent nature of the operation of this diesel generator (emergency operations and intermittent testing), a DNL noise level greater than 55 dBA would not be expected.

The Berg/IDS and Legacy Partners Properties are also located adjacent to the Hitachi Campus Headquarters. During the noise monitoring survey, the campus was not actively being used, and measurements of noise sources at the site were not conducted. It is anticipated that there could be equipment such as emergency back-up generators and other activities at the site that may not be compatible with residential land uses proposed in the vicinity. These sources would have to be considered during design of the residential project.

Evergreen Valley College Property

Office and educational uses would remain under Scenario I. 275 to 500 residential units, office uses, commercial uses, a library, and parks and open space are proposed under Scenarios II

through VI. Future noise levels generated by vehicular traffic along San Felipe Road and Yerba Buena Road would be 55 DNL and 57 to 60 DNL, respectively, at the proposed residential use areas. Residential uses would also be subject to noise generated by the commercial uses to the south of the site. Exterior noise levels at the property line of the commercial use are approximately 57 to 59 DNL. Office and educational uses would remain under Scenario I, the No Project Alternative. 275 to 500 residential units are proposed under Scenarios II through VI. The exterior noise environment at the site would be compatible with the City's regulatory criteria, and the impact would be considered less than significant at the Evergreen Valley College Site.

Mitigation Measure 1:

The following mitigation measures would reduce the potentially significant impacts to a less-than-significant level:

- Maintain a sufficient buffer distance between roadways and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 60 DNL or less. Less noise-sensitive land uses (commercial, office, or parks) should be located between more-sensitive uses and adjacent roadway where practical. Such uses could shield the more-sensitive uses allowing for a compatible residential noise environment.

- Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of exterior and interior noise reduction requirements and specifications for all project phases, in accordance with State and City standards. Project-specific acoustical analyses are mandated by the State for new multi-family uses. These standards should also apply to single-family residential developments. Appropriate noise control treatments necessary to achieve a compatible interior noise environment (45 DNL) shall be incorporated into proposed structures located within the 60 DNL contour of area roadways. The City of San Jose also establishes 45 DNL as the interior noise limit for residential and commercial land uses. Interior noise levels could be reduced to acceptable levels by including such measures as forced-air mechanical ventilation systems and/or sound-rated construction to allow occupants the option of controlling noise in interior spaces by maintaining the windows closed.

Impact 2: **Project Generated Noise.**
Activities and processes allowed by the various alternatives could generate noise levels in excess of existing ambient noise levels in the area or above established noise thresholds. **This is a potentially significant noise impact.**

Arcadia Property

Under Scenarios II-VI, up to 300,000 square feet of commercial retail uses would be constructed on the Arcadia property. Commercial/office development is proposed along Quimby Road in the northwest corner of the property. Single-family residential development exists across Chopin Avenue from this area of the site. Commercial development is also proposed in the southeast corner of the property along Capitol Expressway. An existing mobile home park is located to the south. Noise sources associated with commercial and commercial/office development include heating, ventilating, and air conditioning equipment, parking lot activities, and sometimes other stationary noise sources, such as loading docks. Normally, these types of noise sources do not generate noise levels above 55 DNL offsite, but there is the potential for city standards to be exceeded at the adjacent residential properties. This is a potentially significant impact.

Under Scenarios II-VI, approximately 18 acres of the Arcadia property would be used for parks and open space purposes. This would include a 15-acre area in the northeasterly portion of the site. This latter area would include a new community center and sports complex that would be constructed by the City. Finally, there would be a linear open space area in the central portion of the site that would provide a connection to the community center and sports complex for the future residents of the site, as well as for the residents of the existing neighborhood located to the west. The sports complex is a potentially significant source of community noise. Because of the proposed location on the project site, it is not anticipated that it would have an adverse effect on existing residential developments because of the large buffer distance. On the Arcadia property itself, the plan proposes new residential development adjacent to the active sports complex. To avoid noise and land use compatibility conflicts, the development of this property must be sensitive to the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems. This is a potentially significant intra-project impact.

Pleasant Hills Golf Course Property

Under Scenarios II-VI, the project applicant will reserve a 1-acre parcel on the site, which would be located along White Road, so that a fire station can be built. The City would construct a new fire station at this location, which would serve as relocated Station 21, per the San José Fire Department's long-range plans to improve service for this area. The new station would be a 2-story building of approximately 13,000 to 15,000 square feet in size. Noise-generating activities associated with the operation of a fire station include fire engine sirens sounding as the trucks leave the station, the testing of engines during the morning check, weekly testing of the emergency generator, and minimal training exercises. Sirens are only sounded when necessary as trucks leave the station. Noise measurements conducted at fire stations during the morning equipment checkout indicate that maximum noise levels at a distance of 50 feet from an activity can reach 80 to 85 dBA. Normally, such activities are within the range of vehicular traffic noise when stations are located adjacent to major streets (as is the case here). Normally, an emergency

generator is tested weekly. If the equipment is similar to other fire stations in San Jose, it is anticipated that the standby generators would cause a noise level of about 60 dBA at a distance of 50 feet. Proper siting of the equipment would result in noise levels consistent with the San Jose Emergency Generator Ordinance. This is a less-than-significant impact.

Under Scenarios II-VI, two new neighborhood public parks would be constructed on the site. One would be located in the interior of the site and would be approximately 4.5 acres in size. The other would be located in the southwest corner of the site and would be approximately 10.5 acres in size. The parks would contain one or more of the following amenities that are part of most neighborhood parks: tot lot/playground, open turf area, picnic tables with barbeques, pathways, and landscaping. Neighborhood public parks are both noise sensitive and sources of community noise. The public open space park areas are generally proposed where noise levels would be compatible. Given the activities outlined above, noise from the parks would not cause any adverse noise impacts upon either existing or future noise sensitive receptors in the area. This is a less-than-significant impact.

Berg/IDS/ Legacy Partners Properties

Under Scenarios I and VI, the Berg/IDS property could be developed under its existing PD zoning with up to approximately 2.891 million square feet of campus industrial buildings. The estimated number of employees at the site would be 7,250. Allowed uses would include office, research and development (R&D), and product manufacturing and assembly. Buildings would be one to two stories in height. Approximately 30% of the property would be covered by buildings, 45% by parking and roadways, and 25% by open space/landscaping. This development is planned in what would be characterized as a relatively quiet rural/suburban area. The development will change the noise environment here. Noise levels are anticipated to substantially increase as a result of increased vehicular traffic on the street network and noise sources associated with the campus industrial development. This is a potentially significant impact.

Under Scenarios I and VI, the Legacy Partners property could be developed under its existing PD zoning with up to approximately 1.769 million square feet of campus industrial buildings. The estimated number of employees at the site would be 4,450. Allowed uses would include office, research and development (R&D), and product manufacturing and assembly. Buildings would be one to three stories in height. Approximately 30% of the property would be covered by buildings, 45% by parking and roadways, and 25% by open space/landscaping. This development is planned in what would be characterized as a relatively quiet rural suburban area. The development will change the noise environment here. Noise levels are anticipated to substantially increase as a result of increased vehicular traffic on the street network and noise sources associated with the campus industrial development. This is a potentially significant impact.

Under Scenarios II-V, a series of neighborhood parks and open space areas would be provided on the Berg/IDS property. These areas, which would total approximately 26 acres, would include multiple parks, each roughly one acre in size, located across the site. It would also include a larger 11-acre park along the east side of Yerba Buena Road in the vicinity of Altia Avenue. The parks would contain one or more of the following amenities that are part of most neighborhood parks: tot lot/playground, open turf area, picnic tables with barbeques, pathways, and landscaping.

The open space would include a linear corridor along Fowler Creek. The corridor will have a width of 50 feet beyond the top-of-bank on each side of the creek. A multi-use, recreational trail would be constructed within the 50-foot corridor along the south side of the creek. The trail would connect to Fowler Creek Park, which is adjacent to the westerly boundary of the Berg/IDS property. The trail alignment would also continue south of Fowler Creek along the easterly boundary of the property where it would connect to a proposed trail on the Legacy Partners property. Neighborhood public parks are both noise sensitive and sources of community noise. The public open space park areas are generally proposed where noise levels would be compatible. It is not anticipated, given the activities outlined above, that noise from the parks would cause any adverse noise impacts upon either existing or future noise sensitive receptors in the area. This is a less-than-significant impact.

Under Scenarios II-V, approximately 39 acres of the site would be for park and open space uses. A portion of the open space would be along the easterly boundary of the site since that area is deemed unsuitable for development due to geologic hazards. Other open space would be located in the southwest corner of the site and is proposed to be developed into a sports complex for the Evergreen Little League. The Little League complex is proposed adjacent to proposed residential development but not near any existing residential development. The current site plan is excellent from the standpoint of community noise control because the Little League infields are proposed as far as possible from the proposed residential. The primary sources of noise associated with a Little League field are ball strikes, cheering from the team at bat and cheering from the stands. All these sources are located near the home plate area. The proposed site plan would result in a less-than-significant noise impact.

The open space would include a linear corridor along Evergreen Creek. The corridor would have a width of 100 feet beyond the top-of-bank on each side of the creek. A multi-use, recreational trail would be constructed within the 100-foot corridor along the south side of the creek. The trail alignment would also continue north of Evergreen Creek along the easterly boundary of the property where it would connect to the proposed trail on the Berg/IDS property. These uses would not be significant sources of community noise.

Evergreen Valley College Property

Under Scenarios II-VI, up to 95,000 square feet of office uses would be constructed on the Evergreen Valley College property. This would represent an increase of 75,000 square feet over existing conditions since the project would demolish a building that contains 20,000 square feet of office uses. The office building would be located in the southeast portion of the site and would be up to four stories in height. Parking would be in an adjacent surface lot. All setbacks and other applicable criteria of the San José Commercial Design Guidelines will be adhered to by the project. Development on the community college site would not change the noise environment on the campus or its surrounding sensitive receptors to the north. This is a less-than-significant impact.

Under Scenarios II-VI, up to 100,000 square feet of commercial retail uses would be constructed on the Evergreen Valley College property. The uses would be concentrated in the westerly part of the site adjacent to the existing shopping center that is located on the northeast corner of San Felipe and Yerba Buena Roads. The buildings housing the retail would be single-story. Parking would be in adjacent surface lots. All setbacks and other applicable criteria of the San José Commercial Design Guidelines will be adhered to by the project. Development on the community college site would not change the noise environment on the campus or its surrounding sensitive receptors to the north. This is a less-than-significant impact.

White Road Corridor

White Road will be widened to six lanes, three in each direction, between Ocala Avenue on the north and Aborn Road on the south, a distance of approximately 2.1 miles. Within this segment, there is one location where White Road will remain four lanes due to insufficient right-of-way: an approximately 0.1-mile section between Remington Way and Stutz Way. These improvements to White Road will occur within the existing right-of-way. The White Road Corridor is wide enough to accommodate the proposed widening project. In many areas, minor re-striping would occur. New through lanes would be added in some areas near adjacent residential land uses.

A screening level traffic modeling analysis was conducted to determine potential noise level increases that would result from proposed roadway improvements. Existing roadway geometries and traffic conditions were input into the traffic noise model for calibration purposes. Future conditions were then modeled to calculate the relative noise level increase resulting from the proposed modifications.

In the north, minor re-striping is proposed at the intersection of White Road and Ocala Avenue/Marten Avenue. Single-family residential land uses and Mt. Pleasant High School are located near this intersection. No new traffic lanes are proposed in this area, and the proposed lane geometry is not substantially different than existing conditions. Traffic noise level increases

would not result from the minor re-striping proposed at this intersection. Future traffic volumes are expected to yield increased noise levels of about 1 dBA at residential receivers along this roadway segment. Overall noise levels resulting from the project widening and anticipated traffic growth would be approximately 1 dBA. This increase would not be considered substantial and the impact would be less than significant.

A merge lane would be added along northbound White Road between Coldwater Drive and Cunningham Court. This additional lane would allow vehicles to travel approximately 12 feet closer to residences to the east. Traffic noise modeling indicates that this additional lane would increase noise levels by approximately 1 dBA at the receivers to the east. Future traffic volumes are expected to increase noise levels by 1 dBA. The total noise level increase resulting from the project widening and anticipated traffic growth would be approximately 2 dBA. Noise levels would not be substantially increased with the proposed widening activities at receivers adjacent to White Road between Coldwater Drive and Cunningham Court.

A new through lane would be constructed along northbound White Road between Cunningham Court and Tully Road, adjacent to the Pleasant Hills Golf Course site. An existing residence is located at the southeast corner of the White Road / Cunningham Court intersection. This particular residence would also experience a 2 dBA increase in traffic noise with the widening of northbound White Road and projected traffic volumes along the roadway. The calculated noise level increase resulting from the project would not be substantial, and the impact would be less-than-significant.

Minor re-striping is proposed at the White Road / Tully Road intersection. Along the south leg of the intersection, the near lanes along northbound and southbound White Road would be slightly closer to existing residential land uses located adjacent to the roadway. Traffic noise levels would increase by 0 dBA as a result of the intersection modifications proposed by the project, and by 1 dBA with project traffic. The overall noise level increase, however, would not be considered substantial, and the impact would be less than significant.

The proposed street improvements along White Road would include a new through lane along southbound White Road between Glen Donegal Drive/Peppermint Drive and Quimby Road. Single-family residences nearest the new through lane are located just west. With the project, receivers to the west would experience noise level increases of less than 1 dBA. Traffic volumes along this segment are anticipated to increase by 1 dBA under Scenarios I through V and by up to 2 dBA under Scenario VI. The overall noise level increase resulting from the project would not be substantial as the significance threshold of 3 dBA would not be exceeded and the impact would be less-than-significant.

Minor re-striping is proposed along White Road between Quimby Road and Aborn Road. Traffic noise levels would increase by 0 dBA as a result of the roadway and intersection improvements proposed by the project. Traffic volumes along this segment of White Road are

anticipated to increase by 1 dBA under Scenarios I through V and by up to 2 dBA under Scenario VI. The overall noise level increase resulting from the project would not be substantial and the impact would be less-than-significant.

