## 4.8.1 INTRODUCTION

*This section of the EIR documents existing and predicted future noise levels in the project area and along affected roadways associated with project construction and operation. These findings are based on information provided ~~by~~ in the revised project traffic study, prepared for this recirculated partial Draft EIR by Fehr and Peers Transportation Consultants, ~~May 2007~~October 2007, as discussed in detail in Section 1.0, Introduction and Purpose.*[1] *Complete copies of the acoustic analysis data and the traffic analysis are contained within* ***Appendices 4.8 and 4.11*** *of this recirculated Draft EIR, respectively.*

## 4.8.2 METHODOLOGY

### Characteristics of Noise

Noise is usually defined as unwanted sound and can be an undesirable by-product of society's normal day-to-day activities. Sound is characterized as unwanted when it interferes with normal activities, causes actual physical harm, or has an adverse effect on health. The definition of noise as unwanted sound implies that it has an adverse effect or causes a substantial annoyance to people and their environment.

Noise is measured on a logarithmic scale of sound pressure known as a decibel (dB). Sound pressure level alone is not a reliable indicator of loudness because the human ear does not respond uniformly to sounds at all frequencies. For example, it is less sensitive to low and high frequencies than to medium frequencies that more closely correspond with human speech. In response to human sensitivity or lack thereof to different frequencies, the A-weighted noise level, referenced in units of dB(A), was developed to better correspond with people's subjective judgment of sound levels.

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1 It should be noted that the traffic study has been updated to reflect the traffic counts taken for the 231-265 North Beverly Drive Project EIR (William Morris), one of several projects currently under environmental review by the City of Beverly Hills. In order to evaluate the most conservative scenario, traffic projected to be generated by the Beverly Hilton Revitalization Plan project has been added to the existing traffic volumes at certain intersections defined in the 231-265 North Beverly Drive Project EIR. This additional analysis has been performed for those intersections where the existing volumes measured for the 231-265 North Beverly Drive Project EIR, in June 2006, are higher than the volumes measured by Fehr & Peers in December 2006 and January and February 2007. Thus, for each intersection, the highest measured volumes of existing traffic have been used. However, this additional analysis also altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes, even though overall traffic volume increased at the intersection.

In general, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear.[2] A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level. Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. An increase of greater than 5 dB(A) is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound volume. Common noise levels associated with certain activities are shown on **Figure 4.8-1, Common Noise Levels.**

Noise originates with two kinds of sources: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line or linear sources, such as a roadway with a large number of mobile point sources (motor vehicles). Sound generated by a stationary point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites (i.e., paved areas), and it attenuates at a rate of 7.5 dB(A) at acoustically "soft" sites (i.e., landscaped areas).[3] For example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dB(A) at 100 feet from the source and it would be 48 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates (i.e., becomes less) at a rate of 3 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for hard and soft sites, respectively.[4] Man-made or natural barriers can also attenuate sound levels, as illustrated in **Figure 4.8-2, Noise Attenuation by Barriers.**

Solid walls and berms may reduce noise levels by 5 to 10 dB(A).[5] The minimum attenuation of exterior to interior noise provided by typical building types is provided in **Table 4.8-1,** below.

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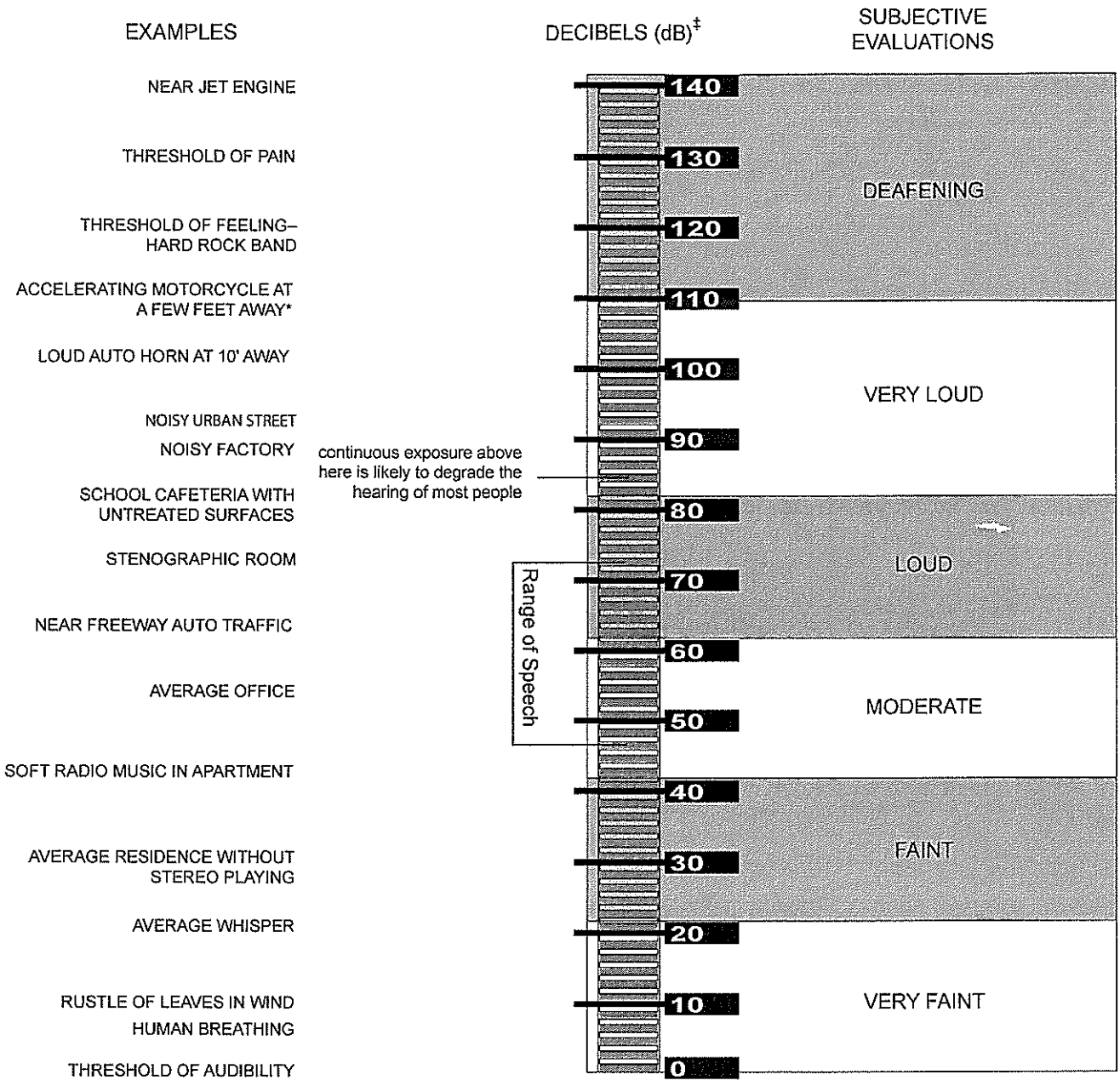
2 U.S. Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.

3 U.S. Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 97. A "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt, concrete, and very hard packed soils. An acoustically "soft" or absorptive site is characteristic of normal earth and most ground with vegetation.

4 U.S. Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 97.

5 U.S. Department of Transportation, Federal Highway Administration, *Highway Noise Mitigation,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 18.



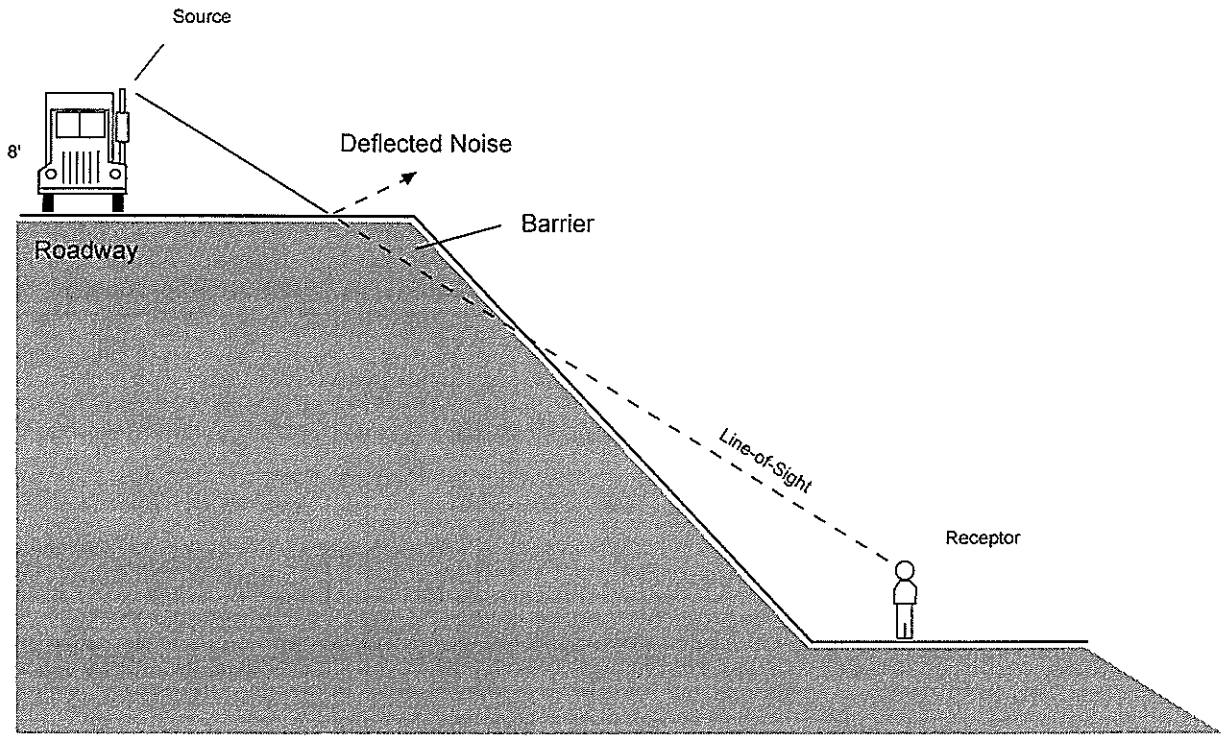

** NOTE: 50' from motorcycle equals noise at about 2000' from a four-engine jet aircraft.*

*‡ NOTE: dB are "average" values as measured on the A–scale of a sound–level meter.*

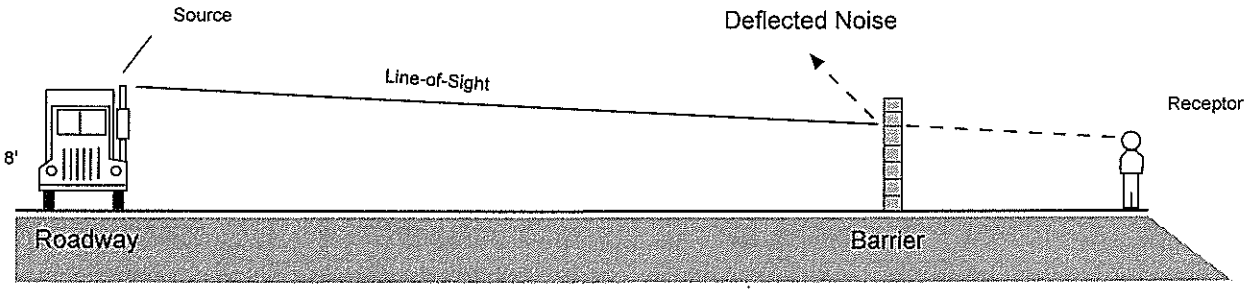
**SOURCE:** Impact Sciences, Inc. – March 2007

FIGURE **4.8-1**

## Common Noise Levels




"Barrier Effect" Resulting from Differences in Elevation.




"Barrier Effect" Resulting from Typical Soundwall.

SOURCE: Impact Sciences, Inc. – March 2007

FIGURE **4.8-2**

Noise Attenuation by Barriers

**Table 4.8-1**
**Outside to Inside Noise Attenuation (dB(A))**

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

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

[1] *As shown, buildings with closed windows can attenuate exterior noise by a minimum of 25 to 30 dB(A).*

When assessing community reaction to noise, there is an obvious need for a scale that averages sound pressure levels over time and quantifies the result in terms of a single numerical descriptor. Several scales have been developed that address community noise levels.

