

## ATTACHMENT NO. 3

# memorandum

date February 14, 2018

to Jose Mendivil

cc Michael Allen

from Mike Harden and Olivia Chan

subject 9735 Washington or “Brick-Machine” Project – Noise/Vibration Corrections and Revisions

An Initial Study/Mitigated Negative Declaration (IS/MND or MND) was prepared by the City of Culver City (City) in accordance with the California Environmental Quality Act (CEQA), as amended, to evaluate the potential environmental effects associated with implementation of the proposed office, retail, and restaurant development project known as Brick and Machine (the "Project"). The MND was circulated for public review from August 2, 2017 to August 23, 2016. The City received one (1) comment letter during the public review period from Allen Matkins Attorneys at Law (on behalf of the Southern California Hospital or “SCH-CC”), dated August 21, 2017. Responses to comments raised in the letter were provided by ESA PCR to the City on September 28, 2017.

This memo includes additional corrections and revisions to Section XII, Noise, of the IS/MND.

### Construction Noise – Ground Level

As discussed in ESA’s September 28, 2017 Memo (see Attachment A), the southern façade of the hospital building is separated from the project site by an approximately 15-foot wide loading ramp and variations in the façade set patient rooms back from the project site. Therefore, construction noise levels conservatively assume that the nearest habitable rooms at the adjacent receptors are located 15 feet from the project site. Modifications to Mitigation Measures NOISE-1 and NOISE-3 are shown below. Text that has been added is underlined and text that has been removed is ~~stricken through~~.

**NOISE-1** Noise-generating equipment operated at the project site shall be equipped with the most effective noise control devices, (i.e., mufflers, lagging, and/or motor enclosures) achieving a minimum 10 dB reduction in equipment noise. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure.

**NOISE-3** Construction and demolition activities shall be scheduled so as to avoid operating more than one piece ~~several pieces~~ of motorized equipment simultaneously within 15 feet of the adjacent sensitive receptor's nearest building facade. Should one piece of motorized equipment be operational within 15 feet to an adjacent sensitive receptor's nearest building facade, all other motorized equipment must be operated at a minimum of 120 feet from that receptor, measured from the same point at the receiving location. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure.

The revised construction noise analysis included in the September 28, 2017 Memo analyzed the use of a drill rig truck, air compressor, and backhoe operating at 15 feet from the SCH-CC façade during the grading/excavation phase of construction, resulting in a maximum hourly noise level of 95 dBA Leq. As stated within the September 28, 2017 Memo, with incorporation of modified mitigation, noise levels at the nearest sensitive receptors would be reduced to 61 dBA Leq, which is below the significance threshold of 63 dBA Leq.

The construction noise analysis in the September 28, 2017 has been further refined herein to incorporate the use of an "auger drill rig" in place of the drill rig truck during the grading/excavation phase of construction. This results in a maximum hourly noise level of 97 dBA Leq. Mitigation Measure NOISE-3 has been modified to prohibit the simultaneous use of motorized construction equipment within 15 feet of adjacent sensitive receptors. Simultaneous use of all other motorized equipment shall occur at a minimum of 120 feet from that receptor, measured from the same point at the receiving location. For example, should one piece of motorized equipment be in use at 15 feet from the southwestern corner of the SCH-CC building, all other motorized equipment shall be operated no nearer than 120 feet from that same corner, not the hospital building as a whole. As shown below, implementation of mitigation would reduce construction noise to 63 dBA Leq, which does not exceed the threshold of 63 dBA Leq. Therefore, refinement of construction equipment would not result in a greater impact than previously analyzed and impacts would remain less than significant with implementation of mitigation as modified.

<b>Grading/Excavation</b>					<b>95</b>	<b>97</b>		
Air Compressor	1	78	50%	15	88	85	88	0
Backhoe	1	80	40%	15	90	86	89	0
Auger Drill Rig	1	85	20%	15	95	88	91	0
Cranes	1	81	40%	65	79	75	78	0
Excavator	1	81	40%	65	79	75	78	0
Generator Sets	1	81	50%	65	79	76	79	0
Rubber Tired Loader	1	79	50%	65	77	74	77	0
Skid Steer Loaders	1	80	40%	65	78	74	77	0
Sweepers	1	82	10%	65	80	70	73	0
Boom Pump Trucks	1	81	20%	65	79	72	75	0
Welders	1	74	40%	65	72	68	71	0

<b>Mitigation Measure</b>	<b>Noise Level Reduction (dBA)</b>
NOISE-1	10
NOISE-2	--
NOISE-3	4
NOISE-4	20
<i>Total Reduction</i>	<i>34</i>
Unmitigated Construction Noise Level	97
<b>Mitigated Construction Noise Level</b>	<b>63</b>
Threshold (Ambient 58 dBA +5 dBA)	63
Exceeds Threshold?	No

## Vibration

As discussed above, the southern façade of the hospital building is separated from the project site by an approximately 15-foot wide loading ramp. Therefore, vibration impacts were analyzed at 15 feet from the project site. As discussed in the September 28<sup>th</sup> Memo, vibration impacts regarding structural damage to ground level SCH-CC structures are addressed in Response 17. As discussed therein, with implementation of Mitigation Measure NOISE-5, impacts related to structural damage and human annoyance would be less than significant.

The SCH-CC structure has a basement level, the southern wall of which is located approximately one-foot from the property line shared with the Project Site. It is anticipated that grading and excavation would occur as near as two feet from the property line, a total distance of 3 feet from the southern basement wall. A vibration study was performed by Wilson Ihrig, an acoustics, noise & vibration consultant, to assess the potential for building damage and human perception within sensitive areas of the SCH-CC basement level (see Attachment B of this Memo). Wilson Ihrig concluded that implementation of Mitigation Measure NOISE-5 (as modified below) would mitigate the Project's vibration impact for potential building damage as well as the potential for human perception within the nearest vibration sensitive areas of the SCH-CC basement level.

In order to ensure that construction vibration would not exceed applicable thresholds, Mitigation Measure NOISE-5 has been modified to specify the location at which vibration monitoring shall be conducted within SCH-CC. Modifications to Mitigation Measure NOISE-5 are shown below. Text that has been added is underlined and text that has been removed is ~~stricken through~~. No new impacts have been identified and no additional mitigation would be required.

**NOISE-5** Contractors ~~shall~~ will phase in construction activity, use low-impact construction technologies, and avoid the use of heavy vibrating equipment ~~where possible~~ to reduce or avoid construction vibration impacts. Any heavy-duty construction equipment operating within 20 feet of the Project Site boundary shall have rubber tires to the extent that such equipment is available and feasible. ~~Especially, contractors shall use smaller and lower impact construction technologies to avoid human annoyance to the adjacent buildings. Contractors shall avoid the use of driving piles and drill piles instead where necessary to avoid structural damage.~~

In order to ensure that construction vibration levels do not exceed applicable thresholds (0.2 PPV in/sec for structural damage or 0.035 PPV in/sec for human annoyance), the contractor shall install and maintain at least two continuously operational automated vibrational monitors with: one within the adjacent hospital basement; and one on the adjacent residential building at the locations closest to the active auger bit until it can be confirmed that the applicable vibration threshold for potential structural damage will not be exceeded. The monitoring system must produce real-time specific alarms (via text message and/or email to on-site personnel) when vibration velocities are approaching, but prior to, the applicable vibration threshold. In the event of an alarm, feasible steps by the contractor must be taken to reduce vibratory levels, including but not limited to halting/staggering concurrent activities, utilizing lower-vibratory techniques, and slowing the speed of the auger. In the event of an exceedance of an applicable vibration threshold, work in the vicinity shall be halted and potential

adjustments to the construction program assessed to ensure that vibration thresholds would not be exceeded upon continuation of construction activity. In the event that the structural damage threshold is exceeded, the adjacent hospital and residential buildings shall be inspected for damage, as applicable.

In the event damage occurs due to construction vibration, repairs shall be arranged by the contractor and/or the applicant's representative in consultation with SCH-CC, the residential building owner and/or the City Building Official, as necessary.

The construction contractor shall be responsible for implementing this measure during the construction phase. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure. Vibration monitoring data shall be collected by the contractor and reported to the City Chief Building Office on a weekly basis

## **Groundborne Noise**

The SCH-CC structure has a basement level, the southern wall of which is located approximately one-foot from the property line shared with the Project Site. It is anticipated that grading and excavation would occur as near as two feet from the property line, a total distance of 3 feet from the southern basement wall. Because the basement level is enclosed under the surface with a substantial foundational wall and soil, there would not be an airborne pathway for construction noise to reach receptors in the basement level.

A groundborne noise study was performed by Wilson Ihrig, an acoustics, noise & vibration consultant, to assess the potential for audibility groundborne noise within sensitive areas of the SCH-CC basement level (see Attachment C of this Memo). Groundborne noise can occur due to sound radiated from vibration of floors/walls/ceilings generated by construction activity. Based on estimated vibration levels from the use of a large excavator and auger drill, Wilson Ihrig concluded that groundborne noise would not exceed typical maximum interior background noise levels of 45 dBA within the noise and vibration sensitive areas of the SCH-CC basement. Therefore, no new impacts have been identified and no additional mitigation would be required.

### Attachments:

- A. Memo: 9735 Washington or "Brick-Machine" Project – Responses to Allen Matkins Letter, prepared by ESA PCR, dated September 28, 2017
- B. Vibration Study of Planned Construction for Future Mixed-Use Development at 9735 Washington Boulevard or "Brick-Machine", Culver City, California, prepared by Wilson Ihrig, February 7, 2018.
- C. Groundborne Noise Study of Planned Construction for Future Mixed-Use Development at 9735 Washington Boulevard or "Brick-Machine", Culver City, California, prepared by Wilson Ihrig, February 9, 2018.

# memorandum

date September 28, 2017

to Jose Mendivil

cc Michael Allen

from Mike Harden and Jay Ziff

subject 9735 Washington or “Brick-Machine” Project – Responses to Allen Matkins Letter

An Initial Study/Mitigated Negative Declaration (IS/MND or MND) was prepared by the City of Culver City (City) in accordance with the California Environmental Quality Act (CEQA), as amended, to evaluate the potential environmental effects associated with implementation of the proposed office, retail, and restaurant development project known as Brick and Machine (the "Project"). The MND was circulated for public review from August 2, 2017 to August 23, 2016. The City received one (1) comment letter during the public review period from Allen Matkins Attorneys at Law (on behalf of the Southern California Hospital or “SCH-CC”), dated August 21, 2017. A Copy of the original comment letter is attached to this Memo. Each individual comment within the letter is bracketed and numbered (i.e., 1, 2, 3, etc.). Responses to each individual comment raised within the letter are provided below.

## **Comment 1**

This firm represents Prospect Medical Holdings, Inc. ("Prospect"), owner of the Southern California Hospital at Culver City ("SCH-CC" or “Hospital” located at 3828 Delmas Terrace in the City of Culver City (“Culver City”).

Since its opening in 1925, SCH-CC has dedicated itself to providing quality care to the residents of both Culver City and adjacent West Los Angeles communities. SCH-CC is a 420-bed general acute care facility that offers a wide range of inpatient and outpatient acute care services to residents, including an orthopedic center, cardiovascular services, acute rehabilitation, sub-acute care, psychiatric care and chemical dependency programs. Additionally, SCH-CC operates a 24-hour emergency services center, which serves as a paramedic receiving station and is staffed by board-certified emergency physicians and nurse specialists. Indeed, it is the only emergent care hospital in the geographic boundaries of Culver City.

## **Response 1**

This comment provides a general introduction of Allen Matkins and SCH-CC. This comment is noted.

## **Comment 2**

We present below SCH-CC's concerns and objections regarding the adverse, significant environmental, health and safety impacts to the environment, including the Hospital, which will result from the mixed-use project proposed by Claret West Development, commonly referred to as the "Brick and Machine" project (the "Project"), for the property directly adjacent to and south of the Hospital at 9735 Washington Boulevard (the "Property"). As detailed below, SCH-CC objects to this Project on the basis that the proposed Initial Study and Mitigated Negative Declaration (the "MND") is legally inadequate, is not supported by substantial evidence, and neglects to consider significant impacts of the Project on SCH-CC.

## **Response 2**

This comment introduces the commenter's subsequent comments which state the MND is legally inadequate, is not supported by substantial evidence, and neglects to consider significant impacts of the Project on SCH-CC. Individual responses to direct comments on the MND are provided under Responses 3-20 below.

## **Comment 3**

The MND fails to identify a number of the Project's potentially significant environmental impacts, and fails to adequately address and/or propose appropriate mitigation measures for many of the impacts the MND does identify. Accordingly, the MND fails to comply with the requirements of the California Environmental Quality Act ("CEQA") and the guidelines enacted under CEQA ("CEQA Guidelines"). At a minimum the administrative record before the City has substantial evidence to support a fair argument that the Project may have a significant effect on the environment that has not been previously identified. Consequently, an Environmental Impact Report ("EIR") must be prepared to evaluate each such impact for its potentially significant effects, to discuss measures that feasibly mitigate such impacts to insignificance, and to describe a reasonable range of project alternatives that lessen the Project's environmental impacts.

California law provides that an EIR is required whenever substantial evidence supports a "fair argument" that significant impacts may occur. The "fair argument" standard creates a "low threshold" for requiring preparation of an EIR. As CEQA Guidelines Section 15064(f)(1) makes clear:

"If a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect."

Thus, even if substantial evidence would also support the opposite conclusion, an EIR is nevertheless required. Reliance by the City on a MND is a shortcut to CEQA's preference for the preparation of a full EIR where it may be fairly argued based on substantial evidence that significant impacts might occur in the construction or subsequent completion of a project. Indeed, there is a "strong presumption in favor of requiring EIRs."

## **Response 3**

This comment provides background information on CEQA requirements and definitions. The comment does not require further response because it does not raise any new issues or specifically address the adequacy of the

environmental analysis in the MND. However, the comment is part of the record and as such will be considered by the decision makers for review as part of the decision making process.

#### **Comment 4**

Further, there is a possibility that these significant impacts may not have available feasible measures to mitigate them to insignificance, in which case an EIR and supporting Statement of Overriding Considerations would be required for this additional reason. Finally, if significant effects are identified for the Project, then, as noted, an evaluation of Project alternatives is warranted to reduce the Project's significant environmental impacts. For these and other reasons detailed below, the MND is legally insufficient, and the Project requires preparation of an EIR.

#### **Response 4**

This comment speculates that there is the possibility that significant impacts and that an EIR is required, including an evaluation of Alternatives. The comment does not require further response because it does not raise any new issues or specifically address the adequacy of the environmental analysis in the MND. However, the comment is part of the record and as such will be considered by the decision makers for review as part of the decision making process.

#### **Comment 5**

The following discussion and objections are preliminary in nature, as SCH-CC has not had sufficient time or opportunity to retain experts who could assist in analyzing the MND's deficiencies discussed in this letter, and has not had access to the various studies on which the MND presumably rests. The SCH-CC only received notice of the upcoming Planning Commission hearing and a copy of the IS/MND and Traffic Study less than one week ago. At that time, neither the Staff Report nor many of the studies upon which the IS/MND relies (including but not limited to the noise and air quality analyses) were available on the City's website. As such, SCH-CC reserves the right and intends to further assess the MND's and the Project's sufficiency under CEQA, the CEQA Guidelines and other applicable law, and to augment the comments and objections raised in this letter.

