



June 7, 2018

Zoning Board of Appeals
Town of Wellesley
525 Washington Street
Wellesley, MA 02482

Attn.: Lenore Mahoney
Executive Secretary

**Re: Proposed Residential Development – 135 Great Plain Avenue
Traffic Peer Review**

Dear Mr. Seegel:

BETA Group, Inc. reviewed the Applicant's response to comments and supplemental information provided regarding the Traffic Impact Assessment (TIA) of the proposed residential development at 135 Great Plain Avenue (GPA) in Wellesley, MA. This letter also includes comments from the Zoning Board meeting on May 31, 2018.

BASIS OF REVIEW

The following document was received by BETA and formed the basis of the review.

- *Response to Comments Proposed Residential Development – 135 Great Plain Avenue* dated May 24, 2018 prepared by VAI, Andover, MA.

COMPILED REVIEW LETTER KEY

BETA reviewed this project previously and provided traffic review comments in a letter to the Board dated May 7, 2018 (original comments in standard text), VAI responses are shown in italic text, and BETA has provided comments on the status of each in bold text.

1. ATR data should be collected for a minimum continuous 48-hour period.
VAI: Full 24-hour ATR data was collected for Wednesday and Thursday, May 16 and 17, and is consistent with the prior data. The ATR data is attached.
BETA 2: Data has been provided. Note that Wednesdays are early school release day. The ATR data revealed that the Thursday data is approximately 6% higher. Provide a sensitivity analysis to confirm that the GPA and Skyline Drive intersection analysis would have no issues based on the Thursday volumes.

2. Verify that Wellesley High School seniors and the surrounding colleges were still in session on June 14th, 2017 so the ATR data reflects typical daily roadway and peak volumes.

VAI: Seniors classes ended on or about on June 1, 2017. So seniors were out of class by June 14, 2017. College classes are also out by June. Overall, the schools do not significantly impact peak hour traffic volumes. The recent 2018 traffic counts in May 2018 are consistent with the prior traffic counts. The counts utilized in our study are reasonable for design purposes, which by State Guidelines are required to be average month conditions.

BETA2: No further comment.

3. Clarify the date of the TMC data collection. The date on the backup data in the Appendix is illegible.

VAI: The TMC data was collected on Tuesday, June 14, 2017.

BETA2: June 14, 2017 is a Wednesday. The additional ATR data shows that the higher volume day (approx. 6%) is on a Thursday. Provide a sensitivity analysis to confirm that the GPA and Skyline Drive intersection analysis would have no issues based on a Thursday volume

4. The Applicant should provide a summary of the MassDOT crash data from 2015.

VAI: There were zero (0) accidents reported at Skyline Drive in 2015.

BETA2: Crash data should include the RDF Driveway.

5. The Applicant should also obtain and summarize the latest three years (2016-2018) of Wellesley Police Department crash data for the intersection of GPA and Skyline Drive, the Brook Street rotary, and the segment of GPA in front of the proposed site to determine any safety issues in the area.

VAI: Accident data was researched from the Wellesley Police Department for the area extending along Great Plain Avenue from Wellesley Avenue to Babson Skate. The police department provided the accident diagrams only and not the full reports. The accident diagrams are attached and the vast majority of accidents occurred at the Wellesley Avenue and Seaver Street intersection with Great Plain Avenue.

BETA2: Data has been provided. No further comment.

6. Since the project is close to the Town of Needham, the Town of Needham should be contacted regarding any planned developments that may impact traffic along GPA in the study area.

VAI: VAI contacted the Town of Needham and no projects were identified which would significantly impact traffic volumes.

BETA2: No further comment.

7. Provide traffic data from other Northland sites similar in unit size and type to estimate a more realistic trip generation.

VAI: VAI has collected traffic counts and calculated the trip rates at three (3) similar locations as part of prior work for Northland. The data presented in the report is realistic and conservatively higher than the collected data and follows appropriate industry practices in estimating the vehicle trips.

BETA2: Verify that the four monitored Northland sites have the same percentage of three-bedroom units as the proposed site at 135 GPA.

8. Perform a gap analysis during the morning and afternoon peak commuting periods to determine the number of sufficient gaps available along GPA in the study area.

