

## **APPENDIX F**

### **NOISE**

Noise Assessment For:  
**PALAZZO WESTWOOD**  
**CITY OF LOS ANGELES**

Prepared For:  
**ENVICOM CORPORATION**  
28328 Agoura Road  
Agoura Hills, CA 91301

Prepared By:  
Fred Greve P.E.  
Matthew B. Jones  
**MESTRE GREVE ASSOCIATES**  
27812 El Lazo  
Laguna Niguel, CA 92677  
949•349•0671  
Fax 949•349•0679

January 20, 2003  
Report#01-81SMa

# Table Of Contents

---

1.0 EXISTING SETTING .....	1
1.1 <i>Project Description</i> .....	1
1.2 <i>Background Information on Noise</i> .....	1
1.2.1 Noise Criteria Background.....	1
1.2.2 Noise Assessment Metrics .....	3
1.2.3 Noise Criteria.....	4
1.3 <i>Existing Noise Measurements</i> .....	6
1.4 <i>Existing Roadway Noise Levels</i> .....	7
2.0 POTENTIAL NOISE IMPACTS .....	11
2.1 <i>Noise Impact Criteria</i> .....	11
2.2 <i>Temporary Impacts</i> .....	12
2.2.1 Construction Noise .....	12
2.3 <i>Long Term Off-Site Impacts</i> .....	12
2.3.1 Traffic Noise .....	13
2.3.2 On-Site Activities .....	20
2.4 <i>Long Term On-Site Impacts</i> .....	21
3.0 MITIGATION MEASURES .....	26
3.1 <i>Temporary Impacts</i> .....	26
3.2 <i>Long Term Off-Site Impacts</i> .....	26
3.3 <i>Long Term On-Site Impacts</i> .....	26
4.0 UNAVOIDABLE NOISE IMPACTS.....	27
APPENDIX .....	28

## **1.0 EXISTING SETTING**

### **1.1 Project Description**

The project calls for a mixed-use development in the Westwood Village Area of the City of Los Angeles. The project site is bounded by Tiverton Avenue on the east, the alley east of Westwood Boulevard on the west, Weyburn Boulevard on the north and just north of Kinross Avenue on the south. Glendon Avenue bisects the project site. A vicinity map is presented in Exhibit 1.

Currently, the site is occupied by a Cinema, an apartment building with 42 units and approximately 29,400 square feet of specialty retail. The majority of the site is currently an at grade parking lot. All of the existing buildings on the project site will be demolished as a part of this project.

The project proposes construction of a 54,000 square foot supermarket, a 61,000 square foot shopping center, and 350 apartment units. The supermarket and shopping center will be constructed at ground level with the apartment units in four levels above the retail level. Additionally, three levels of below grade parking are proposed. A site plan showing the retail level is shown in Exhibit 2 and a site plan showing the first level of the residential uses is shown in Exhibit 3.

This report will analyze the potential noise impacts associated with this project. Traffic volume information used in this report to project traffic noise levels was provided by Crain & Associates and is presented in their traffic study for the project. Project generated traffic noise impacts are evaluated, as are traffic noise impacts on the project site. Noise impacts from project site activity on nearby residential areas are also discussed.

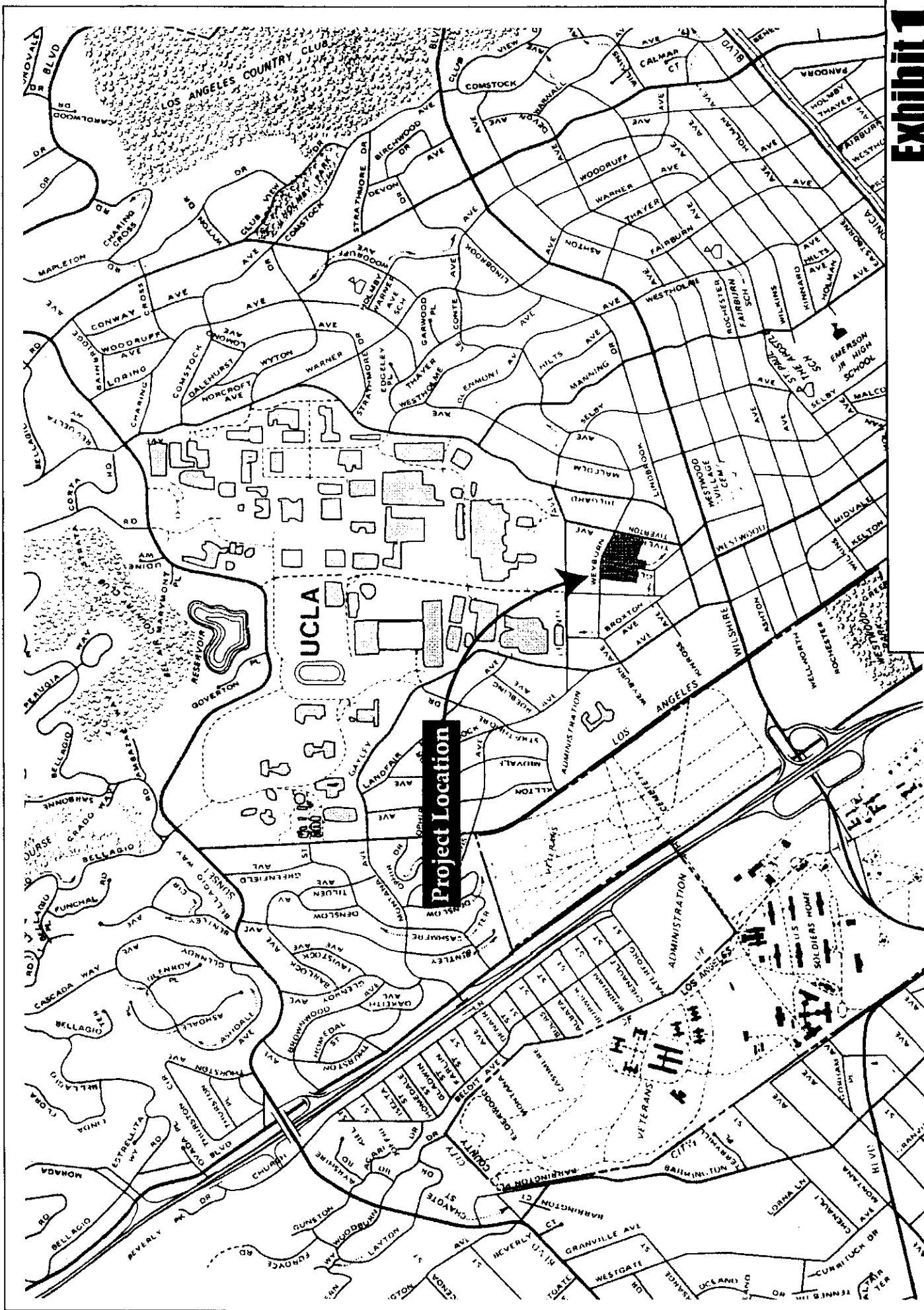
### **1.2 Background Information on Noise**

#### **1.2.1 Noise Criteria Background**

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. Exhibit 4 provides examples of various noises and their typical A-weighted noise level.

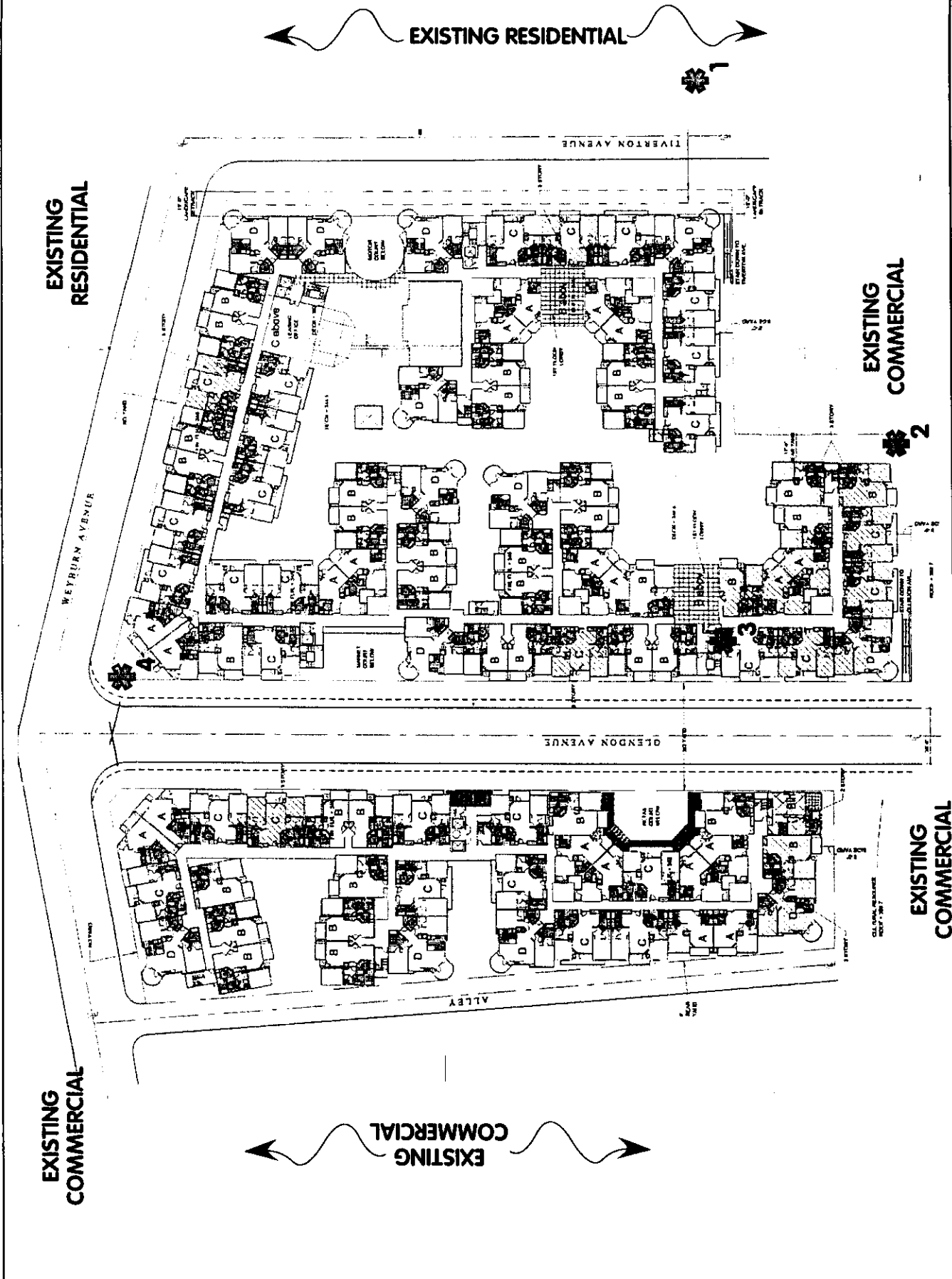
# Exhibit 1 Vicinity Map



**Mestre Greve Associates**

# Exhibit 3

## Second Level Site Plan



NOISE MEASUREMENT  
# LOCATION



## SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS

Numbers in Parentheses are the A-Scale Weighted Sound Levels for that Noise Event

dB(A)	OVER-ALL LEVEL Sound Pressure Level Reference: 0.0002 Microbars	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130		Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	UNCOMFORTABLY LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Ft. (110)	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100		Jet Flyover @ 1000 Ft. (103) Boeing 707, DC-8 @ 6080 Ft. Before Landing (106) Bell J-2A Helicopter @ 100 Ft. (100)		100 dB(A) 8 Times as Loud
90	VERY LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 Ft. Before Landing (97) Motorcycle @ 25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Prop. Airplane Flyover @ 1000 Ft. (88) Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 + or - 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
20	JUST AUDIBLE	Desert at Night (dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Beland, "Outdoor Noise in the Metropolitan Environment,"  
Published by the City of Los Angeles, 1970, p.2.



Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, temperature and humidity also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels.

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criteria is based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

**HEARING LOSS** is not a concern in community noise situations of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, is not sufficiently loud to cause hearing loss.

**SPEECH INTERFERENCE** is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level.

**SLEEP INTERFERENCE** is a major noise concern for traffic noise. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

**PHYSIOLOGICAL RESPONSES** are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are sign of harm.

**ANNOYANCE** is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

### **1.2.2 Noise Assessment Metrics**

The description, analysis and reporting of community noise levels around communities is made difficult by the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these metrics attempts to quantify noise levels with respect to community response. Most of the metrics use the A-Weighted noise level to quantify noise impacts on humans. A-Weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Noise metrics can be divided into two categories: single event and cumulative. Single-event metrics describe the noise levels from an individual event such as an aircraft fly over or perhaps a heavy equipment pass-by. Cumulative metrics average the total noise over a specific time period, which is typically 1 or 24-hours for community noise problems. For this type of analysis, cumulative noise metrics will be used.

Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on man, (2) the variety of noises found in the environment, (3) the variations in noise levels that occur as a person moves through the environment, and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. Two of the predominate noise scales are the: Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs.

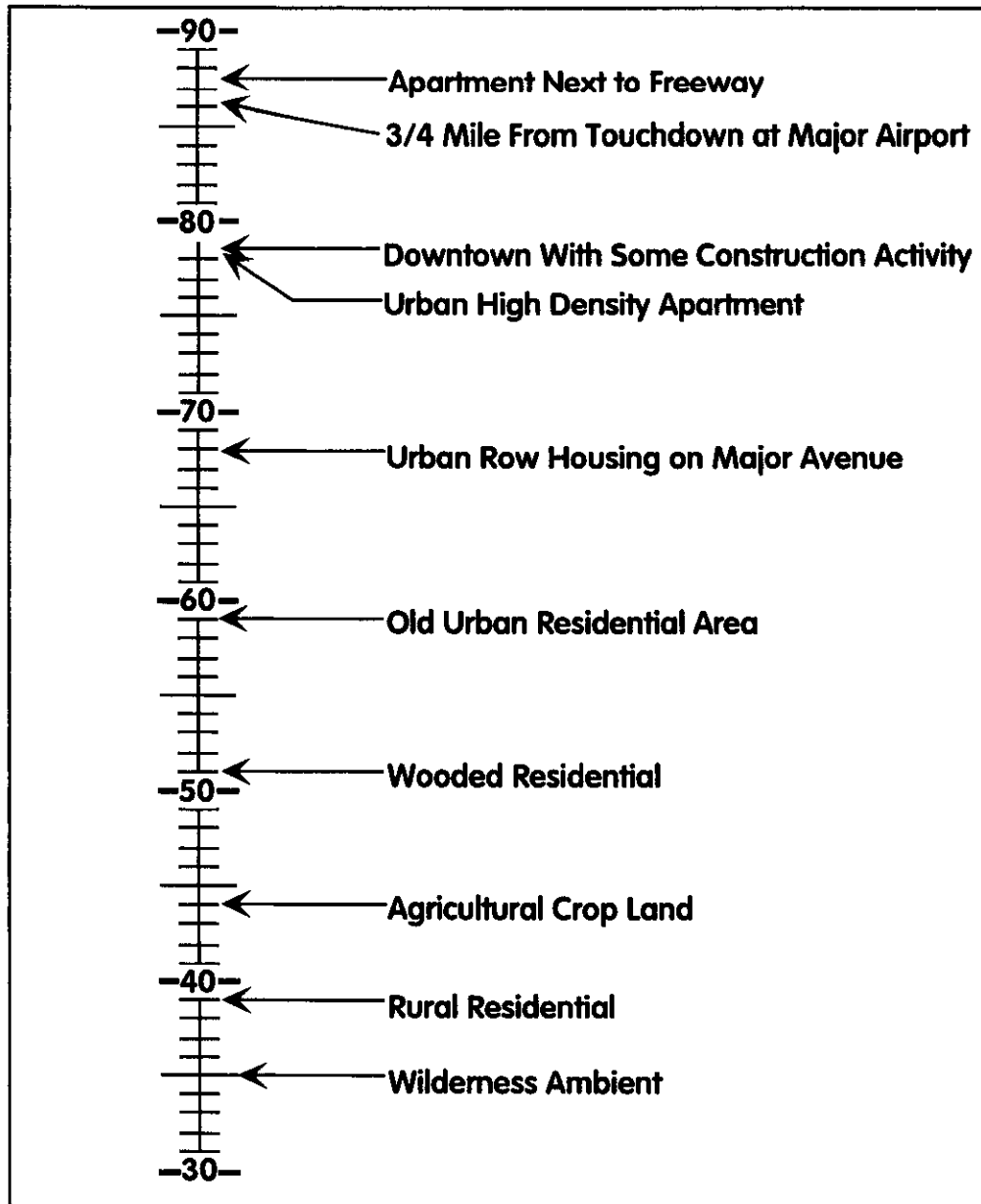
**LEQ** is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1 hour. This 1 hour noise level can also be referred to as the Hourly Noise Level (HNL). It is the energy sum of all the events and background noise levels that occur during that time period.

**CNEL**, Community Noise Equivalent Level, is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of 60 dBA," "60 dBA CNEL," or simply "60 CNEL." Typical noise levels in terms of the CNEL scale for different types of communities are presented in Exhibit 5.

**Ldn**, the day-night scale is similar to the CNEL scale except that evening noises are not penalized. It is a measure of the overall noise experienced during an entire day. The time-weighted refers to the fact that noise that occurs during certain sensitive time periods is

## CNEL

## Outdoor Location



Source:

U.S. Environmental Protection Agency, "Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure," EPA Report NTID 73.4, 1973.

penalized for occurring at these times. In the Ldn scale, those noise levels that occur during the night (10 pm to 7 am) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where home and sleep is the most probable activity.

L(%) is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example since 5 minutes is 25% of 20 minutes, L(25) is the noise level that is equal to or exceeded for five minutes in a twenty minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example most daytime City, state and county Noise Ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words the Noise Ordinance states that no noise level should exceed 55 dBA for more than fifty percent of a given period.

### **1.2.3 Noise Criteria**

#### **City of Los Angeles Noise Element**

Exhibit 1 of the City of Los Angeles Noise Element presents “Guidelines for Noise Compatible Land Use” which is reproduced in Table 1 below. This exhibit classifies various land uses in terms of Normally Acceptable, Conditionally Acceptable, Normally Unacceptable and Unacceptable based on their noise exposure in the Community Noise Equivalent Level (CNEL) scale. A land use exposed to noise levels that are considered Normally Acceptable indicates that the land use is compatible with the noise environment and no special noise insulation is required. If new construction is exposed to a Conditionally Acceptable noise level, a noise analysis is typically required to determine noise mitigation required to reduce noise levels to a compatible level. Conventional construction will normally suffice with a fresh air supply system or air conditioning to allow windows to remain closed. A noise analysis is also required for new construction exposed to a Normally Unacceptable noise level. The analysis is required to determine mitigation measures, which may be significant, to reduce noise levels to a compatible level. In general, development is discouraged for land uses in areas this designation. Proposed development exposed to Clearly Unacceptable noise levels should generally not be undertaken.

**Table 1**  
**City of Los Angeles Noise Guidelines**

Land Use	Community Noise Exposure, CNEL, dB			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Single Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 70
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging - Motels, Hotels	50 - 65	60 - 70	70 - 80	above 80
Auditoriums, Concert Halls, Amphitheaters	--	50 - 70	--	above 65
Sports Arena, Outdoor Spectator Sports	--	50 - 75	--	above 70
Playgrounds, Neighborhood Parks	50 - 70	--	67 - 75	above 72
Golf Courses, riding Stables, Water Recreation, Cemeteries	50 - 75	--	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	--
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	--

**Key:**

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

**Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

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

**Clearly Unacceptable:** New construction or development should generally not be undertaken. Source: City of Los Angeles.

Noise Element policies establish a 65 CNEL standard for outdoor residential areas and a 45 CNEL standard for indoor residential areas.

**City of Los Angeles Municipal Code**

Chapter IX – Building Regulations, Article 1 – Buildings, Section 91.1208 – Sound Transmission Control of the City of Los Angeles Municipal Code establishes maximum interior noise levels attributable to exterior sources in habitable rooms of residences to be 45 CNEL. Compliance with this limit must be shown with either existing or future noise levels whichever is worst-case. Additionally, future noise levels must be predicted for a period of at least 10 years from the time of building permit application.

**City of Los Angeles Noise Ordinance**

The Los Angeles Municipal Code (Chapter XI-Noise Regulation) establishes the noise standards for various noise sources generated on private property affecting neighboring properties. Parking lot noise sources are not specifically regulated by the code. The section of the code (Article 6-General Noise) is what is referred to as a “nuisance ordinance” in that it does not contain any specific noise limits that cannot be exceeded. In general, these types of ordinances are difficult to enforce because they do not define specific noise levels that are considered nuisances. The remainder of ordinance does set specific restrictions for specific activities. Two of these sections relate to the project.

Section 112.02 regulates air conditioning, refrigeration, heating pumping and filtering equipment. This equipment cannot cause the noise level on any adjacent occupied property to exceed the ambient noise level by more than 5 dB.

Section 114.03 regulates loading and unloading of vehicles at loading docks. This section restricts any person to “load or unload any vehicle, or operate any dollies, carts, forklifts, or other wheeled equipment which causes any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building” to the hours between 7:00 a.m. to 10:00 p.m.

**1.3 Existing Noise Measurements**

To determine the existing noise environment at the proposed project site, ambient noise measurements were made on March 13, 2001 between 2:20 p.m. and 3:30 p.m. The locations of the noise measurement sites are shown in Exhibit 2.

The measurements were made with a Brüel & Kjær Modular Precision Sound Level Meter, Type 2236. The systems were calibrated before and after each measurement series with calibration traceable to the National Institute of Standards and Technology. The wind speeds during the time of measurements were light (0 to 5 miles per hour).

Fifteen minute measurements were made at each of the measurement sites except Site 2. Site 2 was located near the southeast corner of the existing apartment building. A large fan was quite audible at this location. Restricted access limited determination of the exact source of the noise but it was observed that the source was coming from off the project site and likely a parking garage exhaust fan for the office building located south of the project site. Site 1 was located at the front yard of the existing residences located across Tiverton Avenue. Sites 3 and 4 were located along the east side of Glendon Avenue. Site 3 was located near the southern end of the project and Site 4 was near the northern end near Weyburn Avenue. The results of the noise measurements are presented in Table 2.

