



ratings of E to F under existing conditions which triggered the criteria and are expected to remain at those ratings with the project. The Project also triggered Bicycle Planning Board criteria because there is no bicycle facility on Route 2. The Project will be reconstruction the sidewalk on its Route 2 frontage and creating a pedestrian/bicycle connection to/from Discovery Park, which is further discussed below.

2. **Site Access.** The proposed vehicle site access will be provided by a separate entering and exiting driveway on Route 2, similar to the adjacent Vox on Two residential project. TP&T believes that the proposed driveways are reasonable. They will also need approval from MassDOT. According to the TIS there were, no crashes recorded at the Lanes & Games bowling alley and Gateway In driveways at Route 2.
3. **Emergency Access Lane.** TP&T supports the proposed 18' wide emergency access lanes on the sides of the project, which will include 12 foot wide pervious pavement and 3 foot wide reinforced grass shoulders. Because the emergency access lanes may also be used for pedestrian and bicycle access between the project site and Discovery Park they should be paved, smooth, accessible surfaces, lighted, and cleared of snow and ice in the winter.

Prior to the issuance of an Occupancy Permit, the Permittee should also remove (or fund the removal of) the bus stop/bunker structure on Route 2 adjacent to the Fire lane on the east side of the Project at the overpass bridge across Route 2. That bus stop is no longer needed because the stop has been moved to Acorn Park Drive. Removing the bus stop shelter is subject to approval from the MBTA and MassDOT.

4. **Pedestrian and Bicycle Connection to Discovery Park.** Similar to the adjacent Vox on Two residential project, TP&T strongly supports a pedestrian and bicycle connection to Discovery Park and believes it is a critical component of the Project by providing residents a connection to/from the Alewife MBTA station. TP&T has been working with the Applicant on the details of the connection to Discovery Park, and has the following recommendations:
  - a. Prior to the issuance of a Building Permit, the final design of the pedestrian and bicycle connection (i.e. exact location and width, pavement material, maintenance agreement, etc.) should be approved by the City being issued.
  - b. The Applicant should provide proof of the connection in an agreement letter to the City and a legal agreement prior to the Building Permit.
  - c. The bicycle and pedestrian path connection should be lighted and plowed in winter and treated for ice; there should be a clear commitment to doing this as part of the special permit.
5. **Automobile Parking.** The Project is requesting a Planning Board Special Permit for a reduction of minimum off street parking from one parking space per unit to 0.76 spaces per unit (243 parking spaces). TP&T supports the Special Permit because 0.76 parking spaces per unit is consistent with the observed peak parking demand at the adjacent Vox on Two residential building, which is a comparable residential project to the proposed Project. TP&T also believes that the proposed parking plan will not substantially reduce parking availability for other uses in the area or otherwise adversely impact the neighborhood.

The Applicant is considering further refinement to their parking layout plan to facilitate drop-off/pick up activities from services such as Uber and Lyft, which may result in a reduction of a few additional parking spaces, but could also create additional green space for the site frontage. TP&T supports minor modifications to the parking plan, which would provide a parking ratio of approximately 0.75 spaces per unit. This is a reasonable parking ratio considering the 0.76 ratio at the adjacent Vox on Two and the

continued cultural shift away from auto ownership by residents of multi-unit apartment buildings due to transportation options such as transit, bicycling, walking, carsharing, and Transportation Network Companies (TNC).

6. **Bicycle Parking.** The Project will meet the long-term and short-term bicycle parking space zoning requirements. TP&T will work with the applicant on the final locations for the short-term bicycle parking spaces.
7. **Transportation Mitigation.** TP&T recommends the Planning Board consider the following transportation mitigation and Transportation Demand Management (TDM) Measures be required as conditions of the project's Planning Board Special Permit to support non-single occupancy travel. Such TDM measures are key to ensure that the Project achieves the low level of vehicle trip impact anticipated in the TIS, especially during peak hours when traffic on Route 2, Alewife Brook Parkway and other roadways are most congested.

