

MEMORANDUM

TO: Ms. Sheila Page
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FROM: Mr. Shaun P. Kelly
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DATE: May 18, 2020

RE: 7993

SUBJECT: Response to Traffic Impact Assessment Peer Review
Proposed Research & Development Facility
91 Hartwell Avenue
Lexington, Massachusetts

INTRODUCTION

Vanasse & Associates, Inc. (VAI) has prepared this technical memorandum in order to provide responses to comments issued by the Town of Lexington's transportation peer review consultant, WorldTech Engineering (WorldTech) as part of their May 12, 2020 peer review letter for the above referenced project.

To facilitate your review of this document, this response letter follows the general outline of the WorldTech review letter, with individual responses provided for each comment. This response letter includes:

- A commitment to work with MassDOT to review the timing at the intersection of Bedford Street with Hartwell Avenue and optimize signalized operations if deemed appropriate by MassDOT.
- The findings of a vehicle speed study and sight distance analysis that demonstrates adequate sight distance will be provided with the proposed landscaping plan designed to ensure adequate sight distance is maintained.
- A commitment to conduct a comprehensive traffic monitoring plan on an annual basis to evaluate the effectiveness of the Parking and Transportation Demand Management Plan (PTDM) and refine the program as necessary to meet the target 85 percent single-occupancy vehicle (SOV) rate.
- An updated signage and pavement marking plan for the Hartwell Place corridor, including elimination of on-street parking proximate to Hartwell Avenue.

The following summarizes the responses to the peer review comments.



Comment 1: “Introduction

As indicated in the TIA, the proposed development consists of the construction of 93,250 square feet of office/laboratory space and a four-story parking garage consisting of 499 parking spaces. The existing site contains an existing three-story office building, which will remain, and parking for 388 vehicles. The proposed laboratory office building will be constructed in the existing surface parking lot necessitating developing parking for both the existing and proposed buildings in the new garage. The redevelopment of the site will result in the elimination of the existing surface parking. The site is located within the Hartwell Avenue office park, with primary access from Hartwell Avenue via a driveway to the main parking area and secondary access from Hartwell Place, just south of the site.

The site access is proposed to be modified to use Hartwell Place as the primary access point to site and the existing driveway modified for emergency use only.

Subsequent to the TIA, an Updated Parking and Transportation Demand Plan (PTDMP) was prepared to supplement the TIA. The primary purpose of the Updated PTDM was to identify a plan that would significantly reduce the number of single occupancy vehicle (SOV) trips to the site and ultimately reduce demand for parking spaces to be supplied by the project proponent. A goal of a maximum of 85% SOV trips to the site, for both existing and proposed building uses, has been identified in the PTDMP. The aggressive TDM program described in the PTDMP was not factored into the trip generation numbers for site trips forecast for the proposed development in the TIA. The PTDMP identified the amount of the Transportation Mitigation Fee to be paid by the project proponent.”

Response: No response required.

Comment 2: “Study Area

The study area in the TIA includes the following intersections:

1. Bedford Street at Hartwell Avenue
2. Hartwell Avenue at Maguire Road
3. Hartwell Avenue at 91 Hartwell Avenue Driveway
4. Hartwell Avenue at Hartwell Place
5. Hartwell Avenue at Wood Street

The study area is generally sufficient to evaluate the potential impact of the project on the transportation infrastructure based on the expected trip-distribution pattern for the Project.”

Response: VAI concurs that the study area scope is adequate to identify the anticipated traffic impacts of the Project, with peak hour increases at the northern and southern extents of the study area amounting to only one vehicle trips every 3 to 5 minutes on average.

Comment 3: “Traffic Volumes and Data Collection

Traffic volume data was collected at the study area intersections by means of manual turning movement counts and automatic traffic recorder counts in August of 2018. Existing pedestrian and bicycle facilities were described but no count data was collected.