The measurement results are presented in terms of the equivalent noise levels (Leq), maximum (Lmax) noise levels, and minimum (Lmin) noise levels. The Leq represents the average noise level during the measurement period. The Lmax and Lmin noise levels are the maximum and minimum noise levels during the measurement period. In addition, the L50 and L90 percentile noise levels are presented. These represent the noise levels that are exceeded 50 and 90 percent of the time. The L50 is the median noise level and the L90 represents the background noise level.

**Table 2**  
**Existing Noise Measurements**

Site	Start	Leq	Lmax	L50	L90	Lmin
1	2:28 PM	59	73	57	56	54
2	2:52 PM	65	68	65	65	64
3	3:00 PM	60	73	56	54	52
4	3:18 PM	63	76	61	58	57

The noise environment in the project area is primarily determined by the local traffic on Glendon Avenue, Weyburn Avenue and Tiverton Avenue. Activity in the at-grade parking lot contributes to the noise levels in the project area. During the measurements, the eastern side of the parking lot was being used as a staging area for a movie or television production. A diesel generator was slightly audible during the measurements at Site 1. In addition, during this measurement there was some noise audible as equipment was loaded and removed from a truck in the parking lot. This activity did not last long nor did it generate noise levels significantly above the ambient level.

The noise levels around the project are moderate. Sites 3 and 4 were located about 10 feet from the edge Glendon Avenue. Tiverton experiences less traffic than Glendon resulting in lower noise levels at Site 1 than at Sites 3 and 4. Site 4 experienced slightly higher levels than Site 3 because it was located near Weyburn Avenue. The maximum noise levels at these three sites were caused by trucks or busses on the adjacent roadways.

The noise level at Site 2 was determined by the fan noise mentioned previously. The maximum noise level was caused by a crow in a nearby tree that crowed twice during the measurements. The noise generated by the fan was essentially a constant 65 dB. Based on the measurements at Sites 1 and 3, this fan appears to generate a noise level 5 dB greater than the ambient level in violation of Section 112.02 of the Los Angeles Municipal Code.

#### **1.4 Existing Roadway Noise Levels**

An estimate of highway noise levels in terms of CNEL was computed for the roadways affected by project traffic. The Highway Noise Model published by the Federal Highway Administration ("FHWA Highway Traffic Noise Prediction Model," FHWA-RD-77-108, December, 1978) was utilized. The CALVENO noise emission curves developed by Caltrans were used with the FHWA model. These curves better model the California vehicle mix. The FHWA Model uses traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute the "equivalent noise level." A computer code has been written which computes equivalent noise levels for each of the time periods used in the calculation of CNEL. Weighting these noise levels and summing

them results in the CNEL for the traffic projections used. CNEL contours are found by iterating over many distances until the distances to the 60, 65, and 70 CNEL contours are found.

The distances to the existing 60, 65 and 70 CNEL contours for the roadways whose noise levels will be affected by project traffic are given in Table 3. These represent the distance from the centerline of the road to the contour value shown. The CNEL at 100 feet from the roadway centerline is also presented. The values given in Table 3 represent existing noise levels and do not take into account the effect of any existing noise barriers or topography that may affect ambient noise levels. Areas with noise barriers or structures that break line of sight from a receptor to the roadway will experience lower levels. Traffic volumes, speeds and mixes used in calculating these noise levels can be found in the appendix. Noise levels along all roadways examined in the traffic study can be found in the appendix.

**Table 3**  
**Modeled Existing Roadway Traffic Noise Levels**

Roadway Segment	CNEL @ 100'†	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Montana Blvd.</b>				
East of Sepulveda	60.5	RW	50	108
West of Veteran	59.7	RW	44	95
<b>Gayley Ave.</b>				
East of Veteran	59.9	RW	46	98
South of Lindbrook	61.9	29	62	135
North of Wilshire	61.8	28	61	132
South of Wilshire	58.6	RW	37	80
<b>Levering</b>				
West of Veteran	55.3	RW	23	49
East of Veteran	52.1	RW	RW	30
<b>Leconte Ave.</b>				
East of Hilgard	53.4	RW	RW	36
<b>Weyburn Ave.</b>				
East of Veteran	60.0	RW	46	100
West of Gayley	59.9	RW	46	98
East of Gayley	57.5	RW	32	68
West of Westwood	56.7	RW	28	61
East of Westwood	55.6	RW	24	51
West of Glendon	55.6	RW	24	51
East of Glendon	55.1	RW	RW	47
West of Tiverton	53.7	RW	RW	38
East of Tiverton	52.4	RW	RW	31
West of Hilgard	54.0	RW	RW	40
East of Hilgard	51.0	RW	RW	25

† - From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way



**Table 3 (Continued)**  
**Modeled Existing Roadway Traffic Noise Levels**

Roadway Segment	CNEL @ 100'†	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Kinross Ave.</b>				
East of Veteran	55.7	RW	24	52
West of Gayley	55.9	RW	25	54
East of Gayley	55.5	RW	23	50
West of Westwood	55.3	RW	23	49
East of Westwood	54.0	RW	RW	40
West of Glendon	55.6	RW	23	51
<b>Lindbrook Ave</b>				
West of Kinross	59.3	RW	41	89
East of Kinross	61.0	RW	54	117
East of Gayley	57.3	RW	31	66
West of Westwood	56.9	RW	RW	62
East of Westwood	58.3	RW	36	78
West of Hilgard	48.4	RW	RW	RW
East of Hilgard	53.4	RW	RW	36
<b>Wilshire Blvd.</b>				
West of Veteran	67.9	73	157	338
East of Veteran	67.4	67	145	312
West of Gayley	67.1	64	137	295
East of Gayley	66.3	56	122	262
West of Westwood	66.4	58	124	268
<b>Veteran Ave.</b>				
South of Sunset	59.2	RW	41	89
North of Montana	59.8	RW	45	97
South of Montana	58.9	RW	39	85
North of Levering	59.1	RW	40	87
South of Levering	60.1	RW	47	102
North of Weyburn	59.9	RW	46	99

†- From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

**Table 3 (Continued)**  
**Modeled Existing Roadway Traffic Noise Levels**

Roadway Segment	CNEL @ 100'†	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Westwood Blvd.</b>				
South of Weyburn	61.8	RW	61	132
North of Kinross	61.8	RW	61	132
South of Kinross	61.9	RW	62	133
North of Lindbrook	62.0	RW	63	137
South of Lindbrook	62.7	RW	70	151
North of Wilshire	62.6	RW	70	150
South of Wilshire	62.2	RW	65	140
North of Wellworth	62.4	RW	67	144
South of Wellworth	62.9	RW	73	156
<b>Glendon Ave.</b>				
South of Weyburn	54.2	RW	RW	41
North of Kinross	55.3	RW	23	49
South of Kinross	56.5	RW	27	58
North of Lindbrook	57.0	RW	29	63
South of Lindbrook	60.0	RW	46	99
North of Wilshire	59.1	RW	41	88
South of Wilshire	56.4	RW	27	57
<b>Tiverton Ave.</b>				
South of Weyburn	51.5	RW	RW	27
North of Lindbrook	54.3	RW	RW	42
<b>Hilgard Ave.</b>				
South of Sunset	60.4	RW	50	107
North of Wyton	60.6	RW	51	110
South of Wyton	60.9	RW	53	114
North of Leconte	61.6	27	59	128
South of Leconte	59.7	RW	45	96
North of Weyburn	59.5	RW	43	93

†- From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

Table 3 shows that Wilshire Boulevard and Westwood Boulevard generate significant amounts noise in the project area. Noise levels from Gayley Avenue and Hilgard Avenue are considerable. Noise levels along Montana Boulevard, Weyburn Avenue, Kinross Avenue, Lindbrook Avenue, Veteran Avenue, and Glendon Avenue are moderate. Traffic noise levels along Levering Avenue, Le Conte Avenue and Tiverton Avenue are minor.

## **2.0 POTENTIAL NOISE IMPACTS**

Potential noise impacts are commonly divided into two groups; temporary and long term. Temporary impacts are usually associated with noise generated by construction activities. Long-term impacts are further divided into impacts on surrounding land uses generated by the proposed project and those impacts that occur at the proposed project site.

### **2.1 Noise Impact Criteria**

The City of Los Angeles has drafted a CEQA thresholds guide. While the City has not officially adopted these thresholds (the document is dated May 14, 1998 and distributed as a draft) they will be used to assess the impacts of this project.

#### **Construction Noise**

For construction related noise, a project would have a significant impact any of the three following conditions are met.

- Construction activities last more than one day generate noise levels that exceed the existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.
- Construction activities last more than 10 days in a three month period that exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday or anytime on Sunday.

#### **Operational Impacts from Traffic Noise**

A 3 dBA CNEL noise level increase due to the project along any roadway where the resulting noise level at the property line of the affected use is within the “normally unacceptable” or “clearly unacceptable” in the City of Los Angeles Noise Guidelines presented previously in Table 1 is considered significant. Any increase greater than 5 dBA is considered significant regardless of the resulting noise level.

#### **Operational Impacts from On Site Activities**

A 3 dBA CNEL noise level increase due to the activities on the project site where the resulting noise level at the property line of the affected use is within the “normally unacceptable” or “clearly unacceptable” in the City of Los Angeles Noise Guidelines presented previously in Table 1 is considered significant. Any increase greater than 5 dBA is considered significant regardless of the resulting noise level.

#### **Long-Term On Site Impacts**

Long-term On-Site impacts are measured against the noise level limits applied by the City of Los Angeles. The exterior noise standard for residential uses is 65 CNEL. Specifically, this limit applies to outdoor private living areas. For interior uses, the applicable city standard is a 45 CNEL limit for habitable residential rooms. The city has not established a specific interior noise standard for retail uses. Exterior noise standards are not typically applied to commercial areas. Based on the land use compatibility matrix an appropriate interior noise standard for retail uses is

55 CNEL. These levels will be used to assess the compatibility of the residential and commercial uses of the project.

## **2.2 Temporary Impacts**

### **2.2.1 Construction Noise**

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. For the proposed project, the highest noise generating activities will include demolition of the remaining buildings along Glendon Avenue and excavation of the parking garages. Since the time of the NOP, the 29,400 sq. ft. retail structure has been demolished. Therefore, this analysis only considers the effects of the demolition of the movie theater, Glendon Manor, and parking facilities.

Worst-case examples of construction noise at 50 feet are presented in Exhibit 6. The peak noise level for most of the equipment that will be used during the construction is 70 to 95 dBA at a distance of 50 feet. At 200 feet, the peak construction noise levels range from 58 to 83 dBA. At 400 feet the peak noise levels range from 52 to 77 dBA. Note that these noise levels are based upon worst-case conditions. Typically, noise levels near the site will be less. Noise measurements made by Mestre Greve Associates for other projects show that the noise levels generated by commonly used grading equipment (i.e. loaders, graders and trucks) generate noise levels that typically do not exceed the middle of the range shown in Exhibit 6.

