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July 15, 2024

VIA U.S. Mail and Email

Trevor Martin
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City of Los Angeles
200 North Spring Street
Los Angeles, California 90012
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Re: **Comments on the Mitigated Negative Declaration for the Chaminade College Preparatory High School Project (Case No. ENV-2023-1255-MND, SCH No. 2024060557)**

Dear Mr. Martin:

We write on behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") to comment on the Mitigated Negative Declaration[1] ("MND") prepared by the City of Los Angeles ("City") pursuant to the California Environmental Quality Act[2] ("CEQA") for the Chaminade College Preparatory High School Project (Case No. ENV-2023-1255-MND, SCH No. 2024060557) ("Project") proposed by Chaminade College Preparatory ("Applicant").

The MND fails to provide a comprehensive and meaningful evaluation of all the Project's possible adverse effects and lacks substantial evidence to support its conclusion that there will be no significant environmental impacts with the implementation of mitigation. As detailed below, substantial evidence supports a fair argument that the Project may have potentially significant noise, hazards, public health, and biological resources impacts, requiring the preparation of an environmental impact report ("EIR").

[1] City of Los Angeles, Mitigated Negative Declaration: Chaminade College Preparatory, High School Project (June 2024) (hereinafter "MND"), *available at* https://planning.lacity.gov/odocument/56530739-3ff6-452e-b736-2740cb84a20f/ENV-2023-1255.pdf.
[2] Pub. Res. Code §§ 21000 *et seq.*

I. INTRODUCTION

The proposed Project aims to modernize and expand an existing high school campus in the San Fernando Valley.[3] The comprehensive plan includes several key components: (1) enhancements to the Main Campus with the addition of a new three-story school building (referred to as the "Multistory Building"), updated parking areas, renovated athletic fields, new student quads, refurbished classrooms, student service centers, and offices, (2) expansion of campus across Saticoy Street, known as the North Campus, featuring new athletic fields, an outdoor swimming pool, ancillary structures, and parking facilities, and (3) the construction of a new pedestrian bridge linking the Main Campus and the North Campus.[4] The development of the North Campus involves demolition of a one-story multi-tenant commercial center and surface parking lot.[5]

Surrounded primarily by single-family residential areas, the Project interfaces closely with the community, including five homes directly adjacent to the northern border of the North Campus and several residences along the eastern and western boundaries of the Main Campus.[6] Additionally, residential uses and a park are situated across the street from the Project sites.[7]

The MND incorporates a phased construction approach as a project design feature.[8] Initial activities on the North Campus include demolition, grading, and construction of the parking lots and the pedestrian bridge.[9] Development of new athletic fields on the North Campus and portions of the Main Campus may overlap.[10] Temporary accommodations for displaced classrooms, consisting of six temporary double-wide mobile modular trailers, will be utilized until completion and occupancy of the Multistory Building.[11]

Our evaluation of the MND and supporting documents reveals significant deficiencies under CEQA. Specifically, the MND inadequately characterizes the existing environmental conditions and fails to comprehensively assess, disclose, and

[3] MND at p. 3-1.
[4] *Ibid*.
[5] *Id*. at p. 3-2, 3-16.
[6] *Id*. at p. 3-2.
[7] *Ibid*.
[8] *Id*. at pp. 3-19 to 3-20.
[9] *Id*. at p. 3-20.
[10] *Ibid*.
[11] *Id*. at p. 3-6.

mitigate potential adverse impacts related to noise, hazards, public health, and biological resources arising from both construction and ongoing operation of the Project. To address these defects, the City must prepare an EIR which provides thorough disclosure, analysis, and mitigation for all potentially significant impacts associated with the Project, while also exploring viable alternatives.

These comments are informed by the insights and expertise of acoustical and vibration specialist, Kathryn Krainc, whose detailed comments and qualifications are included as Exhibit A.[12] The City must respond to Ms. Krainc's comments separately and fully.

II. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations formed to ensure that the construction of major urban projects in the Los Angeles region proceeds in a manner that minimizes public and worker health and safety risks, avoids or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The association includes Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the Los Angeles region.

CREED LA's individual members, including Thomas Brown, John Bustos, Gery Kennon, and Chris Macias, live, work, recreate, and raise families in the City and surrounding communities. Accordingly, they will be directly affected by the environmental and health and safety impacts of the Project. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards created by the Project. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts.

[12] **Exhibit A**, Letter to Andrew J. Graf, Adams Broadwell Joseph & Cardozo from Kathryn Krainc, Wilson Ihrig re: Chaminade College Preparatory, High School Project, Los Angeles, CA: Review and Comments on IS/MND Noise Analysis (July 15, 2024) (hereinafter "Krainc Comments").

III. THE CITY MUST PREPARE AN ENVIRONMENTAL IMPACT REPORT

In most cases, CEQA mandates that lead agencies prepare an EIR for projects that could have significant environmental effects.[13] The purpose of an EIR is to ensure that the public and decision-makers are fully informed about potential environmental consequences before decision are made, thus promoting informed decision-making and protecting the environment.[14]

The "fair argument" standard underscores a preference for EIR preparation. Under this standard, an EIR must be prepared if there is substantial evidence in the record indicating a fair argument that the project could significantly impact the environment.[15] This standard sets a "low threshold" for triggering environmental review through an EIR, rather than through a mitigated negative declaration, which is only appropriate if all potentially significant effects of the project are avoided or reduced to insignificance.[16]

"Substantial evidence" under the fair argument standard means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[17] In cases where it's uncertain whether substantial evidence exists regarding a project's potential environmental effects, the lead agency must consider expert opinion and facts.[18] If there is disagreement among experts about the significance of an effect on the environment, the lead agency must treat the effect as significant and prepare an EIR.[19]

Here, substantial evidence supports a fair argument that the Project may cause significant noise, hazards, public health, and impacts to biological resources. Therefore, the City must prepare an EIR that thoroughly analyzes, discloses, and

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[13] Pub. Res. Code § 21000; 14 Cal. Code Regs. ("CEQA Guidelines") § 15002.
[14] *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564.
[15] Pub. Resources Code §§ 21080(d), 21082.2(d); CEQA Guidelines §§ 15002(k)(3), 15064(f)(1), (h)(1); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 1501-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.Appl.4th 1597, 1601-02.
[16] Pub. Res. Code § 21080(c)(2); CEQA Guidelines § 15070(b).
[17] CEQA Guidelines § 15384(a).
[18] *Id.* § 15064(g).
[19] *Ibid.*

mitigates these impacts, while also exploring less environmentally damaging alternatives.

A. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Noise Impacts

The goal of providing Californians with "freedom from excessive noise" is among CEQA's basic policies.[20] CEQA defines the term "environment" to include noise as a physical condition that may be affected by a proposed project.[21] The CEQA Guidelines clarify this reference by using the term "ambient noise" to describe the physical condition that could be changed by a project.[22]

The MND fails to provide substantial evidence to support its conclusions regarding noise impacts, leading to a fair argument that the Project may result in significant noise impacts. Key deficiencies in the MND's noise impact analysis include clearly erroneous methodologies and assumptions, ineffective mitigation, and omission of noise-sensitive receptors, operational equipment, and vibration annoyance potential. These errors highlight the need for a comprehensive EIR to thoroughly evaluate and mitigate the Project's noise impacts.

