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Subject: **Esperanza Hills**
FEIR Noise Section Review
CSA Project: 15-0116

Dear Kevin:

Our client, Protect our Homes and Hills, requested that we send you this letter summarizing our review and comments on Chapter 5.10 Noise and Appendices E and N (Noise Impact Analyses) of the Final EIR for the Esperanza Hills Project.

EXECUTIVE SUMMARY

In our opinion, the FEIR does not sufficiently address potential noise impacts. Certain potential impacts that we highlight below should have been anticipated. Towards the goal of making the EIR noise study comprehensive and complete, the following issues should be addressed:

1. Traffic from the new access road of either Option 1 or Option 2 and the potential noise impacts to adjacent residences were not studied in the FEIR. We expect this could be a significant impact.
2. Substantial increases in traffic noise along existing roadways in residential areas are projected. This is claimed to be a significant but "unavoidable" impact.
3. No potential noise mitigation measures are discussed to reduce the significant impact of traffic.
4. The potential noise impact on residence interior noise levels is not studied in the FEIR. We estimate that this could be a significant impact.
5. The potential impact of new "Noise Referral Zones" that may be recognized by the County in areas where noise would be increased above 60 dB CNEL is not studied.
6. The FEIR ambient noise analysis was not comprehensive. It focused only on noise levels along existing roadways and no measurements were conducted in residential areas with potentially lower ambient levels (e.g., near residence backyards) that would be exposed to noise from new access road construction and future traffic.
7. The construction noise impact analysis is incomplete since it does not address single-event noise from construction traffic or noise from expected grading and construction activities along the access roads.

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INTRODUCTION

The Project consists of approximately 469 acres of land designated to become 340 large-lot, low-density single-family homes. One of two options for access roads would be constructed that would connect the development to neighboring residential areas.

COMMENTS ON FEIR AND NOISE IMPACT ANALYSES

1. Traffic Noise from New Access Roads is not Studied

The FIER study of traffic noise compares existing traffic noise levels of existing roadways to projected future conditions with the Project. However, the study does not include an evaluation of expected traffic noise along the proposed Project access roads associated with both Options 1 and 2. This study is necessary to evaluate the potential impact of access road traffic noise at the adjacent residential receivers. This evaluation is particularly important as many of these homes and their outdoor use spaces (i.e., backyards) do not have significant exposure to existing traffic noise. Therefore, the noise impact is potentially significant. Based on this omission, we suggest that the FEIR traffic noise study does not adequately address potential noise exposure to existing residences. To address this issue, we expect that ambient noise levels will need to be measured in the subject areas along the proposed access roads and additional traffic noise analysis performed that takes into account the topography of the surrounding areas.

2. Substantial Increases in Noise are Projected

The FEIR proposed Thresholds of Significance includes the following two items that would trigger a potentially significant impact (Section 5.10.3, page 5-469):

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.*
- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*

In Tables 5-10-10, 5-10-11, and 5-10-12, the study states that “existing plus project” traffic noise along San Antonio Road, Aspen Way, Via Del Agua, and Stonehaven Drive (at 50 feet from centerline) is expected to reach levels between 57.4 dB to 62.5 dB CNEL¹. Therefore, the study concludes the following (Section 5.10.6, Item 2, page 5-481):

"No mitigation measures are required for long-term operation of the Proposed Project because noise levels will remain below the 65 dB CNEL threshold."

¹ Community Noise Equivalent Level (CNEL) – A descriptor for the 24-hour A-weighted average noise level. The CNEL concept accounts for the increased acoustical sensitivity of people to noise during the evening and nighttime hours. Sound levels during the hours from 7 pm to 10 pm are penalized 5 dB; sound levels during the hours from 10 pm to 7 am are penalized 10 dB. A 10-dB increase in sound level is perceived by people to be a doubling of loudness.

This conclusion is based solely on Threshold of Significance (a) listed above. However, Threshold of Significance (c) is not satisfied. Project-related traffic is projected to increase existing noise levels by as much as 7.4 dB for Option 1 and up to 14.6 dB for Option 2 (Table 5-10-10). Compared to the FEIR noise increase threshold of significance of 3 dB, these projected traffic noise increases are substantial and would constitute a significant noise impact to the surrounding neighborhoods. This is acknowledged in the FEIR in Section 5.10.8. However, this significant impact is dismissed in the FEIR as "unavoidable" and no mitigation is proposed. The claim that this significant impact is "unavoidable" is not substantiated by a credible analysis (see Comment 3 below for further discussion).

