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**To:** Village of Montebello – Anthony Caridi, Chairman, Planning Board

**From:** Danna Cuneo, Partner

**Date:** July 17, 2025

**Subject: 100 & 300 Rella Blvd Warehouse - Response to Comments**

In response to both Board Member and public comments at the July 8, 2025 meeting, additional information is being provided for clarification on the Sound Impact Review analysis last dated April 14, 2025.

## Ambient Noise Measurements:

Measurements for the previously provided ambient analysis occurred between September 2020 and March 2025. Measurements covered varied climate/meteorological conditions. A list of measurement dates is provided below:

September 17, 2020
May 25, 2021
July 13-14, 2021
January 19, 2022
March 11, 2025

The measurement locations are shown on the site plans presented as figures in the various reports. The measurement reports can be found in the Appendix of the report.

Meteorological conditions can influence sound transmission. For example, sound waves can travel further in colder temperatures and faster in warmer air. Humid conditions can also increase the speed of sound while also affecting attenuation. A waterbody will influence sound levels propagating from a site. In calm water conditions, sound can carry over long distances skimming the surface of the water. Sound waves refract downwards towards regions of lower sound speed and cooler air. In rough conditions, sound will be scattered and reflected randomly and will have no influence on the amplitude of sound. Conservative measures have been implemented in the study to account for potential variation of sound levels due to meteorological conditions.

## Traffic Noise:

Sound levels associated with vehicular traffic are a function mainly of traffic speed, vehicle mix (automobiles, medium trucks, heavy trucks) and volume. Posted vehicle traffic speeds will not be affected by the Proposed Action. Vehicle mixes are also anticipated to be very similar to the existing condition following construction at the Site. Therefore, any changes in traffic related sound will be a function of the change in volume (i.e., number) of vehicles. A doubling of traffic volume (assuming speeds and vehicle mixes do not change) equates to an increase in sound of 3 dB(A). The New York State Department of Environmental Conservation (NYSDEC) published "Assessing and Mitigating Noise Impacts" (October 6, 2000 and revised February 2, 2001) to provide guidance and policy on existing and proposed sound levels. This document states that sound level increases of 0 to 5 dB(A) are unnoticed to tolerable.

It should be further noted that several site plan versions (several years), prior to the current submission, the entry/egress driveways to the facility were combined and moved to the far western side of the proposed facility's bounds. This feature will place the vast majority of the future facility traffic on the western end of Rella Boulevard such that few, if any, automobiles would even pass in front of the Sentinel facility. Thus, the increased sound levels resulting from facility-generated traffic will be limited to this same, small portion of Rella Boulevard and the site itself.

Pursuant to the New York State Department of Transportation Traffic Data Viewer, North Airmont Road from Montebello Vl to Montebello Rd (one way south of the Rella Boulevard entrance) had an annual, estimated average daily traffic (AADT) over 18,000 vehicles including trucks in 2024. According to the April 14, 2025 Colliers Engineer and Design traffic memorandum the "current development plan is anticipated to generate similar traffic (a total of 71 vehicle trips during the AM Peak Hour and a total of 75 vehicle trips during the PM Peak Hour) to the modified development plan and second approval." Thus, a doubling of traffic volume will not occur as a result of the project, and so there will be less than a 3 dB(A) increase, if at all.

## Noise Modeling:

NoiseTools© modeling of the revised Project was undertaken to reflect predicted project levels; including nighttime levels with limited to 2 axle, box-type trucks utilizing the project site. The results were provided in the attached, updated report dated April 2025. As provided in the analysis, NoiseTools© computer modeling is based on International Organization for Standardization (ISO) standards (i.e., ISO96-13-2:2024), which is used world-wide in sound/noise analysis.

The modeler defines the properties of the objects to be analyzed:
- building locations and heights,
- receivers' locations, and height,
- the sound power or Leq emission level for traffic and types8 on roads,
- the sound power or emission level for "industrial sources" (e.g., HVAC, etc.),

• mitigation wall heights and finishes.

NoiseTools© environmental settings are based on average values of ambient weather and are set to 20 degrees (C) and 70 percent humidity with ground factor as 1 (soft ground).

The above inputs allow the calculation, superimposition, reflection, and compilation of different noise sources at the receivers and a comparison to the existing, ambient levels.

