

### Memorandum

| To:          | Justin Ferrazzano; Corey Robinson, P.E.  |
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| From:        | Philip Grealy, Ph.D., P.E.   |
|              | Joseph Muccin, P.E., PTOE  |
| Date:        | January 31, 2025   |
| Subject:     | Dewpoint North and Dewpoint South - Consideration of Town of Wawayanda Code<br>Modifications |
| Project No.: | 20006912E  |

The recently adopted code changes (Section 195-23D) restricts nighttime decibel noise levels at adjacent lot lines to 50 decibels between the hours of 10:00 PM and 7:00 AM. Based on a review of the noise data and analysis including the evaluation of both daytime (7 AM to 10 PM) represented by the AM and PM peak presented herein and nighttime noise levels (10 PM to 7 AM) which are specifically represented herein for the time between 1:00 AM and 5:00 AM, relative to the above referenced facilities, we note the following pertaining to these new provisions of the Code.

Note that based on the existing sound level measurements, there are some receptor locations immediately adjacent to Dolsontown Road (i.e. within 50 feet of the roadway) which currently exceed 50 decibels during the hours of 10:00 PM and 7:00 AM. An analysis of future Build conditions with the additional traffic and building equipment related operations all considered was completed evaluating both daytime and nighttime levels. Based on the site-specific mitigation measures referenced below, any increases in resultant noise levels will be limited. The increase in levels above the no-build scenario will be less than 3 dBA above ambient levels during all hours of the day. Pursuant to NYSDEC's guidelines for Assessing and Mitigating Noise Impacts, decibel increases of less than 5 dBA are considered "unnoticed to tolerable". Thus, these increases will not result in a significant adverse noise impact. (See attached Figures and Tables)

Furthermore, it should be noted that all measurements taken along Dolsontown Road and particularly those at Receptor 2 (which is representative of the levels at the adjacent residential properties) were taken in close proximity to Dolsontown Road and reflect conservatively higher existing ambient noise levels than what is experienced at a larger distance separation from Dolsontown Road at a location similar to the actual residential homes themself. Note that the measurements were conducted utilizing a Brüel and Kjaer Type 1-Precision integrating Sound Level Meter – Type 2236. The meter was calibrated prior to actual measurements using a Brüel and Kjaer Acoustical Calibrator Model No. 4231. The measurements and calibration procedures followed were completed in conformance with American National Standards Institute (ANSI) and NYSDEC criteria.

As outlined in the NYSDEC guidelines, at distances greater than 50 feet from a sound source, every doubling of the distance produces a 6 dB reduction in the sound levels. Distances 50 feet or less from Dolsontown Road under existing conditions already experience ambient noise levels exceeding

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50 dBA during nighttime periods. Based on the distance attenuation factor, beyond 50 feet from the roadway, noise levels of 50 dBA or below will be experienced under future No-Build and Build conditions.

Thus, under the build condition, noise levels will be compliant with the new code requirements during the daytime hours, and compliant during the evening at distances greater than 50 feet from the road. The new code requirement provides the Planning Board with discretion to impose less restrictive noise requirements where appropriate. Given the "unnoticed to tolerable" range of the increase and the fact that an exceedance of the overnight standard would exist even without the projects, it is appropriate for the Planning Board to exercise its discretion, to the extent there may be noise levels at the property line in excess of 50 dBA within 50 feet of the roadway during the overnight hours.

The noise analysis for future levels considered both increases in operational noise as well as vehicle noise along the Dolsontown Road corridor. The specific design items that were considered for each of these developments include:

#### **Dewpoint North**

The increase of the side yard setback to 31 feet, (where 15 is required", construction of a berm, positioning of the building and baffling of HVAC equipment will limit any increases in noise levels at the adjacent residential property to under 3 decibels and in compliance with the latest Town code.