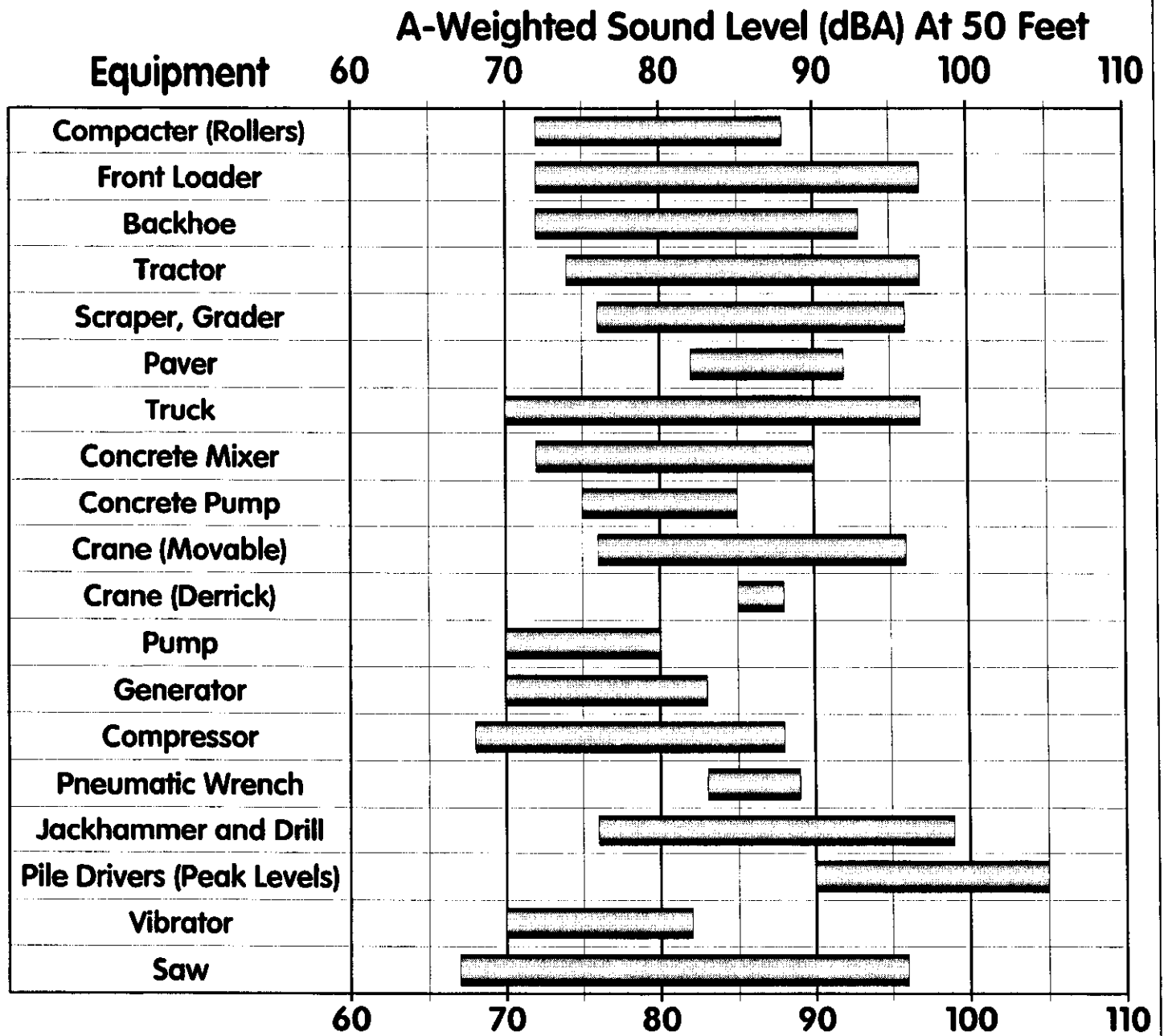
The nearest residences that may be impacted by construction and demolition noise are located across Tiverton Avenue from the project. These residences are located more than 200 feet from the nearest demolition activities. Noise generated by demolition activities could reach as high as 83 dBA with typical maximum noise levels of approximately 70 dBA. Average noise levels during demolition would likely be approximately 65 dBA. Average noise levels during demolition would likely be approximately 5 dBA greater than ambient noise levels in the area.

The residences located across Tiverton are approximately 40 feet from the nearest excavation and grading activities. At this distance, peak noise levels could be as high as 99 dBA for short periods of time but this would only occur on very rare occasions. Typically, as heavy equipment passed near the homes noise levels would reach a maximum of approximately 80 dBA. As this equipment traveled near the center of the project site it would be approximately 500 feet from the homes and generate noise levels of approximately 60 dBA. Average noise levels at the residential areas during construction would likely be between 65 and 70 dBA. This represents less than a 10 dB increase over the measured ambient noise levels.

Construction and demolition activities will generate substantial noise levels at the residences adjacent to the project and result in a significant short-term noise impact. Mitigation is discussed in Section 3.1.

## **2.3 Long Term Off-Site Impacts**

This section examines noise impacts from the proposed project on the surrounding land uses. Specifically traffic noise increases due to the project are examined as well as potential noise impacts from activities on the project site. Currently known project site activities that could



Source: "Handbook of Noise Control,"  
by Cyril Harris, 1979

## Exhibit 6

# Construction Equipment Noise Levels

potentially result in noise impacts are parking lot activities, loading dock activities and mechanical equipment.

### 2.3.1 Traffic Noise

Table 4 shows traffic noise CNEL level changes on the roadways in the vicinity of the project whose noise levels will be affected by the project. Column 1 lists the roadway segments. Columns 2 and 3 show the increase in future noise levels over existing levels along the roadways listed. Column 2 shows increase without the project and Column 3 shows the increase with the project. The last column of Table 4 shows increase in future noise levels due to the project.

The noise level increases were calculated using traffic volume data presented in the previously referenced traffic study prepared for the project. The traffic volumes used are presented in the appendix.

**Table 4**  
**Traffic Noise Level CNEL Increases (dB)**

Roadway Segment	Future (2006)		Increase Due to Project
	Increase Over Existing CNEL No Project	With Project	
<b>Montana Blvd.</b>			
East of Sepulvida	0.4	0.5	0.1
West of Veteran	0.5	0.6	0.1
<b>Gayley Ave.</b>			
East of Veteran	0.4	0.4	0.1
South of Lindbrook	0.5	0.6	0.1
North of Wilshire	0.5	0.6	0.1
South of Wilshire	0.5	0.5	0.1
<b>Levering</b>			
West of Veteran	0.3	0.3	0.1
East of Veteran	0.3	0.4	0.1
<b>Leconte Ave.</b>			
East of Hilgard	0.6	0.8	0.2
<b>Weyburn Ave.</b>			
East of Veteran	0.7	0.8	0.1
West of Gayley	0.6	0.7	0.1
East of Gayley	1.0	1.3	0.3
West of Westwood	1.4	1.7	0.3
East of Westwood	1.4	2.1	0.7
West of Glendon	1.4	2.4	0.9
East of Glendon	1.9	2.9	1.1
West of Tiverton	1.4	2.9	1.6
East of Tiverton	1.5	3.2	1.6
West of Hilgard	1.2	2.0	0.8
East of Hilgard	0.9	1.2	0.3

**Table 4 (Continued)**  
**Traffic Noise Level CNEL Increases (dB)**

Roadway Segment	Future (2006) Increase Over Existing CNEL		Future Increase
	No Project	With Project	Due to Project
<b>Kinross Ave.</b>			
East of Veteran	1.0	1.2	0.1
West of Gayley	0.8	0.9	0.1
East of Gayley	0.9	1.1	0.2
West of Westwood	0.6	0.8	0.3
East of Westwood	0.5	1.2	0.7
West of Glendon	0.4	1.3	0.9
<b>Lindbrook Ave</b>			
West of Kinross	0.7	0.9	0.3
East of Kinross	0.6	0.7	0.1
East of Gayley	0.3	0.4	0.1
West of Westwood	0.3	0.4	0.1
East of Westwood	0.7	1.0	0.2
West of Hilgard	1.0	1.5	0.5
East of Hilgard	0.6	0.9	0.3
<b>Wilshire Blvd.</b>			
West of Veteran	0.5	0.6	0.1
East of Veteran	0.5	0.5	0.1
West of Gayley	0.5	0.5	0.1
East of Gayley	0.5	0.6	0.1
West of Westwood	0.5	0.5	0.1
<b>Veteran Ave.</b>			
South of Sunset	0.4	0.4	0.1
North of Montana	0.4	0.4	0.1
South of Montana	0.5	0.6	0.1
North of Levering	0.5	0.6	0.1
South of Levering	0.5	0.5	0.1
North of Weyburn	0.7	0.8	0.1

**Table 4 (Continued)**  
**Traffic Noise Level CNEL Increases (dB)**

Roadway Segment	Future (2006) Increase Over Existing CNEL		Future Increase
	No Project	With Project	Due to Project
<b>Westwood Blvd.</b>			
South of Weyburn	0.7	0.8	0.1
North of Kinross	0.6	0.7	0.1
South of Kinross	0.6	0.7	0.1
North of Lindbrook	0.6	0.8	0.1
South of Lindbrook	0.7	0.9	0.2
North of Wilshire	0.7	0.9	0.2
South of Wilshire	0.5	0.6	0.1
North of Wellworth	0.6	0.7	0.1
South of Wellworth	0.6	0.7	0.1
<b>Glendon Ave.</b>			
South of Weyburn	0.8	2.8	2.0
North of Kinross	0.6	2.5	2.0
South of Kinross	0.5	1.5	1.0
North of Lindbrook	0.6	1.5	0.9
South of Lindbrook	0.4	0.9	0.4
North of Wilshire	0.8	1.0	0.3
South of Wilshire	0.5	0.6	0.1
<b>Tiverton Ave.</b>			
South of Weyburn	0.7	1.9	1.2
North of Lindbrook	0.2	0.9	0.7
<b>Hilgard Ave.</b>			
South of Sunset	0.6	0.7	0.1
North of Wyton	0.6	0.7	0.1
South of Wyton	0.6	0.7	0.1
North of Leconte	0.6	0.7	0.1
South of Leconte	0.8	1.0	0.2
North of Weyburn	0.8	1.0	0.2

The last column of Table 4 shows that the project itself will not result in noise level increases greater than 2.0 dB with the majority of increases less than 0.5 dB. Noise level increases must be at least 3 dBA to be considered significant. The increase in CNEL traffic noise levels due to the project will not be perceptible to the local residents. The project will not result in a significant offsite traffic noise impact.

The table shows that CNEL traffic noise levels are projected to increase more than 3.0 dB over existing conditions with the project along only one roadway segment, Weyburn Avenue east of Tiverton. The project contributes 1.6 dB of this increase. However, Table 5, below, shows that the future with project noise level along this roadway segment will not exceed 65 CNEL. Therefore, no land use will be exposed to a noise level categorized as Normally Unacceptable or



Clearly Unacceptable in the City of Los Angeles Noise Guidelines presented previously in Table 1. All other noise level increases over existing conditions are less than 3 dB. Therefore, there are no significant cumulative off site traffic noise impacts.