Travel speeds were not collected on Hartwell Avenue although the existing posted speed limits were noted. Spot speeds should be measured in the vicinity of the Hartwell Place intersection to determine appropriate sight distance requirements.”

Response: Traffic volumes collected in August 2018 included collection of both vehicular traffic, separated by vehicle type, as well as bicycle and pedestrian traffic volumes within the study area. As traffic volumes were collected outside of winter months, on a weekday with no rain, it is expected that the collected bicycle and pedestrian volumes are representative of typical conditions. Based on the collected data, pedestrian volumes within the study area were relatively low, amounting to approximately 5 or less total pedestrian movements at all study area intersections during peak hours. Bicycle traffic volumes ranged from approximately 15 to 25 total bicycle movements per hour along the segment of Hartwell Avenue between the Minuteman Commuter Bikeway and Wood Street, with lower bicycle volumes of approximately 5 bicycle trips per hour further north at Bedford Street.

As part of the sight distance analysis conducted in support of this response letter, vehicle speed measurements were conducted along the Hartwell Avenue corridor. Speed measurements were taken during off-peak conditions in order to determine prevailing travel speeds along the corridor. As noted in the TIA, the posted speed limit along this stretch of Hartwell Avenue is 40 miles per hour (mph). However, the 85th percentile travel speeds were determined to be 44 mph in both the northbound and southbound directions. In accordance with American Association of State Highway and Transportation Officials (AASHTO) design criteria, the 85th percentile travel speeds were utilized to review sight distances along Hartwell Avenue, which reveal that adequate sight lines are provided in both the northbound and southbound directions.

Comment 4: “Seasonal Adjustment

Traffic counts for passenger cars and trucks were taken in August, a period when traffic volumes are generally higher than average conditions. Based on Seasonal Adjustment Factors provided by MassDOT, for urban arterials, August traffic volumes are 7% higher than average conditions. The parking survey indicated that 93% of the existing office was occupied during the August survey period supporting the assumption that use of unadjusted August traffic counts results in a conservative estimate of traffic volumes used for this TIA.”

Response: VAI concurs that the data collected in August represents typical if not a conservative assessment of existing traffic and parking conditions within the study area.

Comment 5: “Crash Data

Motor vehicle crash data was obtained for the study area intersections from MassDOT for the 5-year period of 2014-2018. The intersection of Bedford Street and Hartwell Avenue averaged over 16 crashes per year over the 5-year period. The motor vehicle crash rate for this intersection exceeds MassDOT’s average crash rate for signalized intersections. All remaining study area intersections were found to have crash rates that fall below the MassDOT average crash rate for unsignalized intersections.

The intersection of Hartwell Avenue at Maguire Road has an average of only 4+ crashes per year, but a crash rate that is approaching the district wide average for the 5-year period examined. A very large volume of turning traffic, right from Maguire Road in the morning



and lefts from Hartwell Avenue northbound to Maguire Road in the afternoon, may account for number of angle and rear-end crashes. As reported, the Town is pursuing potential transportation improvements for the Hartwell Avenue corridor which, if implemented, should improve the safety record of these two study area intersections.”

Response: As noted by WorldTech, the Town of Lexington is currently pursuing potential transportation improvements to Hartwell Avenue that area expected to enhance future traffic operations and safety along the corridor. In accordance with Town of Lexington Zoning requirements, the applicant is committed to providing a fair-share contribution towards future improvements along Hartwell Avenue. In addition, the applicant is also committed to implementing short-term mitigation to the intersection of Hartwell Avenue and Bedford Street, specifically optimizing future traffic signal timing at this location to improve operations during peak hours.

Comment 6: “Sight Distance

The site plans call for the site access to be changed from the existing driveway location to a location utilizing the intersection with Hartwell Place. Proposed landscaping plans should be provided showing the necessary clearing to make sure adequate sight distance can be maintained.”