1. The MND Lacks Substantial Evidence to Support Baseline Ambient Noise Measurements

To assess the changes to the environment that will result from the project, the lead agency must identify the existing physical conditions as the environmental baseline against which the project's changes to the environment are measured.[23] The baseline serves as a critical reference point, enabling a clear comparison between pre-project and post-project conditions to determine the significance of environmental impacts. This provides the public and decision-makers with "the most accurate picture practically possible of the project's impacts."[24]

The MND identifies existing ambient noise levels at 11 locations surrounding the proposed Project site.[25] The City's noise consultant determined ambient noise

[20] Pub. Res. Code § 21001(b).
[21] *Id.* § 21060.5.
[22] CEQA Guidelines § 15360.
[23] *Id.* § 15125.
[24] *Id.* § 15125(a)(1).
[25] MND at pp. 4-147 to 4-148.

levels by taking sample measurements for approximately 10 minutes at each location in a single afternoon.[26] This methodology is insufficient for several reasons.

Traffic noise, the dominant source of ambient noise in the area, exhibits significant variability throughout the day.[27] Noise levels fluctuate due to changes in traffic volume, speed, and type of vehicles, as well as other factors such as weather conditions and nearby activities.[28] A 10-minute snapshot cannot capture this variability, resulting in an incomplete and potentially misleading representation of ambient noise levels.[29] Moreover, the 10-minute sampling period represents only 1% of the potential 14-hour construction workday allowed by the City code.[30] This disparity highlights the inadequacy of sampling duration in reflecting the noise environment during the actual periods when construction activities and their associated noise impacts will occur.[31]

In addition, reliance on a single afternoon of measurements further undermines the reliability of the data. Noise levels can vary significantly between different days and times due to fluctuating traffic patterns and other environmental factors.[32] A more robust approach would involve multiple measurements at various times of day and on different days, providing a comprehensive picture of ambient noise conditions.[33]

Finally, nearby sensitive receptors, such as students, teachers, and residents, are particularly vulnerable to noise pollution.[34] The limited and inadequately timed measurements in the MND fail to accurately capture the baseline conditions at these noise-sensitive locations.[35] Without a precise understanding of existing noise levels, it is impossible to adequately assess the potential impact of the proposed Project on these receptors.

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[26] Krainc Comments at p. 3.
[27] *Ibid.*
[28] *Ibid.*
[29] *Ibid.*
[30] *Ibid.*
[31] *Ibid.*
[32] *Ibid.*
[33] *Ibid.*
[34] *Ibid.*
[35] *Ibid.*

Given the defects in the methodology used to establish ambient noise levels, the MND lacks substantial evidence to support the existing ambient noise conditions at sensitive receptors surrounding the Project site. An EIR must be prepared to properly document ambient measurements near sensitive receptors to accurately capture baseline conditions. Only then will the public and decisionmakers have an accurate picture of the Project's impacts, as required by CEQA.

2. The MND Fails to Analyze Construction Noise Impacts on On-Site Classrooms

Under the City's General Plan Noise Element, schools are categorized as noise-sensitive land uses.[36] While the MND discloses construction impacts to nearby residential receptors, it neglects to address the noise impacts on students and teachers who will be present on-site during Project construction.[37]

Existing classrooms which are not scheduled for demolition would be directly next to construction activities on the Main Campus.[38] Ms. Krainc estimates that construction activities at the upper level parking lot could occur within 30 feet of the permanent classrooms, while activities at the proposed Multistory Building could occur within 40 feet.[39] In addition, six temporary double-wide mobile modular trailers would be installed directly next to the multistory building upon completion of the first phase of the North campus and remain in use until occupancy of the Multistory Building.[40] Ms. Krainc estimates that construction activities, including demolition of the existing single-story building and construction of the proposed Multistory Building, could occur 75 feet of the temporary classrooms.[41]

Figure 1 highlights the locations of the classrooms in relation to these construction sites.

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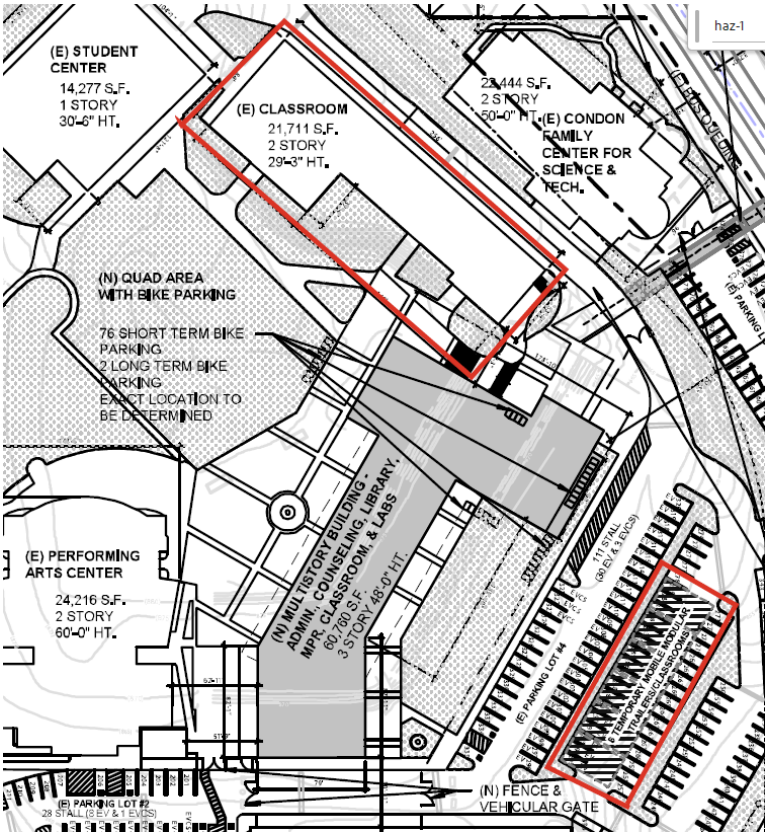
[36] *Ibid.*
[37] *Ibid.*
[38] *Ibid.*
[39] *Ibid.*
[40] MND at p. 3-7.
[41] Krainc Comments at p. 3.

FIGURE 1



The presence of noise-sensitive receptors on the Project site does not relieve the City from its obligation to analyze all sensitive receptors affected by the Project, irrespective of their precise location relative to the project boundary.[42] The term "vicinity" as used in Appendix G of the CEQA Guidelines inherently includes on-site conditions, referring to the surrounding area or proximity to the project site. In the context of a school with classrooms adjacent to construction activities, the "vicinity" unquestionably includes the school premises where the classrooms housing sensitive receptors are located.