Mitigation Measure 2:

The following mitigation measures would reduce the potentially significant impacts to a less-than-significant level:

- Non-residential development shall comply with Policy 11 of the Noise Element and not exceed 55 DNL at existing or planned residential properties in the vicinity. For recreational uses, proposed development must be sensitive to the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems. For commercial and industrial developments, site planning can effectively mitigate noise impacts; such as by not locating loading docks near residences. Mechanical equipment screens, fan silencers, and engine mufflers shall be used to mitigate noise from project equipment. Noise barriers shall be used to control noise from parking and vehicle circulation. The proper application of these measures individually or together would mitigate this potentially significant impact to a less-than-significant level.

Impact 3: **Project-Generated Traffic Noise.**
Traffic volume increases in the project vicinity will result with the development of the project area. Similarly, increased traffic volumes will generate an increase in traffic noise along the local roadway network. In some locations, these increases would be substantial, as the project would permanently increase noise levels at noise sensitive receptors in the project area. **This is a significant and unavoidable impact.**

Traffic volume information was reviewed at study area intersections in and around the EVP. A comparison of "Existing", "No Project" (Scenario I), and "Project" alternative (Scenarios II-VI) traffic volumes was made at the project study intersections, and the relative change in traffic noise along identified roadway segments was calculated. Roadway segments experiencing a traffic noise level increase less than 3 dBA DNL were excluded from further analysis, as the noise level increase would not be substantial. Where noise levels were calculated to increase by 3 dBA DNL or more, the noise level increase was considered substantial. Table 9 shows the roadway links that are calculated to experience a substantial noise increase (3 dBA or more) as a result of the project.

Scenario I – No Project

The "No Project" scenario would include planned development on the Arcadia (residential) and Berg/IDS and Legacy Partners Properties (campus industrial), which would generate increased

traffic along the local roadway network. Under this alternative, significant noise level increases would result at noise sensitive receivers along identified roadway segments of Aborn Road, Nieman Boulevard, Silver Creek Valley Road, and Yerba Buena Road. Substantial noise level increases would range from 3 dBA DNL to 9 dBA DNL.

Scenario II – Very Low Development

This scenario would include construction of up to 3,600 new residences, approximately 500,000 square feet of new commercial uses, and about 75,000 square feet of new office uses, and the approved campus industrial uses would not be constructed. Under this scenario, existing office and training facilities at the Evergreen Valley College property would be removed, and existing neighborhood retail uses at the Quimby/White property would be expanded. Under development Scenario II, substantial noise level increases would occur on roadway segments on the following roadways; Aborn Road, Silver Creek Valley Road, and Yerba Buena Road. In general, the predicted noise level increases along these roadways are less than or equal to the noise level increases identified under the "No Project" scenario. Substantial noise level increases would range from 3 dBA DNL to 6 dBA DNL.

Scenario III –Low Development

This scenario would be similar to Scenario II, but would include the construction of an additional 600 residences up to a total of 4,200 new residences. Approximately 500,000 square feet of new commercial uses and about 75,000 square feet of new office uses would also be constructed. Under this alternative, significant noise level increases would result at noise sensitive receivers along identified roadway segments of Aborn Road, Silver Creek Valley Road, and Yerba Buena Road. Predicted noise level increases along these roadways are less than or equal to the noise level increases identified under the "No Project" scenario and are similar to the noise level increases expected under Scenario II.

Scenario IV – Medium Development

This scenario would include construction of up to 4,600 new residences, approximately 500,000 square feet of new commercial uses, and about 75,000 square feet of new office uses. Significant noise level increases would result at noise sensitive receivers along identified roadway segments of Aborn Road, Quimby Road, Silver Creek Valley Road, and Yerba Buena Road. Predicted noise level increases along these roadways are less than or equal to the noise level increases identified under the "No Project" scenario and are similar to the noise level increases expected under Scenarios II and III. Substantial noise level increases would range from 3 dBA DNL to 7 dBA DNL.

Scenario V – High Development

This scenario would include construction of up to 5,700 new residences, approximately 500,000 square feet of new commercial uses, and about 75,000 square feet of new office uses. The campus industrial uses would not be constructed. Under this scenario, existing office and training facilities at the Evergreen Valley College property would be removed, and existing neighborhood retail uses at the Quimby/White property would be expanded. The development of Scenario V would increase traffic noise levels substantially along identified roadway segments of Aborn Road, Quimby Road, San Felipe Road, Silver Creek Valley Road, and Yerba Buena Road. Predicted noise level increases along these roadways are generally less than or equal to the noise level increases identified under the "No Project" scenario. The noise level increases identified under Scenario V are greater than or equal to the noise level increases expected under Scenarios II, III, and IV. Substantial noise level increases along affected roadway segments would range from 3 dBA DNL to 8 dBA DNL.

Scenario VI – Retain Development

This scenario would include construction of up to 3,900 new residences, approximately 500,000 square feet of new commercial uses, and about 75,000 square feet of new office uses. The 4.66 million square feet of campus industrial uses would be constructed. Under this scenario, existing office and training facilities at the Evergreen Valley College property would be removed, and existing neighborhood retail uses at the Quimby/White property would be expanded. The development of Scenario VI would increase traffic noise levels substantially along identified roadway segments of Aborn Road, Nieman Boulevard, San Felipe Road, Silver Creek Valley Road, White Road and Yerba Buena Road. Predicted noise level increases along these roadways are generally at or above the noise level increases identified under the "No Project" scenario (Scenario I) and development scenarios II-V. Substantial noise level increases along affected roadway segments would range from 3 dBA DNL to 9 dBA DNL.

TABLE 9 Traffic Noise Level Increases Above Existing Levels by Development Scenario (DNL, dB)

Roadway	Segment	Development Scenario					
		I	II	III	IV	V	VI
Aborn Road	Ruby Ave to Alessandro Dr	4	2	2	2	3	4
Aborn Road	Mosher Dr to Altamara Ave	8	6	6	6	8	9
Aborn Road	Murillo Ave to Mosher Dr	9	6	7	7	8	9
Aborn Road	Altamara Ave to Ruby Ave	6	4	4	4	5	6
Aborn Road	Alessandro Dr to White Rd	3	2	2	2	3	4
Aborn Road	U.S. 101 to King Rd	4	3	3	3	3	4
Nieman Boulevard	Capitol Exp to Aborn Rd	3	2	2	2	2	4
Nieman Boulevard	Woodberry Ln to Yerba Buena Rd	2	2	2	2	2	3
Quimby Road	Tully Rd to Eastridge Rd	0	2	2	3	3	2
San Felipe Road	Fowler Rd to Delta Rd	1	2	2	2	3	3
San Felipe Road	Aborn Rd to Fowler Rd	1	2	2	2	3	3
Silver Creek Valley Rd	Eastbourne Dr to Hellyer Ave	3	3	3	3	3	4
Yerba Buena Road	Yerba Buena Ave to Nieman Blvd	3	2	2	2	3	4
Yerba Buena Road	Fowler Rd to Old Yerba Buena Rd	5	6	6	7	7	5
Yerba Buena Road	San Felipe Rd to Old Yerba Buena Rd	5	4	4	4	5	6
Yerba Buena Road	San Felipe Rd to Byington Dr	3	2	2	2	3	4
Yerba Buena Road	Silver Creek Rd to Nieman Blvd	2	2	2	2	2	3

The Evergreen Visioning Plan Area and vicinity contains a variety of land uses with varying sensitivities to noise. Residential land uses would be most affected by traffic noise level increases. Industrial land uses would not generally be affected by an increase in traffic noise. Office and commercial uses are not typically affected by traffic noise increases along the local roadway network. The noise environment would be noticeably increased over existing conditions with the implementation of the project and would affect various land uses differently.

Methods available to mitigate project generated noise level increases would need to be studied on a case-by-case basis at receivers that would be considered noise impacted. Noise reduction methods could include the following:

- New or larger noise barriers or other noise reduction techniques could be constructed to protect existing residential land uses where reasonable and feasible.

- Alternative noise reduction techniques could be implemented, such as re-paving the streets with "quieter" pavement types such as Open-Grade Rubberized Asphaltic Concrete. The use of "quiet" pavement can reduce noise levels by 2 to 5 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors.

- Installing traffic calming measures to slow traffic.

- Affected residences could be provided building sound insulation such as sound rated windows and doors on a case-by-case basis as a method of reducing noise levels in interior spaces.

Given the scope of the project and expected noise level increases resulting from project traffic, it may not be reasonable or feasible to reduce project-generated traffic noise at affected receivers. The increase in development density would increase noise levels noticeably at receivers. Measures available to reduce the project noise level increases would not likely be reasonable or feasible in all areas, therefore, the impact would be considered significant and unavoidable.

Impact 4: **Construction Noise.**
The construction of the project would temporarily elevate noise levels at adjacent noise-sensitive land uses. **This is significant and unavoidable impact.**

The development of the project would generate noise and would temporarily increase noise levels at adjacent land uses. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Where noise from construction activities exceeds 60 dBA $L_{eq(hr)}$ and the ambient noise

environment by at least 5 dBA for a period more than one construction season, the impact would be considered significant.

Construction activities generate considerable amounts of noise, especially during the demolition phase and the construction of project infrastructure when heavy equipment is used. The highest maximum noise levels generated by project construction would typically range from about 90 to 105 dBA (impact pile driving) at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are about 81 dBA to 89 dBA measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.) Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in much lower construction noise levels at distant receptors.

Typically, small residential, commercial, or office construction projects do not generate significant noise impacts when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. Construction noises associated with projects of this type are disturbances that are necessary for the construction or repair of buildings and structures in urban areas. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction materials, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life.

Larger construction projects are typically built out over more than one construction season, and some construction methods, such as pile driving, generate higher noise levels and noise that would be considered impulsive. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Limiting the hours when construction can occur to daytime hours is often a simple method to reduce the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing "quiet" construction equipment can also reduce the potential for noise impacts.

Each major project site adjoins noise-sensitive residential areas. Construction noise levels are anticipated to exceed 60 dBA L_{eq} and the ambient by 5 dBA or more over extended periods of time. The Pleasant Hills Golf Course Property, Berg, IDS, and Legacy Partners Properties, and the Evergreen Valley College Property would be built out in approximately 3-5 years. The Arcadia Property would be built out in approximately 12 years. It is conceivable that the phasing of such projects would be such that a particular receiver or group of receivers would be subject to construction noise levels in excess of 60 dBA L_{eq} and the ambient by 5 dBA for durations

exceeding one construction season. The construction of the project would result in a significant temporary noise level increase at neighboring noise-sensitive properties.

To reduce the effects of project construction activities, the following mitigation measures shall be included in all construction projects to reduce noise:

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays. No construction activities should occur Sundays or holidays.

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.

- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

- Utilize "quiet" air compressors and other stationery noise sources where technology exists.

- Multiple-pile drivers shall be considered to expedite construction. Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.

- Temporary noise control blanket barriers shall shroud pile drivers or be erected in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected.

- Foundation pile holes shall be pre-drilled to minimize the number of impacts required to seat the pile Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the pile.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the

construction site and include it in the notice sent to neighbors regarding the construction schedule.

Although the above measures would reduce noise generated by the construction of the project, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.

Impact 5: **Aircraft Noise.**
The project would not locate noise-sensitive residential land uses within the Reid-Hillview Airport's 60 or 65 CNEL noise contour. **This is a less-than-significant impact.**

Noise-sensitive land uses proposed at the five major sites would be located outside of the Reid-Hillview Airport's 60 and 65 CNEL noise contours. Aircraft noise intermittently affects these sites, with the highest noise exposure at the Arcadia Property. Maximum instantaneous noise levels generated by aircraft departing to the south often reached 64 to 72 dBA at the Arcadia Property. Although noise from these aircraft would contribute to the noise environment at some of the sites (i.e., Arcadia, Pleasant Hills Golf Course), the noise environment resulting from aircraft would be considered compatible with the proposed uses. Noise from aircraft would be insignificant at the Berg/IDS, Legacy Partners, and Evergreen Valley College Properties. This is a less-than-significant noise impact under all development scenarios.

