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July 25, 2024

Ocean Breeze Ranch, LLC
Attn: James Conrad
1550 South Coast Highway, Suite 201
Laguna Beach, CA 92651

RE: Noise Addendum Letter PDS2023-TM-5615TER - Ocean Breeze Ranch Revised Tentative Map Time Extension - County of San Diego

The proposed Project seeks to modify the previously approved Tentative Map 5615 which was approved by the Planning Commission on December 13, 2019. The approved project, also named Ocean Breeze Ranch, includes a 396 planned residential development (PRD) and a private equestrian facility which would be developed over three planning areas (PA1. PA2, and PA3). The PRD would also include parks, roads and landscaped areas. The equestrian facility consists primarily of previously constructed buildings and structures.

The proposed Project would modify 86 lot lines (57 residential lots, 25 open space lots and 2 public park lots and 2 private park lots); lower building pad elevations PA1 and PA3 while raising elevations at PA2. In addition, the proposed Project would realign Street B and utilities to accommodate the modifications. The unit count will remain the same as originally approved.

Earthwork for the approved Tentative Map 5615 consisted of 1,900,000 cubic yards (CY) of even cut and fill with no export required. The proposed Project modification would increase the earthwork to approximately 2,500,000 CY and would remain balanced.

The purpose of this analysis is to update the construction analysis based on the change in grading quantities which includes additional earthwork onsite with 2,500,000 CY of earthwork. No construction related noise impacts were originally identified unless rock drilling occurs within 225 feet of any occupied noise sensitive land use. Additional information on the rock drill operations is provided below in this memo. None of the operational components of the Project site have changed (i.e., unit count, mechanical equipment and traffic volumes). Therefore, the onsite and offsite transportation and operational related noise findings are still valid.

This report does not replace the previously approved Noise Assessment conducted for the site prepared by Ldn Consulting 2019. This report provides supplemental findings for the onsite related to construction noise.

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CONSTRUCTION RELATED NOISE ANALYSIS

Construction Noise: Noise generated by construction activities related to the project will exceed the standards listed in San Diego County Code Sections as follows.

SEC. 36.408: HOURS OF OPERATION OF CONSTRUCTION EQUIPMENT

Except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment:

a. Between 7 p.m. and 7 a.m.

b. On a Sunday or a holiday. For purposes of this section, a holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special State holiday. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10 a.m. and 5 p.m. at the person's residence or for the purpose of constructing a residence for himself or herself, provided that the operation of construction equipment is not carried out for financial consideration or other consideration of any kind and does not violate the limitations in sections 36.409 and 36.410.

SEC. 36.409: SOUND LEVEL LIMITATIONS ON CONSTRUCTION EQUIPMENT

Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

SEC. 36.410: SOUND LEVEL LIMITATIONS ON IMPULSIVE NOISE

In addition to the general limitations on sound levels in section 36.404 and the limitations on construction equipment in section 36.409, the following additional sound level limitations shall apply:

(a) Except for emergency work or work on a public road project, no person shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410A (provided below), when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period, as described in subsection (c) below. The maximum sound level depends on the

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use being made of the occupied property. The uses in Table 36.410A are as described in the County Zoning Ordinance.

TABLE 36.410A: MAXIMUM SOUND LEVEL (IMPULSIVE) MEASURED AT OCCUPIED PROPERTY IN DECIBELS (dBA)

OCCUPIED PROPERTY USE	DECIBELS (dBA)
Residential, village zoning or civic use	82
Agricultural, commercial or industrial use	85

(b) Except for emergency work, no person working on a public road project shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410B, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period, as described in subsection (c) below. The maximum sound level depends on the use being made of the occupied property. The uses in Table 36.410B are as described in the Zoning Ordinance.

TABLE 36.410B: MAXIMUM SOUND LEVEL (IMPULSIVE) MEASURED AT OCCUPIED PROPERTY IN DECIBELS (dBA) FOR PUBLIC ROAD PROJECTS

OCCUPIED PROPERTY USE	dB(A)
Residential, village zoning or civic use	85
Agricultural, commercial or industrial use	90

(c) The minimum measurement period for any measurements conducted under this section shall be one hour. During the measurement period a measurement shall be conducted every minute from a fixed location on an occupied property. The measurements shall measure the maximum sound level during each minute of the measurement period. If the sound level caused by construction equipment or the producer of the impulsive noise exceeds the maximum sound level for any portion of any minute, it will be deemed that the maximum sound level was exceeded during that minute.