Those that are applicable to this analysis are the Equivalent Noise Level ($L_{eq}$) and the Community Noise Equivalent Level (CNEL). $L_{eq}$ is the average A-weighted sound level measured over a given time interval. $L_{eq}$ can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is another average A-weighted sound level measured over a 24-hour period. However, this noise scale is adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained by adding 5 decibels to sound levels occurring during the evening from 7 PM to 10 PM, and 10 decibels to sound levels occurring during the nighttime from 10 PM to 7 AM. These 5 and 10 decibel "penalties" are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour $L_{eq}$ measurements typically results in a CNEL measurement that is within approximately 3 dB(A) of the peak hour $L_{eq}$.[6]

## Characteristics of Vibration

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from

6 California Department of Transportation, *Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol,* (Sacramento, California: October 1998), pp. N51-N54.

truck pass-bys. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne vibration generated by man-made activities attenuates rapidly as distance from the source of the vibration increases and vibration rapidly diminishes in amplitude with distance from the source. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

**Figure 4.8-3, Typical Levels of Ground-Borne Vibration**, identifies the typical groundborne vibration levels in VdB and human response to different levels of vibration.

## 4.8.3 EXISTING CONDITIONS

### Noise Environment

The Beverly Hilton Hotel is located in an urban setting in the City of Beverly Hills and is exposed to noise sources typical of such a setting. Off-site stationary noise sources in the area that are audible on the site include activities associated with commercial and retail uses surrounding the site such as people talking, doors slamming and tires squealing, and truck deliveries. However, the predominant and most consistently noticeable noise source within the area is generated by vehicular traffic within the City. The project site is bounded by roads on all sides, including Wilshire Boulevard, a major six-lane principal arterial, on the north; Santa Monica Boulevard, a major eight-lane principal arterial, on the south; the intersection of Wilshire and Santa Monica Boulevards on the east; and Merv Griffin Way, a private four-lane roadway connecting Wilshire and Santa Monica Boulevards, on the west. Residential uses and the Beverly Gardens Park lie north of Wilshire, while the area south of Santa Monica Boulevard is commercial and office uses. The former Robinsons-May department store is located west of the Beverly Hilton across Merv Griffin Way.

Analysis of the existing and future noise environments presented in this EIR section is based on technical reports, noise monitoring, and noise prediction modeling. Predicted vibration impacts as a result of the implementation of the proposed project were determined using data from the Federal Transit Administration. In addition to noise monitoring, noise prediction modeling was conducted to ascertain noise levels generated by motor vehicle traffic traveling on local roadways. This was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108). This model, which is commonly used to assess roadway noise impacts throughout the United States, calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site conditions. Average vehicle noise rates (energy rates) contained in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans). Caltrans data show that California automobile noise is 0.8 to 1.0 dB(A) louder than national levels and that medium and heavy truck noise is 0.3 to 3.0 dB(A) quieter than national levels. Traffic volumes utilized as data inputs to the noise prediction model were calculated based on information provided by Fehr and Peers Transportation Consultants, the project traffic engineer, in the traffic study (October 2007) and are consistent with the analysis provided in revised section **Section 4.11, Transportation, Traffic, Parking, and Circulation**, of this recirculated partial Draft EIR. Traffic counts relied upon for analysis contained in this recirculated Draft EIR were collected by Fehr and Peers in December 2006 and January and February 2007, and, for certain study intersections, higher traffic volumes were collected ~~in December 2006 and January 2007~~for the 231-265 North Beverly Drive Project in June 2006, avoiding major holidays and school breaks.[7]

The results of the weekday noise modeling are provided in **Table 4.8-2, Existing Modeled Roadway Noise Levels.** As shown, existing roadway noise levels range from a low of 58.3 dB(A) to a high of 68.4 dB(A) at a distance of 75 feet from the centerline of the roadway.

To further document ambient noise levels, monitoring was conducted in the vicinity of the project site using a Larson Davis Model 720 Sound Level Meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. Noise monitoring was conducted at four locations along Wilshire Boulevard, Santa Monica Boulevard, and Merv Griffin Way in November 2006. The noise monitor was elevated approximately 5 feet above the existing grade. The monitoring locations, as indicated in **Figure 4.8-4, Noise Monitoring Locations**, were selected in order to

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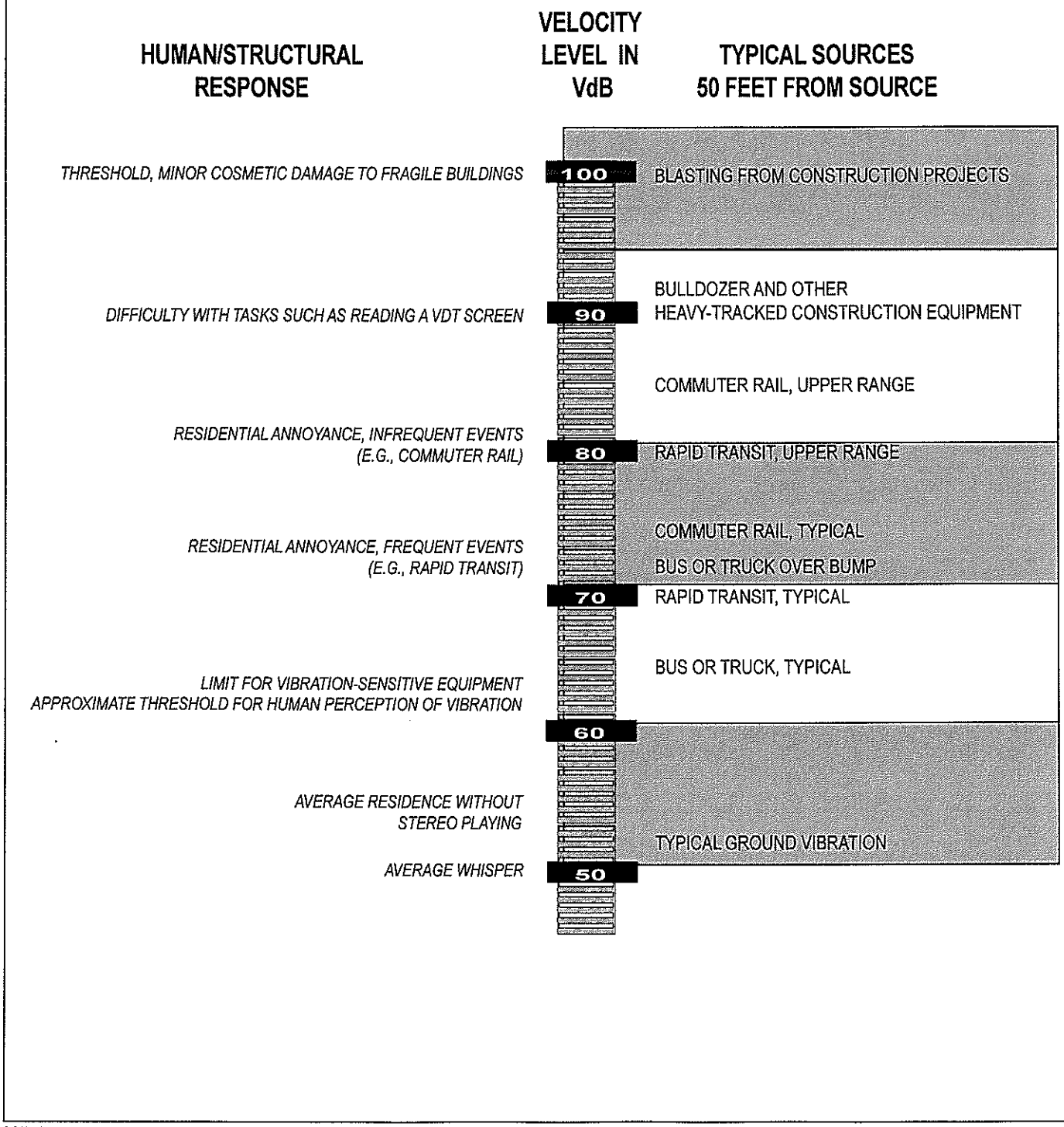
7 Traffic counts taken before the closing of the Robinsons-May department store on the adjacent 9900 Wilshire site have been added to the December 2006 and January 2007 counts conducted for the Beverly Hilton Revitalization Plan project, to reflect the true existing conditions on the 9900 Wilshire site (that is, to replicate conditions in place when the store was open). Although the store has been closed since mid 2006 and the site has been kept vacant in the anticipation of the City's consideration of redevelopment of the property, reoccupying the department store building would require no further discretionary approvals from the City. Accordingly, this methodology results in a conservative estimate of baseline traffic conditions.

represent the existing noise environment experienced on and immediately surrounding the project site. During each noise sample, no heavy wind gusts or adverse weather conditions were observed. As presented in **Table 4.8-3, Monitored Noise Levels,** below, existing CNEL noise levels monitored ranged from a low of 68.6 dB(A) to 78.6 dB(A).

**Table 4.8-2**
**Existing Modeled Roadway Noise Levels**

| Roadway Segment | CNEL (in dB(A) at 75 feet from the roadway centerline) |
|---|---|
| Beverly Dr. S/O Wilshire Blvd. | 63.9 ~~64.4~~ |
| Beverly Dr. E/O S. Santa Monica Blvd. | 64.6 |
| Beverly Dr. W/O N. Santa Monica Blvd. | 60.3 |
| Merv Griffin Way S/O Wilshire Blvd. | 60.7 |
| Santa Monica Blvd. S/O Century Park E. | 68.2 |
| N. Santa Monica Blvd. N/O Moreno X-Over | 66.3 ~~66.2~~ |
| N. Santa Monica Blvd. N/O Merv Griffin Way | 65.4 ~~65.0~~ |
| N. Santa Monica Blvd. N/O Wilshire Blvd. | 66.3 ~~66.7~~ |
| N. Santa Monica Blvd. N/O Beverly Dr. | 66.8 ~~66.6~~ |
| S. Santa Monica Blvd. N/O Moreno X-Over | 65.8 ~~64.7~~ |
| S. Santa Monica Blvd. N/O Wilshire Blvd. | 67.2 ~~64.7~~ |
| S. Santa Monica Blvd. N/O Beverly Dr. | 65.7 |
| Sunset Blvd. W/O Whittier Blvd. | 66.4 |
| Sunset Blvd. E/O Whittier Blvd. | 66.6 |
| Whittier Blvd. N/O Wilshire Blvd. | 60.8 |
| Whittier Blvd. N/O Sunset Blvd. | 58.3 |
| Wilshire Blvd. W/O Whittier Dr. | 68.4 |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | 67.6 ~~68.0~~ |
| Wilshire Blvd. E/O S. Santa Monica Blvd. | 67.4 |
| Wilshire Blvd. E/O Beverly Dr. | 67.3 ~~67.1~~ |

*Source: Impact Sciences, Inc. Modeled results are contained in* ***Appendix 4.8.***
*Notes: Estimated average daily trips are based on a PM peak-hour trips to daily trips ratio of 8 percent. The additional analysis in the revised traffic study altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes than previously counted, even though overall traffic volume increased at the intersection.*