VAI: Gaps in the Great Plain Avenue traffic stream were measured between 7:00 and 9:00 AM and 4:00 and 6:00 PM on May 17 and 18, 2018. A summary of the peak hour gaps (8:00 to 9:00 AM and 4:45 to 5:45 PM) is summarized below. As shown, there are numerous gaps that are 6 seconds or greater which is considered an acceptable gap time for left-turn traffic. The projected exiting volume is 22 vehicles during the morning peak hour and 10 vehicles during the evening peak hour and, as such, there is more than sufficient capacity to accommodate the project.

GAPS IN SECONDS

	6	7	8	9	10	>10
8:00-9:00 AM	31	17	10	15	4	35
4:45--4:45 PM	41	23	25	15	7	35

BETA2: Clarify how the 6 second acceptable gap time was determined.

9. Install ADA ramps at the existing crosswalks.

VAI: While the ramps are in need of upgrade, this is the responsibility of the Town and not the applicant.

BETA2: This development consists of 33 out of 44 units with three bedrooms and will generate an increase in pedestrian activity surrounding the site. Therefore, mitigation safety improvements should include the installation of ADA compliant ramps at the existing crosswalks.

10. Install additional pedestrian crosswalk signs (W11-2 & W16-7P) for both the GPA northbound and southbound approaches. These signs will supplement the existing signs and provide added visibility for traffic approaching the crosswalks. An advanced crosswalk sign for the GPA eastbound approach (approximately 200 feet west of the crosswalk) should also be installed due to the limited sight line approaching the crosswalk.

VAI: The upgrade of the signs, as suggested, should be the responsibility of the Town.

BETA2: Refer to BETA's response to comment 9. The mitigation safety improvements

should include the installation of additional pedestrian signs at the existing crosswalks.

11. An electronic feedback speed limit sign (non-solar type) coupled with a 35mph speed limit regulatory sign should be provided for the GPA northbound and southbound travel directions to discourage traffic from speeding a this section of the roadway. The location of the speed signs shall be reviewed and approved by the Wellesley Engineering Department prior to installation.

VAI: An electronic feedback speed limit sign, non-solar if power is readily available, coupled with the attached sign will be installed at a location to be determined.

BETA2: Verify that an electronic feedback sign will be provided on GPA in both travel directions.

SITE PLAN REVIEW

1. Provide marked crosswalk(s) and ADA compliant accessible ramps at intersection of GPA and site driveway and the T-type intersection between the Townhouse and Duplex buildings.
2. Provide a double yellow center line approximately 50 feet in length at the site driveway to provide a guideline for vehicles entering and exiting the site.
3. Provide visitor parking signs and/or markings.
4. The roadway directly in front of Duplex 7 is 14 feet wide which is insufficient for two-way traffic. Provide either an R4-7 "Keep Right" sign or an R5-1 "Do Not Enter" sign on the eastern edge of the island in front of Duplex 2 and Duplex 7.
5. Provide ADA complaint accessible ramps at driveway on GPA.
6. Either remove sections of sidewalk which lead directly to the roadway without accessible ramps and marked crosswalks or provide safe pedestrian accommodations at these locations. For example, at the end of the maintenance access drive and in front of Townhouse's 6 and 7.
7. Provide a parking summary table.
8. Graphically show the routes for emergency, delivery (WB-50) and service vehicles circulating the site using AutoTurn to ensure that vehicle turning radii are adequate.
9. The proposed roadway widths are 22 feet wide; for safety purposes, verify that there will be on-site snow storage area to ensure that the roadway width will be maintained during the winter months.

MEETING COMMENTS

The following are comments from the Planning Board meeting on May 31, 2018:

- A crosswalk on GPA at the site drive was suggested so pedestrians could walk to Boston Sports Club (BSC). A proposed crosswalk at this location will also require the installation of a new sidewalk on east side or BSC side of GPA.

- Rectangular Rapid Flashing Beacon (RRFB) pedestrian signal system was suggested at the existing crosswalks.
- A section of the sidewalk is missing on the west side of GPA near Brook Street. Completing the sidewalk connection for pedestrians to walk to the Town Center is important as pedestrians do not use the east side of the GPA sidewalk.
- Analyze the Wellesley Recycling and Disposal Facility (RDF) driveway on a Saturday peak period between 12 Noon and 2:00PM was suggested.
- Concerns regarding Brook Street queuing in the morning peak commuting period was raised.

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

Very truly yours,
BETA Group, Inc.



Kien Ho, P.E., PTOE
Vice President

cc:
Meghan Jop, Assistant Executive Director, Town of Wellesley
Jaklyn Centracchio, PE, BETA Group,
Job No: 5475-10

CC: Jaklyn Centracchio, PE
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