**Transportation Mitigation:**

- A. Prior to the issuance of a Building Permit, the Permittee should provide twenty-five thousand dollars (\$25,000) to the City toward funding the Hubway regional bikesharing system in the Alewife area. The funds will go toward the Hubway system which provides another mobility option for residents and visitors at the project site and/or provides another mobility option for other residents, visitors, and employees in the Alewife area which reduces traffic on Alewife area roadways and mitigates new traffic generated by the Project.
- B. Prior to the issuance of a Building Permit, the Permittee should provide twenty-five thousand dollars (\$25,000) to the City toward a study of a dedicated bus/HOV lane or queue jump lane for the Route 2 access ramp into the Alewife Station at Steel Place. This could provide travel time savings for residents of the Project that take a shuttle bus or carpool to Alewife station instead of driving alone.
- C. Prior to the issuance of a Building Permit, the Permittee should provide seventy-five thousand dollars (\$75,000) to the City toward furthering the feasibility study and design for the Alewife bicycle and pedestrian bridge and commuter rail station. The amount is based on the number of units and contributions by other development projects in the Alewife area with a 50% reduction in the amount since the Project is not located in Alewife Quadrangle or Triangle areas, however, the Project will benefit from a pedestrian and bicycle bridge and a commuter rail station over the railroad tracks because a commuter rail station would provide another transportation option and a pedestrian and bicycle bridge would provide another access connection to areas such as the Fresh Pond recreational pathways and the Fresh Pond shopping area. The pedestrian and bicycle bridge and commuter rail station would also reduce traffic in the Alewife area in general which would benefit the proposed Project, such as traffic reduction on Route 2.

**Transportation Demand Management (TDM Measures):**

- A. Provide at least two car-sharing parking spaces on-site, if desired by a local car-share company. Car-share vehicles will be available for use by the general public as well as the residents.
- B. To establish the habit of using mass transit, each adult member of each household (up to 2) upon move-in will be offered a Charlie Card valued at the cost of 50% of a Monthly MBTA LinkPass (currently \$84.50/month but subject to fare increases) for 3 consecutive months. This requirement renews each time a new household moves in to incentivize new household to use public transit.
- C. The Property owner shall join the Alewife Transportation Management Association (TMA) including access to shuttle buses to/from Alewife MBTA station for residents of the Project, such as provided by the Alewife TMA or a comparable shuttle service such as the Route 128 Business Council, Vox on Two

shuttle, and Discovery Park shuttle. Joining the existing Vox on Two shuttle bus which currently provides peak-hour round trip service to Alewife Station may be ideal since it already operates.

- D. Install a real-time multimodal transportation display screen to help people decide which mode to choose for each trip and/or provide a transportation information center located in an area that is central, visible, convenient, and equally accessible to all residents and visitors. The center will feature information on:
  - i. Available pedestrian and bicycle facilities in the vicinity of the Project site.
  - ii. MBTA maps, schedules, and fares.
  - iii. Area shuttle map and schedule, if one exists.
  - iv. "Getting Around in Cambridge" map (available at the Cambridge Community Development Department office).
  - v. Location of bicycle parking.
  - vi. Hubway regional bikeshare system.
  - vii. Carsharing/Ride-matching programs.
  - viii. Other pertinent transportation information.
- E. Designate a transportation coordinator (TC) for the site to manage the TDM program, and coordinate with the TMA. The TC will also oversee the marketing and promotion of transportation alternatives to all residents at the site in a variety of ways:
  - i. Posting information in a prominent location in the building and on the project's website and property newsletters.
  - ii. The TC will oversee any monitoring and reporting requirements as discussed below.
  - iii. Compile and distribute up-to-date information explaining all transportation options to all new residents as part of their New Resident Packet. The packets will contain information on both the range of options available and any building manager programs to support the use of these options. As discussed above, in item (B.) New Resident Packets will also contain information about the Charlie Card offer at a 50% discount of a monthly LinkPass for three months to each adult member of a new household.
  - iv. The TC will be on-site during a minimum of 2 hours per week and will be available to residents via email and telephone. Email and phone information for the TC will be posted in the transportation information center.
  - v. The TC will participate in any TC trainings offered by the City of Cambridge or local TMA.
- F. Provide a minimum of 1 Electric Vehicle charging station for two parking spaces.
- G. Provide 20 complementary bikes for resident's use.
- H. Provide bike repair areas, including air pumps and other bike repair tools in the bicycle storage areas. The applicant should consider providing automatic power assist doors to enter/exit the bicycle room, which will make it more convenient for cyclists.
- I. The Project should not charge for bicycle parking.
- J. Automobile parking should be charged separately from the rent to remind residents of the cost of owning a vehicle.

**Transportation Monitoring and Reporting Program:**

The TC shall implement a monitoring program to include: annual monitoring of mode split, counts of parking space utilization and auto ownership. All surveys and counts shall be designed and conducted in a manner approved by CDD. Approval of the form of any survey instrument or monitoring method is required before issuance of the first Certificate of Occupancy. Monitoring and surveying shall begin when the occupancy of the building has reached ninety percent (90%) or within one year of the date of the first Certificate of

Occupancy, whichever is sooner. If the Certificate of Occupancy is issued between September 1<sup>st</sup> and February 29<sup>th</sup>, the monitoring should take place during the months of September or October and be reported to the City no later than November 30. If the Certificate of Occupancy is issued between March 1<sup>st</sup> and August 31<sup>st</sup>, monitoring should take place during the months of April or May and be reported to the City no later than June 30.