The distances to the future (2006) 60, 65 and 70 CNEL contours for the roadways in the vicinity of the proposed project site are given in Table 5. These represent the distance from the centerline of the road to the contour value shown. The CNEL at 100 feet from the roadway centerline is also presented. The contours do not take into account the effect of any noise barriers or topography that may affect ambient noise levels. Areas with noise barriers or structures that break line of sight from a receptor to the roadway will experience lower levels. The traffic data used to calculate these noise levels is presented in the appendix. Table 4 only presents noise levels along roadway segments with noise levels will be affected by the project. Future traffic noise levels along all roadways analyzed in the traffic study are presented in the appendix.

**Table 5**  
**Future (2006) With Project Traffic Noise Levels**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Montana Blvd.</b>				
East of Sepulvida	60.9	RW	54	116
West of Veteran	60.2	RW	48	103
<b>Gayley Ave.</b>				
East of Veteran	60.3	RW	49	105
South of Lindbrook	62.4	31	67	145
North of Wilshire	62.3	31	66	142
South of Wilshire	59.0	RW	40	86
<b>Levering</b>				
West of Veteran	55.6	RW	24	51
East of Veteran	52.4	RW	RW	31
<b>Leconte Ave.</b>				
East of Hilgard	54.0	RW	RW	40
<b>Weyburn Ave.</b>				
East of Veteran	60.6	24	51	110
West of Gayley	60.5	23	50	108
East of Gayley	58.5	RW	37	79
West of Westwood	58.2	RW	35	76
East of Westwood	57.0	RW	29	63
West of Glendon	57.0	RW	29	63
East of Glendon	57.0	RW	29	63
West of Tiverton	55.0	RW	RW	47
East of Tiverton	54.0	RW	RW	40
West of Hilgard	55.2	RW	22	48
East of Hilgard	51.8	RW	RW	29

† - From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

**Table 5 (Continued)**  
**Future (2006) With Project Traffic Noise Levels**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Kinross Ave.</b>				
East of Veteran	56.8	RW	28	61
West of Gayley	56.7	RW	28	60
East of Gayley	56.4	RW	27	58
West of Westwood	55.9	RW	25	53
East of Westwood	54.5	RW	RW	43
West of Glendon	56.0	RW	25	54
<b>Lindbrook Ave</b>				
West of Kinross	59.9	RW	46	99
East of Kinross	61.6	RW	59	128
East of Gayley	57.6	RW	32	69
West of Westwood	57.2	RW	30	65
East of Westwood	59.1	RW	40	87
West of Hilgard	49.4	RW	RW	RW
East of Hilgard	54.0	RW	RW	40
<b>Wilshire Blvd.</b>				
West of Veteran	68.5	79	170	366
East of Veteran	67.9	72	155	335
West of Gayley	67.5	69	148	318
East of Gayley	66.8	61	131	283
West of Westwood	66.9	62	134	288
<b>Veteran Ave.</b>				
South of Sunset	59.6	RW	44	94
North of Montana	60.2	RW	48	103
South of Montana	59.5	RW	43	92
North of Levering	59.6	RW	43	94
South of Levering	60.6	RW	51	109
North of Weyburn	60.7	RW	51	111

† - From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

**Table 5 (Continued)  
Future (2006) With Project Traffic Noise Levels**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Westwood Blvd.</b>				
South of Weyburn	62.5	RW	68	146
North of Kinross	62.5	RW	68	146
South of Kinross	62.5	RW	68	146
North of Lindbrook	62.7	RW	70	151
South of Lindbrook	63.4	37	79	169
North of Wilshire	63.4	36	78	168
South of Wilshire	62.7	RW	70	152
North of Wellworth	63.0	RW	73	158
South of Wellworth	63.5	37	79	171
<b>Glendon Ave.</b>				
South of Weyburn	54.9	RW	RW	46
North of Kinross	55.9	RW	25	54
South of Kinross	57.0	RW	29	63
North of Lindbrook	57.7	RW	32	70
South of Lindbrook	60.4	23	49	106
North of Wilshire	59.9	RW	46	98
South of Wilshire	56.9	RW	29	62
<b>Tiverton Ave.</b>				
South of Weyburn	52.3	RW	RW	31
North of Lindbrook	54.6	RW	RW	43
<b>Hilgard Ave.</b>				
South of Sunset	61.0	25	54	117
North of Wyton	61.2	26	56	120
South of Wyton	61.5	27	58	126
North of Leconte	62.2	30	65	141
South of Leconte	60.6	RW	51	109
North of Weyburn	60.3	RW	49	105

† - From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

Table 5 shows that Wilshire Boulevard and Westwood Boulevard will continue generate significant amounts noise in the area around the project. Noise levels from Gayley Avenue and Hilgard Avenue will remain considerable. Noise levels along Montana Boulevard, Weyburn Avenue, Kinross Avenue, Lindbrook Avenue, Veteran Avenue, and Glendon Avenue will remain moderate. Traffic noise levels along Levering Avenue, Le Conte Avenue and Tiverton Avenue will remain minor.

### **2.3.2 On-Site Activities**

On-site noise generating activities associated with the project include parking lot activity, delivery dock activity and mechanical equipment. These activities are regulated by the City's Noise Ordinance. The Noise Ordinance sets noise level restrictions to limit noise at nearby residences. Note that in the case of the parking lots and delivery docks the Noise Ordinance only applies to vehicles when they are on private property. When the vehicles are on public roadways the noise generated by the vehicles is controlled by State Law and local municipalities are prohibited from establishing their own vehicle noise standards.

#### **Parking Lot Activity**

Most of the parking areas will be located underground where they will not impact existing or proposed residential areas. Potentially noise from exhaust fans could impact existing residences as well as proposed residences. This is discussed further below under Mechanical Equipment.

The project does propose ground level parking along the alley between Glendon Avenue and Westwood Boulevard. There are no existing residences in this area. Parking lot activity will result in a significant noise impact on any adjacent land uses.

#### **Loading Dock Activities**

Three loading docks are proposed for the project. The location of these loading docks is noted in Exhibit 2. The loading dock along Tiverton Avenue will serve the residential portions of the project. The loading dock located along Glendon Avenue will serve the shopping center. The loading dock located along the Alley between Glendon Avenue and Westwood Boulevard will serve the residential and the shopping center uses located between Glendon Avenue and the Alley.

Section 114.03 of the City of Los Angeles Municipal Code Noise prohibits loading or unloading any vehicle between the hours of 10:00 p.m. and 7:00 a.m. when the loading dock is located within 200 feet of any residential building. All of the proposed loading docks are located within 200 feet of existing or proposed residential buildings and will be subject to this restriction. The project will further limit the use of the loading docks to the hours between 7:00 a.m. and 8:00 p.m.

The primary source of noise from deliveries and loading docks is noise generated by the trucks as they arrive and depart the loading docks. Noise generated by actual loading and unloading activities are generally minor with occasional short duration impulse noises. These impulses are typically not great enough in level and duration to significantly affect long-term average noise levels such as CNEL. Noise levels along Tiverton Avenue are the lowest of the three loading dock locations. Residential uses along Tiverton are located approximately 140 feet from the loading dock. It would take more than 80 daily semi-trailer trucks (or 275 medium 2-axle trucks) to result in the future CNEL levels along Tiverton to increase by more than 3 dB. This is much greater than the level of activity expected for the loading docks. Therefore, operation of the loading docks will not result in a CNEL noise increase greater than 3 dB and not result in a significant noise impact.

**Mechanical Equipment**

Potential sources of mechanical equipment noise include exhaust fans for the underground parking, HVAC equipment serving the retail portions of the project and HVAC equipment serving the residential portions of the project. At this time, information regarding the specific location and type of any required mechanical equipment is not available. This information is required to calculate noise levels generated by this equipment at existing or proposed residences.

In any case, this equipment will need to comply with Section 112.02 of the Los Angeles Municipal Code Noise Regulations. This requires that the equipment not increase the ambient noise environment by more than 5 dB. With proper design, the mechanical equipment required for the project should be able to comply with this requirement. Appropriate design decisions such as the specific piece of equipment, location, ducting and existence of enclosures or barriers will ensure compliance with this requirement. However, if this requirement is not considered during design, the mechanical equipment could exceed this requirement.

Mitigation listed in Section 3.2 requires that an acoustical study be prepared prior to issuance of building permits that shows that the mechanical equipment required for the project will comply with Section 112.02 of the Los Angeles Municipal Code Noise Regulations. Typical mechanical equipment expected for this project is not expected to generate noise levels at any of the neighboring properties that would approach or exceed the “Normally Unacceptable” or “Clearly Unacceptable” categories in the City’s Noise Guidelines presented in Table 1. Therefore, by complying with Section 112.02 of the municipal code and limiting the maximum increase in ambient noise levels to 5 dB, the operation of the project’s mechanical equipment will not result in a significant noise impact.

**2.4 Long Term On-Site Impacts**

The purpose of this section is to examine the noise impacts of on the proposed project. Traffic noise impacts on the proposed uses are examined. Noise from on-site activities also has the potential to result in a significant noise impact on the proposed residential uses of the project. These impacts are also examined.

**2.4.1 Traffic Noise**

Noise generated by traffic on Weyburn Avenue, Glendon Avenue and Tiverton Avenue will impact the proposed project. The sources of noise impacting the proposed project are from traffic on Weyburn Avenue, Glendon Avenue and Tiverton Avenue. The Los Angeles County Municipal Code interior noise level standard requires that future noise levels be predicted for a year at least 10 years from issuance of building permit. The traffic study predicted future traffic volumes for the year 2006. This does not satisfy the 10 year projection requirement. The traffic report indicates a general traffic volume growth rate of 1% per year. Discussions with the traffic engineer for the project (Jerry Overland at Cain & Associates) indicated that applying this growth rate to the 2006 without project traffic volumes to determine a 2015 no project traffic volume and then adding the project generated traffic volume (i.e. the difference between the with project and no project 2006 traffic volume) would provide an appropriate estimate of the 2015 traffic volume.

The distances to the future (2015) 60, 65 and 70 CNEL contours for the roadways adjacent to the proposed project site are given in Table 6. These represent the distance from the centerline of the road to the contour value shown. The CNEL at 100 feet from the roadway centerline is also presented. The contours do not take into account the effect of any noise barriers or topography that may affect ambient noise levels.

**Table 6**  
**Modeled Future (2015) Roadway Traffic Noise Levels**

Roadway Segment	CNEL @ 100'†	Distance To CNEL Contour from Centerline of Roadway (feet)		
		70 CNEL	65 CNEL	60 CNEL
<b>Weyburn Ave.</b>				
East of Glendon	58.4	RW	36	78
West of Tiverton	56.9	RW	29	62
<b>Glendon Ave.</b>				
South of Weyburn	57.2	RW	30	65
North of Kinross	58.2	RW	35	75
<b>Tiverton Ave.</b>				
South of Weyburn	53.8	RW	RW	39
North of Lindbrook	55.6	RW	24	51

†- From Roadway Centerline

RW-Contour Falls Within Roadway Right-of-Way

Table 6 presents the distance from the roadway centerline to the proposed buildings of project along the roadways impacting the project. The CNEL traffic noise levels at the building faces is presented in the third column of Table 7. The final two columns present the required outdoor-to-indoor noise reduction required to meet the 45 CNEL residential interior noise standard and the 55 CNEL retail interior noise criteria.

