

**APPENDIX 3.10**

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**Noise Impact Analysis**

**MENLO SCIENTIFIC ACOUSTICS, INC.**  
**Consultants in Acoustics and Communication Technologies**

**WHOLE FOODS IN THE PARK**

**CITY OF MALIBU**

**NOISE IMPACT ANALYSIS**

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**WHOLE FOODS IN THE PARK**  
**CITY OF MALIBU**  
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## INTRODUCTION

### Purpose of Study

The purpose of this study is to evaluate the potential noise impacts of the proposed project on surrounding properties by assessing their existing noise environments, the project's short-term construction noise impacts, and its long-term operational noise impacts. Mitigation measures for potentially significant impacts are recommended where appropriate.

### Project Description

The proposed project site is at the northwest corner of Cross Creek Road and Civic Center Way in the City of Malibu. It is surrounded by an equestrian center to the north, a Verizon maintenance facility to the northeast, Cross Creek Road to the east, Civic Center Way to the south, and the undeveloped Malibu-La Paz site to the west. The vicinity map is shown in Figure 1, at the end of this report. The site is currently vacant.

The proposed project is a ~38,500 square foot shopping center consisting of a ~25,000 square foot Whole Foods Market plus 4 smaller buildings that will contain various restaurant and retail uses. The project's parking lot capacity is 220 vehicles. Figure 2, at the end of this report, lists the project's site plan.

## CHARACTERISTICS OF ENVIRONMENTAL NOISE

### Definitions

**dBA** – the primary unit for environmental noise measurement is the A-weighted decibel (dBA). The term “A-weighting” refers to the filtering effect that the human ear has on sound as it is perceived by the listener. Sound level meters have A-weighting filters that simulate the effect of the ear on the approaching sound such that the meters' displayed sound level correlates with the perceived loudness of the sound.

**Leq** – the equivalent (average) sound pressure level of a noise environment, expressed in terms of dBA, for a specific time period. Because the sound level at any location varies over a given time period, the Leq terminology has been developed to describe the average sound level over the same time period. Typical Leq time periods are 1 minute, 15 minutes and 1 hour. The 15-minute Leq value is often used to characterize the ambient sound level.

**L90** – the sound level that is exceeded during 90% of any given time period. The L90 value, expressed in terms of dBA, is used sometimes to characterize a location's minimum ambient sound level.

**Lmax** – the maximum sound level during a given time period, expressed in terms of dBA.

### Basics of Sound Propagation

The main cause of acoustical attenuation between a noise source and a receiver is hemi-spherical spreading, by which a sound source’s acoustical energy spreads out over a larger area as it travels away from the source. More specifically, the sound level due to an acoustical “point source” drops by 6 dBA for every doubling of the source-to-receiver distance. A sound source is characterized as a “point source” if the closest source-to-receiver distance of interest is at least twice the source’s largest dimension. For example, for a 20-foot long truck, the rule of “6 dBA per distance-doubling” applies for all receptors that are more than 40 feet from the noise source. All of the noise sources in this study are point sources.

The “6 dBA per distance-doubling rule” applies if the ground is hard and sound-reflective. If the ground is covered with grass or other foliage, the attenuation rate can be much as 9 dBA per distance-doubling. This report uses only the “6 dBA per distance-doubling” rule, so all calculation results are conservative where there is grass or ground foliage between the noise sources and the receptors.

### Audible Sound Level Differences

Table 1 below summarizes the human perception of different sound levels for sounds of the same general acoustical content.

<b>TABLE 1 – Subjective Perceptions of Sound Level Changes</b>	
<b>Sound Level</b>	<b>Subjective Perception</b>
Reference Sound Level + 10 dBA	Twice as loud
Reference Sound Level + 5 dBA	Significantly louder
Reference Sound Level + 2 dBA	Just noticeably louder
Reference Sound Level	Baseline
Reference Sound Level – 2 dBA	Just noticeably quieter
Reference Sound Level – 5 dBA	Significantly quieter
Reference Sound Level – 10 dBA	Half as loud

### Multiple Noise Sources

When new sources of noise are added to an environmental soundscape the new sound level will increase on a logarithmic scale. When the number of similar sound sources is increased, the new sound level can be estimated by the equation  $L_{new} = L_{old} + 10 \log(N)$ , where N is a multiplier that represents the increased number of sound sources. For example, if the amount of vehicular traffic is doubled, the equation becomes  $L_{new} = L_{old} + 10 \log(2)$ , which shows that doubling amount of traffic increases the sound level by 3 dBA. And if the traffic increases by 30% the equation becomes  $L_{new} = L_{old} + 10 \log(1.30)$ , which results in an increase of 1.1 dBA.

**EXISTING ENVIRONMENTAL SETTING**

**Noise-sensitive Receptors**

The noise-sensitive receptors closest to the proposed development are the equestrian center to the north, three private residences to the north, one private residence to the northwest, the public library and its courtyard to the west, and Legacy Park to the west south west. These locations are shown on the Vicinity Map in Figure 1 and are listed in Table 2 below.

<b>TABLE 2 – Noise-Sensitive Receptors near the Proposed Project Site</b>			
Number on Vicinity Map	Description	Approx. Distance from Nearest Project Boundary, feet	Approx. Elevation Above Sea Level, feet
1	Equestrian Center at 3661 Cross Creek Road	30	21
2	Residence at 3661 Cross Creek Road	250	22
3	Malibu Public Library and Courtyard	430	20
4	23704 Harbor Vista Road	760	150
5	3657 Cross Creek Road	700	40
6	Malibu Legacy Park	365	18

All of the noise-sensitive receptors are “exposed” to the project site (i.e., there is no existing noise wall), except the residence at 3657 Cross Creek Road, which is partially shielded from the site by the buildings on the equestrian center property located at 3661 Cross Creek Road. The measurements at Location 5 were made on the side of Cross Creek Road in front of the 3657 Cross Creek Road driveway.

**Existing Noise Environment**

**Measurement Times for Locations 1 to 3** - Because the proposed Whole Foods Store will typically operate until 10:00 PM we measured the existing noise environment at noise receptors 1 to 3 from 9:00 to 10:00 PM on a weeknight. We also measured at the same locations during peak afternoon traffic, from approximately 4:45 to 6:00 PM. These two time periods represent the extremes of the existing noise environment during the times that the proposed project’s tenants will be in operation. During each of the two time periods noted above we measured the ambient sound levels for 15 minutes at each noise-sensitive receptor location.

**Measurement Times for Locations 4 and 5** - Three measurements were made at each location - one on a Saturday between 12:25 and 1:00 PM, two on a Monday afternoon during the 4:00 to 5:00 PM peak traffic hour, and a nighttime measurement between 10:00 and 11:00 PM. Each measurement was 15 minutes in duration.

**Measurement Times for Location 6** – Five measurements were made at the northwest corner of the park on a Friday during the rush hour between approximately 4:45 PM and 5:45 PM. Each measurement was 15 minutes in duration.

**Measurement Results** - All measurements were made using a Larson Davis 824 Type 1 Sound Level Meter, Larson Davis LxT1L Type 1 Sound Level Meter, or a Bruel & Kjaer 2250 Type 1 Analyzer. The main ambient noise source at locations 1, 2, 4, and 5 was vehicular traffic on the Pacific Coast Highway. The main ambient noise source at locations 3 and 6 was from traffic on Civic Center Way and on Pacific Coast Highway. Traffic on other local streets, pedestrians, insects, and passing aircraft also contributed to the ambient noise environment. The existing nighttime and afternoon peak hour sound levels in terms of their Leq and L90 values are shown in Tables 3A, 3B, and 3C, below.

The measurement locations are shown in Figure 2, Measurement Locations, at the end of this report.

