

Ref: 9930

February 21, 2024

Mr. Tobin Shulman, Chair
Board of Appeals
Town of Stoneham
35 Central Street, Basement Level
Stoneham, MA 02180

Re: Traffic Engineering Peer Review
The Residences at Spot Pond – 5 Woodland Road
Stoneham, Massachusetts

Dear Chair Shulman and Members of the Board of Appeals:

Vanasse & Associates, Inc. (VAI) has completed a review of the materials that have been submitted on behalf of Fellsway Development, LLC c/o The Gutierrez Company (the “Applicant”) in support of the proposed multifamily residential development to be known as The Residences at Spot Pond and located at 5 Woodland Road in Stoneham, Massachusetts (hereafter referred to as the “Project”). The Applicant is requesting the issuance of a Comprehensive Permit for the Project pursuant to M.G.L. c.40B, §§ 20 through 23. Our review focused on the following specific areas as they relate to the Project: i) vehicle and pedestrian access and circulation; ii) Massachusetts Department of Transportation (MassDOT) design standards; iii) Town Zoning requirements as they relate to access, parking and circulation; and iv) accepted Traffic Engineering and Transportation Planning practices. The Applicant has submitted the following materials which are the subject of this review:

1. *Comprehensive Permit Site Approval Application*, The Residences at Spot Pond, Stoneham, MA, submitted by The Gutierrez Company on behalf of Fellsway Development, LLC and dated June 30, 2023;
2. *Comprehensive Permit Application to Town of Stoneham Zoning Board of Appeals*, The Residences at Spot Pond, Stoneham, MA, submitted by The Gutierrez Company on behalf of Fellsway Development, LLC and dated December 14, 2023;
3. *Site Development Plans*, The Residences at Spot Pond, 5 Woodland Road, Map 27 Lots 3, 3CM & 6, Stoneham, MA; Allen & Major Associates, Inc.; November 16, 2023, no revisions (the “Site Plans”);
4. *Architectural Plans*, The Residences at Spot Pond, 5 Woodland Rd. Stoneham, MA; Cube3; November 16, 2023 (no revisions); and
5. *Traffic Impact Assessment*, The Residences at Spot Pond, Stoneham, Massachusetts; Langan Engineering & Environmental Services, Inc.; November 2023 (the “November 2023 TIA”).

In addition, VAI reviewed the site locus in order to validate the existing conditions context of the Project and to observe factors related to the design and location of the access to the Project site, internal circulation and potential off-site improvements.

Based on our review of the aforementioned materials that have been submitted in support of the Project, we have determined that the materials were prepared in a professional manner and following the applicable standards of care. That being said, the Applicant should address the following comments that were identified as a part of our review, a detailed summary of which is attached:

November 2023 TIA

Comment T1: Based on discussions with the Director of Planning & Community Development, it is our understanding that the Massachusetts Bay Transportation Authority (MBTA) has indicated that the route for the Route 99 bus will be redirected along Executive Drive to travel in a counterclockwise direction with a new bus stop to be located along the south side of Executive Drive opposite the Project site at the location that is proposed for a new 82 space surface parking lot. We would suggest that consideration be given to constructing a bus stop with a shelter at the new bus stop location and that the proposed surface parking lot be “land banked” and not constructed unless the observed parking demands demonstrate the need for the additional parking.

Comment T2: Given that the Woodland Road/Pond Street intersection has been identified as high crash location and acknowledging that there are planned future improvements that will serve to enhance safety at the intersection, we would recommend a motor vehicle collision diagram be prepared for the intersection and that recommendations be provided to address the identified crash patterns that can be implemented as a part of the Project subject to receipt of all necessary rights, permits and approvals. It is expected that these improvements would be limited to sign and pavement marking enhancements.

