

March 18, 2024

NEX-2300442.00

Ms. Allison Rees, P.E.
Underwood Engineers
25 Vaughan Mall
Portsmouth, New Hampshire 03801

SUBJECT: Traffic Peer Review – Proposed Mixed-Use Development
3 Railroad Street – Newmarket, New Hampshire

Dear Ms. Rees:

Greenman-Pedersen Inc. (GPI) previously performed a review of the transportation impacts associated with the proposed mixed-use development to be located at 3 Railroad Street in Newmarket, New Hampshire in a letter dated February 6, 2024. The review focused on the following documents:

- *Traffic Impact Study, Residential & Commercial Development, Railroad Street, Newmarket, New Hampshire*; prepared by Barton & Loguidice. (B&L); November, 2023.
- *Condor Capital LLC Site Plan, 3 Railroad Street*, prepared by Horizons Engineering; October 17, 2023 (no revisions).
- *Letter of Intent – Site Plan Review for Concord Capital, LLC, Mixed-Use Development*, prepared by Horizons Engineering; November 13, 2023.

Subsequent to this review, the GPI has received the following additional documentation from the Applicant's project team:

- *Traffic Impact Study, Residential & Commercial Development, Railroad Street, Newmarket, New Hampshire*; prepared by Barton & Loguidice. (B&L); Submitted November 2023/Revised March 2024.
- *CC Railroad Street Newmarket LLC Site Plan, 3 Railroad Street, Newmarket, New Hampshire*, prepared by Horizons Engineering; October 17, 2023 (revised January 2024, with February 22, 2024 date of print).

Previous GPI comments requiring responses are provided below, as well as our supplemental comments as they relate to the revised materials.

Existing Traffic Volumes

1. Original GPI Comment: The applicant's traffic engineer should revisit the network volume diagram(s) to confirm AM and PM peak hour volumes are appropriately labeled in their schematic form, and, if not, make any necessary adjustments.

Supplemental GPI Comment: The comment has been satisfactorily addressed; no further information is required.

Traffic Volume Adjustments

2. Original GPI Comment: Supplemental traffic projections with appropriate Covid adjustments should be provided.

Supplemental GPI Comment: The comment has been satisfactorily addressed; no further information is required.

Motor Vehicle Crash Data

3. Original GPI Comment: The public intersections under study should be investigated from available NHDOT crash data and/or the Newmarket Police Department to determine if there any identifiable crash patterns.

Supplemental GPI Comment: The comment has been satisfactorily addressed; no further information is required. It should be noted that the investigation of crash data indicated no reported crashes at any of the public intersections under study.

Development by Others

4. Original GPI Comment: [T]he applicant's traffic engineer should confirm the assignment of traffic from other developments after revisiting the peak hour networks.

Supplemental GPI Comment: The comment has been satisfactorily addressed; no further information is required.

General Background Traffic Growth / Future Conditions

5. Original GPI Comment: Supplemental traffic projections with a revised growth factor should be provided for both an Opening Year of 2024 and a Horizon Year of 2034.

Supplemental GPI Comment: The comment has been satisfactorily addressed; no further information is required.

Trip Generation

6. Original GPI Comment: Explanation/justification for the trip generation method utilized (rate vs. fitted curve) should be provided.

Supplemental GPI Comment: The revised study utilized ITE LUC 712 (Small Office Building), based on 2.5 ksf for the office component (rate methodology), and ITE LUC 220 (Multifamily Housing (Low-Rise), based on 41 dwelling units (fitted curve methodology). GPI concurs with this methodology. The comment has been satisfactorily addressed; no further information is required.

Trip Distribution

7. Original GPI Comment: GPI requests that the trip distribution calculations and a revised Figure 3 be provided. Additionally, comparison of trip distribution results to the more conventional Journey-to-Work based method should also be provided.