<b>TABLE 3A– Existing Environmental Noise Exposures – Locations 1 to 4</b>				
Location	Thur. 15 July 2010 Nighttime 15-minute Ambient Sound Level, dBA		Mon. 19 July 2010 Afternoon Peak-Hour 15-minute Ambient Sound Level, dBA	
	Leq	L90	Leq	L90
1 - Equestrian Center at 3661 Cross Creek Road	45	42	46	43
2 - Residence at 3661 Cross Creek Road	45	43	45	42
3 - Malibu Public Library and Courtyard	48	39	52	49

<b>TABLE 3B – Existing Environmental Noise Exposures – Locations 5 and 6</b>						
Location	Sat. 27 Nov 2010 Mid-day 15-minute Ambient Sound Level, dBA		Mon. 29 Nov. 2010 Nighttime 15-minute Ambient Sound Level, dBA		Mon. 29 Nov. 2010 Afternoon Peak-Hour 15-minute Ambient Sound Level, dBA	
	Leq	L90	Leq	L90	Leq	L90
4 - 23704 Harbor Vista Drive	52	48	44	39	52	49
5 - 3657 Cross Creek Road	46	37	42	38	43	40

<b>TABLE 3C– Existing Environmental Noise Exposures – Location 7</b>		
	Fri. 18 Jan. 2013 Afternoon, 15-minute Ambient Sound Level, Average of 4 periods, dBA	
Location	Leq	L90
6 - Legacy Park	59	50

### SIGNIFICANCE CRITERIA

Chapter 8.24 NOISE of the City of Malibu Municipal Code (see the attached Exhibit 1) prohibits certain types of activities on the basis of kinds of noises that they typically produce, but the code does not specify maximum permissible sound level limits to the noises produced by those activities. However, Table 6-4 in the Noise Element of the City of Malibu General Plan fulfills the CEQA requirement for establishing threshold limits of significance throughout the city by specifying “significance” sound levels on properties as a function of their zoning and the time of day. Noise Element Table 6-4 is reproduced below as Table 4.

<b>TABLE 4 - Maximum Exterior Noise Limits for Non-Transportation Sources</b> (Ref. Malibu General Plan Noise Element Table 6-4)				
Receiving Land Use Category	General Plan Land Use Districts	Time Period	Sound Level, dBA	
			Leq	Lmax
Rural	All RR Zones and PRF, CR, AH, OS	7 AM to 7 PM	55	75
		7 PM to 10 PM	50	65
		10 PM to 7 AM	40	55
Other Residential	All SFR, MFR and MFBB Zones	7 AM to 7 PM	55	75
		7 PM to 10 PM	50	65
		10 PM to 7 AM	45	60
Commercial, Institutional	CN, CC, CV, CG, and I	7 AM to 7 PM	65	85
		7 PM to 7 AM	60	70

### Significance Criteria - Construction Phase

Section 8.24.050, paragraph G. of the Malibu Municipal Code specifies that construction may occur only from 7 AM until 7 PM on weekdays, and from 8 AM until 5 PM on Saturdays. Construction is not allowed on Sundays and holidays. Because construction on the project site will take place only during daytime hours, the daytime sound level limits in Table 4 apply at the seven receptors during construction per Table 5, below.

Receptor #	Receptor Description	Zoning	Sound Level Limit, dBA (Ref. Table 4, 7 AM to 7 PM)	
			Leq	Lmax
1	Equestrian Center at 3661 Cross Creek Road	CG	65	85
2	Residence at 3661 Cross Creek Road	CG	65	85
3	Malibu Public Library and Courtyard	I	65	85
4	Residence at 23704 Harbor Vista Drive	RR5	55	75
5	Residence at 3657 Cross Creek Road	RR5	55	75
6	Legacy Park	CV	65	85

### Significance Criteria - Operations Phase

When the project is opened and operational, some of its sound sources will be active all day and some at night until as late as 10:00 PM, so the slightly more stringent nighttime sound level limits included in Table 4 above will apply, per Table 6, below. The limits for RR5 locations, per Table 4, are more restrictive after 10 PM.

Receptor #	Receptor Description	Zoning	Sound Level Limit, dBA (Ref. Table 4 after 7 PM)	
			Leq	Lmax
1	Equestrian Center at 3661 Cross Creek Road	CG	60	70
2	Residence at 3661 Cross Creek Road	CG	60	70
3	Malibu Public Library and Courtyard	I	60	70
4	Residence at 23704 Harbor Vista Road	RR5	50	65
5	Residence at 3657 Cross Creek Road	RR5	50	65
6	Legacy Park	CV	60	70

The sound level limits included in Tables 5 and 6 above were used to assess the significance of the project's construction and operations noise in the next section of this report.

## ENVIRONMENTAL NOISE IMPACTS

### Construction Phase Impacts

Construction of the proposed project will result in temporary, intermittent increases in the ambient sound levels on and around the project site. The increases might occasionally result in temporary annoyance at some of the nearby properties. The sound levels will vary depending on the construction phase, equipment type and duration of use, the locations of the equipment, and the presence or absence of sound-attenuating barriers.

Several different types of noise-producing equipment will be used during construction, e.g., graders, shovels, tractors, backhoes, saws, welders, hauling trucks, concrete mixers, and other equipment. Typical equipment sound levels are given in Table 7, below.

<b>Noise Source</b>	<b>Range of Sound Levels at 50 feet, dBA</b>
Graders	80 to 93
Backhoes	72 to 92
Rollers	73 to 75
Trucks	83 to 94
Concrete Mixers	75 to 87
Air Compressors	74 to 86
Saws	72 to 82

Source: Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971

The sound levels in Table 7 above are for individual pieces of equipment, whereas the construction process requires the simultaneous use of several pieces of equipment, many of which move around the site and change their operating conditions on a day-by-day and hour-by-hour basis. Therefore, for the purposes of our acoustical calculations we used the typical site-wide sound levels shown in Table 8, below.

A review of Table 8 below shows that the loudest construction phases are the Grading/Excavation and Finishing phases, which can generate sound levels of as much as 89 dBA at a distance of 50 feet. We used the “89 dBA at 50 feet” sound level as the basis for our calculations of the worst-case noise impacts at the seven noise-sensitive receptors.

<b>TABLE 8 – Typical Sound Levels at Construction Sites</b>	
<b>Construction Phase</b>	<b>Sound Level at 50 feet, dBA</b>
Ground Clearing	84
Grading/Excavation	89
Foundations	78
Erection	87
Finishing	89

Source: Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971

Table 9, below, summarizes those worst-case construction phase sound levels, and compares these levels with the Lmax sound level limits from Table 5 above.

<b>TABLE 9 – Estimated Lmax <u>Maximum</u> Construction Sound Levels and Their Impacts</b> (Based on distance from site boundary)							
Receptor #	Distance from Site Boundary, feet	Anticipated Maximum Sound Level during Construction, Lmax	Acoustical Significance Criteria per the General Plan, Lmax	Excess over Criteria Without Mitigations, dBA	Impact without Mitigations?	Excess over Criteria With Mitigations, dBA	Impact with Mitigations?
1	30	93	85	8	Yes	---	No
2	250	75	85	---	No	---	No
3	430	70	85	---	No	---	No
4	760	65	75	---	No	---	No
5	700	66	75	---	No	---	No
6	250	75	85	---	No	---	No

The mitigations referred to in the next-to-last column of Table 9 are described later in this report. A review of Table 9 shows that the maximum construction noise without any acoustical mitigations will exceed the General Plan’s Lmax Acoustical Significance Criteria only at the equestrian center, which is immediately north of the project site. The 8 dBA excess noted in the table can be mitigated by the construction phase mitigations labeled C1 through C7 that are described later in this report. The most significant mitigation is a 12 foot high noise wall that will be built along the site’s entire north boundary.