Compliance of Construction Noise Levels

The County's Noise Ordinance states that when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. The properties surrounding the Project site are mostly occupied and are separated by distances over 900 feet.

According to the project applicant, a total of four scrapers, three dozers, three loaders, three graders and three tracked excavators with rock breakers during grading activities will be

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required to complete the proposed grading operations. Project construction activities also include blasting that will require two rock drills. The blasting operations are anticipated to control the material size so that the excess rock and grading debris will be manageable and utilized onsite in the areas that fill material is needed using a portable rock crushing machine. As mass grading is completed, underground trenching would occur and then the utility construction phases and paving of internal roadways would be completed.

The anticipated equipment will be spread out over the site working in different areas for 1-4 weeks and then relocating to a different portion of the site as cut or fill material is needed. For example: the rock drills may be working in the eastern portion of the site while the dozers, tractors and scrapers are operating in the western or southern portions of the site. Some of the equipment will then move to bring the blasted material to areas where fill is needed. Due to the size of the site and the need to bring cut and blasted material from the one area to where fill in needed, none of the equipment is anticipated to be operating more than 30 days in the same location. The list of equipment and the associated noise levels utilized in this analysis are shown in Table 1. The anticipated construction noise levels during construction are characterized below for each piece of equipment. The list of equipment did not change from the original analysis. Therefore, the anticipated noise levels are expected to remain the same and are provided below for simplicity.

Table 1: Reference Construction Noise Levels and Equipment

Construction Phase	Construction Equipment	Quantity	Source Level @ 50 Feet (dBA)[1]
Grading and Blasting Operations	Dozer – D8	3	74
	Loader/Tractor	3	73
	Water Truck	2	70
	Excavator	3	73
	Scrapers	4	75
	Graders	3	73
	Rock Drill	2	85
[1] Source: EPA and Empirical Data			

Using a point-source noise prediction model with a standard 6 dBA reduction per doubling of distance, calculations of the expected construction noise impacts were completed. The essential model input data for these performance equations include the source levels of each type of equipment, relative source to receiver horizontal and vertical separations, the amount of time the equipment is operating in a given day, also referred to as the duty-cycle. The point-source modeling does not account for any transmission loss from topography or barriers.

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Grading Operations

The overall grading operations have not changed from the originally approved project. The equipment list and remains the same but the earthwork quantities have increased. The increased earthwork will not result in a larger footprint or additional noise producing equipment. The grading equipment listed in Table 1 will be spread out over the site working in different phases or areas as described above. The majority of the grading operations would be located 900-feet from the nearest property lines. Some equipment may be operating at or near the property line for grading of the proposed access roads. This would result in an acoustical center for the grading operation at approximately 450-feet to the nearest property line. As can be seen in Table 2 below, if all the equipment was operating in the same location, which is not physically possible, at a distance as close as 180-feet from the nearest property line, the point source noise attenuation from construction activities is -11.1 dBA. This would result in an anticipated worst-case combined noise level of 75 dBA at the property line. Given this and the spatial separation of the equipment, the noise levels will comply with the County of San Diego's 75 dBA standard at all Project property lines.

Table 2: Grading Operation Noise Levels

Construction Equipment	Quantity	Source Level @ 50 Feet (dBA)	Duty Cycle (Hours/Day)	Cumulative Noise Level @ 50 Feet (dBA)
Dozer – D8	3	74	8	78.8
Loader/Tractor	3	73	8	77.8
Water Truck	2	70	8	73.0
Excavator	3	73	8	77.8
Scrapers	4	75	8	81.0
Graders	3	72	8	76.8
			Cumulative Levels @ 50 Feet (dBA)	86.0
			Average Distance	180
			Noise Reduction Due to Distance	-11.1
			NEAREST PROPERTY LINE NOISE LEVEL	**74.9**

Potential Impulsive Noise Impacts

Areas of the project site that require deeper cuts and where the native material is not easily ripable (graded) may require blasting and the use of rock drills. The two rock drills would be moved around the site on an as needed basis dependent upon the site characteristics. The use of two rock drills would occur independently of all other proposed equipment. The drilling and blasting activities would occur in one area then the grading equipment would relocate or remove the debris. To determine the worst-case noise levels from the drilling operations both

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rock drills were assumed to be placed in the same location on the site, which is not physically possible. The cumulative noise level from the equipment would be 88.0 dBA at 50 feet. Utilizing a 6 dBA reduction per doubling of distance, at distances of 225 feet from any property line, the noise levels will comply with the County of San Diego's 75 dBA standard as shown in Table 3.