In this case, both line and point sources were added to the model to estimate project sound levels. Point sources included rooftop HVAC equipment and the placement of back up beepers in the loading docks. Line sources were utilized to represent the movement of traffic throughout the site. Note, no truck traffic will travel north of the proposed warehouse buildings. This lane is for emergency purposes only and will be gated-off from regular use. Source decibel level is A-weighted to closely represent the loudness perceived by the human ear. Input decibels are based on published predicted noise levels from sources such as Traffic Noise Model (TNM) and the U.S. Department of Transportation (DOT). Frequency for each source is set at 500 hertz which falls within the midrange of human hearing and accounts for the somewhat increased base components found in truck vs. car traffic.

Proposed sound walls/barriers are set to 4.6 meters (15 feet) with a reflection coefficient of 0.9 (most sound reflected).

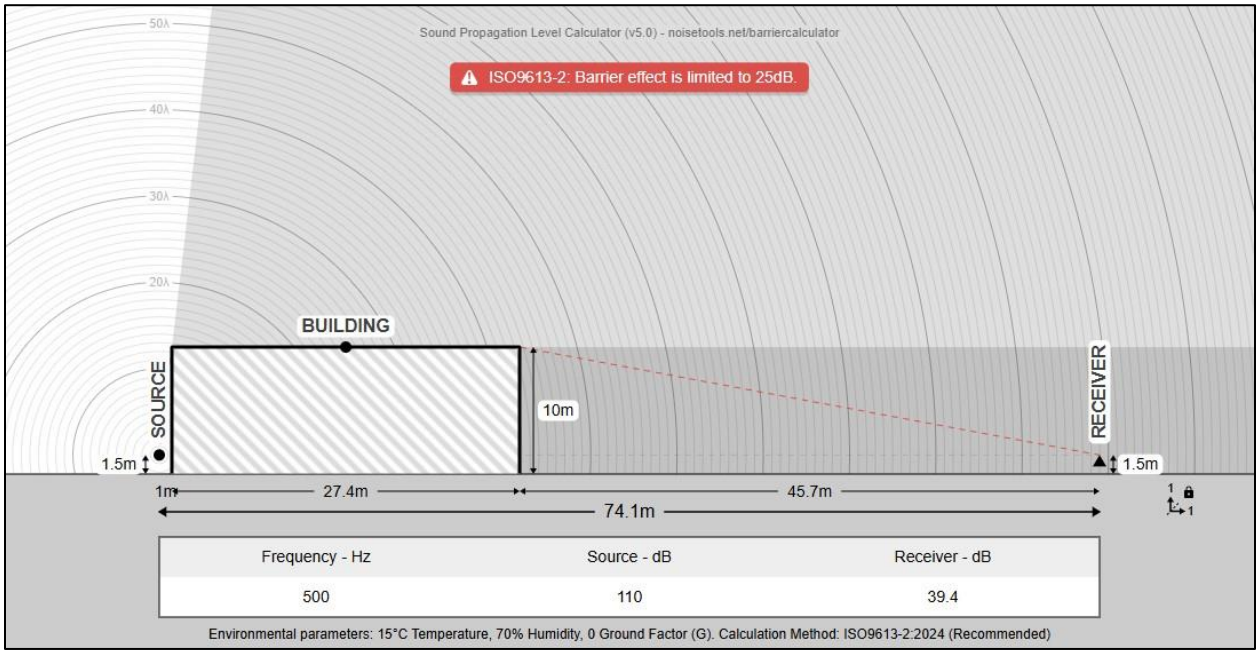
Predicted project results are expressed in Leq and were provided in Table 2, Project Receiver Results, with and without Mitigation. Noise modeling predicted project receiver results without mitigation as less than the ambient conditions. However, with mitigation, project receiver results for Receiver 1 – Polo Court Central Residence and Receiver 2 - Polo Court Eastern Residence were significantly reduced. Predicted daytime levels from the project along Polo Court will be in the low to mid-40 decibel range[1]. Further, with mitigation at the project, all nighttime levels will be in the high 30 decibel range. The ambient nighttime measurement collected in March 2025 was 51.5 dB(A). Thus, the predicted noise levels will have no significant impact to Receivers 1, 2 and 3, as they are considerably lower than the ambient. The project decibel level is considered quiet to very quiet as provided in the figure below from NYSDEC's Assessing and Mitigating Noise Impacts.

Similarly, levels at Receiver 4 – Eastern Condo Property and Receiver 5 – Assisted Living Facility will all have predicted sound levels from the project that will be less than the existing ambient measurements recorded. Receiver 5 had predicted project sound levels that were 14 to 20 decibels below the ambient sound level.

