

MEMORANDUM

DATE: 18 May 2022

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FROM: Blake Wells, LEED GA and Eric Mori, PE

SUBJECT: Kalae at Ward Village
Hawaii Department of Transportation Comments

PROJECT: 20-0498

We understand that the Hawaii Department of Transportation is concerned about noise levels from the Honolulu International (HNL) Airport impacting the project site and requires the incorporation of Noise Reduction Measures to achieve interior noise levels of DNL¹ 45 dB. The site is within the DNL 60 to 65 dB noise contour for the Honolulu Airport.

The measured DNL on the roadways adjacent to the site is DNL 71 to 79 dB, as shown in Figure 1 of our Environmental Noise Study (dated 10 March 2021). This measured data was used to calculate the necessary noise reduction from the facade (i.e., window system STC ratings) in order to achieve interior noise levels of DNL 45 dB.

The exterior noise level at all facades due to street traffic was greater than DNL 65 dB (the loudest potential noise exposure from HNL). Therefore, the facade STC ratings are sufficient to reduce aircraft noise to below DNL 45 dB.

1 DNL (Day-Night Average Sound Level) – A descriptor for a 24-hour A-weighted average noise level. DNL accounts for the increased acoustical sensitivity of people to noise during the nighttime hours. DNL penalizes sound levels by 10 dB during the hours from 10 PM to 7 AM. For practical purposes, the DNL and CNEL are usually interchangeable. DNL is sometimes written as L_{dn} .