Table 3: Construction Noise Levels from Rock Drills

Construction Equipment	Quantity	Source Level @ 50 Feet (dBA)	Duty Cycle (Hours/Day)	Cumulative Noise Level @ 50 Feet (dBA)
Rock Drill	2	85	8	88.0
			Noise Reduction Needed to Comply	-13.0
			Distance Required to Reduce Noise Levels	225
			NEAREST PROPERTY LINE NOISE LEVEL	**75.0**

Rock drilling and blasting will occur on an as-needed basis on site. In the event that the rock drills are staged within 225 feet of any occupied noise sensitive land use, it is recommended that a specific mitigation plan based upon the location of the construction equipment, topography and construction schedule be identified by a County certified acoustical engineer. The mitigation plan would need to develop mitigation measures to reduce noise if rock drilling occurs within 225 feet of any occupied noise sensitive land use. This mitigation measure may include a temporary noise barrier along any property line where the impacts could occur. Based on previous projects, a barrier ranging from 8 to 12 feet in height maybe needed. The proposed noise barrier will need to be of solid non-gapping material to adequately reduce construction noise levels below the County's threshold. The mitigation plan can also incorporate the usage of the equipment (amount of time used and/or the location in respect to the property line). The mitigation plan would determine the final height and location of a temporary barrier, if one is necessary.

Additionally, the County Noise Ordinance Section 36.410, states that except for emergency work or work on a public road project, no person shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown of 82 dBA (at residential uses), when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period. The maximum sound level and uses are shown above in Table 36.410A as described in the County Zoning Ordinance.

The rock drills that will be utilized can produce impulsive noise. Based upon normal procedures the two rock drills are anticipated to be separated but working in the same area on the site. Rock drills can produce maximum noise levels (Lmax) of 87-91 dBA at a distance of

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50 feet based on the orientation of the equipment (Source: Rancho Cielo Rock Drill Measurements, Ldn Consulting 2011). Typically, a rock drill is not continuously operating at full power; this is referred to as the usage factor. The usage factor is the percentage of time that a piece of construction equipment is operating at full power. Since the maximum noise level from a rock drive exceeds the County's maximum noise level threshold of 82 dBA, the following recommendations are presented. To reduce the maximum noise level of 94 dBA (cumulative noise level from both rock drills) to 82 dBA, the rock drills would need to be located 200 feet from the nearest occupied residential property line or only operate 25% of the hourly or daily duration (15 minutes of any hour and 2 hours of a 8 hour work day) when located within that distance.

In the event that the rock drills are staged within 200 feet of any occupied noise sensitive land use, impulsive noise may exceed the County Noise Ordinance Section 36.410 standard of 82 dBA. As stated above, the rock drill need to be 225 feet from any occupied noise sensitive land use to meet the 75 dBA standard in the County Noise Ordinance Section 36.409. Therefore, if the rock drills are staged within 225 feet of any occupied noise sensitive land it is recommended that a specific mitigation plan based upon the location of the construction equipment, topography and construction schedule be identified by a County certified acoustical engineer. The mitigation plan may include a temporary noise barrier along any property line where the impacts could occur. Based on previous projects, a barrier ranging from 8 to 12 feet in height may be needed. The proposed noise barrier will need to be of solid non-gapping material to adequately reduce construction noise levels below the County's threshold. The mitigation plan can also restrict the usage of the equipment (amount of time used and/or the location in respect to the property line). The mitigation plan would determine the final height and location of a temporary barrier, or equipment usage as necessary. Blasting operations must comply with the County's Consolidated Fire Code (2011) Section 3301.2 which establishes permitting and notification procedures.

Conclusions

Based upon the findings for the proposed project, the increased earthwork construction activities would generate the same noise levels as analyzed in the approved Noise Assessment and no impacts are anticipated. If you have any questions, please contact me directly at (760) 473-1253.

Sincerely,
Ldn Consulting, Inc.

Jeremy Louden