Mitigation Measure 5: **NONE**

Appendix A – Long-Term Noise Data

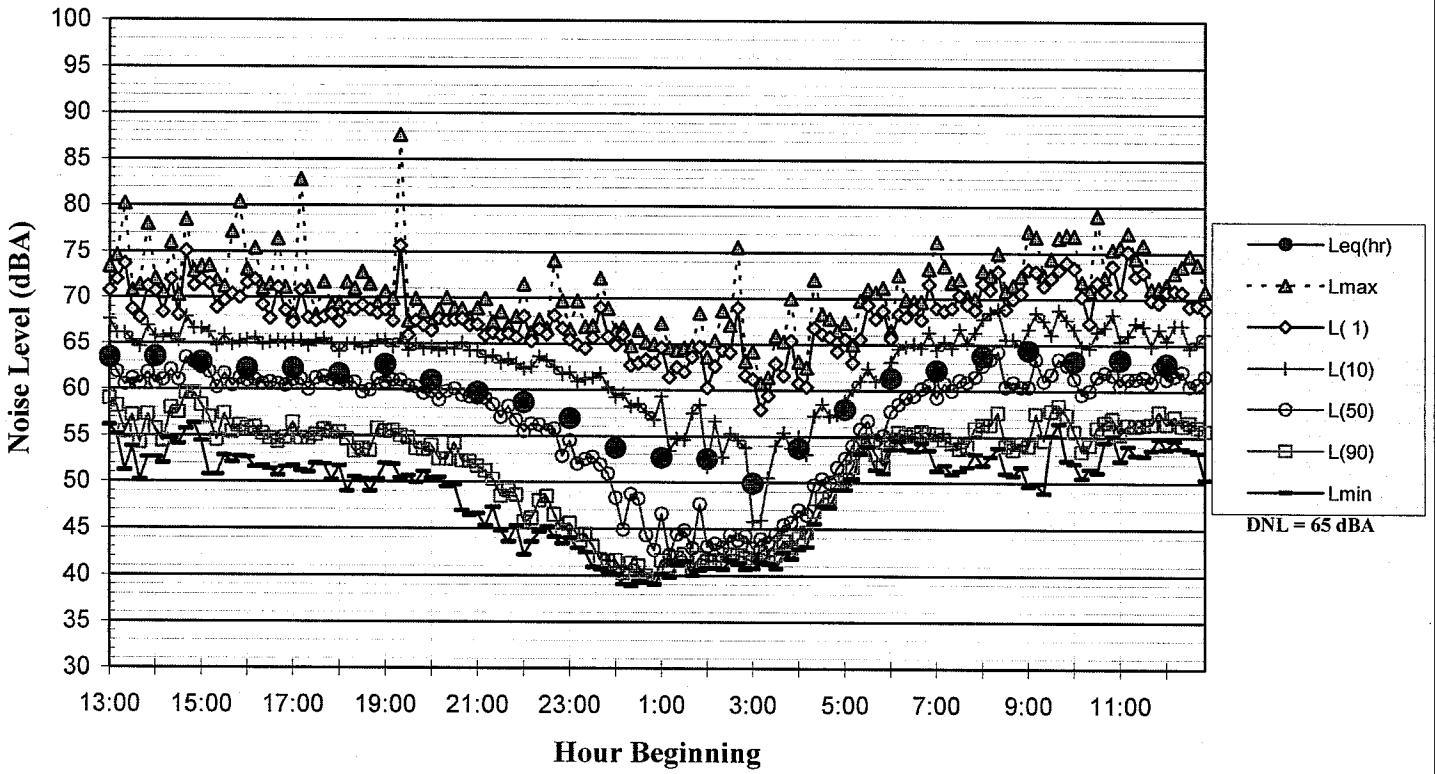

Noise Levels at LT-1
105 feet from the Center of Quimby Road
June 1 - 2, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 65 dBA

Figure A1

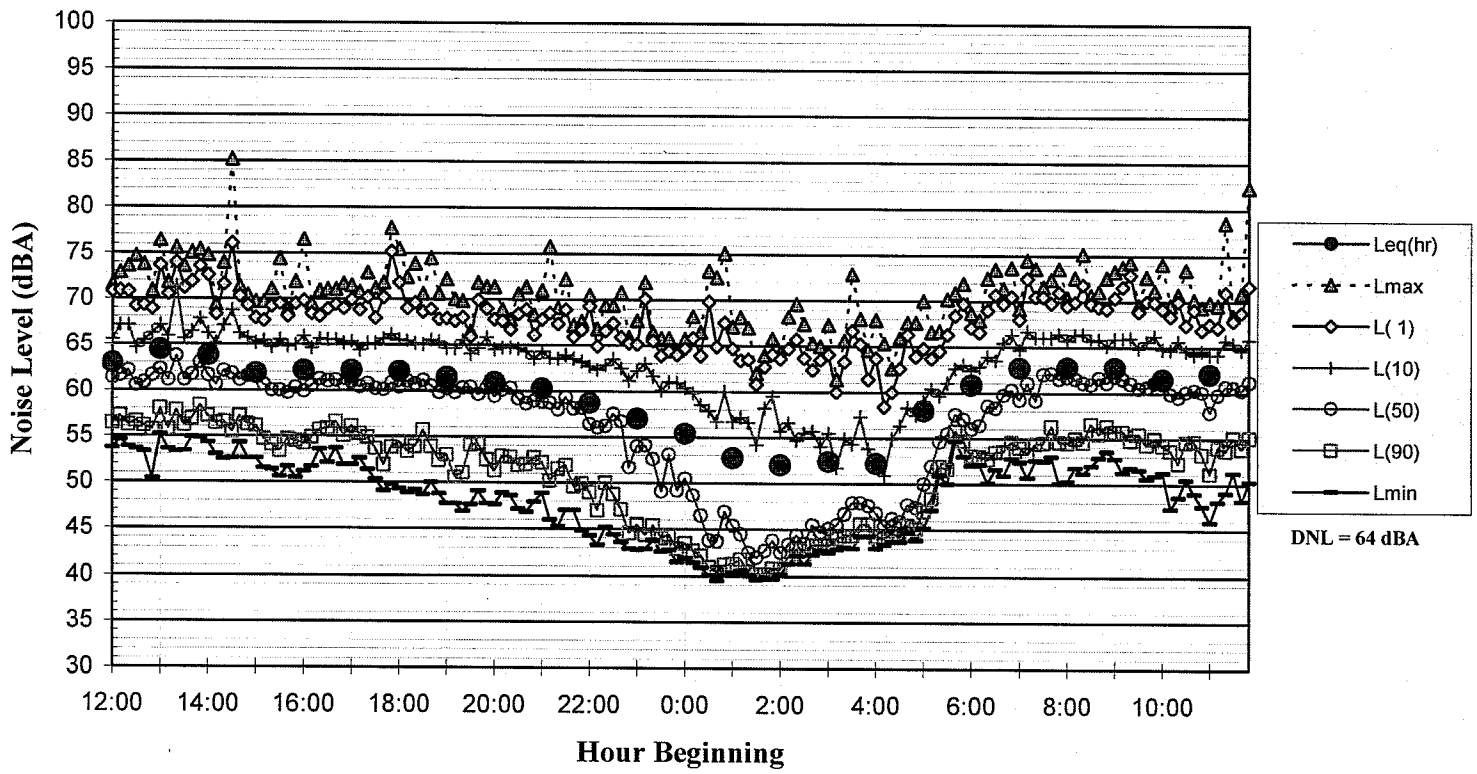

Noise Levels at LT-1
105 feet from the Center of Quimby Road
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
12:00
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 64 dBA

Figure A2

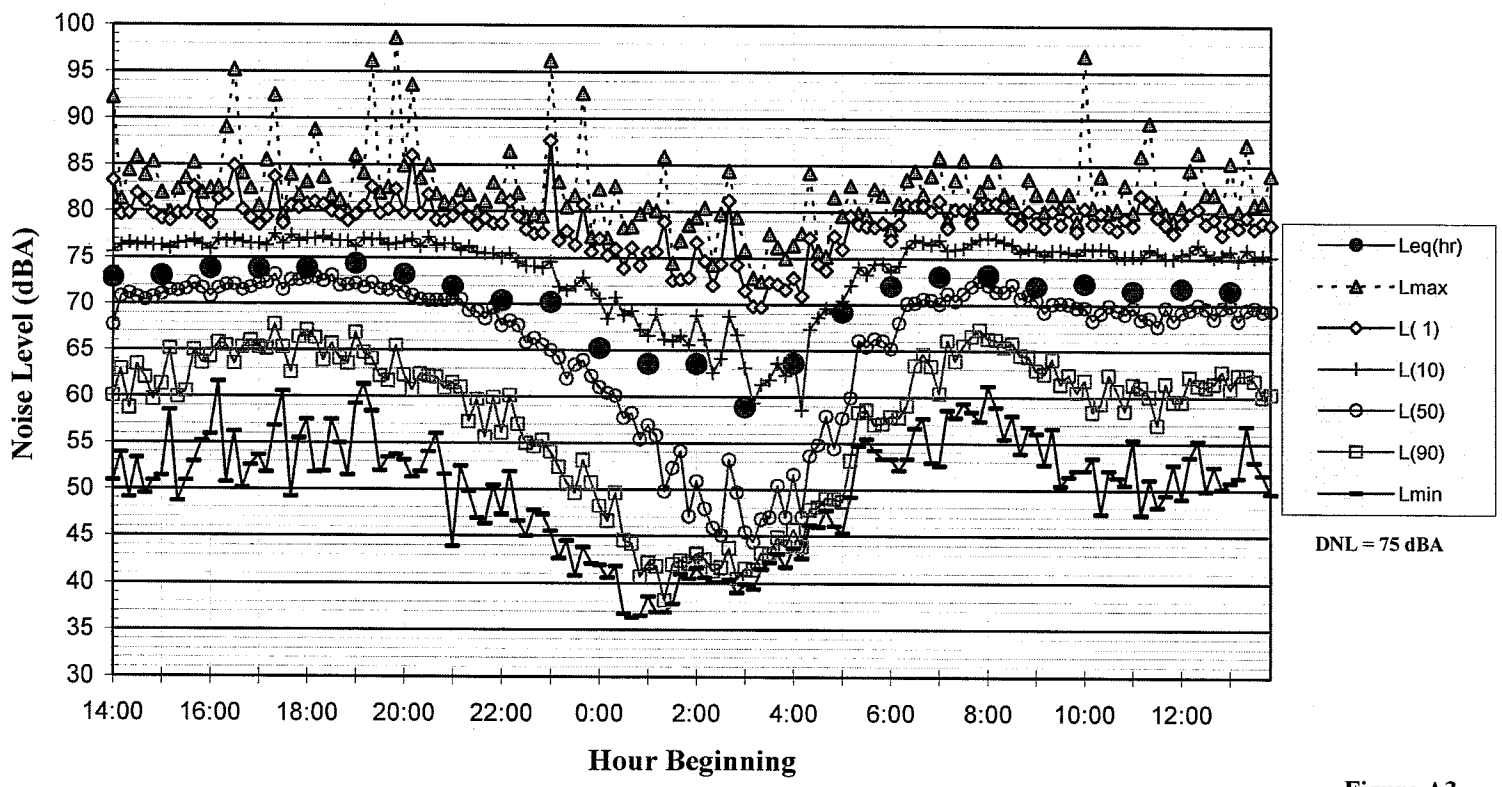

Noise Levels at LT-2
90 feet from the Center of Capitol Expressway
June 1 - 2, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 75 dBA

Figure A3

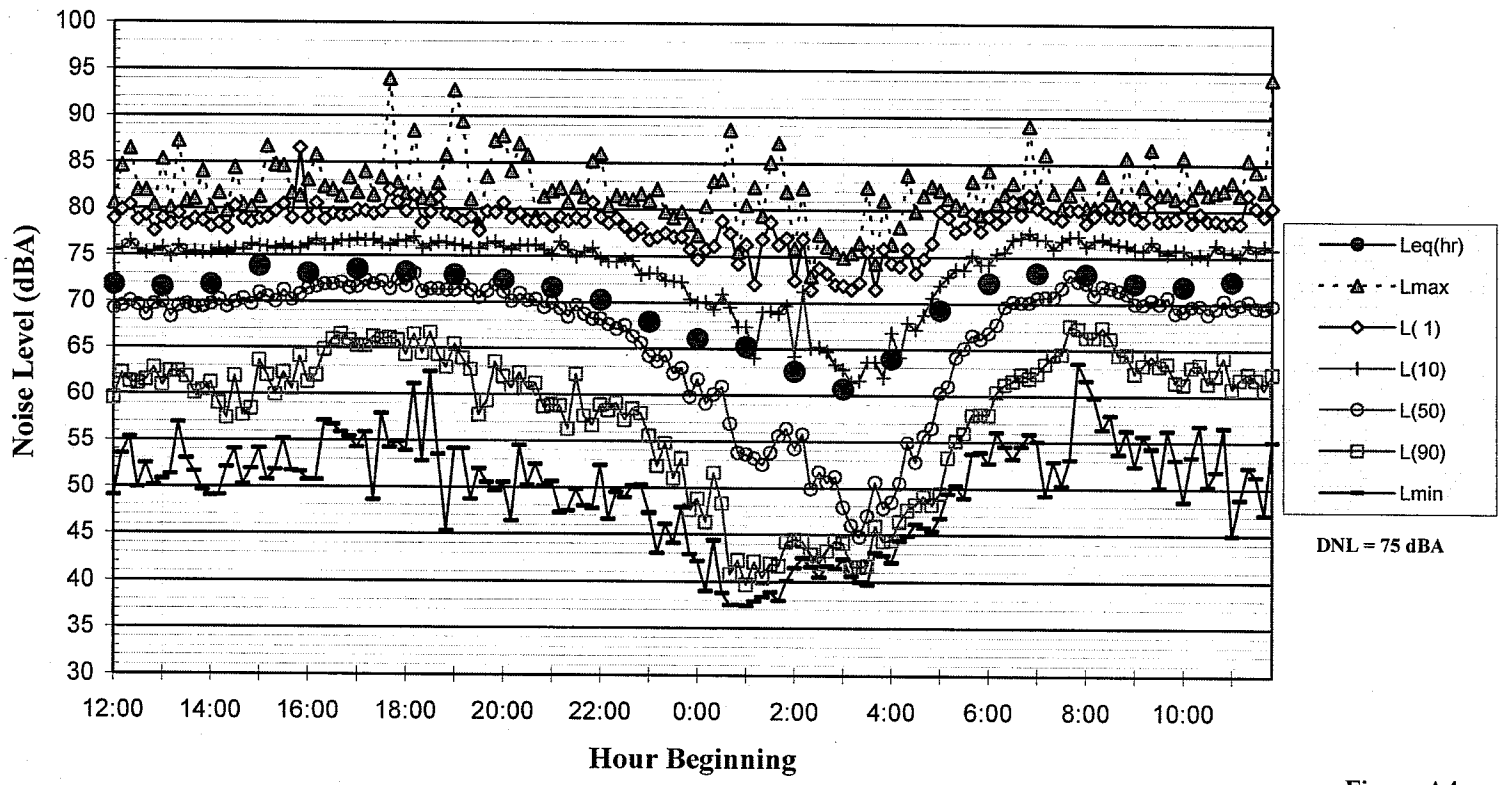

Noise Levels at LT-2
90 feet from the Center of Capitol Expressway
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
12:00
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 75 dBA

