

October 16, 2013

Town of Hanover
Planning Department
550 Hanover Street
Hanover, MA 02339
Attn: Ms. Margaret Hoffman

**Subject: Peer Review – 40B Traffic Assessment –
Proposed Kennedy Building Apartments**

Dear Ms. Hoffman:

Jacobs has reviewed the 40B Traffic Assessment dated April 18, 2013 prepared by McMahon Associates Inc. The Traffic Assessment should be re-submitted as a Traffic Impact and Access Study to effectively evaluate the traffic impacts of the proposed 40B development. This review letter highlights our concerns, requests for additional information and our recommendations.

Existing Site Conditions

The traffic assessment does not clearly define a study area. On a recent field visit with you and Dave Delaney, we recommend that the study area include the following intersections:

- Washington St at the Kennedy Building driveway and the southern parking lot driveway
- Washington St at Rockland Street and Church Street
- Washington St and Oakland Street

Traffic Volumes

The traffic assessment does not include any existing traffic counts, projected traffic from other nearby proposed developments, seasonal adjustments, future growth rate and future build traffic volumes. Jacobs recommends traffic counts be taken at all of the study area intersections for both AM, School PM and PM peak hours.

Several residents have expressed traffic concerns to the Town regarding cut-through traffic from Route 53 through Cardinal Cushing School Drive through Washington Street to avoid the traffic signal at Route 53 and Rockland Street.

Capacity Analysis

The traffic assessment does not include any capacity analyses for the existing, build or future build conditions. While traffic volumes may be low during the day, a capacity analysis is needed for the AM and PM peak hours for all of the study area intersections for existing and build conditions.

Sight Distance and Crosswalks

As stated in the report the sight distance appears adequate at each of the site driveways and at the three marked crosswalks. It should be noted that there are no sidewalks along Washington Street and that the crosswalks on the west side of Washington Street terminate at driveway entrances and not at a wheelchair ramp. The pedestrian access is a concern as half off the parking is proposed off-site that would require the use of these crosswalks.

Speed

The assessment does not evaluate existing speeds on Washington Street. There are three marked crosswalks on Washington Street through the campus where motorists have been reported to speed down the hill on Washington Street coming from the retirement community.

Parking Observations

The report indicates that the southern parking lot was full at 8:00 am and that the northern parking lot was half full by 9:00 am. We observed both parking lots at 11:00 am on October 3, 2013; The southern parking lot was full and the northern parking lot was approximately 2/3 to ¾ full. We had spoken to one of the Cardinal Cushing employees that was near the northern parking lot and he had indicated that the Cardinal Cushing School conducts training on Wednesday afternoons that result in both northern and southern parking lots being full because the training occurs during a school shift overlap.

Crash Data

The crash data presented is not indicative of a major safety concern. The applicant should also contact the Hanover Police to determine if there are any automobile/pedestrian safety concerns within the campus that may not be included on the MassDOT database. It should be noted that the number of accidents at the Washington St/Rockland/Church St intersection is higher than the other locations. A closer look should be taken at this intersection for safety improvements due to its non-standard geometry.

Trip Generation

The Trip Generation Calculations conform to the ITE Trip Generation Handbook 9th edition.

Trip Distribution

A trip distribution figure should be provided in addition to the volumes used to calculate it.

Parking

The parking demand is consistent with the parking generation manual. The traffic assessment states that there are 33 dedicated spaces behind the building for residential use, but does not state how many spaces would be required for the on-site health center and the adjacent pool. Additionally, space has to be provided for the building's dumpster, emergency and non-emergency vehicles accessing the health center. The applicant should supply a parking management plan that addresses parking for both the Kennedy Building Apartments and Cardinal Cushing Parking to accommodate demand during peak periods.

Proposed Mitigation

The traffic assessment states that the proposed residential development will not impact traffic in the study area and does not propose any mitigation.

Jacobs feels that the proposed development as proposed, will impact the traffic operations and safety of the study area intersections. There is an existing traffic cut-through problem that has been raised by several abutters. The applicant has not proposed any improvements or solutions in the traffic assessment.

The traffic assessment does not mention anything about bicycle or pedestrian accommodations or improvements, public information regarding public transportation and car/vanpool programs that could be made available to the residents of the project.

Additional suggested mitigation improvements are:

- As a temporary solution, the gates at the end of Cardinal Cushing School Drive should be closed at all times with the exception of an Emergency, Snow Removal, or short term maintenance (less than a few hours). Evaluate the closing of Washington Street to vehicular traffic just south of the Kennedy Building for the future expansion as shown on the Cardinal Cushing Master Plan.
- Coordinate with the Hanover Police Department to conduct enforcement patrols for speeding vehicles on Washington and Oakland Streets.
- Observe the traffic signal at the intersection of Route 53 and Rockland Street and if necessary, re-time the signal to minimize delays and queues that would cause cut-through traffic through the Cardinal Cushing Center.

- Consider marking crosswalks with ladders or diagonals and install rectangular rapid flashing beacons at the main crosswalk to slow traffic on Washington Street.
- Propose and discuss bicycle car/van pool and public transportation accommodations that could be incorporated within the site.
- Provide a parking management plans for the Kennedy Building and the Cardinal Cushing Complex.

If you have any questions regarding this peer review, please let us know.

Sincerely,

Peter J. Vasiliou, PE, PTOE, LEED-AP
Manager Traffic Engineering

PJV:pv