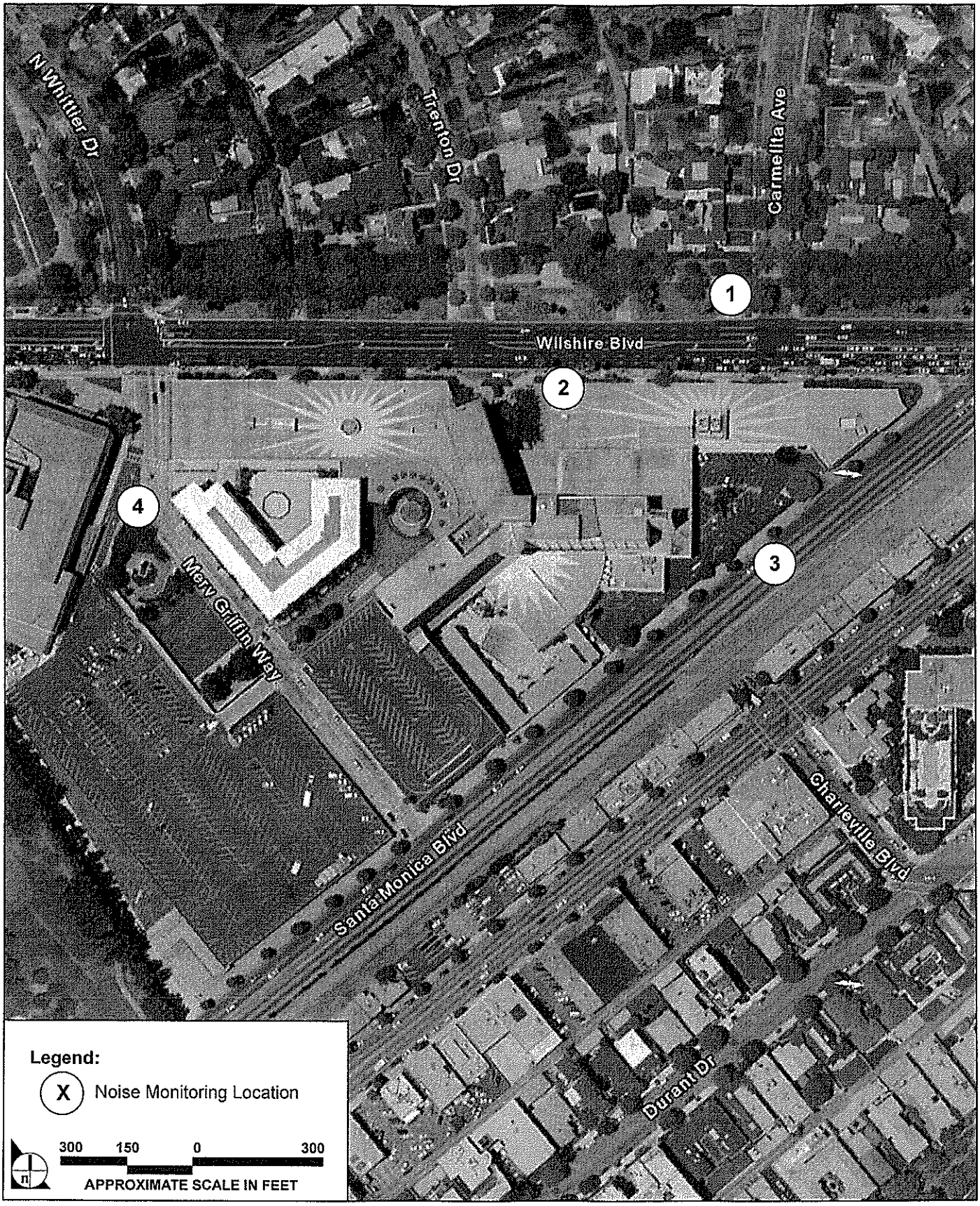



**SOURCE:** Impact Sciences, Inc. – March 2007

FIGURE **4.8-3**

Typical Levels of Ground-Borne Vibration

713-003•05/07




SOURCE: Google Earth – 2007, Impact Sciences, Inc. – March 2007

FIGURE **4.8-4**

Noise Monitoring Locations

713-003•05/07

Table 4.8-3
Monitored Noise Levels

| Site | Location | CNEL |
|---|---|---|
| 1. | 80 feet north of centerline of Wilshire Boulevard at Carmelita Avenue across from project site | 70.1 |
| 2. | 48 feet south of centerline of Wilshire Boulevard across from and between Trenton Drive and Carmelita Avenue on project site | 75.8 |
| 3. | 38 feet north of centerline of Santa Monica Boulevard on project site across from Charleville Boulevard | 78.6 |
| 4. | Merv Griffin Way between Robinsons-May building and Beverly Hilton | 68.6 |

*Source: Impact Sciences, Inc.*
*Note: All values are in dB(A).*

## 4.8.4 REGULATORY FRAMEWORK

### Applicable Plans and Policies

#### *City of Beverly Hills Noise Element*

As required by state law, the City of Beverly Hills adopted a Noise Element as a part of the City's General Plan. As adopted in November of 1975, and amended in 1980, the City's Noise Element was established to meet two main goals: (1) to guide decision makers relative to policy matters associated with noise and "noise pollution," and (2) to provide decision makers and the public with accurate data on noise within the jurisdiction. To help meet the two goals discussed above, the Noise Element also contains five objectives, which are listed below.

- To reduce noise from motor vehicles;
- To insure that future modes of transportation or new versions of existing modes meet acceptable noise levels;
- To provide a basis for noise evaluations which might be needed in conjunction with land use and construction matters and environmental impact reports/studies;
- To create a greater awareness of noise-associated problems among the public and elected officials and to provide guidance as to how they might be resolved; and
- To work jointly with appropriate agencies and/or jurisdictions to mitigate any noise problems in Beverly Hills.

## *City of Beverly Hills Municipal Code*

Title 5, Chapter 1, Noise Regulations, of the City of Beverly Hills Municipal Code contains provisions that would affect the noise environment on the project site and in its vicinity. Those sections of the code relevant to the proposed Project are cited below:

*5-1-202: MACHINERY, EQUIPMENT, FANS, AND AIR CONDITIONING:*

*It shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient noise level by more than five (5) decibels based on a reference sound pressure of 0.0002 microbars, as measured in any octave band center frequency, in cycles per second, as follows: 63, 125, 250, 500, 1,000, 2,000, 4,000, and 8,000 and for the combined frequency bands (all pass). (1962 Code § 4-8.206).*

*5-1-206: RESTRICTIONS ON CONSTRUCTION ACTIVITY:*

*A. No person shall engage in construction, maintenance or repair work which requires a city permit between the hours of six o'clock (6:00) P.M. and eight o'clock (8:00) A.M. of any day, or at any time on a Sunday or public holiday unless such person has been issued an after hours construction permit issued pursuant to subsection C of this section. In addition, no person shall engage in such work within a residential zone, or within five hundred feet (500') of a residential zone, at any time on a Saturday unless such person has been issued an after hours construction permit issued pursuant to subsection C of this section. For the purpose of this section, "public holiday" shall mean:*

*1. New Year's Day.*

*2. Memorial Day.*

*3. Independence Day.*

*4. Labor Day.*

*5. Thanksgiving Day.*

*6. Christmas Day.*

*Nothing in this section shall restrict the performance of 'emergency work' as that term is defined in section 5-1-102 of this chapter.*

*B. No person employed for the purposes of construction, maintenance, or repair work which requires a city permit shall enter a site on which such work will be done prior to eight o'clock (8:00) A.M. Any violation of this subsection shall be deemed to be an infraction.*

*C. The city building official, after consultation with appropriate city officials, may issue an after hours construction permit authorizing work and/or entrance to a work site otherwise prohibited by*

*this section if the city building official determines that the public interest will be served by such a permit. Situations in which the public interest may be served by the issuance of such an after hours construction permit include, but are not limited to, construction near school grounds, and construction that may interfere with vehicular or pedestrian traffic in heavily traveled public rights of way.*

*D. Applications for an after hours construction permit issued pursuant to subsection C of this section shall be in writing and shall set forth how the public interest will be served by issuing the permit. An after hours construction permit may be revoked or suspended by the city building official if the city building official determines that activity conducted pursuant to the permit detrimentally affects the public health, safety or welfare. (Ord. 88-O-2039, eff. 10-13-1988; amd. Ord. 89-O-2074, eff. 10-19-1989; Ord. 90-O-2088, eff. 2-8-1990).*

## *State of California Noise Standards*

The Office of Planning and Research has published guidance for local planners preparing general plans, which include guidelines for mobile source noise and land use compatibility. These guidelines are illustrated in **Table 4.8-4, Land Use Compatibility for Community Noise Environments.** As is identified in **Table 4.8-4**, noise levels up to 65 dB(A) are considered "normally acceptable" for both multi-family residential and hotel land uses. For the proposed commercial land uses, the guidelines identify 70 dB(A) CNEL as the "normally acceptable" exterior noise level threshold.

In addition, the California Commission of Housing and Community Development officially adopted noise standards in 1974. In 1988, the Building Standards Commission approved revisions to the standards (Title 24, Part 2, California Code of Regulations). As revised, Title 24 establishes an interior noise standard of 45 dB(A) CNEL for multi-family residential and hotel space.

**Table 4.8-4**
**Land Use Compatibility for Community Noise Environments**

| Land Use Category | Community Noise Exposure (CNEL) | | | |
|---|---|---|---|---|
| | Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
| Residential – Low Density, Single-Family, Duplex, Mobile Homes | 50–60 | 55–70 | 70–75 | 75–85 |
| Residential - Multiple Family | 50–65 | 60–70 | 70–75 | 70–85 |
| Transient Lodging - Motel, Hotels | 50–65 | 60–70 | 70–80 | 80–85 |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | 50–70 | 60–70 | 70–80 | 80–85 |
| Auditoriums, Concert Halls, Amphitheaters | NA | 50–70 | NA | 65–85 |
| Sports Arenas, Outdoor Spectator Sports | NA | 50–75 | NA | 70–85 |
| Playgrounds, Neighborhood Parks | 50–70 | NA | 67.5–75 | 72.5–85 |

| Land Use Category | Community Noise Exposure (CNEL) | | | |
|---|---|---|---|---|
| | Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | 50–70 | NA | 70–80 | 80–85 |
| Office Buildings, Business Commercial and Professional | 50–70 | 67.5–77.5 | 75–85 | NA |
| Industrial, Manufacturing, Utilities, Agriculture | 50–75 | 70–80 | 75–85 | NA |

*Source: Office of Planning and Research, General Plan Guidelines, California, October 2003.*
*Notes:*
*NA: Not Applicable.*
*Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.*
*Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.*
*Normally Unacceptable – New construction or development should 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.*

## 4.8.5 SIGNIFICANCE CRITERIA

Based on the City of Beverly Hills Noise Ordinance and the State Office of Planning and Research Land Use Compatibility guidelines, the proposed project would result in significant noise impacts if:

NOISE-1 Construction activities occurring on the project site would result in an increase of 5 dB(A) or more outside the hours permitted by the City's noise ordinance (i.e., between the hours of 6:00 PM and 8:00 AM on weekdays, or at any time on Saturday, Sunday or a public holiday);

NOISE-2 Exterior land uses would be exposed to exterior noise above 65 dB(A) for residential and hotel land uses and 70 dB(A) for commercial land uses, or interior land uses would be exposed to noise levels in excess of 45 dB(A);

NOISE-3 Noise levels measured at off-site land uses exceed the 45 dB(A) interior noise threshold or 65 dB(A) exterior noise threshold contained in the state's guidelines. Based on this information, the project would result in significant noise impacts if:

- An increase of 3 dB(A) or greater in traffic noise levels that occurs from project-related activities would cause the noise compatibility thresholds for "normally acceptable" exterior or interior noise levels to be exceeded, or a 3 dB(A) increase in noise would occur to a land use experiencing levels above the noise compatibility threshold for "normally acceptable" (a noise level increase of less than 3 dB(A) under either of the previously described scenarios is not considered to be significant).

- Increases in traffic noise greater than 5 dB(A) result even if the resulting noise levels are below the land use compatibility standards (an increase of 5 dB(A) or less in traffic noise levels that occurs from project-related activities would not be considered significant if the resulting noise levels remain below the "acceptable" thresholds).

- Stationary noise sources proposed as part of the project that could result in increases in noise levels at adjacent land uses would exceed the land use compatibility standards.

NOISE-4 Vibration or groundborne noise levels exceeds the Federal Railroad Administration (FRA) maximum acceptable level threshold of 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools).

## 4.8.6 ENVIRONMENTAL IMPACT ANALYSIS

### Construction Impacts

*NOISE-1 Would construction activities occurring on the project site result in an increase of 5 dB(A) or more outside the hours permitted by the City's noise ordinance (i.e., between the hours of 6:00 PM and 8:00 AM on weekdays, or at any time on Saturday, Sunday or a public holiday)?*

Construction equipment operates in two primary modes: mobile and stationary. Mobile equipment, such as bulldozers, scrapers, graders, etc., is operated in a cyclic fashion in which a period of full power is followed by a period of reduced power. Stationary equipment can be subdivided into two groups. One group contains such items as pumps, generators, compressors, etc., which generally operate at a fixed power and produce a fairly constant sound level under normal operations. The other group contains impact equipment, such as jackhammers, pavement breakers, etc.

The U.S. Environmental Protection Agency (U.S. EPA) has compiled data on the noise-generating characteristics of specific types of construction equipment. This data is presented in **Figure 4.8-5, Noise Levels of Typical Construction Equipment**. As shown, noise levels generated by heavy equipment can range from approximately 68.0 dB(A) to noise levels in excess of 95 dB(A) when measured at a distance of 50 feet from the source. However, these stationary source noise levels would, as discussed previously, diminish rapidly with distance from the construction site at a rate of approximately 6.0 to 7.5 dB(A) per doubling of distance. Nonetheless, any locations that would have an uninterrupted line of sight to the construction noise sources could be exposed to construction noise. It should be noted, however, that each piece of construction equipment would not be used continuously.