#### **Response 5**

This comment asserts that SCH-CC has not had sufficient time review and comments on the MND. SCH-CC was mailed a Public Notice at the onset of the public comment period by Culver City Planning Staff, which meets City noticing requirements. E-mail correspondence on August 2, 2017 between City Staff and Stewart Kahn with Prospect Medical, who owns the Hospital, confirmed the receipt of the MND and the public notice by the Hospital on that date (the 1<sup>st</sup> day of the public review period). It is also noted that the comment letter is dated August 21, 2017 and was submitted 2 days prior to the end of the public review period. Based on these considerations, noticing and review time of the MND was made available to SCH-CC consistent with CEQA and City requirements.

#### **Comment 6**

##### **A. Geological & Soil; Seismic Safety**

The proposed MND does not identify significant geological and soil impacts because it fails to evaluate several possible significant effects that the Project's excavation plan will have on the Hospital. For example, as proposed,

the Project will require excavation and trenching around the existing Hospital building to construct the three-story subterranean parking garage and to install utility lines and related fixtures and support systems. This excavation work will be performed vertically and within unconsolidated sediments or artificial fill. If not undertaken with appropriate preventative and protective measures, slumping of material in the excavation walls and/or trenches could endanger workers and seriously undermine the structural integrity and safety of the Hospital by undercutting ground support for the foundations of the Hospital structures.

### **Response 6**

The IS/MND provided a technical impact analysis pertaining to the site's underlying geology and soils based on information contained in the *Geotechnical Engineering Investigation Proposed Mixed Use Development 9735 West Washington Boulevard, Culver City, California* (herein referred to as the "Geotechnical Engineering Investigation"), prepared by Geotechnologies, Inc., dated July 20, 2015. This document was provided under separate cover available at the Culver City Planning Division, as stated in the IS/MND.

Geotechnologies, Inc. has provided geotechnical engineering recommendations and on-site inspection services for over 45 years and is a highly qualified geotechnical engineering firm. Geotechnologies has reviewed the Allen Matkins letter and provided input on Responses 6 to 9, below (see attached letter).

The objective of each project geotechnical engineering investigation is to provide geotechnical recommendations within guidelines allowed by the applicable building code. As an independent check prior to the commencement of site work, the Building and Safety Division of the Culver City Community Development Department will perform a review of the findings and recommendations for compliance to the California Building Code and the Culver City Building Code.

The proposed excavation will be supported with temporary shoring during construction in accordance with all applicable regulatory requirements. When complete, the finished structure will provide permanent support for the Hospital. Prior to the initiation of construction, Geotechnologies will also review the work of the shoring engineer and the structural engineer for compliance with the recommendations provided in the Geotechnical Engineering Investigation, effectively closing the design loop and ensuring that no "slumping" of material or loss of lateral support for the foundations of Hospital structures will occur.

The professional opinions and geotechnical advice contained in the Geotechnical Engineering Investigation are sought because of special skill in engineering and geology and were prepared in accordance with generally accepted geotechnical engineering practice. Geotechnologies has a duty to exercise the ordinary skill and competence of members of the engineering profession.

Furthermore, Culver City requires that all new construction meet or exceed the Culver City Building Code and the latest standards of the California Building Code (CBC), as applicable, to minimize geologic hazards. While the project would be required to comply with applicable regulatory requirements, implementation of the site-specific structural and seismic design parameters and recommendations for foundations, retaining walls/shoring, and excavation of the Final Geotechnical Engineering Investigation per Mitigation Measure GEO-1 would further ensure that geology and soils impacts would be less than significant.



**Comment 7**

Further, installation of utilities or other subsurface construction in connection with the Project could require temporary dewatering activities which the MND likewise wholly fails to address. Even temporary dewatering could cause settlement, which could crack the foundations, walls, or floor slabs of the Hospital's existing buildings and other structures, given the Project's close proximity to the existing Hospital structures.

**Response 7**

The existing ground surface is near elevation 99 feet above mean sea level (msl) and the proposed structure's lowest finish floor elevation will be at an elevation 66 feet above msl. The subgrade will be cut to approximately elevation 65 feet and the bottom of the footings are anticipated to be cut to elevation 61 feet above msl. Sand and silty sand that is dense to very dense will be exposed at the subgrade and in the footings. The borings drilled by Geotechnologies in 2015 identified water at elevation 56.5 feet above msl, at its highest.

For these reasons, water is anticipated to be 4.5 feet below the bottom of the footing excavations and approximately 8.5 feet below the subgrade elevation. Due to the dense consistency of the exposed soils distance between the water and the bottom of the excavation, dewatering for the proposed structure is not anticipated.

However, in the unlikely event that dewatering is necessary, the water will be drawn down near to elevation to 56 feet above msl. The soils within the zone that may be dewatered (above elevation 56 feet) are dense and stiff as indicated on the consolidation graphs shown in the referenced report. Therefore, no significant settlement of these soils is anticipated. In addition, the return of the water level from a higher elevation back to 56 feet will not cause settlement of the soils since dewatering settlement occurs during the first dewatering cycle (naturally occurring or man-induced) of soils that have always been saturated.

In addition, as discussed on page B-56 and B-57 of the MND, if encountered, typically, groundwater removed from a construction site is disposed of in the storm drain system. However, if any removed groundwater contain contaminants that exceed acceptable water quality regulatory standards of the Los Angeles Regional Water Quality Control Board (LARWQCB) or other appropriate agencies, this could be a potentially significant impact. Thus, Mitigation Measure WQ-1 is prescribed to address this potential impact, which requires implementation and completion of a dewatering plan that would dispose of contaminated groundwater in compliance with applicable regulatory requirements. Implementation of Mitigation Measure WQ-1 would ensure that potentially significant impacts regarding groundwater contamination during dewatering activities on the project site are reduced to a less than significant level.

**Comment 8**

Finally, the MND lacks any evaluation of how the Project's excavation plan could impact the SCHCC's ability to comply with strict State-mandated standards for seismic stability that apply uniquely to Hospitals and other healthcare facilities. As a facility regulated by the Office of Statewide Health Planning and Development ("OSHPD"), the Hospital is subject to very stringent geological standards adopted pursuant to Senate Bill 1953 ("SB 1953"), codified at California Health & Safety Code sections 130000 through 130070. Among other standards, the SB 1953 Program and related SPC-2 compliance measures require that acute and emergent care providers like the Hospital retrofit their facilities by July 1, 2019 such that they will not have more than a 1.20% probability of collapse in the event of an earthquake with a 10% chance of exceedance in 50 years ( $\pm$  475-year return period). Retrofit plans

must be submitted to and approved by OSHPD's Seismic Compliance Unit of the Facilities Development Division. The Hospital's seismic engineers have analyzed the SCH-CC buildings and prepared a plan for the required retrofit.

Based upon our seismic engineer's preliminary analysis, there is a risk that the Project's proposed grading/excavation plan, if not carefully evaluated and strictly implemented, may interfere with the Hospital's ability meet and implement its current seismic retrofit plan. If not properly executed with limitations and considerations specific to the neighboring Hospital, implementation of the proposed grading plan has the potential to eliminate lateral and subjacent support that the Property currently provides to the Hospital, rendering the building less durable. If that were to occur, the Hospital would face an imminent risk of closure for an inability to meet the SB 1953 building collapse standards under the Hospital's current retrofit plan as a direct result of the Project's excavation plan.

These, and potentially other, significant geological impacts must be properly evaluated and feasible mitigation measures imposed to prevent permanent impacts - such as underpinning and stabilization of existing Hospital buildings prior to trenching or other construction activities, provision of permanent shoring such as tie-ins, and specific requirements for strict adherence to the Project's excavation plans. In the absence of specified parameters and additional site-specific seismic evaluation, the sole mitigation measure proposed in GEO-1 of the IS/MND is inadequate.

Such potential impacts unquestionably would "expose people or structures to potential substantial adverse effects, including loss, injury or death" from strong "seismic shaking", "seismic-related ground failure" and an "unstable soil" as a result of the Project. CEQA Guidelines, *Appendix G, Geology and Soils*. As such, these potential impacts must be evaluated and feasible mitigation sufficiently addressed. *Id.*

### **Response 8**

Refer to Response 6-7 above. In addition, the project is required to comply with all applicable Culver City Building Code and the latest standards of the California Building Code (CBC), as applicable, to minimize geologic hazards. The design and compliance of shoring and retaining walls will be addressed by the Shoring and Structural Engineers as part of the Final Geotechnical Engineering Investigation. The site-specific design recommendations in the Final Geotechnical Engineering Investigation would consider structural and geologic hazards to both the project and adjacent properties, including the Hospital.

No evidence has been presented indicating that the Project would have any effect on the SCHCC's ability to comply with state-mandated standards for seismic stability or its plans for the required retrofit. Moreover, this comment does not concern the potential *environmental* impacts of the Project. See CEQA Guidelines § 15361 ("Environment' means the physical conditions which exist within the area which will be affected by a proposed project ..."). Therefore, the comment does not require further response, but is part of the record and may be considered by the decision-makers as part of the decision making process.

### **Comment 9**

The Hospital has previously notified the developer in an effort to resolve this matter, but no resolution **has** been reached, as the developer has been so far unwilling to expand the MND's analysis or make changes to the excavation plan that would mitigate or eliminate these impacts.

**Response 9**

Refer to Responses 6-8 above. The comment does not require further response because it does not raise any new issues or specifically address the adequacy of the environmental analysis in the MND. However, the comment is part of the record and as such will be considered by the decision makers for review as part of the decision making process.

**Comment 10****B. Traffic**

The traffic analysis in the MND is inadequate in scope and fails to impose *any* mitigation measures to mitigate the potentially significant traffic impacts of this Project on both the Hospital and the surrounding neighborhood. For example, nowhere in the Traffic Impact Report or supporting Scoping Memorandum of Understanding (the "TIR") is there an explanation of the traffic engineer's rationale for limiting the traffic impact analysis for a Project of this size and complexity to only seven intersections. This rationale must be explained, and the scope of this analysis expanded, in order to properly evaluate and mitigate the traffic impacts caused by expanding the existing uses on the Property to *ten times* their current size. Specifically, the Project proposes to redevelop the Property by replacing the existing 2-story 16,079 square foot building with a 7-story 163,477 square foot building, which is a much more intensive use of this site and will generate far more traffic trips as a consequence. Nevertheless, the traffic analysis in the IS/MND oddly and without any evidentiary support concludes that there would be *no* significant traffic impacts caused by the Project.

**Response 10**

Approximately 87,000 square feet of the Project's 163,477 square feet will be used for parking, which does not generate trips. The floor area for uses within the proposed building that would generate trips is approximately 76,500 square feet. As noted by the commenter, the existing building on the site contains approximately 16,079 square feet of trip-generating floor area. Therefore, the Project will not expand the existing uses on the site by "ten times" as the commenter suggests.

As no significant impacts were identified for traffic study intersections, no traffic mitigation was required. The intersections for the traffic study analysis were carefully selected in consultation with the City of Culver City, Department of Public Works. The Project trip generation and distribution were carefully considered in the study intersection selection process. Six of the intersections were selected through the City of Culver Scoping process. The City of Los Angeles, Department of Transportation also reviewed the study procedures and assumptions, and requested that a seventh intersection be added to the list of study intersections. The intersections selected to be studied were those signalized intersections through which the largest amount of Project traffic were estimated to pass, and the most likely to be significantly impacted. The study showed that none of the seven selected intersections near the Project will be significantly impacted. Therefore, more remote intersections with lower Project traffic volumes would not be anticipated to be significantly impacted.

**Comment 11**

In addition, the TIR does not analyze the potentially significant impacts of both temporary construction and permanent project traffic on the SCH-CC emergent care facilities and emergency response times. As the MND acknowledges, the Project and the SCH-CC are immediate neighbors. Indeed, the Project's proposed primary entrance and a primary point of access to the Hospital's emergent care "Tower Building" are both on Delmas Terrace, a narrow 2-lane thoroughfare. Emergency vehicles regularly enter and exit the Tower Building by utilizing this street. Furthermore, a number of pedestrians regularly traverse across Delmas Terrace from the main non-emergent building to the emergent Tower Building - including physicians and staff responding to emergency "codes" as well as family members and friends of patients. Since neither the MND nor the TIR evaluate these impacts, the MND does not comply with CEQA.

Project traffic thus has the potential to significantly impede vehicular and pedestrian access to the SCH-CC's emergency facilities, thereby increasing emergency responsive times - especially during peak hours. This could be of particular concern during Project construction if, for example, trucks hauling soil or other materials to or from the Project site idle next to the emergency exits and impair the ability of ambulances to ferry patients to the ER. The IS/MND is therefore deficient as it fails to discuss and proposed appropriate mitigation measures for the Project's traffic and particularized emergency access impacts, both during construction and later operations.

**Response 11**

The commenter's concerns regarding construction truck traffic staging on Delmas Terrace are noted. However, the Emergency Room entrance is on Hughes Avenue. The Emergency Room exit is located on Delmas Terrace. Page B-72 of the MND describes the potential haul routes for the Project. No construction traffic along Hughes Avenue would occur. Further, the Traffic Study did include an analysis of the Project impacts at the signalized intersections at the two ends of the block – Washington Boulevard and Hughes Avenue, and Venice Boulevard and Hughes Avenue – and found them to be less than significant. Therefore, no significant impact on emergency response times is anticipated.

Additionally, northbound and southbound vehicular access would be maintained on Delmas Terrace during construction activities. Delmas Terrace north of the Project site would not be part of the construction truck access route to the Project site. Further, no driveway entrance is to be provided to the site from Delmas Terrace for construction purposes. Therefore, no trucks will be idling on Delmas Terrace while waiting to access the site. Delmas Terrace has a right-turn only restriction at Venice Boulevard for northbound traffic and is 3 blocks from the nearest downstream signal (at Bagley Avenue). Therefore, no exiting queue extending on Delmas Terrace to the hospital site or other exiting truck idling at the hospital site is anticipated.

Pages A-23 and A-24 of the MND describe the Project's construction schedule and activities. As discussed therein, dirt hauling and construction material deliveries or removal would not be allowed during morning (7:00 AM – 9:00 AM) and afternoon (4:00 PM – 6:00 PM) peak traffic periods, which would minimize peak hour traffic impacts. Also, every effort would be made to minimize the need for lane closures. Should lane closures be required, neighbors and city officials would be notified via the email notification system set up at the commencement of construction. Lane closures, if required, will occur only between the hours of 9:00 AM – 3:00 PM (again, avoiding the peak traffic periods). Such events would be coordinated with neighboring construction projects, as necessary.

As required by Mitigation Measure PS-1, the project would implement a Final Construction Traffic Management Plan. The Construction Traffic Management Plan will be developed by the project contractor in consultation with the project's traffic and/or civil engineer and approved by the City of Culver City, City Engineer and Planning Manager and the City of Los Angeles Department of Public Works prior to issuance of any project demolition, grading or excavation permit. The Construction Traffic Management Plan will also be reviewed and approved by the City of Culver City's Fire and Police Departments. The construction management plan will include an up-to-date list of local police, fire, and emergency response organizations and procedures for the continuous coordination of construction activity, potential delays, and any alerts related to unanticipated road conditions or delays, with local police, fire, and emergency response agencies. The Plan will describe the location, times, and estimated duration of any lane closures, traffic detours, use of protective devices, warning signs, and staging or queuing areas. Thus, the Plan will be designed and implemented to maintain adequate emergency response in and around the project site.

