



September 18, 2019

Ref: 14691.00

Ms. Margaret Pinkham, Chair
Woburn Zoning Board of Appeals
10 Common Street
Woburn, MA 01801

Re: Woburn 38 Development - 1042 Main Street,
Review of Request for Determination of Insubstantial Change

Dear Chair Pinkham,

VHB/Vanasse Hangen Brustlin, Inc. (VHB) has performed a technical review of the proposal by Woburn 38 Development to limit the potential impacts that may be associated with the on-site pickup of processed materials by end-users at the 1042 Main Street site in Woburn, Massachusetts. The project is seeking to continue to process material (rock) on the site and have met with the City of Woburn Building Commissioner to discuss the operations and is seeking a set of conditions that will limit and minimize the impact of the continued operations at the site. VHB has been requested to review the engineering plans presented to the board, review the list of proposed conditions offered by the applicant to achieve this goal and, if reasonable, amend or offer additional conditions for consideration, and to develop an estimate of how long it will take the material processing operations to conclude at the site. As part of this review effort, VHB reviewed the following documents:

"Woburn Heights, 1042 Main Street, Woburn MA 01801" site plan developed by Allen & Major Associates, Inc. originally dated 6/7/2012 with revisions through 7/12/2019 showing the access roadways and the proposed queuing of vehicles on the site;

"Request for Determination of Insubstantial Change" letter from Attorney Paul Haverty of Blatman, Bobrowski, & Haverty, LLC to the ZBA dated July 16, 2019.

VHB also reviewed the meeting minutes of the ZBA hearing when this proposal was presented to the Board and visited the project site on September 11, 2019 to review the area and observe operations on the site. VHB has reached out to Onyx (the blasting company responsible for the material processing on the site) as well as Allen & Major Associates (the site civil engineer) to better understand what has been and what is remaining to be processed on the site.

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Review of the Site Plan

In general, the site plan is consistent with the original plans submitted as part of the comprehensive permit process several years ago. While no traffic study was submitted to support the queuing operations at the site, VHB did review the plan from a technical layout and operations perspective given the proposed operating plan being suggested by the applicant.

The Site Plan provided locates approximately where on the site the temporary construction trailer, weigh station, and concrete slabs and ramps will be located to deliver and load the material to the hauling vehicles. The site plan also indicates where the 25-foot building setback line from adjacent properties is located. The plan also demonstrates how a number of vehicles described as "50-foot long and 7-foot wide" hauling trucks can be staged on the site. The plan notes that there is room for 18 vehicles to queue on the site with another two vehicles waiting for the scale (up to 20 in total).

VHB offers the following comments on the site plan and its operations:

- VHB assumes that the queued vehicles will wait in line based on the order of their arrival to have the material loaded. From a practical perspective, VHB recommends that this queue begin within the site as shown on the plan and extend back towards Main Street on the right-hand portion of the roadway only. Vehicles that are shown on the site plan queued on the left-hand portion of the roadway could inhibit the pathway of fully loaded truck exiting the site. With this adjustment, there is room for twelve (12) trucks to queue on the site at any one time (plus up to two loaded trucks waiting for the scale). In a pinch, these other locations could be used if queuing reaches the Main Street entrance,
- It was also noted that the minimum size of the trucks hauling material off the site will be 18 cubic yards up to a maximum of 35 cubic yards – therefore, the 12-vehicle queue would be representative of a situation where all the trucks were of the 35 cubic yard variety. Additional trucks could be stored if they were of the smaller capacity (up to about 16 if they were all the smaller capacity).
- The applicant should provide a written narrative of how they intend on controlling the arrival timelines of the various trucks over the course of the day. This should include a plan where trucks that are under the control of the operator are staged well away from the site and dispatched when they're ready to be received and/or are assigned a time for arrival when the facility activity is at its lightest. For trucks that are not owned or under the control of the operator, efforts should be made to avoid a situation where they all arrive at the same time and need to be turned away.
- Additionally, the applicant should provide in a narrative form a summary of how arriving trucks will be greeted, confirmed, and placed into queue on the site.

Based on VHB's observations and summary calculations, along with the above suggestions and subject to the development of a satisfactory management plan for arriving trucks, VHB is satisfied that the operations on the site will not impact the local roadway system negatively from an operations perspective and will provide for a reasonable amount of queuing area within the site.



Review of the Proposed Conditions

VHB has reviewed the conditions outlined in the July 16, 2019 letter from Attorney Haverty to the ZBA. VHB concurs with the conditions and recommends that the ZBA adopt them as part of any approval they might consider. In addition, VHB recommends the following altered or new conditions also be considered:

- Bullet number 5 should be adjusted to state that “No queuing of trucks will be allowed along Main Street or any of the surrounding roadways...”. If there is no available area to safely queue on-site, drivers will be directed to return the following day or to an off-site staging area that is approved by the Building Commissioner.
- Vehicle queuing shall not be allowed within the 25-foot building setback areas.
- Drivers and contractors will be informed that they are not allowed to arrive on site prior to 7:00am. Those drivers who arrive prior to 7am will initially be warned and recorded. Should more than 5 repeat violations occur within a calendar month, the Board may – after hosting a public meeting – revise the hours of operations for the material processing and/or truck arrivals.
- It shall be posted conspicuously that trucks not be allowed to idle more than 5 minutes, per Massachusetts law.
- Similarly, given the residential nature of the site, drivers should be informed that they should not use their engines brakes to slow their decent from the site (i.e. “no Jake braking”). Signs informing drivers of this should be posted conspicuously after the weigh station.

Review of the Material Processing Timelines

Finally, VHB worked with Onyx and Allen & Major to predict the expected timelines for the continued material processing and excavation activities. According to Onyx, material processing and removal has been on-going for approximately 50 working days, with over 30,000 cubic yards of material removed from the site; an average of 600 cubic yards a day.

Based on the “modified proposal” outlined in the HAC’s Decision on Project Change issued on April 23, 2015, the total volume of material to be removed from the site was capped at 357,632 cubic yards of processed materials (more if the material was unprocessed). This translated to an estimated 13,332 truck trips in total. The Decision also notes that this could be accomplished in 233 days.

It is unclear to VHB if the 50 days of activity at the site is included in the overall 233 day period or not seeing as it has been unprocessed material. If it has (and considering that approximately 30,000 CY has been removed from the site), this leaves a total of 327,632 CY yet to be removed in 183 days. If not, then the 327,632 CY will be removed from the site over the 233-day period.

In either scenario, VHB’s calculations indicate that the material can be processed and removed from the site within the allotted times and still maintain an average of 60 truck trips per day. The only unanswered question is if the 183 days or 233 days is governing the processing timeline. Naturally, the 183-day timeline will require a larger volume of material to be removed per truck. VHB recommends that the

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Board reconfirm with the applicant which timeline they are working with and that they're committed to still meeting the timelines set in the Decision.

Conclusion

Please call if you have any questions or require additional information on any of the requests or comments noted above. As we discussed, I will do my best to attend the next Zoning Board of Appeals hearing on September 18, 2019 to discuss in greater detail these findings as needed. The applicant should be prepared to review and address the comments at the meeting as well.

Sincerely,

Vanasse Hangen Brustlin, Inc.

Robert L Nagi, PE

Principal, Transportation Planning and Operations