3. No Traffic Noise Mitigation Measures are Proposed

As mentioned above, the FEIR claims that the potentially significant impact of increased traffic noise is "unavoidable" and that "no mitigation measures are required." In our opinion, a suitable analysis would include a discussion of potential measures to avoid or mitigate this potential impact. For example, the following measures could be discussed:

- Sound barriers and potential locations
- Fresh-air ventilation/air-conditioning systems for impacted residences
- Upgraded windows for impacted residences
- Alternative access road options to split/reduce total traffic volume on roadways near impacted residences

4. Potential Impact on Residence Interior Noise Levels is not Studied

In Table VIII-3 of the County of Orange Noise Element of the General Plan, an interior noise standard of 45 dB CNEL is established for habitable rooms. Policy 6.3 of the Noise Element institutes this requirement with the understanding that "standard construction practices reduce the noise level by 12 dB CNEL with windows open and 20 dB CNEL with the windows closed. With this assumption, if exterior noise levels exceed 57 dB CNEL, the County may assume that windows must be closed to meet the interior noise standard.

In Tables 5-10-10, 5-10-11, and 5-10-12, the study states that "existing plus project" traffic noise along San Antonio Road, Aspen Way, Via Del Agua, and Stonehaven Drive (at 50 feet from centerline) is expected to increase to levels between 57.4 dB to 62.5 dB CNEL from levels that are below 57 dB CNEL. Therefore, since Project-related traffic would increase noise exposure in the surrounding residential areas up to 62.5 dB CNEL, the County may assume that interior noise levels could reach 50.5 dB CNEL with windows open. Therefore, windows might then need to be closed to meet the interior noise standard of 45 dB CNEL. The FEIR does not study the potential impact of noise that exceeds 57 dB CNEL, the resulting interior noise levels, nor the potential need for residents to close their windows to meet the County interior noise standard.

5. Impact of New "Noise Referral Zones" is not Studied

The County of Orange Noise Element establishes Noise Referral Zones as summarized in the excerpts below:

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"Such a zone is defined as that area with a total noise environment of 60 decibels Community Noise Equivalent Level (CNEL) or more. It is the level at which either State or Federal laws and standards related to land use become important and, in some cases, supersede local laws and regulations. Any development proposed which may be impacted by a CNEL from each noise source of 60 or more decibels will be evaluated on a project specific basis...The intent of the Noise Referral Zone is to act as a triggering mechanism or flag for development proposals in areas potentially adversely affected by high noise levels. If a development proposal falls within a Noise Referral Zone, it will be subject to evaluation and review to determine whether the project is indeed within an area where the CNEL is 60 or more decibels."

In Tables 5-10-10, 5-10-11, and 5-10-12, the study states that "existing plus project" traffic noise along San Antonio Road, Aspen Way, Via Del Agua, and Stonehaven Drive (at 50 feet from centerline) is expected to increase to levels between 57.4 dB to 62.5 dB CNEL from levels that are well below 60 dB CNEL. Where existing noise levels below 60 dB CNEL will increase to be above that threshold, we expect that a new Noise Referral Zones would be created as defined by the County. The impact of such new zones is not studied in the EIR.

6. Existing Ambient Noise Analysis is not Comprehensive

The ambient noise measurements and analysis of the FEIR documented existing noise levels at four locations. These four locations were located along roadways in the subject area. However, the study does not address locations where ambient noise levels are likely lower. For example, at residence backyards, ambient noise would be notably quieter due to additional distance from the roadways and acoustical shielding from the terrain, homes, or fences. These data should have been used to assess potential noise impact from new access road construction and future traffic (see Item 1 above).

7. Construction Noise Impact Analysis is Incomplete

The FEIR addresses average noise levels along existing traffic routes and from construction at the proposed residential lots. However, the construction noise analysis does not include the following:

- Study of single-event noise (e.g., periodic noise) from construction vehicle passbys along residential areas. Single-event noise has the potential to be disturbing to residential activities and sleep.
- Study of access road construction noise. As the access roads are graded and constructed, construction noise would be generated close to nearby residences where ambient noise levels are likely quite low. Such activities might constitute a significant impact and should be studied.

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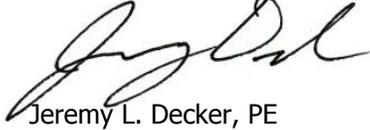
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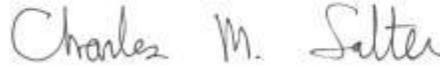
This concludes our comments on the Esperanza Hills FEIR noise study. Should you have any questions, please call.

Sincerely,

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