The MND fails to document existing ambient noise levels on the Project site where these noise-sensitive receptors are located.[43] For example, the MND does not establish baseline ambient noise levels at either the temporary classrooms or the

[42] See *Sierra Watch v. County of Placer* (2021) 69 Cal.App.5th 86, 106 (holding a lead agency may not confine the scope of its analysis of noise impacts to an arbitrary distance from the project).
[43] Krainc Comments at p. 3.

permanent classrooms.[44] Without baseline data specific to the on-site classrooms, the incremental noise impact that construction activities would impose on students and teachers cannot be accurately assessed. Moreover, although the MND discloses off-site measurements, the defects in the methodology used to establish the off-site ambient noise levels renders them insufficient to characterize the classroom's noise environment during typical hours of use.[45]

While these deficiencies make it impossible to fully assess the Project's noise impacts, construction noise impacts to students and teachers in the on-site classrooms are potentially significant, even with mitigation. Ms. Krainc found that construction noise during demolition of the existing building to make way for the new Multistory Building could reach up to 76 dBA at the temporary classrooms and 82 dBA at the permanent classrooms.[46] In addition, demolition of the upper-level parking lot could reach up to 83 dBA at the permanent classrooms.[47] These levels significantly exceed the 10-minute baseline measurements reported at nearby off-site receptors and represent a noise increase of more than 25 dBA at any location.[48] Consequently, temporary noise walls, such as those proposed as mitigation for residential receptors, would not effectively mitigate construction noise impacts on students and teachers.[49]

Moreover, excessive background noise in classrooms can significantly impair student outcomes and impair cognitive performance.[50] According to acoustic standards published by the American National Standards Institutes, in core learning spaces with enclosed volumes less than 10,000 cubic feet, the recommended maximum on-hour-average background noise level is 35 dBA.[51] To achieve this interior noise level of 35 dBA Leq in temporary classrooms during the classroom demolition phase, without additional mitigation measures, the walls and windows of these classrooms would need to provide 41 dBA of attenuation.[52] This requirement corresponds to walls with a Sound Transmission Class ("STC") rating

[44] *Ibid.*
[45] *Ibid.*
[46] *Id.* at pp. 3-4.
[47] *Ibid.*
[48] *Ibid.*
[49] *Id.* at p. 4.
[50] *Id.* at pp. 2, 4.
[51] *Id.* at p. 4.
[52] *Ibid.*

of at least STC-56.[53] However, typical lightweight wall assemblies do not meet this rating.[54]

In sum, the MND provides no analysis of the Project's construction noise impacts on students and teachers in on-site classrooms. The lack of documented baseline noise levels on the Project site, the proximity of the construction activities to classrooms, and the potential for significant noise impacts all demonstrate that the MND is insufficient. Ms. Krainc's expert opinion constitutes substantial evidence supporting a fair argument that the Project may have a significant effect on the environment. An EIR must be prepared to ensure a comprehensive assessment of these impacts and include the necessary mitigation to protect the health and well-being of students and teachers during the construction period.

3. The MND Fails to Identify and Substantiate Key Assumptions Used to Evaluate Construction Noise Impacts

The MND's construction noise impact analysis is marred by several critical deficiencies that undermine its credibility and completeness. The MND provides unmitigated noise level estimates ranging between 52 dBA and 74 dBA depending on the activity, yet crucially omits the distances from sensitive receivers.[55] This omission is significant because noise levels attenuate with distance from the source, making it essential to accurately define these distances to assess potential impacts on nearby receptors.[56]

The MND appears to employ an unconventional approach in its construction noise analysis by using the distance from the center of the construction phase area to adjust noise levels relative to equipment and receiver proximity.[57] This method diverges from widely accepted methodology, which typically require assessing noise levels at the closest point between equipment and the receptor.[58] Such deviations can lead to underestimations of actual noise impacts, particularly since construction equipment is expected to operate nearer to the receptors than assumed by the MND.[59]

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[53] *Ibid.*
[54] *Ibid.*
[55] *Ibid.*
[56] *Ibid.*
[57] *Ibid.*
[58] *Ibid.*
[59] *Ibid.*

In addition, the MND's supporting calculations do not list reference noise levels for the construction equipment utilized in the analysis.[60] Reference noise levels are indispensable for establishing baseline noise emissions for different machinery and verifying the accuracy of the noise impact predictions.[61] The absence of this foundational data raises significant doubts about the reliability and validity of the construction noise estimates presented in the MND.

For example, Ms. Krainc found that excavators operating during North Campus demolition within 50 feet of nearby residential receptors could reach up to 79.7 dBA if construction equipment reference levels identified in the Federal Highway Administration's Roadway Construction Noise Model are utilized.[62] This impact is much higher than the 69.1 dBA estimated in the MND, resulting in an unmitigated increase of 25.8 over ambient noise levels.[63] As a result, the sound wall mitigation measure proposed in the MND would not effectively reduce this impact to less than significant.[64]

The MND's failure to identify and substantiate key assumptions used to evaluate noise impacts compromises the integrity of its findings. By omitting crucial details such as specific distances from sensitive receivers, reference noise levels for construction equipment, and adhering to regulatory standards, the MND falls short of providing a comprehensive and accurate assessment of the Project's noise impacts and lacks substantial evidence to support its conclusions. Addressing these deficiencies is crucial to ensuring a thorough understanding of potential noise impacts and their mitigation.

4. The MND Underestimates Construction Noise During the Grading Phase for the North Campus

The MND acknowledges the necessity of heavy equipment such as a grader, excavator, roller, bulldozer and haul trucks for the North Campus grading phase.[65] Despite this recognition, the MND's analysis of noise impacts fails to adequately disclose and address the full extent of potential impacts, especially concerning nearby residential receptors adjacent to the Project site.

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[60] *Ibid.*
[61] *Ibid.*
[62] *Ibid.*
[63] *Id.* at pp. 4-5.
[64] *Id.* at p. 5.
[65] MND at p. 4-152.

In addition to the unsubstantiated assumptions discussed in Section III.A.3, the MND's discussion suffers from two key flaws. *First*, it relies on an incorrect usage factor for grading equipment.[66] An equipment's usage factor is a key parameter in noise modeling because it indicates the percentage of time construction equipment operates during a given period.[67] For instance, a 20% usage factor means the equipment is active for only 12 minutes out of every hour, whereas a 40% usage factor means the equipment is active for 24 minutes out of every hour. Such differences directly influence calculated average noise levels, leading to an underestimation when using a lower factor.[68]

The MND incorrectly assumes a 20% usage factor for the grader at the North Campus,[69] contradicting the 40% usage factor specified for this equipment in the Federal Highway Administration's Roadway Construction Noise Model – the very model from which the MND claims it used to derive reference equipment noise levels.[70] Application of the correct 40% usage factor would result in an 18 dBA increase in noise levels at residences near North Campus grading activities.[71] Even with the proposed noise mitigation measures, this increase could not be attenuated to a less than significant level, as the mitigated noise increase would be 6.2 dBA.[72]

Second, the MND neglects to account for the cumulative effects of all significant construction noise sources.[73] While acknowledging the requirement for multiple pieces of heavy equipment during the North Campus grading phase, the MND incorrectly asserts the loudest noise impacts would be associated with "finish" grading operations.[74] This limited focus leads the MND to primarily consider the noise generated by a single grader over a half-acre parcel in proximity to nearby receptors.[75]

The MND lacks substantial evidence to support its assumption that only a single piece of machinery would operate at any given time throughout the entire grading phase. Each piece of operating equipment contributes to the overall noise

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[66] Krainc Comments at p. 5.
[67] *Ibid.*
[68] *Ibid.*
[69] *Ibid.*
[70] MND at p. 4-148.
[71] Krainc Comments at p. 5.
[72] *Ibid.*
[73] *Ibid.*
[74] MND at p. 4-152.
[75] *Ibid.*

environment, and their combined operation can significantly increase the total noise levels experienced by nearby residents.[76] Ms. Krainc estimates potential noise levels could increase by 4 to 6 dBA if multiple pieces operate simultaneously during the grading phase.[77]

By focusing exclusively on noise from the grader, the MND disregards noise from other essential equipment. A comprehensive assessment should encompass the cumulative noise impacts of all relevant equipment. These critical oversights undermine the MND's conclusion that construction noise impacts on nearby residential receptors is less than significant. Furthermore, Ms. Krainc's observations indicate that rectifying these errors (by considering the operation of multiple pieces of equipment) would support a fair argument that significant impacts persist even with the proposed mitigation in place.