The sound level at each noise-sensitive receptor due to each specific piece of construction equipment depends on the distance of the receptor from the equipment, and because the various

pieces of construction equipment will move throughout the entire project site during the construction phase, we calculated the average sound level at each noise-sensitive receptor based on its distance from the center of the project site.

If we consider the average construction sound levels based on the construction equipment’s movements throughout the site during a typical workday, we can use the center of the site as a reference point source location. The sound levels in Table 10 below are representative of the average sound levels that will occur at the 6 noise-sensitive receptors.

Receptor #	Distance from Center of Site, feet	Average Sound Level during Construction, Leq	Acoustical Significance Criteria per the General Plan, Leq	Excess over Criteria Without Mitigations, dBA	Impact without Mitigations?	Excess over Criteria With Mitigations, dBA	Impact with Mitigations?
1	390	71	65	6	Yes	---	No
2	610	67	65	2	Yes	---	No
3	710	66	65	1	Yes	1	Yes
4	1130	62	55	7	Yes	7	Yes
5	1030	63	55	8	Yes	5	Yes
6	680	66	65	1	Yes	1	Yes

A review of Table 10 shows that the average construction sound levels without any acoustical mitigation will present acoustical impacts at all seven noise-sensitive receptors. Therefore, noise reduction mitigations are recommended for use during the project’s construction phase. Specifically, the seven mitigations labeled C1 through C7 in a later section of this report will reduce any excess acoustical impacts to less than acoustical significance at Receptors 1 and 2.

There will be a small residual ‘impact’ at Receptor 3 (Library and Courtyard) and at Receptor 6 (Legacy Park). We address the residual ‘‘impact’’ later in this report.

The excess at Receptor 4 (Harbor Vista Drive) is due to its elevation (~150 feet ASL) for which an unreasonably tall property line wall would be needed to reduce the average construction phase sound levels to less than acoustical significance. Please note that this scale of sound level excess would occur during any significant construction that occurs in the civic center area. Note, also, that the acoustical reports for the La Paz and Legacy Park projects predict construction sound levels at this location that would indicate significant acoustical impacts. These and other related projects are listed in Exhibit 2, Related Project Information.

### **Operational Phase Impacts**

The dominant noise sources during the proposed project's operational phase will be vehicular traffic on the nearby and distant roadways, delivery trucks at the Whole Foods' loading dock, and mechanical equipment on the roofs of all five of the project's buildings. Outdoor activities, such as those from the playground and outdoor dining, are not expected to be significant noise sources compared to that from traffic.

### **Future Traffic Noise without Project**

Changes in the noise level from traffic were found by determining the change in traffic volume from 2012 to 2015 without the project and calculating the difference in decibels for this change.

The Overland Traffic Consultants' (OTC) report of February 2013 (updated April 2013 and June 2013), Figures 10 to 12, Existing (2012) Traffic Volume, and Figures 16 to 18, Future (2015) Traffic Volume Without Project, indicates that from 2012 to 2015 the maximum increase in vehicular traffic without the subject project close to the proposed project site (i.e., on Civic Center Way and Cross Creek Road) will be for the Saturday mid-day peak hour.

The projected net acoustical impact of this traffic increase without the project is a sound level increase of 3.0 dBA above the 2012 sound levels at all seven noise-sensitive receptors.

The projected net increase in sound level without the project for the AM peak hour is 2.8 dBA while for the PM peak hour it is 1.9 dBA.

### **Future Traffic Noise with Project**

Changes in the noise level from traffic were found by determining the change in traffic volume from 2012 to 2015 with the project and calculating the difference in decibels for this change.

The OTC February 2013 report (updated in April and June 2013), Figures 16 to 18, Future (2015) Traffic Volume Without Project, and Figures 19 to 21, Future (2015) Traffic Volume With Project, Civic Center Way and Cross Creek Road details, shows the maximum increase in "year 2015 with project" maximum vehicular traffic in close proximity to the project site over that for "year 2015 without project" will be for the Saturday mid-day peak hour.

The projected increase in sound level of the additional traffic with the project compared to that without the project for this time is less than 0.5 dBA at all seven noise-sensitive receptors.

The projected net increase in sound level, over that without the project, is 0.4 dBA for the AM peak hour and the PM peak hour at all seven noise-sensitive receptors.

### **Whole Foods' Loading Dock Trucks**

The Whole Foods Market will have a loading dock at its north façade, and the nearest noise-sensitive areas to the dock will be the equestrian center's west riding ring (about 150 feet from the

loading dock) and residence (about 300 feet from the loading dock). Whole Foods will have no more than 2 daily truck deliveries, with both occurring during daytime hours. Some of the trucks will have onboard refrigeration.

The noise produced by an idling refrigerator truck can be as high as 66 dBA at a distance of 50 feet, so the expected sound levels at Receptors 1 and 2 (riding ring and the residence) will be no more than 57 dBA and 51 dBA, respectively, if there is no north site boundary wall providing noise reduction to either location. This sound level is not considered “significant” by the Malibu General Plan because it is below the 65 dBA “significance” limit. However, because the current daytime sound levels at the riding ring and residence are about 46 dBA and 45 dBA, respectively, ref. Table 3 above, the presence of each refrigerator truck would temporarily increase the sound levels at these 2 locations by approximately 10-11 dBA, and would be audible at both locations. Therefore, even though a noise wall may not be required for compliance with the Malibu General Plan, retaining the construction phase noise wall, and making it a permanent part of the project, will reduce the delivery truck noise by approximately 10 dBA, such that it will blend in with the ambient noise environment at both locations.

### **Mechanical Equipment Noise**

All five of the proposed project’s buildings will have rooftop mechanical equipment, and Building 5, the Whole Foods Market building, will have the most equipment. Based on the equipment complement used at a similarly-sized Whole Foods Market, as many as 30 pieces of HVAC and refrigeration equipment could be operating on the roof of Building 5. The project’s other 4 buildings will have many fewer pieces of rooftop equipment.

The project’s mechanical engineer has provided us with preliminary estimates of the amount of HVAC equipment that will be needed on the roofs of Buildings 1 through 4, and based on those estimates we have calculated the anticipated sound levels at all 6 noise-sensitive receptors, assuming that all of the rooftop equipment is operating at its maximum capacity simultaneously. Table 11 below summarizes the calculation results.

Receptor #	Receptor Description	HVAC Equipment Sound Levels in dBA					
		From Bldg 1	From Bldg 2	From Bldg 3	From Bldg 4	From Bldg 5	Total from All 5 Bldgs.
1	Equestrian Center at 3661 Cross Creek Road	39	35	32	35	58	58
2	Residence at 3661 Cross Creek Road	33	30	31	32	54	54
3	Malibu Public Library and Courtyard	29	30	34	34	48	48
4	Residence at 23704 Harbor Vista Drive	25	25	26	27	45	45
5	Residence at 3657 Cross Creek Road	26	25	25	27	46	46
6	Legacy Park	29	30	34	34	47	47

The HVAC equipment sound levels in the last column of Table 11 above are combined with the traffic noise in the next section of this report to determine the cumulative acoustical impacts at the seven noise-sensitive receptors.

## **CUMULATIVE IMPACTS AND MITIGATIONS**

### **Cumulative Impacts – Construction Phase**

The cumulative impacts of all construction phase noise sources are summarized in Table 12, below. The traffic noise values used in the calculations are based on the information in the OTC traffic study, which includes the incremental traffic from the other projects listed in Exhibit 2 that could affect the overall traffic noise exposure in and around the proposed project. The North Boundary Wall mentioned in the next-to-last column of Table 12 is Construction Phase Mitigation C7, which is described in the next section of this report.

A review of Table 12 shows that the lack of the North Boundary Wall will result in sound levels that exceed the General Plan Acoustical Significance Criteria at all seven noise-sensitive receptors. However, the addition of the wall will reduce the sound levels to less than the significance criteria at

Receptors 1, 2, and 5 such that there will be no impact.

