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Transportation Engineers & Planners

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Suite 140
Andover, MA 01810

Ref: 10429

December 6, 2025

Ms. Jasmin Farinacci
Director of Planning and Economic Development
Town of Ashland
101 Main Street
Ashland, MA 01721

Re: 2nd Traffic Engineering Peer Review
Proposed YMCA and Early Learning Center – 30 Memorial Drive
Ashland, Massachusetts

Dear Jasmin:

Vanasse & Associates, Inc. (VAI) has completed a review of the supplemental materials that have been submitted on behalf of MetroWest Young Men's Christian Association, Inc. (the "Applicant") in support of the Planning Board's review of the proposed YMCA membership facility and Early Learning Center to be located at 30 Memorial Drive in Ashland, Massachusetts (hereafter referred to as the "Project"). This information was prepared in response to the comments that were raised in our November 4, 2025 *Traffic Engineering Peer Review* letter and consisted of a memorandum prepared by MDM Transportation Consultants, Inc. (MDM) dated November 26, 2025 with accompanying attachments.

Based on our review of the supplemental materials, the information provided is responsive to the comments that were raised in our November 4, 2025 letter. Our follow-up comments provide guidance to the Planning Borad for potential conditions of approval and for revisions to be reflected on the final Site Plan prior to endorsement by the Planning Board, including establishing a minimum all-season parking supply of 288 marked parking spaces.

For reference, listed below are the comments that were identified in our November 4, 2025 letter followed by a summary of the information submitted on behalf of the Applicant, with additional comments indicated in **bolded** text for identification.

May 2025 TIA[1]

Comment T1: *Given the proximity of the Project site to the Ashland Middle School, a review of traffic volumes between 2:00 and 4:00 PM should be undertaken to verify that the weekday evening peak-hour has been captured in the 4:00 to 6:00 PM data collection period. The ATR data can be used to complete this review.*

Response: Review of ATR data collected along Memorial Drive indicates that the traffic volumes between 2:00 and 4:00 PM are approximately 58% to 63% lower than the weekday evening peak hour. In addition, a review of the turning movement counts conducted at the West Union Street/

[1]*Transportation Impact Assessment,* Proposed YMCA Facility, 30 Memorial Drive, Ashland, Massachusetts; MDM Transportation Consultants, Inc. (MDM); May 23, 2025 (the "May 2025 TIA").

Memorial Drive intersection as a part of the 55 Union Street development indicates that overall traffic volumes at the intersection between 2:00 and 4:00 PM are approximately 9% to 24% lower than the weekday evening peak hour.

Comment closed.

Comment T2: *A traffic study was prepared for the multifamily residential development at 61 Waverly Street in February 2025 and the associated peak-hour traffic volumes should be included in the future condition traffic volumes.*[2] *In addition, traffic volumes associated with following specific development projects by others should also be included in the future condition traffic volumes:*

- *Arbella at Ashland Age-Restricted Residential Development, Memorial Drive (180-unit, age-restricted, multifamily residential development to be located off of Memorial Drive and generally south of the Cirrus Apartments);*[3]
- *Ashland Dog Park, Memorial Drive (dog park to be situated on 1.47± acres of land located off of Memorial Drive west of the Trolley Bike Trail);*
- *55 West Union Street (116 multifamily residential units to be accessed from (2) full-access driveways that will intersect the south side of Memorial Drive approximately 300 feet and 650 feet west of Route 135, respectively).*[4]

The traffic study for the 55 West Union Street was filed with the Town after the preparation of the May 2025 TIA; however, the relationship of this project and its associated driveways to those of the Project should be considered for both developments.

Response: Traffic volumes associated with the 61 Waverly Street developed were obtained from the traffic study that was prepared for that project and it was determined that the additional trips that would be added to the study area would be included in the general background traffic growth rate. Trips associated with the Arbella at Ashland and the Ashland Dog Park were incorporated into the future No-Build and Build condition traffic volumes. A separate Build Sensitivity analysis was also performed that included trips associated with the 55 West Union Street project recognizing that the Application for that project was filed after the Application for the Project.

Comment closed.

Comment T3: *The Build condition traffic volumes should be updated to include the traffic volumes associated with the identified specific development project by others.*

Response: The Build condition traffic volumes were updated to reflect the revisions to the No-Build traffic volumes and a separate Build Sensitivity analysis was performed that included trips associated with the 55 West Union Street project.

