City of Newton



DEPARTMENT OF PUBLIC WORKS

TRANSPORTATION DIVISION 110 Crafts Street Newton, MA 02460

Setti D. Warren Mayor

DATE: June 18, 2013

TO: Candace Havens, Director of Planning

FROM: William G. Paille, P.E., Director of Transportation

RE: Riverside MBTA Station Redevelopment Project – Intersection Improvements

The 2012 Traffic Impact and Access Study (TIAS) prepared by Vanasse Hangen Brustlin (VHB) identified five (5) locations that are projected to experience a "measureable impact (i.e. drop in Level of Service)", as a result of the project:

• Washington Street (Route 16) at Concord Street

It should be noted this intersection was upgraded in 2012 as part of a City-funded project which included installation of new traffic signals, curb/sidewalk upgrades and new pavement markings scheduled this year. The TIAS identifies a LOS D (AM)/D (PM) with mitigation and recommends signal timing modifications as part of the mitigation.

The City concurs with the recommended mitigation

Route 16 at Quinobequin Road/I-95 Southbound On-Ramp

It should be noted this intersection was upgraded in 2011/2012 by the Massachusetts Department of Transportation (MassDOT) which included traffic signal improvements, lane configurations, new paving and markings. The TIAS identifies a LOS E/F with mitigation and recommends signal timing modifications as part of the mitigation.

The City concurs with the recommended mitigation although any improvements to this intersection will be subject to the approval of MassDOT.

• Route 16 at Commonwealth Avenue (Route 30)

It should be noted this intersection was upgraded within the last five years as part of a city-funded project which included traffic signals, and curb/sidewalk/ADA compliance improvements in 2012 which are expected to be completed this year. The TIAS identifies a LOS D/E with mitigation and recommends signal timing modifications as part of the mitigation.

The City concurs with the recommended mitigation. However, it is recommended a revised capacity analysis be performed to confirm storage lane length.

Route 16 at Perkins Street/I-90 Eastbound On-Ramp

The TIAS identifies a LOS B/D with mitigation and recommends signal timing modifications as part of the mitigation.

The City concurs with the recommended mitigatin.

Route 30 at Auburn Street

It should be noted this intersection is currently listed on the MassDOT website as part of a project to reconstruct Commonwealth Avenue from the Weston Town Line to Auburn Street which is currently in the preliminary design stage and an expected construction year of 2017/2018. The TIAS identifies a LOS C/D with mitigation and recommends signal timing modifications as part of the mitigation.

The City concurs with the recommended mitigation. However, it is also recommended the project proponent coordinate with MassDOT regarding the true status of the design schedule.

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In addition, it is our understanding that BH Normandy Riverside LLC has offered to provide traffic engineering and improvement recommendations for approximately six (6) intersections. In addition to the TIAS, the City also utilized the City-Wide Traffic Signal Re-Timing Study, prepared by VHB in 2012 that made specific short/long-term recommendations. In addition to proximity of a particular roadway/intersection to the Riverside site, the City based its selection primarily on the trip distribution (i.e. percentage of office, retail and residential trips) traffic entering/exiting a specific intersection from the TIAS. As a result, the following intersections are recommended for traffic improvements resulting from the project:

• Riverside Office (South, Center - signalized, North) drive at Grove Street (Int. # 4, 5, 6)

Due to the proximity of the Riverside Office Park to the Riverside development, there is concern that exiting vehicles from the site may have difficulty turning onto Grove Street NB from the north drive as a result of the project.

Recommended mitigation includes installation of "do not block intersection" signs and associated pavement markings to discourage drivers from blocking the north driveway.

- Hagar Street at Concord Street currently non-signalized (Int. #9)
 The TIAS indicates approximately 10-13% of projected volume will utilize Concord Street which may result in delay and queuing of vehicles exiting Hagar Street onto Concord SB. Not likely to meet warrants for a traffic signal at this location. Three way stop petition was recently heard and denied by Traffic Council.

 Recommended mitigation may include installation of a three-way stop.
- Woodland Street at Grove Street currently a four way stop w/flashing beacon (Int. #16)
 The TIAS indicates 8-15% of project volume along Grove with Woodland having the less volume.
 Recommended mitigation includes performing a complete traffic signal warrant analysis with recommendations as to permanent traffic controls for implementation.
- Washington Street at I-90 Exit 16 WB off-ramp currently signalized (Int. #28)
 The TIAS indicates 9-21% of projected volume entering this intersection.
 Recommended mitigation includes new signal mast arms, new signal controller, new pedestrian signal heads, ADA compliance upgrades, new pavement surface markings.
- Washington Street at Perkins St./I-90 Exit 16 WB off-ramp currently signalized (Int. #27)
 The TIAS indicates 2-9% of projected volume entering/exiting this intersection.
 Recommended mitigation includes new signal mast arms, new signal controller, new pedestrian signal heads, ADA compliance upgrades, new pavement surface and markings.
- Washington Street at Prospect Street currently signalized
 The TIAS indicates 2-21% of projected volume utilizing this section of Washington Street.

 Recommended mitigation includes new signal mast arms, new signal controller with leading pedestrian interval (LPI) and dynamic maximum functions (i.e. similar to Washington/Comm. Ave), new pedestrian signal heads, ADA compliance upgrades, new pavement surface and markings.
- Washington Street at Auburn Street currently signalized (Int. #26)
 The TIAS indicates 4-21% of projected volume entering/exiting this intersection.

 Recommended mitigation includes new signal mast arms, new signal controller with leading pedestrian interval (LPI) and dynamic maximum functions (i.e. similar to Washington/Comm. Ave), new pedestrian signal heads, ADA compliance upgrades, new pavement surface and markings.
- Grove at Auburn/Central currently signalized (Int. #19)
 Trip distribution indicates 3-21% of projected volume entering/exiting this intersection.

 Recommended mitigation includes new signal mast arms, new signal controller with LPI's and dynamic maximum functions, video detection, new pedestrian signal heads, ADA compliance upgrades, minor geometric modifications, new pavement surface and markings.

Cc: Dave Turocy, DPW Commissioner, File

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