Also, the commenter is referred to pages B-82 to B-89 of the MND, which discuss impacts to public services, including Fire Department and emergency medical response times. As discussed therein, with compliance to applicable CCFD requirements and implementation of the prescribed mitigation measure requiring approval of a Final Construction Traffic Management Plan, and due to the temporary nature of the necessary construction activities, construction impacts on fire protection and emergency medical services would be less than significant. Operational impacts regarding emergency-related public services were also determined to be less than significant, noting that the CCFD's response times would not be substantially changed such that response time objectives are compromised in any significant manner. Further, according to the CCFD, project implementation would not require the physical expansion of an existing fire station or a new fire station or require additional staffing to the fire protection facilities servicing the project site.

With regards to pedestrian access during construction, the crosswalk at Delmas Terrace and Washington would be maintained during construction. Pedestrian access at Venice and Delmas Terrace would remain similar to existing conditions. Pedestrian access would be maintained along Washington, but would be closed along the project site frontage of Delmas Terrace. Parking for the Hospital along the east side of Delmas Terrace is located north of the project site, as such minimal hospital-related pedestrian traffic occurs along the project site's frontage sidewalk. Nonetheless, as part of the Final Construction Traffic Management Plan, a detailed pedestrian access plan will be developed in consultation with the City that would describe any sidewalk closures, related detours, signage and/or temporary sidewalks that would be implemented to ensure adequate pedestrian flows around the project site.

Concerning Project permanent (operational) traffic, as noted by the commenter, Delmas Terrace is a narrow roadway. At Venice Boulevard, only right-turns in/right-turns out are allowed – no through or left-turn movements are allowed on Delmas Terrace. At Washington Boulevard left-turns as well as right-turns are allowed. The Project fronts Washington Boulevard on one side. Therefore, the Project traffic assignment agreed to with the Culver City traffic study reviewer in the Scoping MOU For Traffic Study did not assign any traffic to Delmas Terrace north of the Project driveway as Delmas Terrace does not have characteristics which tend to attract large percentages of Project vehicles. As shown on Table B-31 on page B-106 of the MND shows, Project impacts would be less than significant at the nearby signalized intersections that are the critical capacity constraints for the surrounding roadway system. Furthermore, any traffic that may travel north on Delmas Terrace (e.g., due to the driver's lack of familiarity with the aforementioned constraints) would be minimal and would be expected to have a lower traffic impact that is also not significant.

### **Comment 12**

Finally, neither the TIR nor the IS/MND discuss the traffic impacts of the Project on street segments. The TIR likewise does not provide any rational basis for the high number of trip reductions granted for internal linkages and pass-by traffic, or for why a 15% credit (rather than some lower percentage) for the Project's proximity to mass transit is justified. In the absence of a rationale for these traffic impacts analysis issues, there is at minimum a "fair argument" that the IS/MND's conclusion that the Project would not result in any significant traffic impacts is not supported by substantial evidence in the record.

### **Response 12**

Street segment analyses are conducted to determine if commercial projects will impact single-family residential neighborhood streets. A segment analysis is not applicable given the Project location along a major arterial and away from single-family residential streets.

The Project's Traffic Study utilized a 5% trip credit for internal linkages. Culver City's Traffic Study Criteria (Page 8) indicates that a maximum of ten percent (10.0%) trip credit may be allowed for Internal Trip Capture for mixed-use developments as determined by the City taking into account various items including, but not limited to, the type and amount of non-residential land uses. The 5% trip credit for internal linkages used in the Traffic Study is lower than that allowed by City policy. Further, the City of Los Angeles, Department of Transportation reviewed the Project's MOU and the Traffic Study, and found the 5% internal trip linkages credit to be appropriate

The pass-by credit for the retail and restaurant uses followed standard City policy, that in-turn is based on Institute of Transportation Engineers studies. No pass-by credit was taken for the office use. It should also be noted that the pass-by credit was higher in the AM and PM peak hours for the existing use than the proposed use. Thus, the net pass-by credit results in an increase in the calculated Project traffic impacts. Not considering pass-by credits would result in a lesser number of peak hour Project trips and would be less conservative.

The transit service with stops available in close proximity to the Project site are described in detail in the Public Transit subsection of the Environment section of the traffic study. There is high frequency transit service on Route 1 traveling past the Project site. City criteria allows for up to a 25% discount to be used, but based on the transit service and City traffic study procedures, the 15% credit was determined to be appropriate for inclusion in the Scoping MOU For Traffic Study. The MOU was followed in the Project Traffic Study.

### **Comment 13**

#### **C. Noise**

The Noise impacts discussion in the IS/MND is likewise inadequate. The IS/MND fails to analyze the noise impacts of the Project in a manner that accounts for sensitive receptors and/or that documents compliance with Culver City's Interior Noise Standards.

The IS/MND fails to analyze whether the noise generated by the Project would result in significant noise impacts by exceeding the interior noise standards for the Hospital and nearby residential uses, which are both subject to an interior noise standard of 45 dBA (CNEL).

### **Response 13**

The commenter states that the MND fails to analyze the noise impacts of the Project in a manner that accounts for sensitive receptors and/or that documents compliance with Culver City's interior noise standards. The noise impacts of the Project and effects on sensitive receptors were addressed in the MND on pages B-65 through B-81. The MND documents the existing noise environment at those sensitive receptors and analyzes project impacts on those sensitive receptors pursuant to CEQA and City requirements. As discussed under Response 14 below, incorporation of Mitigation Measures NOISE-1 through NOISE-4 (as revised herein) would effectively reduce construction noise levels to 61 dBA at the adjacent hospital and residential receptors.

Title 24 regulations generally state that interior noise levels generated by exterior noise sources shall not exceed 45 dBA Ldn/CNEL, with windows closed, in any habitable room for general residential uses. A precise exterior-to-interior attenuation factor achieved at the hospital or residential use is dependent on factors such as type of building framing, insulation, thickness of drywall, and thickness and material of exterior or interior finishes, the precise details of which are not known by the City. According to the Federal Highway Administration (FHWA), typically, exterior noise attenuation to interior spaces is up to 10 dBA with windows open for all building types and up to 20 dBA with windows closed for light frame buildings (wood framing).<sup>1</sup> For masonry building types with single glazed windows, exterior noise attenuation to interior spaces is up to 25 dBA. Therefore, with a mitigated exterior noise level of 61 dBA at 15 feet from the Project Site, likely interior noise levels during construction at the hospital and nearest residential use, considering both uses are of light frame building types, should be 41 dBA with windows closed, which would fall below 45 dBA Ldn/CNEL and be consistent with Title 24 and City of Culver City's interior noise standard for habitable spaces. These noise levels conservatively assume that the nearest habitable rooms at the adjacent receptors are located 15 feet from the project site. The southern façade of the hospital building is separated from the project site by an approximately 15-foot wide loading ramp. The southwestern portion of the hospital building façade does not contain any windows and may contain vertical circulation such as a stair well. Additionally, there are variations in the building façade that set patient rooms back from the project site, further decreasing interior noise levels attributable to the project. Therefore, interior noise levels at the hospital during Project construction would not exceed Title 24 and City of Culver City's interior noise standard for habitable spaces.

### **Comment 14**

Further, while the IS/MND identifies Mitigation Measures NOISE-1 through NOISE-4 to mitigate construction noise impacts on hospital and residential use, there is no substantial evidence to support the conclusion that these mitigation measures will be effective in reducing the potentially significant noise impacts of the Project. Of particular concern to the SCH-CC is the IS/MND's failure to analyze noise impacts on sensitive uses such as the adjacent Hospital and residences. The IS/MND does not assess the noise impacts on these sensitive uses after incorporation of the mitigation measures in order to determine the effectiveness of the mitigation measures to reduce the significance of construction noise impacts.

---

<sup>1</sup> Federal Highway Administration. Noise – Analysis and Abatement Guidance. Available at [https://www.fhwa.dot.gov/Environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/polguide02.cfm](https://www.fhwa.dot.gov/Environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/polguide02.cfm). Accessed August 2017

## **Response 14**

The commenter states that the MND does not assess noise impacts after incorporation of Mitigation Measures NOISE-1 through NOISE-4 to determine the effectiveness of the mitigation measures to reduce construction noise impacts.

As discussed on page B-72 of the MND, worst-case construction noise levels reaching the adjacent hospital and residential uses at 15 feet from the Project Site could reach 95 dBA  $L_{eq}$ . Mitigation Measure NOISE-1 requires that noise-generating equipment be equipped with noise control devices such as mufflers. According to the Federal Highway Administration (FHWA), use of adequate muffler systems can achieve reductions in noise levels of up to 10 dBA.<sup>2</sup> Mitigation Measure NOISE-1 has been modified to explicitly require that noise control devices be employed to achieve a noise level reduction of at least 10 dBA.

Mitigation Measure NOISE-2 requires that a construction relations officer serve as a liaison with surrounding residents and property owners to address concerns related to construction noise and vibration. Although this mitigation measure may not result in a measurable decrease in construction noise, continued communications with the neighbors would ensure that any complaints related to construction noise and vibration would be properly dealt with in a timely manner. Mitigation Measure NOISE-2 has been modified to require that the construction relations officer submit a weekly report to the Chief Building Official at the City summarizing any complaints received and steps taken to address those complaints.

Mitigation Measure NOISE-3 requires that the simultaneous operation of multiple pieces of equipment be avoided. The mitigation measure has been modified to specifically allow no more than one piece of noise-generating equipment at a time to operate within 15 feet of the adjacent hospital and residential use. Noise-generating equipment includes stationary and mobile equipment that generate noise by impact and/or by the running of an engine or motor. All other noise-generating equipment must be operated no closer than 120 feet of the adjacent hospital and residential uses. As shown in the calculations below (page 13), assuming that the loudest piece of equipment during each construction phase would be operating at 15 feet from sensitive receptors with other equipment operating at a distance of 120 feet from sensitive receptors, maximum hourly construction noise levels could reach 91 dBA  $L_{eq}$ , a 4 dBA reduction from the maximum unmitigated 95 dBA noise level. Furthermore, as discussed below, implementation of Mitigation Measures NOISE-1 through NOISE-4 and compliance with proposed Condition of Approval No. 61 will reduce construction noise to a less than significant level. It should also be noted as set forth in the MND, that construction noise would be temporary and would be carried out in compliance with the Culver City Municipal Code noise regulations.

The table below (page 14) summarizes the reductions achieved by Mitigation Measures NOISE-1 through NOISE-4, a total of reduction of 34 dBA. As shown, mitigated construction noise could reach 61 dBA and would not result in temporary increases of 5 dBA over the ambient daytime noise level of 58 dBA  $L_{eq}$ . Greater specificity has been added to the MND mitigation measures and the effectiveness of those measures have been discussed herein. Therefore, construction noise would be less than significant with mitigation incorporated.

---

<sup>2</sup> Federal Highway Administration. Special Report – Measurement, Prediction, and Mitigation: Chapter 4 Mitigation, [https://www.fhwa.dot.gov/Environment/noise/construction\\_noise/special\\_report/hcn04.cfm](https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm). Accessed August 2017.



**Project: 9735 Washington Boulevard****Construction Noise Impact on Sensitive Receptors****Mitigation Measure NOISE-3****Parameters**

Construction Hours:	8 Daytime hours (7 am to 7 pm)
	0 Evening hours (7 pm to 10 pm)
	0 Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3

**Calculation**

				<b>Sensitive Receptors</b>				
<b>Construction Phase Equipment Type</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance (ft)</b>	<b>Lmax</b>	<b>Leq</b>	<b>L10</b>	<b>Estimated Noise Shielding, dBA</b>
<b>Demolition</b>					<b>95</b>	<b>89</b>		
Concrete Industrial Saw	1	85	20%	15	95	88	91	0
Rubber Tired Dozer	1	82	40%	120	74	70	73	0
Tractor/Loader/Backhoe	1	80	25%	120	72	66	69	0
<b>Site Preparation</b>					<b>91</b>	<b>88</b>		
Excavator	1	81	40%	15	91	87	90	0
Tractor/Loader/Backhoe	1	80	25%	120	72	66	69	0
<b>Grading/Excavation</b>					<b>88</b>	<b>91</b>		
Air Compressor	1	78	50%	15	88	85	88	0
Tractor/Loader/Backhoe	3	80	25%	120	77	71	74	0
Drill Rig Truck	1	79	20%	120	71	64	67	0
Excavator	1	81	40%	120	73	69	72	0
Generator Sets	1	81	50%	120	73	70	73	0
Sweepers	1	82	10%	120	74	64	67	0
Boom Pump Trucks	1	81	20%	120	73	66	69	0
Welders	1	74	40%	120	66	62	65	0
<b>Drainage/Utilities/Sub</b>					<b>91</b>	<b>88</b>		
Excavator	1	81	40%	15	91	87	90	0
Tractor/Loader/Backhoe	2	80	25%	120	75	69	72	0
<b>Building Construction</b>					<b>88</b>	<b>91</b>		
Air Compressor	1	78	50%	15	88	85	88	0
Tractor/Loader/Backhoe	1	80	25%	120	72	66	69	0
Cement and Mortar Mixers	1	79	40%	120	71	67	70	0
Concrete Saw	1	90	20%	120	82	75	78	0
Cranes	1	81	40%	120	73	69	72	0
Dump/Haul Trucks	1	76	20%	120	68	61	64	0
Forklift	1	75	10%	120	67	57	60	0
Generator Sets	1	81	50%	120	73	70	73	0
Pumps	1	81	50%	120	73	70	73	0
Rough Terrain Forklift	1	78	10%	120	70	60	63	0
Aerial Lift	1	75	20%	120	67	60	63	0
<b>Arch Coating</b>					<b>88</b>	<b>82</b>		
Scissor Lift	2	75	20%	15	88	81	84	0
Zoom Boom	2	76	20%	120	71	64	67	0

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

<b>Mitigation Measure</b>	<b>Noise Level Reduction (dBA)</b>
NOISE-1	10
NOISE-2	--
NOISE-3	4
NOISE-4	20
<i>Total Reduction</i>	<i>34</i>
Unmitigated Construction Noise Level	95
<b>Mitigated Construction Noise Level</b>	<b>61</b>
Threshold (Ambient +5 dBA)	63
Exceeds Threshold?	No

Modifications to Mitigation Measures NOISE-1 and NOISE-3 are shown below. Text that has been added is underlined and text that has been removed is ~~stricken through~~.

**NOISE-1** Noise-generating equipment operated at the project site shall be equipped with the most effective noise control devices, (i.e., mufflers, lagging, and/or motor enclosures) achieving a minimum 10 dB reduction in equipment noise. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure.

**NOISE-3** Construction and demolition activities shall be scheduled so as to avoid operating more than one piece ~~several pieces~~ of motorized equipment simultaneously within 15 feet of the adjacent sensitive receptors. Should one piece of motorized equipment be operational within 15 feet an adjacent sensitive receptor, all other motorized equipment must be operated at a minimum of 120 feet from that receptor. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure.

Furthermore, the Staff Report to the Culver City Planning Commission includes the following proposed Condition of Approval:

61. Compliance with the following noise standards shall be required at all times; these noise standards are in addition to the noise standards listed in Mitigation Measures Noise-1 through Noise-5 included below:
  - A. No construction equipment shall be operated without an exhaust muffler, and all such equipment shall have mufflers and sound control devices (i.e., intake silencers and noise shrouds) that are no less effective than those provided on the original equipment;
  - B. All construction equipment shall be properly maintained to minimize noise emissions;
  - C. If any construction vehicles are serviced at a location onsite, the vehicle(s) shall be setback from any street and other property lines so as to maintain the greatest distance from the public right-of-way and from Noise Sensitive Receptors;
  - D. Noise impacts from stationary sources (i.e., mechanical equipment, ventilators, and air conditioning units) shall be minimized by proper selection of equipment and the installation of

acoustical shielding as approved by the Planning Manager and the Building Official in order to comply with the City's Noise Regulations and Standards as set forth in CCMC Chapter 9.07; and

- E. Stationary source equipment (i.e., compressors) shall be located so as to maintain the greatest distance from the public right-of-way and from Noise Sensitive Receptors.