Comment closed.

[2] *Traffic Impact Assessment*, Residential Development – 61 Waverly Street; Langan; February 2025.
[3] *Traffic Memorandum*, Arbella at Ashland – Age-Restricted Residential Development, Memorial Drive; MDM; March 11, 2021.
[4] *Transportation Impact Assessment*, Proposed Multifamily Residential Development, 55 West Union Street (Route 135), Ashland, Massachusetts; VAI; June 2025.

Comment T4: The traffic operations analysis should be revised to reflect the updated No-Build and Build condition traffic volumes. In addition, the traffic operations analysis for the Route 135/ Memorial Drive intersection should include pedestrian actuations during the peak hours.

Response: The traffic operations analysis was revised to reflect the updated No-Build and Build condition traffic volumes and the traffic operations analysis for the Route 135/Memorial Drive intersection should include pedestrian actuations during the peak hours.

Table R1 provides a summary of operating conditions by approach vs. by lane group for the Route 135/Memorial Drive intersection and revised analyses were not provided for the Project site driveway intersections to reflect the added trips along Memorial Drive associated with the additional specific development projects by others, all of which will result in an increase in conflicting traffic volumes at the driveways and increase delays and the associated residual vehicle queuing for exiting motorists. That being said, we do not expect that the added traffic will result in significant change in operating conditions at the Project site driveways such that further analysis is required.

With regard to the Route 135/Memorial Drive intersection, the revised traffic operations analysis indicates that movements from Memorial Drive and Voyagers Lane will operate at capacity (i.e., level-of-service "E") under 2032 Build conditions during one or both peak hours. As such, it is recommended that the traffic signing timing and phasing be reviewed post occupancy and adjusted as necessary to reflect the actual traffic demands and impacts resulting from the Project (discussion follows).

Comment closed.

Comment T5: In order to validate the sight distance study, the following information should be reviewed and the sight distance study revised as necessary, including the sight distance study that was provided for the proposed crossing of Memorial Drive:

1. *The object for the stopping sight distance study should be located within Memorial Drive and aligned opposite the center of the driveway or positioned opposite the nearside curbline extension that is closest to the approaching driver;*
2. *The intersection sight distance profile should be taken from a point along the driveways 14.5 feet from the edge of the traveled-way along Memorial Drive. This will require that separate sight line profiles be provided for each driveway;*
3. *The sight triangles should be added to the intersection sight distance plans for both driveways;*
4. *The approach grades along Memorial Drive should be shown on the roadway profiles;*
5. *If the approach grade exceeds 3%, the required minimum stopping sight distance should be adjusted and the supporting calculations provided; and*
6. *The south (east) Project site driveway is located approximately 340 feet west of Route 135 which would allow a vehicle approaching the driveway from the south (east) to achieve a speed that would approximate the posted speed limit of 30 mph vs. 15 mph which was the assumed approach speed that was used in the study.*

Response: The crosswalk that was proposed across Memorial Drive was removed at the request of the Town and a sidewalk has been added along the Project site frontage on Memorial Drive. The sight triangles and sight line profiles were revised as requested. A review of the revised Site Distance Analysis for both site driveways and with consideration of the regrading that will occur within the Project site and the proposed addition of a sidewalk along the Project site frontage on Memorial Drive, the required sight lines can be provided for safe operation of the driveways. The sight line triangles will be provided on the final Site Plan along with a note stating "any new plantings (shrubs, bushes) or physical landscape features be located within driveway sight lines should also be maintained at a height of 2 feet or less above the adjacent existing roadway grade to ensure unobstructed lines of sight. Furthermore, snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed".

The addition of the sight triangle areas and note should be completed prior to the endorsement of the Site Plan by the Planning Board. Comment closed.

Comment T6: *A student drop-off/pick-up management plan should be provided as a part of the Planning Board review of the Early Learning Center component of the Project. The plan may take the form of a narrative describing: i) the hours of operation; ii) student arrival and departure times; iii) number of staff that will be on-site during the arrival/departure times; iv) number of students accommodated and if drop-off/pick-up times will be staggered; and v) circulation patterns during drop-off/pick-up or if parking spaces will be utilized.*

Response: The Applicant has indicated that they anticipate no more than 10 simultaneous parent/caregiver vehicles being on-site at any one time. Staff will actively manage the parking spaces along the sidewalk area of the building for pick-up/drop-off operations. Parents/caregivers will walk into the center to drop-off/pick-up children, a process that will typically take less than 5-minutes. Saff will parking within the main parking area, with a predicted parking demand of 15 parking spaces at full occupancy of the center. After accounting for staff parking and the number of parking spaces required to accommodate student pick-up/drop-off, the Early Learning Center is predicted to have a peak parking demand of approximately 27 parked vehicles. The center will provide a parent/caregiver handbook that will detail policies and procedures, including student drop-off/pick-up procedures.

