MEMORANDUM

TO:	Mr. Christian Klein Chairman Zoning Board of Appeals 23 Maple Street Arlington, MA 02476	**FROM:**	Mr. Shaun P. Kelly SPK Associate Vanasse & Associates, Inc. 35 New England Business Center Drive, Suite 140 Andover, MA 01810
DATE:	January 23, 2023	**RE:**	9153

SUBJECT: Response to Transportation Peer Review
Proposed Residential Development
1021 & 1025 Massachusetts Avenue
Arlington, Massachusetts

Vanasse & Associated, Inc. has prepared this memorandum to respond to comments issued by the Town of Arlington Transportation Advisory Committee, as outlined in their November 2, 2022 memorandum and comments issued by the Town's transportation peer review consultant, Tetra Tech, as outlined in their January 6, 2023 peer review letter. The responses to the Tetra Tech letter are provided for the traffic study only, with responses to comments related to the site plan provided under separate cover.

To facilitate your review, this document follows the general outline of both comment letters. As noted, based on the supplemental information provided, the findings of the initial Transportation Impact Assessment (TIA) remain unchanged, with the proposed development expected to have minimal impact on area traffic operations. The applicant is committed to working with the Town to enhance pedestrian accommodations within the study area, including reconstruction of sidewalk adjacent the site, and implementing improvements to the mid-block pedestrian crossing located across Massachusetts Avenue, south of the Project.

Transportation Advisory Committee Comments

Existing Conditions

Comment 1: "Were the traffic counts (March 16, 2022) conducted when schools were in session?"

Response: Based on a review of the academic calendar for Arlington Public Schools, public schools were in session when the traffic counts were conducted.

Comment 2: "Pedestrian, bicycle and trucks volumes were not provided. Please provide them."

Response: As requested, existing traffic volume networks for pedestrian and bicycles have been provided as an attachment to this document. Truck volumes were already included in the overall traffic volumes presented in Figures 3 of the TIA, but have been called out explicitly in an existing truck volume figure provided as an attachment to this document.

Comment 3: "Did any of the reported crashes involve pedestrians or bicyclists?"

Response: A single collision between a vehicle and pedestrian occurred on Tuesday October 11, 2016 at the intersection of Massachusetts Avenue at Brattle Street.

Comment 4: "It should be noted that the condition of the existing sidewalk on Mass Ave along the project frontage is in fair condition and generally not ADA compliant."

Response: In conjunction with the Project development, the existing sidewalk along the site frontage will be reconstructed to ADA design criteria.

Future Conditions

Comment 5: "Project vehicle trips were only assigned to Mass Ave. It seems reasonable to assume that some trips would use Brattle St to get to Rt. 2A or Walnut Street or School Street to travel towards Route 2."

Response: The trip distribution patterns for the Project were developed based on existing traffic flows and expected commuter patterns within the study area, which indicate that the majority of traffic destined to points east and west of the site would utilize Massachusetts Avenue at their primary travel route.

A review of the traffic patterns at the intersections Massachusetts Avenue with Brattle Street and Walnut Street reveals relatively low volumes of traffic utilizing these corridors. Specifically, during the morning commuter peak, only 12 percent of the westbound traffic on Massachusetts Avenue turns onto Brattle Street, with the remaining 88 percent continuing westbound. Similarly, only 3 percent of the eastbound traffic on Massachusetts Avenue turns onto Walnut Street, with the remaining 97 percent continuing eastbound on Massachusetts Avenue.

Given the relatively low trip generation characteristics of the Project, only 1 peak hour trip would be expected to use either of these corridors, which would not materially change the results of the capacity analyses at either location.

Comment 6: "Provide a Site Layout Plan."

Response: An updated site layout plan is provided under separate cover by the site engineer.

Comment 7: "Identify proposed driveway width."

Response: The proposed driveway width within the garage is 24 feet. The outside driveway and garage door width has been increased to 20 feet.

Comment 8: "Identify if any existing driveway curb cuts are being closed. If so, will this create any additional on-street parking spaces?"

Response: As part of the site redevelopment, three existing curb cuts, including a curb cut located adjacent to the existing bus stop will be closed. Parking spaces along this stretch of Massachusetts Avenue are not individually delineated, however the closure of the existing

curb cuts will likely allow for an additional 1-2 vehicles to be parked along the site frontage.

Comment 9: "How will residents get bikes to the basement?"

Response: An elevator and stairwell will be provided to allow residents to access the basement bicycle parking.

Comment 10: "Provide dimensions for parking spaces."

Response: Parking space dimensions are provided on the updated site plans, submitted under separate cover by the site engineer.

Comment 11: "Identify handicap parking spaces."

Response: A total of three (3) handicap parking spaces are provided as depicted on the updated site plans, submitted under separate cover by the site engineer.

Comment 12: "It may be difficult for full-size vehicles to park in the end spaces against the walls."

Response: Autoturn analyses depicting turning movements to and from these spaces are provided under separate cover by the site engineer.

