

Ref: 8587

March 1, 2021

Mr. Richard S. Novak, Chair  
Zoning Board of Appeals  
Town of Sherborn  
19 Washington Street  
Sherborn, MA 01770

Re: Response to Peer Review of Transportation Impact Assessments  
The Pines – 41 North Main Street (Route 27)  
Sherborn, Massachusetts

Dear Chair Novak and Members of the Zoning Board of Appeals:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the February 18, 2021 *Peer Review of Transportation Impact Assessments – Evaluation of Responses to Peer Review Comments* prepared by Professional Services Corporation, PC (PSC) in reference to their review of the January 29, 2021 *Response to Peer Review of Transportation Impact Assessments* prepared by VAI in support of the proposed The Pines multifamily residential community to be located at 41 North Main Street (Route 27) in Sherborn, Massachusetts (hereafter referred to as the “Project”). PSC has indicated that VAI’s responses and the associated supplemental information have addressed their questions concerning the October 2020 *Transportation Impact Assessment*, and that additional follow-up information is not required. That being said and as discussed at the February 18, 2021 Zoning Board of Appeals (ZBA) hearing, we are providing additional information and commentary regarding the use of Powderhouse Lane to access the Project site.

As discussed in our January 29, 2021 letter, vehicle queues on the Route 27 northbound approach to the Route 27/Eliot Street (Route 16) intersection currently extend beyond Powderhouse Lane during the weekday morning peak-hour independent of the Project. These conditions will persist in the future, again, independent of the Project, and are confined to the weekday morning peak period and likely influenced by traffic associated with student drop-off activities at the Pine Hill Elementary School. A review of the motor vehicle crash data presented in the October 2020 *Transportation Impact Assessment* for the Route 27/Route 16 and Route 27/Powderhouse Lane intersections indicates that the calculated motor vehicle crash rates at both intersections are below the Massachusetts Department of Transportation (MassDOT) average crash rates for similar intersections, with the majority of the crashes involving rear-end type collisions that resulted in property damage only.

During those periods when Powderhouse Lane is blocked by northbound queues on the Route 27 approach to Route 16, vehicles exiting Powderhouse Lane will be delayed and need to wait for a gap in northbound traffic before proceeding. Again, these conditions exist today and impact all users of Powderhouse Lane, including those business that currently operate at the Project site that will be removed to accommodate the Project (landscaping business and pet grooming/boarding). The Project includes secondary emergency vehicle access to Hunting Lane to ensure that emergency access to the Project site is afforded in the unlikely event that access to the Project site from Powderhouse Lane is impeded to the extent that emergency response is necessary via an alternative access.

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In an effort to address the existing capacity constraints at the Route 27/Route 16 intersection and the associated impacts of residual vehicle queuing on proximate roadways, including Powderhouse Lane, the Town retained Green International Affiliates, Inc. to undertake a review of improvements to the intersection. The recommended improvements included the realignment of the Route 16 approach and the replacement of the traffic signal system. In addition, the driveway to 43 North Main Street was incorporated into the traffic signal system. The cost to implement the recommended improvements was estimated to be \$500,000.

To assist the Town in advancing the recommended improvements for the Route 27/Route 16 intersection, the Applicant will contribute a fair-share portion of the estimated cost to design and construct the improvements as defined by the net increase in traffic that the Project represents at the intersection during the weekday peak hours vs. the No-Build condition. Using this methodology and without consideration of trips generated by the existing uses that occupy the Project site, the Project represents an approximate 0.8 percent increase in traffic. As such, the fair-share allocation of the intersection improvements to the Project would be \$4,000 ( $0.8\% \times \$500,000 = \$4,000$ ).

The Applicant has committed to implementing an optimal traffic signal timing plan for the intersection in an effort to improve traffic operations and reduce vehicle queuing. In addition and as discussed at the February 18, 2021 ZBA hearing, “Do Not Block” pavement markings and accompanying signs can be installed on Route 27 at Powderhouse Lane to maintain the flow of southbound traffic on Route 27 during those periods when the northbound queue from the Route 27/Route 16 intersection blocks traffic from exiting Powderhouse Lane.

We trust that this information is responsive to PSC’s comments pertaining to vehicle queue impacts on access to Powderhouse Lane. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.



Jeffrey S. Dirk, P.E., PTOE, FITE  
Managing partner

*Professional Engineer in CT, MA, ME, NH, RI and VA*

JSD/jsd

cc: G. Barsky - Barsky Estate Realty Trust  
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