5. The MND Lacks Substantial Evidence to Conclude that Noise Barriers Would Be Effective Mitigation

The MND proposed Mitigation Measures NOI-1 and NOI-2 to reduce construction noise impacts to nearby residential receptors to less than significant.[78] Each measure requires 15-foot-high sound barriers rated to achieve sound attenuation of at least 15 dBA to shield nearby residences from on-site construction noise activities.[79] However, the MND's assertion that these noise barriers will effectively reduce noise impacts to less than significant lacks substantial evidence.

The MND fails to provide any substantiated evidence or analysis that the proposed noise barriers can achieve the claimed 15 dBA attenuation.[80] Ms. Krainc points out that the MND lacks a thorough evaluation of the effectiveness of these barriers based on the site geometry and recommended barrier height.[81] Without such an analysis, there is no assurance that the proposed mitigation measures will achieve their intended noise reduction goals. This omission is critical as effective noise mitigation hinges on accurately predicting and varying the attenuation capabilities of the barriers.

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[76] Krainc Comments at p. 5.
[77] *Ibid.*
[78] MND at p. 4-156.
[79] *Ibid.*
[80] Krainc Comments at p. 6.
[81] *Ibid.*

Moreover, inadequacies with the existing ambient noise level measurements and construction noise assumptions further cast doubt on the effectiveness of the proposed 15 dBA attenuation.[82] If the baseline noise levels are inaccurately assessed or underestimated, a 15 dBA reduction may not suffice to mitigate noise impacts to a less than significant level.[83] The same is true if equipment and distance assumptions are inaccurate. Construction noise can vary significantly in intensity and frequency, and inadequate noise reduction could result in substantial noise disturbances for nearby residences. In addition, given that the proposed barriers are not likely to reduce noise impacts to off-site residential receptors to a level of insignificance, the measure certainly would not sufficiently mitigate impacts to on-site receptors (i.e., students and teachers).

The MND's conclusion that noise barriers rated at 15 dBA attenuation will mitigate noise impacts to less than significant lacks substantive support. The absence of an effective analysis of the barriers' attenuation capabilities and uncertainties with baseline noise levels and equipment assumptions undermine the reliability of this mitigation measure. To ensure adequate protection of nearby residents from construction noise impacts, a comprehensive assessment and validation of the proposed noise barrier's effectiveness is essential. Without such evidence, there is insufficient basis to conclude that the Project's noise impacts would be adequately mitigated.

6. The MND Lacks Substantial Evidence to Conclude Operational Noise Impacts Are Less Than Significant

The MND posits that operational noise from rooftop mechanical equipment would be inaudible at surrounding residential receptors.[84] However, audibility alone is not a sufficient metric for evaluating potential impacts.[85] To meet CEQA's requirements, reasonable estimates of noise levels generated by rooftop mechanical equipment must be provided. In addition, the potential for noise increases to the existing ambient noise must be evaluated. Without this quantification and evaluation, there is no basis to determine the significance of operational noise impacts accurately. An EIR must be prepared to document the noise levels from the rooftop mechanical equipment and to evaluate the potential noise impacts on sensitive receptors, such as nearby residential areas.

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[82] *Ibid.*
[83] *Ibid.*
[84] MND at p. 4-160.
[85] Krainc Comments at p. 7.

7. The MND Fails to Analyze Vibration Annoyance Potential

The MND acknowledges that construction of the Project necessitates the use of large earthmoving equipment capable of generating groundborne vibrations.[86] These vibrations pose two primary concerns: the risk of structural damage and the likelihood of disrupting the quality of life for nearby sensitive receptors. While the MND addresses the risk of structural damage from construction-induced vibrations, it overlooks an essential consideration: the potential for vibration annoyance among occupants of affected buildings.[87]

The Federal Transit Administration ("FTA") outlines criteria for assessing vibration annoyance, which vary based on land use category and frequency of event.[88] For frequent events, the residential groundborne impact criteria are 72 VdB.[89] The California Department of Transportation ("CalTrans") provides specific guidelines for evaluating vibration annoyance.[90] Table 20 of the CalTrans' Transportation and Construction Guidance Manual indicates that continuous vibration amplitudes that exceed 0.10 inches per second Peak Particle Velocity ("PPV") are strongly perceptible and can lead to significant annoyance for building occupants.[91] Activities such as excavation equipment, static compaction equipment, tracked vehicles, and vehicles on a highways typically produce continuous vibrations.[92]

The MND reports that construction equipment operating within 10 feet of homes adjacent to the North Campus site could generate groundborne vibrations levels up to 0.244 inches per second PPV,[93] corresponding to a groundborne vibration level of 96 VdbB.[94] This clearly exceeds the FTA threshold and is more than double the CalTrans threshold.[95] Therefore, substantial evidence supports a fair argument that groundborne vibration impacts are potentially significant.

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[86] MND at pp. 4-167 to 4-168.
[87] Krainc Comments at p. 7.
[88] *Ibid.*
[89] *Ibid.*
[90] California Department of Transportation, Transportation and Construction Vibration Guidance Manual (Apr. 2020), *available at* https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.
[91] *Id.* at p. 38.
[92] *Id.* at p. 9.
[93] MND at pp. 4-167 to 4-168.
[94] Krainc Comments at p. 7.
[95] *Ibid.*

By omitting an assessment of vibration annoyance, the MND fails to comprehensively evaluate impacts of construction on the surrounding community, and its conclusion that such impacts will be less than significant are unsupported by substantial evidence. The well-being and comfort of building occupants are legitimate concerns that warrant thorough examination and appropriate mitigation where necessary.

B. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Hazard Impacts

The MND recognizes that a significant impact may occur if a project could potentially pose a hazard to the public or environment by releasing hazardous materials into the environment through accident or upset conditions.[96] A Phase 1 Environmental Site Assessment ("ESA") highlighted four recognized environmental conditions, including historical solvent release from a dry cleaner and hydrocarbon contamination from an adjacent gas station.[97] Notably, soil vapor sampling during a limited Phase 2 ESA detected elevated levels of tetrachloroethene ("PCE"), a known carcinogen and environmental pollutant, which exceeds both residential and commercial screening levels.[98]

To mitigate the impact of PCE contamination, the MND proposes mitigation measure HAZ-1, which mandates remediation of PCE-impacted soil vapor using soil vapor extraction ("SVE"), subject to approval by the Los Angeles Fire Department and the Department of Building and Safety.[99] However, this approach raises significant concerns regarding its adequacy and effectiveness.