**Table 7**  
**Future (2015) Roadway Traffic Noise Levels at Project Buildings**  
**and Required Outdoor-to-Indoor Noise Reduction**

Roadway Segment	Building Distance From Roadway Centerline	CNEL at Building	Required Outdoor-to-Indoor Noise Reduction To Meet	
			Residential Interior Noise Standard	Retail Interior Noise Criteria
<b>Weyburn Ave.</b>				
East of Glendon	35	65	20	10
West of Tiverton	35	64	19	9
<b>Glendon Ave.</b>				
South of Weyburn	33	64	19	9
North of Kinross	33	65	20	10
<b>Tiverton Ave.</b>				
South of Weyburn	45	59	14	4
North of Lindbrook	45	61	16	6

No residential outdoor living areas are located closer to the roadways than the building faces. Therefore, the information presented in Table 7 shows that the outdoor noise levels at the residential areas will not exceed the 65 CNEL noise criteria. Therefore, no mitigation is required to meet the outdoor residential noise criteria.

Table 7 shows that the residential units along Weyburn, Glendon and Tiverton will require between 14 and 20 dB of outdoor-to-indoor noise reduction. Typical residential construction achieves at least 20 dB of outdoor-to-indoor noise reduction with windows closed. Modern construction that meets energy conservation requirements often achieves 24 dB of outdoor-to-indoor noise reduction with windows closed. With windows open the outdoor-to-indoor noise reduction falls to 12 dB. Therefore, the residences proposed by the project along Weyburn, Glendon and Tiverton will meet the 45 CNEL interior noise standard with windows closed. The windows closed assumption requires that adequate ventilation be provided. Note that the windows do not need to be sealed shut but closeable at the occupants discretion. Currently, air conditioning, which would satisfy the ventilation requirements, is included for all residential units of the project. Adequate ventilation will be required for all residential units along Weyburn, Glendon and Tiverton. This is discussed further in the Mitigation Section 3.3.

The retail buildings will require between 4 and 10 dB of outdoor-to-indoor noise reduction to achieve the 55 CNEL noise criteria. This level of noise reduction is achievable even with windows and doors open. Therefore, the interior noise levels at the retail uses will not exceed the 55 CNEL interior noise criteria with no mitigation required.



### **2.4.2 On Site Activities**

On-site noise generating activities associated with the project include parking lot activity, delivery dock activity and mechanical equipment. These activities are regulated by the City's Noise Ordinance. The Noise Ordinance sets noise level restrictions to limit noise at nearby residences. The Noise Ordinance applies to both existing residences as discussed above as well as the residences proposed by the project. The potential impacts from noise generating activities on the site on the proposed residences are discussed below.

#### **Parking Lot Activity**

Most of the parking areas will be located underground where they will not impact the proposed residential areas. Potentially noise from exhaust fans could impact existing residences as well as proposed residences. This is discussed further below under Mechanical Equipment.

The project does propose ground level parking along the alley between Glendon Avenue and Westwood Boulevard. The residences proposed for the project will be located directly above these parking areas. There will be no direct line of sight from the residential areas to the parking areas. This will effectively reduce the noise levels from the parking area at the residences so that no impact will result. It is not expected that parking lot activity will result in a significant noise impact.

#### **Loading Dock Activities**

Three loading docks are proposed for the project. The location of these loading docks is noted in Exhibit 2. The loading dock along Tiverton Avenue will serve the residential portions of the project. The loading dock located along Glendon Avenue will serve the shopping center. The loading dock located along the Alley between Glendon Avenue and Westwood Boulevard will serve the residential and the shopping center uses located between Glendon Avenue and the Alley.

Section 114.03 of the City of Los Angeles Municipal Code Noise prohibits loading or unloading any vehicle between the hours of 10:00 p.m. and 7:00 a.m. when the loading dock is located within 200 feet of any residential building. All of the proposed loading docks are located within 200 feet of existing or proposed residential buildings and will be subject to this restriction.

All three of the loading docks are located directly below the proposed residences of the project. There will be no direct line of sight from the proposed residential areas to the loading docks. This will effectively reduce the noise levels from the parking area at the residences. The noise levels generated by loading and unloading could approach significant levels if they occurred during the nighttime hours. However, with the project restricting these activities to daytime hours these noises will not be present during nighttime hours. The noise levels potentially generated at the loading docks during daytime hours will not be significant at the proposed residences.

Loading dock activities and truck operations will not result in a significant noise impact on the residences proposed by the project.

**Mechanical Equipment**

As discussed in the Off-Site Operational Impacts section, noise generated by mechanical equipment is regulated by the Los Angeles Municipal Code. These regulations must be followed both for existing residences as well as the residences proposed for the project. These conditions will be achievable with proper design of the mechanical equipment. Mitigation will be required to assure that the project mechanical equipment will comply with Section 112.02 of the Los Angeles Municipal Code Noise Regulations.

### 3.0 MITIGATION MEASURES

#### 3.1 Temporary Impacts

Construction and demolition activities will result in a significant noise impact. The following mitigation measures will reduce the impacts to an extent but noise generated by construction and demolition activities will continue to result in a short-term significant noise impact.

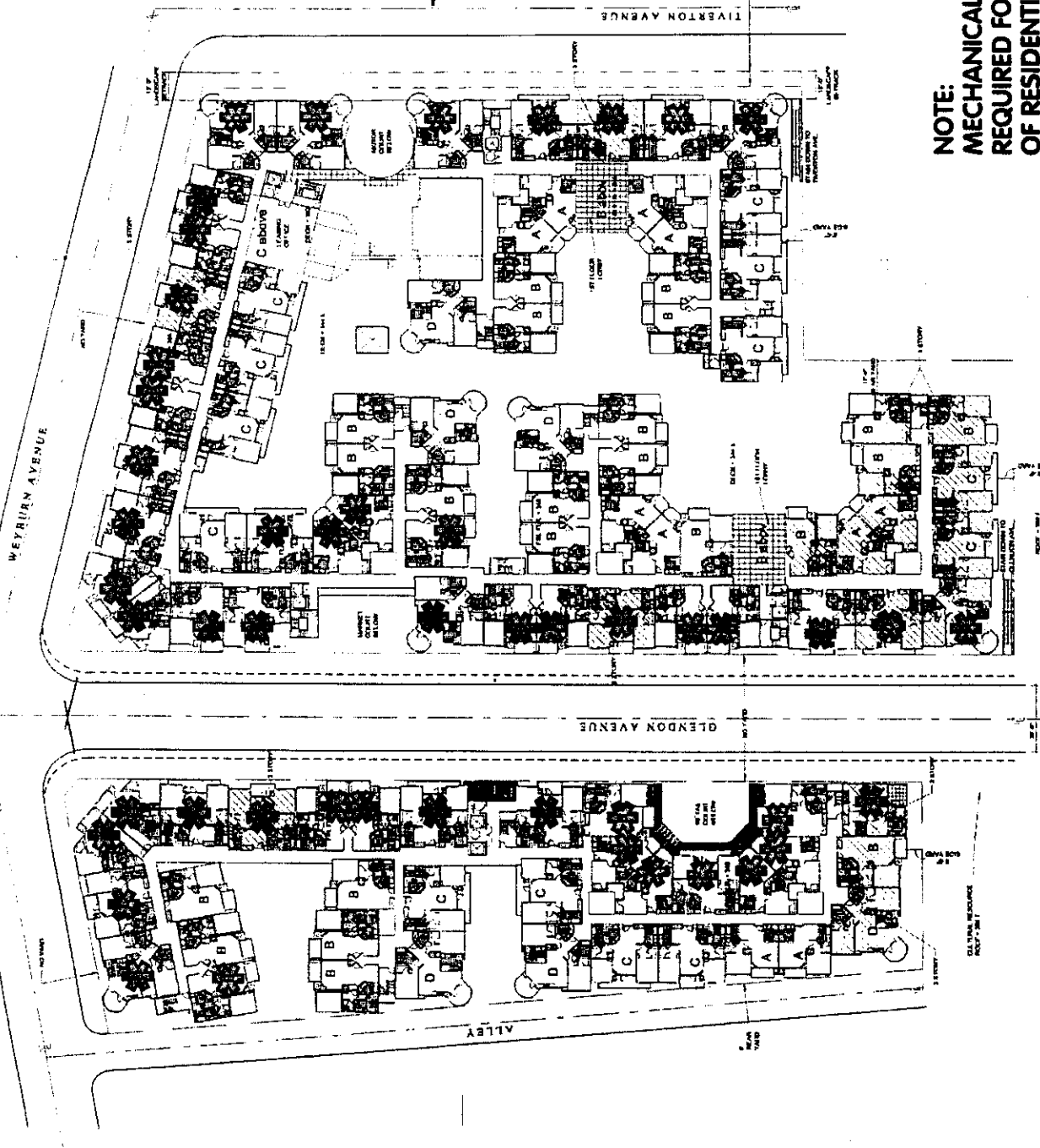
1. Noise generating construction activities will be limited to the hours between 7:00 a.m. and 6:00 p.m. Monday through Friday and 8:00 a.m. to 6:00 p.m. and be prohibited on Sunday or any national holiday.
2. The applicant shall prepare a construction related traffic plan detailing proposed haul routes and staging areas for the transportation of materials and equipment, with consideration for sensitive uses in the neighborhood. A traffic and parking plan for the construction phase will be submitted for approval by LADOT and the Department of Building and Safety prior to the issuance of any permits.
3. The subterranean excavation shall be surrounded by a plywood barrier wall for security and noise protection. This plywood barrier will have a minimum thickness of 3/4" and have no gaps, cracks or holes.
4. All equipment operating on site shall have properly operating mufflers.
5. Equipment and material staging and siting of cranes, hoists, or other semi-stationary heavy equipment shall be as far from noise-sensitive uses as practical.
6. Electrically powered equipment shall be used instead of internal combustion engine driven equipment, where feasible.
7. No deliveries shall be permitted outside the hours of 7:00 a.m. to 6:00 p.m. on weekdays.

#### 3.2 Long Term Off-Site Impacts

Mechanical equipment required for the project including parking garage exhaust fans and retail and residential HVAC units have the potential to exceed the noise standard contained in Section 112.02 of the City of Los Angeles Municipal Code Noise Regulations. The project applicant shall provide equipment specifications to the Department of Building and Safety demonstrating that the equipment meets the City's Noise Regulations. This assessment should be prepared by a qualified acoustical consultant and submitted to the City. Prior to issuance of building permits, the City should ensure that all required measures are incorporated into the building plans.

#### 3.3 Long Term On-Site Impacts

In order to assume that windows and doors can remain closed, adequate ventilation per the Uniform Building Code must be provided. Typically, this is provided in the form of mechanical ventilation as a part of the HVAC system. Note that windows do not need to be sealed shut, but closeable at the occupants discretion. Currently, air conditioning, which would satisfy the ventilation requirements, is included for all residential units of the project. Residential units in the first row of units along Weyburn, Glendon and Tiverton will require mechanical ventilation. The units requiring mechanical ventilation are indicated in Exhibit 7.