Comment T3: We would suggest consideration of advancement of the following improvements as a part of the Project, which are commensurate with the predicted impact of the Project on the transportation infrastructure and are focused on safety and encouraging the use of alternative modes of transportation to single-occupancy vehicles:

1. Implement safety-related improvements at the Woodland Road/Pond Street intersection that should be informed by the preparation of a motor vehicle collision diagram for the intersection and limited to the installation of signs and pavement markings subject to receipt of all necessary rights, permits and approvals; and
2. Implement a Transportation Demand Management (TDM) program that is inclusive of the following elements:
 - Assign a transportation coordinator for the Project who may also have other responsibilities to coordinate the TDM program;
 - Information regarding public transportation services should be made available to residents and include maps, schedules and fare information;
 - A “welcome packet” should be provided to new residents providing the name and contact information for the transportation coordinator and detailing available public transportation services, bicycle and walking alternatives, and other commuting options;



- Work-at-home accommodations should be included within Project, and may take the form of meeting space and a business office in the common area;
- Make best efforts to coordinate with a carshare provider to locate two (2) carshare vehicles at the Project site for use by residents of the Project;
- Secure bicycle parking should be provided consisting of both weather protected bicycle parking and exterior bicycle racks; and
- A transit screen or other equivalent display will be provided in the primary building lobby to display real-time traffic and bus location information (similar to <https://transitscreen.com/>).

Site Plans

- Comment S1: The sight triangle areas for the Project site driveways should be shown on the Site Plans along with a note to indicate: “Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not to exceed 2.5-feet in height. Snow accumulation (windrows) located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”
- Comment S2: A narrative should be provided describing how tenant moves will be accommodated and trash/recycling managed, including the scheduling of such activities and where they will occur within the Project site.
- Comment S3: A loading area for deliveries and rideshare vehicles should be provided for “Building B” (similar to the accommodation shown for “Building A”).
- Comment S4: The single-yellow centerlines should be changed to double-yellow centerlines.
- Comment S5: Interior, weather protected bicycle parking should be provided in each building that is convenient to a pedestrian or vehicle entrance to the buildings. In addition, exterior bicycle racks should be located proximate to each building entrance.
- Comment S6: A leveling area that should not exceed 2 percent for a minimum distance of 25 feet should be provided approaching Executive Drive for the driveway that is located to the immediate north of “Building B”.
- Comment S7: The grade of the fire department access to the east of “Building B” is identified as 14.9 percent, which exceeds the 10 percent maximum grade specified in 527 CMR 1.05 c. 18 §18.2.3.5.6.1. We defer to the Fire Chief as to the adequacy of this access for use by emergency vehicles.



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Parking

Comment P1: Based on a review of parking demand data available from the Institute of Transportation Engineers (ITE)¹ for multifamily residential communities in a similar setting, we would suggest that consideration be given to delaying the construction of the 82 space surface parking lot that is proposed to the east of the Life Care Center of Stoneham and “reserve” (design for but not construct) this area for future parking, if necessary, based on tenant demands as the Project is leased. Reserving but not constructing these parking spaces would reduce the initially constructed parking supply to 597 parking spaces, or a parking ratio of 1.58 parking spaces per unit, which continues to exceed the ITE average peak parking demand ratio for a multifamily residential development.

Comment P2: Consideration should be given to designating two (2) parking spaces proximate to each building entrance as short-term (10-minute) parking for rideshare providers and deliveries.

This concludes our review of the materials that have been submitted to date in support of the Project. Written responses to our comments should be provided so that we may continue our review on behalf of the Town. If you should have any questions regarding our review, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.



Jeffrey S. Dirk, P.E., PTOE, FITE
Managing Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

JSD/jsd

¹*Parking Generation Manual*, 6th Edition; Institute of Transportation Engineers; Washington D.C.; October 2023.



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The following details Vanasse & Associates, Inc.'s (VAI's) review of the November 2023 *Traffic Impact Assessment* (the "November 2023 TIA") prepared by Langan Engineering & Environmental Services, Inc. (Langan), and the November 16, 2023 Site Plans prepared by Allen & Major Associates, Inc. (A&M), in support of the proposed multifamily residential development to be known as The Residences at Spot Pond and located at 5 Woodland Road in Stoneham, Massachusetts (hereafter referred to as the "Project"). Our comments are indicated in *italicized* text, with those requiring responses or additional information **bolded**.