Comment 13: "Identify where retail customers would park on-site."

Response: Parking for the limited ground level commercial space would occur on-street and not on-site.

Comment 14: "The Recreation and Open Space Amenities Plan shows shrubs/perennials planted within project's plaza area. Street trees should also be provided along the project frontage."

Response: Street trees have been added to the project frontage.

Comment 15: "Will the tables, chairs, umbrellas, lawn, and furniture proposed within the plaza area be for project residents, or commercial patrons? Will it be open to the public?"

Response: Amenities provided within the plaza area will be open to the public.

Comment 16: "Would the proposed pedestrian pathway on the west side of the building, to access the open spaces at the rear of the site, be open to the public?"

Response: The proposed pedestrian pathway on the west side of the building, to access the open space, will not be open to the public.

Comment 17: "Identify how emergency vehicles would access the rear of the building."

Response: Emergency vehicle access to the building would be from the front of the building, from the rear adjacent parking lot, and there will be an access door in the rear wall of the building in line with the garage door.

Recommendations

Comment 18: "Reconstruct sidewalk along the project frontage to improve surface condition and meet ADA requirements."

Response: In conjunction with the Project, the sidewalk along the site frontage will be reconstructed to meet ADA requirements.

Comment 19: "The fee for residential units and parking spaces should be unbundled (separated) so that residents who do not wish to own a vehicle do not have to pay for a parking space."

Response: Given this is a condominium development, each unit will have a parking space assigned to it.

Comment 20: "The proponent should consider providing MBTA passes (or a portion of) for residents for the first year of occupancy as an incentive to use public transportation for commuting."

Response: No public transportation subsidies are proposed as part of the Project.

Town of Arlington Department of Public Works

Traffic:

Comment 1: Review and documentation of the Mass Ave. LOS ratings should be provided along with anticipated traffic generation and effects resulting from the proposed project.

Response: The June 2022 TIA includes a detailed summary of the existing and future LOS ratings for all study area locations, as well as the anticipated daily and peak hour traffic generation. As documented in the TIA, Project-related traffic increases are expected to result in approximately one new vehicle trip every 2 to 3 minutes, resulting in no notable impact to area traffic operations.

Comment 2: Due to proximity to the Mass Ave. and Brattle Street signalized intersection and the entrance to the Highland Fire Station, it is recommended that an analysis be provided indicating the anticipated impacts of increased traffic volume and use at these locations.

Response: As summarized in the TIA, Project-related traffic increases are expected to result in increases to peak hour area traffic volumes of approximately 1 to 2 percent as compared to future No-Build conditions. Project-related traffic impacts to the intersection of Massachusetts Avenue with Brattle Street are projected to result in minimal increases to overall delays or approximately 1 second or less as compared to future No-Build conditions. Project-related traffic increases in the vicinity of the Highland Fire Station are also minimal, resulting in only 11 to 18 total hourly trips, or one new trip every 3 to 5 minutes in the vicinity of the station.

Tetra Tech Comment Letter 1

Transportation Impact Assessment

Comment 61: "Town guidelines recommend traffic studies include intersections within 1,000 feet of the development site. The traffic study did not include all intersections within 1,000 feet. However, additional intersection capacity analyses beyond those evaluated in the traffic study is not warranted since Project traffic is less than 2% of existing volume. Such a nominal increase is not anticipated to materially change peak hour levels of service at intersections not included in the study."

Response: VAI concurs with Tetra Tech that the nominal increases in traffic associated with the Project are not anticipated to have a material impact on traffic operations within the study area.

Comment 62: "The building program shown in the traffic study varies slightly from that shown on architectural plans and site plans. The discrepancies are not considered material but should be addressed in future submittals to the extent possible."

Response: Since the preparation of the initial TIA, the building program was modified, including the relocation of all proposed parking below the building in a ground level garage. The current parking plan calls for a total of 52 parking spaces, including 2 handicap accessible parking spaces.

Comment 63: "The traffic study indicates that nine surface parking spaces are proposed in the rear of the site. However, the site plan does not show any surface parking on the site. Please confirm proposed parking layout and supply."

Response: See response to Comment 62.

Comment 64: "The traffic study included a crash analysis of the study intersections. However, crash data for the Massachusetts Avenue/Menotomy Road intersection and the crash rate calculations for all study intersections were not included in the Appendix. Please provide."

Response: As requested, crash data include the crash rate calculations are provided as an attachment to this document.

Comment 65: "No documentation is provided to support the proposed parking space to unit ratio. We recommend the Board request the applicant to provide a simple justification for the ratio proposed."

Response: As the project is a condominium for sale project, all units will be provided one parking space. This parking ratio exceeds the Institute of Transportation Engineers (ITE) parking demand ratio of 0.90 spaces per dwelling unit rate for Multifamily Housing (Mid-Rise) with no nearby rail transit.