First, conditioning a negative declaration on the future approval of environmental mitigation by other agencies is prohibited. *Sundstrom v. County of Mendocino* underscores that such reliance on future approval without demonstrating the likelihood of effective mitigation, does not justify overlooking significant environmental concerns during the environmental review process and violates CEQA.[100] Mitigation measure HAZ-1 replicates this flaw by depending on

[96] MND at p. 4-124.
[97] MND, appen.F, Dudek, Phase 1 Environmental Site Assessment West Hills Shopping Center (Jan. 2018).
[98] MND, appen. F, Dudek, Limited Phase II Environmental Site Assessment West Hills Shopping Center (Jan. 2018) (hereinafter "Phase 2 ESA").
[99] MND at p. 4-126.
[100] *See Sundstrom v. County of Mendicino* (1988) 202 Cal.App.3d 296.

future approvals without presenting substantial evidence of the SVE method's effectiveness in reducing PCE concentrations below regulatory screening levels.

Second, substantial evidence in the record indicates that the proposed mitigation is speculative and potentially inadequate. The Phase 2 ESA consultant explicitly expressed uncertainty about the efficacy of the SVE method, noting the prolonged timeframe and uncertain outcomes associated with achieving meaningful reductions in PCE concentrations. The consultant stated:

> Dudek has been successful in the past achieving site-cleanup with the SVE [soil vapor extraction] remediation method and the SVE method is a commonly employed remediation strategy but takes time to achieve meaningful results. While we are hopeful that this remediation method will effectively address vapor concerns, **it is possible that post-remediation concentrations of PCE [tetrachloroethene] will still not meet the DTSC HERO Note 7 Future Residential Soil Gas Screening Level of 0.46 µg/L at all Site locations**. Since we do not know what post-remediation concentrations will be after employing SVE remediation method at this time and are mindful that the remediation process will likely take more than twelve (12) months to achieve meaningful extracting these soil vapors, **we can't aver or opine at this time whether this remediation will successfully reduce concentrations below the screening levels** and remain keenly aware that it could take well over a year from employment to make such determinations. **To further address these continuing concerns, if necessary, a site specific human health risk analysis can be sued to evaluate potential human health risk at post-remediation levels**. Additionally, mitigation of buildings located in areas where soil vapor exceeds screening levels is also an option. Future building construction may implement mitigation measures at the time of development utilizing vapor barriers and passive venting systems. Again, these are remediation scenarios that can't be quantified and scoped at this early stage.[101]

This uncertainty undermines the MND's assertion that hazard impacts would be mitigated to a less than significant level.

A mitigated negative declaration is not appropriate, and an EIR is required, if there is any substantial evidence in the record that would support a fair

[101] Phase 2 ESA at p. 6 (emphasis added).

argument that proposed mitigation measures will be infeasible or ineffective.[102] When the City's own consultant expresses doubt about the viability of the proposed remediation strategies, as seen with the SVE method, substantial evidence supports a fair argument that the mitigation proposed in HAZ-1 would be ineffective.

In sum, relying on future agency approvals for the implementation of HAZ-1, coupled with uncertainty about the proposed remediation strategies effectiveness, does not provide a sound basis for concluding that the potential impacts of PCE contamination will be mitigated to less than significant levels. An EIR is necessary to comprehensively evaluate and disclose the feasibility and effectiveness of proposed mitigation strategies, ensuring that all potential hazard impacts are adequately addressed and mitigated in accordance with CEQA requirements.

C. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Public Health Impacts

The MND acknowledges that construction equipment will emit diesel particulate matter ("DPM"),[103] a known toxic air contaminant ("TAC") linked to serious health issues such as respiratory disease, lung damage, cancer, and premature death.[104] Despite recognizing these risks, the MND asserts that the Project would not expose nearby receptors to significant pollutant levels, citing adherence to regional and localized air quality thresholds set by the South Coast Air Quality Management District ("SCAQMD.[105] However, this conclusion is fundamentally flawed.

The MND incorrectly asserts that there is no established guidance for evaluating the impacts of TACs from individual construction projects.[106] To the contrary, the Office of Environmental Health Hazard Assessment provides clear directives on assessing cancer risks from short-term projects such as construction

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[102] *See Save the Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665, 693, 702; *California Native Plant Soc'y v. County of El Dorado* (2009) 170 Cal.App.4th 1026, 1060; *Citizens for Responsible & Open Gov't v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 134; *Architectural Heritage Ass'n v. County of Monterey* (2004) 122 Cal.App.4th 1095, 1119.
[103] MND at p. 4-18 to 4-19.
[104] *Id*. at p. 4-19.
[105] *Id*. at p. 4-48 to 4-49.
[106] *Id*. at p. 4-48.

activities.[107] It recommends that cancer risks be assessed for any project lasting longer than 2 months.[108]

Moreover, the MND's reliance on localized significance thresholds ("LSTs") is misplaced. LSTs are intended to prevent exceedances of federal or state air quality standards, not to assess the health risks associated with TACs like DPM.[109] Unlike criteria pollutants with established ambient air quality standards, DPM comprises various carcinogenic particles and organic compounds, including polycyclic aromatic hydrocarbons and benzene, recognized by the California Air Resources Board as carcinogens. These substances have no safe exposure threshold.

By failing to adequately disclose the health risks posed by DPM, the MND falls short of the informational standards required by CEQA. This deficiency undermines the City's assertion that the Project's impacts are insignificant, as it lacks substantial evidence to support this claim. The City must reconsider its approach and prepare an EIR that includes a comprehensive health risk assessment specifically addressing the unique risks posed by DPM emission from the Project's construction activities. Only through such a thorough analysis can the City fulfill its obligations under CEQA and provide the public with an accurate understanding of the potential health impacts associated with the proposed Project.

D. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Biological Resources Impacts

The protection of biological resources is a fundamental policy incorporated in CEQA. It is the policy of the State to "[p]revent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities."[110]

The MND's discussion of biological resources impacts contains two key defects. First, compliance with regulatory standards does not ensure that impacts

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[107] Office of Environmental Health Hazard Assessment, Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments (Feb. 2015) p. 8-17, *available at* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[108] *Id*. at p. 8-18.
[109] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology (July 2008), *available at* http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.
[110] Pub. Res. Code § 21001(c).

to nesting and migratory birds are less than significant. Second, the MND fails to analyze all potentially significant impacts to these species caused by Project construction.

1. Compliance with the Migratory Birds Treaty Act Does Not Ensure Impacts to Migratory and Nesting Birds Are Less than Significant

The proposed Project would result in the removal of 40 non-protected significant trees and 7 non-protected non-significant trees.[111] The MND recognizes that tree removal could potentially impact nesting and migratory birds.[112] However, it concludes that the impact is less than significant due to compliance with existing regulatory requirements.[113] The MND cites the Migratory Bird Treaty Act ("MBTA"), which it claims regulates vegetation removal during the nesting season.