# CITY OF CAMBRIDGE

## Special Permit Transportation Impact Study (TIS)

## Summary Sheet

Planning Board Permit Number: \_\_\_\_\_

Project Name: PROPOSED RESIDENCES AT ALEWIFE STATION

Address: 195-211 Concord Turnpike, Cambridge, MA

Owner/Developer Name: Criterion Development Partners

Contact Person: Andrew Kaye

Contact Address: 1601 Trapelo road, Suite 280

Waltham, MA 02451

Contact Phone: 781-890-5600

ITE sq. ft.: 320 Apartment Units (325 Units analyzed)

Zoning sq. ft.: \_\_\_\_\_

Land Use Type: Residential

Existing Parking Spaces: 273 Use: Mixed Use/Commercial

New Parking Spaces: 241 Use: Residential

Date of Parking Registration Approval: \_\_\_\_\_

Trip Generation:	Daily	AM Peak Hour	PM Peak Hour
Total Trips	2,240	208	172
Vehicle	840	78	65
Transit	1,006	95	76
Pedestrian	180	16	14
Bicycle	90	8	7

Mode Split (person trips): Vehicle: 39 %

(Residential) Transit: 45 %

Pedestrian: 8 %

Bicycle: 4 %

Other: 4 %

Transportation Consultant: Vanasse and Associates, Inc.

Contact Name: Scott W. Thornton, P.E.

Phone: 978-474-8800

Date of Building Permit Approval: \_\_\_\_\_

**CITY OF CAMBRIDGE**  
**Special Permit Transportation Impact Study (TIS)**

**Planning Board Criteria Performance Summary**  
**Page 1**

Planning Board Permit Number: \_\_\_\_\_

Project Name: PROPOSED RESIDENCES AT ALEWIFE STATION

Total Data Entries = 145 Total Number of Criteria Exceedences = 15

**1. Project Vehicle Trip Generation**

Weekday = 840 AM Peak Hour = 78 PM Peak Hour = 65

Below Criteria? [Y/N]	Y/Y/Y
-----------------------	-------

**2. Level of Service (LOS)**

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing	With Project	Below Criteria?	Existing	With Project	Below Criteria?
Route 2 at Alewife Brook Parkway Signal 1	F	F (0.2)	Y	E	E	Y
Route 2 at Alewife Brook Parkway Signal 2	C	C	Y	B	B	Y
Route 2 at Alewife Brook Parkway Signal 3	B	B	Y	A	A	Y
Route 2 at Alewife Brook Parkway Signal 4	D	D	Y	E	E	Y
Alewife Brook Parkway at Massachusetts Avenue	D	D	Y	D	D	Y
Alewife Access Ramp at Steel Place	A	A	Y	E	E (0.1)	Y
Acorn Park Drive at Alewife Station Access Ramp	F	F	Y (3.0)	C	C	Y
Site Drive at Route 2 EB	C	C	Y	C	C	Y
Lake Street at Frontage Road	B	B	Y	B	B	Y
Lake Street at Route 2 WB Ramps	B	B	Y	B	B	Y
Frontage Road at Acorn Park Drive	A	A	Y	C	C	Y
Frontage Road at Route 2 EB	D	C	Y	B	B	Y

Note: Percentage Roadway Volume Increases shown in parentheses.

**3. Traffic on Residential Streets**

No residential streets exist at the study locations. This criterion does not apply to the study.