**TABLE 12 – Projected Cumulative Worst-Case Average Sound Levels, Leq, at Noise-sensitive Receptors – Construction Phase, All values are in dBA**

Receptor #	General Plan Acoustical Significance Criteria	Without Project	With Project, Without North Boundary Wall	Impact without North Boundary Wall?	With Project, With North Boundary Wall	Impact with North Boundary Wall?
1	65	48	71	Yes	63	No
2	65	47	67	Yes	59	No
3	65	54	66	Yes	66	Yes
4	55	53	62	Yes	62	Yes
5	55	47	63	Yes	55	No
6	65	53	66	Yes	66	Yes

The presence of the North Boundary Wall will not reduce the sound levels at Receptor 5 (the Library and Courtyard) and Receptor 6 (Legacy Park) because the wall will not shield these locations from the project’s sound sources. However, the residual 1 dBA increase for the library proper is not truly significant because the construction of the library façade provides more outdoor-to-indoor noise reduction (OINR) than is assumed by most municipal acoustical criteria.

Most municipal acoustical criteria assume that a building façade provides approximately 20 dBA of OINR, such that a 65 dBA outdoor sound environment becomes about 45 dBA indoors after passing through the building’s façade. The library’s east façade wall, which faces the proposed project, is brick, which provides approximately 35 dBA of OINR. We estimate that the combination of the east façade brick wall and the south façade glass wall yields a combined OINR of at least 25 dBA. Accordingly, a 66 dBA outdoor noise environment will be only about 41 dBA inside the library, and would be less than the assumed 45 dBA indoor limit.

From Table 1, above, Subjective Perception of Sound Level Changes, the residual 1 dBA “significance” for the library courtyard and for Legacy Park is less than the + 2 dBA for the change to be “just noticeably louder.”

The excess at Receptor 4 (Harbor Vista Drive) is due to its elevation (~150 feet ASL), for which an unreasonably tall property line wall would be needed to reduce the average construction phase sound levels to less than acoustical significance. Please note that this scale of “impact” would occur during any significant construction in the civic center area. Note, also, that the acoustical reports for the La Paz and Legacy Park projects predict sound levels at this location that would indicate significant acoustical impacts.

**Construction Phase Mitigations**

We recommend the following measures and mitigations to ensure compliance with the General Plan’ Noise Element sound level limits during the project’s construction phase.

- C1. All construction machinery and delivery trucks shall be maintained to the highest level of performance, and shall be outfitted with all noise reduction accessories, e.g., mufflers, enclosures, etc. that are offered by the equipment manufacturers.
- C2. The contractor and all subcontractors shall be knowledgeable about the details of Chapter 8.24 NOISE of the Malibu Municipal Code, and shall conform to its requirements at all times.
- C3. Construction activities may occur only during the hours permitted by the Malibu Municipal Code – 7 AM until 7 PM on weekdays, and 8 AM until 5 PM on Saturdays. Construction activities are not permitted on Sundays and holidays.
- C4. The site shall be laid out such that materials are staged near the south end of the site to maximize the distance from the equestrian center.
- C5. All residences within 1000 feet of the site shall be individually notified of the project’s construction schedule.
- C6. There shall be a sign posted on the site that is legible from at least 50 feet offsite. The sign shall include a telephone number that residents can call to inquire about the construction process and to register complaints.
- C7. One of the first construction actions will be the construction of a noise wall along the property’s entire north boundary to minimize the noise emissions to the equestrian center and the residence at its west edge. The wall should be at least 12 feet tall, and can be made of any solid material that weighs at least 5 pounds per square foot, e.g., stucco, wood, masonry, etc.
- C8. The project developer shall designate a “noise control coordinator” who will reply to all noise-related questions and complaints.

### **Cumulative Impacts – Operational Phase**

The projected cumulative impacts of all operational phase noise sources are summarized in Table 13 below. The traffic noise contributions used in our calculations are based on the information in the February 2013 (updated in April and June 2013) OTC traffic study, which includes traffic contributions from the other potential projects, listed in Exhibit 2, that could affect the overall traffic noise exposure in and around the proposed project. The mitigations that are mentioned in the table are described later in this report. Operational noise sources from future projects other than the subject project were not included in this analysis.

<b>TABLE 13 – Projected Cumulative Worst-Case Average Sound Levels at Noise-sensitive Receptors – Operations Phase, All values are in dBA</b>								
Receptor #	Without Project		With Project, Without Mitigations		With Project, With Mitigations		General Plan Noise Element Limits	
	Day	Night	Day	Night	Day	Night	Day	Night
1	49	45	59	58	49	45	65	60
2	48	45	55	55	48	45	65	60
3	55	48	56	51	55	48	65	60
4	55	44	55	48	55	44	55	50
5	49	42	51	48	49	42	55	50
6	56	48	57	51	56	48	65	60

Note that for all receptors the sound levels with mitigation are due to traffic noise

### Operations Phase Mitigations

A review of Table 13 shows that the operational phase sound levels without mitigations does not exceed the General Plant’s Noise Element Limits.

To further mitigate any nighttime noise levels, and to provide better-than-required noise reduction during the daytime (noting that the cumulative sound level can only be reduced to the ambient level without the project and not below), we recommend the following mitigations:

- O1. Retain the north boundary’s 12-foot high construction noise wall to minimize the operational phase noise emissions to the equestrian center and the residences to the north. This will control the noise from such on-grade sources as cars, delivery and garbage trucks, parking lot sweepers, etc.
- O2. Install rooftop noise barrier screens that surround all rooftop equipment on Building 5. The locations, weights and heights of the screens will depend on the specific equipment; but, at a minimum, they should be made of a solid material that weighs at least 4 pounds per square foot, and they should completely shield the line-of sight from each piece of rooftop equipment to the noise-sensitive receptors. A screen that is close to a piece of rooftop equipment will be more effective than one that is farther from it.
- O3. All truck deliveries and all maintenance operations shall occur between the hours of 7 AM and 7 PM.

### Potential Late Restaurant Closing Times

It is possible that the project will include two small restaurants that will close as late as 11:00 PM, thereby necessitating compliance with the lower General Plan Noise Element sound level limits of 40 dBA at the three noise-sensitive receptors and 60 dBA at the other three receptors. If we assume

the worst-case condition that the restaurants are in Buildings 1 and 2, and that the HVAC equipment in the other three buildings is shut down at 10:00 PM, then the HVAC equipment sound levels at the seven noise-sensitive receptors will be as shown in Table 14, below.

A comparison of the HVAC equipment sound levels in Table 14 with the General Plan Noise Element sound level limits shows that the 10:00 PM to 11:00 PM HVAC equipment noise from the two restaurants would comply.

<b>TABLE 14 – Projected HVAC Equipment Sound Levels at Noise-sensitive Receptors – Operations Phase between 10:00 PM and 11:00 PM, All values are in dBA, Assumes HVAC Equipment is Turned Off at the Other 3 Buildings</b>				
Receptor #	From Bldg 1	From Bldg 2	Combined from Both Buildings	General Plan Noise Element Limits 10 PM to 11 PM
1	39	35	41	60
2	33	30	35	40
3	29	30	33	60
4	25	25	28	40
5	26	25	29	40
6	29	30	33	60

Table 15, below, shows the cumulative noise impacts at the 3 noise-sensitive receptors due to the HVAC equipment plus the existing ambient noise environment.