As discussed in **Section 3.0, Project Description**, construction of the proposed project would involve five phases.

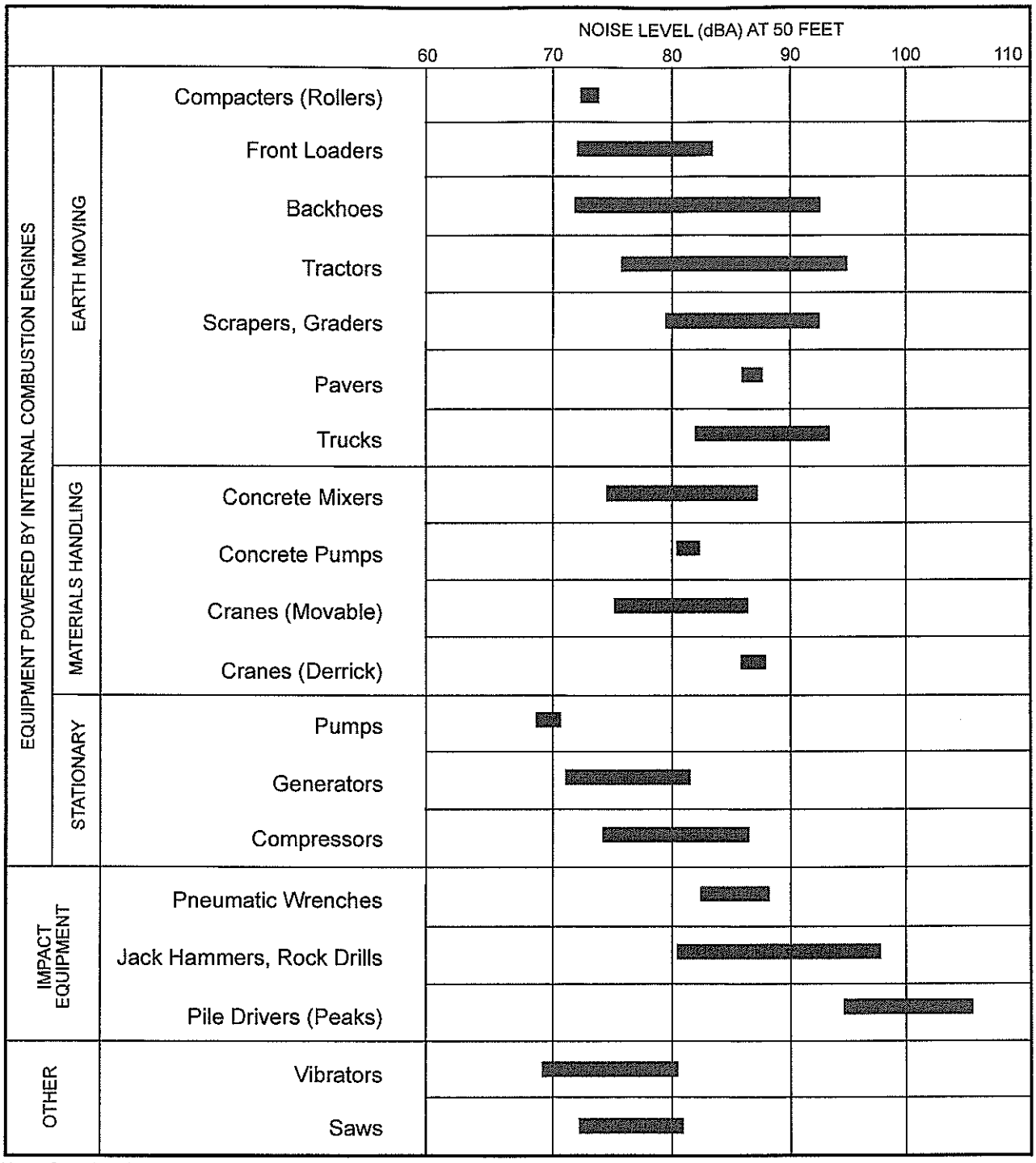
- Phase 1 would consist of the demolition of the Palm/Oasis Court building and existing access driveway, and the grading and construction of the first and second temporary access driveways.
- Phase 2 would consist of the demolition of some existing hotel components, including the executive conference center, hotel offices, the lobby bar, a portion of the lobby, the exterior courtyard between the lobby and Wilshire Boulevard, and the former Trader Vic's restaurant building and parking lot, as well as demolition of the first temporary access driveway.
- Phase 3 would involve grading and construction of The Waldorf Astoria Hotel, new Beverly Hilton Hotel rooms and executive conference center, new lobby and retail, the Residence A building, and associated -underground parking, as well as construction of the third temporary access driveway.
- Phase 4 would consist of the demolition of the Cabana/Lanai Rooms building, the existing parking structure, pool, and terrace.
- Finally, Phase 5 would involve the grading and construction of the Residence B building and associated underground parking, the new pool and terrace, the final access driveway, and the residential access driveway, and demolition of the third temporary access driveway.

Construction would take place between early 2008 and mid-2012 with each subsequent phase overlapping the previous one by at least one month. Additionally, demolition, grading, and construction activities within each phase would overlap with each other.

Construction activities associated with the proposed project would take place approximately 100 feet from institutional uses (El Rodeo School), Beverly Gardens Park, and single-family residences northwest of the site across Wilshire Boulevard. These uses constitute off-site noise-sensitive land uses. Additionally, the Wilshire Tower portion of the Beverly Hilton would continue to operate during construction and constitutes a sensitive land use.

Because of overlap between phases and between demolition, grading and construction activities within each phase, construction generated noise levels are estimated based on the anticipated combinations of equipment throughout the construction process, as presented in **Table 4.8-5, Construction Noise Levels**.

As **Table 4.8-5** shows, noise levels throughout project construction are estimated to range from 79 CNEL to 88 CNEL. The highest construction-related noise levels would occur during grading of Sites A, A-1 and B and Site C. This is due to the use of drilled piles for construction of the subterranean parking structures.




Note: Based on limited available data samples.

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

FIGURE **4.8-5**

## Noise Levels of Typical Construction Equipment

Equipment required during each construction phase would generate both steady state and episodic noise that would be heard both on and off the project site. It should be noted that equipment operation estimates used for the analysis of demolition, grading, and building construction noise levels are representative of worst case conditions, since it very unlikely that all the equipment associated with each activity would operate simultaneously. Noise levels presented in **Table 4.8-5** reflect the peak noise levels based on the types of equipment being used at the closest point to sensitive receptors, which include the El Rodeo Elementary School and residential land uses located approximately 100 feet to the northwest and north of the project site. Typically, the noise levels generated by the types of equipment required for each phase of construction would be experienced intermittently. Finally, construction activities associated with the excavation and shoring of the underground parking structures would be much lower due to the location of the construction activities below grade.

**Table 4.8-5**
**Construction Noise Levels**

| Activity/Combination of Activities[1] | Required Equipment[2] | Anticipated Noise Levels at a Distance of 100 feet (CNEL) |
|---|---|---|
| Demolition: Palm/Oasis | Truck, Dozer, Tractor/Loader/Backhoe | 79 |
| Demolition: Palm/Oasis<br>Grading: 1st AD | 2 Trucks, 2 Dozers, 2 Tractor/Loader/Backhoes | 81 |
| Demolition: Existing AD, Sites A, A-1, B<br>Construction: 1st AD | Grader, 2 Trucks, Paver, Roller, 2 Dozers, 2 Tractor/Loader/Backhoes | 83 |
| Demolition: Existing AD, Sites A, A-1, B<br>Grading: 2nd AD | 3 Trucks, 3 Dozers, 3 Tractor/Loader/Backhoes | 82 |
| Demolition: Sites A, A-1, B<br>Construction: 2nd AD | Grader, Truck, Paver, Roller, Dozer, Tractor/Loader/Backhoe | 82 |
| Demolition: Existing AD, Sites A, A-1, B<br>Grading: Sites A, A-1, B | 2 Trucks, 3 Dozers, Scraper, Drilled piles,[3]<br>3 Tractor/Loader/Backhoes | 88 |
| Grading: Sites A, A-1, B | Excavator, Truck, 2 Dozers, Scraper, Drilled piles, 2 Tractor/Loader/Backhoes | 87 |
| Construction: Sites A, A-1, B | 5 Concrete/Industrial Saws, Grader, 9 Other Equipment, Paver, Roller, 5 Rough Terrain Forklifts | 85 |
| Grading: 3rd AD<br>Construction: Sites A, A-1, B | 5 Concrete/Industrial Saws, Grader, 9 Other Equipment, Paver, Roller, 5 Rough Terrain Forklifts, Truck, Dozer, Tractor/Loader/Backhoe | 86 |
| Construction: 3rd AD | Grader, Paver, Roller | 82 |
| Demolition: Site C | Grader, Paver, Roller, Truck, Dozer, | 83 |

| Activity/Combination of Activities[1] | Required Equipment[2] | Anticipated Noise Levels at a Distance of 100 feet (CNEL) |
|---|---|---|
| Construction: 3rd AD | Tractor/Loader/Backhoe | |
| Demolition: Site C | Truck, Dozer, Tractor/Loader/Backhoe | 80 |
| Demolition: Site C<br>Grading: Site C | 2 Trucks, 2 Dozers, 2 Tractor/Loader/Backhoes, Excavator, Scraper, Drilled Piles | 87 |
| Grading: Site C | Excavator, Truck, Dozer, Scraper, Drilled Piles, Tractor/Loader/Backhoe | 87 |
| Construction: Site C | Concrete/Industrial Saw, Grader, 2 Other Equipment, Paver, Roller, Rough Terrain Forklift | 83 |
| Demolition: 3rd AD<br>Construction: Site C | Concrete/Industrial Saw, Grader, 2 Other Equipment, Paver, Roller, Rough Terrain Forklift, Truck, Dozer, Tractor/Loader/Backhoe | 84 |
| Grading: Final AD | Truck, Dozer, Tractor/Loader/Backhoe | 80 |
| Grading: Res AD<br>Construction: Final AD | Grader, Paver, Roller, Truck, Dozer, Tractor/Loader/Backhoe | 83 |
| Construction: Res AD | Grader, Paver, Roller | 82 |

*Source: Impact Sciences, Inc. Results are contained in Appendix 4.8.*

*Notes: Construction equipment for all phases was assumed based on equipment used in the URBEMIS air quality model except when substitutions were made.*

[1] *1st, 2nd and 3rd AD = temporary access driveways*
*Sites A, A-1, B (demolition) = Executive conference center, hotel office, hotel retail, lobby components, existing parking, 1st AD, et al.*
*Sites A, A-1, B (construction) =The Waldorf Astoria Hotel, Residence A Building, new executive conference center, hotel retail, hotel office, lobby components, parking, et al.*
*Site C (demolition) = Lanai Building, existing parking structure, 2nd AD, et al.*
*Site C (construction) = Residence B Building, pool, parking, et al.*
*Final AD = Permanent final access driveway*
*Res AD = Permanent residential access driveway*

[2] *Grading Phases: Backhoes were substituted for excavators. "Other Equipment" includes a combination of electric drills, jackhammers, pneumatic tools, and other equipment within the URBEMIS database that represent a range of operational noise levels.*

[3] *Consistent with the City's restriction on the use of impact-driven piles, project construction would utilize drilled piles. The range of noise levels generated by pile drilling is estimated to be 80 to 95 dB(A) at 50 feet. Since pile drilling equipment was not available within the construction noise model used, sonic pile drivers, which generate noise levels of 96 dB(A) at 50 feet, were used in this analysis to represent noise associated with drilled piles.*

In order to minimize potential conflicts between construction activity and through traffic in the vicinity of the project site, a Construction Management Plan is being developed and would be finalized prior to the initiation of demolition of the structures on site. The plan would identify all traffic control measures, signs, and delineators required to be implemented by the construction contractor throughout the duration of demolition and construction activity.

Construction of the proposed project would also require the use of heavy trucks to haul equipment and materials to the site, as well as to transport debris and earth excavated for construction of the subterranean parking. According to the preliminary Construction Management Plan prepared by the

project applicant, the construction staging area for the project would be located on site. Haul trucks would use Santa Monica Boulevard to travel between the project site and the 405 Freeway, minimizing the use of residential streets to the extent feasible, as designated by the City's commercial vehicle restrictions under Section 7-2-203 of the Municipal Code.

