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March 21, 2019

Ms. Mary F. Savage Dunham, AICP, CFM  
Director of Community Planning  
Town of Hingham  
210 Central Street  
Hingham, MA 02043

RE: Response to Comments  
Proposed Mixed-Use Development  
103 & 105 North Street and 11 Bank Avenue  
Hingham, Massachusetts

Dear Ms. Dunham,

McMahon Associates has reviewed the comments provided by Vanasse & Associates, Inc., in a letter dated September 18, 2018, in regards to the traffic analysis conducted as part of the proposed Mixed-Use Development to be located at 103 & 105 North Street and 11 Bank Avenue in Hingham, Massachusetts. The Vanasse & Associates review letter was based on a review of the Traffic Impact Study prepared by McMahon Associates in September 2018. This letter provides a McMahon response to each of the Vanasse & Associates comments related to the Traffic Impact Study.

**Comment 1:** Given the proximity of the North Street access to South Street, the study area should be expanded to include the intersection of North Street at South Street.

*Response 1: Turning movement counts were performed at the intersection of North Street at South Street in February and March of 2019 and are attached to this memo. Capacity analysis for the intersection of North Street at South Street/Site Driveway for 2025 Build conditions is attached to this memo.*

**Comment 2:** The data collection effort should include a 72-hour (Thursday through Saturday, inclusive) automatic traffic recorder (ATR) count on North Street in the vicinity of the Project site that should include vehicle travel speed measurements.

*Response 2: A 72-hour, automatic traffic recorder (ATR) count has been conducted on North Street from Thursday, March 7, to Saturday, March 9, 2019 just west of the intersection of North Street and South Street. The results are attached to this memo.*

**Comment 3:** The traffic volumes entering and exiting the Bank Avenue Project site driveway during the weekday evening peak-hour should be reviewed for consistency with the raw traffic count data.

*Response 3: The peak hour traffic volumes entering and exiting Bank Avenue have been reviewed and updated to reflect the turning movement count data collected as part of the project.*

**Comment 4:** The motor vehicle crash analysis should be updated to incorporate the 2016 motor vehicle crash data that is available from MassDOT and to include the North Street/South Street intersection.

*Response 4: The crash analysis has been updated to include the 2016 crash data from MassDOT and has also been expanded to include the intersection of North Street and South Street. The updated crash summary is attached to this memo.*

**Comment 5:** The MassDOT Crash Rate Worksheet should be provided for the North Street/Bank Avenue intersection to verify that the calculated crash rate exceeds the MassDOT average crash rate for an unsignalized intersection. To the extent that the calculated crash rate exceeds the MassDOT average, motor vehicle crash reports should be obtained from the Hingham Police Department for the most recent complete 5-year period available and a motor vehicle collision diagram should be prepared for the intersection.

*Response 5: The MassDOT Crash Rate Worksheets are attached to this memo. The crash rate for the intersection of North Street at South Street are shown to be above the statewide and district averages. Therefore, detailed crash reports at this intersection were requested from the Hingham Police Department and will be analyzed when received.*

**Comment 6:** A portion of the existing traffic along Bank Avenue that is not associated with the Project site appears to have been reassigned to the North Street Project site driveway. The trip reassignments should be reviewed and the associated traffic operations analyses corrected to the extent necessary.

*Response 6: A portion of existing Bank Avenue traffic is associated with the existing land use on the project site, and therefore was assigned to use the North Street site driveway under Build conditions. The trip assignment for the proposed project have been revised to reflect the updated site plan which depicts a clockwise circulation through the project site. Updated Build 2025 capacity analysis for the intersection of North Street at Bank Avenue is attached to this memo.*

**Comment 7:** Given that the North Street access to the Project site is located proximate to South Street, the traffic operations analysis should be revised to include the interaction of the Project site driveway with South Street (i.e., modeled as a four-way intersection with the Project site driveway and South Street under STOP-sign control).