Response: Required sight distances along Hartwell Avenue at the Hartwell Place intersection were calculated based on a 45 mph design speed, which is slightly higher than the 44 mph 85th percentile travel speed along the corridor. Based on this travel speed, a minimum of 360 feet of sight distance is required in both the northbound and southbound directions. Field observations reveal that greater than 500 feet of sight distance is available in both directions, well exceeding the AASHTO requirements.

Proposed landscaping plans are provided as part of this response letter. As noted, all existing and proposed landscaping provided within the sight triangles from the intersection of Hartwell Avenue with Hartwell Place will be designed as not to exceed two-feet in height in order to ensure required sight distances are maintained at this location.

Comment 7: “General Background Growth

A background growth rate of 0.5% was assumed based on a review of historical MassDOT traffic counts in the area. Based on continuous count station data, on Route 128 in the immediate area, dating back to 1990, and the uncertainty of the future travel in the short term, 0.5% is a reasonable assumption.”

Response: No response required.

Comment 8: “Specific Development by Others

The other development projects were identified in the report. No additional work required.

Response: No response required.



Comment 9: “Project-Generated Traffic

The assumptions used to estimate weekday daily and peak hour traffic volumes was based on Institute of Transportation Engineers Trip General Manual, using Land Use Code 760 for Research and Development Centers. No reduction was applied for transit or bicycle trips.

The calculations for project generated trips were based on a proposed development size of 93,250 sf to be added to the existing traffic volumes counted at the site driveway and Hartwell Place. Based on the calculated volumes, the project is expected to generate approximately 1,050 new trips (525 in/525 out) per day, 39 trips (29 in/10 out) during the morning peak hour and 46 trips (7 in/39 out) during the evening peak hour.

Existing traffic volumes, counted in August, totaled 114 trips entering and 6 exiting the site from the existing office space in the morning peak hour; similarly, 84 vehicles were counted leaving the site and 14 entering in the afternoon peak hour.

Based on the ITE rates, peak hour trip generation rates for Research and Development Centers are significantly lower than general office space, as there are likely less employees per square foot.

It should be noted that there is a slight difference in the proposed building uses between the TIA and the site plans submitted for the special permit. The TIA utilizes 93,250 square feet of laboratory space, while the site plans call for a mix of office and laboratory space. The mix (30% office/70% laboratory) of office and laboratory space would result in higher peak hour trip generation values than pure laboratory space. WorldTech estimates that a site with 30% Office would generate approximately 1010 new trips (505 in/505 out) per day, 60 trips (48 in/11 out) during the morning peak hour and 64 trips (10 in/54 out) during the evening peak hour.

Based on this calculation, the TIA might overestimate the daily trip generation and underestimate the peak hour trip generation. The proposed use of the site should be clarified.

No adjustment was applied to the proposed ITE laboratory rates to account for the aggressive TDM program, so the differences in trip generation values are less impactful than the estimate above.”

Response: As noted by WorldTech, the trip generation projections for the Project were based on ITE data for LUC 760 – Research and Development Center, which is the appropriate category for the proposed laboratory use. While it is noted that the site plan parking supply requirements utilized a 30 percent office component to determine the local zoning requirement, the ITE trip generation data accounts for the fact that R&D facilities ‘may contain offices and light fabrication areas’. It is also noted that in order to provide a conservative assessment of Project impacts, no reduction to the ITE trip generation data were made, despite the comprehensive Parking and Transportation Demand Management Plan that will be implemented as part of the Project.



Comment 10: “Trip Distribution and Assignment

Traffic volumes associated with the project were assigned to the study area roadways based on a review of existing travel patterns and other traffic impact studies performed in the area. The trip distribution provided in the TIA is generally consistent with existing travel patterns and likely routes to and from the project site.”

Response: No response required.

Comment 11: “Future Traffic Volumes-Build Conditions

Table 5 in the study provided a summary of peak hour traffic volume increases on area roadways. The results showed low percentage increases on Bedford Street and Hartwell Avenue.”

