## **MEMORANDUM**

To:

Cambridge Board of Zoning Appeal; Ranjit Singanayagam, ISD

From:

Jason Schrieber, TP&T

Date:

March 22, 2004

Re:

2480 Massachusetts Avenue

Our Department has reviewed the traffic study conducted by Fay, Spofford & Thorndike for the proposed Dunkin Donuts at 2480 Massachusetts Avenue. Our staff also has met with the proponent on a number of occasions, and we have observed traffic operations at the existing gas station during peak and off-peak conditions.

Overall, the proposed curbline and median improvements represent an improvement to vehicular, bicycle and pedestrian traffic operations and safety in this stretch of Massachusetts Avenue. The traffic study is an accurate and conservative representation of the anticipated traffic impacts associated with the change of use. There will be no reduction in vehicular level-of-service, and turning conflicts will be reduced through: the elimination of any curb cuts near the intersection of Mass. Ave. and Edmunds Street; the reduction of the median break at Washburn Street; and the installation of a new median break for Edmunds Street.

The traffic study indicates that seventy-percent of the 1,440 daily vehicle trips that the Dunkin Donuts will attract will come from existing "pass-by" trips on Mass. Ave., similar to what happens today at the gas station. About 320 new vehicle trips will be attracted to the site each day. During the AM peak hour, over 200 vehicles will enter and exit the site, and about 45 of those trips will be new to the area. During the PM peak hour, 60 vehicles will enter and exit, but only about 15 trips will be new to the area. Mass. Ave. carries 30,000 vehicles per day in this stretch, with nearly 2,500 in each peak hour.

The site plan incorporates several safety improvements, and our Department has asked for several changes to the surrounding sidewalks and Mass. Ave. median that will further enhance safety for vehicles, bicycles and pedestrians. These include:

- The existing Mass. Ave. curb cut will be consolidated to a point east of the Washburn Street median break, and that median break will be narrowed. These actions remove the confusing and dangerous angular and head-on vehicle turning conflicts that exist today among vehicles departing Washburn Street, departing the gas station, departing Edmunds Street, and traveling in both directions on Mass. Ave. Washburn and Mass. Ave. drivers will be left with a more predictable driving environment.
- The site's Edmunds Street curb cut will be consolidated to a narrow one-way entrance driveway at least 50-feet from Mass. Ave., removing any confusion that exists today when right-turning entering traffic from Mass. Ave. cuts-off vehicles exiting Edmunds Street. With this change, entering cars will have to slow for the

- right-turn and will then need to yield to on-coming Edmunds traffic before turning sharply left into the Dunkin Donuts.
- An exclusive median break for Edmunds Street will be added, eliminating the dangerous movements to and from northbound Mass. Ave. that exist today. By requiring the site have an "entrance only" from Edmunds Street, Dunkin Donuts patrons will not be allowed to make difficult left-turns out of Edmunds, yet Edmunds residents will retain their existing access in a safer configuration.
- A sidewalk curb extension into Mass. Ave. and a new crosswalk across Mass. Ave. will be installed at the Edmunds Street corner doorway of the Dunkin Donuts. This will serve anticipated pedestrian demand and provide improved sight-lines between vehicles and crossing pedestrians. Situated between the Washburn median break and the new Edmunds median break, the crosswalk gives pedestrians a refuge on the median which allows them to cross Mass. Ave. one half at a time without crossing the vehicles turning into either Edmunds or Washburn.

Our Department finds that the improvements being undertaken by the proponent will improve vehicular, bicycle, and pedestrian operations in this stretch of Mass. Ave. without creating any significant traffic increases. We have entered into an agreement with the proponent to review the operation of these changes one year after opening to determine if further changes are necessary.

If you have any questions, please contact me at 617-349-4745.

Cc: Susan E. Clippinger, TP&T
Brandon Woolkalis
Nicholas Leo
Michael Brandon