Figure A4

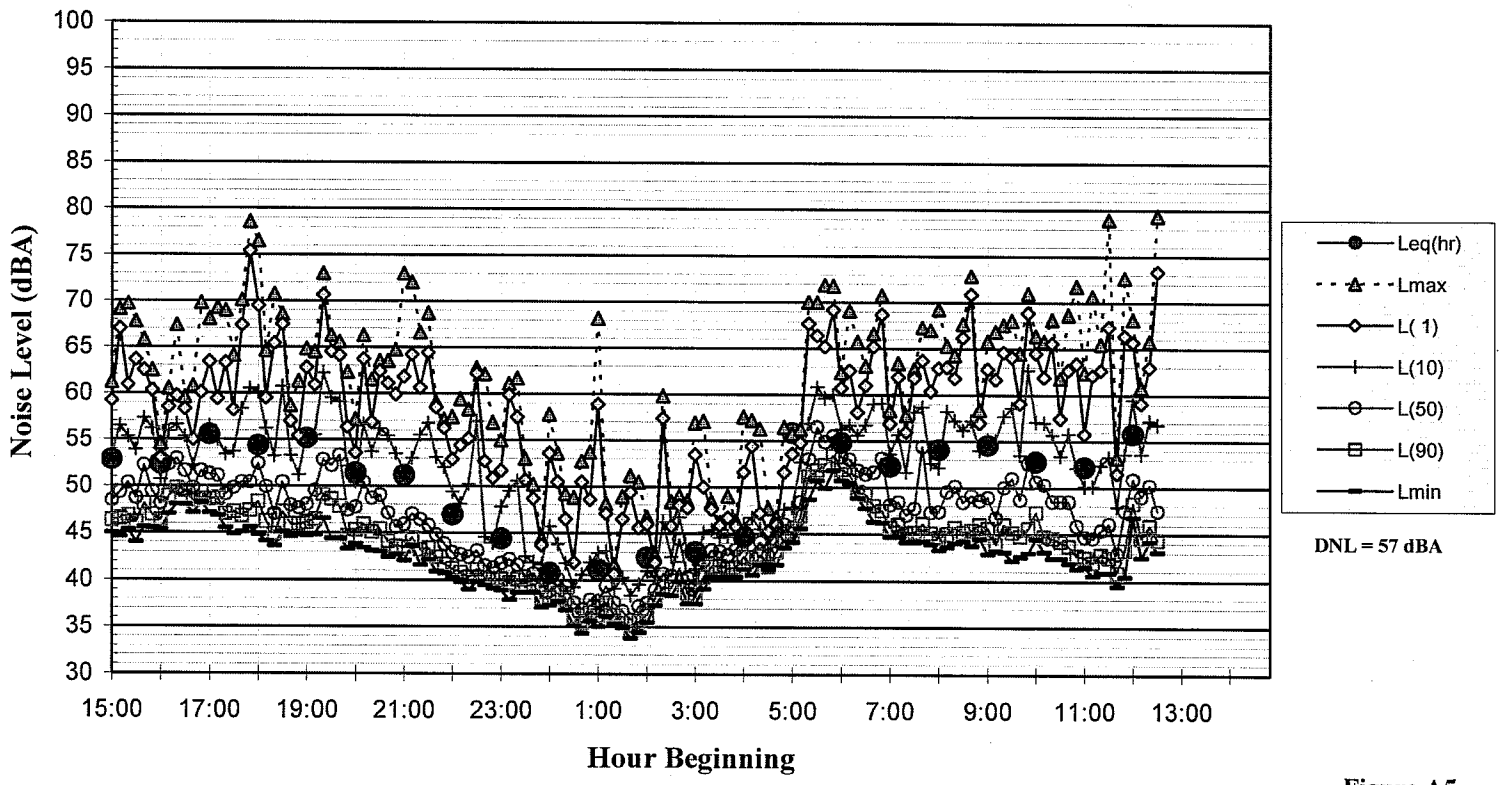

Noise Levels at LT-3
Easternmost Terminus of Brahms Avenue
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
13:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 57 dBA

Figure A5

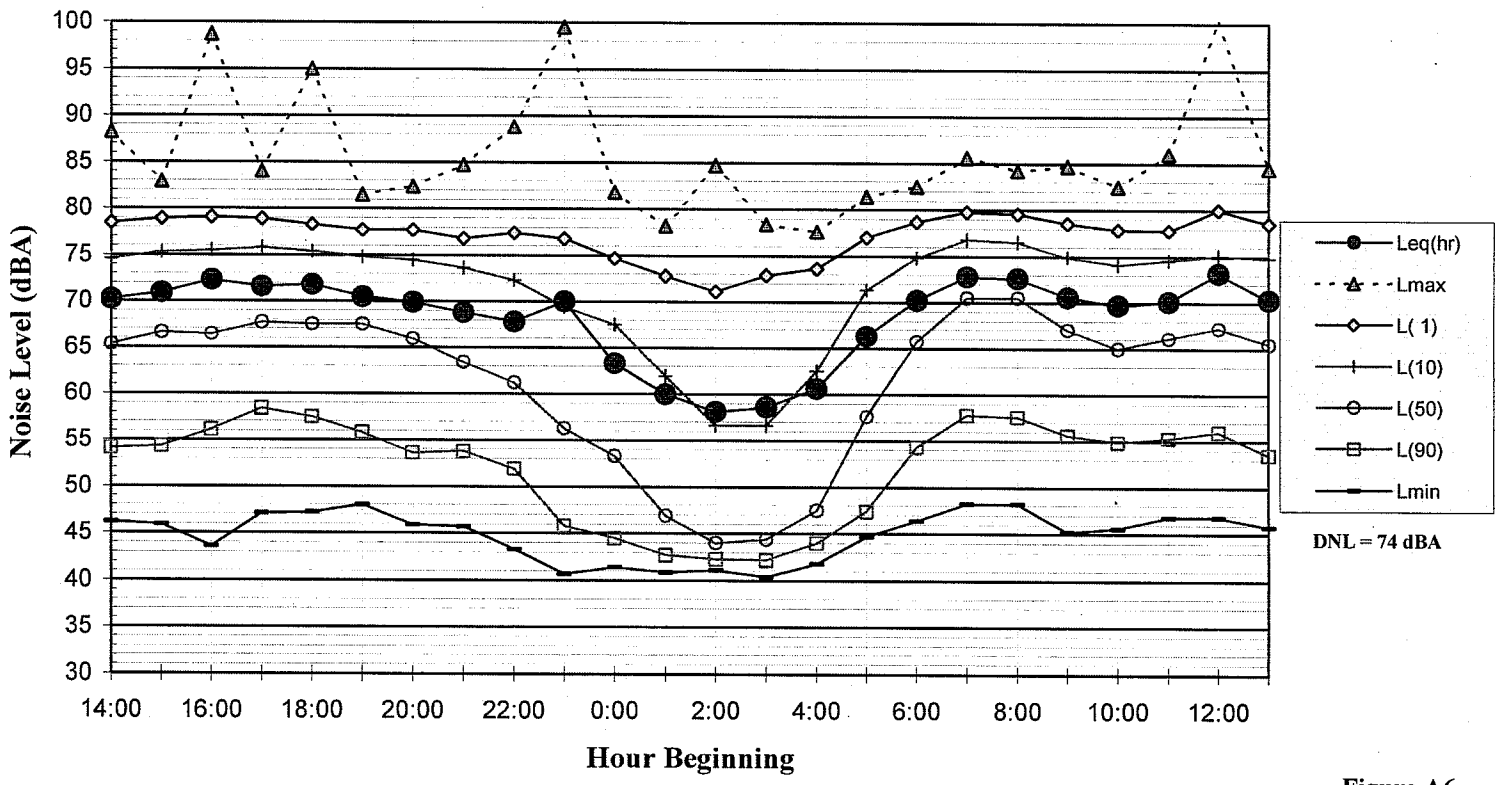

Noise Levels at LT-4
60 feet from the Centerline of White Road
June 13 - 14, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 74 dBA

Figure A6

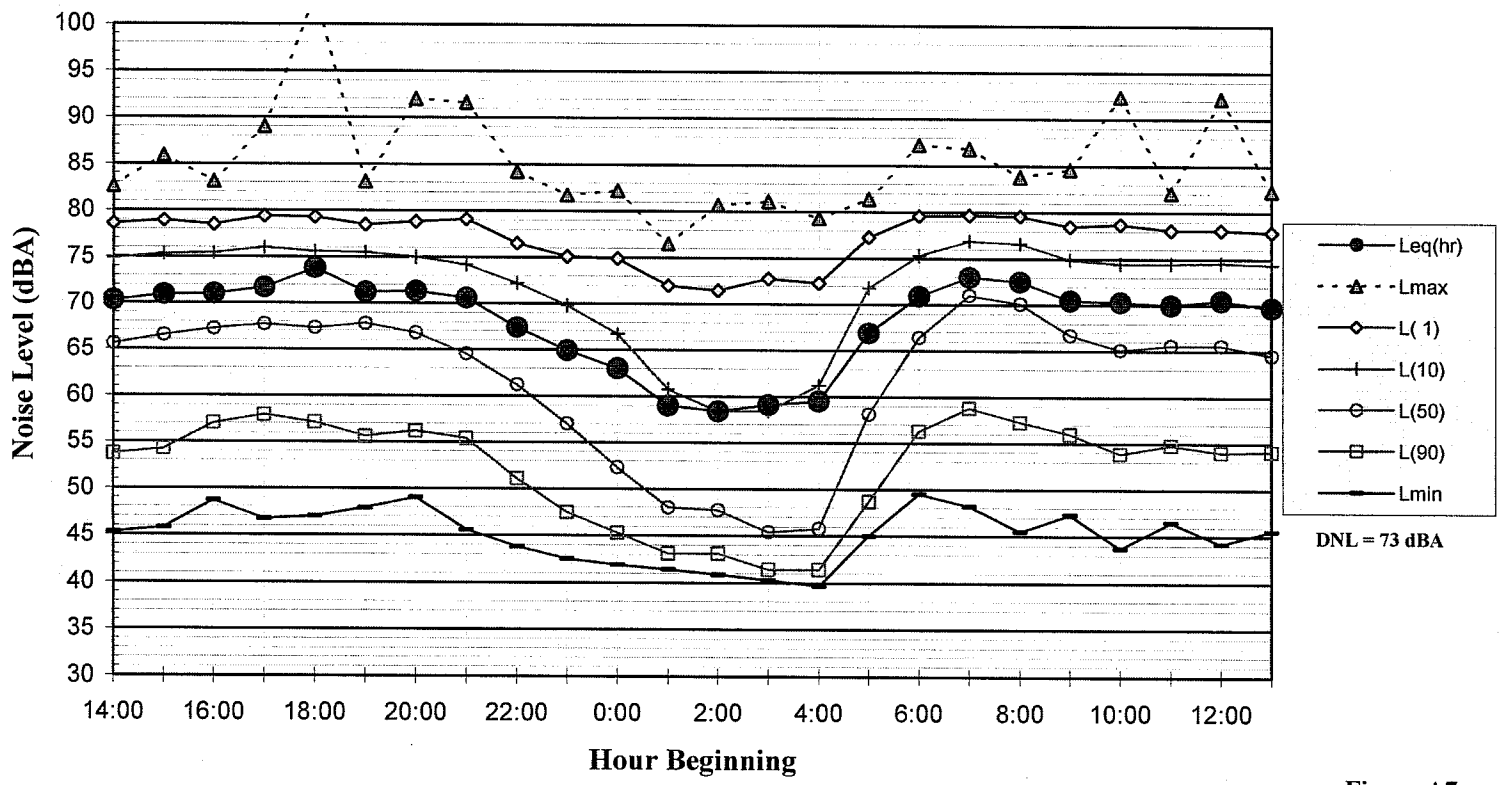

Noise Levels at LT-4
60 feet from the Centerline of White Road
June 14 - 15, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 73 dBA

Figure A7

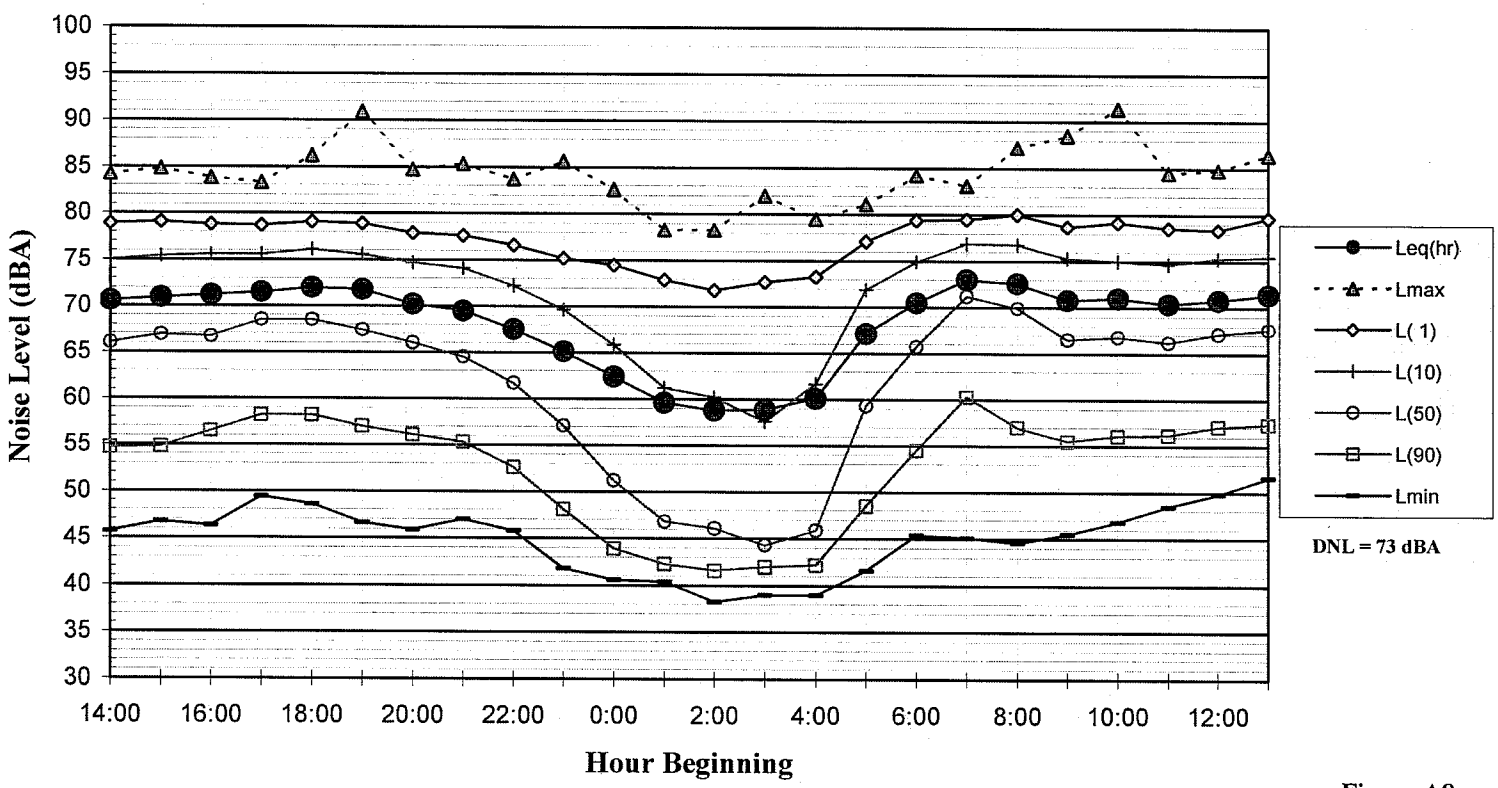

Noise Levels at LT-4
60 feet from the Centerline of White Road
June 15 - 16, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 73 dBA