Although not specifically denominated as mitigation measures, the standards contained in proposed condition no. 61 further support a conclusion that the Project will not have a significant noise impact.

### **Comment 15**

Moreover, none of these mitigation measures account for the particularities of constructing a project of this size directly adjacent to a 24-hour emergency care facility housing critically ill and injured patients. Mitigation Measure NOISE-1 proposes to limit construction activities to the hours of 8:00 PM and 8:00 AM Monday through Friday, 7:00 PM and 7:00 AM on Saturdays, and 7:00 PM and 10:00 AM on Sundays. However, since the SCH-CC treats patients 24 hours a day, 7 days a week, these time limitations will not mitigate noise impacts on the Hospital during permitted construction hours directly adjacent to where critical patients are being treated.

### **Response 15**

The commenter opines that limitations on construction hours to 8:00 PM and 8:00 AM Monday through Friday, 7:00 PM and 7:00 AM on Saturdays, and 7:00 PM and 10:00 AM on Sundays will not mitigate noise impacts on the Hospital (which operates 24 hours per day, 7 days per week).

Mitigation Measure NOISE-1 does not set limitations of construction hours. The commenter has referenced significance threshold NOISE-1, which states that the Project would result in potentially significant impacts if construction activities were to occur between the hours of 8:00 PM and 8:00 AM Monday through Friday, 7:00 PM and 7:00 AM on Saturdays, and 7:00 PM and 10:00 AM on Sundays, which is prohibited by Chapter 9.07 of the Culver City Municipal Code (CCMC). Significance threshold NOISE-1 will not be exceeded because the Project is subject to the provisions of Chapter 9.07 of the CCMC.

Furthermore, the Staff Report to the Culver City Planning Commission includes the following proposed Condition of Approval which would further limit construction activities:

- 59. Hours of construction shall be limited to the following: 8:00 AM to 7:00 PM Monday through Friday; 9:00 AM to 6:00 PM Saturday; no work shall be allowed on Sunday and National holidays. Dirt hauling and construction material deliveries or removal are prohibited during the morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak traffic periods. All construction workers shall be respectful of the surrounding neighborhood and keep non-construction related noise to a minimum prior to, during, and after permissible construction hours. Construction hours shall include any activity on the construction site or on City streets including any staging activities or any vehicle operation or any activity of any kind.

### **Comment 16**

Also, as noted, the Hospital and Project's extremely close proximity and shared use of Delmas Terrace make construction noise impacts particularly harmful to patients. For example, SCH-CC anticipates that significant noise impacts will result from construction trucks hauling soil and materials to the Project site idling in or near Delmas Terrace next to the ER facility and ICU. The IS/MND does not analyze or propose to mitigate these unique potential impacts.

### **Response 16**

The commenter states that the MND does not analyze or propose to mitigate impacts resulting from use of Delmas Terrace by construction haul trucks.

As discussed on page B-71 of the MND, dirt hauling or material deliveries would not be allowed between the hours of 7:00 A.M. and 9:00 A.M. or between the hours of 4:00 P.M. and 6:00 P.M. Therefore, it is assumed that hauling and deliveries would occur within a 7-hour period between 9:00 A.M. and 4:00 P.M. The proposed project is anticipated to require 40 haul trucks per day along the designated haul route (page B-74 of the MND), which includes Delmas Terrace on the outbound route. Assuming that 40 trucks would leave the site throughout the 7-hour period, approximately 6 trucks would drive past the adjacent hospital on Delmas Terrace per hour. As discussed under Response 11, no exiting queue extending on Delmas Terrace to the hospital site or other exiting truck idling at the hospital site is anticipated.

Hourly roadway noise levels generated by heavy-duty haul trucks traveling on Delmas Terrace were calculated using the California Department of Transportation (Caltrans) Technical Noise Supplement (TeNS) method.<sup>3</sup> The model calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions. The distance from the edge of the roadway to the inside side of the sidewalk is approximately 7 feet. Assuming that haul trucks would travel at speeds up to 25 miles per hour at 7 feet from the hospital property line, hourly noise levels would reach 61.7 dBA  $L_{eq}$  (see table on following page). The off-site construction noise level caused by haul trucks would not result in temporary increases of 5 dBA over the ambient daytime noise level of 58 dBA  $L_{eq}$ . Therefore, impacts related to haul trucks exiting the site and traveling north on Delmas Terrace would be less than significant.

### **Comment 17**

Finally, as the IS/MND acknowledges, the Hospital building could suffer structural damage impact as a result of the vibration impacts from the Project's construction activities. The IS/MND identifies a Mitigation Measure NOISE-5, which requires the developer to use low-impact construction technologies; avoid the use of heavy vibrating equipment, *where possible* (implicitly acknowledging that this will sometimes be impossible) and avoid driving piles where necessary to avoid structural damage.

---

<sup>3</sup> California Department of Transportation, Technical Noise Supplement (TeNS) to the Traffic Noise Analysis Protocol, September, 2013.

**TRAFFIC NOISE ANALYSIS TOOL**

Project Name: 9735 Washintgon Boulevard  
 Project Number: DPCRW01.EP  
 Analysis Scenario: Construction Traffic

Roadway Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)
			Auto	MT	HT	Auto	MT	HT	
Delmas Terrace	Hard	7	0	0	25	0	0	6	61.7

**Model Notes:**

According to IS/MND, project would add 40 haul trucks per day over a 7-hour period = 6 trucks per hour  
 The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).  
 The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.  
 Accuracy of the calculation is within  $\pm 0.1$  dB when comparing to TNM results.  
 Noise propagation greater than 50 feet is based on the following assumptions:  
     For hard ground, the propagation rate is 3 dB per doubling the distance.  
     For soft ground, the propagation rate is 4.5 dB per doubling the distance.  
 Vehicles are assumed to be on a long straight roadway with cruise speed.  
 Roadway grade is less than 1.5%.  
 CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

However, there is no substantial evidence to support the conclusion that this mitigation measure will be effective in reducing the potentially significant impact of structural damage and extreme vibrations. In addition to the proposed noise mitigation measures, the Project proponent should be required to implement a vibration, crack, and line and grade monitoring program at existing residential and the Hospital buildings located within 15 feet of construction activities and to provide a report to the City Chief Building Official regarding crack and vibration monitoring conducted during demolition and construction phase. Following additional evaluation of these issues, this additional may ensure that the proposed mitigation measure NOISE-5 is effective in minimizing structural damage to the existing buildings.

**Response 17**

The commenter states that Mitigation Measure NOISE-5, requiring that low-impact construction and the avoidance of heavy vibratory equipment “where possible” implies that this may sometimes be impossible and therefore does not provide substantial evidence to support that the mitigation measure would be effective in minimizing potential structural damage. Additionally, the commenter recommends that a vibration monitoring program be implemented/required.

As shown in Table B-18 on page B-79 of the MND, a large bulldozer would result in vibration levels of up to 0.089 in/sec at 25 feet from the construction equipment. As discussed on page B-80 of the MND, the use of a large bulldozer within 15 feet of the adjacent hospital and residential use would result in a vibration level of 0.19 in/sec PPV, which does not exceed the threshold for potential structural damage (0.2 in/sec PPV), but was determined to be potentially significant as a conservative analysis. A small bulldozer would result in vibration levels of up to 0.003 in/sec PPV at 25 feet and 0.006 in/sec PPV at 15 feet. See the table below for a comparison of vibration levels:

<b>Equipment</b>	<b>Large Bulldozer</b>	<b>Large Bulldozer</b>	<b>Small Bulldozer</b>
Reference Vibration Levels (in/sec PPV)	0.089	0.089	0.003
Reference Distance	25	25	25
Distance to Sensitive Receptor	15	20	15
Vibration Level at Sensitive Receptor (in/sec PPV)	0.19	0.12	0.006

Mitigation Measure NOISE-5 requires that low-impact construction technologies be used where possible and requires that the use of heavy vibrating equipment be avoided. Mitigation Measure NOISE-5 has been modified to prohibit the use of a large bulldozer closer than 20 feet to the adjacent hospital and residential uses. Instead, a small bulldozer shall be utilized at a minimum, within 20 feet of the adjacent receptors. Should the contractor choose to utilize a small bulldozer on the entire site and not utilize a large bulldozer at all, impacts related to structural damage from use of vibratory equipment would be reduced further.

In order to ensure that construction vibration would not exceed applicable thresholds, Mitigation Measure NOISE-5 has been modified to include vibration monitoring during construction activities.

Mitigation Measure NOISE-5 also requires that the use of driving piles be avoided. It should be noted that as stated on page B-77 of the MND, no pile driving or blasting will occur during construction of the site. Therefore, Mitigation Measure NOISE-5 has been modified to remove the unnecessary prohibition of driving piles and drill piles.

Modifications to Mitigation Measure NOISE-5 are shown below. Text that has been added is underlined and text that has been removed is ~~stricken through~~.

**NOISE-5** Contractors ~~shall~~ will phase in construction activity, use low-impact construction technologies, and avoid the use of heavy vibrating equipment ~~where possible~~ to reduce or avoid construction vibration impacts. A large bulldozer shall not be used closer than 20 feet of the Project Site boundary. In the event that a bulldozer is needed within 20 feet of the Project Site boundary, a small bulldozer shall be used. Especially, ~~contractors shall use smaller and lower impact construction technologies to avoid human annoyance to the adjacent buildings. Contractors shall avoid the use of driving piles and drill piles instead where necessary to avoid structural damage.~~

In order to ensure that construction vibration levels do not exceed applicable thresholds, the contractor shall install and maintain at least two continuously operational automated vibrational monitors with one on the adjacent hospital building and one on the adjacent residential building. The monitoring system must produce real-time specific alarms (via text message and/or email to on-site personnel) when velocities exceed predetermined levels. In the event of an alarm, feasible steps must be taken to reduce vibratory levels, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity shall be halted and the adjacent hospital and residential buildings inspected for damage. In the event damage occurs to due to construction vibration, repairs shall be arranged.

The construction contractor shall be responsible for implementing this measure during the construction phase. The Chief Building Official, or designated representative, shall conduct periodic site visits to ensure compliance with the requirements set forth in this measure. Vibration monitoring data shall be collected by the contractor and reported to the City Chief Building Office on a weekly basis.

### **Comment 18**

#### **D. Public Services.**

The public services analysis in the MND does not address the significant adverse impacts of the Project on, and the likelihood that it will lengthen, emergency response time for ambulances and the Fire Department to reach the Hospital's ER. It is particularly important that this impact be analyzed and adequately mitigated, if impacts are found to be significant, because as analyzed in detail above 1) the Project and Hospital are immediate neighbors, and both the ER entrance and proposed main entrance to the Project are on Delmas Terrace, a narrow 2-lane thoroughfare; and 2) as the Hospital is the only emergency service provider in the City, the speed of its emergency response time is of critical importance.

### **Response 18**

Refer to Responses 10-12, above. As discussed therein, traffic and emergency response time impacts will be less than significant. Also, the commenter is referred to pages B-82 to B-89 of the MND, which discuss impacts to public services, including Fire Department and Emergency medical response times. As discussed therein, with compliance to applicable CCFD requirements and implementation of the prescribed mitigation measure requiring approval of a Final Construction Traffic Management Plan, and due to the temporary nature of the necessary construction activities, construction impacts on fire protection and emergency medical services will be less than significant. Operational impacts regarding emergency-related public services were also determined to be less than significant, noting that the CCFD's response times will not be substantially changed such that response time objectives are compromised in any significant manner. Further, according to the CCFD, project implementation will not require the physical expansion of an existing fire station or a new fire station or require additional staffing to the fire protection facilities servicing the project site.

### **Comment 19**

The Project is not compatible with the surrounding neighborhood and uses, and will have a significant adverse effect on surrounding properties, including the Hospital. The scale, size and the intensity of this mixed use Project, in comparison to the existing relatively low-impact two-story bank building, makes it incompatible to the neighboring sensitive Hospital use and its patients because of the noise, traffic and pedestrian access issues created by the Project. As discussed above, the construction trucks for the Project may also affect the ability of the emergency vehicles to access the Hospital's Emergency Room during construction period. As such, the IS/MND does not fully disclose or evaluate the impacts of the Project regarding compatibility with neighboring uses, and fails to identify feasible measures to mitigate such impacts.

### **Response 19**

Aesthetics impacts are addressed on pages B-1 to B-6 of the MND. As discussed therein, aesthetics impacts regarding the size and scale of the project and compatibility relative to the surrounding vicinity would be less than significant.

Noise impacts are addressed on pages B-65 to B-81 of the MND. As discussed therein, noise impacts during construction and operation would be less than significant with implementation of the prescribed mitigation measures, as applicable. Refer also to Responses 13-17 above.

Traffic impacts are addressed on pages B-94 to B-112 of the MND. As discussed therein, traffic impacts would be less than significant. Refer also to Responses 10-12 above for further discussion of traffic impacts, including construction-related traffic impacts and emergency access. Pedestrian access is discussed in Response 11.

### **Comment 20**

#### **II. THE PROJECT ENTITLEMENTS ARE NOT SUPPORTED BY THE REQUIRED FINDINGS.**

As discussed above, the IS/MND for the Project is deficient and it fails to adequately address the Project's impacts on the neighboring Hospital use and is also incompatible with the surrounding uses. Therefore, the proposed Project entitlements (Site Plan Review, General Plan Amendment and Zone Change) are likewise deficient because the required findings of the Project's compliance with CEQA and compatibility with the surrounding uses cannot be made. Further, now that the Project's staff report is available, the SCH-CC intends to conduct a detailed review to determine that all required other findings in support of the Project entitlements are supported by substantial evidence in the record.

We request the City to prepare an EIR that adequately discusses the impacts discussed in this letter, identifies feasible measures to mitigate them to insignificance and addresses a reasonable range of Project alternatives, all as required by CEQA.

### **Response 20**

Refer to Responses 1-9 above. No significant deficiencies have been identified in the MND. The MND has sufficiently analyzed the Project in accordance with City and CEQA requirements and provides feasible mitigation for potentially significant impacts. Thus, an EIR is not required to meet CEQA requirements.

### **Conclusion**

Based on the above responses, the analyses included in the MND is supported by substantial evidence and no additional analysis is required per City and/or CEQA requirements. Thus, the impact conclusions in the MND remain unchanged. Revisions to the Mitigation Monitoring and Reporting Program will be made as stated above.

### **Attachments:**

- Comment Letter from Allen Matkins Attorneys at Law (on behalf of the Southern California Hospital or "SCH-CC"), dated August 21, 2017.
- Response to Comment Letter by Allen Matkins from Geotechnologies, dated September 18, 2017.



# Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP  
Attorneys at Law  
865 South Figueroa Street, Suite 2800 | Los Angeles, CA 90017-2543  
Telephone: 213.622.5555 | Facsimile: 213.620.8816  
www.allenmatkins.com

Fernando Villa  
E-mail: fvilla@allenmatkins.com  
Direct Dial: 213 955 5647 File Number: 374598-00001/LA1089442.04

## Via Email/U.S. Mail

August 21, 2017

City of Culver City & Culver City Planning  
Commission  
Planning Division  
9770 Culver Boulevard  
Culver City, CA 90232

### **Re: Comments to Clarett West "Brick and Machine" Project & Proposed Mitigated Negative Declaration**

Honorable Members of the Culver City Planning Commission:

This firm represents Prospect Medical Holdings, Inc. ("**Prospect**"), owner of the Southern California Hospital at Culver City ("**SCH-CC**" or "**Hospital**"), located at 3828 Delmas Terrace in the City of Culver City ("**Culver City**").