Response: As noted in the TIA, traffic volume increases associated with the Project result in increases to overall traffic volumes of approximately 0.5 to 1.5 percent as compared to future No-Build conditions.

Comment 12: “Traffic Operations Analysis

Bedford Street at Hartwell Avenue

Under 2019 Existing Conditions the intersection of Bedford Street with Hartwell Avenue currently operates at an overall LOS E and C during weekday morning and weekday evening peak hours, respectively. The Bedford Street eastbound approach is over capacity ($V/C = 1.12$) in the morning peak hour. With the addition of No Build traffic and ultimately Build traffic added to the intersection, conditions will worsen. The Town of Lexington prepared a Transportation Improvement Plan (TMO-1) for the Hartwell Avenue corridor in 2010, which the project proponent has agreed to contribute funds. The plan calls for the intersection of Bedford Street and Hartwell Avenue to be reconstructed and the signalized intersection replaced by a roundabout design. The schedule for these improvements has not provided. Additional capacity analyses should be performed for the morning Build Conditions to see if an optimized timing plan, that improves the LOS for the eastbound Bedford Street approach, can be developed.”

Response: As requested by the WorldTech, traffic signal operations were reviewed at the intersection of Bedford Street with Hartwell Avenue during the weekday morning peak hour. Under existing conditions eastbound traffic currently operates at LOS F. Based on the capacity analysis results, the eastbound Bedford Street approach can be improved to LOS E through the optimization of future signal timing at this location. If deemed appropriate by MassDOT, who has jurisdiction over this location, the applicant will update the signal timing at this intersection to optimize future traffic operations.

Comment 13: “Hartwell Avenue at Maguire Road

Under 2019 Existing conditions the intersection of Hartwell Avenue with Maguire Road currently operates at a LOS F during both the weekday morning and weekday evening peak hours, for eastbound traffic on McGuire Road. The Maguire Road eastbound approach is over capacity ($V/C > 1.20$) in both peak hours. The summary tables do not provide details on the level of increased delay that would result in the No-build and Build cases compared



to Existing conditions. The Transportation Improvement Plan (TMO-1) for the Hartwell Avenue corridor details traffic operations improvements consisting of a new roundabout design that should address the capacity and safety issues at the intersection. The Town is also considering a traffic signal design alternative to the roundabout. The project proponent is contributing mitigation fees that could be used to implement either traffic operations improvement.

Response: VAI concurs that under Existing conditions, independent of the Project, long delays are currently experienced by traffic turning from Maguire Road during peak hours of roadway traffic. The majority of delay in the morning peak hour is experienced by eastbound traffic turning right onto Hartwell Avenue southbound. Project-related increases to this movement are projected to amount to only 7 vehicles per hour, a minor increase as compared to greater than 500 vehicles per hour that make this maneuver under Existing conditions. During the weekday evening peak hour the majority of delays are experienced by traffic turning left from Maguire Road to Hartwell Avenue northbound. As this movement occurs away from the site, no additional traffic will be added to this movement by the Project.

As previously noted, the proponent is committed to providing funding towards the implementation of future traffic improvements along the corridor, including the potential installation of a new roundabout at this location. Capacity analyses were conducted under future 2026 No-Build and Build conditions assuming the roundabout design alternative include in the Town of Lexington's TMO-1 Plan for the Hartwell Avenue corridor. The results of the roundabout capacity analyses indicate that with the implementation of the roundabout design, all roadway approaches to this intersection would operate at LOS B or better, with the Project resulting in increases to approach delays of less than one second per vehicle as compared to future 2026 No-Build conditions.

Comment 14: "Hartwell Avenue at Hartwell Place

Under 2019 Existing conditions the stop-controlled intersection of Hartwell Avenue with Hartwell Place currently operates at a LOS D during weekday morning and a LOS F during the weekday evening peak hours, respectively for eastbound traffic on the Hartwell Place approach. Although the V/C ratios do not indicate a capacity problem for traffic on the Hartwell Place approach, under Existing and No Build conditions, delays are predicted to increase under Build conditions compared with No-Build. New capacity analyses should be performed on the intersection for Build conditions with separate right and left turn lanes on Hartwell Place as a potential mitigation measure to reduce delays at the intersection.