*Response 7: The capacity analysis of the project site driveway at North Street is shown within the 2025 Build capacity analysis attached to this memo.*

**Comment 8:** A conflict diagram should be prepared to illustrate the conflicting turning movements and potential operational and safety impacts that may result from the off-set between the Project site driveway and South Street. It is imperative that clear lines of sight be afforded to and from the Project site driveway for the intersection to function in a safe manner.

*Response 8: A conflict diagram has been created to illustrate the conflicting turning movements from the proposed site driveway and South Street onto North Street and is attached to this memo. Based on a review of the conflict diagram, given that there are clear sightlines between the two approaches and minimal volume exiting South Street to the west (left), the off-set of the site driveway is not anticipated to create operational or safety impacts as a result of the project.*

**Comment 9:** Sight distance measurements should be provided for the Project site driveway intersections and the intersections of North Street at Bank Avenue and North Street at South Street following American Association of State Highway and Transportation Officials (AASHTO) standards for both the stopping sight distance approaching the intersections and the intersection sight distance exiting the driveways. The sight lines provided should be assessed based on the measured 85th percentile speed approaching the driveways or the posted speed limit, whichever is higher. The sight line measurements for the North Street Project site driveway should include lines of sight to/from the adjacent (east) residential driveway and reflect the presence of vehicles that may be parked within the on-street parking area along the Project site frontage.

*Response 9: Sight distances for the project site driveway intersections and the intersections of North Street at Bank Avenue and North Street at South Street have been measured and are summarized in a table attached. Vehicles exiting the proposed driveway on North Street are expected to exit in two stages, first crossing the sidewalk during a gap in pedestrian traffic before turning onto North Street in a vehicular gap. As such, sight distance at the site driveway was measured at the decision point of the second stage of the crossing, approximately six feet from the edge of North Street. At this decision point, sight distances measurements show that there is sufficient stopping sight distance for the 85<sup>th</sup> percentile vehicle speeds on North Street.*

**Comment 10:** Recommendations: The Applicant should commit to the implementation of a Transportation Demand Management (TDM) program that would include the 11 Bank Street mixed-use development and the existing residential use at 103 and 105 North Street, and consist of the following measures:

- The owner or property manager will contact MassRIDES to obtain information on facilitating and encouraging healthy transportation options for residents and employees of the Project;
- Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to residents and employees;
- A “welcome packet” will be provided to new residents and employees detailing available public transportation services, bicycle and walking alternatives, and commuter options available through MassRIDES and their Bay State Commute program (formerly NuRide) which rewards individuals that choose to walk, bicycle, carpool, vanpool or that use public transportation to travel to and from work;

- Residents and employees will be made aware of the Emergency Ride Home (ERH) program available through MassRIDES, which reimburses employees of a participating MassRIDES employer partner worksite that is registered for ERH and that carpool, take transit, bicycle, walk or vanpool to work;
- Pedestrian accommodations will be incorporated into the Project to link the existing and proposed buildings to the sidewalk infrastructure along North Street;
- A mail drop will be provided in a central location within each building; and
- Secure bicycle parking will be provided consisting of: i) exterior bicycle parking conveniently located proximate to building entrances; and ii) weather protected bicycle parking located in a secure area within the proposed parking garage that is accessible to residents of both buildings and employees.

*Response 10: The proponent agrees to implement a Transportation Demand Management (TDM) program, including providing information regarding public transportation, walking, and biking, and providing a mail drop within the building. The most recent site plan includes a sidewalk connection between the proposed buildings and North Street. Secure bicycle parking will be considered, but is dependent on available space in the interior and exterior of the building.*

If you have any questions or require any additional information, please feel free to contact me at 617-556-0020.

Very truly yours,



Maureen Chlebek, P.E., PTOE  
Regional Manager – New England

Attachments:

2025 Build Capacity Analysis  
Count Data  
Crash Summary  
MassDOT Crash Worksheets  
Sight Distance Measurements  
Turning Conflict Diagram