

February 26, 2025

NEX-2400043.00

Ms. Elizabeth Hughes, AICP, Town Planner  
Town of Concord  
Planning Division  
141 Keyes Road  
Concord, MA 01742

SUBJECT: 275 Forest Ridge Road, Concord, MA  
Traffic Peer Review Letter #3

Dear Ms. Hughes and Members of the Zoning Board of Appeals:

Greenman-Pedersen, Inc. (GPI) previously performed a traffic peer review of the following materials submitted to the Concord Zoning Board of Appeals for the Proposed Residences at Thoreau Comprehensive Permit Application at 275 Forest Ridge Road:

- *Comprehensive Permit Application*, prepared for Thoreau Residences LLC by The Pinebrook Group, dated December 21, 2023.
- *Multi-Family Site Development, Residences at Thoreau, 275 Forest Ridge Road, Concord, MA*; prepared by Allen & Major Associates, Inc.; dated December 20, 2023.
- *Traffic Impact and Access Study, Proposed Residential Development, 275 Forest Ridge Road, Concord, Massachusetts*; prepared by MDM Transportation Consultants, Inc. (MDM); dated December 2023.

Our comments related to traffic impacts, site circulation and access, and parking elements of the project were summarized in a letter dated April 3, 2024. Subsequent to our initial review, the Applicant completed a redesign of the site plan to address numerous comments from Town staff and the public. Accordingly, the Applicant's team provided the following updated documents for review as part of this Comprehensive Permit Application:

- *Multi-Family Site Development, Residences at Thoreau, 275 Forest Ridge Road, Concord, MA*; prepared by Allen & Major Associates, Inc.; revised October 18, 2024.
- *Traffic Impact and Access Study, Proposed Residential Development, 275 Forest Ridge Road, Concord, Massachusetts*; prepared by MDM Transportation Consultants, Inc. (MDM); dated October 2024.

GPI reviewed the above materials and submitted *Traffic Peer Review Letter #2* to the Town on December 19, 2024. Subsequently, the Applicant has provided the following additional documents to respond to comments contained in GPI's December 19, 2024 comment letter:

- *Response to Comments – GPI, 275 Forest Ridge Road, Concord, Massachusetts*; prepared by MDM Transportation Consultants, Inc. (MDM); dated January 16, 2025.

GPI reviewed the above materials and submitted *Traffic Peer Review Letter #3* to the Town on January 23, 2025. Subsequently, the Applicant has provided the following additional documents to respond to comments contained in GPI's January 23, 2025 comment letter:

- *Response to Secondary Comments – GPI, 275 Forest Ridge Road, Concord, Massachusetts*; prepared by MDM Transportation Consultants, Inc. (MDM); dated February 13, 2025.

- *The Residences at Thoreau, 275 Forest Ridge Road, Concord, MA – Layout & Materials Plans;* prepared by Allen & Major Associates, Inc.; revised February 13, 2025.

As requested, GPI has reviewed the above materials for compliance with the applicable sections of the Town of Concord Zoning Bylaws, Massachusetts Department of Transportation (MassDOT) guidelines for traffic analysis, and general engineering practice. GPI generally finds that the Applicant's responses to GPI's comments adequately address our comments, with the exception of the items discussed below. The original comment numbers have been retained for ease in reviewing the comments.

#### **Site Circulation, Access, and Egress**

4. The Applicant has agreed to revise the site plans to eliminate snow storage areas that would restrict internal sight lines; however, snow storage areas were not designated on the revised site plans provided. GPI will review the final site plans for compliance with this comment upon receipt.
5. The Applicant has agreed to implement a pavement overlay at the intersection of Forest Ridge Road and the site driveway, as well as install a new crosswalk with ADA-accessible curb ramps on both sides of the roadway, and MUTCD-compliant pavement markings and warning signage on Forest Ridge Road at the site driveway. No plans have been provided depicting the proposed improvements. **The proposed improvements should be demonstrated on the final site plan set.**