PROJECT DESCRIPTION

The Project will entail the construction of a 378-unit, multifamily residential development with supporting parking and amenities to be located at 5 Woodland Road in Stoneham, Massachusetts. The residential units will be dispersed between two (2) buildings, with "Building A" to contain 138 residential units in five stories and "Building B" to contain 240 residential units in five stories above one level of parking, along with supporting amenities and parking. The Project will be developed on 10.02± acres in the southern portion of the property that was formerly operated as the Boston Regional Medical Center (BMRC). The Project site is currently occupied by the former BMRC hospital building and associated appurtenances, and is bounded by medical office buildings and supporting surface parking to the north; Executive Drive to the south and east; and Woodland Road and the aforementioned medical office buildings and parking to the west. The Project site is improved by the former BMRC hospital building and associated appurtenances, all of which will be removed or modified (surface parking areas) to accommodate the Project.

Access to the Project will be provided by way of Executive Drive and seven (7) individual driveways that intersect Executive Drive.

On-site parking will be provided for 679 vehicles, or a parking ratio of 1.75 parking spaces per unit, consisting of 583 surface parking spaces, 59 of which are defined as "Non-Exclusive" deeded parking located within the parking lot serving the Life Care Center of Stoneham and 82 are to be located in a new surface parking lot situated along the south side of Executive Drive, and 96 garage parking spaces.

NOVEMBER 2023 TIA

General

The November 2023 TIA was prepared in a professional manner and following the applicable standards of care, and was prepared under the responsible charge of Maximo G. Polanco, P.E. (MA P.E. No. 58173, Civil) and John D. Plante, P.E. (MA P.E. No. 38118, Civil).

Existing Conditions

Study Area

The study area that was assessed in the November 2023 TIA consisted of Woodland Road and Executive Drive, and the following specific intersections:



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1. Woodland Road at Pond Street
2. Woodland Road at Ravine Road
3. Woodland Road at Executive Drive (North)
4. Woodland Road at Executive Drive (South)
5. Woodland Road at Elm Street & Highland Avenue
6. Elm Street at Fulton Street

Comment: This study area includes all intersections where the Project is predicted to result in an increase in peak hour traffic volumes by: a) five (5) percent or more, or b) by more than 100 vehicles per hour.

Traffic Volumes and Data Collection

Traffic volume data was collected by means of: i) automatic traffic recorder counts (ATRs); and ii) turning movement counts (TMCs) and vehicle classification counts; that were conducted in September 2023. The ATR was conducted on Woodland Road, south of Executive Drive, over a 24-hour period on Wednesday, September 13, 2023, that included the collection of vehicle travel speed data. The TMCs were conducted at the study area intersections also on Wednesday, September 13, 2023, during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods. These time periods were selected for analysis as they were determined to be representative of the peak traffic volume periods for both the Project and the adjacent roadway network.

A review of seasonal adjustment data available from MassDOT indicated that traffic volumes within the study area during the month of September are approximately 8.0 percent higher than those that occur under “average-month” conditions. Accordingly, the September traffic volumes did not require a seasonal adjustment as the data is representative of above “average-month” conditions.

Comment: The data collection effort and seasonal adjustment were completed following accepted standards.

We note that MassDOT no longer requires pandemic-related adjustment of traffic counts performed after March 2022 except in locations where the predominant land use consists of offices or similar uses.² Given that the predominant land use within the study area consists primarily of residential properties, a pandemic-related adjustment was not applied to the traffic count data.

Pedestrian and Bicycle Facilities

A description of pedestrian facilities within the study area was included as a part of the roadway and intersection descriptions in the November 2023 TIA. As described therein, sidewalks are provided along the west side of Woodland Road, along the inner side (the side of the roadway along which the proposed buildings will be located) of Executive Drive and along the north side of Pond Street.

²25% Design Submission Guidelines; MassDOT Highway Division, Traffic and Safety Engineering; Revised May 31, 2022.



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A description of planned future pedestrian and bicycle accommodations was also provided. The Spot Pond Circumferential Trail Project is currently in the preliminary design phase and envisions reducing the width of Woodland Road to accommodate a two-way bicycle path and a widened sidewalk along the west side of the roadway, with modern roundabouts to be constructed at the Woodland Road/Pond Street and Woodland Road/Ravine Road intersections and pedestrian crossings provided. As a short-term improvement, the existing four-lane cross-section along Woodland Road would be reduced by one lane in each direction in order to accommodate the addition of buffered bicycle lanes and additional turn lanes and pedestrian crossings would be added at the Woodland Road/Pond Street, Woodland Road/Ravine Road and Woodland Road/Executive Drive intersections.

