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March 7, 2019

Mr. John Gunn, Chairman Beacon Planning Board City of Beacon City Hall 1 Municipal Plaza Beacon, NY 12508



RE: Site Plan and Traffic Review for 511 Fishkill Avenue, City of Beacon, NY; CM Project #119-056

Dear Mr. Gunn:

Creighton Manning Engineering (CME) has performed a review of the following documents in connection with the proposed multi-use redevelopment project at 511 Fishkill Avenue:

- Traffic Impact Study (TIS) prepared by Maser Consulting (Maser), dated February 26, 2019;
- Colorized Site Plan prepared by Aryeh Siegel, Architect, and Hudson Land Design, dated January 29, 2019 (revision #2); and
- Shared Parking Report prepared by Aryeh Siegel, Architect, dated January 29, 2019.

After reviewing these documents, we offer the following comments:

TIS

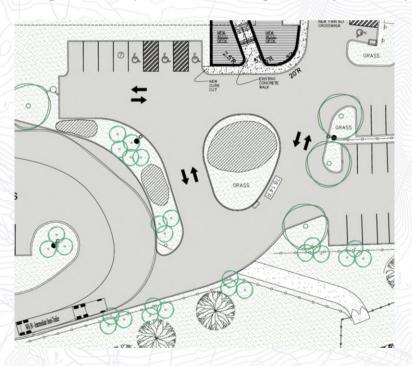
- 1. The TIS states that the weekday PM peak hour occurred from 3:45 PM to 4:45 PM. As most PM peak period traffic counts begin at 4:00 PM, how was this peak hour determined?
- 2. The 2024 No-Build Traffic Volumes are based on a 2% growth rate compounded over five years, which CME agrees is conservative.
- 3. Most of the trip generation calculations provided by Maser are based on industry-standard data published by the Institute of Transportation Engineers (ITE). In addition, Maser cites data from Spack Consulting, an open source of traffic data in the US. While CME has no objection to the use of this data, we recognize that the traffic associated with the proposed uses can vary depending on their intended operation, which is not standardized across the industry. Therefore, more information regarding the brewery event space, specifically the expected size and frequency of gatherings, is needed to verify the accuracy of the trip generation calculations. Based on the maximum occupancy of 331 persons (as per the Shared Parking Report), the potential for more than 114 peak-hour trips on Saturday is possible.
- 4. Upon review of appended Figure 8, "Arrival Distribution," it appears the northeastbound left-turn movement at intersection #3 (subject site driveway) is missing 35%. This should be corrected and the Build analysis should be verified.

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- 5. The TIS states that the sight distance at the intersection of Fishkill Avenue and Prospect Street is good. CME recommends that the sight distance analysis for the Prospect Street approach be presented given the existing building at the intersection corner and the posted speed limit of 40 miles per hour beyond the city limit.
- 6. Maser states that it considered potential traffic signal timing modifications to improve future operations at the intersection of Fishkill Avenue and Red Schoolhouse Road. CME recommends that more detail regarding the timing modifications be provided.
- 7. The TIS recommends changes to the traffic control on the Mill Street approach to Fishkill Avenue, which includes an existing highway-rail crossing. As per the Manual on Uniform Traffic Control Devices (MUTCD), "Before any new highway/rail grade crossing traffic control system is installed or before modifications are made to an existing system, approval shall be obtained from the highway agency with jurisdictional and/or statutory authority, and from the railroad company" (8A.02.06).

Site Plan

8. CME recommends the installation of MUTCD-compliant traffic control signs and pavement markings at the subject site driveway (approaching Fishkill Avenue). Additionally, CME recommends that Maser evaluate the on-site parking areas and drive aisles for traffic control. Special attention should be given to the pavement area surrounding the landscaped island so that rights-of-way are clearly assigned.



9. What is the design vehicle for the one-way drive aisle at the rear and side of the existing building and how will the drive aisle be used?

Mr. John Gunn March 7, 2019 Page 3 of 3

Shared Parking Report

- 10. The report lists four uses in the building, but the TIS refers to five. The office use does not appear to be part of the shared parking analysis. The parking generation of the office use should be clarified and considered in the analysis.
- 11. Based on the hours of operation, the report makes it clear that the brewery production and warehouse uses will not be active when the brewery event space and arcade are open to the public. By separating these uses into non-concurrent categories, the analysis concludes that the zoning requirement for parking is satisfied. This makes sense on the surface, but it would be helpful to understand the expected parking *demand* generated by the various uses (inclusive of employees) so that the parking supply can be evaluated. Citing data from local studies of similar uses, ITE, or Urban Land Institute would be appropriate.

If you have any questions about the above comments, please don't hesitate to contact our office.

Respectfully,

Creighton Manning Engineering, LLP

Frank A. Filiciotto, PE