



✓

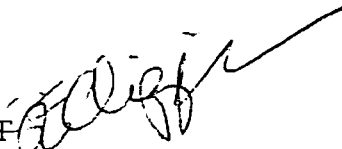
CITY OF CAMBRIDGE
Traffic, Parking and Transportation
344 Broadway
Cambridge, Massachusetts 02139

www.cambridgema.gov/traffic

Susan E. Clippinger, Director
Brad Gerratt, Deputy Director

Phone: (617) 349-4700
Fax: (617) 349-4747

MEMORANDUM

To: Cambridge Planning Board
From: Susan Clippinger, Director TP&T 
Date: October 18, 2005
Re: Mt. Auburn Hospital Expansion

Mount Auburn Hospital's consultant, VHB Inc., submitted a complete Transportation Impact Study (TIS) to our office on June 8, 2005. This study analyzed the impacts of a 110,400 square foot gross floor area addition to the hospital plus 144 new parking spaces. The analysis was certified by our Department as "complete and reliable" on June 22nd.

The TIS indicates that 23 criteria for the Planning Board's "indicators of substantial adverse impact to City traffic" were triggered by vehicle trips to and from the hospital. These include increased traffic along Mt. Auburn Street as well as increased traffic at several intersections that already experience unacceptable delays for crossing pedestrians. The project impact summary is attached.

Of the 10 noted impacts to pedestrians along Mt. Auburn Street, the City's planned traffic calming project will mitigate those at Hawthorne, Willard, and Sparks Streets for the hospital. The impact at Lowell Street may be mitigated as part of the curb changes the hospital is planning along its frontage, and we will coordinate that with the hospital when those changes are being designed. The two pedestrian impacts at Fresh Pond Parkway can only be reduced by narrowing the excessive cross-section of the parkway. Meanwhile, the six impacts to pedestrians at Memorial Drive & Hawthorne Street can only be solved with a new traffic signal.

The remaining 5 impacts are the result of increased traffic along Mt. Auburn Street. This is because 100-percent of all hospital trips must use Mt. Auburn Street today, which is residential on the north side for much of its length. The hospital already creates about 5,600 trips each day. The expansion will bring that to nearly 7,000 trips. Mt. Auburn Street carries about 11,000 cars each day.

The volume on residential streets is created by turn restrictions on Fresh Pond Parkway and Memorial Drive which force 11-percent of daily trips to cut through the neighborhood north of the hospital. This and the increased traffic volume impacts on Mt. Auburn Street can only be mitigated by creating alternate traffic patterns that remove hospital trips from these streets. Providing alternate access to the hospital along its Memorial Drive or Gerry's Landing Road frontage is the simplest way to mitigate the increased trips on Mt. Auburn Street. Conservatively, 43-percent of all hospital trips (30-percent of inbound and

55-percent of outbound trips) would use the new access, removing 43-percent of the hospital's trips off Mt. Auburn Street. At least an additional 11-percent of hospital trips (17-percent of inbound and 5-percent of outbound trips) would be removed from neighborhood streets immediately north of Mt. Auburn Street. These changes represent a reduction of up to 3,000 trips each day from Mt. Auburn Street with the expansion (up to 2,400 trips without the expansion) and up to 600 vehicles each day from the side streets.

Below is a draft of proposed language for the special permit decision for your consideration. I will be available at your October 18th meeting to discuss these measures.

cc: Katherine Rafferty, Mt. Auburn Hospital
Rich Rossi, Deputy City Manager
Beth Rubenstein, Assistant City Manager for Community Development
Jason Schrieber, Cambridge TP&T Department
Ted Brooks, Mt. Auburn Hospital
Nick DiLesco, Mt. Auburn Hospital
James Rafferty, Adams & Rafferty
Ellen Donohoe, VHB Inc.

Recommended Special Permit Decision Language:

1. In order to ensure that the new parking garage does not encourage visitors and patients to start arriving by car, only 61 new spaces may be operated on the hospital's campus before occupancy of the West Campus Building. The new garage may be used in its entirety, as long as the total parking supply on-site does not exceed 654 spaces prior to the opening of the West Campus Building.
2. Because of the time of year the permittee's Transportation Impact Study (TIS) was completed, the required bicycle turning movement counts and the required 12-hour bicycle counts could not be conducted during one of the four months specified in the TIS guidelines. The permittee shall complete these counts within one year of the issuance of this permit and submit the results to the Traffic, Parking & Transportation (TP&T) Department and Community Development Department in the form of a revised final TIS.
3. The proposed development triggers the pedestrian safety indicators of impact on Mt. Auburn Street at Hawthorne, Willard, Sparks, and Lowell Streets. The City of Cambridge has already started to plan a traffic calming project for Mt. Auburn between Story Street and Fresh Pond Parkway. That design may include improvements which would mitigate these impacts. The permittee shall participate with City staff and the community in the design of the traffic calming on Mt. Auburn Street, incorporating the new driveways for the hospital in that design. The permittee shall construct all of its new driveways as well as its portion of the traffic calming improvements agreed upon with the City and identified through the City's public process within the public right-of-way between Gibson Street and Fresh Pond Parkway before any occupancy of the parking garage.
4. The proposed development triggers residential street volume indicators of impact on Mt. Auburn Street in the vicinity of the project. These impacts are inherent since site access is limited to Mt. Auburn Street. All existing trips also must use Mt. Auburn Street. The only way to mitigate these

