

# ATTACHMENT F

22 June 2021

Steve Montgomery  
Vice President of Development and Entitlements  
Erickson Living Properties  
701 Maiden Choice Lane  
Catonsville, Maryland 21228

ATTN Phil Isaja  
Vice President & General Manager  
Soltesz  
2 Research Place, Suite 100  
Rockville, Maryland 20850

Reference: ELP Bethesda at Rock Spring – Phase 1A  
Phase I & II Noise Analyses Proposal  
**Proposal No. ELP2001.02**

Dear Mr. Montgomery:

Thank you for contacting Phoenix Noise & Vibration. We are pleased to offer a scope of services to conduct an analysis of transportation noise impact upon ELP Bethesda at Rock Spring - Phase 1A, which consists of two proposed attached multifamily buildings and an outdoor activity area, as well as an existing parking garage, located in Montgomery County, Maryland. These services will include:

- Computerized noise model revisions.
- Noise impact determination.
- If necessary, indoor and outdoor mitigation design.

Since 2004, Phoenix Noise & Vibration has provided engineering services to various builders, developers, architects, engineers, and researchers for numerous properties throughout the Mid-Atlantic, Southeast, and Midwest. We have over 60 years of combined experience in the measurement and analysis of transportation noise and mitigation design for indoor and outdoor noise impact. Our staff includes degreed engineers and a professional engineer licensed in Maryland and Virginia and board-certified by the Institute of Noise Control Engineers (INCE).

*Acoustical Engineering Solutions.*



Phoenix Noise & Vibration, LLC  
5216 Chairmans Court, Suite 107  
Frederick, Maryland 21703  
301.846.4227 (phone)  
301.846.4355 (fax)  
www.phoenixnv.com

## **1 PHASE I NOISE ANALYSIS (COMPUTERIZED NOISE MODELING REVISIONS)**

Since the completion of the Phase I Noise Analysis completed by Phoenix Noise & Vibration for the entire proposed ELP Bethesda at Rock Spring development, the site plan has been modified. Phase 1A of the site, which will consist of two attached multifamily buildings, an outdoor activity area, and an existing parking garage, requires an updated analysis. The computer model developed in the original analysis will be updated to reflect the new proposed layout of Phase 1A. The remaining phases will also be modeled as currently planned and the future noise impact with and without the presence of these other phases will be presented.

The updated future model will calculate the noise impact upon the proposed multifamily buildings and outdoor activity areas in Phase 1A. The future model will simulate future site conditions and account for the effect of existing surrounding topography and buildings, as well as future site topography and the future multifamily buildings, on roadway noise propagation throughout the site. The future model will indicate which, if any, outdoor activity areas and residential units will be exposed to noise levels above 65 dBA Ldn.

A Phase I Noise Analysis report will be completed for Phase 1A, documenting the future noise impact upon Phase 1A of ELP Bethesda at Rock Spring.

## **2 PHASE II NOISE ANALYSIS – MITIGATION DESIGN (IF NECESSARY)**

A Phase II Noise Analysis uses the future model and noise impact determined in the Phase I Noise Analysis (and includes any updates to the future site plan) to develop final indoor and outdoor mitigation designs. A Phase II Noise Analysis is only required if the results of the Phase I Noise Analysis indicate noise impact greater than 65 dBA Ldn upon the future site.

### **2.1 Outdoor Mitigation**

Outdoor mitigation designs (noise barrier locations and heights) will be finalized for all impacted outdoor activity areas (e.g. rooftop amenity, outdoor activity areas, etc.). If requested, recommendations for barrier materials and manufacturers will also be provided.

### **2.2 Indoor Mitigation (Building Shell Analysis)**

When a residential structure is impacted by transportation noise levels which exceed a governing threshold (65 dBA Ldn), further analysis (a “building shell analysis”) is required to determine if proposed building structures will be capable of reducing exterior noise levels to an acceptable indoor level. A building shell analysis calculates a room’s indoor noise level based upon its exterior noise level, the STC ratings<sup>1</sup> of its various building components, the amount of exterior wall exposed to the noise, and the size and finish of the room. An accurate building shell analysis can only be completed once architectural plans for each residential building are well developed (typically during the Design Development phase of design).