The major pieces of heavy equipment would be moved onto the project site once per construction activity (i.e., demolition, grading, etc). In addition, the daily transportation of construction workers and the hauling of materials both on and off the project site are expected to cause increases in noise levels along project roadways, although noise levels from such trips would be less than peak hour noise levels generated by trips during project operation. Given that construction activities would not result in a doubling of daily trips on any roadways in the project vicinity and that it takes a doubling of average daily trips on roadways to increase noise by 3 dB(A), the noise level increases along major arterials in the City of Beverly Hills would be less than 3 dB(A). Therefore, the noise impacts of construction-related roadway traffic would be less than significant.

The project's Construction Management Plan indicates that in order to ensure timely completion of the project, exterior construction would be performed Monday through Friday between the hours of 8:00 AM and 6:00 PM, and may also be performed during extended hours if required and specifically permitted by the City. As shown in **Table 4.8-5**, construction activities would generate noise levels ranging from 77 B(A) to 88 dB(A) CNEL as measured at a distance of 100 feet from the noise source. However, the noise levels presented in **Table 4.8-5** represent conservative, worst-case conditions and not typical conditions throughout construction. They assume that all equipment associated with each construction activity would operate simultaneously and continuously. In actuality, equipment would operate individually as needed, and noise generation would be periodic and not continuous throughout construction. Accordingly, project construction undertaken during weekday hours between 8:00 AM and 6:00 PM would comply with the standards established in the Noise Ordinance and is anticipated to result in less than significant noise impacts.

Exterior construction activities undertaken before 8:00 AM, after 6:00 PM, or on weekends would generate noise levels in excess of 5.0 dB(A) above ambient noise levels outside the hours permitted by the City's noise ordinance, which is a significant impact. While implementation of **MM-NOISE-1** would reduce daytime and nighttime noise impacts associated with all construction activity, no feasible mitigation exists to reduce impacts to less than significant. Therefore, impacts associated with noise generated by construction undertaken outside hours permitted by the City's noise ordinance would be significant and unavoidable.

Interior construction would be performed Monday through Friday between the hours of 6:30 AM and 8:00 PM, except when extended hours are required or specifically permitted by the City. Interior construction equipment typically generates less noise than exterior construction equipment and noise generated by interior construction would be attenuated by the presence of the building shell. As a result, interior construction activity, even if performed outside the hours permitted by the City's noise ordinance, would not generate noise levels in excess of 5.0 dB(A) above ambient noise levels outside the hours permitted by the City's noise ordinance and would result in a less than significant noise impact.

*NOISE-4 Would vibration or groundborne noise levels exceed the Federal Railroad Administration (FRA) maximum acceptable level threshold of 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools)?*

Construction equipment can create intense noise that is disturbing and can result in ground vibrations. Persons residing and working in the area surrounding the project site could be exposed to the generation of such excessive groundborne vibration or groundborne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Ground vibrations from construction activities very rarely reach levels that can damage structures, but they can fall within the audible range and be felt in buildings very close to the site. The primary and most intensive vibration source associated with the development of the project would be the use of bulldozers. **Table 4.8-6, Vibration Source Levels for Construction Equipment**, lists vibration source levels for construction equipment.

**Table 4.8-6**
**Vibration Source Levels for Construction Equipment**

| Equipment | Approximate VdB | | | |
|---|---|---|---|---|
| | 25 Feet | 50 Feet | 75 Feet | 100 Feet |
| Large Bulldozer | 87 | 81 | 77 | 75 |
| Loaded trucks | 86 | 80 | 76 | 74 |
| Jackhammer | 79 | 73 | 69 | 67 |
| Small Bulldozer | 58 | 52 | 48 | 46 |

*Source: Federal Railroad Administration, 2005.*

Land uses surrounding the project site consist of institutional, residential, commercial, and recreational uses. As mentioned above, the FRA identifies a maximum acceptable level threshold of 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land

uses with primary daytime use (such as churches and schools). The Wilshire Tower portion of the Beverly Hilton Hotel will remain in operation throughout project construction and constitutes a sensitive land use on the project site, adjacent to proposed demolition and construction activities. The nearest off-site sensitive land uses, El Rodeo Elementary School and residential uses, are located approximately 100 feet to the northwest and north of the project site.

As indicated in **Table 4.8-6**, large bulldozers would generate the largest vibrations of approximately 75 VdB at 100 feet from the source. This is the approximate distance to El Rodeo Elementary School. As a result, ground vibrations from project construction activities would meet, but not exceed, the FRA groundborne vibration threshold for schools. As such, vibration impacts experienced by the school would be less than significant. However, single-family residences are also located approximately 100 feet north of the project site. The vibration level of 75 VdB at 100 feet from the source exceeds the FRA threshold of 72 VdB for residential uses. Therefore, vibration impacts experienced by the residences located approximately 100 feet north of the project site would be significant.

On-site sensitive receptors include guests of the Beverly Hilton Hotel, which will remain in operation throughout project construction. As discussed above, construction activity would generate vibration levels of up to 75 VdB at 100 feet from the source. This exceeds 72 VdB, the FRA vibration threshold for hotels. As such, construction activity would result in significant vibration impacts on on-site receptors (i.e., the hotel).

**MM-NOISE-1** is applicable to this impact, but no feasible mitigation is available to reduce construction vibration impacts to less than significant. Therefore, although short-term in duration, construction vibration impacts on off-site receptors to the north and on-site receptors would be significant and unavoidable.

## Operational Impacts

### *Off-Site Noise Impacts*

*NOISE 3 Would noise levels measured at off-site land uses exceed the 45 dB(A) interior noise threshold or 65dB(A) exterior noise threshold contained in the State's guidelines? Based on this information, the project would result in significant noise impacts if:*

- *An increase of 3 dB(A) or greater in traffic noise levels that occurs from project-related activities would cause the noise compatibility thresholds for "normally acceptable" exterior or interior noise levels to be exceeded, or a 3 dB(A) increase in noise would occur to a land use experiencing levels above the noise compatibility threshold for "normally acceptable" (a noise level increase of less than 3 dB(A) under either of the previously described scenarios is not considered to be significant).*

- *Increases in traffic noise greater than 5 dB(A) result even if the resulting noise levels are below the land use compatibility standards (an increase of 5 dB(A) or less in traffic noise levels that occurs from project-related activities would not be considered significant if the resulting noise levels remain below the "acceptable" thresholds).*

- *Stationary noise sources proposed as part of the project that could result in increases in noise levels at adjacent land uses would exceed the land use compatibility standards.*

### Roadway Noise

Vehicular noise can potentially affect the project site, as well as land uses located along the studied roadway system. Based on the distribution of traffic volumes, noise modeling was conducted for the roadways analyzed in **Section 4.11, Transportation, Traffic, Parking, and Circulation**. The analysis is based on the difference between the projected traffic volumes with project implementation and the projected traffic volumes without project implementation.[8] Both scenarios are modeled for the buildout year 2012. The comparison is illustrated in **Table 4.8-7, Future Year (2012) Modeled Roadway Noise Levels**. As can be seen, the project-related noise increases for the roadway segments studied are minimal. Three roadway segments experience a CNEL increase greater than 0.0 dB(A), but no greater than 0.1 dB(A). As discussed above, a noise level increase of 3 dB(A) or more represents the point at which only the most sensitive individuals notice a change in noise levels. Given that none of the roadway segments studied would result in an increase in CNEL greater than 3 dB(A) as a result of project implementation, the project would not exceed the significance criteria for off-site noise impacts. As a result, potential roadway noise impacts would be less than significant.

### Mechanical Equipment

New land uses proposed on the project site could introduce various on-site stationary noise sources, including electrical and mechanical air conditioning, most of which would be located on building rooftops. Land uses potentially affected by the introduction of such equipment include on-site residential and hotel uses and off-site commercial, institutional, and residential uses. Typically, rooftop-mounted equipment sources produce noise levels of approximately 56 dB(A) at 50 feet away from the source.

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8 As discussed earlier, it should be noted that the traffic analysis used to estimate future traffic conditions reflects the traffic counts taken for the 231-265 North Beverly Drive Project EIR. In order to evaluate the most conservative scenario, traffic projected to be generated by the Beverly Hilton Revitalization Plan project has been added to the existing traffic volumes at certain intersections defined in the 231-265 North Beverly Drive Project EIR. This additional analysis has been performed for those intersections where the existing volumes measured for the 231-265 North Beverly Drive Project EIR, in June 2006, are higher than the volumes measured by Fehr & Peers in December 2006 and January and February 2007. Thus, for each intersection, the highest measured volumes of existing traffic have been used. However, this additional analysis also altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes, even though overall traffic volume increased at the intersection.

Although these noise levels may be noticeable in a quiet environment, the existing daytime, evening, and nighttime ambient noise levels within the project vicinity would substantially mask these on-site sources. In addition, development activities on the project site must comply with Beverly Hills Municipal Code Section 5-1-202, which requires that noise generated by mechanical equipment not exceed 5.0 dB(A) above ambient noise levels at adjacent property lines. Use of standard design features such as shielding, enclosures and parapets, proper selection and sizing of equipment, as well as locating rooftop equipment a suitable distance from sensitive receptors, would ensure compliance with City Code. Since noise generated by mechanical equipment is expected to be sufficiently masked by standard design features and existing ambient noise levels, no significant stationary noise impacts are anticipated.

**Parking Structure**

Development of the proposed project would introduce one four-level subterranean and one three-level subterranean parking garage to the project site. Since the subterranean parking garages would be fully enclosed, they would not be a significant source of noise. Parking structures produce noise such as automobile engine start-ups and acceleration and the activation of car alarms. However, in general, noise associated with parking structures does not exceed community standards based on the time-weighted CNEL scale. Parking structures can generate $L_{eq}$ noise levels of between 49 dB(A) $L_{eq}$ (tire squeals) to 74 dB(A) $L_{eq}$ (car alarms) at 50 feet from the source. Because of the high levels of traffic noise along Santa Monica Boulevard and Merv Griffin Way on the south and west sides of the site, respectively, and the fully enclosed design of the parking garages, normal daytime parking structure $L_{eq}$ noise would likely not be audible due to the masking of noise by traffic on nearby roadways. Therefore, off-site noise impacts associated with the parking garages would be less than significant.

**Table 4.8-7**
**Future Year (2012) Modeled Roadway Noise Levels**

| Roadway Segment | Future (2012) Without Project | Future (2012) With Project | Project Related Increase | Significant Impact? |
|---|---|---|---|---|
| Beverly Dr. S/O Wilshire Blvd. | ~~69.5~~ 69.1 | ~~69.5~~ 69.1 | 0.0 | No |
| Beverly Dr. E/O S. Santa Monica Blvd. | 70.0 | 70.0 | 0.0 | No |
| Beverly Dr. W/O N. Santa Monica Blvd. | ~~65.2~~ 65.1 | ~~65.2~~ 65.1 | 0.0 | No |
| Merv Griffin Way S/O Wilshire Blvd. | 64.9 | 64.9 | 0.0 | No |
| Santa Monica Blvd. S/O Century Park E. | 73.9 | 73.9 | 0.0 | No |
| N. Santa Monica Blvd. N/O Moreno X-Over | 71.8 | 71.8 | 0.0 | No |
| N. Santa Monica Blvd. N/O Merv Griffin Way | ~~71.1~~ 71.4 | ~~71.2~~ 71.4 | 0.1 | No |
| N. Santa Monica Blvd N/O Wilshire | ~~72.7~~ 72.4 | ~~72.7~~ 72.4 | 0.0 | No |

| Roadway Segment | Future (2012) Without Project | Future (2012) With Project | Project Related Increase | Significant Impact? |
|---|---|---|---|---|
| Blvd. | | | | |
| N. Santa Monica Blvd. N/O Beverly Dr. | ~~72.8~~ 72.9 | ~~72.8~~ 72.9 | 0.0 | No |
| S. Santa Monica Blvd. N/O Moreno X-Over | ~~70.1~~ 70.9 | ~~70.1~~ 70.9 | 0.0 | No |
| S. Santa Monica Blvd. N/O Wilshire Blvd. | ~~69.6~~ 71.8 | ~~69.7~~ 71.8 | ~~0.1~~ 0.0 | No |
| S. Santa Monica Blvd. N/O Beverly Dr. | 70.5 | 70.5 | 0.0 | No |
| Sunset Blvd. W/O Whittier Blvd. | 72.7 | 72.7 | 0.0 | No |
| Sunset Blvd. E/O Whittier Blvd. | 72.8 | 72.8 | 0.0 | No |
| Whittier Blvd. N/O Wilshire Blvd. | 64.9 | 64.9 | 0.0 | No |
| Whittier Blvd. N/O Sunset Blvd. | 62.8 | 62.8 | 0.0 | No |
| Wilshire Blvd. W/O Whittier Dr. | 74.8 | 74.8 | 0.0 | No |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | ~~74.4~~ 74.1 | ~~74.4~~ 74.1 | 0.0 | No |
| Wilshire Blvd. E/O S. Santa Monica Blvd. | ~~75.2~~ 75.1 | ~~75.2~~ 75.1 | 0.0 | No |
| Wilshire Blvd. E/O Beverly Dr. | ~~75.0~~ 75.1 | ~~75.1~~ 75.2 | 0.1 | No |