Provision of a parent/caregiver handbook that details policies and procedures, including those for student drop-off/pick-up should be a condition of any approvals that are granted for the Project. In addition, it is recommended that a minimum of 10 parking spaces along the sidewalk area at the front of the Early Learning Center be designated by signs for student drop-off/pick-up only during the operational hours of the center. Comment closed.

Comment T7: *We agree with the recommendations that have been provided as a part of the May 2025 TIA and would suggest that the following additional measures be considered as a part of the Project:*

- *<u>Route 135/Memorial Drive</u> – Pending the outcome of the revised analysis that has been requested as a part of this review, design and implement an optimal timing and phasing plan for the intersection within 6-months of the issuance of a Certificate of Occupancy for the Membership Building or the Early Learning Center, whichever is issued first.*

- *Transportation Demand Management – A Transportation Coordinator, who may have other responsibilities and duties as a part of the Project, should be assigned to manage the TDM program. The elements of the TDM program should be expanded to include the following measures:*
  - *A "welcome packet" should be provided to new employees that includes the contact information for the TC and detailing available public transportation services, bicycle and walking alternatives, and other commuter options;*
  - *Providing information in a central location within both the Membership Building and in the Early Learning Center and on the website for the Project that includes information regarding the MWRTA bus service; and*
  - *Coordinating with the MWRTA to locate a bus stop within the Project site.*
- *Parking Monitoring – Parking occupancy should be monitored as the Project is constructed with the following frequency: 1) within 6-months of the issuance of a Certificate of Occupancy for the Membership Building; 2) within 6-months of the issuance of a Certificate of Occupancy for the Early Learning Center; and 3) 12-months after Project completion. The monitoring program should identify the number of parking spaces constructed at the time that the monitoring occurs and the number of parking spaces occupied during the observation period. The observations should occur on an average weekday and on a Saturday under normal operating conditions for the components of the Project. The monitoring should occur between 7:00 AM and 7:00 PM on a weekday and on a Saturday, and should be performed in May/June or September/October to reflect months of the year when the playing fields would also be in use. To the extent that the observed parking occupancy exceeds 90% of the available parking spaces, specific measures to reduce or manage parking should be identified.*
- *Special Events – A traffic and parking management plan should be developed for special events to the extent that the Project will host events where the traffic volumes and parking demands would exceed the trip estimates that are presented in the May 2025 TIA. Such a plan is not intended to result in modifications to the Site Plan or other features of the Project, but to establish protocols on scheduling to avoid impacts during school hours and peak travel periods, consideration of the use of buses and carpooling, and other such measures as may be deemed appropriate for the specific event.*

Response: Based on the revised traffic operations analysis that has been provided for the Route 135/ Memorial Drive intersection, the intersection affords sufficient capacity to accommodate the additional traffic that is expected to be associated with the Project. The Applicant has agreed to implement a Transportation Demand Management (TDM) program inclusive of the elements that were recommended, to undertake a post-occupancy parking monitoring program and to develop a traffic and parking management plan for special events.

A review of the revised traffic operations analysis indicates that one or more movements at the Route 135/Memorial Drive intersection will operate at capacity with the addition of Project-related traffic. As such, as a condition of the approval of the Project, it is recommended that the Applicant design and implement an optimal traffic signal timing and phasing plan for the Route 135/Memorial Drive intersection within 6-months of the issuance of a final Certificate of Occupancy for the Project. In addition, the TDM program,

post-occupancy parking monitoring program and the development of a traffic and parking management plan for special events as outlined above should also be a condition of any approvals that are granted for the Project.

Comment closed.

Site Plan

Comment S1: *The fire truck turning analysis should include an evaluation of vehicle turning movements entering and exiting from both directions for both driveways.*

Response: A revised vehicle turning analysis was provided by Bohler that depicted the vehicle turning movements entering and exiting from both directions for both driveways.