Since its opening in 1925, SCH-CC has dedicated itself to providing quality care to the residents of both Culver City and adjacent West Los Angeles communities. SCH-CC is a 420-bed general acute care facility that offers a wide range of inpatient and outpatient acute care services to residents, including an orthopedic center, cardiovascular services, acute rehabilitation, sub-acute care, psychiatric care and chemical dependency programs. Additionally, SCH-CC operates a 24-hour emergency services center, which serves as a paramedic receiving station and is staffed by board-certified emergency physicians and nurse specialists. Indeed, it is the only emergent care hospital in the geographic boundaries of Culver City.

We present below SCH-CC's concerns and objections regarding the adverse, significant environmental, health and safety impacts to the environment, including the Hospital, which will result from the mixed-use project proposed by Claret West Development, commonly referred to as the "Brick and Machine" project (the "**Project**"), for the property directly adjacent to and south of the Hospital at 9735 Washington Boulevard (the "**Property**"). As detailed below, SCH-CC objects to this Project on the basis that the proposed Initial Study and Mitigated Negative Declaration (the "**MND**") is legally inadequate, is not supported by substantial evidence, and neglects to consider significant impacts of the Project on SCH-CC.

The MND fails to identify a number of the Project's potentially significant environmental impacts, and fails to adequately address and/or propose appropriate mitigation measures for many of the impacts the MND does identify. Accordingly, the MND fails to comply with the requirements of the California Environmental Quality Act ("CEQA") and the guidelines enacted under CEQA ("**CEQA Guidelines**").<sup>1</sup> At a minimum the administrative record before the City has substantial evidence to support a fair argument that the Project may have a significant effect on the environment that has not been previously identified. Consequently, an Environmental Impact Report ("**EIR**") must be prepared to evaluate each such impact for its potentially significant effects, to discuss measures that feasibly mitigate such impacts to insignificance, and to describe a reasonable range of project alternatives that lessen the Project's environmental impacts.

California law provides that an EIR is required whenever substantial evidence supports a "fair argument" that significant impacts may occur.<sup>2</sup> The "fair argument" standard creates a "low threshold" for requiring preparation of an EIR.<sup>3</sup> As CEQA Guidelines Section 15064(f)(1) makes clear:

3

"If a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect."

Thus, even if substantial evidence would also support the opposite conclusion, an EIR is nevertheless required. Reliance by the City on a MND is a shortcut to CEQA's preference for the preparation of a full EIR where it may be fairly argued based on substantial evidence that significant impacts might occur in the construction or subsequent completion of a project. Indeed, there is a "strong presumption in favor of requiring EIRs."<sup>4</sup>

Further, there is a possibility that these significant impacts may not have available feasible measures to mitigate them to insignificance, in which case an EIR and supporting Statement of Overriding Considerations would be required for this additional reason. Finally, if

4

<sup>1</sup> Pub. Res. Code ("**PRC**") §§ 21000 *et seq.*; Cal. Code of Reg., Title 14, §§ 15000 *et seq.*

<sup>2</sup> *Laurel Heights Improvement Association v. Regents* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75.

<sup>3</sup> *No Oil*, 13 Cal.3d at 75.

<sup>4</sup> PRC § 21082.2(d); 14 Cal. Admin. Code § 15064(f)(1); *California Clean Energy Cttee. v. City of Woodland* (2014) 225 Cal.App.4th 173; *No Oil, Inc., supra*, 12 Cal.3d 68.

significant effects are identified for the Project, then, as noted, an evaluation of Project alternatives is warranted to reduce the Project's significant environmental impacts.<sup>5</sup> For these and other reasons detailed below, the MND is legally insufficient, and the Project requires preparation of an EIR.

4  
Cont.

The following discussion and objections are preliminary in nature, as SCH-CC has not had sufficient time or opportunity to retain experts who could assist in analyzing the MND's deficiencies discussed in this letter, and has not had access to the various studies on which the MND presumably rests. The SCH-CC only received notice of the upcoming Planning Commission hearing and a copy of the IS/MND and Traffic Study less than one week ago. At that time, neither the Staff Report nor many of the studies upon which the IS/MND relies (including but not limited to the noise and air quality analyses) were available on the City's website. As such, SCH-CC reserves the right and intends to further assess the MND's and the Project's sufficiency under CEQA, the CEQA Guidelines and other applicable law, and to augment the comments and objections raised in this letter.

5

## **I. THE MND FAILS TO COMPLY WITH CEQA.**

### **A. Geological & Soil; Seismic Safety.**

The proposed MND does not identify significant geological and soil impacts because it fails to evaluate several possible significant effects that the Project's excavation plan will have on the Hospital. For example, as proposed, the Project will require excavation and trenching around the existing Hospital building to construct the three-story subterranean parking garage and to install utility lines and related fixtures and support systems. This excavation work will be performed vertically and within unconsolidated sediments or artificial fill. If not undertaken with appropriate preventative and protective measures, slumping of material in the excavation walls and/or trenches could endanger workers and seriously undermine the structural integrity and safety of the Hospital by undercutting ground support for the foundations of the Hospital structures.

6

Further, installation of utilities or other subsurface construction in connection with the Project could require temporary dewatering activities which the MND likewise wholly fails to address. Even temporary dewatering could cause settlement, which could crack the foundations, walls, or floor slabs of the Hospital's existing buildings and other structures, given the Project's close proximity to the existing Hospital structures.

7

Finally, the MND lacks any evaluation of how the Project's excavation plan could impact the SCH-CC's ability to comply with strict State-mandated standards for seismic stability that apply uniquely to Hospitals and other healthcare facilities. As a facility regulated by the Office of Statewide Health Planning and Development ("OSHPD"), the Hospital is subject to very stringent geological standards

8

---

<sup>5</sup> PRC § 21002.

adopted pursuant to Senate Bill 1953 ("SB 1953"), codified at California Health & Safety Code sections 130000 through 130070.<sup>6</sup> Among other standards, the SB 1953 Program and related SPC-2 compliance measures require that acute and emergent care providers like the Hospital retrofit their facilities by July 1, 2019 such that they will not have more than a 1.20% probability of collapse in the event of an earthquake with a 10% chance of exceedance in 50 years ( $\pm$  475-year return period). Retrofit plans must be submitted to and approved by OSHPD's Seismic Compliance Unit of the Facilities Development Division. The Hospital's seismic engineers have analyzed the SCH-CC buildings and prepared a plan for the required retrofit.

Based upon our seismic engineer's preliminary analysis, there is a risk that the Project's proposed grading/excavation plan, if not carefully evaluated and strictly implemented, may interfere with the Hospital's ability meet and implement its current seismic retrofit plan. If not properly executed with limitations and considerations specific to the neighboring Hospital, implementation of the proposed grading plan has the potential to eliminate lateral and subjacent support that the Property currently provides to the Hospital, rendering the building less durable. If that were to occur, the Hospital would face an imminent risk of closure for an inability to meet the SB 1953 building collapse standards under the Hospital's current retrofit plan as a direct result of the Project's excavation plan.

8  
Cont.

These, and potentially other, significant geological impacts must be properly evaluated and feasible mitigation measures imposed to prevent permanent impacts – such as underpinning and stabilization of existing Hospital buildings prior to trenching or other construction activities, provision of permanent shoring such as tie-ins, and specific requirements for *strict* adherence to the Project's excavation plans. In the absence of specified parameters and additional site-specific seismic evaluation, the sole mitigation measure proposed in GEO-1 of the IS/MND is inadequate.

Such potential impacts unquestionably would "expose people or structures to potential substantial adverse effects, including loss, injury or death" from strong "seismic shaking", "seismic-related ground failure" and an "unstable soil" as a result of the Project. CEQA Guidelines, *Appendix G, Geology and Soils*. As such, these potential impacts must be evaluated and feasible mitigation sufficiently addressed. *Id.*

The Hospital has previously notified the developer in an effort to resolve this matter, but no resolution has been reached, as the developer has been so far unwilling to expand the MND's analysis or make changes to the excavation plan that would mitigate or eliminate these impacts.

9

---

<sup>6</sup> SB 1953 was an amendment to and furtherance of the Alfred E. Alquist Hospital Seismic Safety Act of 1983 (Alquist Act). The regulations developed as a result of this statute are deemed to be emergency regulations and became effective upon approval by the California Building Standards Commission and filing with the Secretary of State on March 18, 1998.

**B. Traffic.**

The traffic analysis in the MND is inadequate in scope and fails to impose *any* mitigation measures to mitigate the potentially significant traffic impacts of this Project on both the Hospital and the surrounding neighborhood. For example, nowhere in the Traffic Impact Report or supporting Scoping Memorandum of Understanding (the "TIR") is there an explanation of the traffic engineer's rationale for limiting the traffic impact analysis for a Project of this size and complexity to only seven intersections. This rationale must be explained, and the scope of this analysis expanded, in order to properly evaluate and mitigate the traffic impacts caused by expanding the existing uses on the Property to *ten times* their current size. Specifically, the Project proposes to redevelop the Property by replacing the existing 2-story 16,079 square foot building with a 7-story 163,477 square foot building, which is a much more intensive use of this site and will generate far more traffic trips as a consequence. Nevertheless, the traffic analysis in the IS/MND oddly and without any evidentiary support concludes that there would be *no* significant traffic impacts caused by the Project.

10

In addition, the TIR does not analyze the potentially significant impacts of both temporary construction and permanent project traffic on the SCH-CC emergent care facilities and emergency response times. As the MND acknowledges, the Project and the SCH-CC are immediate neighbors. Indeed, the Project's proposed primary entrance and a primary point of access to the Hospital's emergent care "Tower Building" are both on Delmas Terrace, a narrow 2-lane thoroughfare. Emergency vehicles regularly enter and exit the Tower Building by utilizing this street. Furthermore, a number of pedestrians regularly traverse across Delmas Terrace from the main non-emergent building to the emergent Tower Building – including physicians and staff responding to emergency "codes" as well as family members and friends of patients. Since neither the MND nor the TIR evaluate these impacts, the MND does not comply with CEQA.

11

Project traffic thus has the potential to significantly impede vehicular and pedestrian access to the SCH-CC's emergency facilities, thereby increasing emergency responsive times – especially during peak hours. This could be of particular concern during Project construction if, for example, trucks hauling soil or other materials to or from the Project site idle next to the emergency exits and impair the ability of ambulances to ferry patients to the ER. The IS/MND is therefore deficient as it fails to discuss and proposed appropriate mitigation measures for the Project's traffic and particularized emergency access impacts, both during construction and later operations.

Finally, neither the TIR nor the IS/MND discuss the traffic impacts of the Project on street segments. The TIR likewise does not provide any rational basis for the high number of trip reductions granted for internal linkages and pass-by traffic, or for why a 15% credit (rather than some lower percentage) for the Project's proximity to mass transit is justified. In the absence of a rationale for these traffic impacts analysis issues, there is at minimum a "fair argument" that the IS/MND's conclusion that the Project would not result in any significant traffic impacts is not supported by substantial evidence in the record.

12

C. Noise.

The Noise impacts discussion in the IS/MND is likewise inadequate. The IS/MND fails to analyze the noise impacts of the Project in a manner that accounts for sensitive receptors and/or that documents compliance with Culver City's Interior Noise Standards.

13

The IS/MND fails to analyze whether the noise generated by the Project would result in significant noise impacts by exceeding the interior noise standards for the Hospital and nearby residential uses, which are both subject to an interior noise standard of 45dBA(CNEL).<sup>7</sup>

Further, while the IS/MND identifies mitigation measures NOISE-1 through NOISE-4 to mitigate construction noise impacts on hospital and residential use, there is no substantial evidence to support the conclusion that these mitigation measures will be effective in reducing the potentially significant noise impacts of the Project.<sup>8</sup> Of particular concern to the SCH-CC is the IS/MND's failure to analyze noise impacts on sensitive uses such as the adjacent Hospital and residences. The IS/MND does not assess the noise impacts on these sensitive uses after incorporation of the mitigation measures in order to determine the effectiveness of the mitigation measures to reduce the significance of construction noise impacts.

14

Moreover, none of these mitigation measures account for the particularities of constructing a project of this size directly adjacent to a 24-hour emergency care facility housing critically ill and injured patients. Mitigation measure NOISE-1 proposes to limit construction activities to the hours of 8:00 PM and 8:00 AM Monday through Friday, 7:00 PM and 7:00 AM on Saturdays, and 7:00 PM and 10:00 AM on Sundays. However, since the SCH-CC treats patients 24 hours a day, 7 days a week, these time limitations will not mitigate noise impacts on the Hospital during permitted construction hours directly adjacent to where critical patients are being treated.

15

Also, as noted, the Hospital and Project's extremely close proximity and shared use of Delmas Terrace make construction noise impacts particularly harmful to patients. For example, SCH-CC anticipates that significant noise impacts will result from construction trucks hauling soil and materials to the Project site idling in or near Delmas Terrace, next to the ER facility and ICU. The IS/MND does not analyze or propose to mitigate these unique potential impacts.

16

Finally, as the IS/MND acknowledges, the Hospital building could suffer structural damage impact as a result of the vibration impacts from the Project's construction activities. The IS/MND identifies a mitigation measure NOISE-5, which requires the developer to use low-impact construction technologies; avoid the use of heavy vibrating equipment, *where possible* (implicitly acknowledging that this will sometimes be impossible); and avoid driving piles where necessary to avoid structural damage.

17

<sup>7</sup> City of Culver City Noise Element.

<sup>8</sup> PRC § 21100(b)(3); CEQA Guidelines § 15126.4.

However, there is no substantial evidence to support the conclusion that this mitigation measure will be effective in reducing the potentially significant impact of structural damage and extreme vibrations.<sup>9</sup> In addition to the proposed noise mitigation measures, the Project proponent should be required to implement a vibration, crack, and line and grade monitoring program at existing residential and the Hospital buildings located within 15 feet of construction activities and to provide a report to the City Chief Building Official regarding crack and vibration monitoring conducted during demolition and construction phase. Following additional evaluation of these issues, this additional may ensure that the proposed mitigation measure NOISE-5 is effective in minimizing structural damage to the existing buildings.

17  
Cont.

**D. Public Services.**

The public services analysis in the MND does not address the significant adverse impacts of the Project on, and the likelihood that it will lengthen, emergency response time for ambulances and the Fire Department to reach the Hospital's ER. It is particularly important that this impact be analyzed and adequately mitigated, if impacts are found to be significant, because as analyzed in detail above 1) the Project and Hospital are immediate neighbors, and both the ER entrance and proposed main entrance to the Project are on Delmas Terrace, a narrow 2-lane thoroughfare; and 2) as the Hospital is the only emergency service provider in the City, the speed of its emergency response time is of critical importance.

18

**E. Land Use & Planning**

The Project is not compatible with the surrounding neighborhood and uses, and will have a significant adverse effect on surrounding properties, including the Hospital. The scale, size and the intensity of this mixed use Project, in comparison to the existing relatively low-impact two-story bank building, makes it incompatible to the neighboring sensitive Hospital use and its patients because of the noise, traffic and pedestrian access issues created by the Project. As discussed above, the construction trucks for the Project may also affect the ability of the emergency vehicles to access the Hospital's Emergency Room during construction period. As such, the IS/MND does not fully disclose or evaluate the impacts of the Project regarding compatibility with neighboring uses, and fails to identify feasible measures to mitigate such impacts.