*Source: Impact Sciences, Inc. Model results are contained in Appendix 4.8.*

*Note: Noise levels referenced in the table above are measured a distance of 75 feet from the centerline of the roadway. The additional analysis in the revised traffic study altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes than previously counted, even though overall traffic volume increased at the intersection.*

## *On-Site Noise Impacts*

NOISE 2 *Would exterior land uses be exposed to exterior noise above 65 dB(A) for residential and hotel land uses and 70 dB(A) for commercial land uses, or would interior land uses be exposed to noise levels in excess of 45 dB(A)?*

### Exterior Noise Levels

Three roadways surround the project site: Wilshire Boulevard to the north, Merv Griffin Way to the west and Santa Monica Boulevard to the south. The noise contours generated by the three roadway segments nearest the project site, and the contour distance from the centerline of each respective roadway, are identified in **Table 4.8-8, Future Year (2012) With Project On-Site Roadway Noise Levels.**

**Table 4.8-8**
**Future Year (2012) With Project On-Site Roadway Noise Levels**

| Roadway | CNEL at 75 Feet from Roadway Centerline | Distance from Source to Noise Contour (feet) | | |
|---|---|---|---|---|
| | | 70 dB(A) CNEL | 65 dB(A) CNEL | 60 dB(A) CNEL |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | ~~74.4~~ 74.1 | ~~207~~ 193 | ~~653~~ 610 | ~~2,066~~ 1,928 |
| Merv Griffin Way S/O Wilshire Blvd. | 64.9 | 23 | 23 | 73 |
| N. Santa Monica Blvd. N/O Merv Griffin Way | ~~71.2~~ 72.9 | ~~99~~ 146 | ~~313~~ 462 | ~~989~~ 1,462 |

*Source: Impact Sciences, Inc. Model results are contained in Appendix 4.8.*

As indicated in **Table 4.8-8**, noise generated by traffic along Merv Griffin Way would be close to exceeding the normally acceptable multi-family residential and hotel noise standard of 65 dB(A) at 75 feet from the roadway centerline on the project site. Thus, noise impacts to outdoor living spaces, such as patios and balconies, to be developed as part of Residences A and B along Merv Griffin Way would be potentially significant.

As indicated in **Table 4.8-8**, noise generated by traffic along Santa Monica and Wilshire Boulevards would exceed 65 dB(A) at 75 feet from the roadway centerline and therefore would exceed the normally acceptable multi-family residential and hotel noise standard of 65 dB(A) on the project site. Thus, outdoor living spaces along Santa Monica and Wilshire Boulevards, such as patios and balconies to be developed as part of Residences A and B, the new Beverly Hilton Hotel rooms, and The Waldorf Astoria Hotel building, would experience noise levels beyond what is considered normally acceptable. Since future noise levels generated by vehicular traffic along Santa Monica and Wilshire Boulevards with project implementation would exceed the exterior multi-family residential and hotel noise standard of 65 dB(A), noise levels at on-site exterior spaces on Santa Monica and Wilshire Boulevards would be significant.

However, implementation of **MM-NOISE-2** would further reduce noise levels by 7 to 10 dB(A), depending on the material(s) used, and would require an acoustical analysis prior to issuance of an occupancy permit to demonstrate that exterior livable spaces do not exceed state residential noise standards. As such, exterior noise levels for the proposed residential units on floors 1 through 6 adjacent to Merv Griffin Way, Santa Monica Boulevard and Wilshire Boulevard would be less than significant with mitigation.

As stated above, the subterranean parking levels would be fully enclosed and would therefore not create a significant source of noise. In general, noise associated with parking structures does not exceed community standards based on the time-weighted CNEL scale. Normal daytime parking structure $L_{eq}$ noise would not likely be audible due to the masking of noise by traffic on Merv Griffin Way, Santa Monica Boulevard and Wilshire Boulevard. Therefore, on-site noise impacts associated with the parking garage would be less than significant.

**Interior Noise Levels**

All residential dwelling units are required to comply with Title 24 of the Uniform Building Code for the conservation of energy associated with building design and construction. Consequently, buildings are constructed with insulated walls, glazed windows, and weather stripping on all doors and windows opening to the exterior. Insulated stucco walls have a Sound Transmission Class (STC) rating (reduction capability) of 43 dB(A) from roadway noise. Double-paned windows provide an STC rating reduction of approximately 21 dB(A) from roadway noise. Development of the proposed project must comply with Title 24 building requirements, thus the residential units are expected to experience a reduction in exterior noise levels estimated between 23 dB(A)[9] to 31 dB(A).[10]

As stated above, future roadway noise levels along Merv Griffin Way would be close to exceeding the multi-family residential and hotel noise standard of 65 dB(A) with project implementation. Assuming minimum attenuation of 23 dB(A) associated with compliance with Title 24 requirements, interior noise levels along Merv Griffin Way would be below the interior threshold of 45 dB(A) CNEL for residential space as stated in Title 24. As such, interior noise levels experienced at the proposed residential units along Merv Griffin Way would be less than significant.

As stated above, exterior noise levels along Wilshire and Santa Monica Boulevards would be above 70 dB(A) with project implementation, thereby exceeding the multi-family residential and hotel exterior noise standard of 65 dB(A), which is a significant impact. Moreover, assuming minimum attenuation of 23 dB(A) associated with compliance with Title 24 requirements, interior noise levels along Wilshire and Santa Monica Boulevards would be ~~51.4~~ 51.1 dB(A) and ~~48.2~~ 49.9 dB(A), respectively, which is a significant impact. Although compliance with Title 24 requirements would reduce exterior noise levels, noise levels along these roadways could still cause exceedance of the 45 dB(A) CNEL threshold for residential interior space established in Title 24. However, implementation of **MM-NOISE-3** would further reduce noise levels by 7 to 10 dB(A), depending on the material(s) used and would require an

9 Window coverage assumed to be approximately 50 percent of the wall surface area.

10 Window coverage assumed to be approximately 30 percent of the wall surface area.

acoustical analysis prior to issuance of an occupancy permit to demonstrate that interior livable spaces do not exceed state residential noise standards. As such, interior noise levels for the proposed residential units on floors 1 through 6 adjacent to Santa Monica and Wilshire Boulevards would be less than significant with mitigation.

## 4.8.7 MITIGATION MEASURES

The following measures are required for the project to reduce daytime and nighttime (after-hours) construction noise impacts associated with site development to the greatest extent feasible.

MM-NOISE-1 Prior to issuance of grading permits, the applicant shall submit a Construction Management Plan satisfactory to the Director of Community Development and the Building Official. The Building Official shall enforce noise attenuating construction requirements. The Construction Management Plan shall include, but not be limited to, the following noise attenuation measures:

- Excavation, grading, and other construction activities related to the proposed project shall comply with Section 5-1-206, Restrictions on Construction Activity, of the City Municipal Code. Any deviations from these standards shall require the written approval of the City Building Official.

- During the initial stage of construction, including site demolition and site preparation/excavation, and when construction activities are within 200 feet of the northern boundary of the site, an 8-foot temporary sound barrier (e.g., wood fence), with at least one-half inch thickness, shall be erected at the project site, to the extent feasible. Sound blankets will also be used. All stationary construction equipment (e.g., air compressor, generators, etc.) shall be operated as far away from the single-family residences and elementary school located north of the project site as possible. If this is not possible, the equipment shall be shielded with temporary sound barriers, sound aprons, or sound skins to the satisfaction of the Director of Community Development.

- Haul routes for construction materials shall be restricted to truck routes approved by the City. Hauling trucks shall be directed to use commercial streets and highways, and, to the extent feasible, shall minimize the use of residential streets. The haul routes and staging areas for the project shall be established to minimize the impact of construction traffic on nearby residential neighborhoods and schools. Generally, haul routes to the 405 Freeway shall utilize Santa Monica Boulevard to minimize impacts to City streets.

- All construction vehicles, such as bulldozers and haul trucks, shall be prohibited from idling in excess of ten minutes, both on site and off site. Construction vehicles will not be staged on streets located in the City of Beverly Hills.

- The General Contractor and its subcontractors shall inspect construction equipment to ensure that such equipment is in proper operating condition and fitted with standard factory silencing features. Construction equipment shall use available noise control devices, such as equipment mufflers, enclosures, and barriers.

The following measures are required for the project to reduce operational roadway noise impacts to sensitive on-site land uses to less than significant.

MM-NOISE-2 The applicant shall implement sound attenuation features to reduce noise levels at all private outdoor livable spaces (i.e., balconies) on building floors 1 through 6 fronting Wilshire and Santa Monica Boulevards and Merv Griffin Way. Such features may include berms made of sloping mounds of earth, walls and fences constructed of a variety of materials, thick plantings of trees and shrubs, or combinations of these materials; or the use of solid material for balcony construction such as double-paned or laminated glass, Plexiglas, or wood. Acoustical analysis shall be performed prior to the issuance of an occupancy permit to demonstrate that noise levels at the exterior livable spaces do not exceed state land use standards for residences. This requirement shall be incorporated into the plans to be submitted by the applicant to the City of Beverly Hills for review and approval prior to the issuance of building permits.

MM-NOISE-3 The applicant shall incorporate building materials and techniques that reduce sound transmission through walls, windows, doors, ceilings, and floors of on-site residences in order to achieve interior noise levels that are below the state land use guidelines standards for interior noise. Such building materials and techniques may include double-paned windows, staggered studs, or sound-absorbing blankets incorporated into building wall design, or outdoor noise barriers erected between noise sources and noise-sensitive areas, such as berms made of sloping mounds of earth, walls and fences constructed of a variety of materials, thick plantings of trees and shrubs, or combinations of these materials. Acoustical analysis shall be performed prior to the issuance of an occupancy permit to demonstrate that noise levels in the interior livable spaces do not exceed state standards for residences. This requirement shall be incorporated into the plans to be submitted by the applicant to the City of Beverly Hills for review and approval prior to the issuance of building permits.

## 4.8.8 CUMULATIVE IMPACTS

### Construction Impacts

The following cumulative noise impact analysis evaluates the noise impact of construction of the project and related projects in the cities of Beverly Hills, Los Angeles, and West Hollywood. These related projects are identified in **Section 4.0, Environmental Impact Analysis.** The closest related project to the proposed project is the 9900 Wilshire project, which is located west of the project site. Construction phases for the 9900 Wilshire project are anticipated to overlap with those of the proposed project. Construction activities undertaken on the 9900 Wilshire project site would be similar to those on the Beverly Hilton project site, and would generate similar noise levels.

Exterior construction of the proposed project would be performed Monday through Friday between the hours of 8:00 AM and 6:00 PM, and may also be performed during extended hours if required and specifically permitted by the City. As described above, these noise levels are anticipated to range from 79 dB(A) to 88 dB(A) as measured at a distance 100 feet from the noise source. Related projects, except for the 9900 Wilshire project, are located too far from the project site to contribute to increases in ambient noise levels due to construction in the project area. Since construction noise is localized and rapidly attenuates within an urban environment, construction activity at another related project site would not result in a noticeable increase in noise to sensitive receptors adjacent to the proposed project.

As discussed above, exterior construction activities undertaken by the proposed project before 8:00 AM, after 6:00 PM, or on weekends could generate noise levels in excess of 5.0 dB(A) above ambient noise levels outside the hours permitted by the City's noise ordinance, and therefore has the potential to be significant and unavoidable. In the event that the 9900 Wilshire project also undertakes exterior construction activity outside of the hours specified in the City's noise ordinance, the cumulative construction noise impact would be significant. Although **MM-NOISE-4**, which requires coordination of construction activities between the two projects, would reduce impacts, cumulative construction noise impacts would remain significant. All other related projects are too far from the project site to increase ambient noise levels in the project area. The project's incremental contribution to cumulative construction noise impacts outside the hours specified in the City's noise ordinance would therefore be cumulatively considerable and significant.

