



To: John Caulo, Project Manager

Date: August 12, 2020

Memorandum

Project #: 58237.00

From: Jenn Conley, PE, PTOE

Re: Burton Hub

Response to Traffic Questions Raised at DRB Hearing

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VHB has conducted a Traffic Impact Study (TIS) for the proposed Performing Arts Center use, a component of the redevelopment of the Burton Hub properties located at 180 and 266 Queen City Park Road (formerly 80 and 152 Industrial Parkway) in Burlington, Vermont. The findings of the TIS have been summarized in a memorandum dated April 23, 2020. The TIS has undergone rigorous peer review by the City's Transportation Consultant, CHA. This review resulted in requests for additional information and some additional analysis checks. The impacts on the transportation system revealed by the TIS have been used by the Applicant and DPW to craft proposed conditions on the times of operation and other management criteria for the Performing Arts use to mitigate those impacts.

#### **General Rebuttal to August, 4, 2020 DRB Presentation by CRZ**

The presentation made during the August 4, 2020 DRB meeting by opponents to the proposed use assert the TIS is unreliable and flawed. The TIS follows applicable industry and professional standards to analyze the traffic impacts of the proposed Performing Arts use. The DRB can have confidence the TIS is valid and sound as it was reviewed not only by DPW, but also DPW's consultant, CHA. Atypical for a DRB hearing, this application has a peer reviewed TIS. Therefore, the TIS, along with the proposed permit conditions related to transportation, should be viewed as strong evidence that the impacts of the proposed use satisfy the Conditional Use criteria. Unlike the TIS, the presentation made by representatives of the CRZ during the August 4<sup>th</sup> hearing attempted to depict impacts of the proposed use that failed to follow any recognizable accepted traffic engineering methodologies.

In addition, the presentation made during the August 4, 2020 DRB meeting by project opponents misuse the TIS and the concerns raised fail to analyze the Performing Arts Center use reflecting the proposed conditions for this application. The DRB should use the TIS as it was used by the Applicant, DPW and CHA. The impacts on the transportation system revealed by the TIS have been used by the Applicant, DPW and CHA to craft proposed conditions on the times of operation and other management criteria for the Performing Arts use to mitigate those impacts. For example:

- Limiting the hours for peak events so that no performing arts traffic overlaps with the weekday commuter peak hours ensures that the impact level outlined in the TIS does not occur at any location
- Requiring monitoring and a fifty percent contribution to potential infrastructure improvements for site related traffic increases at the constrained intersection of Home Avenue and Pine will ensure that site traffic does not cause unreasonable impact at that location. With the condition that eliminates event traffic from overlapping with commuter peak traffic, it is unlikely that the level of traffic generated by the site will increase significantly at this location.
- Because the intersection of Home Avenue and the Champlain Parkway has been identified as an intersection of concern in the future, monitoring of that location and identification of mitigation measures has been included in the conditions.

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### **One Lane Bridge**

The City's Transportation Consultant CHA expressed a concern regarding the operation of the one lane bridge and requested additional analysis to simulate that condition by adding delay into the movement associated with each vehicle to account for the time spent traversing the bridge before another vehicle could enter the bridge. CHA requested this analysis be completed for both the conservatively high weekday commuter PM peak hour that was analyzed in the Traffic Impact Study (The TIS analyzed an overlap in commuter peak hour traffic and performing art center traffic, but at this point, based on the proposed conditions, performing arts trips would not overlap with commuter trips due to the hours of operation in proposed Condition #5) as well as an analysis scenario that models that end of show time period. At end of the show, the existing traffic is extremely low and the addition of Performing Arts Center use related traffic exiting results in an operation where virtually all traffic crosses the bridge travelling in the same direction (to the east). CHA reviewed the traffic volume calculations as well as the analysis parameters and concluded:

*We agree with the methodology used to represent the alternating one-way traffic operations on the Queen City Park Road bridge. These analyses show that the operations in the Build condition will be comparable to the No-Build conditions during the morning and afternoon peak hours, and that these operations will have low vehicle delays and short queues. The analyses also show that the one lane bridge can accommodate the projected traffic on Queen City Park Road during the evening condition after the end of events at the Higher Ground component of the project.*

The commenters to the DRB presented diagrams that showed what it would look like if 60 vehicles were parked on Queen City Parkway. This depiction was just that – an illustration of 60 vehicles parked. It was not related to an analysis or simulation of the actual operations of the bridge or any other location.

### **Home Avenue and Pine Street**

As outlined in the TIS and reviewed by DPW and CHA, the intersection analysis of Home Avenue and Pine Street indicates it currently operates with lengthy delays during the peak hours. At a constrained intersection, any additional trips will cause delay increases. As such, proposed condition #5 which limits the hours of operation to avoid impacting this location during the commuter peak hour mitigates this concern. In addition, the DPW's recommended condition of conducting a post-construction traffic analysis of the impacts at this location will quantify the project related impacts at this location. In the event that the impact is greater than anticipated, potential infrastructure improvements will be required. Once the Champlain Parkway is in place, the traffic volumes at this location are significantly reduced.

### **Conclusions**

The DPW and CHA reviewed the TIS and found its methodologies accurate. The proposed permit conditions to be attached to this permit address the issues to the transportation system identified by the TIS.