If proposed building elements (windows, walls, doors) are incapable of reducing exterior noise impact to the 45 dBA Ldn limit, STC ratings will be adjusted incrementally until the standard is

---

<sup>1</sup> The STC (Sound Transmission Class) rating is a single number representing a building element’s (wall, window, door, etc.) ability to prevent noise transmission from one side of the element to the other. The higher the STC rating, the greater the noise reduction.

met. STC rating requirements will be calculated individually for each impacted residential unit on a floor-by-floor, elevation-by-elevation basis, and presented using the building elevations from the architectural drawing set. This analysis must be completed for each residential building exposed to noise levels greater than 65 dBA Ldn.

### 3 FEES & TERMS

Fees for the above scope of services are presented in Table 1.

**Table 1: Phase I & II Noise Analyses fees for ELP Bethesda at Rock Spring – Phase 1A.**

Service [Tracking Number] .....	Fee
<b>1. Phase I Noise Analysis (Computerized Noise Modeling Revisions) [ELP2001.02.01] .....</b> <ul style="list-style-type: none"> <li>• Computerized noise modeling revisions. <b>See Note 1.</b></li> <li>• Noise impact determination upon the future buildings and throughout the future site.</li> </ul>	<b>\$2,360.00</b>
<b>2. Phase II Noise Analysis – Mitigation Design (See Note 3) [ELP2001.02.02] .....</b> <ul style="list-style-type: none"> <li>• Mitigation design to reduce noise impact upon any outdoor activity areas.</li> <li>• Evaluation of proposed building construction and specification of building construction requirements to achieve indoor noise level limit.</li> <li>• Building construction requirements will be presented on a floor-by-floor, elevation-by-elevation basis for each impacted living unit. This evaluation must be completed for each residential building exposed to noise levels above 65 dBA Ldn.</li> </ul>	<b>TBD</b>

**Table 1 Notes:**

1. Only one future site plan (topography, building layout, etc.) will be evaluated (and computer modeled). If additional site plans are submitted for analysis, either before or after submission of the Phase I Noise Analysis, fees for the evaluation of each additional site plan and any updates to the original Phase I Noise Analysis report will be billed at the hourly rates shown in Section 4 – Additional Work.
2. The Phase II Noise Analysis is only necessary if the future site will be exposed to transportation noise levels above 65 dBA Ldn. The fee for the Phase II Noise Analysis can only be determined once the extent of noise impact throughout the site is known, the future site plan is finalized, and architectural plans are well developed for each building exposed to noise levels greater than 65 dBA Ldn.

Any data measured or collected by Phoenix Noise & Vibration remains the sole property of Phoenix Noise & Vibration to be used as necessary for this project or for any other reason.

Payment terms are net 30 days. If payment in full is not received within 30 calendar days of the invoice date, invoice(s) shall bear interest at 1.5% of the past due amount per month calculated from the invoice date. Any fees incurred by Phoenix Noise & Vibration (collection fees, attorney fees, etc.) which are needed to collect on payment will be billed to Erickson Living Properties.

This proposal is valid for a period of 90 days after the date of this proposal. If you are in agreement with this proposed scope of services, please indicate so by signature on the next page.

#### 4 ADDITIONAL WORK

Work beyond the scope of this proposal, including any meetings and expert testimony, will be carried out on an hourly basis using the following rate schedule:

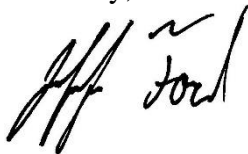
Principal Engineer.....	\$250/hour
Senior Engineer.....	\$200/hour
Engineer .....	\$165/hour
Associate Engineer.....	\$135/hour
Field/Office Technician .....	\$85/hour
CAD Technician .....	\$90/hour
Administrative Services .....	\$65/hour
Expert Witness .....	\$330/hour
PE Certification.....	\$295/stamp

Other incidental expenses will be invoiced as necessary, including but not limited to, travel, lodging, parking, large document printing, additional report copies, faxes, and phone calls.

Please note that hourly rates are valid for twelve (12) months. Rates are reviewed on an annual basis. At the end of the twelve month period following signing of this contract agreement, hourly rates will be adjusted to match the current year’s rates. This is only applicable to projects lasting more than twelve months.

We look forward to continuing our working relationship with you and Erickson Living Properties through this project. If you have any questions, please contact me directly.

Sincerely,



Jeff Ford  
Engineer

**ELP Bethesda at Rock Spring – Phase 1A  
Phase I & II Noise Analyses Proposal**

---

**Steve Montgomery**

---

**Date**