Response: Under existing conditions the eastbound Hartwell Place approach to Hartwell Avenue flares to greater than 70 feet at its eastern terminus. Field observations during peak hours revealed that vehicles turning right towards Hartwell Avenue southbound were able to bypass a vehicle waiting to turn left due to the width of the roadway at Hartwell Avenue, as well as the majority of on-street parking occurring towards the western end of the corridor, proximate to the building entrances at 91 and 101 Hartwell Avenue properties. As such, under both existing and future conditions, the capacity analyses provided in the TIA analyzed the eastbound approach as a two-lane approach, allowing left- and right-turns to occur simultaneously.

The project includes a number of enhancements to Hartwell Place, including provision of upgraded pedestrian accommodations by way of a new sidewalk along the northern side of the corridor that is not provided today and the elimination of on-street parking along the



southern side of the corridor that compromises the available travel width along the roadway. Specifically, under existing conditions the allowance of parking along both sides of Hartwell Place effectively reduces the available travel width to only 16 feet for two-way traffic flow along the majority of the corridor. The proposed plan eliminates parking along the southern side of the corridor while also formalizing the parking along the northern edge.

A proposed parking plan is provided as an attachment to this response letter, formalizing on-street parking along the northern edge, and restricting parking proximate to the eastern terminus to ensure adequate travel width is provided at Hartwell Avenue to continue to allow right-turn traffic to bypass. Given the relatively low number of right-turns from Hartwell Place during peak hours, amounting to 7 to 31 vehicles per hour, or one right-turn every 2 to 9 minutes, this measure will allow for right-turn bypass maneuvers to continue to occur.

Comment 15: “Hartwell Avenue at Wood Street

Under 2019 existing conditions the intersection of Hartwell Avenue with Wood Street currently operates at a LOS F during both the morning and afternoon peak hours for the westbound traffic on Wood Street. The TMO-1 described a plan to add an additional lane to the Wood Street approach to the intersection and should improve the LOS at this location. The small number of site generated trips at this intersection would not trigger any further analysis or mitigation.

Response: VAI concurs that Project-related traffic increases to the critical westbound approach from Wood Street are minimal, amounting to only one new trip every 9 to 30 minutes.

Comment 16: “Transportation Demand Management

There were no Transportation Demand Management (TDM) measures identified in the TIA, but the PTDM identified a significant program offered by the project’s proponent to reduce SOV trips to the site. These incentives consisted of bicycle improvements, such as bicycle parking, shower and changing facilities and the use of on-site bicycles and helmets for use during business hours. Due to the proximity of the Minuteman Bike Trail, the measures have the potential to be very effective.

Public transportation services were proposed including subsidized bus passes and continued support in the 128 Business Council, including assigning a Transportation Coordinator for the site. The last component of the TDM measures was a constrained parking supply to discourage the use of single occupancy vehicles (SOV) trips. With these TDM measures in place, and a marketing plan employed for the site, the project proponent has established a goal of no more than 85% SOV trips. Since the project was analyzed without taking advantage of these TDM measures, the traffic operations analyses prepared for the project would be characterized as conservative.

Response: VAI concurs with the peer review consultant that the implementation of a comprehensive TDM plan, with a goal of no more than 85% SOV trips likely results in the traffic volumes utilized in the traffic operations analysis being conservatively high.



Comment 17: “Transportation Mitigation Fee

A commitment was provided in the PTDMP for a payment of \$373,000 as a transportation mitigation fee based on a value of \$5 per square foot of the net floor area. The net floor area was determined by applying an 80% reduction in size according to the Zoning Bylaws.

Response: No response required.