**NOTE:**  
MECHANICAL VENTILATION  
REQUIRED FOR ALL LEVELS  
OF RESIDENTIAL UNITS INDICATED



**UNITS REQUIRING  
MECHANICAL VENTILATION**

# Exhibit 7 - Residential Units Requiring Mechanical Ventilation

#### **4.0 UNAVOIDABLE NOISE IMPACTS**

Even with the mitigation measures presented above construction and demolition activities will result in a significant short-term unavoidable noise impact.

There are no other unavoidable noise impacts associated with the project.

# **APPENDIX**

**Traffic Volumes**

**Traffic Mixes**

**Distance to CNEL Contours**

**Table A-1**  
**Traffic Data Used For Noise Modeling**

Roadway Segment	Speed (mph)	Mix	Average Daily Traffic Volume		
			Existing	2006 No Project	2006 w/Project
<b>Sunset Blvd.</b>					
West of Veteran	35	1	32,790	36,720	36,860
East of Veteran	35	1	34,035	37,980	38,015
West of Hilgard	35	1	27,785	30,965	31,095
East of Hilgard	35	1	29,060	32,130	32,285
West of Beverly Glen	35	1	29,595	32,745	32,900
East of Beverly Glen	35	1	37,960	41,345	41,485
<b>Wyton Dr.</b>					
West of Hilgard	35	1	8,245	8,895	8,895
East of Hilgard	35	1	2,830	3,090	3,125
<b>Montana Blvd.</b>					
West of Sepulveda	35	1	7,205	7,985	8,065
East of Sepulveda	35	1	13,035	14,440	14,620
West of Veteran	35	1	10,785	12,115	12,305
<b>Gayley Ave.</b>					
East of Veteran	35	1	11,355	12,425	12,590
North of Le Conte	35	1	19,150	20,670	20,820
South of Le Conte	35	1	19,575	21,120	21,255
North of Weyburn	35	1	21,000	22,510	22,720
South of Weyburn	35	1	16,895	18,315	18,435
North of Kinross	35	1	16,440	18,570	18,690
South of Kinross	35	1	16,765	19,030	19,250
North of Lindbrook	35	1	17,195	19,495	19,715
South of Lindbrook	35	1	18,145	20,380	20,635
North of Wilshire	35	1	17,545	19,755	20,010
South of Wilshire	35	1	8,385	9,320	9,450
<b>Levering</b>					
West of Veteran	35	1	3,975	4,225	4,300
East of Veteran	35	1	1,880	2,000	2,040
<b>Le Conte Ave.</b>					
West of Gayley	35	1	3,310	3,540	3,555
East of Gayley	35	1	10,935	12,170	12,200
West of Westwood	35	1	11,980	13,230	13,260
East of Westwood	35	1	12,895	15,725	15,755
West of Tiverton	35	1	12,365	14,320	14,350
East of Tiverton	35	1	9,540	11,445	11,445
West of Hilgard	35	1	9,635	11,555	11,555
East of Hilgard	35	1	2,555	2,925	3,040

**Table A-1 (Continued)**  
**Traffic Data Used For Noise Modeling**

Roadway Segment			Speed (mph)	Mix	Average Daily Traffic Volume		
					2006 No Project	2006 w/Project	
<b>Weyburn Ave.</b>							
East	of	Veteran	35	1	11,540	13,465	13,755
West	of	Gayley	35	1	11,310	12,985	13,290
East	of	Gayley	35	1	6,555	8,190	8,755
West	of	Westwood	35	1	5,490	7,645	8,210
East	of	Westwood	35	1	4,220	5,870	6,820
West	of	Glendon	35	1	4,225	5,870	7,270
• East	of	Glendon	35	1	3,750	5,790	7,385
• West	of	Tiverton	35	1	2,700	3,705	5,300
East	of	Tiverton	35	1	2,025	2,890	4,205
West	of	Hilgard	35	1	2,905	3,815	4,595
East	of	Hilgard	35	1	1,450	1,780	1,905
<b>Kinross Ave.</b>							
East	of	Veteran	35	1	4,360	5,545	5,715
West	of	Gayley	35	1	4,560	5,465	5,635
East	of	Gayley	35	1	4,165	5,095	5,365
West	of	Westwood	35	1	3,980	4,545	4,815
East	of	Westwood	35	1	2,935	3,300	3,835
West	of	Glendon	35	1	4,180	4,605	5,645
<b>Lindbrook Ave</b>							
West	of	Kinross	35	1	9,790	11,415	12,160
East	of	Kinross	35	1	14,620	16,790	17,190
East	of	Gayley	35	1	6,240	6,675	6,780
West	of	Westwood	35	1	5,725	6,135	6,240
East	of	Westwood	35	1	7,935	9,390	9,905
West	of	Hilgard	35	1	805	1,020	1,135
East	of	Hilgard	35	1	2,520	2,910	3,125



**Table A-1 (Continued)**  
**Traffic Data Used For Noise Modeling**

Roadway Segment	Speed (mph)	Mix	Average Daily Traffic Volume		
			Existing	2006 No Project	2006 w/Project
<b>Wilshire Blvd.</b>					
West of Sepulveda	35	1	71,215	78,845	79,480
East of Sepulveda	35	1	72,060	79,995	80,780
West of Veteran	35	1	72,220	81,430	82,490
East of Veteran	35	1	63,920	71,215	72,160
West of Gayley	35	1	59,005	66,005	66,950
East of Gayley	35	1	49,325	55,420	56,240
West of Westwood	35	1	50,975	56,830	57,650
East of Westwood	35	1	46,850	51,955	52,205
West of Glendon	35	1	47,015	52,230	52,480
East of Glendon	35	1	44,855	50,005	50,395
West of Selby	35	1	47,810	52,710	53,100
East of Selby	35	1	49,560	54,485	54,885
West of Westholme	35	1	48,495	53,165	53,565
East of Westholme	35	1	49,540	54,265	54,685
West of Warner	35	1	48,235	52,765	53,185
East of Warner	35	1	47,620	51,980	52,400
<b>Wellworth Ave.</b>					
West of Westwood	35	1	3,445	3,760	3,760
East of Westwood	35	1	6,090	6,525	6,525
<b>Ohio Ave.</b>					
West of Westwood	35	1	11,505	12,105	12,165
East of Westwood	35	1	8,435	8,880	8,940
<b>Santa Monica Blvd. (N)</b>					
West of Westwood	35	1	33,215	45,975	46,040
East of Westwood	35	1	33,285	47,645	47,680
<b>Sepulveda Blvd.</b>					
North of Montana	35	1	20,790	22,370	22,470
South of Montana	35	1	21,360	22,645	22,645
North of Wilshire	35	1	16,100	17,185	17,185
South of Wilshire	35	1	18,445	19,935	20,085

**Table A-1 (Continued)**  
**Traffic Data Used For Noise Modeling**

Roadway Segment	Speed (mph)	Mix	Average Daily Traffic Volume		
			Existing	2006 No Project	2006 w/Project
<b>Veteran Ave.</b>					
South of Sunset	35	1	9,685	10,560	10,735
North of Montana	35	1	11,145	12,105	12,280
South of Montana	35	1	9,115	10,265	10,465
North of Levering	35	1	9,390	10,540	10,740
South of Levering	35	1	11,985	13,295	13,530
North of Weyburn	35	1	11,435	13,545	13,780
South of Weyburn	35	1	18,845	21,520	21,575
North of Kinross	35	1	21,270	24,210	24,280
South of Kinross	35	1	22,520	26,355	26,595
North of Wilshire	35	1	20,075	23,710	23,950
South of Wilshire	35	1	15,025	16,395	16,520
<b>Westwood Blvd.</b>					
North of Le Conte	35	1	16,270	17,260	17,320
South of Le Conte	35	1	17,925	20,445	20,505
North of Weyburn	35	1	17,075	19,600	19,660
South of Weyburn	35	1	17,635	20,605	20,980
North of Kinross	35	1	17,670	20,445	20,820
South of Kinross	35	1	17,915	20,550	21,190
North of Lindbrook	35	1	18,590	21,505	22,145
South of Lindbrook	35	1	21,640	25,650	26,650
North of Wilshire	35	1	21,310	25,215	26,215
South of Wilshire	35	1	19,185	21,740	22,170
North of Wellworth	35	1	20,150	23,130	23,525
South of Wellworth	35	1	22,755	26,045	26,440
North of Wellworth	35	1	23,555	26,500	26,800
South of Wellworth	35	1	22,195	25,045	25,225
North of Santa Monica	35	1	22,680	26,335	26,500
South of Sanaa Monica	35	1	20,930	22,525	22,590
<b>Glendon Ave.</b>					
• South of Weyburn	35	1	3,025	3,600	5,715
• North of Kinross	35	1	3,965	4,550	7,130
South of Kinross	35	1	5,145	5,785	7,325
North of Lindbrook	35	1	5,870	6,790	8,330
South of Lindbrook	35	1	11,525	12,720	14,020
North of Wilshire	35	1	9,550	11,360	12,105
South of Wilshire	35	1	5,030	5,705	5,810

**Table A-1 (Continued)**  
**Traffic Data Used For Noise Modeling**

Roadway Segment	Speed (mph)	Mix	Average Daily Traffic Volume		
			Existing	2006 No Project	2006 w/Project
<b>Tiverton Ave.</b>					
North of Le Conte	35	1	6,055	6,360	6,360
South of Le Conte	35	1	2,810	3,185	3,215
North of Weyburn	35	1	2,595	3,285	3,315
• South of Weyburn	35	1	1,660	1,970	2,600
• North of Lindbrook	35	1	3,155	3,315	3,900
<b>Copa De Oro Rd.</b>					
North of Sunset	35	1	2,200	2,310	2,310
<b>Hilgard Ave.</b>					
South of Sunset	35	1	12,865	14,725	15,010
North of Wyton	35	1	13,330	15,205	15,515
South of Wyton	35	1	14,175	16,440	16,785
North of Le Conte	35	1	16,750	19,375	19,850
South of Le Conte	35	1	10,960	13,205	13,795
North of Weyburn	35	1	10,360	12,535	13,125
South of Weyburn	35	1	9,785	11,640	11,755
North of Lindbrook	35	1	9,635	11,380	11,495
<b>Bel Air Rd.</b>					
North of Sunset	35	1	3,170	3,430	3,445
<b>Beverly Glen</b>					
South of Sunset	35	1	12,885	13,710	13,710
<b>Selby Ave.</b>					
North of Wilshire	35	1	3,515	3,695	3,705
South of Wilshire	35	1	3,715	3,980	3,980
<b>Westholme Ave.</b>					
North of Wilshire	35	1	4,930	5,180	5,200
South of Wilshire	35	1	4,455	4,690	4,690
<b>Warner Blvd.</b>					
North of Wilshire	35	1	4,210	4,730	4,730
South of Wilshire	35	1	2,675	3,265	3,265

**Table A-2**  
**Traffic Mixes Used For Noise Modeling**  
**1. Arterial Roadways**

	Day	Eve	Night
Auto	75.51%	12.57%	9.34%
MT	1.56%	0.09%	0.19%
HT	0.64%	0.02%	0.08%

**Table A-3**  
**Modeled Existing and Future Traffic Noise Levels**  
**(Distance to 70, 65 and 60 CNEL Contours in Feet From Roadway Centerline)**