Compliance with a regulatory permit or similar process is sufficient mitigation if compliance with such standards can be reasonably expected, based on substantial evidence, to reduce the impact to the specified performance standard.[114] An analysis of the impact and effectiveness of such a mitigation measure requires an integrated examination of the measure together with the relevant regulatory standards and oversight provisions.[115]

Here, the MND lacks substantial evidence to conclude that compliance with the MBTA is sufficient mitigation. The MND does not discuss the relevant regulatory standards and oversight provisions that would ensure impacts to nesting and migratory birds remain less than significant. Contrary to the MND's claim, the MBTA does not regulate vegetation removal. Rather, it prohibits the taking of migratory birds and the collection, possession, or sale of migratory bird nests and eggs without a valid permit.[116] Compliance with state laws would not suffice either as the relevant statutes contain similar prohibitions, and do not impose monitoring requirements.[117]

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[111] MND at p. 4-53.
[112] *Ibid*.
[113] *Ibid*.
[114] CEQA Guidelines § 15126.4(a)(1)(B); see *Save Our Capitol! V. Department of Gen. Servs* (2023) 87 Cal.App.5th 655, 687-88, 99.
[115] *Tiburon Open Space Comm. v. County of Marin* (2022) 78 Cal.App.5th 700, 763.
[116] 16 U.S.C. § 703.
[117] Fish & Game Code §§ 3503, 3503.5, 3513.

The MND does discuss a potential measure to ensure active nests are not impacted by tree removal. It states:

> To the extent that vegetation removal activities must occur during the nesting season (generally January 15 through August 31), a biological monitor would be present during the removal activities to ensure that no active nests would be impacted. If any active nests are detected, the area would be flagged with a buffer (ranging between 25-50 feet for songbirds and 100 feet for raptors, as determined by the monitoring biologist), and the area would be avoided until the nesting cycle has been completed or the monitoring biologist has determined that the nest is vacated, juveniles have fledged, and there is no secondary nesting attempt.

However, this measure is not included as mitigation.[118] Nor is it included as a project design feature.[119]

To reduce potential impacts associated with tree removal during nesting season, the measure must be enforceable.[120] The project proponent's agreement to a measure, by itself, is insufficient; the mitigation must be adopted in a way that makes it a legally enforceable requirement.[121] This requirement is designed to ensure that mitigation measures will be implemented, not merely discussed and then ignored.[122]

Because the MBTA does not regulate vegetation removal and the proposed measure is not included as enforceable mitigation, the MND lacks substantial evidence to conclude impacts to migratory and nesting birds are less than significant. Given that potentially suitable nesting habitat is present on the Project site,[123] the impact to nesting and migratory birds is potentially significant.

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[118] *See* MND at pp. MMP-1 to MMP-9 (mitigation monitoring program).
[119] *See id*. at p. MMP-10 (project design features).
[120] Pub. Res. Code § 21081.6(b); CEQA Guidelines § 15126.4(a)(2).
[121] *Woodward Park Homeowners Ass'n v. City of Fresno* (2007) 150 Cal.App.4th 683, 730.
[122] *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261.
[123] MND, appen. C-2 at p. 3.

2. The MND Fails to Analyze All Potentially Significant Impacts to Active Nesting Birds

While the MND discusses potential impacts to nesting and migratory birds caused by tree removal, it does not address other potentially significant impacts associated with Project construction. For example, the City's biological resources consultant concludes that noise, dust and increased human activity associated with construction activities could affect active nesting birds regardless of whether trees are removed from the Project site.[124] This information is not disclosed in the MND.

In addition, the proposed (but unenforceable) monitoring measure would not ensure the construction impacts would remain less than significant because the measure is only designed to reduce impacts associated with vegetation removal, not all construction activities. This deficiency is apparent when the measure is compared with the one recommended by the City's consultant, which focuses more broadly on activities associated with construction or grading during the bird nesting/breeding season.[125] As a result, impacts to nesting and migratory birds from construction activities remains potentially significant and unmitigated.

IV. CONCLUSION

Substantial evidence supports a fair argument that the Project may have a significant environmental effect, necessitating the preparation of an EIR. The defects with the MND's analysis of noise, hazards, public health, and biological resources underscore the potential for significant environmental impacts that have not been sufficiently addressed. Given these inadequacies, an EIR is necessary to thoroughly evaluate and mitigate the Project's environmental impacts, ensuring compliance with CEQA and the protection of the public and environmental health.

Sincerely,

Andrew J. Graf

Attachments
AJG:acp

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[124] *Ibid.*
[125] *Id.*, appen. C-2 at pp. 3-4.

EXHIBIT A

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #24-001.xx

July 15, 2024

Andrew J. Graf, Esq.
Associate Attorney
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: **Chaminade College Preparatory, High School Project**
Los Angeles, CA
Review and Comments on IS/MND Noise Analysis

Dear Mr. Graf,

As requested, we have reviewed the information and noise impact analysis for the Chaminade College Preparatory, High School Project in Los Angeles, CA. The project proposes to update and expand the existing campus including a new three-story school building and a new North Campus with sports fields, a swimming pool facility, and parking lot. Both campus sites are bordered by residences on all sides. This letter is based on the Initial Study/ Mitigated Negative Declaration (IS/MND) prepared by CAJA Environmental Services, with an emphasis on Appendix G-1 and G-2, *Noise Modeling* and *North Campus Noise Technical Memo*, prepared by Noah Tanski Environmental Consulting and dated April 25, 2024.

Wilson Ihrig is an acoustical consulting firm that has practiced exclusively in the field of acoustics since 1966. During our almost 58 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise[1]

Learning Outcomes.[2] There is a link between acoustical barriers in the classroom such as background noise and speech intelligibility and the scholastic achievement of students. ANSI Standard S12.60-2002 sets acoustical performance criteria and design requirements for classrooms and other learning spaces.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

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[1] More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (https://www.who.int/publications/i/item/a68672)

[2] More information on classroom acoustical criteria and studies related to educational outcomes may be found in ANSI Standard S12.60-2002.

Baseline Noise Is Not Properly Established

The manner in which the IS/MND Noise Section has determined the existing noise environment at sensitive receptors is unsupported. As shown in Table XIII-1 [IS/MND, page 4-147] and the Noise Measurement Location Map in Appendix G-1 – Noise Modeling [G-1, page 1], existing noise was measured at 11 locations. As noted in the Noise Section, ambient noise was dominated by traffic noise in most cases. The sample time for noise measurements was only 10 minutes for all 11 locations [G-1, pages 1-33], and all measurements were completed between approximately 2 pm and 5:30 pm. 10-minute measurement durations are insufficient to capture the time-variable nature of traffic noise. These 10 minutes represent only 1% of the potential 14-hour construction workday (7 am – 9 pm) per the LAMC. The IS/MND provides no evidence that these measurements are typical and representative of other times of day.

