

DATE: December 14, 2017
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FROM: Arthur G. Stadig, P.E.
PROJECT NAME: 134-138 Babcock Place, Brookline, MA
PROJECT NUMBER: 16-2823.00
SUBJECT: Peer Review of Parking, 12-13 Concept Design

Walker Parking Consultants (WPC) has been retained by the Town of Brookline through Environmental Partners Group to review parking for the 134-138 Babcock Place application. WPC has reviewed the application materials presented by the proponent that are generally available on the Town's website for this project. This review is for recent materials that were dated 12-13-2017 and are described as Zoning Board Presentation.

134-138 Babcock Place is currently designed for 45 residential units, down from previous submissions. Vehicles enter and exit the site from a curb cut on Babcock Street which is in a revised location from previous submissions. There is one level of parking accessed at grade at Babcock Street but below grade for the remainder of the site. The garage contains 36 spaces, including 2 accessible spaces. The parking uses a semi-automated mechanical parking system which generally provides approximately two vehicles for each plan parking location.

We have reviewed the materials and offer the following comments:

1. For the Transit Parking Overlay District (TPOD), the Town requires 1.0 spaces per studio unit, 1.4 spaces for 1 bedroom units and 2.0 spaces for 2 and 3 bedroom units which totals 63 spaces or an average of 1.40 spaces/unit. The project is reducing the number of required spaces to 36 spaces or 0.80 spaces/unit. In our research, if these spaces are market rate for the area, we suggest an appropriate parking supply be between 0.7 to 0.9 spaces per unit, or 32 to 41 spaces.
2. The drawings show building sections which indicate no openings of the parking level walls. This implies no natural ventilation for the parking facility. Parking facilities that are below residential use can either be classified from a code standpoint as an "Open Parking Garage" or an "Enclosed Parking Garage". Because there is no openness for natural ventilation, mechanical ventilation is required for an Enclosed Parking Garage in accordance with the mechanical code. Currently the drawings do not show provisions for required ventilation.
3. It is unclear what the current plan is for access control to open and close the garage doors. There is one large door for entry and exit. The plans do not indicate a width of the door, but it scales at about 19' wide. The entering door is approximately 45' from the curb at the street. The width of the access drive lane scales at approximately 18'. While turning maneuvers are shown for both entering and exiting vehicles in the Traffic memorandum by Vanasse & Associates dated 11-17-2017, they do not show them occurring simultaneously. Further, the turning maneuvers are showing the wheel-tracks, but not the envelope of outside vehicle dimensions. Generally speaking, the revised Concept Design vehicle entry will only allow one-way traffic, either in or out. Since visibility of vehicles inside the facility is blocked from those entering, there will be occasional conflicts that may require backing-up to avoid collision and to allow the other vehicle to pass. While 18' is wide-enough for vehicles to

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pass at the entry drive, maneuvers will be slow. And while there is length for two vehicles to queue after entering from Babcock Street, the queued vehicles will need to use the entire drive lane width to make the appropriate turns to get into the garage. The biggest issue is the swivel move through the overhead doors for entry drive to parking aisle in the garage. We recommend that this condition be studied for improvement.

4. The parking facility utilizes semi-automated vertical puzzle parking to allow a “stacked” parking condition. A manufacturer’s brochure has been submitted showing a CityLift 2-level standard system. This system has been used successfully in the Boston area for residential parking and elsewhere in the USA. We do not take exception to the use of this type of system for this application. We recommend further design development to ensure adequate working details. Attention should be paid to fire suppression system details.
5. There are 2 ADA spaces per the requirement and one is labeled as a “van” space. The accessible spaces appear to meet dimensional requirements.
6. The compliance of parking dimensions meeting zoning will need further review considering the mechanical parking system.

We remain available to answer further questions and attend the Town’s ZBA meeting as required.