<b>TABLE 15 – Projected Cumulative Worst-Case Average Sound Levels at Noise-sensitive Receptors – Operations Phase between 10:00 PM and 11:00 PM, All values are in dBA, Assumes HVAC Equipment is Turned Off at the Other 3 Buildings</b>				
Receptor #	Without Project	With Project, Without Mitigations	With Project, With Mitigations	General Plan Noise Element Limits 10 PM to 11 PM
1	45	47	47	60
2	45	45	45	60
3	48	48	48	60
4	44	44	44	40
5	42	42	42	40
7	48	48	48	60

A review of Table 15 shows that the cumulative 10:00 PM to 11:00 PM sound levels will comply with the General Plan Noise Element limits at Receptors 1, 2, 3, and 6. At first glance it would appear that the sound level at Receptors 4 and 5 will exceed the 40 dBA limit. However, note the extremely low sound levels at both receptors due to the HVAC equipment, as shown in Table 14.

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In fact, the controlling noise during the 10:00 to 11:00 PM hour is traffic on PCH and other nearby roads. Accordingly, no additional project mitigations will be needed.

--- END OF REPORT ---



Figure 1 – Whole Foods In The Park Vicinity Plan

Source: Overland Traffic Consultants Report, May 2011

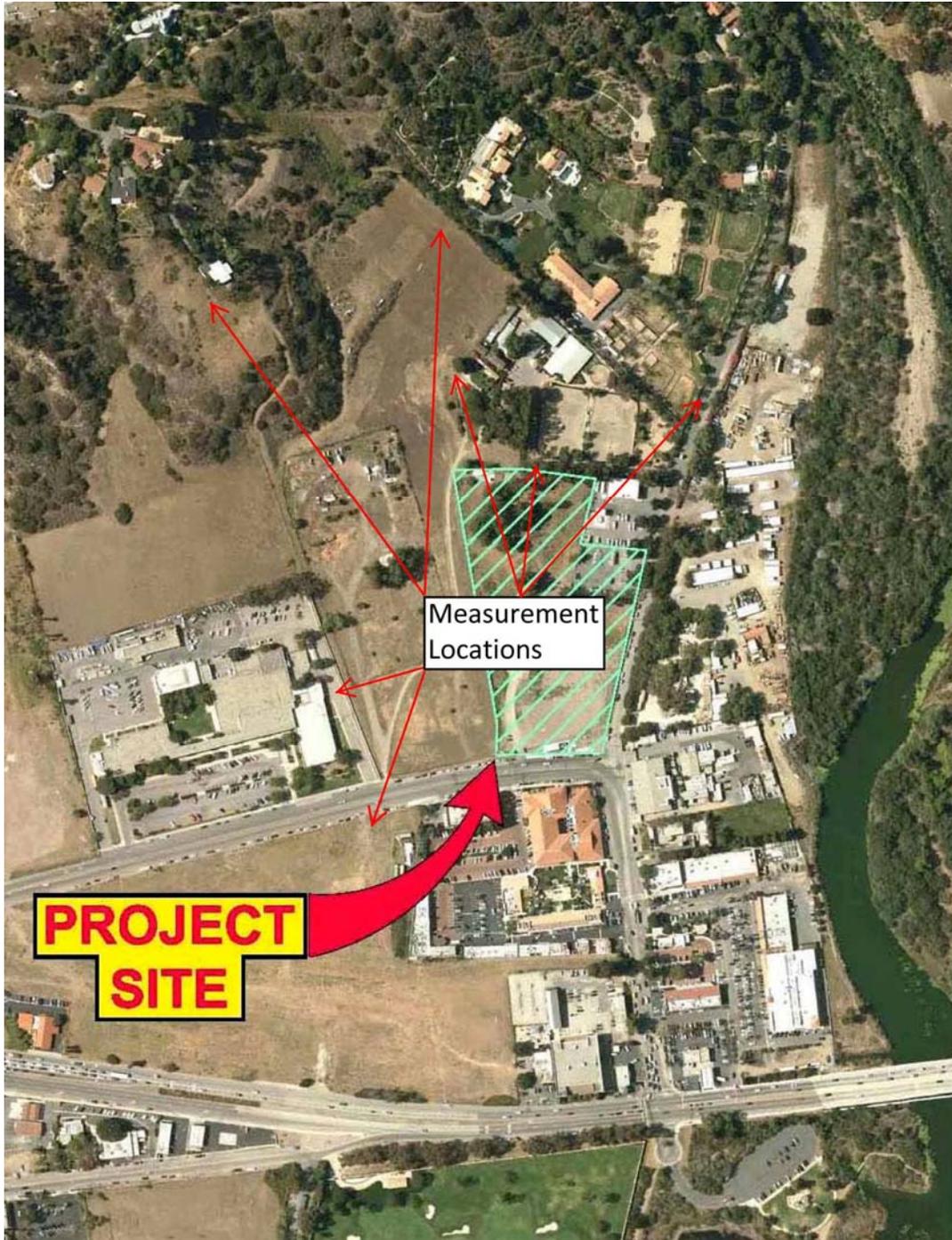


Figure 2 – Measurement Locations

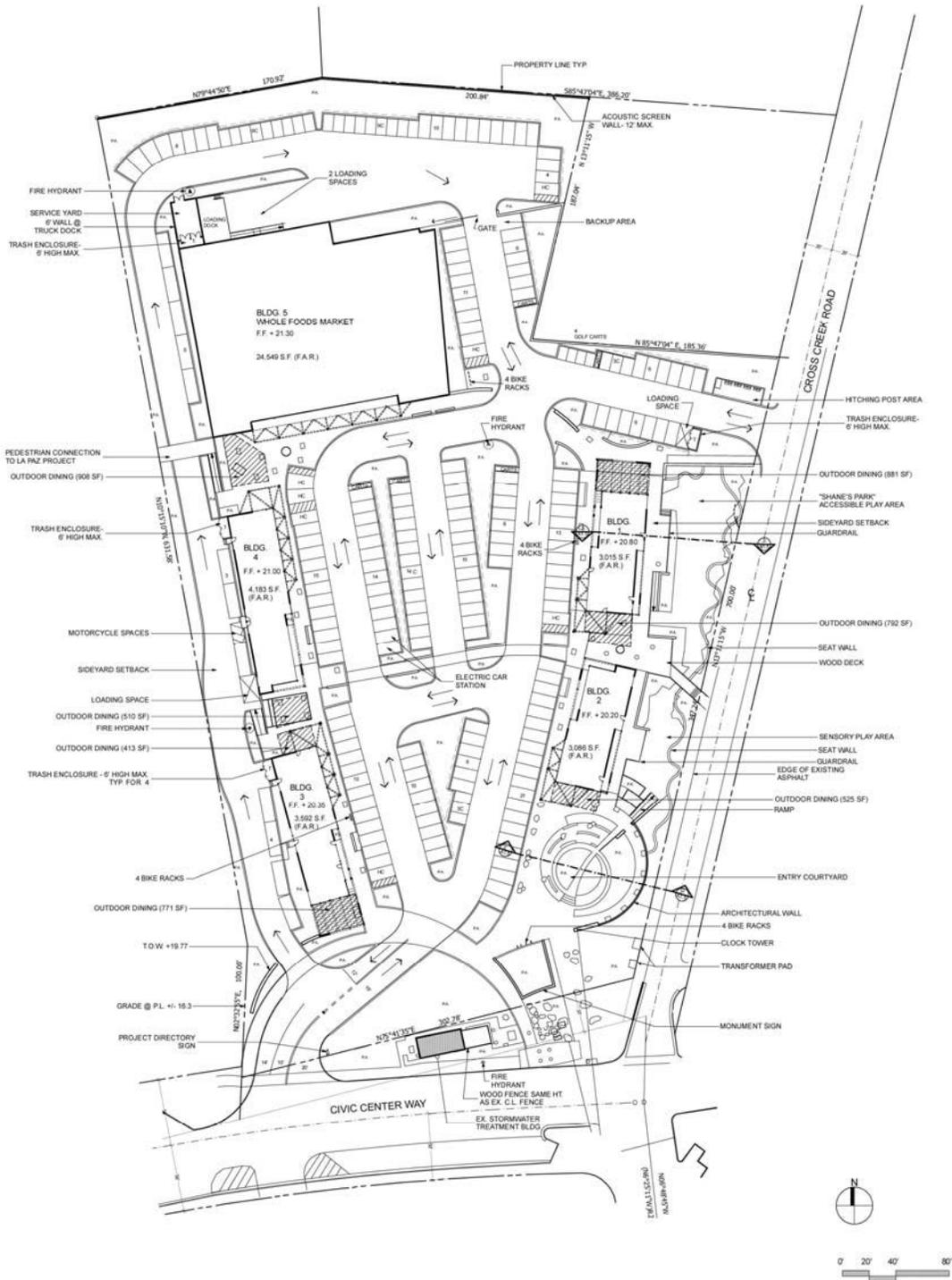


Figure 3 - Whole Foods In The Park Site Plan

Source: Goldman Firth Rossi Architects

*Exhibit 1*  
*Whole Foods in the Park*  
*Malibu Municipal Code*  
*Chapter 8.24 Noise*