The revised vehicle turning analysis indicates that a fire truck exiting to the west (right-turn exit maneuver) will cross the centerline of Memorial Drive, which is not allowed pursuant to 527 CMR 1.05, Chapter 18, Section 18.2.3.5.8. The corner radii of the driveways should be revised to eliminate the centerline incursion for this movement.

Comment S2: *Additional detail of the fire truck maneuvering in the area to the rear of the Membership Building should be provided to demonstrate the number of backing maneuvers that are required. To simplify review, separate drawings for entering and exiting should be prepared.*

Response: The Site Plan has been revised to provide a cul-de-sac type turnaround area to the rear of the Membership Building that can accommodate the maneuvering of the fire truck design vehicle without backing maneuvers.

Comment closed.

Comment S3: *The exiting maneuver for the fire truck from the north (west) Project site driveway indicates that the aerial portion of the vehicle will swing beyond the curbline. Verify that no objects are located in the swing area that would exceed 7-feet in height.*

Response: No objects will be placed adjacent to curblines that would exceed 7-feet in height.

The revised fire truck turning analysis no longer indicates that the aerial portion of the fire truck design vehicle will extend beyond the curbline. Comment closed.

Comment S4: *Double-yellow centerline pavement markings should be provided along both driveways between the STOP-line at Memorial Drive and the first intersection within the Project site.*

Response: The requested pavement markings will be shown on the final Site Plan.

The addition of the centerline pavement markings should be completed prior to the endorsement of the Site Plan by the Planning Board. Comment closed.

Comment S5: *The sight triangle areas for the Project site driveway intersections with Memorial Drive should be shown on the Site Plan and should include the following note: "Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not*

to exceed 2.0-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."

Response: The sight triangle areas and requested note will be added by Bohler to the final Site Plan.

The addition of the sight triangle areas and note to Site Plan should be completed prior to the endorsement of the Site Plan by the Planning Board. Comment closed.

Comment S6: Consideration should be given to striping the snow storage area for parking or otherwise delineating this area so as to define the drive aisle.

Response: The snow storage area will be marked for parking on the final Site Plan prepared by Bohler.

The requested parking spaces should be shown on the Site Plan prior to the endorsement of by the Planning Board. Comment closed.

Parking

Comment P1: Section 5.1.2, Schedule of Parking Area Requirements, of the Ashland Zoning Bylaw provides parking requirements for "Day care and nursery schools", which specifies that 1.0 parking spaces per employee and 1.0 parking spaces per 5 children be provided. These requirements should be compared to the observed parking demand from the Goddard School that were used in the parking demand calculations.

Response: Based on the Ashland Zoning Bylaw, the Early Learning Center requires 35 parking spaces based on a maximum student population of 100 students (20 parking spaces required) and 15 employees. The parking demand data that was provided for the Goddard School indicated a peak parking demand of 40 parking spaces for a student population of 150 students with 25 supporting staff. It was noted that the empirical parking demand data that was provided for the Framingham MetroWest YMCA included an Early Learning Center.

Given that the Ashland Zoning Bylaw establishes a parking rate for day care centers and nursery schools, the parking requirements of the Zoning Bylaw should be used to establish the peak parking demand for the Early Learning Center. Adjustments to the base parking demand can be made to account for the variation in parking demands during the day. The parking demand analysis for the Early Learning Center component of the Project has been completed using the observations from the Goddard School, which was observed to have a peak parking demand of 40 parked vehicles and is higher than the parking required by the Zoning Bylaw for this use.

Comment closed.

Comment P2: The source of the parking distribution by time of day for the day care should be provided as the distribution is different than the data published by the ITE[5] for a day care center. If the data was developed from the observations conducted at the Goddard School, the hours of operation and

[5] *Parking Generation*, 6th Edition; Institute of Transportation Engineers; Washington, D.C.; October 2023.

program at the Goddard School should be provided and compared to the program that will be offered at the Early Learning Center.

Response: The empirical data for the parking demand observations that were conducted at the Goddard School were provided along with the hours of operation (7:30 AM to 6:00 PM, Monday through Friday). Student drop-off/pick-up operations were identified to be similar to those that are expected to occur at the Early Learning Center. The observed peak parking demand at the Goddard School (40 parked vehicles) was used to complete the parking demand analysis for the Early Learning Center component of the Project.

Comment closed.