Roadway Segment	Existing			2006 No Project			2006 With Project		
	70	65	60	70	65	60	70	65	60
<b>Sunset Blvd.</b>									
West of Veteran	43	93	200	46	100	215	46	100	216
East of Veteran	44	95	205	47	102	220	47	102	220
West of Hilgard	39	83	179	41	89	192	42	89	193
East of Hilgard	40	85	184	42	91	197	43	92	198
West of Beverly Glen	40	87	186	43	93	199	43	93	200
East of Beverly Glen	47	102	220	50	108	233	50	108	234
<b>Wyton Dr.</b>									
West of Hilgard	17	37	80	18	39	84	18	39	84
East of Hilgard	8	18	39	9	19	41	9	19	42
<b>Montana Blvd.</b>									
West of Sepulvida	16	34	73	17	36	78	17	36	78
East of Sepulvida	23	50	108	25	54	116	25	54	117
West of Veteran	20	44	95	22	48	103	22	48	104
<b>Gayley Ave.</b>									
East of Veteran	21	46	98	23	49	105	23	49	105
North of Leconte	30	65	139	32	68	147	32	68	147
South of Leconte	30	66	142	32	69	149	32	69	150
North of Weyburn	32	69	148	33	72	155	34	73	156
South of Weyburn	28	60	128	29	63	135	29	63	136
North of Kinross	27	58	126	29	63	137	30	64	137
South of Kinross	27	59	128	30	64	139	30	65	140
North of Lindbrook	28	60	130	30	66	141	31	66	142
South of Lindbrook	29	62	135	31	67	145	32	68	147
North of Wilshire	28	61	132	31	66	142	31	67	144
South of Wilshire	17	37	80	19	40	86	19	40	87
<b>Levering</b>									
West of Veteran	11	23	49	11	24	51	11	24	52
East of Veteran	6	14	30	7	14	31	7	15	31

**Table A-3 (Continued)**  
**Modeled Existing and Future Traffic Noise Levels**  
**(Distance to 70, 65 and 60 CNEL Contours in Feet From Roadway Centerline)**

Roadway Segment	Existing			2006 No Project			2006 With Project		
	70	65	60	70	65	60	70	65	60
<b>Leconte Ave.</b>									
West of Gayley	9	20	43	10	21	45	10	21	45
East of Gayley	21	45	96	22	48	103	22	48	103
West of Westwood	22	47	102	23	51	109	24	51	109
East of Westwood	23	50	107	26	57	122	26	57	122
West of Tiverton	22	48	104	25	53	115	25	53	115
East of Tiverton	19	41	88	21	46	99	21	46	99
West of Hilgard	19	41	88	21	46	100	21	46	100
East of Hilgard	8	17	36	9	18	40	9	19	41
<b>Weyburn Ave.</b>									
East of Veteran	21	46	100	24	51	110	24	52	112
West of Gayley	21	46	98	23	50	108	24	51	109
East of Gayley	15	32	68	17	37	79	18	38	83
West of Westwood	13	28	61	16	35	76	17	37	79
East of Westwood	11	24	51	14	29	63	15	33	70
West of Glendon	11	24	51	14	29	63	16	34	73
• East of Glendon	10	22	47	14	29	63	16	34	74
• West of Tiverton	8	18	38	10	22	47	13	27	59
East of Tiverton	7	14	31	9	18	40	11	24	51
West of Hilgard	9	18	40	10	22	48	12	25	54
East of Hilgard	5	12	25	6	13	29	6	14	30
<b>Kinross Ave.</b>									
East of Veteran	11	24	52	13	28	61	13	29	62
West of Gayley	12	25	54	13	28	60	13	29	62
East of Gayley	11	23	50	12	27	58	13	28	60
West of Westwood	11	23	49	12	25	53	12	26	56
East of Westwood	9	19	40	9	20	43	10	22	48
West of Glendon	11	23	51	12	25	54	13	29	62
<b>Lindbrook Ave</b>									
West of Kinross	19	41	89	21	46	99	22	47	103
East of Kinross	25	54	117	28	59	128	28	60	130
East of Gayley	14	31	66	15	32	69	15	32	70
West of Westwood	13	29	62	14	30	65	14	31	66
East of Westwood	17	36	78	19	40	87	19	42	90
West of Hilgard	4	8	17	4	9	20	5	10	21
East of Hilgard	8	17	36	9	18	40	9	19	42

**Table A-3 (Continued)****Modeled Existing and Future Traffic Noise Levels****(Distance to 70, 65 and 60 CNEL Contours in Feet From Roadway Centerline)**

<b>Roadway Segment</b>	<b>Existing</b>			<b>2006 No Project</b>			<b>2006 With Project</b>		
	<b>70</b>	<b>65</b>	<b>60</b>	<b>70</b>	<b>65</b>	<b>60</b>	<b>70</b>	<b>65</b>	<b>60</b>
<b>Wilshire Blvd.</b>									
West of Sepulvida	72	155	335	77	166	358	78	167	360
East of Sepulvida	73	157	337	78	168	362	78	169	364
West of Veteran	73	157	338	79	170	366	80	171	369
East of Veteran	67	145	312	72	155	335	73	157	338
West of Gayley	64	137	295	69	148	318	69	149	321
East of Gayley	56	122	262	61	131	283	62	133	286
West of Westwood	58	124	268	62	134	288	63	135	291
East of Westwood	55	118	253	58	126	271	59	126	272
West of Glendon	55	118	254	59	126	272	59	127	273
East of Glendon	53	114	246	57	123	264	57	123	266
West of Selby	55	119	257	59	127	274	59	128	275
East of Selby	57	122	263	60	130	280	61	131	281
West of Westholme	56	120	259	59	128	276	60	129	277
East of Westholme	57	122	263	60	130	279	60	130	281
West of Warner	56	120	258	59	127	274	59	128	276
East of Warner	55	119	256	58	126	271	59	127	273
<b>Wellworth Ave.</b>									
West of Westwood	10	21	44	10	22	47	10	22	47
East of Westwood	14	30	65	15	32	68	15	32	68
<b>Ohio Ave.</b>									
West of Westwood	21	46	99	22	48	103	22	48	103
East of Westwood	17	37	81	18	39	84	18	39	84
<b>Santa Monica Blvd. (N)</b>									
West of Westwood	43	93	201	54	116	250	54	116	250
East of Westwood	43	94	202	55	119	256	55	119	256
<b>Sepulvida Blvd.</b>									
North of Montana	32	68	147	33	72	155	33	72	155
South of Montana	32	70	150	34	72	156	34	72	156
North of Wilshire	27	58	124	28	60	130	28	60	130
South of Wilshire	29	63	136	31	66	143	31	67	144

**Table A-3 (Continued)****Modeled Existing and Future Traffic Noise Levels****(Distance to 70, 65 and 60 CNEL Contours in Feet From Roadway Centerline)**

Roadway Segment	Existing			2006 No Project			2006 With Project		
	70	65	60	70	65	60	70	65	60
<b>Veteran Ave.</b>									
South of Sunset	19	41	89	20	44	94	20	44	95
North of Montana	21	45	97	22	48	103	22	48	104
South of Montana	18	39	85	20	43	92	20	43	93
North of Levering	19	40	87	20	43	94	20	44	95
South of Levering	22	47	102	24	51	109	24	51	111
North of Weyburn	21	46	99	24	51	111	24	52	112
South of Weyburn	30	64	138	32	70	151	33	70	151
North of Kinross	32	69	150	35	76	163	35	76	163
South of Kinross	33	72	155	37	80	173	37	81	174
North of Wilshire	31	67	144	35	75	161	35	75	162
South of Wilshire	26	55	119	27	58	126	27	59	126
<b>Westwood Blvd.</b>									
North of Leconte	27	58	125	28	60	130	28	61	130
South of Leconte	29	62	133	31	68	146	31	68	146
North of Weyburn	28	60	129	31	66	142	31	66	142
South of Weyburn	28	61	132	32	68	146	32	69	148
North of Kinross	28	61	132	31	68	146	32	68	147
South of Kinross	29	62	133	31	68	146	32	69	149
North of Lindbrook	29	63	137	32	70	151	33	71	154
South of Lindbrook	33	70	151	37	79	169	37	81	174
North of Wilshire	32	70	150	36	78	168	37	80	172
South of Wilshire	30	65	140	33	70	152	33	71	154
North of Wellworth	31	67	144	34	73	158	34	74	160
South of Wellworth	34	73	156	37	79	171	37	80	173
North of Wellworth	34	74	160	37	80	173	38	81	175
South of Wellworth	33	71	154	36	77	167	36	78	168
North of Santa Monica (N)	34	72	156	37	80	172	37	80	173
South of Santa Monica (N)	32	69	148	33	72	155	34	72	156
<b>Glendon Ave.</b>									
• South of Weyburn	9	19	41	10	21	46	13	29	62
• North of Kinross	11	23	49	12	25	54	16	34	72
South of Kinross	13	27	58	14	29	63	16	34	73
North of Lindbrook	14	29	63	15	32	70	17	37	80
South of Lindbrook	21	46	99	23	49	106	24	53	113
North of Wilshire	19	41	88	21	46	98	22	48	103
South of Wilshire	12	27	57	13	29	62	14	29	63

**Table A-3 (Continued)****Modeled Existing and Future Traffic Noise Levels****(Distance to 70, 65 and 60 CNEL Contours in Feet From Roadway Centerline)**

Roadway Segment	Existing			2006 No Project			2006 With Project		
	70	65	60	70	65	60	70	65	60
<b>Tiverton Ave.</b>									
North of Le Conte	14	30	65	14	31	67	14	31	67
South of Le Conte	8	18	39	9	20	42	9	20	42
North of Weyburn	8	17	37	9	20	43	9	20	43
• South of Weyburn	6	13	27	7	14	31	8	17	37
• North of Lindbrook	9	19	42	9	20	43	10	22	48
<b>Copa De Oro Rd.</b>									
North of Sunset	7	15	33	7	16	34	7	16	34
<b>Hilgard Ave.</b>									
South of Sunset	23	50	107	25	54	117	26	55	119
North of Wyton	24	51	110	26	56	120	26	56	121
South of Wyton	25	53	114	27	58	126	28	59	128
North of Le Conte	27	59	128	30	65	141	31	66	143
South of Le Conte	21	45	96	23	51	109	24	52	112
North of Weyburn	20	43	93	23	49	105	23	50	108
South of Weyburn	19	41	89	22	46	100	22	47	101
North of Lindbrook	19	41	88	21	46	99	21	46	99
<b>Bel Air Rd.</b>									
North of Sunset	9	20	42	10	21	44	10	21	44
<b>Beverly Glen</b>									
South of Sunset	23	50	107	24	52	112	24	52	112
<b>Selby Ave.</b>									
North of Wilshire	10	21	45	10	22	47	10	22	47
South of Wilshire	10	22	47	11	23	49	11	23	49
<b>Westholme Ave.</b>									
North of Wilshire	12	26	56	13	27	58	13	27	58
South of Wilshire	11	24	53	12	25	55	12	25	55
<b>Warner Blvd.</b>									
North of Wilshire	11	24	51	12	25	55	12	25	55
South of Wilshire	8	17	38	9	20	43	9	20	43