Comment: The Project site is well situated to take advantage of the existing and proposed pedestrian and bicycle infrastructure.

Public Transportation

A description of public transportation services that are available within the study area was provided as a part of the November 2023 TIA. As described therein, public transportation services are provided within the study area by the Massachusetts Bay Transportation Authority (MBTA). The MBTA provides fixed-route bus services along Woodland Road and Executive Drive by way of Route 99, *Woodland Road - Wellington Station*, with a stop located adjacent to the Project site at 3 Woodland Road. The Route 99 bus provides service to Malden Center Station, where connections can be made to the Orange Line subway system, the Commuter Rail (Haverhill Line) and other MBTA bus routes, and to Wellington Station, where connections can also be made to the Orange Line subway system and other MBTA bus routes.

Comment: The Project site is well situated to take advantage of the existing public transportation services operated by the MBTA.

Comment T1: Based on discussions with the Director of Planning & Community Development, it is our understanding that the MBTA has indicated that the route for the Route 99 bus will be redirected along Executive Drive to travel in a counterclockwise direction with a new bus stop to be located along the south side of Executive Drive opposite the Project site at the location that is proposed for a new 82 space surface parking lot. We would suggest that consideration be given to constructing a bus stop with a shelter at the new bus stop location and that the proposed surface parking lot be “land banked” and not constructed unless the observed parking demands demonstrate the need for the additional parking (discussion follows).

Motor Vehicle Crash Summary

Motor vehicle crash information for the study area intersections was obtained from MassDOT for the most recent five-year period available (2018 through 2022, inclusive) in order to examine motor vehicle crash trends occurring within the study area and a summary table was provided in the November 2023 TIA. Based on a review of the crash data, with the exception of the Woodland Road/Pond Street intersection, the study area intersections were found to have experienced an average of 3.8 or fewer reported motor vehicle crashes per year over the five-year review period and were found to have motor vehicle crash rates (i.e., number of motor vehicle crashes per million entering vehicles (MEV)) that are below the MassDOT



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average crash rates for similar intersections. The majority of the reported crashes occurred during daytime, on dry pavement and were reported as angle or rear-end type collisions that resulted in property damage only.

The Woodland Road/Pond Street intersection was reported to have experienced 27 crashes over the five-year review period (an average of 5.4 crashes per year) and was identified to have a calculated motor vehicle crash rate that was slightly above the MassDOT average crash rates for similar intersections (0.60 crashes per MEV calculated vs. the MassDOT average of 0.57 crashes per MEV). It was noted that the planned improvements that are associated with the Spot Pond Circumferential Trail Project will serve enhance safety at the intersection, with the short-term improvements resulting in a reduction in the number of travel lanes at the intersection, wider shoulders, sidewalk improvements and improvements to signs and pavement markings. The long-term improvements will entail reconfiguring the intersection as a single-lane modern roundabout.

Comment: The motor vehicle crash analysis was completed following accepted standards and we agree with the findings of the analysis.

A review of the MassDOT high crash location database indicates that there are no (0) Highway Safety Improvement Program (HSIP) eligible locations within the study area. To the east of the study area, the Pond Street/Fellsway East/Lynn Fells Parkway intersection is listed as a high crash location for the 2018-2020 reporting period and HSIP eligible and is also included as a "Top 200" high crash location within the Commonwealth (No. 103).

Comment T2: Given that the Woodland Road/Pond Street intersection has been identified as high crash location and acknowledging that there are planned future improvements that will serve to enhance safety at the intersection, we would recommend a motor vehicle collision diagram be prepared for the intersection and that recommendations be provided to address the identified crash patterns that can be implemented as a part of the Project subject to receipt of all necessary rights, permits and approvals. It is expected that these improvements would be limited to sign and pavement marking enhancements.