8.24.010 Short title.

This chapter may be cited as the “Noise Control Ordinance of the City of Malibu.” (Prior code § 4200)

8.24.020 Declaration of policy.

In order to control unnecessary, excessive and annoying noise and vibration in the city, it is declared to be the policy of the city to prohibit such noise and vibration. (Prior code § 4201)

8.24.030 Definitions.

The following words, phrases and terms as used in this chapter shall have the meanings indicated as follows:

“City Manager” means the city manager of the city of Malibu or the city manager’s designee.

“Construction” means any site preparation, assembly, erection, substantial repair, alteration or similar action, for or of public or private right-of-way, structures, utilities or similar property.

“Emergency machinery, vehicle or alarm” means any machinery, vehicle or alarm used, employed, performed or operated in an effort to protect, provide or restore safe conditions in the community or for the citizenry or work by private or public utilities when restoring utility service.

“Emergency work” means any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency or work by private or public utilities when restoring utility services.

“Holiday” means all designated holidays in Section 2.04.030(B), except 2.04.030(B)(9), (10) and (12) shall not be considered holidays for purposes of this section.

“Person” means any individual, firm, association, partnership, joint venture or corporation.

“Weekday” means any day, Monday through Friday, which is not a legal holiday. (Ord. 203 § 1, 1999: prior code § 4202)

8.24.040 Prohibited noises.

No person shall make, or cause or suffer, or permit to be made upon any premises owned, occupied or controlled by such person, any unnecessary noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time, or place as to occasion unnecessary discomfort to any persons within the neighborhood from which the noises emanate or which interfere with the peace and comfort of the residents or their guests, or the operators or customers in places of business in the vicinity, or which may detrimentally or adversely affect such residences or places of business. (Prior code § 4203)

8.24.050 Prohibited acts.

Notwithstanding any other provisions of this chapter, the following acts and the causing or permitting thereof, are declared to be in violation of this chapter:

*Exhibit 1*  
*Whole Foods in the Park*  
*Malibu Municipal Code*  
*Chapter 8.24 Noise*

A. Unnecessary noises: the unnecessary making of, or knowingly and unnecessarily permitting to be made, any loud, boisterous or unusual noise, disturbance, commotion or vibration in any boarding facility, dwelling, place of business or other structure, or upon any public street, park or other place or building, except the ordinary and usual sounds, noises, commotion or vibration incidental to the operation of said places when conducted in accordance with the usual and normal standard of practice applicable thereto and in a manner which will not disturb the peace and comfort of adjacent residences or which will not detrimentally affect the operators or customers of adjacent places of business;

B. Radios, phonographs, etc. the using, operating or permitting to be played, used or operated between the hours of ten p.m. and seven a.m. of any radio, musical instrument, phonograph, television set, or instrument or device similar to those heretofore specifically mentioned for the production or reproduction of sound in volume sufficiently loud as to disturb the peace, quiet or repose of persons of ordinary and normal sensitiveness who are in the immediate vicinity of such machine or device;

C. Band or orchestral rehearsals: the conducting of or carrying on of band or orchestral concerts or rehearsals or practice between the hours of ten p.m. and seven a.m. sufficiently loud as to disturb the peace, quiet or repose of persons of ordinary and normal sensitiveness who reside in the immediate vicinity of such band or orchestral concerts or rehearsals or practice;

D. Engines, motors and mechanical devices near residential district: except as provided in subsection G of this section regarding construction-related noise, the sustained operation or use between the hours of ten p.m. and seven a.m. of any electric or gasoline powered motor or engine or the repair, modification, reconstruction, testing or operation of any automobile, motorcycle, machine or mechanical device or other contrivance or facility unless such motor, engine, automobile, motorcycle, machine or mechanical device is enclosed within a sound insulated structure so as to prevent noise and sound from being plainly audible at a distance of fifty (50) feet from such structure, or within ten (10) feet of any residence;

E. Motor vehicles: racing the engine of any motor vehicle or needlessly bringing to a sudden start or stop of any motor vehicle;

F. Loading and unloading: loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of ten (10) p.m. and seven a.m. in such a manner as to cause noise disturbance;

G. Construction: operating or causing the operation of any tools, equipment, impact devices, derricks or hoists used in construction, chilling, repair, alteration, demolition or earthwork, on weekdays between the hours of seven p.m. and seven a.m., before eight a.m. or after five p.m. on Saturday, or at any time on Sundays or holidays, except as provided in Section 8.24.060(D);

H. Nonemergency signaling devices: sounding or permitting the sounding of any electronically-amplified signal from any bell, chime, siren, whistle or similar device, intended primarily for nonemergency purposes, from any place, for more than ten (10) consecutive seconds in any hourly period.

Houses of religious worship shall be exempt from the operation of this provision.

*Exhibit 1*  
*Whole Foods in the Park*  
*Malibu Municipal Code*  
*Chapter 8.24 Noise*

Sound sources included within this provision which are not exempted under Section 8.24.060 may be exempted by a variance issued by the city manager;

I. Emergency signaling devices:

1. The intentional sounding or permitting the sounding outdoors of any emergency signaling device including fire, burglar, civil defense alarm, siren whistle or similar emergency signaling device, for testing, except as provided in subsection (H)(2) of this section,

2. Testing of an emergency signaling device shall not occur before seven a.m. or after seven p.m. Any such testing shall use only the minimum cycle test time. In no case shall such test time exceed sixty (60) seconds. Testing of the emergency signaling system shall not occur more than once in each calendar month,

3. Sounding or permitting the sounding of any exterior burglar or fire alarm or any motor vehicle burglar alarm unless such alarm is terminated within fifteen (15) minutes of activation;

J. Noises by Animals. It is unlawful for any person having charge, care, custody, or control of any animal to permit such animal to emit any excessive noise which is disturbing or offensive. The city shall enforce this subsection as follows:

1. Complaints must be submitted in writing and shall include the name, address, and telephone number of the complainant, as well as the address of the animal owner and description of the noise.