#### **Traffic Impact and Access Study (TIAS)**

12. The Applicant has committed to providing the requested intersection sight line clear zones on the site plan, but has not yet included the clear zones on the plans. **The clear zones should be demonstrated on the final site plan set with the following note outlined by the Applicant:**  
***“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 windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”***
24. GPI previously recommended signage and pavement marking improvements at the Main Street / Forest Ridge Road intersection, as well as upgrades to crosswalks along Forest Ridge Road, as mitigation for the proposed development. The Applicant had agreed “to work with” the HOA on these improvements, but had not provided a clear commitment to implement these improvements. GPI requested clarification of the Applicant's commitment to implement these measures. The Applicant has responded that they are in discussions with the HOA to provide a fair share contribution toward the signage, pavement marking, pavement mill and overlay, and crosswalk upgrades. GPI recommends that the fair-share contribution toward the cost of these improvements be equivalent to the percentage increase in traffic generated by the proposed development along Forest Ridge Road. CPW Engineering previously commented requested that the Forest Ridge Road approach to Main Street be regraded as part of the project to remove the puddling and icing hazard and improve the safety of the approach given that the approach will operate at level-of-service (LOS) F and a queue of four vehicles as a result of the proposed development. GPI recommends that the cost of the pavement overlay and regrading work be included within the calculation of the Applicant's fair share contribution and a commitment be made to complete this work prior to the issuance of a Certificate of Occupancy for the proposed development.

#### **Conclusions**

The Applicant has provided commitments to incorporate items recommended by GPI within the final site plan set. Although an updated site layout and materials plan was provided, these items were not included on the revised plans. It is GPI's understanding that the Applicant is in the process of modifying the plans to address comments from multiple reviewers and final plans will be prepared shortly. The following summarizes items to be incorporated by the Applicant as part of the final site plans:

- i. Prepare a sight line plan that depicts the available sight lines and required clear zones to meet AASHTO recommendations for minimum stopping sight distance (SSD) and desirable intersection sight distance (ISD) at the proposed site driveway intersection with Forest Ridge Road based on a posted speed of 25 MPH and a decision point 14.5 feet from the edge of travelway, and ensure that no signage, vegetation, structures, or snow storage that would impede sight lines are located within the required clear zones.
- ii. Demonstrate the proposed pavement overlay, crosswalk pavement markings and signage, and ADA-ramp upgrades at the Forest Ridge Road intersection with the site driveway.
- iii. Provide at least one ride share parking space near the entrance of each building.

The Applicant has committed to the following measures as mitigation for the proposed residential development, which should be included as conditions of approval. The Applicant should prepare detailed design plans for these improvements for review and approval by CPW prior to the issuance of a building permit. All mitigation measures should be completed prior to the issuance of an occupancy permit.

- i. Provide a pavement mill and overlay at the Forest Ridge Road intersection with the proposed site driveway;
- ii. Install new pavement markings and crosswalk warning signage compliant with MUTCD at the crosswalk on Forest Ridge Road at the site driveway;
- iii. Install new ADA-compliant curb ramps to the crosswalk on Forest Ridge Road at the site driveway;
- iv. Install a STOP sign (R1-1) on the Sweet Birch Lane approach to the traffic circle at Forest Ridge Road / Sweet Birch Lane / Black Birch Lane;
- v. Install rectangular rapid flash beacons (RRFBs) on Main Street in both directions and apply high-visibility crosswalk pavement markings at the crosswalk just west of Forest Ridge Road; and
- vi. Provide a fair share contribution toward signage, pavement marking, pavement milling and overlay, and crosswalk ramp upgrades to the HOA proportional to the project's percentage increase in traffic along Forest Ridge Road.

GPI previously recommended signage and pavement marking improvements at the Main Street / Forest Ridge Road intersection, as well as upgrades to crosswalks along Forest Ridge Road, as mitigation for the proposed development. The Applicant had agreed "to work with" the HOA on these improvements, but had not provided a clear commitment to implement these improvements. GPI requested clarification of the Applicant's commitment to implement these measures. The Applicant has responded that they are in discussions with the HOA to provide a fair share contribution toward the signage, pavement marking, pavement mill and overlay, and crosswalk upgrades. GPI recommends that the fair-share contribution toward the cost of these improvements be equivalent to the percentage increase in traffic generated by the proposed development along Forest Ridge Road, and that it include the cost of regrading the Forest Ridge Road approach to Main Street to eliminate the ponding and icing issue.

Should you have any questions or require additional information, please contact me directly at (603) 766-5223 or by email to [rebeccabrown@gpinet.com](mailto:rebeccabrown@gpinet.com).

Sincerely,

**GREENMAN-PEDERSEN, INC.**



Rebecca L. Brown, P.E.  
Senior Project Manager