### Operational Impacts

Cumulative noise impacts would primarily occur as a result of increased traffic volumes on local roadways due to ambient growth and other developments in the vicinity of the project. Cumulative traffic-generating noise impacts are based on the difference between existing traffic volumes and future

(year 2012) traffic volumes, which assume the buildout of the proposed project in combination with related projects currently being proposed or built within the study area. As stated above under Existing Conditions, traffic counts ~~were collected in December 2006 and January 2007~~relied upon for analysis contained in this recirculated Draft EIR were collected by Fehr and Peers in December 2006 and January and February 2007, and, for certain study intersections, higher traffic volumes were collected for the 231-265 North Beverly Drive Project in June 2006, avoiding major holidays and school breaks. **Table 4.8-9, Cumulative Modeled Roadway Noise Levels**, illustrates the existing roadway noise levels compared to the future (year 2012) roadway noise levels.

**Table 4.8-9**
**Cumulative Modeled Roadway Noise Levels**

| Roadway Segment | Existing | Future (2012) With Project | Cumulative Increase in Noise Level | Significant Cumulative Impact? |
|---|---|---|---|---|
| Beverly Dr. S/O Wilshire Blvd. | ~~64.4~~ 63.9 | ~~69.5~~ 69.1 | ~~5.1~~ 5.2 | Yes |
| Beverly Dr. E/O S. Santa Monica Blvd. | 64.6 | 70.0 | 5.4 | Yes |
| Beverly Dr. W/O N. Santa Monica Blvd. | 60.3 | ~~65.2~~ 65.1 | ~~4.9~~ 4.8 | Yes |
| Merv Griffin Way S/O Wilshire Blvd. | 60.7 | 64.9 | 4.2 | No |
| Santa Monica Blvd. S/O Century Park E. | 68.2 | 73.9 | 5.7 | Yes |
| N. Santa Monica Blvd. N/O Moreno X-Over | ~~66.2~~ 66.3 | 71.8 | ~~5.6~~ 5.5 | Yes |
| N. Santa Monica Blvd. N/O Merv Griffin Way | ~~65.0~~ 65.4 | ~~71.2~~ 71.4 | ~~6.2~~ 6.0 | Yes |
| N. Santa Monica Blvd. N/O Wilshire Blvd. | ~~66.7~~ 66.3 | ~~72.7~~ 72.4 | ~~6.0~~ 6.1 | Yes |
| N. Santa Monica Blvd. N/O Beverly Dr. | ~~66.6~~ 66.8 | ~~72.8~~ 72.9 | ~~6.2~~ 6.1 | Yes |
| S. Santa Monica Blvd. N/O Moreno X-Over | ~~64.7~~ 65.8 | ~~70.1~~ 70.9 | ~~6.4~~ 5.1 | Yes |
| S. Santa Monica Blvd. N/O Wilshire Blvd. | ~~64.7~~ 67.2 | ~~69.7~~ 71.8 | ~~5.0~~ 4.6 | Yes |
| S. Santa Monica Blvd. N/O Beverly Dr. | 65.7 | 70.5 | 4.8 | Yes |
| Sunset Blvd. W/O Whittier Blvd. | 66.4 | 72.7 | 6.3 | Yes |
| Sunset Blvd. E/O Whittier Blvd. | 66.6 | 72.8 | 6.2 | Yes |
| Whittier Dr. N/O Wilshire Blvd. | 60.8 | 64.9 | 4.1 | No |
| Whittier Dr. N/O Sunset Blvd. | 58.3 | 62.8 | 4.5 | No |
| Wilshire Blvd. W/O Whittier Dr. | 68.4 | 74.8 | 6.4 | Yes |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | ~~68.0~~ 67.6 | ~~74.4~~ 74.1 | ~~6.4~~ 6.5 | Yes |
| Wilshire Blvd. E/O S. Santa Monica Blvd. | 67.4 | ~~75.2~~ 75.1 | ~~7.8~~ 7.7 | Yes |
| Wilshire Blvd. E/O Beverly Dr. | ~~67.1~~ 67.3 | ~~75.1~~ 75.2 | ~~8.0~~ 7.9 | Yes |

*Source: Impact Sciences, Inc. Model results are contained in Appendix 4.8.*

*Note: Noise levels reference in the table above at located at a distance of 75 feet from the centerline of the roadway. The additional analysis in the revised traffic study altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes than previously counted, even though overall traffic volume increased at the intersection.*

As stated earlier, a cumulative increase of 3 dB(A) or greater in traffic noise levels would be significant if the resulting noise levels would cause the noise compatibility thresholds for normally acceptable noise levels to be exceeded. A cumulative increase of 3 dB(A) or greater would also be significant for land uses

already experiencing noise levels above a normally acceptable noise threshold. A noise level increase of less than 3 dB(A) under either of the previously described scenarios is not considered to be significant. Additionally, an increase of 5 dB(A) or less in roadway noise levels would not be considered significant if the resulting noise levels remain below the normally acceptable thresholds, whereas increases greater than 5 dB(A) would be considered to be significant even if the resulting noise levels are below the land use compatibility standards. In this analysis, the normally acceptable threshold is 65 dB(A) due to the presence of residential land uses in the project vicinity.

As shown in **Table 4.8-9**, future noise levels in the year 2012 with project development and other developments are expected to increase between 4.1 and ~~8.0~~ 7.9 dB(A) above existing conditions due to increased roadway traffic. Based on the significance criteria described above, the roadway segments that would not generate significant noise impacts due to increased traffic are Merv Griffin Way south of Wilshire Boulevard, Whittier Drive north of Wilshire Boulevard, and Whittier Drive north of Sunset Boulevard. All other roadway segments studied are anticipated to contribute to significant cumulative noise impacts.

Even though significant cumulative impacts are anticipated, the project's incremental contribution would be between 0.0 and 0.1 dB(A) on the roadway segments studied, as indicated in **Table 4.8-7**. Noise increases below 3 dB(A) are below the threshold of human perception. Consequently, the project contribution to cumulative roadway noise impacts would be less than cumulatively considerable and therefore not significant.

The major stationary sources of noise that would be introduced in the area by related projects would include rooftop equipment, loading docks, and parking structures. Since rooftop equipment associated with these projects would be required to adhere to the City of Beverly Municipal Code, all rooftop equipment would provide shielding or other noise abatement measures to avoid a substantial increase in ambient noise levels. Moreover, noise associated with parking structures does not normally exceed community standards based on the time-weighted CNEL scale. Due to the distance between sources, it is unlikely that noise from parking structures and other stationary sources would interact to create a significant combined noise impact. Therefore, since no significant cumulative increase in noise levels due to stationary sources is anticipated, the cumulative noise impacts of stationary sources would be less than significant. Since the parking garages associated with the project would be subterranean and rooftop equipment would implement standard design features such as shielding, enclosures, and parapets, noise impacts associated with on-site sources would be less than significant. Consequently, the project contribution to cumulative noise impacts associated with stationary noise sources would not be cumulatively considerable.

## Vibration Impacts

Vibration impacts are localized in nature and decrease with distance from the source. For most projects, vibration is generated during the construction phase. A cumulative vibration impact occurs when multiple sources of vibration are in close proximity to a sensitive receptor. As discussed earlier, one related project, the 9900 Wilshire project, is located adjacent to the project site and would likely undergo all or partial construction during the construction phases of the proposed project. The proposed project by itself would generate vibration levels up to 75 VdB at 100 feet from the source, which exceeds the FRA groundborne vibration threshold for hotels and residences. Since sensitive receptors are located approximately 100 feet north of the two projects and since The Beverly Hilton Hotel also constitutes a sensitive land use, the proposed project's incremental contribution to cumulatively significant vibration impacts would be cumulatively considerable and therefore significant. **MM-NOISE-4** is applicable to this impact, but no feasible mitigation is available to reduce construction vibration impacts to less than significant. Therefore, although short-term in duration, cumulative construction vibration impacts to off-site receptors to the north and on-site receptors would be significant and unavoidable.

## 4.8.9 CUMULATIVE MITIGATION MEASURES

The following mitigation measure would reduce project contributions to cumulatively significant daytime and nighttime (after-hours) construction noise impacts.

MM-NOISE-4 The Beverly Hilton Revitalization Plan project applicant shall coordinate with the 9900 Wilshire project applicant regarding the following:

- All temporary roadway closures shall be coordinated to limit overlap of roadway closures;
- All major deliveries for both projects shall be coordinated to limit the occurrence of simultaneous deliveries. The applicants shall ensure that deliveries of items such as concrete and other high-volume items shall not be done simultaneously;
- The applicants shall coordinate regarding the loading and unloading of delivery vehicles. Any off-site staging areas for delivery vehicles shall be consolidated and shared; and
- Applicants or their representatives shall meet on a regular basis during construction to address any outstanding issues related to construction traffic, deliveries, and worker parking.

## 4.8.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The project would result in significant project-level and cumulative noise impacts associated with construction activities performed outside of the hours specified in the City's noise ordinance. The project's after-hours construction noise impacts would be reduced through implementation of **MM-NOISE-1** and the 9900 Wilshire project would include comparable mitigation to reduce its construction noise impacts. Additionally, **MM-NOISE-4**, which requires construction coordination between the projects, would reduce construction noise impacts. However, exterior construction activities undertaken by both projects before 8:00 AM, after 6:00 PM, or on weekends could generate noise levels in excess of 5.0 dB(A) above ambient noise levels outside the hours permitted by the City's noise ordinance, which would remain a significant and unavoidable cumulative impact.

The proposed project would result in significant project-level and cumulative construction vibration impacts on sensitive receptors north of the project site and on the on-site Beverly Hilton Hotel. Since no feasible mitigation is available to reduce vibration impacts to less than significant, these impacts would be significant and unavoidable.

Finally, future noise levels generated by vehicular traffic along Merv Griffin Way, Santa Monica Boulevard, and Wilshire Boulevard in excess of the exterior multi-family residential and hotel noise standard of 65 dB(A) would result in significant impacts to proposed exterior livable and private interior spaces on the project site. With the required mitigation measures **MM-NOISE-2** and **MM-NOISE-3**, these impacts would be reduced to less than significant levels.

Although these noise levels may be noticeable in a quiet environment, the existing daytime, evening, and nighttime ambient noise levels within the project vicinity would substantially mask these on-site sources. In addition, development activities on the project site must comply with Beverly Hills Municipal Code Section 5-1-202, which requires that noise generated by mechanical equipment not exceed 5.0 dB(A) above ambient noise levels at adjacent property lines. Use of standard design features such as shielding, enclosures and parapets, proper selection and sizing of equipment, as well as locating rooftop equipment a suitable distance from sensitive receptors, would ensure compliance with City Code. Since noise generated by mechanical equipment is expected to be sufficiently masked by standard design features and existing ambient noise levels, no significant stationary noise impacts are anticipated.

**Parking Structure**

Development of the proposed project would introduce one four-level subterranean and one three-level subterranean parking garage to the project site. Since the subterranean parking garages would be fully enclosed, they would not be a significant source of noise. Parking structures produce noise such as automobile engine start-ups and acceleration and the activation of car alarms. However, in general, noise associated with parking structures does not exceed community standards based on the time-weighted CNEL scale. Parking structures can generate $L_{eq}$ noise levels of between 49 dB(A) $L_{eq}$ (tire squeals) to 74 dB(A) $L_{eq}$ (car alarms) at 50 feet from the source. Because of the high levels of traffic noise along Santa Monica Boulevard and Merv Griffin Way on the south and west sides of the site, respectively, and the fully enclosed design of the parking garages, normal daytime parking structure $L_{eq}$ noise would likely not be audible due to the masking of noise by traffic on nearby roadways. Therefore, off-site noise impacts associated with the parking garages would be less than significant.