Figure A8

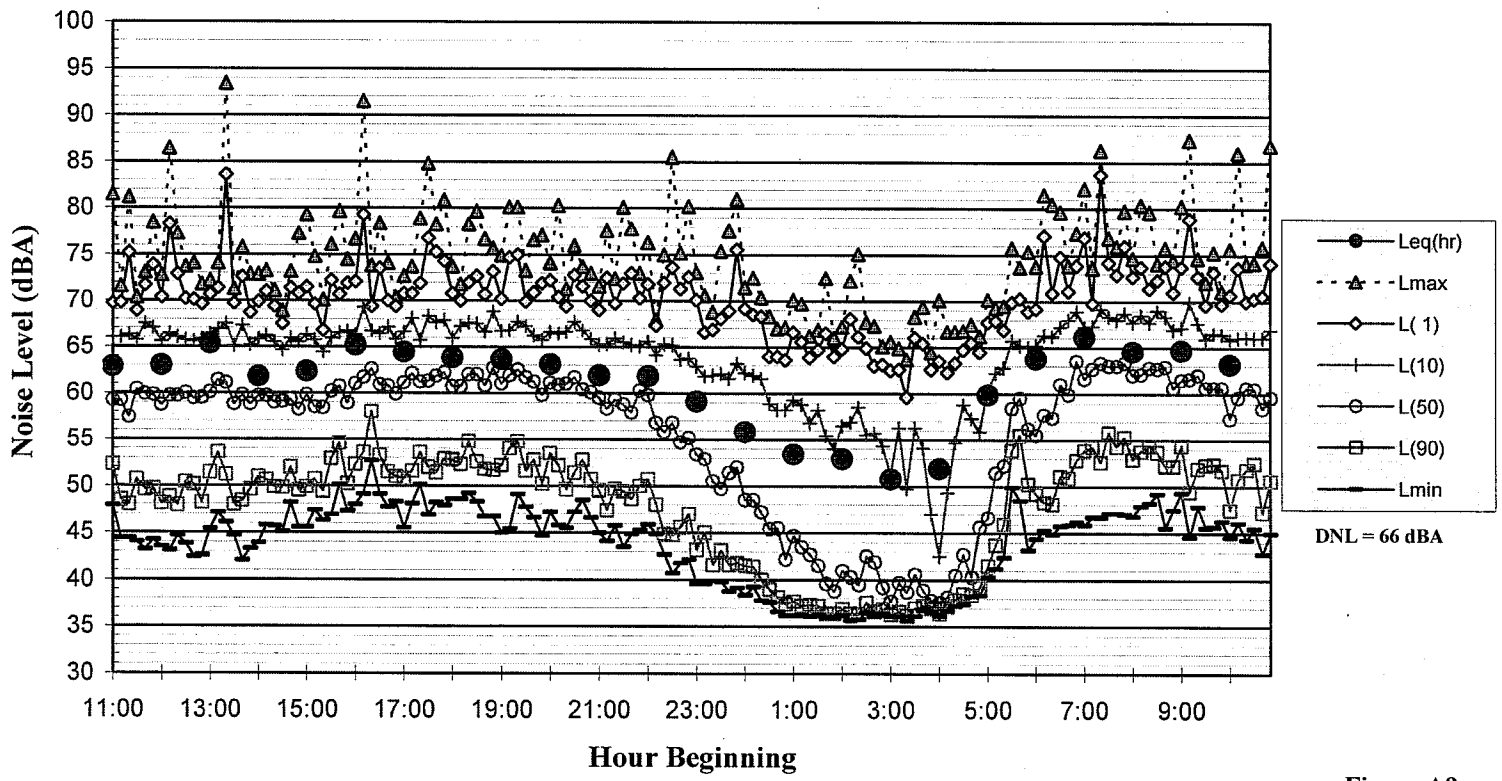

Noise Levels at LT-5
120 feet from the Center of Tully Road
July 6 - 7, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
11:00
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 66 dBA

Figure A9

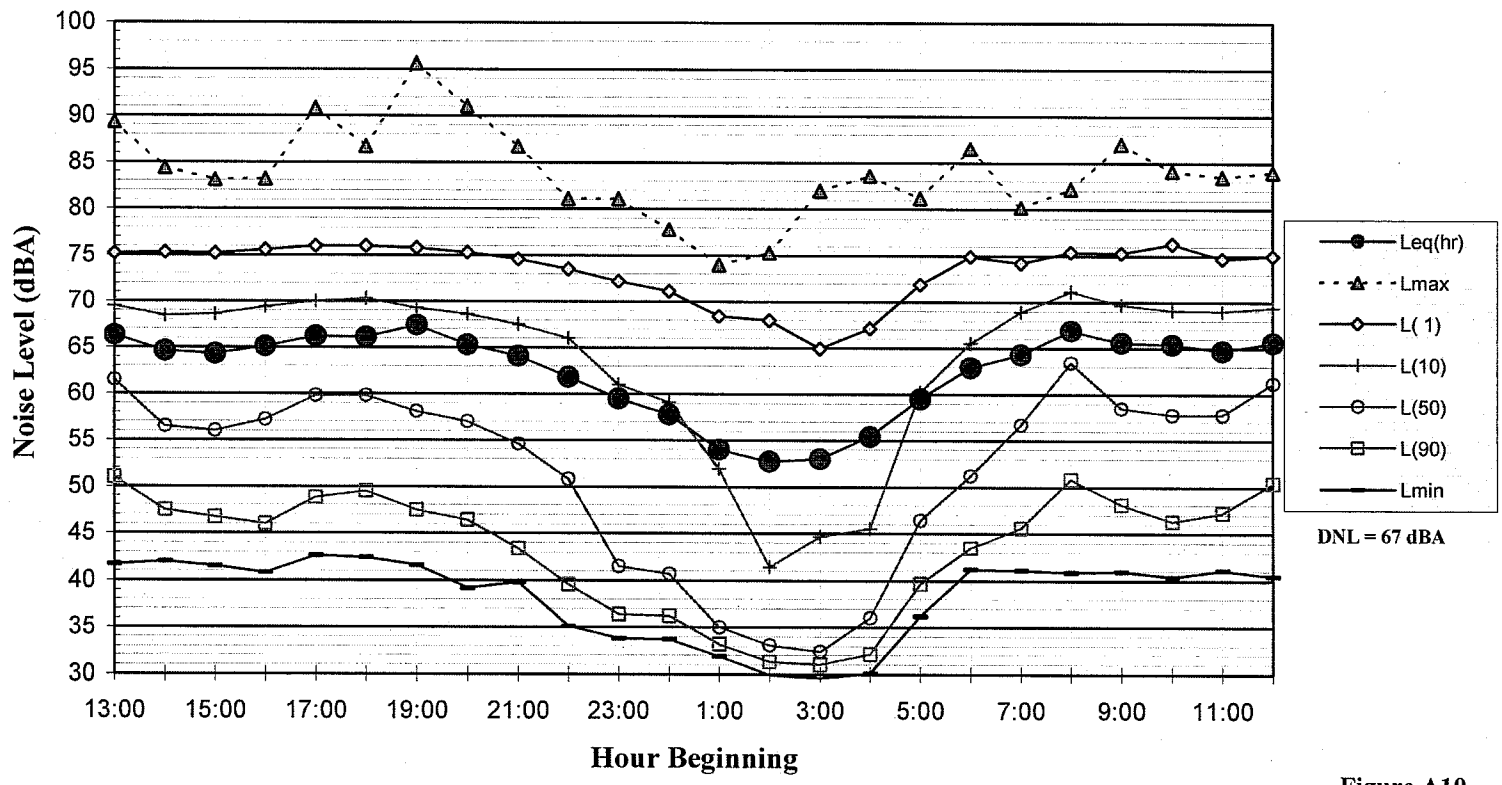

Noise Levels at LT-6
21 feet from the Center of Flint Avenue
June 13 - 14, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 67 dBA

Figure A10

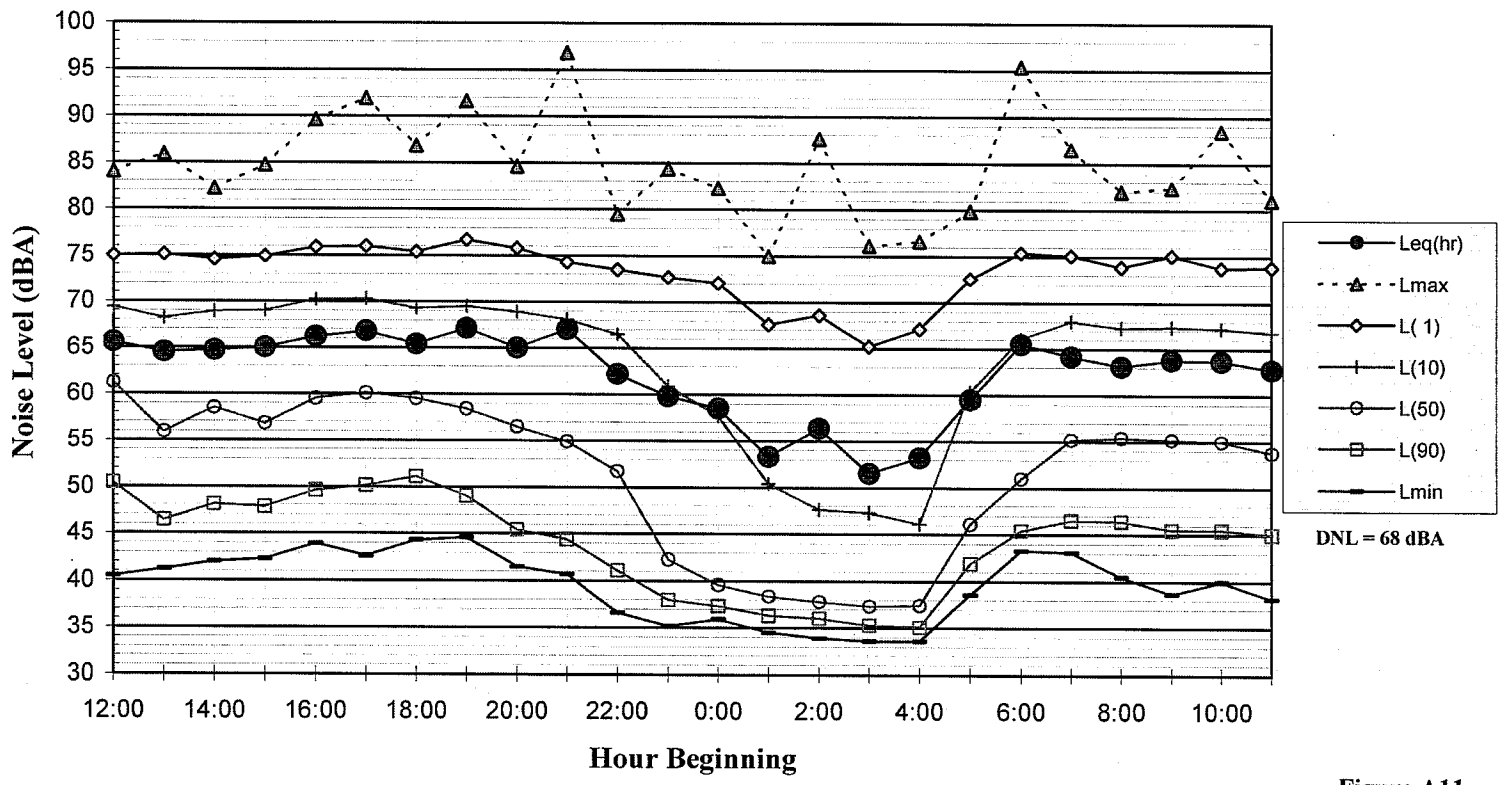

Noise Levels at LT-6
21 feet from the Center of Flint Avenue
June 14 - 15, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
12:00
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 68 dBA