Comment 66: "Based on the site plan, emergency vehicle access will be limited to the front (Massachusetts Avenue) side of the building. Tetra Tech recommends that the Applicant describe anticipated emergency vehicle access at the site and explore the feasibility of expanding emergency vehicle access to the sides and rear of the property. The Applicant should review the site plan with the Arlington Fire Department to ensure accommodations provided are acceptable to the Fire Department."

Response: The emergency vehicle access plan, which allow for fire department access to all sides of the building by utilizing adjacent properties, is provided by the site engineer under separate cover.

Comment 67: "It's unclear how delivery/trash pickup/moving trucks will be accommodated. We recommend the Board request the applicant describe how these activities will be accommodated and provide AutoTurn analysis, if needed, to confirm services/vehicles can circulate without impeding on-street parking, bicycle lane operations or site access/circulation."

Response: All delivery, trash pickup and move in activity will occur within the off-street driveway.

Comment 68: "We agree with the TIAS's suggested site access improvements to provide a Stop bar and sign at the site driveway approach to Massachusetts Avenue. Tetra Tech recommends that all proposed traffic signage and pavement markings for the project be MUTCD-compliant.

Response: All proposed signage and pavement markings will be designed in accordance with MUTCD design criteria.

Comment 69: "The traffic study assumed 20% of residents will use non-vehicle modes of travel to/from the site. Based largely on its MBTA access and the bus stop on the north side of Massachusetts Avenue. We recommend the Applicant coordinate with the Town and the MBTA to evaluate the feasibility and appropriateness of providing a bus shelter to encourage transit usage to/from the site."

Response: The applicant is committed to providing benches for use by the public within the hardscape plaza, immediately adjacent to the MBTA bus stop.

Comment 70: "The Applicant commits to providing bike storage based on the architectural plans. The proposed bike rack locations should be shown on the site plans. Tetra Tech recommends that the Applicant consider providing a mix of indoor, secured long-term bike parking for residents and outdoor, short-term bike parking for guests and retail customers. The bike mitigation should be developed in accordance with the Town's Bicycle Parking Guidelines."

Response: Bicycle storage locations are depicted on the site plans, submitted under separate cover. Both indoor secure spaces for building tenants and outdoor short-term parking for guests and retail customers are provided.

Comment 71: "The traffic study indicates that adequate ISD would be provided at the proposed site driveway on Massachusetts Avenue. However, the available ISD would be restricted when taking on-street parking into account. Tetra Tech recommends that the Applicant work with the Town to evaluate the feasibility of providing a painted buffer (on-street parking restriction) between the proposed driveway and the beginning of on-street parking to the south of the driveway to enhance sight lines."

Response: The applicant is committed to working with the Town of Arlington to implement pavement markings and signage, restricting parking immediately south of the proposed garage entrance to enhance sight lines for exiting motorists.

Comment 72: "As part of the project, a new driveway will be constructed for vehicles entering/exiting the proposed covered parking area. This new driveway will be located within approximately 15 feet of the existing bus lane. The minimum length for an on-street parking space (end space) is 20 feet. Therefore, Tetra Tech recommends the Applicant

prepare a restriping plan to extend the end of the bus lane or provide hatched pavement markings to provide a no parking zone between the bus lane and the proposed driveway, subject to Town review and approval. The plan should also show the proposed restriping for the on-street parking to the south of the driveway."

Response: The applicant is committed to working with the Town to implement pavement marking modifications, either by extending the existing bus lane, or adding cross hatched pavement markings with No Parking signage to ensure no vehicles park between the southern terminus of the existing bus lane and the proposed driveway location.

Comment 73: "Approximately 425 feet south of the site, a midblock crossing is provided across Massachusetts Avenue. Tetra Tech recommends that the Applicant assess conditions at this location (i.e., pavement striping, wheelchair ramp design, crosswalk width and pavement markings, traffic control, sight lines, etc.) and determine if any improvements are warranted to enhance safety."

Response: The condition of the existing midblock crosswalk was reviewed to identify any potential improvements that could be implemented to enhance safety at this location. Based on field observations, advance signage is provided in both the eastbound and westbound directions, including pedestrian crossing ahead signage in advance of the crosswalk and pedestrian crossing signage at the crosswalk location. Additionally, no sight line issues were identified, with clear lines of sight in both directions. It is noted that the wheelchair ramp located on the southern side of Massachusetts Avenue does not provide a detectable warning panel and may not be ADA compliant. Additionally, the painted crosswalk at this location is faded. As mitigation for the Project the applicant is committed to upgrading the southern wheelchair ramp, as required, to meet current ADA design requirements and to also install new thermoplastic pavement markings to enhance the existing crosswalk conditions.

Comment 74: "We recommend the Applicant describe anticipated delivery and moving truck operations and confirm that these services/vehicles can be adequately accommodated on-site without impeding site access, circulation and/or parking."

Response: All delivery and moving truck operations are proposed to occur on-street from Massachusetts Avenue, or within the proposed driveway.