Vanasse Hangen Brustlin, Inc.

Transportation
Land Development
Environmental Services

Post Office Bo
Watertown

Post Office Box 9151 Watertown Massachusetts 02272 617 924 1770 FAX 617 924 2286

Memorandum To:

Ms. Elizabeth Frank Stop & Shop Company PO Box 1942

ate:

July 6, 1998

Project No.: 05963

Robert J. Michaud, P.E.

Boston, MA 02105

Trip Generation Evaluation,
Proposed Stop & Shop
Finaling Facility Daytmouth

Fueling Facility Dartmouth Street, New Bedford

Vanasse Hangen Brustlin, Inc. (VHB) has estimated the trip generation of a proposed 3-pump fueling facility to be located adjacent to Dartmouth Street within an existing Stop & Shop supermarket site in New Bedford, Massachusetts. This memorandum presents the trip generation methodology and summarizes the projected trip generation for the fueling facility. It is concluded that the project will add only nominal new traffic to area streets, and will result in no discernible change in traffic operations at nearby intersections.

Trip Generation

The Stop & Shop Gas program is a new concept in retailing, targeting existing supermarket patrons as the primary customer base. Gasoline stations that are co-located with supermarkets represent a new land use category for which trip generation data is not currently published by the Institute of Transportation Engineers (ITE). However, VHB has documented trip rates for operational Stop & Shop Gas facilities located in New England, including sites in New Bedford and Fall River, Massachusetts, and Providence, Rhode Island (refer to Attachments for a summary of observed data). The observed data indicates that weekday and Saturday peak-hour traffic represents approximately 5 percent of adjacent street traffic. The observed trip rates correlate well with trip rates for gasoline/service stations published by ITE in *Trip Generation*¹. Consequently, trip generation for the project is based on standard ITE trip rates for gasoline/service stations (Land Use Codes 844 and 845).

ITE data for Land Use Code 844 (Gasoline/Service Station) provides trip data for the weekday conditions. As with observed trip rates, the published weekday peak-hour trip rates for this land use code represent 5 percent of adjacent street traffic. The same trip rate methodology (i.e., 5 percent of adjacent street traffic) was applied for the Saturday Midday peak hour, based on the consistency of this rate with observed Stop & Shop trip rates for operational sites.

ITE-published data for gasoline stations indicates that only approximately 13 percent of trips generated by gasoline stations represent new traffic; approximately 52 percent of trips are from drawn from the existing traffic stream (referred to as "Pass-by"), and approximately 35 percent represent trips that

\\MAWALD\LD\05963\DOCS\MEMOS\TRIPS.DOC

¹ Trip Generation, 6th Edition, Institute of Transportation Engineers, Washington, D.C. (1997)