



**Yovani Baez-Rose**  
*Assistant City Manager/DPD Director*

**Camilo Espitia**  
*Deputy Director*

**MEMORANDUM**

TO: Thomas A. Golden, Jr., City Manager 

FROM: Yovani Baez-Rose, Assistant City Manager/DPD Director

CC: Elizabeth Oltman, PE, Transportation Engineer

SUBJECT: MOTION RESPONSE: 5/30/2023 - Councilor Scott – Request City Manager Have The Traffic Engineer Explore The Feasibility Of Incorporating Stop Signs On Streets That Intersect With Lowell Street, A Stop Sign At The End Of Denton Street And Speed Humps And/Or Chicanes On Billerica And Hollis Streets

The City Transportation Engineer conducted an evaluation of the intersections of Jean Avenue, Armand Avenue, Delmont Avenue, and Commonwealth Avenue with Lowell Street. All intersections currently have stop signs controlling the north-south Lowell Street approaches, with the east-west streets free-flowing. The stop control is currently placed on Lowell Street per standard engineering practice because it is the lower volume roadway than the east-west streets.

The MUTCD warrants for application of multi-way stop control include a minimum volume requirement, a notable crash history, and the similar operating characteristics of the two roadways. The four intersections reviewed do not meet the crash history requirement of “five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation.” The intersections do not meet the minimum volume criteria of at least 300 vehicles per hour for 8 hours of an average day on the major street plus 200 vehicles, pedestrians or bicycles per hour for the same 8 hours on the minor street. Therefore, these intersections do not meet the minimum criteria for implementation of all-way stop control. Relocation of the stop signs to the east-west streets and creating a free-flow condition on Lowell Street could be considered, should the neighborhood residents be interested in this change in a trial condition, as they will be the most impacted. Please note that since Lowell Street is the lower volume roadway, non-compliance of the stop condition by vehicles on the east-west street may occur with this change.

Denton Street extends between Billerica Street and Easton Street, with Billerica Street and Easton Street ending at Denton Street, forming a C-shaped geometry. Per the MUTCD, a stop sign is not required at either of the two intersections, as there is no conflict between turning vehicles. A Curve



Warning sign (see graphic) would be more appropriate in this location to notify motorists of the 90-degree turns. DPD will work with the LPD sign department for installation of these signs.

The continued use of Jean Avenue and Hollis Street as a bypass route between Boylston Street and Woburn Street indicates that a traffic calming evaluation of these streets is appropriate. The Transportation Engineer is in the process of this evaluation in accordance with the Lowell Neighborhood Traffic Calming Program. In the short term, enforcement by the LPD STEP program may help ensure vehicles comply with the statutory speed limits.

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