

Juliet T.H. Walker, AICP
Planning Director
City of Portsmouth Planning Department
City Hall, 3rd Floor
1 Junkins Avenue
Portsmouth, NH 03801

August 18, 2021

Ref. T1105

Re: Raynes Avenue Development – Mixed Use Proposal
Transportation Peer Review #3 – Response to Comments Review

Dear Ms. Walker:

On behalf of the City of Portsmouth, TEC, Inc. (TEC) has reviewed additional documents as part of the transportation engineering peer review of a proposed mixed used development located on the north side of Raynes Avenue in Portsmouth.

The following additional documents were received as part of our review:

- *Traffic Impact Study – Raynes Avenue Development*, prepared for North Mill Pond Holdings by Tighe & Bond – Revision dated August 2, 2021
- *Response to Peer Review Comments #2*, prepared by Tighe & Bond – August 2, 2021

The Response to Peer Review Comments #2 letter prepared by Tighe & Bond addressed three outstanding comments from TEC's July 28, 2021 review letter. Review responses are dated accordingly.

Transportation Impact Evaluation

4. 7-28-2021 TEC: Tighe & Bond (T&B) conducted Saturday midday peak hour capacity analyses. The reported site generated trips for the restaurant for the Saturday midday peak hour (16 (Total), 9 (Enter), 7 (Exit)) is significantly lower than the calculated ITE values for a Quality Restaurant (47 (Total), 28 (Enter), 19 (Exit)). While TEC understands that the additional trips, many of them potentially pass-by or internally captured trips, will not have a significant impact on the adjacent roadway system, the difference should be noted.

8-2-2021 Tighe & Bond: T&B has revised the proposed Saturday midday peak hour trip generation to accurately reflect the estimated trips for the restaurant use as outlined in the ITE Trip Generation Manual. The traffic analysis has been updated as required. The conclusions outlined in the previously submitted traffic study remain the same.

8-18-2021 TEC: TEC concurs with the conclusions within the revised study. No further response required.

7. 7-28-2021 TEC: With the conversion of the Raynes Avenue to one-way traffic flow, T&B states that the poor operations for vehicles exiting Raynes Avenue at Maplewood Avenue are offset by the improved operations at the intersection of Maplewood Avenue at Vaughan Street. TEC notes that the capacity and queue analysis results indicate that the southbound left turn movement from Maplewood Avenue into Vaughan Street is anticipated to decrease from a LOS of B in the 2032 No Build condition to a LOS of E in the 2032 Build condition with a potential maximum queue length of approximately 6 vehicles (136 feet). The Applicant should discuss whether a southbound left turn lane is warranted or necessary along Maplewood Avenue to remove delayed turning vehicles from the through traffic flow.

8-2-2021 Tighe & Bond: T&B concurs that vehicular queues at the southbound Maplewood Avenue approach will increase as a result of the conversion of Vaughan Street/ Raynes Avenue to one-way. Maplewood Avenue was recently resurfaced, and it will be desirable to maintain existing parking and bike facilities in each direction as well as minimizing the pedestrian crossing distance across Maplewood Avenue as geometric improvements are not feasible. Additionally, field observations indicate that vehicles at the Maplewood Avenue at Deer Street intersection often back up beyond Vaughan Street. The addition of a short southbound left turn lane is not likely to significantly improve operations at the intersection.

8-18-2021 TEC: TEC concurs with the observation that the queues from the intersection of Maplewood Avenue at Deer Street may extend past the Vaughan Street. While the implementation of a southbound left turn lane at Vaughan Street may not improve intersection operations, it may improve safety for queuing vehicles. However, TEC understands the City's desire to maintain on-street parking and bicycle facilities along Maplewood Avenue in this area. No further response required.

9. 7-28-2021 TEC: The TIS indicates that the recommendation of the exclusive turn lanes was based on the consolidation of the existing two exiting access points to Maplewood Avenue and the results of the capacity analyses. TEC notes that the 2022 Build analysis indicates a peak hour queue length of 24 vehicles on the westbound Raynes Avenue left turn movement. This queue length will block the site driveway access onto Raynes Avenue. The Applicant should discuss any signage or striping recommended at the site driveway to maintain access to the site when queues are present.

8-2-2021 Tighe & Bond: T&B concurs that the vehicular queues under the Build condition may block the site driveway on Raynes Avenue. However, because left turns from the site driveway will be restricted under the proposed one-way conversion of Raynes Avenue, there will not be a significant benefit of signage and/ or pavement markings. Right-turning vehicles will not have space to queue up because the queues are anticipated to extend past the site

driveway. Signage and pavement marking treatments used at driveways in other areas of the City allow both left and right turns out of their driveways. Additionally, the placement of signs and/ or pavement markings at the driveway may be difficult for drivers to process due to the curvature of the roadway on Vaughan Street approaching the site driveway as well as a high amount of existing and proposed signage in the area.

8-18-2021 TEC: TEC concurs with the conclusions presented. No further response required.

Please do not hesitate to contact me directly if you have any questions concerning this peer review at 603-601-8154. Thank you for your consideration.

Sincerely,
TEC, Inc.
"The Engineering Corporation"



Elizabeth Oldman, PE
Director of Transportation Planning