19

**II. THE PROJECT ENTITLEMENTS ARE NOT SUPPORTED BY THE REQUIRED FINDINGS.**

As discussed above, the IS/MND for the Project is deficient and it fails to adequately address the Project's impacts on the neighboring Hospital use and is also incompatible with the surrounding uses. Therefore, the proposed Project entitlements (Site Plan Review, General Plan Amendment and Zone Change) are likewise deficient because the required findings of the Project's compliance with CEQA

20

<sup>9</sup> PRC § 21100(b)(3); CEQA Guidelines § 15126.4.

Allen Matkins Leck Gamble Mallory & Natsis LLP  
Attorneys at Law

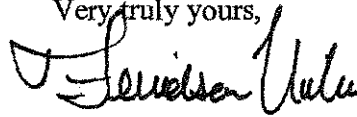
City of Culver City & Culver City Planning Commission  
August 21, 2017

Page 8

and compatibility with the surrounding uses cannot be made. Further, now that the Project's staff report is available, the SCH-CC intends to conduct a detailed review to determine that all required other findings in support of the Project entitlements are supported by substantial evidence in the record.

We request the City to prepare an EIR that adequately discusses the impacts discussed in this letter, identifies feasible measures to mitigate them to insignificance and addresses a reasonable range of Project alternatives, all as required by CEQA.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Fernando Villa", written over the typed name.

Fernando Villa

20  
Cont.





# Geotechnologies, Inc.

Consulting Geotechnical Engineers

439 Western Avenue  
Glendale, California 91201-2837  
818.240.9600 • Fax 818.240.9675

September 18, 2017  
File Number 20995

DLJ Real Estate Capital Partners  
Development, LLC  
1901 Avenue of the Stars  
14th Floor, Suite 1465  
Los Angeles, California 90067

Attention: Michael Namba

**Subject:** Response to Comment Letter by Allen Matkins  
Proposed Mixed-Use Development  
9735 West Washington Boulevard, Culver City, California

**References:** *Report by Geotechnologies, Inc.:*  
Geotechnical Engineering Investigation, dated July 20, 2015.

*Correspondence from Allen Matkins:*  
Comments to Claret West "Brick and Machine" Project & Proposed Mitigated  
Negative Declaration, dated August 21, 2017.

Dear Mr. Namba:

This firm is in receipt of the referenced letter by the law firm Allen Matkins, dated August 21, 2017. The letter was prepared on behalf of Southern California Hospital at Culver City, owner of the property adjacent to the subject site. The letter presents concerns and objections by the Southern California Hospital regarding the proposed development.

This firm is familiar with the geologic conditions of the site having performed the referenced Geotechnical Engineering Investigation dated July 20, 2015. The investigation included a review of published geotechnical-related documents, drilling and sampling three borings on the site, in-house laboratory testing of the soil samples, and preparation of the report.

The August 21 letter lists items covered under to the California Environmental Quality Act (CEQA) for which the project allegedly fails to evaluate. Under the heading "Geological & Soils: Seismic Safety" four comments are listed; two of which this firm is in the position to address. The comments are not numbered in the referenced letter, but are numbered and cited by location for greater clarification. A copy of the letter has been enclosed for reference.

**Comment:** Page 3, 3<sup>rd</sup> Paragraph, 6<sup>th</sup> Line  
*If not undertaken with appropriate preventative and protective measures, slumping of material in the excavation walls and/or trenches could endanger workers and seriously undermine the structural integrity and safety of the Hospital by undercutting ground support for the foundations of the Hospital structures.*



**Response:** Geotechnologies, Inc. has provided geotechnical engineering recommendations and on-site inspection services for over 45 years. The objective of each project is to provide geotechnical recommendations within guidelines allowed by the applicable building code. As an independent check prior to the commencement of site work, the Building and Safety Division of the Culver City Community Development Department will perform a review of the findings and recommendations for compliance to the California Building Code and the Culver City Building Code.

The proposed excavation will be supported with temporary shoring during construction. When complete, the finished structure will provide permanent support for the Hospital. Prior to the initiation of construction, Geotechnologies, will also review the work of the shoring engineer and the structural engineer for compliance with the recommendations provided in the Geotechnical Engineering Investigation, effectively closing the design loop.

The professional opinions and geotechnical advice contained in the report are sought because of special skill in engineering and geology and were prepared in accordance with generally accepted geotechnical engineering practice. Geotechnologies, Inc. has a duty to exercise the ordinary skill and competence of members of the engineering profession.

**Comment:** Page 3, 4<sup>th</sup> Paragraph, 1<sup>st</sup> line  
*Further, the installation of utilities or other subsurface construction in connection with the Project could require temporary dewatering activities which the MND likewise wholly fails to address. Even temporary dewatering could cause settlement, which could crack the foundations, walls, or floor slab of the Hospitals existing buildings and other structures, given the Project's close proximity to the existing Hospital structures.*

**Response:** The existing ground surface is near elevation 99 feet above mean sea level (msl) and the proposed structure's lowest finish floor elevation will be at elevation 66 feet above msl. The subgrade will be cut to approximately elevation 65 feet and bottom of the footings are anticipated to be cut to elevation 61 feet above msl. Sand and silty sand that is dense to very dense will be exposed at the subgrade and in the footings. The borings drilled by this firm in 2015 identified water at elevation 56½ feet above msl at its highest.

Water is anticipated to be 4½ feet below the bottom of the footing excavations and approximately 8½ feet below the subgrade elevation. Due to the dense consistency of the exposed soils distance between the water and the bottom of the excavation, dewatering for the proposed structure is not anticipated.

However, in the event dewatering is necessary, the water will be drawn down near to elevation to 56 feet above msl. The soils with in the zone that may be dewater



September 18, 2017

File No. 20995

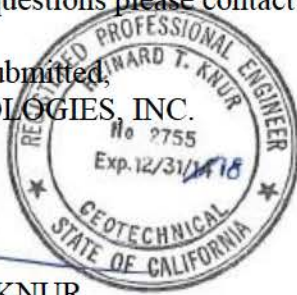
Page 3

(above elevation 56 feet) are dense and stiff as indicated on the consolidation graphs shown in the referenced report. In addition, the return of the water level from a higher elevation back to 56 feet will not cause settlement of the soils since dewatering settlement occurs during the first dewatering cycle (naturally occurring or man-induced) that the soil has been drained.

Geotechnologies, Inc. appreciates the opportunity to provide our services on this project. Should you have any questions please contact this office.

Respectfully submitted,

GEOTECHNOLOGIES, INC.



REINARD T. KNUR

G.E. 2755

RTK:ae

Enclosure: Letter from Allen Matkins, dated August 21, 2017

Distribution: (3) Addressee

E-Mail to: [Michael.Namba@clarettwest.com], Attn: Michael Namba



**Geotechnologies, Inc.**

439 Western Avenue, Glendale, California 91201-2837

www.geoteq.com

Tel: 818.240.9600 Fax: 818.240.9675



WI #17-093

February 7, 2018

Laura Doerges  
Vice President  
Clarett West Development  
1901 Avenue of the Stars, Suite 1465  
Los Angeles, CA 9067

Subject: Vibration study of planned construction for future mixed-use development at 9735  
Washington Boulevard or "Brick-Machine", Culver City, California

Dear Ms. Doerges,

I have completed a vibration study of the planned construction for the future mixed-use development at 9735 Washington Boulevard, also known as Brick-Machine (Project), in Culver City, California. An Initial Study/Mitigated Negative Declaration (IS/MND or MND) was prepared by the City of Culver City (City) for the Project. The original vibration study conducted for the MND assumed a minimum distance of 15 feet from the north property line of the Project to the structure of the Brotman Medical Center of the Southern California Hospital (SCH-CC), based upon the above ground structure of the SCH-CC. However, the underground structure of the SCH-CC approaches less than 1 foot from the property line. This report addresses potential construction vibration impacts on the underground structure of the SCH-CC closest to the Project and addresses public comments requesting documentation on the effectiveness of mitigation proposed in the MND to prevent structural damage to the SCH-CC related to Project construction.

### **Project Description**

Figure 1 is a satellite image of the Project vicinity. The SCH-CC includes a sub-grade, basement level that extends nearly to the property line shared with the Project. The Project includes three levels of sub-grade parking. A temporary shoring system is to be installed adjacent to the property line to temporarily support below grade soil pressures as the soil is excavated and until the Project below grade foundation walls and structure are constructed to permanently support the loads. A section view of the proposed shoring system is provided in Figure 2.

The proposed temporary shoring system consists of lagging, soldier beams, rakers, and raker footings. The soldier beams will be pre-drilled and encased in slurry concrete. The primary source of potential vibration during the shoring process will be the auger used to pre-drill the soldier beams.



Figure 3 is a partial floor plan of the BMC basement level. The closest vibration sensitive areas are Cardiac Procedures, Immuno-Hematology, and Stat-Lab, located approximately 55 feet from the property line shared with the Project.

### Thresholds of Significance

The thresholds of significance for vibration impact stated in the MND are as follows:

NOISE-3: Potential Building Damage – Project construction cause ground-borne vibration levels to exceed 0.2 in/sec PPV at the nearest residential buildings.

NOISE-4: Potential Human Perception – Project construction cause ground-borne vibration levels to exceed 0.035 in/sec PPV at the nearest residential buildings.

NOISE-3 was derived from criteria intended to avoid cosmetic damage to wood-framed buildings, such as cracking of plaster or wallboards. There is no criterion specific to hospitals with respect to potential building damage. To be conservative, the same criteria was applied to address vibration in the SCH-CC.

The criterion in NOISE-4 represents the lower limit at which vibration will be barely perceptible to people of normal sensitivity. Less than 0.035 in/sec PPV, vibration will be imperceptible.

### Mitigation Measure

The MND identified Mitigation Measure NOISE-5 to mitigate vibration impacts. The measure has since been modified to address public comments to the MND. The modified mitigation measure is quoted below.

NOISE-5: Contractors shall phase in construction activity, use low-impact construction technologies, and avoid the use of heavy vibrating equipment to reduce or avoid construction vibration impacts. A large bulldozer shall not be used closer than 20 feet of the Project Site boundary. In the event that a bulldozer is needed within 20 feet of the Project Boundary, a small bulldozer shall be used.

In order to ensure that construction vibration levels do not exceed applicable thresholds, the contractor shall install and maintain at least two continuously operational automated vibrational monitors with one on the adjacent hospital building and one on the adjacent residential building. The monitoring system must produce real-time specific alarms (via text message and/or email to on-site personnel) when velocities exceed predetermined levels, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity shall be halted and the adjacent hospital and residential buildings inspected for damage. In the event damage occurs due to construction vibration, repairs shall be arranged.

### Vibration Estimates

Estimates of the vibration were based on the methodology described in the California Department of Transportation “Transportation and Construction-Induced Vibration Guidance Manual”. The Peak Particle Velocity (PPV) at distance  $D$  from a vibration source is estimated by the following formula:

$$PPV_{Equipment} = PPV_{Ref}(D_{ref}/D)^n \text{ (in/sec)}$$

where:

$PPV_{Ref}$  = reference PPV

$D_{ref}$  = reference distance in feet (25 feet except when noted)

$D$  = distance from equipment to the receiver in feet

$n = 1.1$ , a value related to the attenuation rate through the ground

The two most significant sources of potential vibration impact are an excavator and augering associated with the temporary shoring along the north property line.

### **Excavator**

The United States Federal Transit Administration (FTA) guidance manual *Transit Noise and Vibration Impact Assessment, May 2006* was used as a source of reference vibration levels generated by construction equipment. The FTA manual does not list a reference value for an excavator but it does list a reference value of 0.089 in/sec PPV at a distance of 25 feet for a large bulldozer, which was used as a conservative estimate of vibration generated by an excavator. Referring to the shoring section shown in Figure 2, the closest that a bulldozer/excavator will approach the property line is approximately 3 feet, after the shoring has been installed. Based on the above information, the maximum expected vibration generated by a large bulldozer/excavator is 0.92 in/sec PPV at the property line, which would exceed the significance threshold of 0.2 in/sec PPV for potential building damage.

Mitigation Measure NOISE-5 states that a large bulldozer will not be operated within 20 feet of the Project Boundary (i.e. property line). The expected vibration at the property line from a large bulldozer/excavator 20 feet away is 0.11 in/sec PPV, which is less than the significance threshold of 0.2 in/sec PPV for potential building damage, but greater than the significance threshold of 0.035 in/sec PPV for potential human perception. However, with the equipment 20 feet from the property line, the closest vibration sensitive area is 75 feet away from the equipment. Therefore, the maximum expected vibration from a large bulldozer/excavator within the closest vibration sensitive area is 0.027 in/sec PPV, which is less than the threshold of 0.035 in/sec PPV for potential human perception.

Mitigation Measure NOISE-5 also states that a small bulldozer is to be used when needed within 20 feet of the property line. The FTA manual lists a reference value of 0.003 in/sec PPV at a distance of 25 feet for a small bulldozer. As stated above, the closest that a bulldozer/excavator will approach the property line is 3 feet. Therefore, the maximum expected vibration at the property line from a small bulldozer/excavator is 0.031 in/sec PPV, which is below the significance thresholds for building damage and for human perception.

### **Shoring/Augering**

Vibration data collected by Wilson Ihrig during a previous project indicates a reference level of 0.007 in/sec PPV at 40 feet from a soil auger. The centerlines of the augered holes for shoring will be

approximately 2 feet from the property line. Therefore, the maximum expected vibration at the property line during augering the holes for shoring is 0.19 in/sec PPV, which is below the significance threshold for building damage, but exceeds the significance threshold for human perception. However, the closest vibration sensitive area will be 57 feet away, where the maximum expected vibration from augering is 0.005 in/sec PPV, which is less than the 0.035 in/sec PPV threshold for potential human perception.

## Conclusions

- Implemented properly, Mitigation Measure NOISE-5 will mitigate Project vibration impact for potential building damage.
- Mitigation Measure NOISE-5 will mitigate Project vibration impact for potential human perception within the vibration sensitive areas of the SCH-CC.
- It is recommended that the 20 foot distance from the project boundary stated in Mitigation Measure NOISE-5 for large bulldozers remain unchanged. However, it may be possible to operate large equipment at the property boundary (or close to it) without exceeding the significance threshold for potential building damage (or for potential human perception with the vibration sensitive areas) when the depth of the excavation is 20 feet or more below the bottom depth of the foundation of the SCH-CC structure.
- Vibration amplitude in the SCH-CC during shoring installation will depend upon proximity to the auger bit. Therefore, it is recommended that vibration within the SCH-CC be monitored at the location closest to the auger bit until it can be confirmed that the vibration threshold for potential structural damage will not be exceeded, and that structural damage will not occur due to augering.

Please feel free to contact me with any questions on this information.