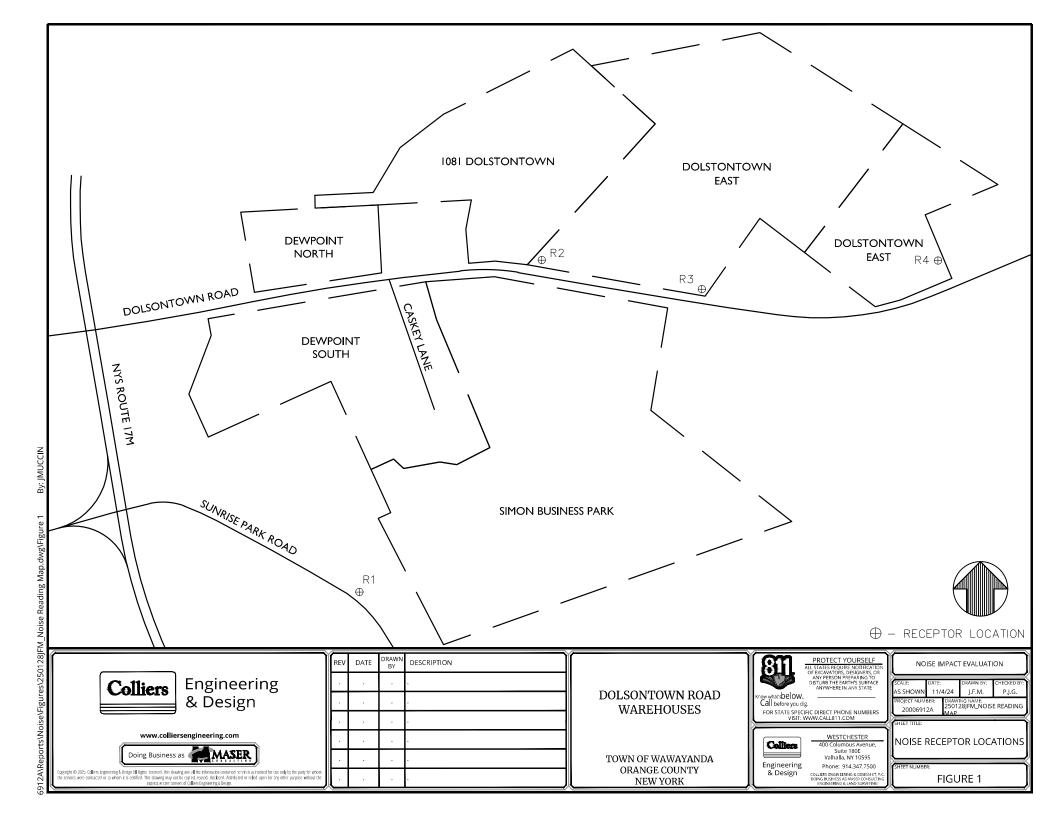
#### **Dewpoint South**

The positioning of the loading docks and additional site-specific measures, including HVAC equipment baffles, will avoid any significant noise impacts at the adjacent residential properties. It is also understood that the existing residences along Caskey Lane will be eliminated as part of the redevelopment of those properties and therefore, will no longer apply.

Therefore, considering the mitigation measures proposed as well as the principle of sound level reduction over distance, the Dewpoint North and Dewpoint South projects will be in compliance with the Town's latest noise code requirements pertaining to the levels at the adjacent property lot lines during both daytime and nighttime hours.

In summary, based on the current ambient background levels due to primarily overnight traffic on I-84 and other existing sources in the area, the noise levels will not be significant in relation to the Town Code or during nighttime operations. For the reasons set forth above, the projects will not result in a significant adverse noise impact.

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# Table No. 3 (AM) Summary of Existing and Projected Noise Levels (Leq-dBA) Weekday Conditions

| Receptor Location | Existing | No-Build | Build | Change from No-Build to Build |
|-------------------|----------|----------|-------|-------------------------------|
| 1                 | 53.2     | 53.4     | 55.4  | 2.0                           |
| 2                 | 57.9     | 59.7     | 61.6  | 1.9                           |
| 3                 | 57.9     | 59.7     | 62.4  | 2.7                           |
| 4                 | 57.9     | 59.7     | 62.5  | 2.8                           |

Notes:

1) See Figure No. 1 for Noise Receptor locations.

2) Existing Noise Level Measurements for the AM hours were collected on Tuesday, January 25, 2022 represent the LEQ Levels observed at each receptor.

3) The Build scenario includes all warehouse developments on Dolsontown Road.

# Table No. 3 (PM) Summary of Existing and Projected Noise Levels (Leq-dBA) Weekday Conditions

| Receptor Location | Existing | No-Build | Build | Change from No-Build to Build |
|-------------------|----------|----------|-------|-------------------------------|
| 1                 | 56.6     | 56.7     | 57.1  | 0.4                           |
| 2                 | 57.7     | 58.7     | 60.9  | 2.2                           |
| 3                 | 57.7     | 58.7     | 61.4  | 2.7                           |
| 4                 | 57.7     | 58.7     | 61.4  | 2.7                           |

Notes:

1) See Figure No. 1 for Noise Receptor locations.

2) Existing Noise Level Measurements for the PM hours were collected on Wednesday, January 26, 2022 represent the LEQ Levels observed at each receptor.

3) The Build scenario includes all warehouse developments on Dolsontown Road.

### Table No. 3 (Nighttime)Summary of Existing and Projected Noise Levels (Leq-dBA)Weekday Conditions

| Receptor Location | Existing | No-Build | Build | Change from No-Build to Build |
|-------------------|----------|----------|-------|-------------------------------|
| 1                 | 51.3     | 51.5     | 52.9  | 1.4                           |
| 2                 | 51.1     | 51.3     | 53.2  | 1.9                           |
| 3                 | 49.4     | 49.6     | 51.8  | 2.2                           |
| 4                 | 53.7     | 53.9     | 55.6  | 1.7                           |

Notes:

1) See Figure No. 1 for Noise Receptor locations.

2) Existing Noise Level Measurements for the Nighttime hours were collected on Wednesday, November 6, 2024 represent the LEQ Levels observed at each receptor.

3) The Build scenario includes all warehouse developments on Dolsontown Road.