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Prologis  
6250 N. River Rd., Ste. 1100  
Rosemont, IL 60018

September 5, 2025

Attn: Ms. Katie Fraser

Re: Yorkville Project Steel Sound Measurements

Dear Ms. Fraser:

The purpose of this letter is to provide a response to the recent Soundscape Engineering comments.

### **Introduction**

Prologis is developing a data center in Yorkville, Illinois, which will be about 540 acres on two parcels generally between Eldamain Rd., Galena Rd., a relocated Beecher Rd., and Corneils Rd. Most or all of the properties are located in unincorporated Kendall Co. and will be annexed into Yorkville.

The site will be adjacent to residential properties in every direction. Several residences will be located close to mechanical equipment or data center buildings and the equipment has the potential to generate high noise levels at the residences.

Shiner Acoustics took background sound measurements in June, 2025 and modeled the proposed equipment, as documented in reports prepared in July and August, 2025. Soundscape Engineering, as Yorkville's acoustical consultant, reviewed these two reports and provided comments in an August 26, 2025 letter.

### **Response to Soundscape Engineering Comments**

1. Comment: The computer model included generators and chillers, but did not include substation transformers, RTUs, AHUs, fans, cooling towers, or any other potential project noise sources. These must be included in the final model.

Response: The final model will include substation transformers, rooftop units (RTUs), and other noise sources.

2. Comment: The study notes that chiller third-octave band data was reviewed to ensure no prominent discrete tones. In the final noise study, this analysis is required to be conducted based upon actual measured sound levels for the selected chillers. It is likely that the manufacturer will need to conduct new sound level measurements prior to permitting in order to provide sound levels that are not empirically derived. Tonality should be assessed based on these measurements and at the planned operating speeds.

Response: We concur.

3. Comment: The report does not state how many generators were considered to be operating at one time and where they are located. In addition, the generators are shown in Table 4 to be 85 dBA at a distance of 23 feet, but the contours in Figures 1-3 show sound levels of no more than 70 dBA inside the generator enclosures. Also, there is no contour

discontinuity at the enclosure edge that we would expect to see with a sound barrier. Verify that the generator noise was included in the 3D model and indicate where they were located and how many were assumed to be operating at once.

Response: Generators are located as shown on the drawings, and have the dimensions shown on the drawings. Generator operation time was modeled as follows: In one month, there is a maximum of 130 hours in which the 43 generators per building can be exercised. This equates to 21.5 hours total exercising time per month, since each generator is exercised for 30 minutes. Therefore, the generators are exercising for a fraction (16.5%) of the total time allotted. The preceding figures were used to determine the operating time per day per generator and to adjust the sound level logarithmically.

Sound barriers are included and modeled correctly but sound level contour discontinuities may not be shown due to the large sound level grid spacing necessary with a project of this size. Fig. 1 below shows contours with finer grid spacing and correctly shows the discontinuities.

4. Comment: At a recent city council meeting, the mayor requested Project Cardinal to provide neighborhood sound levels for the case when all generators are operating simultaneously. The city may also wish for Project Steel to provide this analysis.

Response: Table 1 presents predicted sound levels under a blackout scenario, with all generators and all chillers operating. Also presented are the sound levels under normal operation with mitigation to meet the Yorkville code.

5. Comment: Describe barrier heights in relation to height of equipment. We would typically not expect walls that are the same height as the source to be sufficiently effective. The final study will need to provide source heights, wall heights, and wall footprints. The necessary barrier heights will need to be demonstrated through the use of the computer modeling.

Response: Barrier heights are the same as those for the mechanical equipment that they surround. This is due to the risk of air recirculation with barriers that are higher than the equipment. All barriers are sufficiently high to break the line of sight between the source and receiver and provide an acoustical benefit. The requested data will be included in the final report.

6. Comment: The barrier description allows a few inches gap between the roof and the bottom of the sound walls. The final study will need to demonstrate that such a gap does not limit barrier effectiveness.