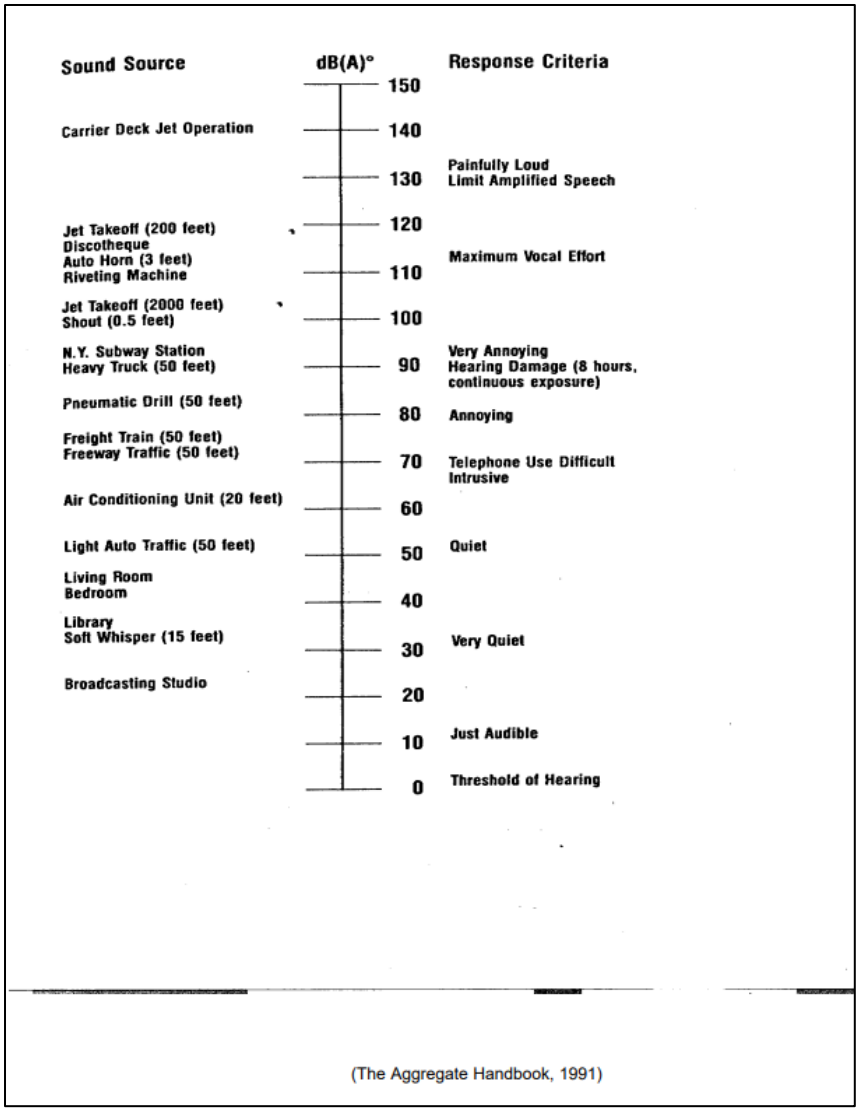
[1] It should be noted that the ambient sound levels in the receptor locations will not actually decline as a result of the project. Rather, the ambient sound levels in the receptor locations will remain the same and the project's sound levels will be at half that level and less discernable within that existing, ambient sound mix.

As previously noted, the currently proposed project is one-third the size as currently approved and includes several noise mitigating features beyond the sound walls including redesigning the project so that the loading bays all interior to the proposed buildings utilizing the structures as sound barriers. Sound waves in the loading bay corridor, generated at a low position, will bounce/reflect off the buildings in an upward direction. The buildings' exterior walls and inward-facing noise barrier/wall surfaces will be finished with roughened surfaces to minimize reflections and maximize scattering of sounds from the site's roadways and interior loading bays further reducing noise.

NYSDEC's "Assessing and Mitigating Noise Impacts" guidance states that building walls can provide an average of 15 dB noise reduction. The reduction of sound levels as a result of the building coupled with distance attenuation provides a significant reduction in predicted project levels at the site's boundaries. For example, if a tenant was undertaking welding operations or using a bandsaw to cut certain materials, this activity would occur within the warehouse facility. However, if the loading bay door was ajar then noise would emanate from the building. NoiseTools© software was used to predict decibel levels at the property boundary. Inputting the average sound power level of a bandsaw, a predicted level of 39.4 decibels would be expected at the property boundary of the Montebello Commons. Again, the project decibel level is considered quiet to very quiet.




The figure below provides common outdoor and indoor approximate noise levels as perceived by the human ear.




(The Aggregate Handbook, 1991)

*The information provided in the figure is not to be utilized as evaluation criteria rather it is only for comparative and comprehension purposes.