**Table 4.8-7**
**Future Year (2012) Modeled Roadway Noise Levels (CNEL)**

| Roadway Segment | Future (2012) Without Project | Future (2012) With Project | Project Related Increase | Significant Impact? |
|---|---|---|---|---|
| Beverly Dr. S/O Wilshire Blvd. | ~~69.5~~ 69.1 | ~~69.5~~ 69.1 | 0.0 | No |
| Beverly Dr. E/O S. Santa Monica Blvd. | 70.0 | 70.0 | 0.0 | No |
| Beverly Dr. W/O N. Santa Monica Blvd. | ~~65.2~~ 65.1 | ~~65.2~~ 65.1 | 0.0 | No |
| Merv Griffin Way S/O Wilshire Blvd. | 64.9 | 64.9 | 0.0 | No |
| Santa Monica Blvd. S/O Century Park E. | 73.9 | 73.9 | 0.0 | No |
| N. Santa Monica Blvd. N/O Moreno X-Over | 71.8 | 71.8 | 0.0 | No |
| N. Santa Monica Blvd. N/O Merv Griffin Way | ~~71.1~~ 71.4 | ~~71.2~~ 71.4 | 0.1 | No |

| Roadway Segment | Future (2012) Without Project | Future (2012) With Project | Project Related Increase | Significant Impact? |
|---|---|---|---|---|
| N. Santa Monica Blvd N/O Wilshire Blvd. | ~~72.7~~ 72.4 | ~~72.7~~ 72.4 | 0.0 | No |
| N. Santa Monica Blvd. N/O Beverly Dr. | ~~72.8~~ 72.9 | ~~72.8~~ 72.9 | 0.0 | No |
| S. Santa Monica Blvd. N/O Moreno X-Over | ~~70.1~~ 70.9 | ~~70.1~~ 70.9 | 0.0 | No |
| S. Santa Monica Blvd. N/O Wilshire Blvd. | ~~69.6~~ 71.8 | ~~69.7~~ 71.8 | ~~0.1~~ 0.0 | No |
| S. Santa Monica Blvd. N/O Beverly Dr. | 70.5 | 70.5 | 0.0 | No |
| Sunset Blvd. W/O Whittier Blvd. | 72.7 | 72.7 | 0.0 | No |
| Sunset Blvd. E/O Whittier Blvd. | 72.8 | 72.8 | 0.0 | No |
| Whittier Blvd. N/O Wilshire Blvd. | 64.9 | 64.9 | 0.0 | No |
| Whittier Blvd. N/O Sunset Blvd. | 62.8 | 62.8 | 0.0 | No |
| Wilshire Blvd. W/O Whittier Dr. | 74.8 | 74.8 | 0.0 | No |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | ~~74.4~~ 74.1 | ~~74.4~~ 74.1 | 0.0 | No |
| Wilshire Blvd. E/O S. Santa Monica Blvd. | ~~75.2~~ 75.1 | ~~75.2~~ 75.1 | 0.0 | No |
| Wilshire Blvd. E/O Beverly Dr. | ~~75.0~~ 75.1 | ~~75.1~~ 75.2 | 0.1 | No |

*Source: Impact Sciences, Inc. Model results are contained in* ***Appendix 4.8****.*

*Note: Noise levels measured in dB(A). Noise levels referenced in the table above are measured a distance of 75 feet from the centerline of the roadway. The additional analysis in the revised traffic study altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes than previously counted, even though overall traffic volume increased at the intersection.*

## *On-Site Noise Impacts*

NOISE 2 *Would exterior land uses be exposed to exterior noise above 65 dB(A) for residential and hotel land uses and 70 dB(A) for commercial land uses, or would interior land uses be exposed to noise levels in excess of 45 dB(A)?*

### Exterior Noise Levels

Three roadways surround the project site: Wilshire Boulevard to the north, Merv Griffin Way to the west and Santa Monica Boulevard to the south. The noise contours generated by the three roadway segments nearest the project site, and the contour distance from the centerline of each respective roadway, are identified in **Table 4.8-8, Future Year (2012) With Project On-Site Roadway Noise Levels**.

acoustical analysis prior to issuance of an occupancy permit to demonstrate that interior livable spaces do not exceed state residential noise standards. As such, interior noise levels for the proposed residential units on floors 1 through 6 adjacent to Santa Monica and Wilshire Boulevards would be less than significant with mitigation.

## 4.8.7 MITIGATION MEASURES

The following measures are required for the project to reduce daytime and nighttime (after-hours) construction noise impacts associated with site development to the greatest extent feasible.

MM-NOISE-1 Prior to issuance of grading permits, the applicant shall submit a Construction Management Plan satisfactory to the Director of Community Development and the Building Official. The Building Official shall enforce noise attenuating construction requirements. The Construction Management Plan shall include, but not be limited to, the following noise attenuation measures:

- Excavation, grading, and other construction activities related to the proposed project shall comply with Section 5-1-206, Restrictions on Construction Activity, of the City Municipal Code. Any deviations from these standards shall require the written approval of the ~~City Building Official~~ **Community Development Director**.

- During the initial stage of construction, including site demolition and site preparation/excavation, and when construction activities are within 200 feet of the northern boundary of the site, an 8-foot temporary sound barrier (e.g., wood fence), with at least one-half inch thickness, shall be erected at the project site, to the extent feasible. Sound blankets will also be used. All stationary construction equipment (e.g., air compressor, generators, etc.) shall be operated as far away from the single-family residences and elementary school located north of the project site as possible. If this is not possible, the equipment shall be shielded with temporary sound barriers, sound aprons, or sound skins to the satisfaction of the Director of Community Development.

- Haul routes for construction materials shall be restricted to truck routes approved by the City. Hauling trucks shall be directed to use commercial streets and highways, and, to the extent feasible, shall minimize the use of residential streets. The haul routes and staging areas for the project shall be established to minimize the impact of construction traffic on nearby residential neighborhoods and schools. Generally, haul routes to the 405 Freeway shall utilize Santa Monica Boulevard to minimize impacts to City streets.

- All construction vehicles, such as bulldozers and haul trucks, shall be prohibited from idling in excess of ten minutes, both on site and off site. Construction vehicles will not be staged on streets located in the City of Beverly Hills.

- The General Contractor and its subcontractors shall inspect construction equipment to ensure that such equipment is in proper operating condition and fitted with standard factory silencing features. Construction equipment shall use available noise control devices, such as equipment mufflers, enclosures, and barriers.

- **Prior to the start of every school year, the applicant shall obtain a schedule of testing periods at El Rodeo School. The applicant shall submit a construction schedule for review and approval by the Community Development Director and the Environmental Monitor that ensures that no construction activity generating the highest noise levels (e.g. demolition and grading) is undertaken during any designated testing periods at the school. Such testing periods typically occur for one week per semester; however, the exact dates and times will be determined by the School District.**

The following measures are required for the project to reduce operational roadway noise impacts to sensitive on-site land uses to less than significant.

MM-NOISE-2 The applicant shall implement sound attenuation features to reduce noise levels at all private outdoor livable spaces (i.e., balconies) on building floors 1 through 6 fronting Wilshire and Santa Monica Boulevards and Merv Griffin Way. Such features may include berms made of sloping mounds of earth, walls and fences constructed of a variety of materials, thick plantings of trees and shrubs, or combinations of these materials; or the use of solid material for balcony construction such as double-paned or laminated glass, Plexiglas, or wood. Acoustical analysis shall be performed prior to the issuance of an occupancy permit to demonstrate that noise levels at the exterior livable spaces do not exceed state land use standards for residences. This requirement shall be incorporated into the plans to be submitted by the applicant to the City of Beverly Hills for review and approval prior to the issuance of building permits.

MM-NOISE-3 The applicant shall incorporate building materials and techniques that reduce sound transmission through walls, windows, doors, ceilings, and floors of on-site residences in order to achieve interior noise levels that are below the state land use guidelines standards for interior noise. Such building materials and techniques may include double-paned windows, staggered studs, or sound-absorbing blankets incorporated into building wall design, or outdoor noise barriers erected between noise sources and noise-sensitive areas, such as berms made of sloping mounds of earth, walls and fences constructed of a variety of materials, thick plantings of trees and shrubs, or combinations of these materials. Acoustical analysis shall be performed prior to the issuance of an occupancy permit to demonstrate that noise levels in the interior livable spaces do not exceed state standards for residences. This requirement shall be incorporated into the plans to be submitted by the applicant to the City of Beverly Hills for review and approval prior to the issuance of building permits.

(year 2012) traffic volumes, which assume the buildout of the proposed project in combination with related projects currently being proposed or built within the study area. As stated above under Existing Conditions, traffic counts ~~were collected in December 2006 and January 2007~~relied upon for analysis contained in this recirculated Draft EIR were collected by Fehr and Peers in December 2006 and January and February 2007, and, for certain study intersections, higher traffic volumes were collected for the 231-265 North Beverly Drive Project in June 2006, avoiding major holidays and school breaks. **Table 4.8-9, Cumulative Modeled Roadway Noise Levels**, illustrates the existing roadway noise levels compared to the future (year 2012) roadway noise levels.

**Table 4.8-9**
**Cumulative Modeled Roadway Noise Levels (CNEL)**

| Roadway Segment | Existing | Future (2012) With Project | Cumulative Increase in Noise Level | Significant Cumulative Impact? |
|---|---|---|---|---|
| Beverly Dr. S/O Wilshire Blvd. | ~~64.4~~ 63.9 | ~~69.5~~ 69.1 | ~~5.1~~ 5.2 | Yes |
| Beverly Dr. E/O S. Santa Monica Blvd. | 64.6 | 70.0 | 5.4 | Yes |
| Beverly Dr. W/O N. Santa Monica Blvd. | 60.3 | ~~65.2~~ 65.1 | ~~4.9~~ 4.8 | Yes |
| Merv Griffin Way S/O Wilshire Blvd. | 60.7 | 64.9 | 4.2 | No |
| Santa Monica Blvd. S/O Century Park E. | 68.2 | 73.9 | 5.7 | Yes |
| N. Santa Monica Blvd. N/O Moreno X-Over | ~~66.2~~ 66.3 | 71.8 | ~~5.6~~ 5.5 | Yes |
| N. Santa Monica Blvd. N/O Merv Griffin Way | ~~65.0~~ 65.4 | ~~71.2~~ 71.4 | ~~6.2~~ 6.0 | Yes |
| N. Santa Monica Blvd. N/O Wilshire Blvd. | ~~66.7~~ 66.3 | ~~72.7~~ 72.4 | ~~6.0~~ 6.1 | Yes |
| N. Santa Monica Blvd. N/O Beverly Dr. | ~~66.6~~ 66.8 | ~~72.8~~ 72.9 | ~~6.2~~ 6.1 | Yes |
| S. Santa Monica Blvd. N/O Moreno X-Over | ~~64.7~~ 65.8 | ~~70.1~~ 70.9 | ~~6.4~~ 5.1 | Yes |
| S. Santa Monica Blvd. N/O Wilshire Blvd. | ~~64.7~~ 67.2 | ~~69.7~~ 71.8 | ~~5.0~~ 4.6 | Yes |
| S. Santa Monica Blvd. N/O Beverly Dr. | 65.7 | 70.5 | 4.8 | Yes |
| Sunset Blvd. W/O Whittier Blvd. | 66.4 | 72.7 | 6.3 | Yes |
| Sunset Blvd. E/O Whittier Blvd. | 66.6 | 72.8 | 6.2 | Yes |
| Whittier Dr. N/O Wilshire Blvd. | 60.8 | 64.9 | 4.1 | No |
| Whittier Dr. N/O Sunset Blvd. | 58.3 | 62.8 | 4.5 | No |
| Wilshire Blvd. W/O Whittier Dr. | 68.4 | 74.8 | 6.4 | Yes |
| Wilshire Blvd. W/O N. Santa Monica Blvd. | ~~68.0~~ 67.6 | ~~74.4~~ 74.1 | ~~6.4~~ 6.5 | Yes |
| Wilshire Blvd. E/O S. Santa Monica Blvd. | 67.4 | ~~75.2~~ 75.1 | ~~7.8~~ 7.7 | Yes |
| Wilshire Blvd. E/O Beverly Dr. | ~~67.1~~ 67.3 | ~~75.1~~ 75.2 | ~~8.0~~ 7.9 | Yes |

*Source: Impact Sciences, Inc. Model results are contained in Appendix 4.8.*
*Note: Noise levels measured in dB(A). Noise levels reference in the table above at located at a distance of 75 feet from the centerline of the roadway. The additional analysis in the revised traffic study altered the turning movements (i.e. left turns and right turns) at intersections such that certain roadway segments experience lower average daily trip volumes than previously counted, even though overall traffic volume increased at the intersection.*

As stated earlier, a cumulative increase of 3 dB(A) or greater in traffic noise levels would be significant if the resulting noise levels would cause the noise compatibility thresholds for normally acceptable noise