Figure A11

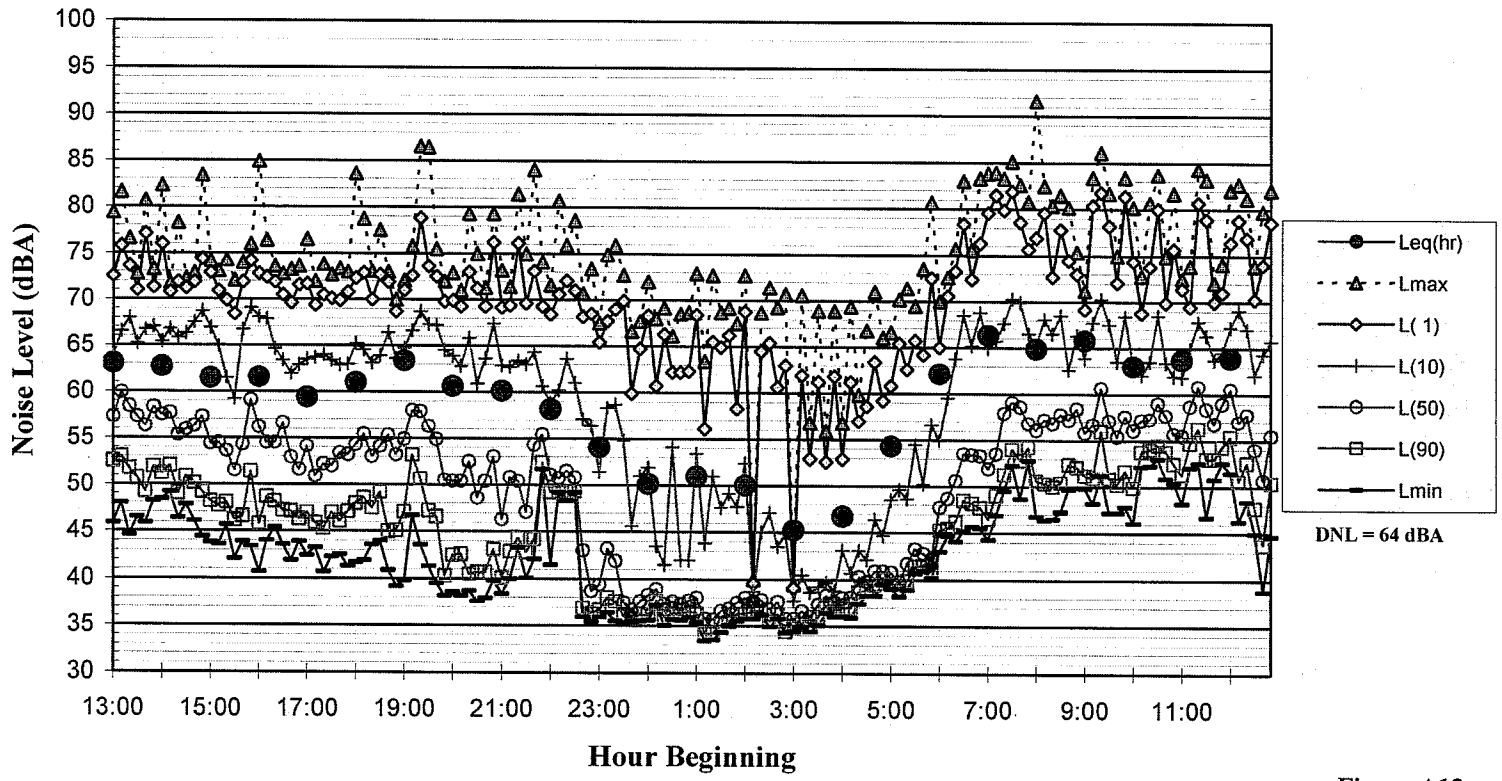

Noise Levels at LT-7
70 feet from the Center of Aborn Road
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 64 dBA

Figure A12

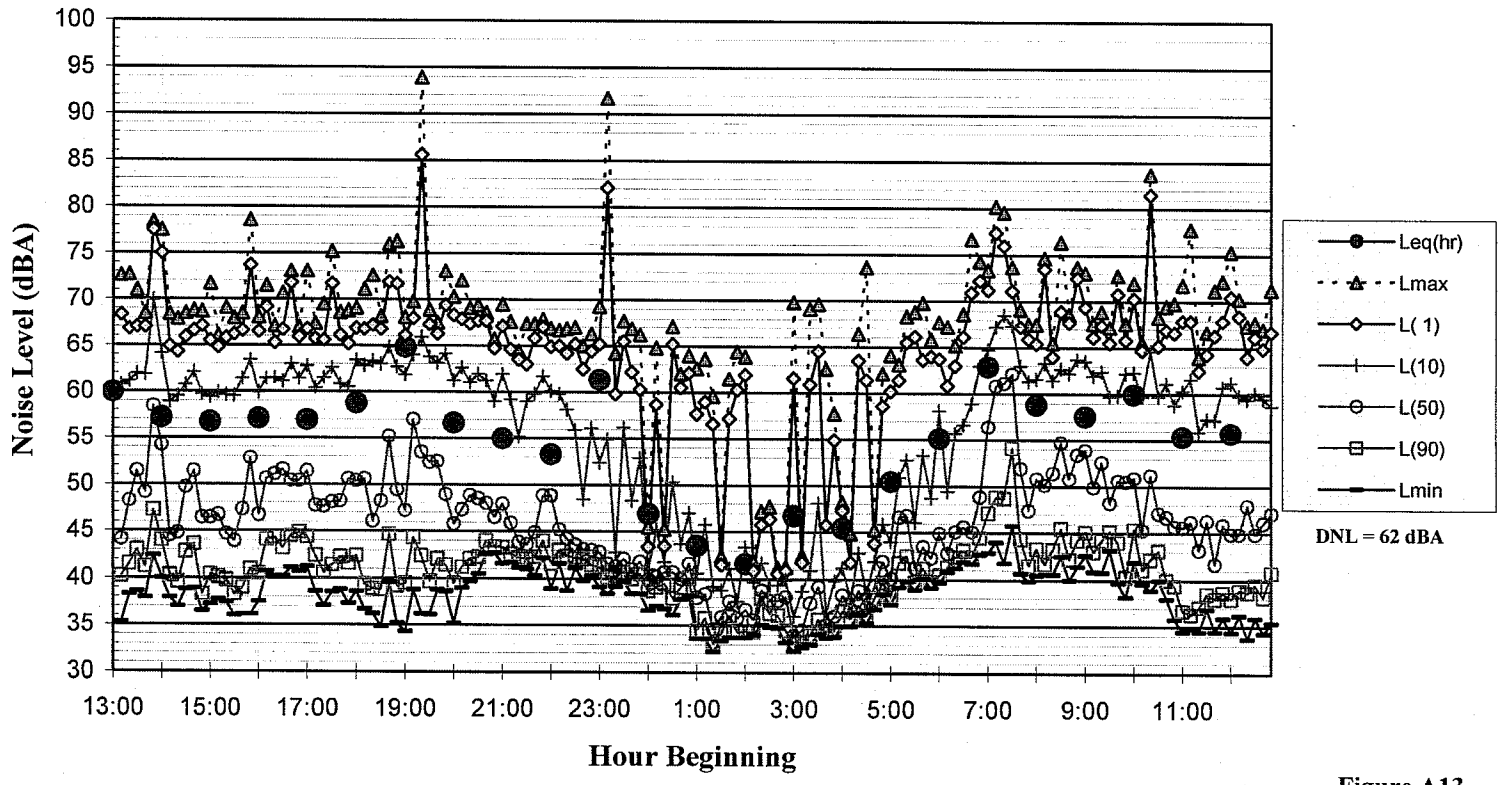

Noise Levels at LT-8
75 feet from the Center of Yerba Buena Road
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 62 dBA

Figure A13

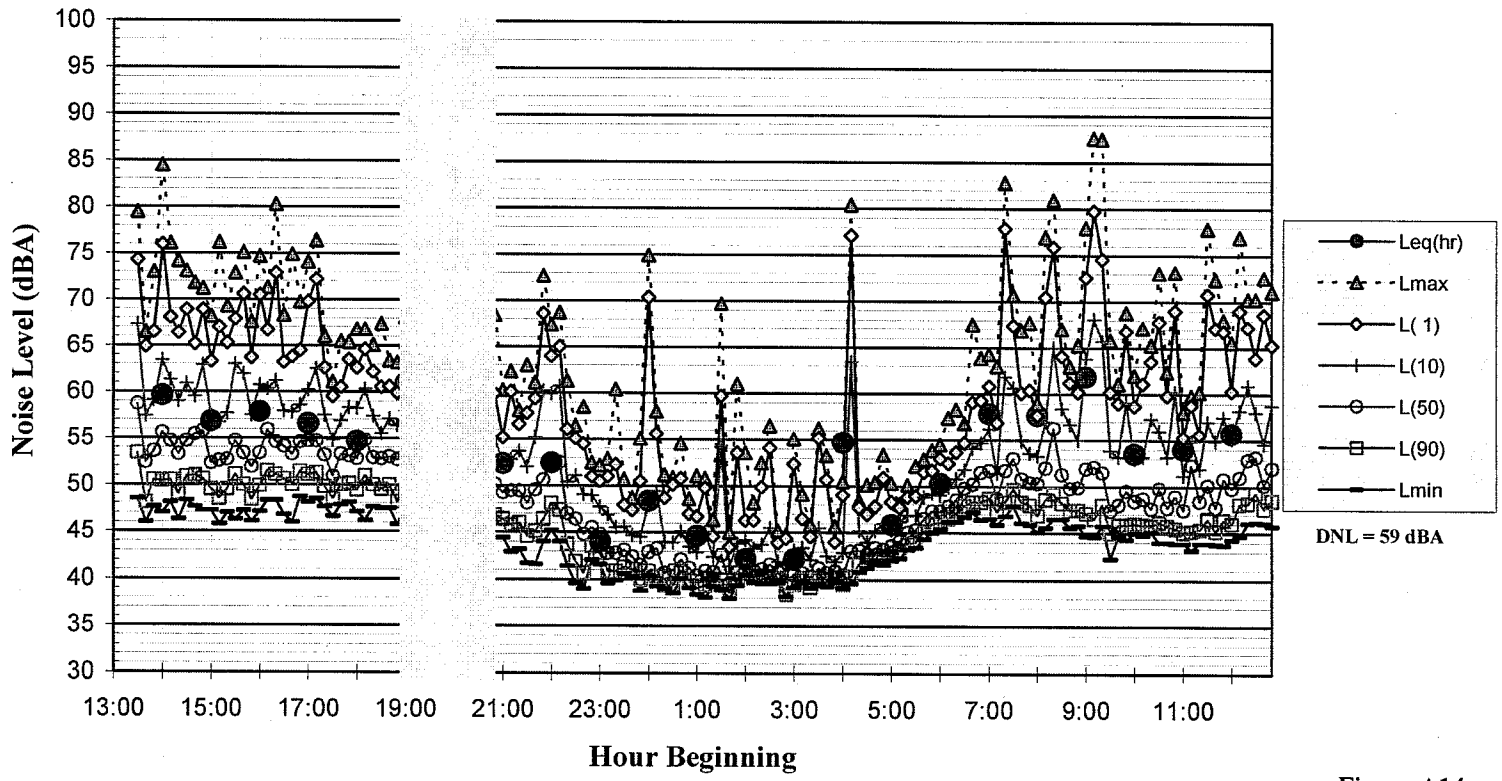

Noise Levels at LT-9
Common Property Line Between Shopping Center and Evergreen College
June 2 - 3, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 59 dBA

Figure A14

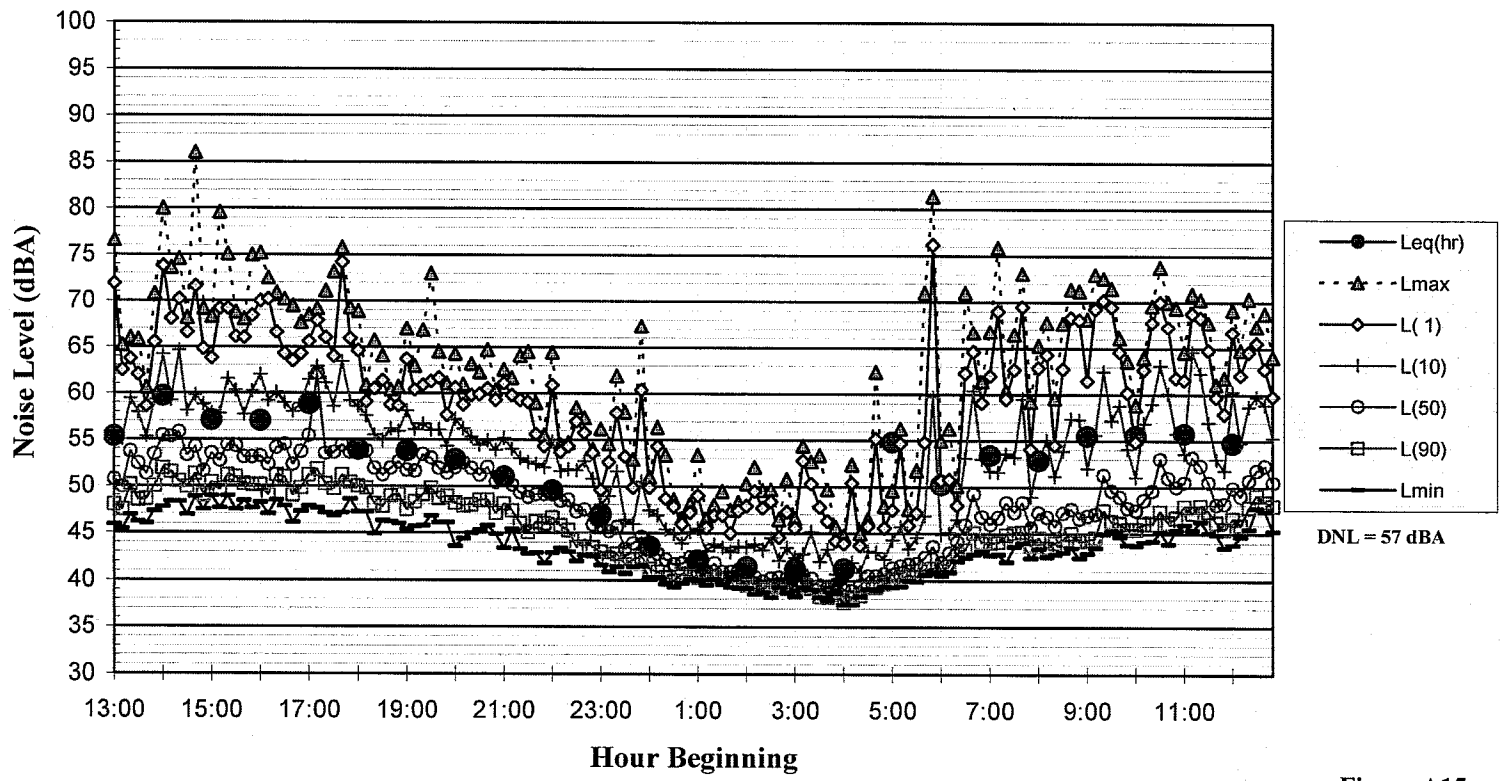

Noise Levels at LT-9
Common Property Line Between Shopping Center and Evergreen College
June 3 - 4, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
13:00
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 57 dBA