Comment P3: Details of the amenities offered and sizes of the YMCA facilities that were used to develop the parking demand data for the Membership Building should be provided along with the dates that the observations were performed. In addition, the source of the parking distribution by time of day should also be provided.

Response: The requested information was provided for each of the (3) YMCA facilities where the parking demand data was obtained. The data for all facilities was collected in January 2007 and the facilities ranged in size from 40,000± sf to 69,000± sf, with (2) facilities providing amenities that are similar to those that will be available at the Project site. The available parking supply ranged from 153 parking spaces to 340 parking spaces.

While the data that was collected is more than 18 years old, the parking demands are expected to be generally consistent with those that may be expected at the proposed YMCA facility. The MetroWest YMCA in Framingham and the Boroughs YMCA in Westborough appear to be the most comparable facilities to the proposed YMCA facility, neither of which includes a separate Early Learning Facility; however, both includes outdoor fields. That being said, the parking demand observations were conducted in January when the fields are not in use.

Comment closed.

Comment P4: The source of the parking demand data and parking distribution by time of day for the playing fields should be provided.

Response: The parking demand data for the playing fields was based on data collected at the Winchester Soccer Club in Winchester in June 2012. The time of day distribution was obtained from the time of day parking distribution for a public park on a weekday and for a soccer facility on a Saturday using data published by the ITE[6] and adjusted to reflect no use of the fields until after school dismissal.

Comment closed.

Comment P5: Explanation for the 85% adjustment factor that was applied to the parking demand calculations should be provided. The observed data should be representative of typical conditions and an adjustment factor should not be applied to the base parking demand unless there are specific trip

[6]Institute of Transportation Engineers; op. cit. 7.

reduction or parking demand measures that will be implemented as a part of the Project that would justify a reduction in the base demand.

Response: A 15% reduction in the base parking demands was assumed to account for the interaction between the proposed uses, with a portion of the employees and patrons of the individual components of the Project (Early Learning Center, YMCA and the playing fields) expected to be associated with more than one of the uses. The basis of the 15% adjustment is that it is 50% of the internal capture trip rate between retail-to-retail uses published by the ITE.[7]

While we agree that there may be some interaction between the uses, the 15% interaction appears to be high and is not substantiated based on observed or published data for the mix of uses that are proposed. A child watch program that is associated with a YMCA is much different than an Early Learning Center or child care facility. Similarly, a game, track meet or similar event at a playing field is also likely to have a significant interaction with use of the inside amenities at the YMCA. As such, for planning purposes, the parking demands should be calculated separately or data should be obtained from an operating YMCA facility with like amenities.

As stated previously, the MetroWest YMCA and the Boroughs YMCA offer similar amenities to those that will be offered at the proposed YMCA, noting that neither facility includes an Early Learning Center and the data was collected in January when the outdoor fields are not in use. As such, the parking demands for the Early Learning Center and the playing fields need to be considered separately. In addition, eliminating the data for the North Suburban YMCA indicates that the 85th percentile peak parking demands should be used as the North Suburban YMCA parking demands were much lower than those of the MetroWest YMCA and the Boroughs YMCA. Using the 50th percentile peak parking demands without the 15% reduction results in a predicted peak parking demand for the Project of 265 vehicles on a weekday and 315 vehicles on a Saturday. Using the 85th percentile peak parking demands without the 15% reduction results in a predicted peak parking demand for the Project of 303 vehicles on a weekday and 353 vehicles on a Saturday. Even assuming a limited interaction between the uses, it is reasonable to assume that the peak parking demand will likely be approximately 300 parking spaces in order to satisfy the peak parking demand on a Saturday. The MetroWest YMCA, which is only slightly larger than the proposed YMCA facility and does not include an Early Learning Center, was observed to have a peak parking demand of 223 vehicles on a weekday and 289 vehicles on a Saturday without consideration of the parking demands of the playing fields.

We would recommended that a minimum of 288 parking spaces be provided for the Project, which will require that the snow storage area be striped to accommodate a minimum of 26 parking spaces to add to the 262 marked parking spaces that are shown on the Site Plan. As such, snow storage will need to be accommodated outside of the parking field so that the minimum all-season parking supply is maintained at 288 parking spaces. In addition and as stated previously, a post-occupancy parking monitoring program and the development of a traffic and parking management plan for special events should be a condition of any approvals that are granted for the Project.

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

This concludes our review of the materials that have been submitted in support of the Project. If you should have any questions regarding our follow-up review, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

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JSD/jsd