Future Conditions

No-Build Conditions

Traffic volumes within the study area were projected to 2030, which represents a 7-year planning horizon from the existing conditions base year (2023) consistent with MassDOT's *Transportation Impact Assessment (TIA) Guidelines*. The future condition traffic volume projections were developed by: i) applying a background traffic growth rate to the 2023 Existing traffic volumes; and ii) adding traffic associated with specific development projects by others that may increase traffic volumes within the study area beyond that accounted for by the background traffic growth rate.

A 1.0 percent per year compounded annual background traffic growth rate was identified for use to reflect anticipated future traffic growth independent of specific development projects based on a review of historic traffic count data collected along Woodland Road by VHB. The Town of Stoneham Department of Planning and Community Development was contacted in order to ascertain if there were any specific



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development projects by others that would result in an increase in traffic volumes within the study area that would exceed the background traffic growth rate. Based on this consultation, no projects were identified at this time beyond the subject Project. Two (2) multifamily residential projects were identified outside of the study area at 170 Franklin Street (259-units) and at 95 Maple Street (270-units) that are not expected to result in traffic volume increases that would exceed the background traffic growth rate.

A review of planned future roadway improvement projects was also undertaken. Based on this review and as described previously, the Town of Stoneham and the Department of Conservation and Recreation (DCR) are evaluating safety, capacity and mobility improvements along the Woodland Road corridor as a part of the Spot Pond Circumferential Trail Project. The current planning would entail a phased improvement project, with the initial phase entailing short-term improvements that include reducing the existing four-lane cross-section along Woodland Road to one lane in each direction to allow for the addition of buffered bicycle lanes in both directions and additional turn lanes and pedestrian crossings at the Woodland Road/Pond Street, Woodland Road/Ravine Road and Woodland Road/Executive Drive intersections. The long-term improvements would be advanced as a part of the second phase and would include eliminating the west side of the roadway (closest to Spot Pond) and accommodating one lane of traffic in each direction on the east side of the roadway. The reclaimed west side of Woodland Road would be converted to open space with widened sidewalks and a two-way bicycle path. Modern roundabouts would be constructed at the Woodland Road/Pond Street and Woodland Road/Ravine Road intersections and pedestrian crossings provided. These improvements are currently at the preliminary design stage and a construction date and funding source have not yet been defined. As such, the improvements that are associated with the Spot Pond Circumferential Trail Project are not reflected in the supporting analyses that are presented in the November 2023 TIA

Comment: We agree with the methodology that was used to develop the future No-Build condition traffic volume projections, including the background traffic growth rate (1.0 percent) and the inclusion of trips associated with the identified specific development project by others (none identified).

Build Conditions

The traffic characteristics of the Project were developed by the Applicant's engineer using trip-generation statistics published by the Institute of Transportation Engineers (ITE)³ for a similar land use as that proposed. ITE Land Use Code (LUC) 221, *Multifamily Housing (Mid-Rise)*, was used to develop the base trip characteristics for the Project. The table below summarizes the peak-hour traffic characteristics of the Project based on 378 residential units using the aforementioned methodology.

³*Trip Generation*, 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.



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TRIP GENERATION SUMMARY

Time Period	Vehicle Trips		
	Entering	Exiting	Total
<i>Average Weekday:</i>	879	879	1,758
<i>Weekday Morning Peak-Hour:</i>	36	119	155
<i>Weekday Evening Peak-Hour:</i>	90	58	148

A trip-generation comparison was also provided that compared the traffic characteristics of the Project to those of: i) the former hospital; ii) a 225,000 sf office building (approved for the Project site in 2011); and iii) a 150,000 sf life science/R&D facility (approved for the Project site in 2022). This comparison demonstrated that the proposed multifamily residential development will generate less traffic on a daily and peak-hour basis when compared to the former hospital and the office building that was approved for the Project site in 2011, and comparable traffic to that of the life science/R&D facility that was approved for the Project site in 2022.

Traffic volumes associated with the Project were assigned to the roadway network based on a review of Journey-to-Work data for residents of the Town of Stoughton obtained from the U.S. Census and refined based on existing traffic patterns. Using this methodology, the traffic volumes associated with the Project were assigned as follows:

TRIP DISTRIBUTION

Roadway	Trip Assignment (%)
<i>Woodland Road to/from the North</i>	22
<i>Pond Street to/from the East</i>	3
<i>Ravine Road to/from the East</i>	3
<i>Highland Avenue to/from the Southeast</i>	15
<i>Elm Street to/from the Southwest</i>	57
TOTAL:	100

Comment: We agree with the methodology that was used to develop the traffic characteristics of the Project and the resulting values, as well as the trip distribution pattern that was used to assign Project-related traffic to the study area roadways and intersections.