Figure A15

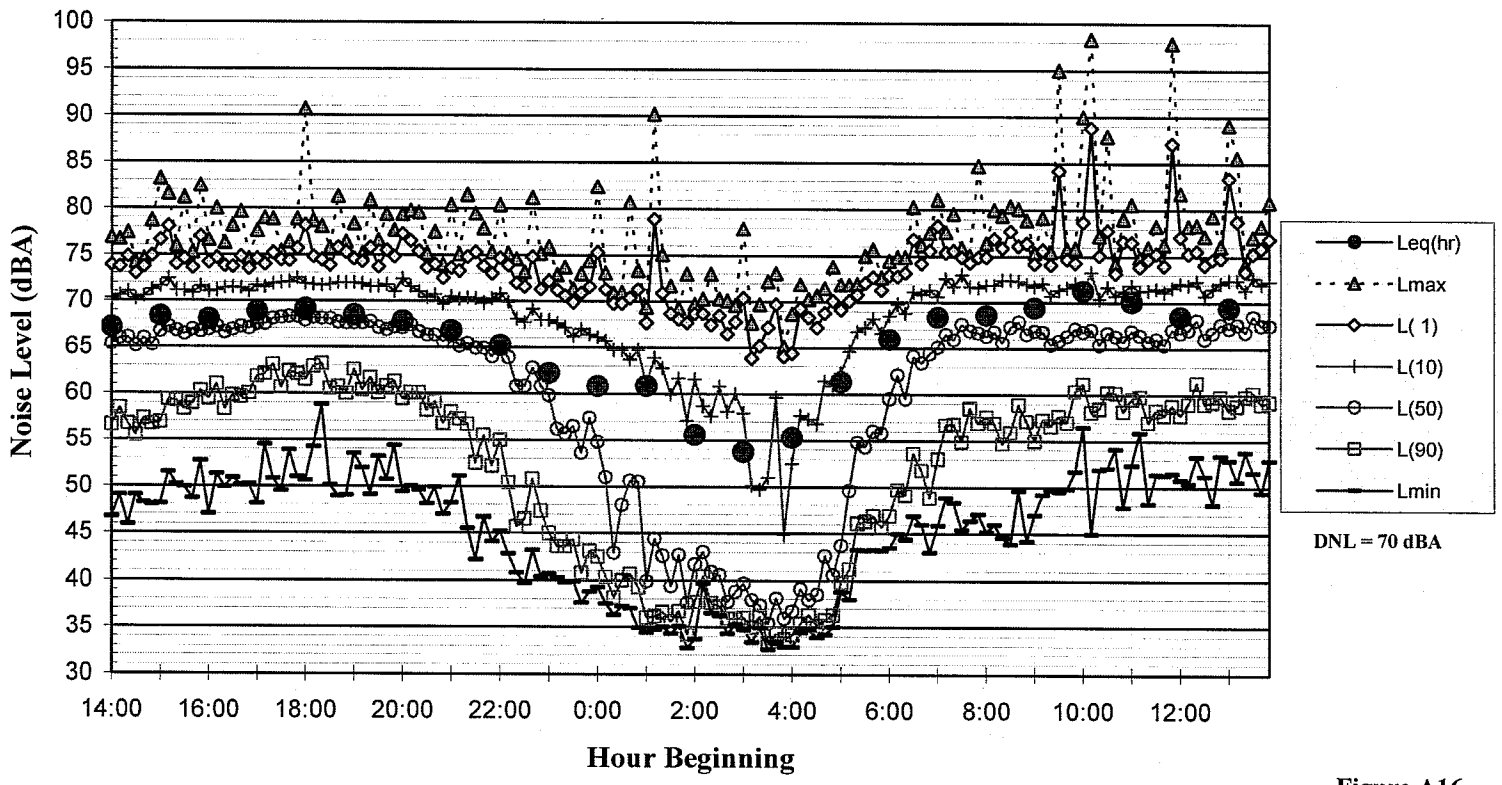

Noise Levels at LT-10
72 feet from the Center of White Road
June 15 - 16, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
14:00
16:00
18:00
20:00
22:00
0:00
2:00
4:00
6:00
8:00
10:00
12:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 70 dBA

Figure A16

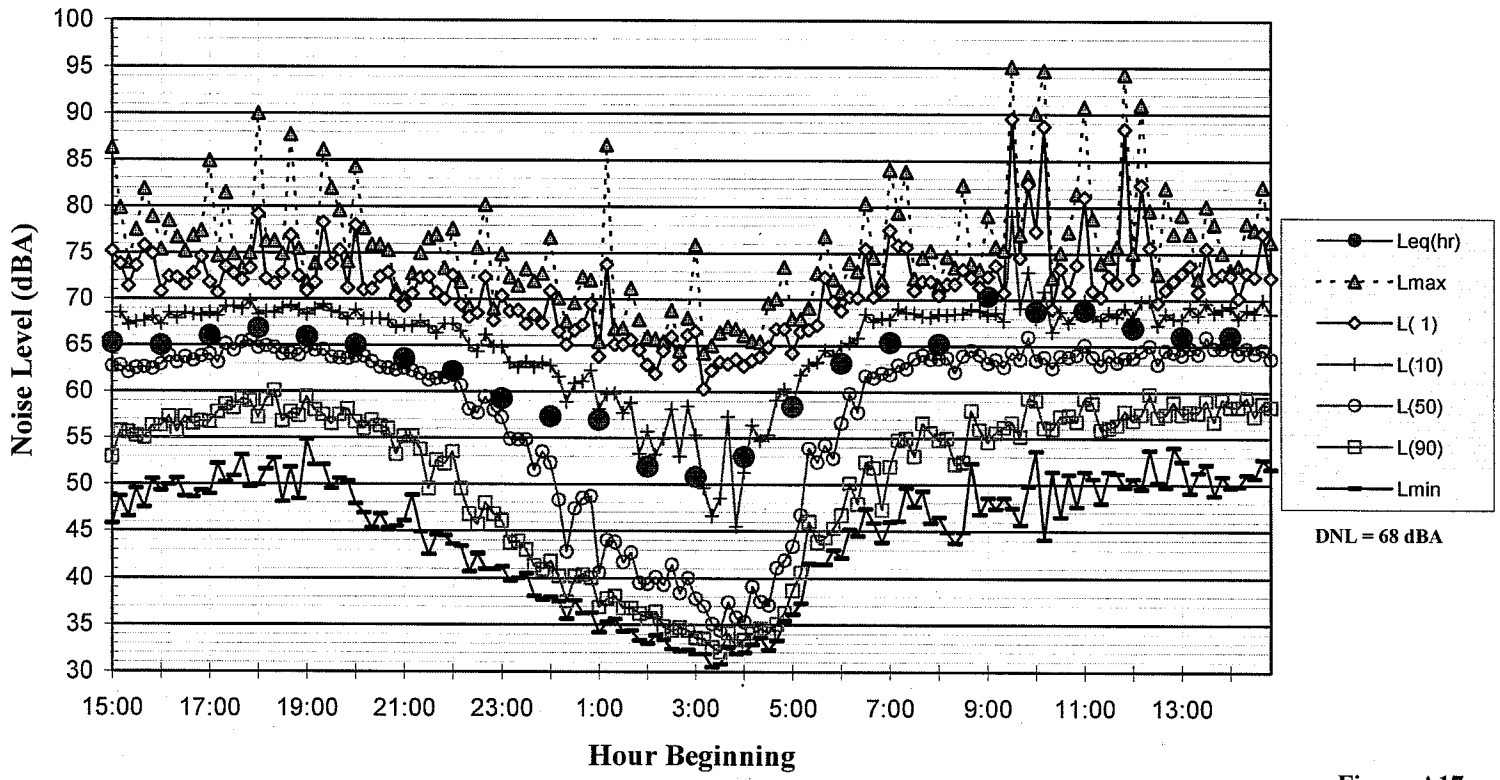

Noise Levels at LT-11
110 feet from the Center of White Road at Westbranch Road
June 15 - 16, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
13:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 68 dBA

Figure A17

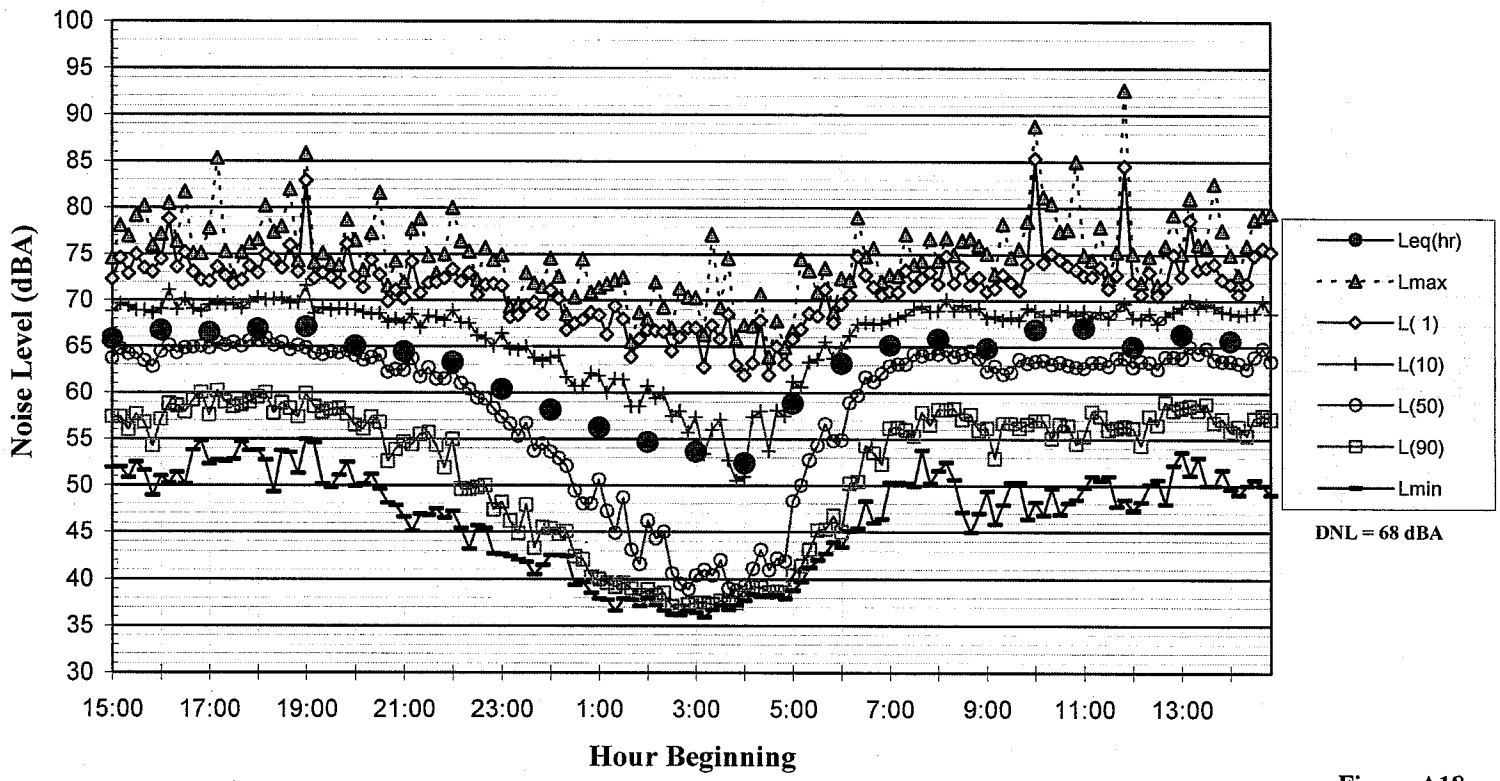

Noise Levels at LT-12
100 feet from the Center of White Road at Allenwood Drive
June 15 - 16, 2005
Noise Level (dBA)
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
13:00
Hour Beginning
Leq(hr)
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
DNL = 68 dBA

Figure A18

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
505 Petaluma Boulevard South
Petaluma, California 94952
Tel: 707-766-7700 *Fax: 707-766-7790*
www.illingworthrodkin.com *illro@illingworthrodkin.com*

January 25, 2006

John Hesler
David J. Powers and Associates
1885 The Alameda, Suite 204
San Jose, CA 95126