Furthermore, the Noise Technical Memo estimates a 50 dBA CNEL at several residential receivers but does not provide a citation or calculation to support this estimate. The CNEL is a 24-hour noise metric that accounts for human sensitivity to noise at different times of day.[3] A 24-hour noise measurement would be necessary to provide an accurate estimate of CNEL at these locations.

An EIR must be prepared to properly document ambient measurements near sensitive receptors that capture the typical baseline conditions during quiet periods of the day and night to determine impact.

Impacts to Permanent and Temporary Classrooms Are Not Evaluated

Under the City of Los Angeles General Plan, schools are categorized as noise-sensitive receivers [Noise Element, page 3-1]. As school classrooms are primarily active during the daytime, daytime ambient noise levels are sufficient to evaluate impacts. The IS/MND does not establish baseline ambient noise levels at the location of the temporary classrooms or the permanent classrooms located in the existing 2-story classroom building. While the measurement locations of "Chaminade Ave. – Near Cul-de-sac" (51.9 dBA $L_{eq10min}$), and "Covello St. – Near Baseball Field" (49.5 dBA $L_{eq10min}$) would be reasonable locations to measure existing noise, the short duration of the measurements taken is insufficient to characterize the noise environment of the school classrooms during typical hours of use (see discussion in "Mitigation Measure Not Supported" section below) [IS/MND, page 4-147]. **An EIR must be prepared disclosing the baseline ambient noise level at both temporary and permanent school classrooms during typical hours of use to analyze and mitigate potentially significant noise impacts on students and teachers.**

Analysis of construction noise for the Classroom Demolition phase at both the location of temporary classrooms and at existing classrooms that will not be demolished show hourly construction noise levels of 76 dBA and 82 dBA, respectively. During demolition of the upper level parking lot to prepare for the quad space, construction noise levels at permanent classrooms could exceed 83 dBA. Table 1 summarizes these calculations. These noise levels are well above the 10-minute baseline measurements reported in the IS/MND and would represent noise increases of more than 25 dBA at

[3] CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dBA penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5 dBA penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m.

any location. Temporary noise wall mitigation would be insufficient to reduce construction noise to less than significant impacts at the temporary and permanent classrooms. **An EIR must be prepared to analyze and report potential construction noise impacts at both temporary and permanent classrooms.**

Table 1: Estimated construction noise at classroom uses.

	Upper level parking lot demolition		Classroom demolition	
	Distance	Noise level	Distance	Noise Level
Temporary classrooms	312 ft	47 dBA*	75 ft	76 dBA
Permanent classrooms	30 ft	83 dBA	40 ft	82 dBA
*** 15 dBA shielding from the existing building or future multi-story building is assumed.**				

Excess background noise in classrooms can negatively affect student outcomes. In core learning spaces with enclosed volume less than 10,000 cubic feet, the recommended maximum one-hour-average background noise level is 35 dBA [ANSI S.12.60-2002, Table 1]. To achieve an interior hourly noise level of 35 dBA Leq in the temporary classrooms during the Classroom Demolition phase without other mitigation, the walls and windows of the temporary classrooms would need to provide 41 dBA of attenuation, which would require walls with a rating of at least STC-56 [ANSI S.12.60-2002, Table D.1]. Typical lightweight wall assemblies do not meet this STC rating. **An EIR must be prepared to document that an acceptable learning environment will be maintained in temporary classrooms during construction.**

Construction Noise Analysis Contains Errors

The IS/MND provides estimated unmitigated construction noise levels in Tables XIII-3, XII-4, XIII-5, XIII-6, and XIII-7, ranging between 52 dBA and 74 dBA depending on activity, at unlisted distances from sensitive receivers [IS/MND, pages 4-152 – 4-155]. The supporting calculations also do not list the assumed distance from the construction phase to the receptor being evaluated, nor do they cite reference levels for construction equipment [Appendix G-1, pages 35 – 66]. It appears that the construction noise analysis uses the distance from the center of the construction phase area to adjust noise levels for distance from equipment to receiver and a usage factor to adjust the noise level based on the fraction of time each piece of construction equipment is operating at full power. This approach does not correspond to either a Federal Transit Administration (FTA) General Assessment or an FTA Detailed Assessment. While the Federal Highway Administration (FHWA) does not provide specific guidance on the use of the "center" distance, the FTA Detailed Assessment construction noise method is widely used which indicates that where acoustical usage factors are used, the distance from each individual piece of equipment is used in the calculation [FTA Transit Noise and Vibration Impact Assessment Manual (FTA Manual), page 177-178]. It can reasonably be expected that construction equipment could operate at the edge of the project area closest to the receiver in question. **An EIR must be prepared to analyze potential construction noise impacts on nearby residential receptors.**

For example, using RCNM construction equipment reference levels for excavators approximately 50 feet from the shopping center that will be demolished to a receptor on either the Bobbyboyar or Melba cul-de-sacs, a North Campus Demolition phase Leq of 79.7 dBA can be calculated. This is much

higher than the reported estimated level of 69.1 dBA, resulting in an unmitigated noise level increase of 25.8 over the measured $L_{eq10min}$. The suggested mitigation measures (noise walls with 15 dBA of attenuation, see discussion in "Mitigation Measure Not Supported" section below) would not be able to mitigate this construction noise to a less than significant noise increase.

Analysis of the North Lot Grading phase in Appendix G-1 shows a usage factor of 0.2 for the grader [Appendix G-1, page 41 – 47]. The MND claims to rely on FHWA RCNM 2.0 [MND, page 4-148]. The reference noise levels and acoustical usage factors for FHWA RCNM 2.0 come from the Central Artery/Tunnel (CA/T) project in Boston, Massachusetts in the 1990s. The CA/T equipment noise emissions and acoustical usage factors database shows a usage factor of 40% (0.4) for a grader.[4] Calculating grader noise with a usage factor of 0.4 increases estimated noise levels during the North Lot Grading phase by 3 dBA. In the case of Melba Street cul-de-sac Residences and Bobbyboyar Avenue cul-de-sac Residences, a usage factor of 0.4 would result in estimated noise increases of 18 dBA, which could not be attenuated to a less than significant increase with the chosen noise wall mitigation (see discussion in "Mitigation Measure Not Supported" section below). **The IS/MND fails to justify deviation from the FHWA model. An EIR must be prepared to correct the error in grader usage factor used to calculate North Lot Grading phase noise levels.**

Additionally, the discussion of the North Lot Grading phase mentions many pieces of equipment, however the noise calculation only accounts for a single grader "finish" grading the parcel [IS/MND, page 4-152, Appendix G-1, page 42]. The combined noise level of a grader, roller, and dozer could be 4-6 dBA higher than a grader alone, depending which reference levels are used in RCNM. This could result in impacts, regardless of the proposed mitigation. When using utilization factors to adjust construction noise by the typical usage of each piece of equipment, it is necessary to model all pieces of equipment that are expected to be active in the phase to develop a construction phase noise estimate [FTA Manual, page 178-179]. Appendix B, AQ and GHG Modeling lists a larger set of equipment in each construction phase than is used for the noise modeling of the phase. Table 2 compares the equipment list from the Air Quality Report [Appendix B] to the equipment list from the Noise Modeling [Appendix G-1]. **An EIR must be prepared which accounts for all pieces of equipment expected to be in use during a phase to provide an accurate assessment of construction noise impact.**