Comment 18: “Parking Demand Analysis

A parking demand analysis was prepared consisting of two elements: first a survey of the parking demand of the existing office use was undertaken. According to the parking survey taken in August 2018, less than 40% of the available parking spaces were occupied during the peak parking demand period on a typical Wednesday. During the survey period, the existing office building was reported to be at 93% utilization. The total number of cars parked totaled 148, with 18 additional cars parked on Hartwell Place at 10 AM. This time period represents the peak parking demand for office uses.

The second component of the parking analysis was an estimate of parking demand that could be expected from construction of new laboratory office space. Based on data derived from ITE’s latest parking generation report, the expected 85th percentile parking demand, for the proposed laboratory/office space, would be 293 spaces. The combined demand for parking based on observed parking usage for the existing office space plus a projected demand for new laboratory space would yield 441 vehicles.

The survey data from the August count seems to indicate a lower parking demand than published sources like ITE would expect. Using the ITE data for office uses would yield a calculated average demand of 289 parkers and an 85% demand of 410 parkers compared to the observed 148 cars parked in August.

According to the Special Permit Application, a total of 589 parking spaces would be required for the combined office/laboratory use, based on Table 5-1-4 of the zoning requirements. The updated PTDMP reported that 502 off-street parking spaces would be supplied and an additional 18 on-street spaces designated on Hartwell Avenue. Considering the Town’s desire to discourage SOV trips for new developments on Hartwell Avenue, the 502 off-street spaces are a reasonable number of off-street spaces to encourage drivers to reduce SOV trips.

If the demand for off-site parking were to exceed the available spaces provided in the new garage during a period of high demand, vehicles may spend time circulating in the garage or would likely try to find a parking space on Hartwell Place.

Response: No response required.

Comment 19: “Site Access and Circulation

World Tech reviewed the site plan for overall site circulation issues. Below are our findings.

- A plan for the restriping of Hartwell Avenue should be provided, showing the elimination of the left turn lane into the existing site drive and new pavement markings for the Hartwell



Place approach to the intersection. New regulatory signing, supplementing the proposed pavement marking plan, should be provided.”

Response: A restriping plan for Hartwell Avenue is provided as an attachment to this response letter. The proposed plan includes the elimination of the existing northbound left-turn lane from Hartwell Avenue into the 91 Hartwell Avenue driveway, as well as the installation of regulatory signage including a No Left Turn (MUTCD R3-2) sign, One-Way sign (R6-2) and Do Not Enter signage (R5-1) to alert motorists of the one-way outbound restriction for traffic flow at the existing 91 Hartwell Avenue driveway.

Comment 20: “• The on-street parking for Hartwell Place should be reviewed in terms of the potential to prohibit parking adjacent to the intersection with Hartwell Avenue to provide additional turn lanes on the Hartwell Place approach. Consideration should be given to designing the parking on Hartwell Place as “short term” parking for visitors to the site.”

Response: The on-street parking plan for Hartwell Place has modified to eliminate the four spaces most proximate to Hartwell Avenue to ensure that adequate width is provided to allow right-turning traffic to bypass a vehicle waiting to turn left. Additionally, short-term parking and no parking signage has been added to the northbound and southbound sides of the corridor, respectively, to identify the parking regulations along both sides of the corridor.

Comment 21: “• The parking demand analysis supports a conclusion that 502 off-street parking spaces would be sufficient to support the proposed office/laboratory development.”

Response: No response required.

Comment 22: “Traffic Monitoring and Reporting

The project applicant, LPC Northeast, (or subsequent owner) should conduct a post development traffic monitoring and employee survey program in order to evaluate the success and to refine the elements of the TDM program, and to validate the trip generation projections for the project. The monitoring program will include:

- Obtaining traffic volume information over a continuous seven-day period, weeklong period at the driveway(s) serving the site;
- Perform manual turning movement count and vehicle classification counts at the intersection of Hartwell Avenue and Bedford Street and Hartwell Avenue and Maguire Road and Hartwell Avenue during the weekday morning (7:00 to 9:00 AM), weekday evening (4:00 to 6:00 PM) peak hours; conducting an employee survey of commuting modes.