VIA E-Mail: jhesler@davidjpowers.com

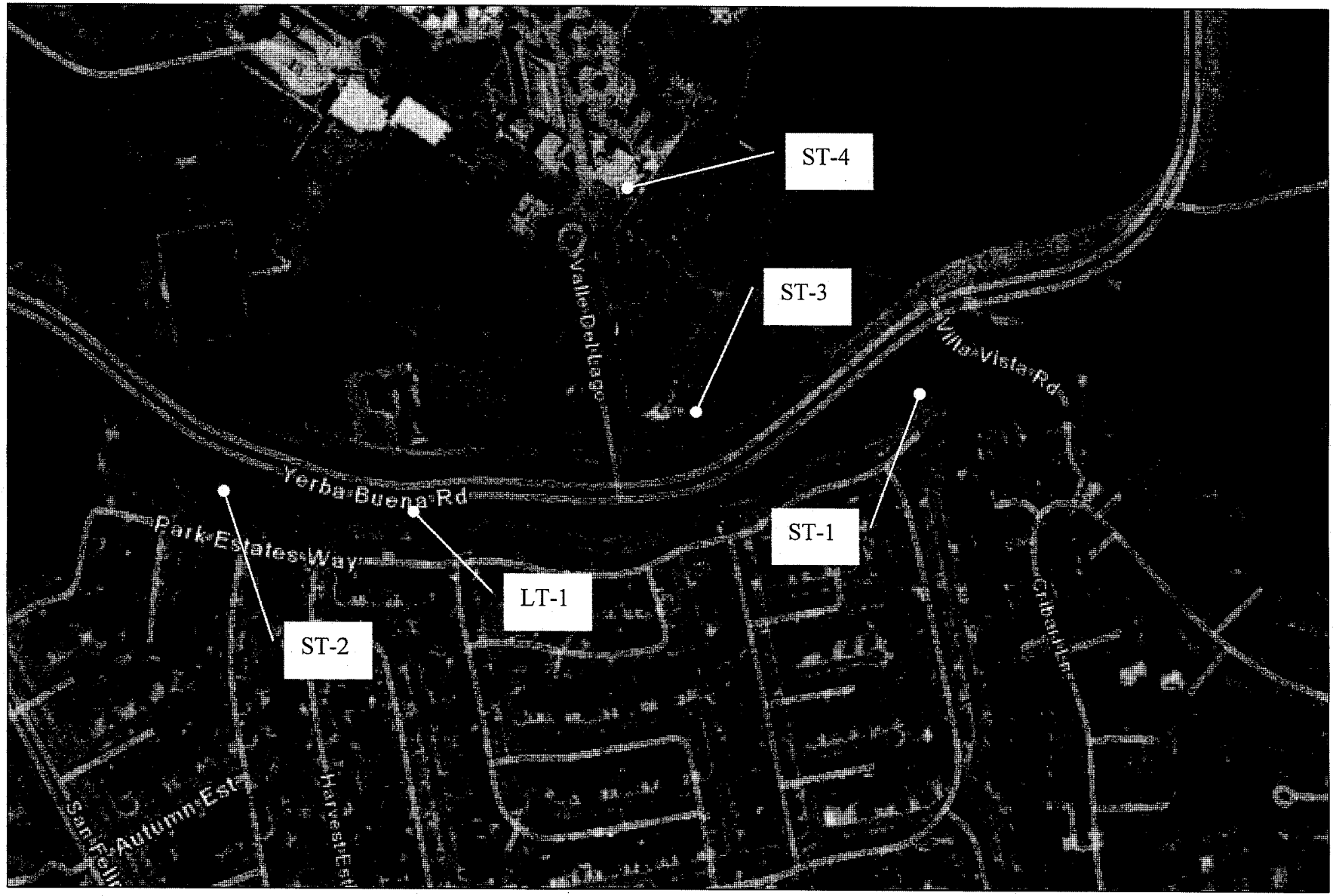
SUBJECT: Evergreen Visioning Project EIR, San Jose, CA
Future Noise Levels along Yerba Buena Road

Dear John:

At your request, we have analyzed potential noise level increases at sensitive receivers along the Yerba Buena Road corridor between San Felipe Road and Old Yerba Buena Road. Noise-sensitive residential land uses are located approximately 250 feet south of Yerba Buena Road along Park Estates Way and Villa Vista Road. Noise sensitive receivers north of the roadway include a daycare just east of Valle Del Lago and Evergreen Valley Community College. Additional noise analyses were made to determine the extent of potential noise level increases at receivers in the corridor and if mitigation could feasibly reduce noise levels expected in the future.

Additional noise measurements were conducted along the corridor between January 4 and January 6, 2006. The noise monitoring survey included one long-term noise measurement and four short-term noise measurements to describe the noise environment at receivers along the corridor. Noise measurement locations are shown on Figure 1. The long-term noise measurement provided data to allow us to calculate existing day-night average noise levels at receivers along Park Estates Way. Short-term noise measurements were made at four additional locations to adequately describe variations in noise levels at receivers north and south of Yerba Buena Road. Data collected during the noise monitoring survey are summarized in Figure 2 and Table 1.

Figure 1 **Noise Measurement Locations**



Noise Levels at LT-1
~ 30 feet from the Center of Park Estates Way in Front of # 3030 Park Estates Way
and ~ 245 feet from the Center of Yerba Buena Road
January 4 - 6, 2006

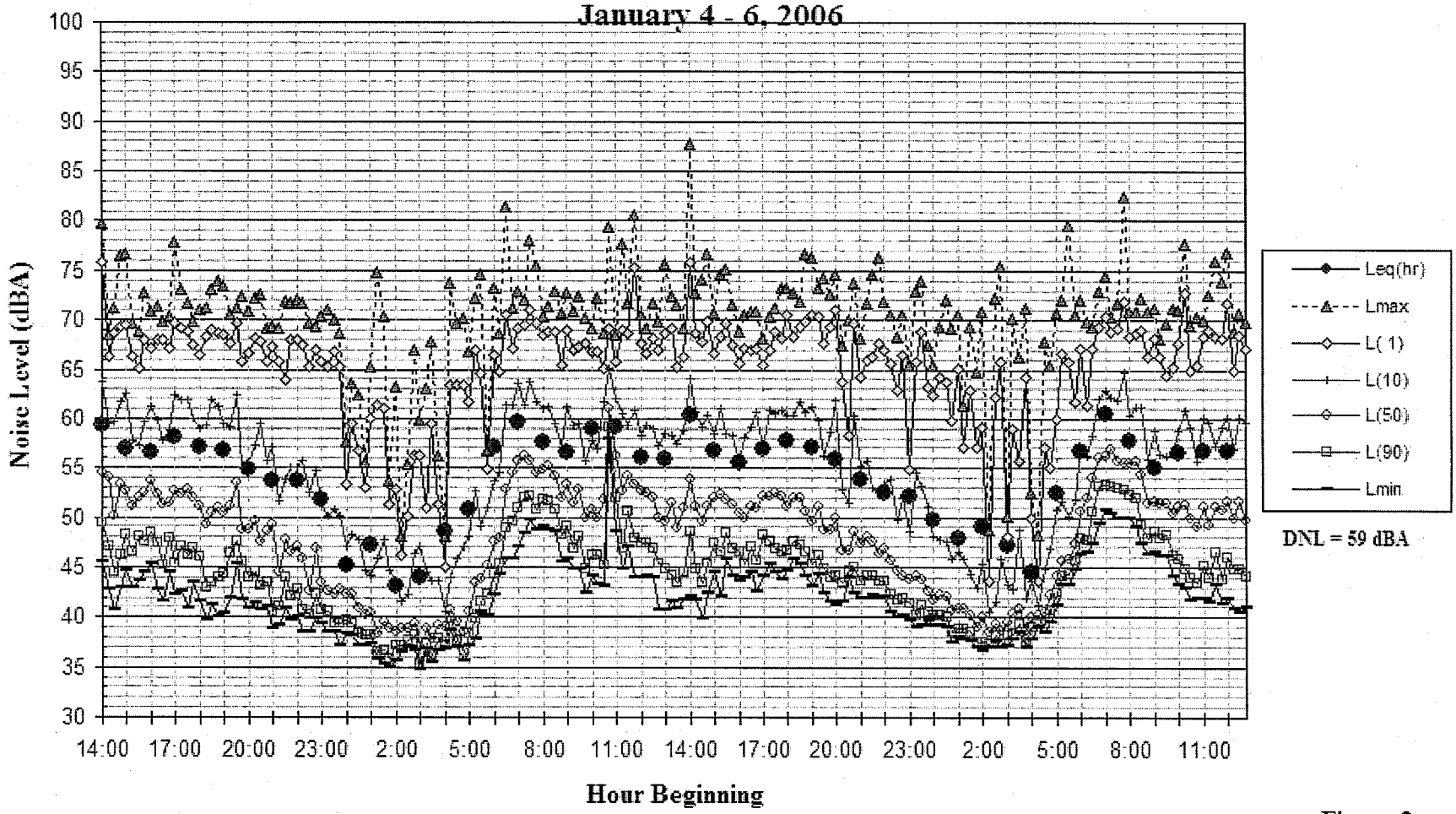


Figure 2

Table 1 Noise Measurement Summary

	Noise Level (dBA)					
Noise Measurement Location (Date/Time)	**Range of Daytime $L_{eq's}$**		**Range of Nighttime $L_{eq's}$**		**DNL**	
LT-1 – Front of 3030 Park Estates Way. (January 4-6, 2006 / 13:30 to 13:30)	54-61		44-57		59-60	
	L_{eq}	**L_{max}**	**L_{10}**	**L_{50}**	**L_{90}**	**DNL (Est.)**
ST-1 – Front of 3132 Park Estates Way. (January 4, 2006 / 13:40 to 14:00)	49	60	52	48	43	56
ST-2 – Front of 5053 Willow Estates Way. (January 4, 2006 / 14:10 to 14:30)	57	71	61	52	46	59
ST-3 – 140 feet from the Center of Yerba Buena Road near Daycare. (January 6, 2006 / 12:40 to 13:00)	53	65	57	50	46	60
ST-4 – Nearest Classrooms at Evergreen Valley College. (January 6, 2006 / 13:10 to 13:30)	57	73	61	54	46	55-60

Noise levels at receivers along the Yerba Buena Road corridor range from about 55 to 60 DNL. The existing daycare and Evergreen Valley College are exposed to the highest environmental noise levels. Noise levels at the daycare result primarily from traffic along Yerba Buena Road. Noise levels at the college, however, result primarily from local activities (e.g., parking lot, campus, bus loop, etc.) with minimal influence from traffic along Yerba Buena Road. Residential land uses located south of Yerba Buena Road are located in noise environments of approximately 56 to 59 DNL. The variation in noise levels at front-line receivers in this subdivision results primarily from local vehicular traffic along Park Estates Way. There is more local traffic at the west end of the subdivision and overall noise levels are approximately 59 DNL. At the east end of the subdivision there is less vehicular traffic along Park Estates Way. The lowest noise levels were measured at ST-1, near the end of Park Estates Way (56 DNL). The noise environment at this position resulted primarily from distant traffic along Yerba Buena Road.

Traffic noise modeling was performed to calculate the relative noise contributions of vehicular traffic along Yerba Buena Road and Park Estates Way. Yerba Buena Road generates approximately 56 DNL. Park Estates Way generates a day-night average noise level of about 55 dBA. The overall DNL ranges from approximately 56 DNL at ST-1 (limited local traffic) to about 59 DNL at ST-2 (regular local traffic).

Project generated traffic noise level increases were calculated along Yerba Buena Road east of San Felipe Road. A comparison of existing, background, and project scenarios indicated that DNL noise levels are anticipated to increase by about 4 to 6 dBA. These increases would be expected at receivers represented by ST-1 and ST-3 because Yerba Buena Road is the most significant source of noise at these receivers. Future DNL noise levels would range from 60 to

62 dBA at receivers represented by ST-1. Future noise levels at the daycare (ST-3) are calculated to range from 64 to 66 DNL. Receivers represented by ST-2 (west of Silver Estates Way) would experience future noise level increases of approximately 2 to 4 dBA. The noise level increases associated with the Evergreen Visioning Project are less at receivers represented by ST-2 because these receivers are also exposed to noise levels generated by traffic along Park Estates Way. Future DNL noise levels would range from 61 to 63 dBA at receivers represented by ST-2.

TABLE 2 Future Traffic Noise Levels by Development Scenario (DNL, dB)

Receiver	Existing	Development Scenario					
		I	II	III	IV	V	VI
ST-1	56	61	60	60	60	61	63
ST-2	59	62	61	61	61	62	63
ST-3	60	65	64	64	64	65	66

As described in the Significance Criteria of the Evergreen Visioning Project EIR Noise Report, a substantial increase to noise levels would occur if the project resulted in an increase of 3 dBA DNL or greater at noise-sensitive land uses where noise levels would exceed 60 DNL. A 5-dBA increase could be tolerated where overall noise levels would remain at or below 60 DNL. Noise levels would substantially increase at receivers represented by ST-1 and ST-3 and would exceed noise levels considered satisfactory for the land uses. Noise levels would substantially increase under development scenarios I, V, and VI. Development scenarios II, II, and IV would generate less than significant noise level increases as future noise levels are expected to increase by 4 dB and would remain at the City's acceptable noise level for residential uses. Noise levels would substantially increase at receivers represented by ST-2 under development scenarios I, V, and VI. These scenarios would increase noise levels by at least 3 dB and overall noise levels would exceed 60 DNL. In comparison to already approved projects, the Evergreen Visioning Project would result in noise levels within plus or minus 1 dB of background noise levels.

Preliminary barrier calculations were made to test the effectiveness of a noise barrier constructed along the south side of Yerba Buena Road. The results of these calculations indicate that future noise levels could be reduced to a DNL of 60 dBA or less at receivers along Park Estates Drive with the construction of a solid six-foot noise barrier. The final detailed design of this barrier should be confirmed and refined based on topographical data of Yerba Buena Road and residential receivers south of the roadway. Similarly, a noise barrier could be designed to reduce exterior noise levels at the daycare north of Yerba Buena Road.

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This concludes our analysis of future noise levels along Yerba Buena Road. If you have any questions, or if we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Michael S. Thill
Senior Consultant
ILLINGWORTH & RODKIN, INC.

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