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Traffic Operations Analysis

In order to assess the potential impact of the Project on the transportation infrastructure, a detailed traffic operations analysis was performed for the study intersections under 2023 Existing, 2030 No-Build (without the Project) and 2030 Build conditions (with the Project). In brief, traffic operations are described by six “levels of service” which are defined by letter grades from “A” through “F”, with a level-of-service (LOS) “A” representing the best operating conditions (average motorist delays of less than 10 seconds and little or no apparent vehicle queuing) and a LOS “F” representing constrained operating conditions (average motorist delays of 50 to 80 seconds or more and often with apparent vehicle queuing). A LOS of “E” is representative of an intersection or traffic movement that is operating at its design capacity, with a LOS of “D” typically representing the limit of acceptable traffic operations.

A review of the traffic operations analysis indicates that the addition of Project-related traffic to the study area intersections will not result in a significant increase in overall average motorist delay or vehicle queuing over anticipated future conditions without the Project (i.e., No-Build conditions), with the majority of the movements at the study intersections shown to operate at LOS D or better with the addition of project-related traffic. Project-related impacts were defined by an increase in average motorist delay of up to 5.6 seconds (Woodland Road/Executive Drive north and Woodland Road/Elm Street/Highland Avenue intersections during the weekday evening peak-hour) and in vehicle queuing of up to 75 feet (approximately three (3) vehicles).

All movements exiting Executive Drive to Woodland Road were shown to operate at LOS A/B during the weekday morning peak-hour and at LOS B/C during the weekday evening peak-hour with vehicle queues of up to 58 feet (approximately two (2) to three (3) vehicles).

Comment: We are in general agreement with the methodology that was used to complete the traffic operations analysis and the associated results.

Sight Distance

An evaluation of sight lines at the Project site driveway intersection with Executive Drive was completed following American Association of State Highway and Transportation Officials (AASHTO)⁴ standards and using a 25 mile per hour (mph) approach speed, which is consistent with the statutory speed limit pursuant to M.G.L. c. 90 § 17C.⁵ Based on this evaluation, it was determined that the available sight lines exceed the recommended minimum sight distance for safe operation (a minimum sight distance of 155 feet is required for an approach speed of 25 mph; the available sight distances exceed 400 feet).

Comment: We are in agreement with the sight distance evaluation and the conclusion that the available sight lines exceed the recommended minimum sight distance for safe operation of the intersection.

⁴A Policy on Geometric Design of Highway and Streets, 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

⁵The statutory or “prima facie” speed is defined in M.G.L Chapter 90, Section 17, as the speed which would be deemed reasonable and proper to operate a motor vehicle. Pursuant to the provisions of M.G.L. c. 90 § 17C, the Town of Stoneham notified MassDOT of the adoption of a 25 mph statutory speed limit in a thickly settled or business district on November 9, 2017.



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Recommendations

Given the limited impact of the Project at the study area intersections, the recommendations that were provided in the November 2023 TIA focused on the access to the Project site and recommended that proposed landscaping and retaining walls be designed and located so as to not impede sight lines.

Comment T3: We would suggest consideration of advancement of the following improvements as a part of the Project, which are commensurate with the predicted impact of the Project on the transportation infrastructure and are focused on safety and encouraging the use of alternative modes of transportation to single-occupancy vehicles:

- 1. Implement safety-related improvements at the Woodland Road/Pond Street intersection that should be informed by the preparation of a motor vehicle collision diagram for the intersection and limited to the installation of signs and pavement markings subject to receipt of all necessary rights, permits and approvals; and*
- 2. Implement a Transportation Demand Management (TDM) program that is inclusive of the following elements:*
 - Assign a transportation coordinator for the Project who may also have other responsibilities to coordinate the TDM program;*
 - Information regarding public transportation services should be made available to residents and include maps, schedules and fare information;*
 - A “welcome packet” should be provided to new residents providing the name and contact information for the transportation coordinator and detailing available public transportation services, bicycle and walking alternatives, and other commuting options;*
 - Work-at-home accommodations should be included within Project, and may take the form of meeting space and a business office in the common area;*
 - Make best efforts to coordinate with a carshare provider to locate two (2) carshare vehicles at the Project site for use by residents of the Project;*
 - Secure bicycle parking should be provided consisting of both weather protected bicycle parking and exterior bicycle racks; and*
 - A transit screen or other equivalent display will be provided in the primary building lobby to display real-time traffic and bus location information (similar to <https://transitscreen.com/>).*



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SITE PLANS

The following comments are offered with regard to our review of the November 16, 2023 Site Plans prepared by Allen & Major Associates, Inc.:

- Comment S1: The sight triangle areas for the Project site driveways should be shown on the Site Plans along with a note to indicate: “Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not to exceed 2.5-feet in height. Snow accumulation (windrows) located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”***
- Comment S2: A narrative should be provided describing how tenant moves will be accommodated and trash/recycling managed, including the scheduling of such activities and where they will occur within the Project site.***
- Comment S3: A loading area for deliveries and rideshare vehicles should be provided for “Building B” (similar to the accommodation shown for “Building A”).***
- Comment S4: The single-yellow centerlines should be changed to double-yellow centerlines.***
- Comment S5: Interior, weather protected bicycle parking should be provided in each building that is convenient to a pedestrian or vehicle entrance to the buildings. In addition, exterior bicycle racks should be located proximate to each building entrance.***
- Comment S6: A leveling area that should not exceed 2 percent for a minimum distance of 25 feet should be provided approaching Executive Drive for the driveway that is located to the immediate north of “Building B”.***
- Comment S7: The grade of the fire department access to the east of “Building B” is identified as 14.9 percent, which exceeds the 10 percent maximum grade specified in 527 CMR 1.00 c. 18 §18.2.3.5.6.1. We defer to the Fire Chief as to the adequacy of this access for use by emergency vehicles.***

PARKING

On-site parking will be provided for 679 vehicles, or a parking ratio of 1.75 parking spaces per unit, consisting of 583 surface parking spaces, 59 of which are defined as “Non-Exclusive” deeded parking located within the parking lot serving the Life Care Center of Stoneham and 82 are to be located in a new surface parking lot situated along the south side of Executive Drive, and 96 garage parking spaces.

Section 6.3, *Off-Street Parking Requirements*, of Chapter 15, *Zoning*, of the Town Code requires that 1.7 parking spaces per unit be provided for “Greater than two family” dwelling. The Project will provide a parking ratio of 1.75 parking spaces per unit, which slightly exceeds the parking requirements of the Town Code.



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Comment: A review of parking demand data documented by the ITE⁶ for similar multifamily residential communities indicates that observed peak parking demand ratios for a midrise multifamily residential community range from 0.39 to 1.75 spaces per dwelling unit, with an average peak parking demand of 1.23 spaces per dwelling unit and an 85th percentile peak parking demand of 1.45 spaces per dwelling unit. Applying the 85th percentile peak parking demand (1.45 spaces per dwelling unit) to the Project (378 dwelling units) would result in a peak parking demand of 549 parking spaces for the Project.

Comment P1: Based on a review of parking demand data available from the ITE for multifamily residential communities in a similar setting, we would suggest that consideration be given to delaying the construction of the 82 space surface parking lot that is proposed to the east of the Life Care Center of Stoneham and “reserve” (design for but not construct) this area for future parking, if necessary, based on tenant demands as the Project is leased. Reserving but not constructing these parking spaces would reduce the initially constructed parking supply to 597 parking spaces, or a parking ratio of 1.58 parking spaces per unit, which continues to exceed the ITE average peak parking demand ratio for a multifamily residential development.

Comment P2: Consideration should be given to designating two (2) parking spaces proximate to each building entrance as short-term (10-minute) parking for rideshare providers and deliveries.

⁶Parking Generation Manual, 6th Edition; Institute of Transportation Engineers; Washington D.C.; October 2023.

