

March 11, 2013

Mr. Paul S. Cincotta, Vice President
Westwood Marketplace Holdings LLC
c/o New England Development, Inc.
One Wells Avenue
Newton, MA 02459-3295

Ref 3684

Re: *University Station – Response to Comments by Epsilon Associates, Inc.*

Dear Paul:

This letter provides responses to the comments from Robert D. O’Neal of Epsilon regarding the noise impact assessment done for University Station.

Baseline Sound Measurement Data

The sound level measurements made in December 2005 are still valid for the project area seven years later (December 2012) due to the effects of the recession on motor vehicle travel and the relative insensitivity of sound levels to changes in traffic volumes. MassDOT’s AADT counts on Route 128 in Westwood south of Route 1 show volumes of 150,000 in 2002, falling to 133,000 in 2009 during the recession.¹ While no published counts are available for 2012, if a 2% growth rate is applied to the 2009 figures, the projected 2012 AADT of 141,000 is close to the 143,000 extrapolated AADT in 2005 on Route 128 near the site. Federal Highway Administration data reveal December 2012 VMT were 98.3% of those for December 2005.² These data confirm that highway traffic volumes on I-95 at the project site today are close to those in December 2005. Since sound pressure levels are proportional to the logarithm of AADT, a 2% difference in traffic volumes represents an imperceptible (and insignificant) change of less than 0.1 dBA.

When the baseline measurements were made in 2005, the old industrial-park buildings, although not operational, were in still place and provided shielding to residential areas for sounds from I-95. Since that time, the old buildings have been demolished. Thus, if anything, current baseline sound levels are likely to be slightly higher than those measured in 2005, and thus the 2005 data are a conservative baseline for measuring increases related to the new development.

¹ MassDOT, Route Book 2009, Excel data.

² FHWA, Travel Volume Trends, 12-month moving-average cumulative traffic volumes, December 2012.

Operational Impact Assessment

My experience with commercial developments over the past 30 years and reviewing actual project mechanical designs is that total project cooling capacity (in tons) when divided by gross square feet is generally in the range of 1 ton per 300-500 SF. The rule of thumb that 1 ton of cooling is needed for every 400 SF is useful as a first-order approximation of cooling capacity for a project at the concept level of design, such as University Station; it provides a sufficient estimate for the sound impact assessment.

Maximum sound levels at the three residences were remodeled in the February 20 revision to the report using an updated site plan layout.³ A copy of that revised report is provided with this letter. The maximum sound level at any residence is now lower at 46.2 dBA. This maximum sound level is well below the 50 dBA sound limit; 46.2 dBA represents only 42% of the sound energy in the Town's 50-dBA limit. Our report suggests a design guide for the two office buildings and three residential buildings nearest to the residential areas, and if the Town were impose a permit condition, it should read as follows:

“For each of the two office buildings (Office A and B), the total sound power level of rooftop equipment, after including the effects of any rooftop sound barrier walls, should not exceed 95 dBA. For each of the three residential buildings (Residential A1, A2, and B), the total sound power level of rooftop equipment, after including the effects of any rooftop sound barrier walls, should not exceed 100 dBA. Alternatively, the developer may offer additional acoustic modeling of the final HVAC design to demonstrate compliance with the Town of Westwood 50 dBA limit.”

Roadway Impact Assessment

As stated in the Noise Impacts Analysis for University Station, the peak-hour trip generation for University Station will be less than on weekdays and approximately the same on Saturdays, than the trip generation of the previous development proposal. The largest difference of 0.8% for Saturday peak-hour trip generation represents a change of only 0.03 dBA in project roadway sound levels. The adjustment of 0.03 dBA was added to the results of the 2007 roadway sound modeling to obtain conservative estimates for the sound impacts of University Station. The roadway segments included in the sound modeling include: Route 128 (I-95) and the University Avenue Interchange ramps; Blue Hill Drive from the T garage to a point 1,000 west of Whitewood Road; University Avenue; Rosemont Road; Maymount Road; NSTAR Way; Harvard Street; Yale Street; and Dartmouth Street.

The 2007 report “Roadway Noise Study for the Westwood Station Project” is included with this letter. The Existing sound levels in Table 1 are modeled values.

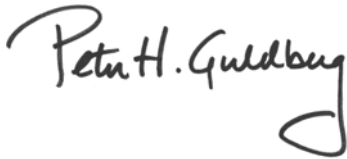
The Blue Hill Avenue noise barrier wall location is shown on Plan L-1.1, which follows page 18 in the 2007 report. As proposed in 2007 and included in the acoustic modeling, the wall is to be 261 feet long, 12 feet high, and composed of pre-cast concrete sections. Alternatively, the wall could be constructed of solid wood panels with a face density of at least 5 lb/ft².

³ Tech Environmental, Inc., “Noise Impact Analysis for University Station,” February 20, 2013.

Please call if you have any questions regarding these responses.

Sincerely yours,

TECH ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads "Peter H. Guldberg". The signature is written in a cursive style with a large, looped initial "P" and a distinct "G" at the end.

Peter H. Guldberg, INCE, CCM
Managing Principal
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