impacts is by moving hospital trips to an alternate access point on another street. The hospital also borders Gerry's Landing Road and Memorial Drive. The current site and the permittee's proposed design already support possible access to these roads from garages on-site, and the permittee shall continue to maintain these access options on-site in the future. The permittee also shall design and evaluate a new access to Gerry's Landing Road. The scope of the design and evaluation shall be approved by the City, and the proponent shall conduct any necessary coordination meetings of the City and the permittee with the DCR. Designs shall ensure that ADA or MAAB standards are met along both roadways and their sidewalks. They shall also evaluate increasing the amount of open space on the parkway with wider planted shoulders or medians where existing lane width is excessive, which may also mitigate the pedestrian safety indicators triggered at the intersection of Fresh Pond Parkway and Mt. Auburn Street. If a design meets the approval of the DCR and the City, the permittee shall install it as soon as it is approved by the DCR. This mitigation measure is considered to produce the greatest possible reduction in impact on city traffic. However, in the event that an acceptable design is not possible, the proponent shall be expected to install mitigation measures to address other impacts identified in the TIS. In any case, the proponent's costs shall not exceed \$275,000 in 2005 dollars unless agreed to by the proponent.

5. In order to help achieve the lower automobile mode split required of the Parking & Transportation Demand Management (PTDM) plan, the permittee shall improve the amenity of transit access by installing and maintaining new bus shelters on both sides of Mt. Auburn Street at the hospital's bus stops. This condition may be met by other parties installing and maintaining these two shelters.
6. As part of their Building Permit plan set, the permittee must show to the TP&T Department that the following operations will be accommodated on-site:
 - The shuttle bus stop is on hospital property and all shuttle bus service is accommodated within the hospital roadways without having to drive in reverse;
 - There is an area within the hospital property for dropping off or picking up a patient or visitor;
 - All deliveries can be accommodated on hospital property and do not need to use Mt Auburn Street; and
 - All driveways and pedestrian paths are consistent with the Mt Auburn Street traffic calming plans being prepared by the City.
7. The hospital will not schedule or accept any truck deliveries after 11pm or before 6am.
8. Before issuance of a building permit, the permittee shall prepare a Construction Management Plan (CMP) consistent with the requirements of Section 18.20 of the Zoning Ordinance. Prior to the preparation of the CMP, the permittee shall develop a scope for the Plan for review by the Community Development, TP&T, Public Works, and Water Departments and the Department of Public Health. Subsequently, a draft Plan shall be submitted to said Departments for review. The draft Plan must be approved by the Public Works Department. Additional items not mentioned in Section 18.20 may be required by City staff as needed.

4. Lane Queue (for signalized intersections critical lane)

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
Fresh Pond Parkway / Mount Auburn Street	Eastbound	Saturated	Saturated	Y	3	3	Y
	Westbound	5	5	Y	5	6	Y
	N'bound Left	6	6	Y	12	12	Y
	N'bound Thru	15	16	Y	11	12	Y
	Southbound	Saturated	Saturated	Y	15	15	Y
Mount Auburn Street / Hawthorne Street	Eastbound	7	8	Y	5	5	Y
	Westbound	2	2	Y	3	3	Y
	Northbound	7	8	Y	11	11	Y
	Southbound	10	10	Y	6	7	Y

5. Pedestrian and Bicycle Facilities

Intersection		AM Peak Hour			PM Peak Hour		
		Existing PLOS	With Project	Meets Criteria?	Existing PLOS	With Project	Meets Criteria?
Mount Auburn Street/ Fresh Pond Parkway	South						
	FPP n/b lanes	D	D	Y	D	D	Y
	MAS w/b lanes	A	A	Y	A	A	Y
	S/bound lanes	E	E	N	E	E	N
	East	A	A	Y	A	A	Y
Mount Auburn Street/ Hawthorne Street	North	D	D	Y	D	D	Y
	South	D	D	Y	D	D	Y
	East	D	D	Y	D	D	Y
	West	E	E	N	E	E	N
Mt. Auburn St. at Hospital	Signalized c/walk	B	B	Y	B	B	Y
Mt. Auburn St. at Channing St.	North	A	A	Y	A	A	Y
Mt. Auburn St. at Lowell St.	North	A	A	Y	A	A	Y
	East	F	F	N	F	F	N
Mt. Auburn St. at Sparks St.	North	B	B	Y	A	A	Y
	West	F	F	N	F	F	N
Mt. Auburn St. at Willard St.	North	B	B	Y	B	B	Y
	East	F	F	N	F	F	N
Memorial Dive at Hawthorne St.	North	F	F	N	F	F	N
	East	F	F	N	F	F	N
	West	F	F	N	F	F	N

Adjacent Street or Public Right-of-Way	Sidewalks or Walkways Present?	Meets Criteria?	Bicycle Facilities or Right-of-Ways Present?	Meets Criteria?
Mount Auburn Street	Y	Y	Y	Y
Gerry's Landing Road	N	N	Y	Y
Memorial Drive	N	N	Y	Y
On-Site:	Y	Y	Y	Y