2. Upon receiving a complaint involving whining, barking, howling, screeching or similar animal noise, the city shall cause the following to be performed:

a. Issue notice of noise complaint to the animal owner or custodian of the animal advising such person of the alleged noise and requesting immediate steps to abate the same,

b. Notice shall adequately describe the noise complaint to assist the animal owner in recognizing and correcting the problem,

c. If a second complaint is received, the city shall issue a notice apprising the animal owner or custodian of the complaint and directing the same to abate the noise. Such notice shall contain a provisions that within five days of receipt thereof the animal owner or custodian may request a hearing with a city representative to discuss the notice of noncompliance,

d. Should the problem remain unresolved by the end of the time limit noted in the notice of noncompliance, a second notice with a five day limit shall be issued,

e. If the problem is not resolved at the end of this five-day period, a citation shall be issued to the owner or custodian of the animal;

K. Leaf blowers: the use or operation of any portable machine powered with a combustion or gasoline engine used to blow leaves, dirt and other debris off sidewalks, driveways, lawns and other surfaces;

L. Commercial establishments adjacent to residential property: sustained noise from the premises of any commercial establishment, including any outdoor area part of or under the control of the establishment, between the hours of ten p.m. and seven a.m. shall not be plainly audible at a distance of five feet of any residential dwelling unit;

M. No person shall make, or cause or suffer, or permit to be made upon any public beach, occupied by such person, any unnecessary noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or

*Exhibit 1*  
*Whole Foods in the Park*  
*Malibu Municipal Code*  
*Chapter 8.24 Noise*

unnatural or unusual in their use, time, or place as to occasion unnecessary discomfort to any persons within five hundred (500) feet of the place from which said noises emanate or which interfere with the peace and comfort of other occupants of the beach or the residents of the neighborhood or their guests, or the operators or customers in places of business in the vicinity, or which may detrimentally or adversely affect such occupants or residences or places of business. (Ord. 188 § 2, 1999; Ord. 94 § 1, 1993; prior code § 4204)

8.24.060 Exemptions.

The following activities shall be exempt from the provisions of this chapter:

A. Emergency exemption: the emission of sound for the purpose of alerting persons to the existence of an emergency or the emission of sound in the performance of emergency work;

B. Warning devices: warning devices necessary for the protection of public safety as for example, police, fire and ambulance sirens and train horns;

C. Outdoor activities: Activities conducted on public playgrounds and public or private school grounds including but not limited to school athletic and school entertainment events;

D. Construction—Special Circumstances. The provisions of Section 8.24.050 do not apply to any person who performs construction, repair, excavation or earthmoving work pursuant to the expressed written permission of the city manager to perform such work at times prohibited in Section 8.24.050. The applicant must submit to the city manager an application in writing, stating the reasons for the request and the facts upon which such reasons are based. The city manager may grant written permission for the construction if he or she finds that:

1. The work proposed to be done is in the public interest,
2. Hardship, injustice or unreasonable delay would result from the interruption thereof during the hours and days specified in Section 8.24.050, or
3. The building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense.

Any applicant dissatisfied with the decision of the city manager may appeal to the city council by filing a notice of appeal with the city clerk within ten (10) days after notice of the city manager's decision. The city council shall, within thirty (30) days of filing the appeal, affirm, reverse or modify the decision of the city manager.

The provisions of Section 8.24.050 do not apply to the construction, repair, or excavation during prohibited hours as may be necessary for the preservation of life or property, when such necessity arises during such hours as the offices of the city are closed, or where such necessity requires immediate action prior to the time at which it would be possible to obtain a permit pursuant to this section. The person doing such construction, repair or excavation shall obtain a permit therefor within one business day of such construction, repair or excavation;

E. Outdoor gatherings, public dances, shows and sporting events: provided the events are conducted pursuant to a permit issued by the city manager. (Prior code § 4205)

8.24.070 Enforcement.

*Exhibit 1*  
*Whole Foods in the Park*  
*Malibu Municipal Code*  
*Chapter 8.24 Noise*

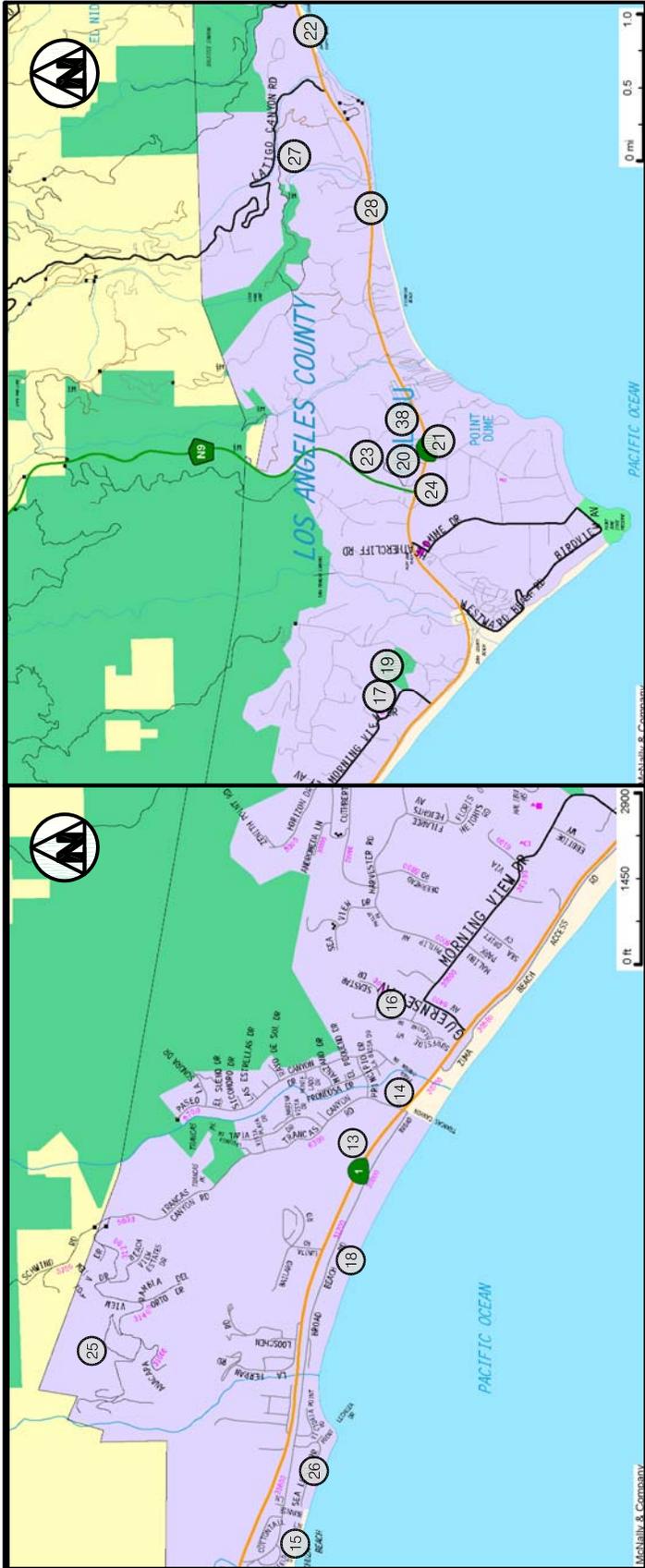
The city manager shall have primary responsibility for the enforcement of the noise regulations contained herein. Nothing in this chapter shall prevent the city manager from obtaining voluntary compliance by way of warning, notice or education. (Prior code § 4206)

8.24.080 Violation—Penalty.

In addition to any criminal, civil or other legal remedy established by law that may be pursued to address violations of the municipal code, violations of the provisions of this chapter are subject to the administrative penalty provisions of Chapter 1.10. (Ord. 325 § 4, 2008)

*Exhibit 2*  
*Related Project Information*

Source: Appendix H OTC February 2013 report (updated April and June 2013)  
Provided by the City of Malibu (August 1, 2012)