Supplemental GPI Comment: While clarification has been provided on the method utilized (distribution based on existing travel patterns), no comparison to Journey-to-Work data was provided. After an independent, cursory review of Journey-to-Work patterns, GPI is in general agreement that the majority of project generated traffic will travel to/from the east on South Main Street. No further information is required.

Capacity Analysis

8. Original GPI Comment: [G]PI requests HCM based operational summaries for all pre- and post-development conditions for Opening Year and Horizon Year.

Supplemental GPI Comment: GPI has reviewed the additional HCM analyses that were provided, as well as the SimTraffic results, and the supplemental empirical queue analysis. Overall, while some approaches under study will exhibit attendant levels of short-term delay during peak hour periods, operational impacts associated with the proposed development are not expected to be significant. No further information is required.

Sight Distance Analysis

9. Original GPI Comment: As an existing public intersection, GPI requests that available sight distance at the Railroad Street intersection with South Main Street be confirmed with appropriate criteria cited/referenced from the most current AASHTO Green Book. Further, GPI requests that the sight triangle areas be provided on a sight line diagram based on the proposed plan and profile of the finished grade at the following location: Railroad Street at the proposed site driveway location. If vegetation or other obstructions are to be cleared, they should be indicated on the diagrams. Further, where appropriate, documentation or substantiation should be provided for the governing speed utilized for sight line determination.

Supplemental GPI Comment: Based on the supplemental documentation provided, GPI agrees that minimum stopping sight distances at the intersection of South Main Street at Railroad Street are satisfied. GPI further agrees with the recommendation of providing an Intersection Ahead (W2-2L) sign, and Advance Street Name Plaque (W16-8P) in the westbound direction of South Main Street in advance of Railroad Street. Said sign installations shall comply with Manual on Uniform Traffic Control Device (MUTCD) standards.

Auxiliary Lane Warrants Analysis

10. Original GPI Comment: GPI requests reanalysis (of auxiliary lane warrants) for all pre- and post-development conditions for Opening Year and Horizon Year.

Supplemental GPI Comment: Based on the supplemental documentation provided, GPI agrees that warrants for auxiliary turn lanes (westbound left-turn lane and eastbound right-turn lane) at the Railroad Street intersection with South Main Street are not warranted. The comment has been satisfactorily addressed; no further information is required.

Parking, Site Access, Pedestrian, and Off-Site Considerations

11. Original GPI Comment: Providing a STOP-sign and STOP-bar pavement marking, both per MUTCD standards, on the proposed site driveway approach to Railroad Street is advisable and should be considered.

Supplemental GPI Comment: The revised site plan does not show these items. Confirmation on Applicant's ability to address this comment should be provided.

12. Original GPI Comment: As there is the potential for conflict pedestrian/vehicular conflict, providing a marked crosswalk, per MUTCD standards, from the 10-vehicle parking area to the landscaped area/sidewalk on the south side of the proposed building is advisable and should be considered.

Supplemental GPI Comment: The revised site plan does not show this item. Confirmation on Applicant's ability to address this comment should be provided.

13. Original GPI Comment: The existing STOP-sign and STOP-bar on the Railroad Street approach to South Main Street should be reviewed against MUTCD standards, and replaced or refreshed as appropriate.

Supplemental GPI Comment: The revised site plan does not provide sufficient detail to demonstrate that this recommendation was investigated. Confirmation on Applicant's ability to address this comment should be provided.

In conclusion, the Revised Traffic Impact Study adequately addresses previous traffic related comments, with respect to traffic operations and safety. However, we would request that any subsequent site plan submittal address GPI's original comments 11, 12 and 13 as they relate to Parking, Site Access, Pedestrian, and Off-Site Considerations.

Should you have any questions or require additional information, please feel free to contact me at (603) 766-5229 or bbollinger@gpinet.com.

Sincerely,

GREENMAN-PEDERSEN, INC.



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Cc: B. McDonough, Town of Newmarket