



Helen Donaldson &lt;hcd@portlandmaine.gov&gt;

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## MMC Office Building Final Traffic Comments

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Tom Errico <thomas.errico@tylin.com>  
To: Helen Donaldson <HCD@portlandmaine.gov>

Thu, Dec 13, 2018 at 10:40 AM

Hi Nell – The following is a status update on prior comments and represent Final Traffic Comments. I have separated the comments that are associated with issuance of a Traffic Movement Permit.

### Traffic Movement Permit

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The following comments and Conditions of Approval are associated with issuance of a Traffic Movement Permit. The review of the project was based upon the project meeting safety and congestion standards contained in the Permit regulations. These standards include:

**Unsafe conditions.** Road segments, intersections, or development entrances and exits may be deemed as unsafe when traffic encounters conditions such as, inadequate turning radii, poor geometrics, limited sight distance or high accident locations. High accident locations are road segments or intersections where eight (8) or more accidents have occurred over the most recent three (3) year period, and the "critical rate factor" is greater than one (1.0). The applicant shall submit a proposal to improve or eliminate the unsafe conditions if they exist or if they are determined to be created or exacerbated by the proposed development.

**Unreasonable congestion.** Level of Service D, as determined from a capacity analysis, is considered the minimum level of service needed to provide safe and convenient traffic movement. Where a road, intersection, or any approach lane to the specific intersection or intersections being evaluated in the vicinity of the proposed development is determined to operate at LOS E or LOS F in the horizon year, the proposed development is considered to result in unreasonable congestion, unless: Improvements will be made to raise the level of service of the road or intersection to D or above.

- I generally find the methods used in the development of the base traffic volumes to be reasonable and acceptable. It should be noted that the volume timeframe for the analyses was the peak hour of the roadway system, which does not correspond to employee peaking in the morning (employees arrive before the peak hour). The Applicant should provide documentation noting traffic volumes on roadways during both the peak hour of the system and peak hour of traffic generation from MMC.

**Status: The Applicant has provided traffic volume information for the noted time periods and I find their response and analysis time-period to be acceptable.**

- The Park Avenue/Valley Street intersection is a High Crash Location. The Applicant shall provide specific recommendations with implication of such changes for review and consideration.

**Status: Given significant future changes to the area, the Applicant shall conduct a monitoring study following the opening of the St. John Street Parking Garage and completion of the St. John Street improvements as required by Dunkin Donuts. The methods and scope of the Study shall be approved by City staff. Any improvements required in conjunction with the monitoring study shall be the responsibility of the Applicant.**

- The Congress Street/Gilman Street intersection is a High Crash Location. The Applicant suggests that the future removal of the traffic signal at Congress Street/Valley Street may mitigate crashes. I continue to review this, but a monitoring requirement post signal conditions may be suggested.

**Status: The Applicant shall conduct a monitoring study of the intersection following removal of the traffic signal at Valley Street and the opening of the St. John Street Parking Garage. The methods and scope of the Study shall be approved by City staff. Any improvements required in conjunction with the monitoring study shall be the responsibility of the Applicant.**

- The St. John Street/A Street is a High Crash Location. The Applicant suggests that traffic volume reductions may mitigate crashes. The new employee parking garage will increase traffic volumes in the area and may negatively impact conditions. I continue to review this, but a monitoring requirement after the employee parking garage is open may be suggested.

**Status: The Applicant shall conduct a monitoring study of the intersection following the opening of the St. John Street Parking Garage. The methods and scope of the Study shall be approved by City staff. Any improvements required in conjunction with the monitoring study shall be the responsibility of the Applicant.**

- Park Avenue/St. John Street is a High Crash Location. The Dunkin Donuts project on St. John Street will likely be implementing improvements to the northbound St. John Street approach. The DD scope of this work is not expected to mitigate all crash patterns. The Applicant shall specifically recommend strategies for mitigating all crash patterns that are correctable by improvements.

**Status: The Applicant has recommended traffic signal timing adjustments and the City can implement those changes. No further action is required of the Applicant.**

- Valley Street between and A Street and C Street is a High Crash Location. The Applicant noted at the TMP Scoping Meeting that traffic volumes will be declining on Valley Street in this area and thus may reduce collisions. The Applicant shall document specific before/after traffic volumes changes on Valley Street as part of assessing mitigation of crash rates.

**Status: The Applicant has provided supporting documentation noting the reduction in traffic volumes expected for Valley Street. I have no further comment.**

- The Congress Street/St. John Street intersection is not a High Crash Location but experienced 25 crashes over the reported three-year period. The Applicant shall conduct a safety review of the intersection.