[4] CA/T equipment noise emissions and acoustical usage factors database:
https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm01.cfm#table1

Table 2: Equipment by construction phase – comparison

Construction Phase	Equipment listed in Air Quality report (Appendix B)[b]	Equipment evaluated in Noise Modeling (Appendix G-1)
North Campus Demolition	2 Dozers 2 Excavators 2 Loaders	2 Excavators
North Lot Grading	1 Excavator 1 Grader 1 Dozer 2 Loaders	1 Grader
North Campus Pedestrian Bridge Foundation	Not evaluated	1 Bore/drill rig
Main Campus Demolition[a]- Upper Level Parking Lot Demolition	2 Loaders 1 Dozer 2 Excavators	2 Loaders
Main Campus Demolition[a] - Classroom Demolition	2 Loaders 1 Dozer 2 Excavators	2 Excavators
[a] Evaluated together in Air Quality Report **[b] Appendix B, pages 77, 103-104, 192** **[c] Appendix G-1, pages 34-66**		

Mitigation Measure not Supported

Mitigation measure MM-NOI-1 calls for a 15-foot-high noise barrier to shield 23309 Saticoy Street Residences, Melba Street cul-de-sac Residences, and Bobbyboyar Avenue cul-de-sac Residences from on-site construction noise activities. Mitigation measure MM-NOI-2 calls for a 15-foot-high noise barrier to shield Atron Avenue cul-de-sac Residences, Covello Street cul-de-sac Residences, and Chaminade Avenue Residences from on-site construction noise activities. The MND fails to demonstrate that the noise barrier in MM-NOI-1 and MM-NOI-2 would provide the 15 dBA of attenuation used in the Mitigated Construction Noise calculations [Appendix G-1, page 35-66] as it does not include an analysis of the proposed barriers' effectiveness. Procedures for determining barrier insertion loss are available in both the FTA Manual and in American National Standards Institute (ANSI) S12.8-1998, "Methods for Determining the Insertion Loss of Outdoor Noise Barriers." Additionally, as discussed in previous sections 15 dBA of attenuation may not be sufficient to fully mitigate noise impacts. **An EIR must be prepared to demonstrate that attenuation from noise barriers, based on site geometry and recommended barrier height, would reduce all potential impacts to less than significant. Otherwise, the construction noise impacts would be significant and unmitigated. .**

Operational Noise Impact Analysis does Not Sufficiently Address Noise from Mechanical Equipment

The operational noise analysis does not provide documentation to support the claim that "noise from [Multi-story building] rooftop mechanical equipment would not be capable of increasing off-site

noise levels by a discernable degree and are likely to be inaudible" [IS/MND, page 4-160]. The analysis also posits that noise from rooftop mechanical equipment at the pool facility will be inaudible to residential receptors. Audibility is not a metric against which potential impacts can be evaluated for CEQA. Reasonable estimates for rooftop mechanical equipment must be provided and the potential for noise increases to the existing ambient noise must be evaluated for rooftop equipment on both the multi-story building and the pool facility. **An EIR must be prepared to document the rooftop mechanical noise and evaluate potential noise impacts to sensitive receivers.**

Construction Vibration Is Not Evaluated Non-Damage Impacts

While the IS/MND does evaluate construction vibration for damage impacts, it does not analyze other potential impacts due to vibration. The FTA Manual describes impact criteria for ground-borne vibration at sensitive receivers based on both the land use category and frequency of event. For frequent events, the residential ground-borne vibration impact criteria is 72 VdB. The IS/MND reports a vibration level for a dozer operating at 10 feet from homes to the north of the North Lot of 0.244 in/s PPV. This level corresponds to a ground-borne vibration level of 96 VdB. This is well over the FTA Manual impact criteria for ground-borne vibration and is therefore a potentially significant impact. **An EIR must be prepared to document potentially significant impacts due to ground-borne vibration.**

Conclusions

There are several errors and omissions in the MND noise analysis, including insufficient measurement of the existing noise environment, omission of impact analysis to classrooms in the school, improper construction noise modeling, insufficient support of the chosen construction noise mitigation measure, and insufficient noise analysis of mechanical noise. Correcting these would potentially identify several significant impacts which require mitigation. Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

Kathryn Krainc

Associate

chaminade high school development comments on the mnd noise analysis

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

KATIE R. KRAINC

Associate

A member of Wilson Ihrig's Seattle office, Katie works primarily on projects involving transit noise and vibration. She has experience with noise and vibration field measurements, data analysis, modal analysis, and report preparation. She has a deep understanding of waves in fluids and solids, as well as architectural acoustics, sound-structure interaction, and transducers.

Education

- MS Acoustics, The Pennsylvania State University, State College, PA
- BA, Physics and Music, Grinnell College, Grinnell, IA

Membership

- Acoustical Society of America, Associate
- INCE-USA Associate

Project Experience

EBMUD Quarry Site, San Leandro CA
Modeled potential project noise scenarios in a large area using CadnaA and GIS to determine compliance with local ordinance. Contributed to noise section of EIR report.

Houston Metro Next Program Management On-Call, Houston, TX
Conducted environmental noise and vibration assessment for a new 25-mile BRT project. Provided the client with a technical report outlining the assessment and recommended noise and vibration control measures.

King County Metro On-Call Tasks, Seattle, WA
Analyzed measurements of TPSS noise following acoustic blanket installation. Made recommendations to further mitigate noise from one TPSS location.

Mercer Island Interceptor Vibration Monitoring, Seattle, WA
For more than six months created weekly vibration reports of construction activity for 3 vibration monitors placed near residences near construction.

Metropolitan Atlanta Rapid Transit Authority (MARTA) On-Call Task, Atlanta, GA
Analyzed noise and vibration measurements in residences near underground sections of track.

Microsoft Building 87 Redmond Link Extension Ballast Mat Installation, Redmond, WA
Provided daily construction quality inspections during the installation of a high-performance ballast mat system. Quality issues identified during construction were resolved with the contractor and the completed installation was approved by the ballast mat manufacturer and Sound Transit.

MicroSurgical Technology, Redmond, WA

Analyzed data from a noise survey in a surgical instrument production facility. Developed a report assessing the workers daily noise exposure and provided noise control recommendations.

Port of Grays Harbor Terminal 4 Expansion, Grays Harbor, WA
Provided analysis of potential noise and vibration impacts from construction activity. Contributed to noise section of EIR report.

Sound Transit Northgate Link Vibration Support, Seattle, WA
Conducted quarterly analysis of vibration at 31 monitors in Sound Transit tunnels under University of Washington. Wrote semi-automated routine for analyzing large amounts of data to analyze trends in change in vibration.

Sound Transit Wheel-Rail Noise Study, Seattle, WA
Provided noise and vibration measurements for validation of wheel-rail noise models. Also performed wheel roughness, rail roughness and track decay rate testing.

MS Thesis: Vibrational Assessment of Ash and Composite Hurleys,
The Pennsylvania State University*
Conducted experimental modal analysis of sports equipment and compared vibration and damping behavior based on material properties. (*done prior to joining Wilson Ihrig)