The monitoring program will commence six months after issuance of the permanent Certificate of Occupancy for the new Parking garage and will continue on an annual basis for a duration to be mutually agreed between LPC Northeast and the Town of Lexington, Planning Board. The results of the monitoring program will be summarized in a report to be provided to the Town within 2-months after completion of the data collection effort.



The report will document the traffic volumes associated with the proposed laboratory as occupied at the time that the traffic counts are completed.

If the monitoring program indicates that the SOV employee mode split exceeds 85%, LPC Northeast will identify and undertake corrective measures in conjunction with the Town of Lexington Planning Department to implement additional TDM measures. The corrective measures, if any, will be documented in the transportation monitoring and reporting program report and will identify the appropriate parties responsible for implementation and timelines for approvals.

Response: As summarized in the PDTM plan submitted for the Project, the proponent is committed to conducting a comprehensive transportation monitoring program post-development, including collection of employee surveys, daily and peak period traffic volumes and parking demand data at the proposed parking garage. The monitoring report will be conducted within six months of the issuance of the Certificate of Occupancy for the Project and will be utilized to determine the effectiveness of the PDTM plan and allow for refinement of the program, as necessary, to meet the target SOV goal of 85 percent or less.

Comment 23: “Summary

Based on the calculated volumes, for Research and Development Center, the project is expected to generate approximately 1,050 new trips (525 in/525 out) per day, 39 trips (29 in/10 out) during the morning peak hour and 46 trips (7 in/39 out) during the evening peak hour. An aggressive TDM program is proposed and a goal of 85% SOV usage is anticipated. Traffic volumes on Study Area will increase by less than 2% over No Build conditions. As noted in the discussion of the project generated traffic above, there is a difference in the proposed mix of laboratory/office space between the site plans submitted and the TIA. Those differences would result in a difference in the trip generation but are not expected to change our recommended mitigation.

Response: See response to Comment 9.

Comment 24: “The project team should provide the following analysis/documentation

“• Provide a recommendation to optimize the timing of the Bedford Street at Hartwell Avenue intersection to eliminate the poor operations (LOS F) for the Bedford Street eastbound approach.”

Response: See response to Comment 12.

Comment 25: “• Provide an analysis of the Hartwell Avenue at Hartwell Place intersection with both left and right turn lanes. “

Response: See response to Comment 20.

Comment 26: “• Review the parking plan for Hartwell Place depending on the outcome of the recommendation for additional turn lanes on Hartwell Place.”

Response: See response to Comment 20.



Comment 27: “• Provide a revised pavement marking and signage plan for Hartwell Avenue illustrating the changes in access proposed for the site.”

Response: See response to Comment 19.

Comment 28: “• Verify the stopping sight distance requirements can be met for the Hartwell Place intersection with Hartwell Avenue.”

Response: See response to Comment 6.

Comment 29: “• Provide a Traffic Monitoring and Reporting plan as described above.”

Response: See response to Comment 22.

CONCLUSION

As documented in this memorandum, the supplemental information provided in this response document confirms the findings of the initial traffic impact assessment, that Project-related traffic increases are projected to result in minimal impacts to area traffic operations. The proponent is committed to working with the Town of Lexington to improve traffic conditions along the Hartwell Avenue corridor, including provision of a fair-share contribution towards future improvements based on Town of Lexington zoning by-laws. Proposed modifications to the Hartwell Place corridor will enhance vehicular and pedestrian traffic flow by delineating on-street parking and providing a dedicated pedestrian route.

Should you have any questions or require any additional information please feel free to contact me directly.

cc: J. Cappellano, LPC Boston
P. Finger, Paul Finger Associates, Inc.
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