

To: Att: Mr. Kenneth Perro, Chair
Board of Appeals
Municipal Office Building
127 Elm Street
Millbury, Massachusetts 01527

From: Evan Drew, PE PTOE
David Glenn, PE

CC: Conor McCormack
Director of Planning & Development

Stantec Consulting Services,
Inc.
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Burlington, MA 01803

Project/File: 179411162

Date: March 11, 2024

Reference: Comprehensive Permit Application (40B) 15-17 Rice Road Residential Development – Traffic Impact Study Update – February 2024

Subsequent to our memo January 10, 2024, and pursuant to the Board’s request, Stantec Consulting Services, Inc. (“Stantec”) has reviewed the *Traffic Impact Study Update – Multifamily Residential Development – Located at 15-17 Rice Road Millbury, Massachusetts* dated February 2024 prepared for Whitney Street Home Builders and prepared by Ali R. Khorasani Associates (AK Associates).

In addition, Stantec reviewed the traffic impact study by following MassDOT’s *Transportation Impact Assessment (TIA) Guidelines*, Town of Millbury’s *Zoning Bylaws* dated May 2018, Town of Millbury’s *Chapter 40B Rules and Regulations* dated January 2023, and Rice Pond Village Site Plan of Land, revised February 19, 2024, as prepared by Azimuth Land Design, LLC. Specific to this memorandum is the review of the traffic engineering related elements of the plans and the connection between the traffic impact assessment and the site plans. Civil/site/stormwater elements of the plans and other documents associated with this development will be provided in a separate review by Stantec.

A previous traffic impact study (TIS) for a residential development (*Rice Pond Village*) at this location was submitted in March 2021 prepared for Whitney Street Home Builders and prepared by AK Associates. Stantec conducted the initial submittal peer review of this TIS and submitted a memorandum, dated May 4, 2021, with comments and recommendations for the applicant’s engineer. This TIS was followed up with a subsequent submittal and Response to Comments by AK Associates in November 2021, which was followed up with Stantec’s review of the responses and TIS updates within a memorandum dated November 19, 2021. Previous submittal review documents were reviewed for any additional outstanding comments resulting from the previous 2021 efforts, while refreshing the current TIS update review based on new information, both existing conditions and proposed conditions of the past two years.

In Stantec’s December 4, 2023 and January 10, 2024, traffic study review memorandum, Stantec had recommended AK Associates review and update their conclusion and findings after updating the traffic analyses based on new traffic data for the study area intersections since the initial data for previous iterations of the project were collected in 2021, within the COVID-19 pandemic era. In parallel with AK Associates’

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Response to Stantec's Comments memorandum, the Applicant had accepted this comment and agreed to conduct new traffic data collection.

We offer the following comments and recommendations regarding the Updated Traffic Study, dated February 2024 for the Board's consideration.

Existing Conditions

Stantec reviewed the following subsections within the Existing Conditions section of the Updated Traffic Study, dated February 2024 in comparison with previous iterations of the development's studies:

- Study Area Roadway Network
- Traffic Volumes
- Safety Concerns
- "Accidents" [Crashes]
- Existing Conditions Summary

Stantec has no additional comments concerning the data presented and the findings from the most current data collection and analysis utilizing the most current manuals and guidelines.

Future Conditions

Stantec reviewed the following subsections within the Future Conditions section of the Updated Traffic Study, dated February 2024 in comparison with previous iterations of the development's studies:

- Site-Generated Traffic (Utilizing 11th Edition of ITE's Trip Generation Manual)
- Trip Distribution and Assignment
- Site Access and Circulation

AK Associates' findings present the development is accounting for future build traffic and parking accommodations. Stantec has no additional comments concerning the data presented and the findings from the most current data collection and analysis utilizing the most current manuals and guidelines.

Traffic Operations

Stantec reviewed the following subsections within the Traffic Operations section of the Updated Traffic Study, dated February 2024 in comparison with previous iterations of the development's studies:

- Traffic Operations Measures
- Existing Conditions
- Future Conditions

AK Associates' findings present that while the development is doubling, even tripling, traffic volumes on Rice Road, the operations and capacity of the study intersections remain at an optimal Level-of-Service (LOS) grade of "A". Stantec has no additional comments concerning the data presented and the findings from the most current data collection and analysis utilizing the most current manuals and guidelines.

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Comments & Recommendations

Overall, Stantec agrees with the four recommended improvements identified by AK Associates within this TIS Update:

- “The site frontage on the north side of Rice Road to the west of the intersection of Rice Road and the access driveway should be graded and cleared of tall vegetation to further improve the sight distance to the west (right).”
- “Any landscaping along the frontage of the proposed site on Rice Road should be limited to vegetation variety that does not grow higher than 2.5’ to ensure best sight distances are provided.”
- “It is recommended that stop signs be installed for both the northbound approach of Thomas Hill Road and the southbound approach of the proposed site driveway at Rice Road.”
- “Finally, it is recommended that a stop sign be installed for the eastbound approach of Rice Road at its intersection with Providence Street.”

Stantec recommends the following additional measures to conform stop bars be installed that supplement the stop signs as per the Manual of Uniform Traffic Control Devices (MUTCD).

Site Plans – Traffic Elements

Site Access Driveway Intersection

The STOP sign and stop bar locations should also correspond to AK Associates’ desirable intersection sight distances (ISDs) calculated within their Traffic Study Update. In support of the first recommendation provided in AK Associates’ recommendations section, this includes the removal and/or limitation of obstructions, such as housing development signing and relocated utility poles, and potential landscaping that could encroach on the ISD sight triangle from the stopped position.

Stantec recommends the Site Plans provide sight distance profiles to assure that the minimum thresholds are met for the ISD sight triangles identified in the Traffic Impact Study, particularly to verify no proposed landscaping or development signs are placed within the sight triangle of the intersection.

Rice Road Sidewalk Expansion

We recommended status of the Rice Road Sidewalk Expansion Plans as referenced in the LIP Development Agreement be addressed by the Applicant with the Board.