



April 23, 2020

Christopher Wider, Chairman
Town of Norfolk – Zoning Board of Appeals
One Liberty Lane
Norfolk, MA 02056

Re: Norfolk, MA – The Preserve at Abbyville, 40B
Supplemental Response to Traffic Comments

Dear Chairman Wider:

BETA Group, Inc. (BETA) has reviewed the *Proposed Abbyville 40B Development Supplemental Response to 4/16/20 Traffic Peer Review Comments* letter dated April 21, 2020 by Green International Affiliates, Inc. (Green), which provides further information related to outstanding comments submitted by BETA in their letter dated April 16, 2020. This letter serves as a review of the responses provided by Green. Where referenced, the term "Applicant" refers to either the Applicant itself or its design consultants.

BETA Comment T3: Provide backup information in the Appendix for the nearby development trips.

Green Response: In our April 15, 2020 letter, we provided the trip generation calculations that had been requested as well additional descriptions related to the analysis assumptions pertaining to the two site specific developments incorporated into the latest analysis. Subsequently, additional trip assignment information for incorporating these background developments was further requested by BETA and a diagram is attached to this letter that provides this detail.

BETA Response: A turning diagram style figure was provided. No further comment.

BETA Comment T5/T6: Analysis sheets provided in the Appendix were found to have mismatched parameters between AM and PM peak hours. Revise accordingly. Analysis sheets provided in the Appendix were not found to match results presented in Table 5 and Table 6 of the TIAS. Clarify and revise accordingly.

Green Response: The tables were corrected and submitted with the April 15th letter. Only the tables needed to be corrected and the corrections were relatively minor and did not change our findings or conclusions. The original LOS calculation sheets in the full study appendix were correct based on the network volumes depicted in the study report and did not need to be reprinted and resubmitted. That said, in preparing this specific response letter and providing the supplemental information noted above in our response to T3, some minor discrepancies in the No-Build networks were discovered. In general, these relate to the amount of estimated trips from the Park Place development to be added to Lawrence Street past the proposed development site. This amounted to 5 trips in the westbound direction in the AM peak hour; and 1 trip in the westbound and 4 trips in the eastbound directions in the PM peak hour. With total Lawrence Street peak hour volumes low (75 in AM, 69 in PM), the addition of these 5 vehicle trips in the peak hours would not have any measurable effect on the LOS calculations. Based on our experience, it's our opinion that the LOS results and findings would not change if these 5 peak hour trips were added to the calculations. For this reason, the LOS calculations for the No-Build and Build conditions have not been recomputed.

BETA Response: BETA reviewed the updated tables as presented in Green's April 15, 2020 letter with the analysis worksheets presented in the December 2019 Traffic Impact and Access Study. The updated

Christopher Wider, Chairman

April 23, 2020

Page 2 of 2

analysis tables were found to match the results as shown on the analysis worksheets. However, two Build AM condition intersections were found to utilize Peak Hour Factor and Heavy Vehicle parameters more consistent with the PM peak hour. For comparison purposes, BETA independently ran the analysis utilizing the AM peak hour parameters and found insignificant differences in the reported Level of Service and delays (<1 second) for each lane use. Based on this exercise, the discrepancies do not alter the conclusions of the Applicant's study

BETA confirmed the volume discrepancy in No-Build and Build conditions for the Lawrence Street approaches at Brett's Farm Road / Site Driveway. For comparison purposes, BETA ran Build condition analysis including the missing volume and found insignificant differences in the reported Level of Service and delays (± 1 second) for each lane use. Based on this exercise, the discrepancies in volume do not alter the conclusions of the Applicant's study.

In addition to the above, Green's letter summarized the Applicant's proposed mitigation measures including:

- Install STOP signs and markings compliant to the MUTCD for the proposed site drive and Brett's Farm Road opposite the site drive.
- Ensure landscaping and signage for the project on the Site Drive approach to be low and set back appropriately so as not to create visibility obstructions within the sight line triangles.
- Install THICKLY SETTLED signs with 30 mph plaques compliant with the MUTCD on Lawrence Street in both directions...
- If the Town concurs, install INTERSECTION AHEAD warning signs on approaches to the project's site drive as it will create a new 4-way intersection with Brett's Farm Road.

BETA Response: BETA concurs with the above recommendations but notes that the 30 mph plaques should only be installed if the Town elects to remove the existing 30 mph regulatory speed limit signs (per MGL 90.18). If the regulatory signs are retained, the advisory plaques should be omitted as they would provide redundant information.

Based on our review of the submitted information and independent analysis we believe that no further traffic submission is required unless there are changes to the proposed development.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.



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