4. Lane Queue (for Signalized Intersections Critical Lane)

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Below Criteria?	Existing	With Project	Below Criteria?
<b>Route 2 at Alewife Brook Parkway<sup>a</sup>:</b>	14						
Route 2 EB LT1		11	11	Y	10	10	Y
Route 2 EB LT2		11	11	Y	10	10	Y
Route 2 EB RT1		12	12	Y	6	6	Y
Route 2 EB RT2		12	12	Y	6	6	Y
Alewife Station Exit WB TH		3	3	Y	6	6	Y
Alewife Station Exit WB RT		2	2	Y	6	6	Y
Alewife Brook Parkway NB LT1		31	31	Y	25	30	Y
Alewife Brook Parkway NB LT2		31	31	Y	25	30	Y
Alewife Brook Parkway NB TH1		4	4	Y	4	4	Y
Alewife Brook Parkway NB TH2		4	4	Y	4	4	Y
Alewife Brook Parkway SB TH1		7	7	Y	6	6	Y
Alewife Brook Parkway SB TH2		7	7	Y	6	6	Y
Alewife Brook Parkway SB RT1		19	19	Y	20	20	Y
Alewife Brook Parkway SB RT2	19	19	Y	20	20	Y	
<b>Massachusetts Avenue at Alewife Brook Parkway:</b>	12						
Massachusetts Avenue EB LT		2	2	Y	3	3	Y
Massachusetts Avenue EB TH		14	14	Y	9	9	Y
Massachusetts Avenue EB TH/RT		14	14	Y	9	9	Y
Massachusetts Avenue WB LT		7	7	Y	7	7	Y
Massachusetts Avenue WB TH		5	5	Y	10	10	Y
Massachusetts Avenue WB TH/RT		5	5	Y	10	10	Y
Alewife Brook Parkway NB LT		2	2	Y	4	4	Y
Alewife Brook Parkway NB TH		11	11	Y	17	17	Y
Alewife Brook Parkway NB TH/RT		11	11	Y	17	17	Y
Alewife Brook Parkway SB LT		5	5	Y	5	5	Y
Alewife Brook Parkway SB TH		14	14	Y	14	14	Y
Alewife Brook Parkway SB TH/RT	14	14	Y	14	14	Y	
<b>Lake Street at Route 2 WB Ramps:</b>	6						
Lake Street EB LT		3	3	Y	5	5	Y
Lake Street EB TH		4	4	Y	5	5	Y
Lake Street WB TH		4	4	Y	2	2	Y
Lake Street WB TH/RT		4	4	Y	2	2	Y
Route 2 WB off Ramp LT/TH		2	2	Y	1	1	Y
Route 2 WB off Ramp RT		0	0	Y	0	0	Y
<b>Lake Street at Frontage Road:</b>	6						
Lake Street EB TH		4	4	Y	7	7	Y
Lake Street WB LT		1	1	Y	1	1	Y
Lake Street WB TH1		3	3	Y	2	2	Y
Lake Street WB TH2		3	3	Y	2	2	Y
Frontage Road NB LT/UT		3	3	Y	4	4	Y
Frontage Road NB RT	0	0	Y	0	0	Y	
<b>Frontage Road at Acorn Park Drive:</b>	4						
Frontage Road EB TH		1	1	Y	1	1	Y
Frontage Road EB TH/RT		1	1	Y	1	1	Y
Acorn Park Drive NB LT		2	3	Y	5	5	Y
Acorn Park Drive NB RT	0	0	Y	0	0	Y	



5. Pedestrian and Bicycle Facilities (for Critical Pedestrian Crossing)

Pedestrian LOS

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing PLOS	With Project	Below Criteria?	Existing PLOS	With Project	Below Criteria?
<i>Alewife Brook Parkway at Alewife Station Exit:</i> Crossing Alewife Station Exit (East)	E	E	N	--	--	--
<i>Massachusetts Avenue at Alewife Brook Parkway:</i> Crossing Massachusetts Avenue (East) Crossing Massachusetts Avenue (West) Crossing Alewife Brook Parkway (North) Crossing Alewife Brook Parkway (South)	E E E E	E E E E	N N N N	E E E E	E E E E	N N N N
<i>Site Drive (entering traffic) at Route 2 EB:</i> Crossing Site Drive (South)	--	--	--	A	A	Y
<i>Site Drive (exiting traffic) at Route 2 EB:</i> Crossing Site Drive (South)	--	--	--	A	A	Y
<i>Alewife Access Ramp at Steel Place:</i> Crossing Alewife Station Exit (East) Crossing Garage Ramp (West) Crossing Alewife Access Ramp (North)	B A F	B A F	Y Y N	F A F	F A F	N Y N
<i>Frontage Road at Acorn Park Drive:</i> Crossing Acorn Park Drive (South)	C	C	Y	--	--	--
<i>Lake Street at Frontage Road:</i> Crossing Lake Street (East) Crossing Frontage Road (South)	D B	D B	Y Y	D B	D B	Y Y
<i>Lake Street at Route 2 WB Ramps:</i> Crossing Lake Street (East) Crossing Route 2 WB On-Ramp (North) Crossing Route 2 WB Off-Ramp (South)	D D D	D D D	Y Y Y	D E E	D E E	Y N N
<i>Acorn Park Drive at Alewife Access Ramp</i> Crossing Acorn Park Drive (South)	C	C	Y	A	A	Y

Safe Pedestrian and Bicycle Facilities

Adjacent Street or Public Right-of-Way	Adjacent Sidewalks Present?	Adjacent Bicycle Facilities Present?
Route 2	Y	N <sup>a</sup>
Multi-Use Path	Y	Y

<sup>a</sup>No bike activities are allowed along Route 2.