Very truly yours,

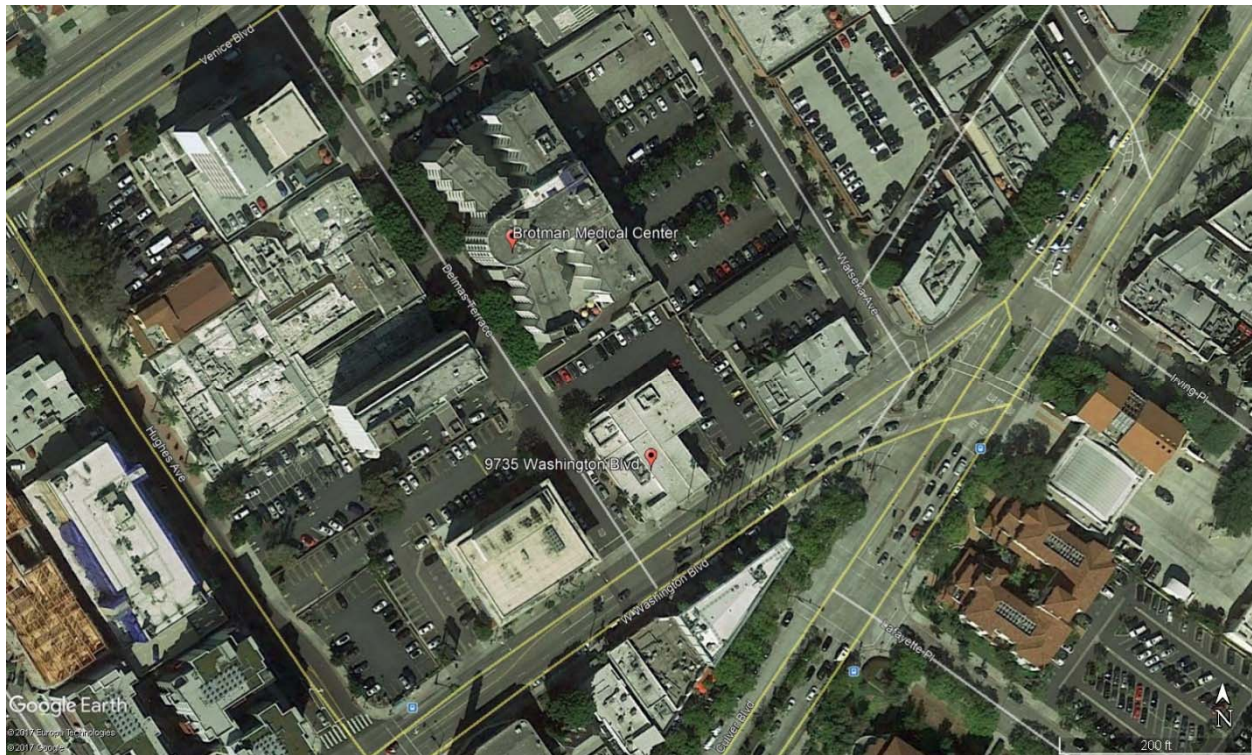
WILSON IHRIG



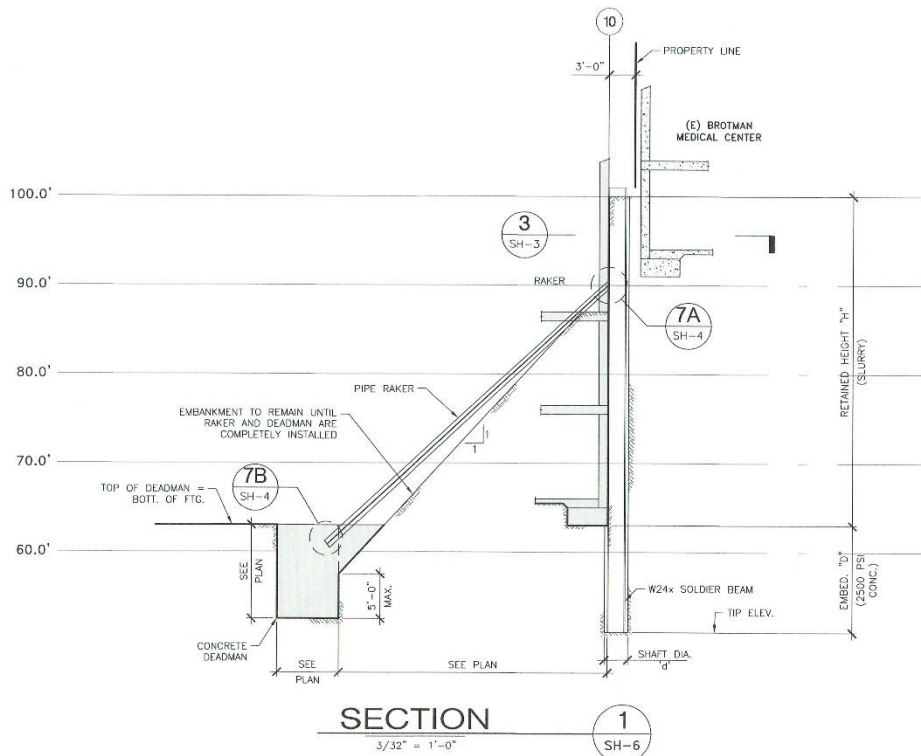
James E. Phillips, MS, FASA

Principal

9735washblvd\_shoring-vib-study-report\_2018-02-07.docx



**Figure 1: Vicinity of the proposed mixed-use project at 9735 Washington Boulevard**



**Figure 2: Section of the proposed shoring**







WILSON IHRIG  
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA  
WASHINGTON  
NEW YORK

WI #17-093

February 9, 2018

Laura Doerges  
Vice President  
Clarett West Development  
1901 Avenue of the Stars, Suite 1465  
Los Angeles, CA 9067

Subject: Groundborne noise study of planned construction for future mixed-use development at  
9735 Washington Boulevard or "Brick-Machine", Culver City, California

Dear Ms. Doerges,

At the request of Michael Namba in your office, I have completed estimates of groundborne noise levels from the planned construction for the future mixed-use development at 9735 Washington Boulevard, also known as Brick-Machine (Project). The primary concern is whether groundborne noise will be audible within the noise and vibration sensitive areas within the basement area of the Brotman Medical Center of the Southern California Hospital (SCH-CC) due to sound radiated from vibration in the floors/walls/ceilings generated by construction activities. The estimates are based upon vibration data Wilson Ihrig has obtained from previous projects, section and plan drawings of the Project, a basement level plan drawing of the SHC-CC, the Project soils report, and Wilson Ihrig experience with similar projects.

### Project Description

Figure 1 is a satellite image of the Project vicinity. The SHC-CC includes a sub-grade, basement level that extends nearly to the property line shared with the Project. The Project includes three levels of sub-grade parking. A temporary shoring system is to be installed adjacent to the property line to temporarily support below grade soil pressures until the Project below grade foundation walls and structure are constructed to permanently support the loads. A section view of the proposed shoring system is provided in Figure 2.

The proposed temporary shoring system consists of lagging, soldier beams, rakers, and raker footings. The soldier beams will be pre-drilled and encased in slurry concrete. The primary source of potential vibration during the shoring process will be the auger used to pre-dill the soldier beams.

Figure 3 is a partial floor plan of the SHC-CC basement level. The closest vibration sensitive areas are Cardiac Procedures, Immuno-Hematology, and Stat-Lab, located approximately 55 feet from the property line shared with the Project.

## Vibration Estimates

Estimates of the vibration within the SCH-CC were based on the methodology described in the California Department of Transportation "Transportation and Construction-Induced Vibration Guidance Manual". The Peak Particle Velocity (PPV) at distance  $D$  from a vibration source is estimated by the following formula:

$$PPV_{Equipment} = PPV_{Ref}(25/D)^n \text{ (in/sec)}$$

where:

$$PPV_{Ref} = \text{reference PPV at 25 ft}$$

$$D = \text{distance from equipment to the receiver in feet}$$

$$n = \text{a value related to the attenuation rate through the ground}$$

For estimating root mean square (rms) vibration velocity values expressed in decibels (VdB re 1 micro-inch/second), the following formula was used:

$$VdB_{Equipment} = VdB_{Ref} + 20n \times \log_{10}(25/D) \text{ (VdB re 1 micro-in/s)}$$

The two most significant sources of potential vibration are an excavator and augering associated with the temporary shoring along the north property line. Reference 1/3 octave band rms vibration velocity levels from a large excavator in motion and during augering in soil and were measured by Wilson Ihrig during similar projects and are indicated in Figure 4.

Noise mitigation for the project includes banning the use of a large bulldozer within 20 feet of the property line between the Project and the SCH-CC. A large excavator can generate similar levels of vibration as a large bulldozer. Therefore, the closest a large excavator will be to vibration sensitive areas within the SCH-CC is 75 feet. The closest distance between the center of the auger and vibration sensitive areas within the SCH-CC is 56.5 feet.

Figures 5 and 6 indicate the estimated maximum vibration velocity levels within the SCH-CC at the closest vibration sensitive area (Immuno-hematology) due to a large excavator and augering, respectively. A range of vibration is indicated in each plot to account for uncertainty by assuming a value of 1.1 and 1.3 for  $n$  in the above formula and adding 3 dB to the higher levels.

Sufficient levels of vibration within a building can be perceived as ground-borne noise, without being felt by the occupants. A-weighted sound pressure levels within the SHC-CC can be approximated by the A-weighted vibration velocity levels when expressed in decibels relative to 1 micro-inch/second, as displayed on the right-hand side of Figures 5 and 6.

Based on the estimated vibration levels described above, **the maximum ground-borne noise from a large excavator is estimated to be 32 to 38 dBA within the sensitive areas of the SCH-CC.** Conversations between people held at a normal effort of speaking generate 60-65 dBA at the listener's ears. Background noise within a building such as the SCH-CC typically ranges from 25 to

45 dBA. Therefore, noise from a large excavator is expected to be comparable to background noise within the SCH-CC and will not be disruptive to conversation within the sensitive areas of the SCH-CC.

**The maximum ground-borne noise from augering for the temporary shoring is estimated to be 11 to 16 dBA within the sensitive areas of the SCH-CC.** The above levels are less than the expected levels of background noise, which will mask groundborne noise from augering. Therefore, augering will not be audible within the sensitive areas of the SCH-CC.

Please feel free to contact me with any questions on this information.