RELATED PROJECTS LOCATION MAP

POINT DUME STUDY AREA

WEST STUDY AREA



EAST STUDY AREA

CARBON BEACH STUDY AREA

CIVIC CENTER STUDY AREA

**RELATED PROJECTS DESCRIPTIONS AND LOCATIONS**

<u>Number</u>	<u>Name/Location</u>	<u>Size</u>	<u>Land Use Description</u>
1	Pepperdine Univeristy		Campus Wide upgrades
2	22716 Pacific Coast Highway	7,100 sf	Restaurant
3	22706 Pacific Coast Highway	5,904 sf	Restaurant
4	22959 Pacific Coast Highway	2,630 sf	Office
		4,517 sf	Retail
5	22729 Pacific Coast Highway	2,499 sf	Office
6	22065 Pacific Coast Hghway	8 units	Condominiums
7	18805,07,09 Pacific Coast Highway	3 du	Single Family
8	22301,03,05,09 Pacific Coast Highway	4 du	Single Family
9	21997 and 22003 Pacific Coast Highway	2 du	Single Family
10	3314 Serra Road	3 du	Single Family
11	20624 and 20630 Pacific Coast Highway	2 du	Single Family
12	2110 Seaboard	4 du	Single Family
13	6155 Trancas Canyon Road	32 units	Townhomes
14	30745 Pacific Coast Highway	53,423 sf	Shopping Center
15	31720.5 Pacific Coast Highway	Public Access Improvements	
16	6270,6304,6312,6282,6398 Sea Star Drive	5 du	Single Family
17	30215 Morning View Drive	35,315 sf	High School Improvements
18	Broad Beach Road	Restoration Project	
19	30215 Morning View Drive	Sports Field Lighting	
20	28811 Pacific Coast Highway	3 du	Single Family
21	28722 Pacific Coast Highway	6,033 sf	Fire Station
22	26038.5 Pacific Coast Highway	Fish Ladder Project	
23	6061 Galahad Road	4 du	Single Family
24	6271 and 6277 Zuma Mesa Drive	2 du	Single Family
25	31537 Anacapa View Drive	Trancas Highlands Water Assessment Project	
26	31864 and 31866 Sea Level Drive	2 du	Single Family
27	5905 and 5909 Latigo Canyon Road	2 du	Single Family
28	27535 Pacific Coast Highway	2 du	Single Family
29	3500 Puerco Canyon Road	7 du	Single Family
30	24120 Pacific Coast Highway	5 du	Single Family
		1 field	Baseball Field
31	24903 Pacific Coast Highway	9,685 sf	Office
32	23915 Malibu Road	7 du	Single Family
33	24038 Malbu Canyon Road	SMMC Beach Access Improvements	
34	23465 Civic Center Way	53,825 sf	Office/Institutional
		77,110 sf	Retail
35	Rancho Malibu Hotel	19,849 sf	Hotel Retail
		20,928 sf	Hotel Spa
		146 room	Hotel
36	City of Malibu	Wastewater Treatment Facility	
37	23525 Civic Center Way	25,000 sf	Satellite Campus (200 Students)
38	28455 Pacific Coast Highway	5.12 acres	102 du (6 du per acre)
	28401 Pacific Coast Highway	3.25 acres	20 du (6 du per acre)
	370 Laz Paz Lane	2.30 acres	14 du (6 du per acre)
39	23575 Civic Center Way	76,000 sf	Shopping Center
Source: City Malibu for Cumulative Listing May 2012			
n/a - not available			

RELATED PROJECTS DESCRIPTIONS AND TRIP GENERATION

Number	Name/Location	Size	Land Use Description	Daily	AM Peak Hour			PM Peak Hour			Sat. Mid-day Peak Hour			Sat.
				Traffic (744)	In (54)	Out (13)	Total (67)	In (15)	Out (37)	Total (52)	In (20)	Out (14)	Total (34)	Daily (402)
1	Pepperdine University		Campus Wide upgrades											
2	22716 Pacific Coast Highway	7,100 sf	Restaurant	639	52	1	6	36	18	54	45	32	77	670
3	22706 Pacific Coast Highway	5,904 sf	Restaurant	597	5	0	5	30	15	45	38	26	64	577
4	22959 Pacific Coast Highway	2,630 sf	Office	29	4	0	4	1	3	4	1	0	1	6
		4,517 sf	Retail	200	0	0	0	5	7	12	5	7	12	190
5	22729 Pacific Coast Highway	2,499 sf	Office	28	3	1	4	1	3	4	1	0	1	6
6	22065 Pacific Coast Highway	8 units	Condominiums	46	1	3	4	3	1	4	2	2	4	45
7	18805,07,09 Pacific Coast Highway	3 du	Single Family	29	1	2	3	2	1	3	1	2	3	30
8	22301,03,05,09 Pacific Coast Highway	4 du	Single Family	38	1	2	3	3	1	4	2	2	4	40
9	21997 and 22003 Pacific Coast Highway	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
10	3314 Serra Road	3 du	Single Family	29	1	2	3	2	1	3	1	2	3	30
11	20624 and 20630 Pacific Coast Highway	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
12	2110 Seaboard	4 du	Single Family	38	1	2	3	3	1	4	2	2	4	40
13	6155 Trancas Canyon Road	32 units	Townhomes	186	2	12	14	12	5	17	8	7	15	181
14	30745 Pacific Coast Highway	53,423 sf	Shopping Center	1,366	37	10	47	73	109	182	101	135	236	1,590
15	31720.5 Pacific Coast Highway		Public Access Improvements	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
				48	1	3	4	3	2	5	2	2	4	50
16	6270,6304,6312,6282,6398 Sea Star Drive	5 du	Single Family											
17	30215 Morning View Drive	35,315 sf	High School Improvements	455	77	31	108	18	16	34	18	10	28	154
18	Broad Beach Road		Restoration Project	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
19	30215 Morning View Drive		Sports Field Lighting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
20	28811 Pacific Coast Highway	3 du	Single Family	29	1	2	3	2	1	3	1	2	3	30
21	28722 Pacific Coast Highway	6,033 sf	Fire Station	66	8	1	9	2	7	9	2	7	9	66
22	26038.5 Pacific Coast Highway		Fish Ladder Project	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
23	6061 Galahad Road	4 du	Single Family	38	1	2	3	3	1	4	2	2	4	40
24	6271 and 6277 Zuma Mesa Drive	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
25	31537 Anacapa View Drive		Trancas Highlands Water Assessment Project	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
26	31864 and 31866 Sea Level Drive	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
27	5905 and 5909 Latigo Canyon Road	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
28	27535 Pacific Coast Highway	2 du	Single Family	19	1	1	2	1	1	2	1	1	2	20
29	3500 Puerco Canyon Road	7 du	Single Family	67	1	4	5	4	3	7	3	3	6	71
30	24120 Pacific Coast Highway	5 du	Single Family	48	1	3	4	3	2	5	2	2	4	50
		1 field	Baseball Field	120	0	0	0	30	30	60	46	46	92	970
31	24903 Pacific Coast Highway	9,685 sf	Office	107	13	2	15	2	12	14	2	2	4	23
32	23915 Malibu Road	7 du	Single Family	67	1	4	5	4	3	7	3	3	6	71
33	24038 Malbu Canyon Road		SMMC Beach Access Improvements	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
34	23465 Civic Center Way	53,825 sf	Office/Institutional	825	100	14	114	20	98	118	13	10	23	133
		77,110 sf	Retail	2,038	22	14	37	56	74	130	90	84	174	2,107
35	Rancho Malibu Hotel	19,849 sf	Hotel Retail	2,058	68	38	106	74	82	156	110	112	222	3,167
		20,928 sf	Hotel Spa											
		146 room	Hotel											
36	City of Malibu		Wastewater Treatment Facility	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
37	23525 Civic Center Way	25,000 sf	Satellite Campus (200 Students)	240	20	4	24	16	8	24	6	4	10	84
38	28455 Pacific Coast Highway	5.12 acres	102 du (6 du per acre)	976	19	57	76	65	38	103	50	45	95	1,028
	28401 Pacific Coast Highway	3.25 acres	20 du (6 du per acre)	191	4	11	15	13	7	20	10	9	19	202
	370 Laz Paz Lane	2.30 acres	14 du (6 du per acre)	134	3	8	11	9	5	14	7	6	13	141
39	23575 Civic Center Way	76,000 sf	Shopping Center	4,592	122	84	206	158	154	312	231	22	456	5,056
Source: City Malibu for Cumulative Listing May 2012														
n/a - not available														