Response: Gaps between the roof and bottom of sound walls are commonly requested by: a) structural engineers to reduce loads due to drifting snow, b) barrier vendors and contractors for constructability and practicality, and c) roof vendors to maintain the warranty and allow for future repairs. The gaps are expected to reduce barrier insertion loss slightly when compared to an ideal barrier. We will address the gaps and their impact in the final study.

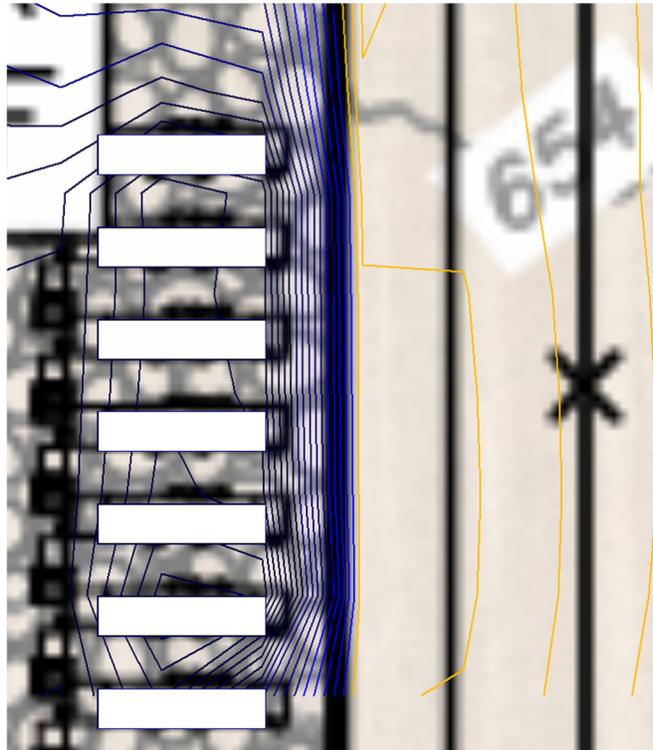
7. Comment: In addition to considering compliance with Yorkville's noise ordinance, Project Steel also considered compliance with Title 35 from Illinois Pollution Control Board (IPCB). However, the results for the mitigated case show one to six decibel exceedances in the 1 kHz and 2 kHz octave bands. If this information is included in the report, it is recommended that further mitigation strategies be investigated to allow full compliance with IPCB standards.

Response: While there are slight exceedances in the predictions, in the final study we can investigate additional mitigation to meet the Illinois code.

Table 1. Predicted Sound Levels, with Yorkville Mitigation

Receiver	Jurisdiction	Sound Pressure Level (dB re 20 µPa), A-weighted		
		Day (chillers, generators)	Night (chillers)	Blackout (chillers, all generators)
Yorkville noise code	n/a	60	50	n/a
Illinois noise code	n/a	55	44	n/a
R1: 1410 E. Beecher Rd.	Illinois	52	52	65
R2: 10907 Corneils Rd.	Illinois	50	49	62
R3: Caledonia	Yorkville	41	41	53
R4: 10825 Corneils Rd.	Yorkville	49	49	60
R5: 2013 Beecher Rd.	Illinois	50	50	62
R6: 1414 Eldamain Rd.	Yorkville	50	50	60
R7: 1314 Eldamain Rd.	Illinois	50	50	60
R8: 790 Eldamain Rd.	Illinois	51	51	66
R9: 11843 Galena Rd.	Illinois	49	49	60
R10: 11018 Galena Rd.	Illinois	47	46	57
R11: 10724 Galena Rd.	Illinois	44	44	56

Fig. 1 Detail at Generator Sound Barrier with Finer Grid Spacing



Prologis

September 5, 2025

If you have questions concerning this report, please do not hesitate to contact us.

Respectfully submitted,  
Shiner Acoustics, LLC

A handwritten signature in cursive script that reads "Cameron Baillie". The signature is written in black ink and is positioned above a thin horizontal line.

Cameron Baillie, P.Eng.