Very truly yours,

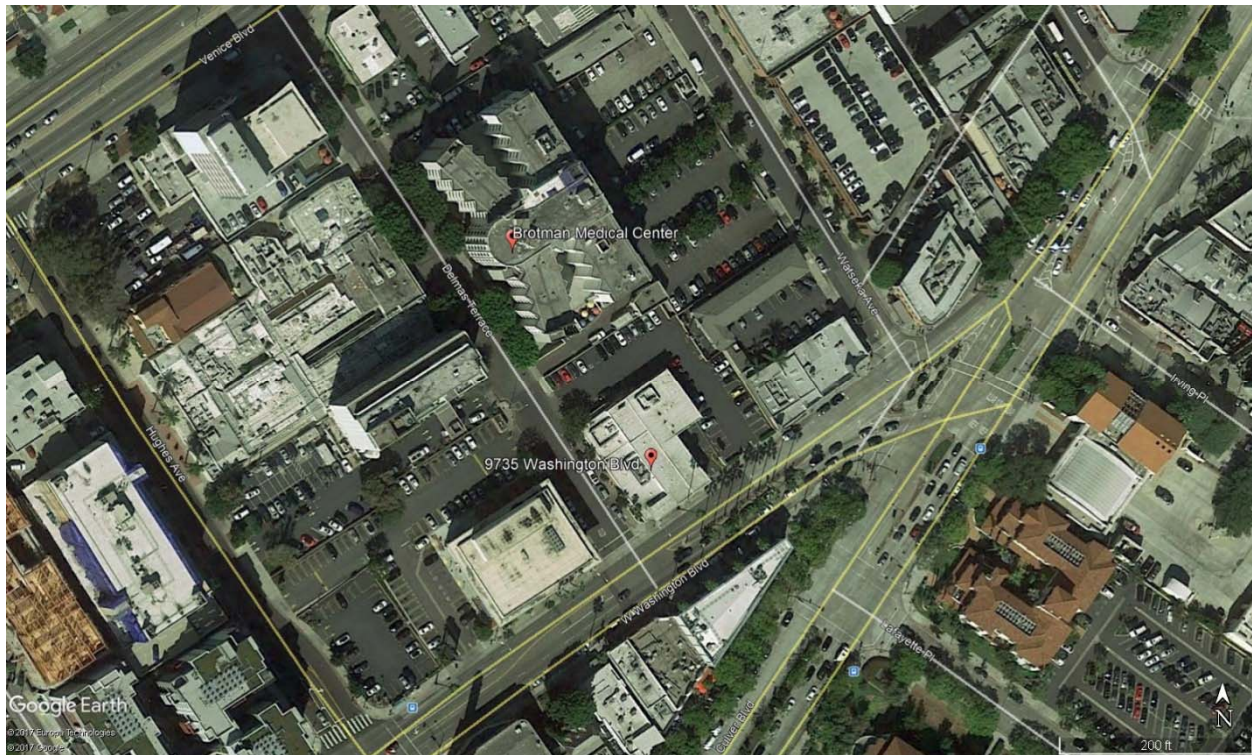
WILSON IHRIG



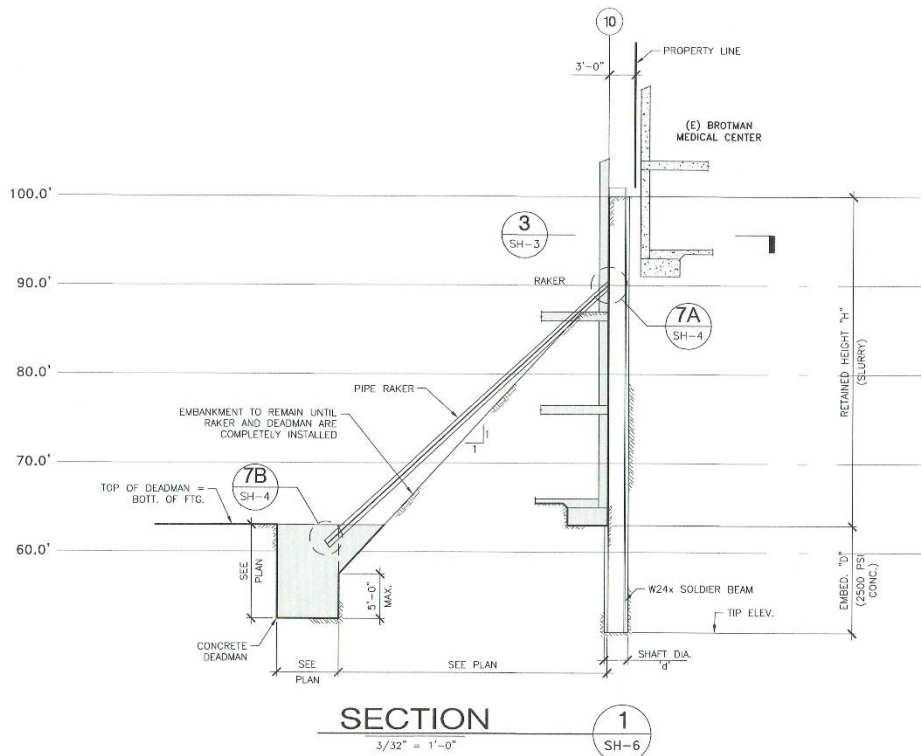
James E. Phillips, MS, FASA

Principal

9735washblvd\_construction-groundborne-noise-study-report\_2018-02-09.docx

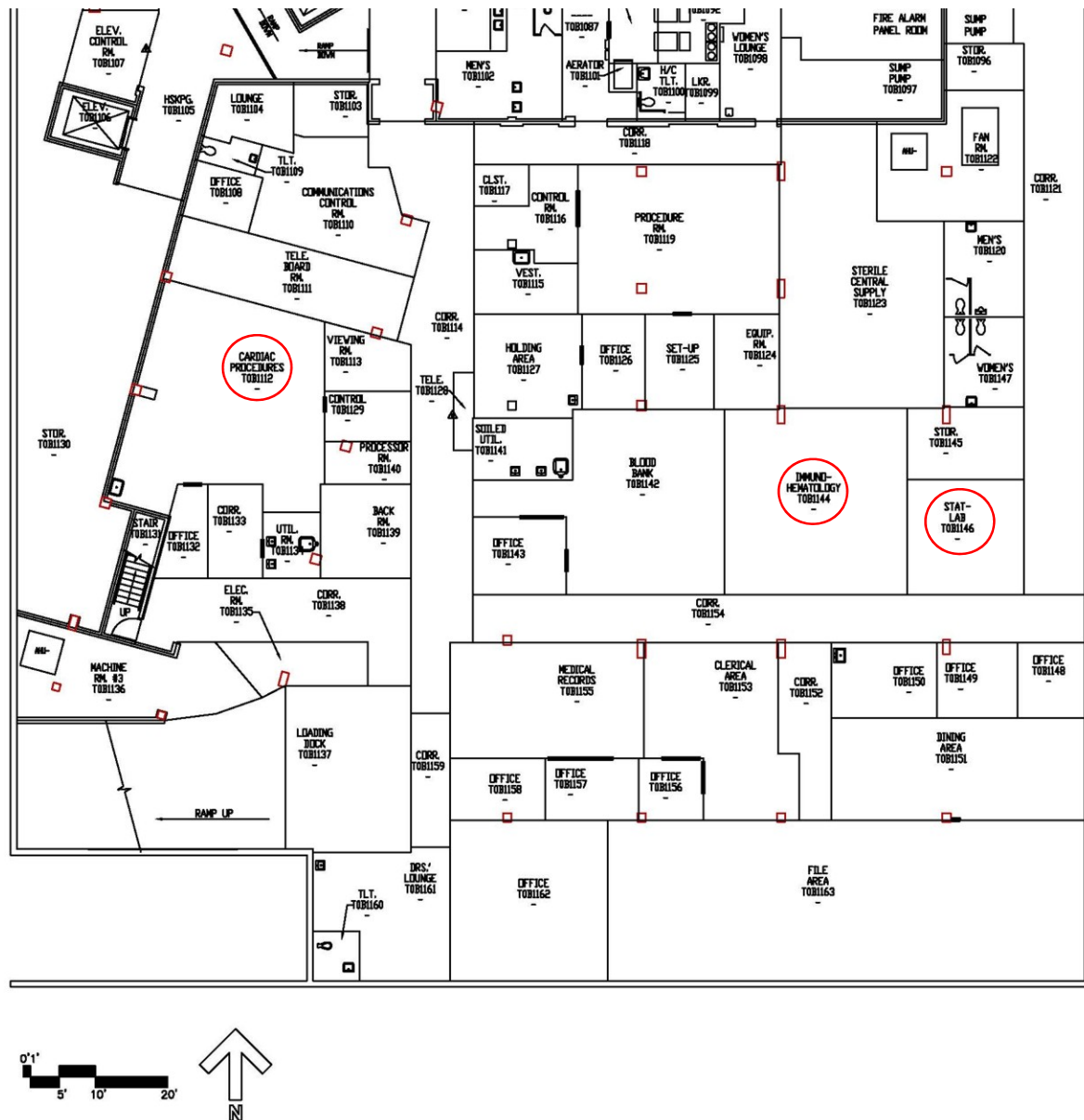


**Figure 1: Vicinity of the proposed mixed-use project at 9735 Washington Boulevard**

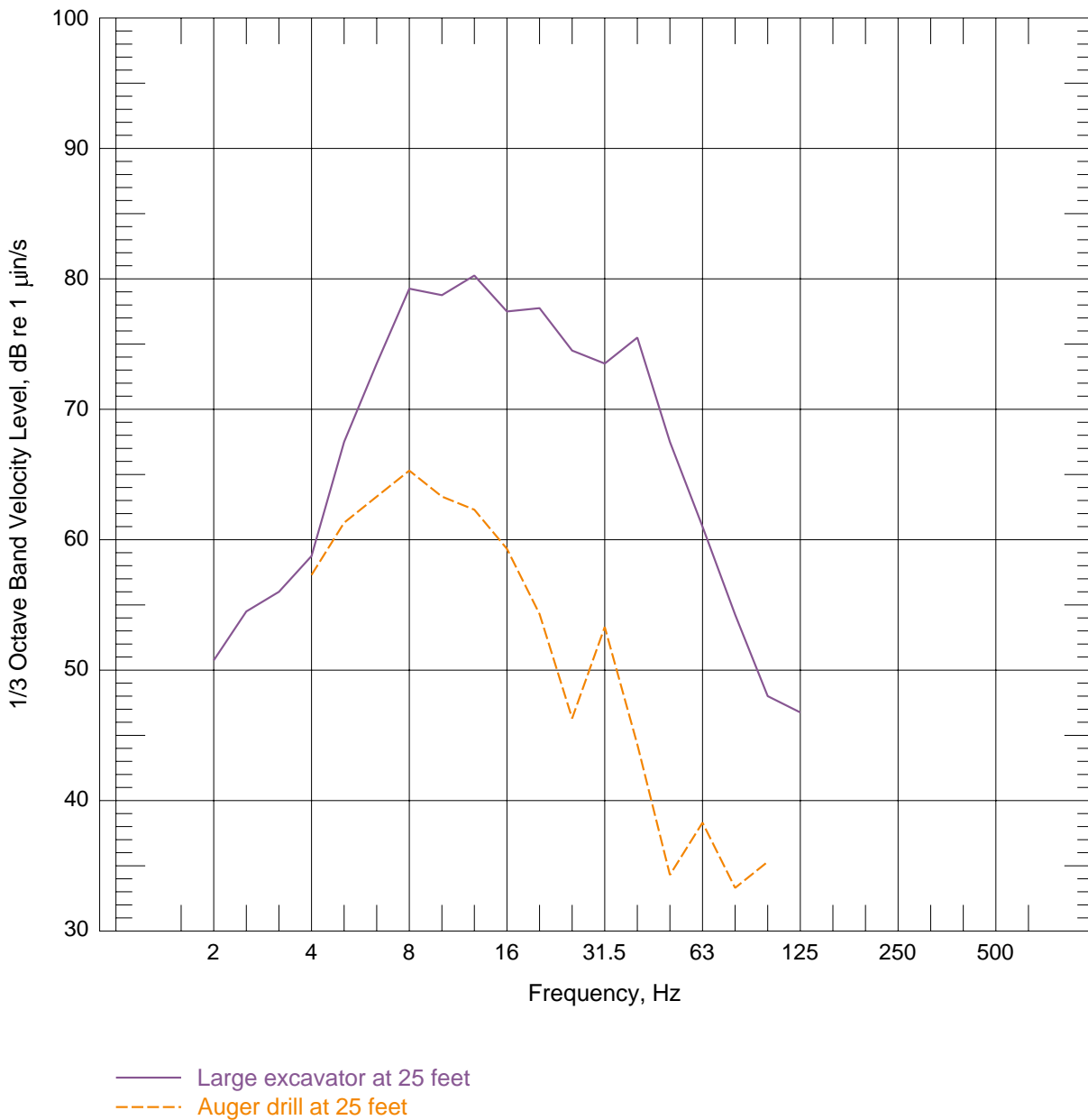


**Figure 2: Section of the proposed shoring**

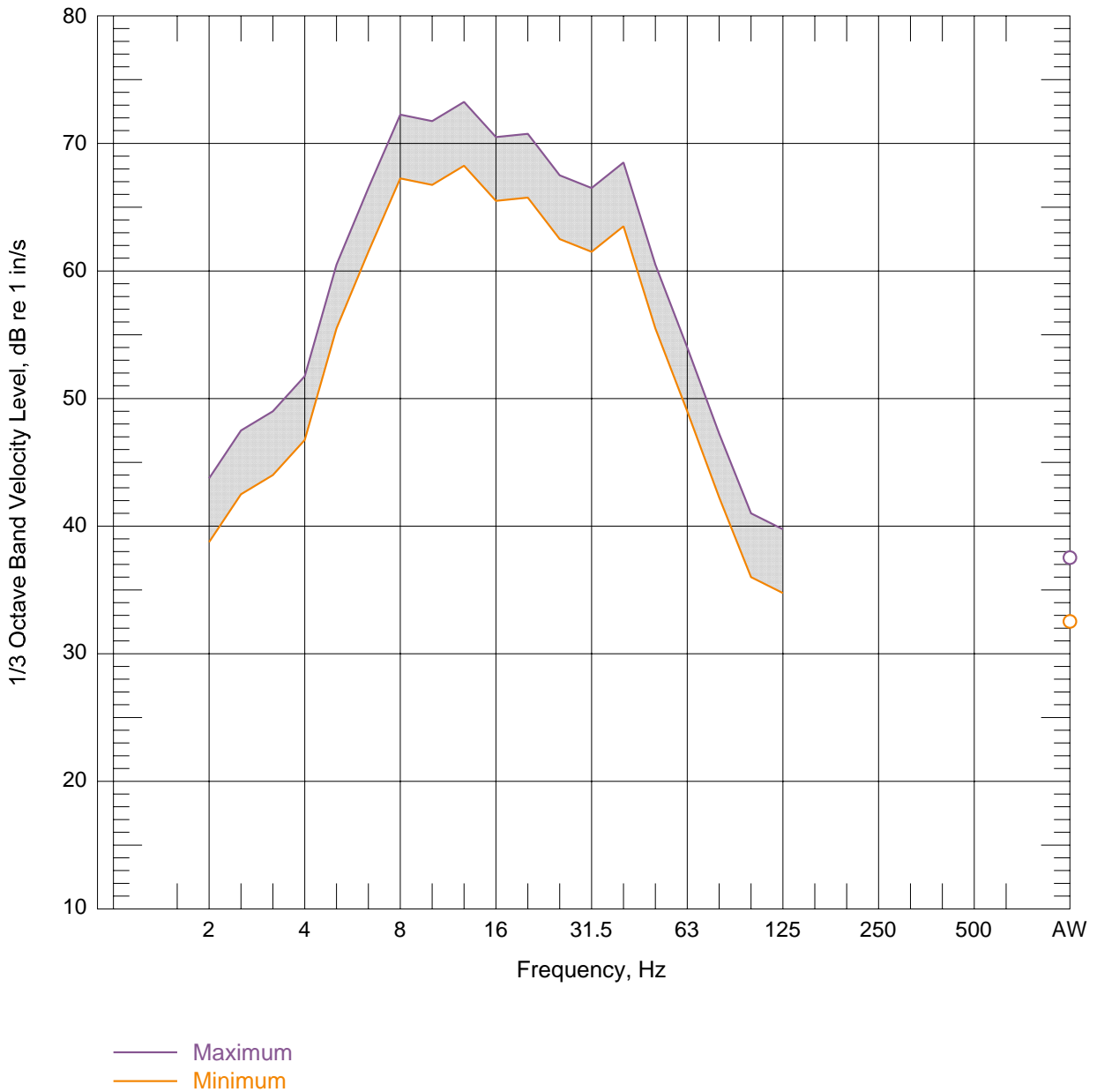




**Figure 3: Partial Basement Plan for the Brotman Medical Center**

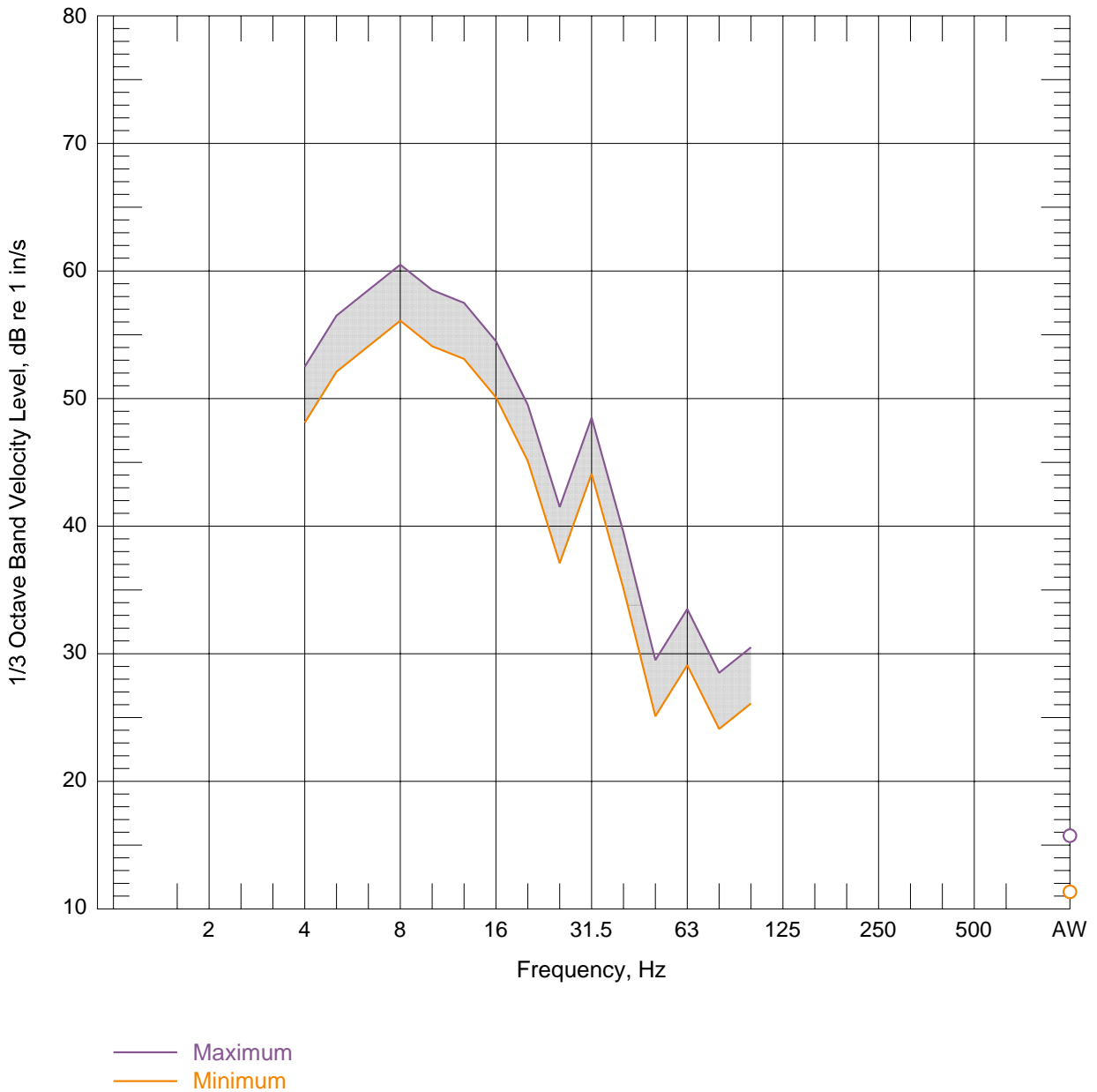


**Figure 4: Reference 1/3 octave band vibration velocity levels at 25 feet from a large excavator and a soil auger.**



**Figure 5: Estimated range of maximum 1/3 octave band vibration velocity levels in vibration sensitive rooms due to a large excavator, 75 feet away (20 feet from the property line).**





**Figure 6: Estimated range of maximum 1/3 octave band vibration velocity levels in vibration sensitive rooms due to augering, 56.5 feet from auger center.**