**Status: The Applicant has provided the requested information. The changes being implemented on St. John Street (implementing a three-lane roadway) in conjunction in the Dunkin Donuts project would be expected to mitigate some crash patterns. I have no further comment.**

- Traffic Movement Permit regulations requires Applicants to document incremental changes to a site over the prior 10 years to determine factors that have influenced traffic generation from the site. In my professional opinion, the Applicant has not provided documentation that adequately addresses historical changes at MMC.

**Status: The Applicant has provided a summary of historical campus changes and I find the documentation to be reasonable and no changes are required for traffic study assumptions. I have no further comment.**

- The Applicant shall provide specific sight distance measurements at the Congress Street/Drop-Off driveway according to Site Plan information.

**Status: The Applicant has provided the requested information and I have no further comment.**

- The Park Avenue/St. John Street intersection has improving levels of service and delay following project build-out. The Applicant should specifically note any traffic signal equipment modifications that are needed to accomplish the noted optimization.

**Status: The Applicant assumed traffic signal timing adjustments and the City can implement those changes. No further action is required of the Applicant.**

- The Commercial Street/Valley Street intersection has improving levels of service and delay following project build-out. The Applicant should specifically note any traffic signal equipment modifications that are needed to accomplish the noted optimization.

**Status: The Applicant assumed traffic signal timing adjustments and the City can implement those changes. No further action is required of the Applicant.**

- I continue to review traffic model output for vehicle queuing and will provide comments in the future.

**Status: The SimTraffic model notes some intersections will have long vehicle queues. The proposed project does not significantly impact queue lengths and improvements associated with signal timing adjustments would be expected to mitigate project impacts. I have no further questions.**

- The Congress Street/St. John Street intersection was modeled assuming existing roadway conditions. The Applicant shall also conduct an analysis assuming the Dunkin Donuts improvements on St. John Street are implemented (converting St. John Street from four lanes to three lanes).

**Status: The Applicant has conducted the noted evaluation and acceptable traffic operations are predicted. I would note that in conjunction with approval of the St. John Street Parking Garage, the Applicant is required to upgrade the traffic signal equipment at this intersection, which is expected to improve efficiency. I have no further comment.**

- Congress Street in the vicinity of the project has been classified as a High Crash Location. The Applicant has prepared an improvement plan that considers multi-modal activity/facilities in creating a safe Complete Street. It is my professional opinion that the proposed project will significantly alter the characteristics of the corridor and thus will change motorist behavior. Accordingly, I find the improvement plan to be acceptable with the following conditions:
  - The Applicant shall improve/enhance wayfinding to the existing MOB Parking Garage and the Visitor Garage. Advance directional signage should help to mitigate sudden stops that may have been a contributing factor in crashes. A signage plan shall be provided for review and approval by City staff.
  - The Applicant shall conduct a monitoring study following the opening of the new Medical Office Building. If crash patterns are not mitigated, the Applicant is responsible for the development of a mitigation plan for review and approval by City staff. Implementation of the approved plan will be the responsibility of the Applicant.
- The results of the traffic modeling analysis for area transportation roadways is based on the assumption that most MMC employees will parking in the proposed St. John Street parking garage and not utilize other parking options, particularly on-street. It is recommended that the Applicant provide documentation that employees are parking in MMC parking facilities and identify measures, to be reviewed and approved by City staff, to be implemented to address this issue. It is recommended that this documentation be provided in conjunction with TDM reporting requirements.

#### Other Non-TMP Comments

- **I have reviewed the Construction Management Plan and generally find it to be acceptable. Some specific comments:**
  - **It is recommended that further discussion on the duration of the Congress Street sidewalk closures be included.**
  - **Supplemental pedestrian safety devices will be required during the sidewalk closure time period (to safely cross pedestrians for the sidewalk detour).**
  - **All sidewalk detours shall be ADA compliant.**
  - **Changes to the lane configuration on Congress Street west of Gilman Street is likely and may need to be included in the plan.**
  - **A significant amount of construction activity will be required for utility and street construction work and specific plans shall be development for review and approval.**

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE  
Senior Associate  
Traffic Engineering Director

**TYLIN** INTERNATIONAL

[12 Northbrook Drive](#)

Falmouth, ME 04105

+1.207.781.4721 main

+1.207.347.4354 direct

+1.207.400.0719 mobile

+1.207.781.4753 fax

[thomas.errico@tylin.com](mailto:thomas.errico@tylin.com)

Visit us online at [www.tylin.com](http://www.tylin.com)

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