

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

August 2, 2019

Ref. T0884

Re: Cate Street Extension Traffic Study – Mixed Use Proposal
Transportation Peer Review #2

Dear Ms. Walker:

On behalf of the City of Portsmouth, TEC, Inc. (TEC) has completed a transportation engineering peer review of the proposed mixed use development located along the new Cate Street Extension to the east of US1 Bypass. Additional documents have been received subsequent to TEC's most recent review letter dated June 3, 2019.

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

- *Updated Traffic Study Memorandum – Proposed Mixed-Use Site*, prepared for Torrington Properties by Stephen G. Pernaw & Co., Inc. – June 10, 2019
- *West End Yards Traffic Study Memorandum – Addendum 1*, prepared for Torrington Properties by Stephen G. Pernaw & Co., Inc. – July 25, 2019

TEC completed a review of these documents for the City of Portsmouth, and the following provides a summary of the comments that were compiled during our review:

Updated Traffic Study

The TEC review letter dated June 3, 2019 requested additional analyses at the realigned intersection of Cate Street / Bartlett Street during the 2018 Existing, 2020 No Build, 2020 Build and 2030 No Build conditions, using Configuration C to show the progression of the operation of this intersection.

Within the Updated Traffic Study, the additional analyses were performed as requested. The analyses indicate that the delays and projected queues on the realigned Bartlett Street southbound approach will increase with the addition of site generated traffic, the diversion of traffic to the Cate Street Extension, and background traffic growth. The primary purpose of the proposed realignment, in addition to the sight distance improvements, is to promote the redistribution of traffic from Bartlett Street to US1 Bypass or other main corridors into the City. Therefore, the delay may actually be lower than projected in the future conditions

as this redistribution is realized. The analyses show that the delay will grow incrementally as background traffic increases, creating a condition which may encourage motorists to seek an alternate route.

West End Yards Traffic Study – Addendum 1

US 1 Bypass / Borthwick Avenue / Cate Street Extension – The current roadway design plans show a revised lane configuration on the westbound Cate Street Extension approach to the intersection. The revised lane configuration includes an exclusive left turn lane, a shared through/right turn lane and an exclusive right turn lane. Updated capacity and queue analyses for this intersection are provided in the Addendum report. The revised analyses indicate that the intersection will operate with levels of service “E” or better on all approach movements in the 2030 Build condition with the revised lane configuration and updated signal timings. This is consistent with the levels of service projected for the intersection in the 2030 No Build condition.

Site Plan

The remaining items from TEC’s review letter dated June 3, 2019 remain open:

1. A landscape plan is provided. The calculated AASHTO Intersection Sight Distances and resulting sight triangles should be shown for the site driveway intersections with the Cate Street Extension to ensure all plantings in the area of these intersections will not impede sight lines to/from the project driveways and the Cate Street Extension.
2. A school bus waiting area should be provided at an appropriate location in consultation with the City. The Applicant should meet with the City of Portsmouth School Department and Department of Public Works to determine this location and provide detail information on the location and associated amenities within the Site Plans.
3. Within the townhome portion of the site, the easternmost internal intersection near the visitor parking spaces has the stop bar and stop sign shown incorrectly. Please revise to the right side of the street.

Cate Street Extension, Portsmouth, NH
Traffic Peer Review
August 2, 2019
Page 3 of 3



Please do not hesitate to contact me directly if you have any questions concerning our review at 978-794-1792. Thank you for your consideration.

Sincerely,
TEC, Inc.
"The **E**ngineering **C**orporation"

A handwritten signature in blue ink that reads "Elizabeth Oldman". The signature is written in a cursive, flowing style.

Elizabeth Oldman, PE
Director of Transportation Planning