The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
http://www.mass.gov/eea

December 22, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Alewife Park
PROJECT MUNICIPALITY	: Cambridge
PROJECT WATERSHED	: Mystic River
EEA NUMBER	: 16473
PROJECT PROPONENT	: QHQ-Alewife LLC
DATE NOTICED IN MONITOR	: November 10, 2021

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of the redevelopment of a previously developed site with a mix of office and laboratory uses (611,000 sf), as well as a small retail space (3,500 sf) and parking structure (121,000 sf) totaling 753,500 sf (lab/office development). The project will reuse two existing buildings, demolish several existing structures and construct three new buildings and a structured parking garage. The project will provide approximately 653 parking spaces, including 350 structured spaces and 303 surface spaces. Approximately 4 acres of the lab/office development area will remain undeveloped as a natural habitat area. As a condition of the local special permit for the project, the Proponent will make improvements to an area of land owned by the Proponent to the south of the proposed office/lab development area referred to as the "Jerry's Pond Area." The improvements include the construction of pedestrian paths and a boardwalk which will improve pedestrian access within the project vicinity. The project includes pedestrian connections to Route 16 (Alewife Brook Parkway) and improvements to the Massachusetts Bay Transportation Authority (MBTA)'s Alewife Station Headhouse including working with the MBTA to restore the head house plaza including; new plaza surface, adding more and new lighting, providing trees in large

planters, repainting the head house on the west, east and south side, adding new community mural on the north wall, provisions for food trucks, and replacing existing entry doors.

Project Site

The 27-acre project site consists of the 19.6-acre area which is the subject of the lab/office development bound by Whittemore Avenue to the north, Alewife Brook Parkway to the west, the MBTA Alewife Headhouse and Jerry's Pond to the south and Russell Field and the Alewife Linear Park to the east and a 9-acre are to the south. The 19.6-acre area currently consists of seven multi-story and single-story structures and four surface parking lots located on the northern side of Whittemore Avenue that will be used for accessory parking. Adjacent to the existing buildings are surface parking lots and service driveways that provide parking and access to the buildings from Whittemore Avenue. The 9-acre Jerry's Pond Area currently consists of a manmade pond and a degraded paved area which has revegetated. It has been completely inaccessible for about 60 years since 1961 when W.R. Grace, a former property owner, fenced off the pond to public access. The project includes the subdivision of the office/lab development area and Jerry's Pond Area to provide a clear development boundary between the two sites although both will remain under the ownership of the Proponent.

The project site includes wetland resource areas associated with Alewife Brook including Bordering Land Subject to Flooding (BLSF), Bordering Vegetated Wetlands and associated buffer zones. There are wetland resources areas within the Jerry's Pond area and pedestrian connections to Route 16which include BLSF, BVW, Bank, Land Under Water and any regulatory buffer zones to those resources. The MBTA Alewife Station headhouse improvements limit of work is within the buffer zone to BVW only.

The site is located within an Environmental Justice (EJ) population designated as Minority and is within one mile of multiple EJ populations designated as either Minority and Minority and Income. As described below, the ENF included a review of potential impacts and benefits to EJ populations and described public outreach efforts to date.

Environmental Impacts and Mitigation

Potential on-site environmental impacts associated with the project include generation of 2,755 new average daily trips (adt) (6,885 adt total),[1] The project will increase water demand by 68,921 gallons per day (gpd) (100,436 gpd total) and increase wastewater generation by 62,656 gpd (91,306 gpd total). The project will result in temporary and permanent impacts to 5.8 acres of BLSF.

Impacts associated with improvements to the Jerry's Pond Area provided part of the local permitting process are conceptual but may include impacts to 18,000 sf of BLSF associated with the construction of pathways at Jerry's Pond; 630 sf of bank and 4,000 sf of BVW associated with the installation of a boardwalk along Jerry's Pond. Approximately 4,100 sf of boardwalks and viewing platforms are proposed over the manmade Jerry's Pond which will result in impacts to LUW.

[1] Total impact calculations include all project components including existing uses that will be demolished and replaced. The net "new" calculations exclude impacts from existing uses, which are still in use and already have impacts on the surrounding water/wastewater system and traffic network.

Measures to avoid, minimize and mitigate impacts include redevelopment of a previously developed site, reducing on-site impervious area by 1.24 acres and a net reduction in the number of parking spaces serving the project site by 69 parking spaces down from the current existing parking count of 722 spaces. The project proposes the reuse of existing buildings. Therefore only 353,500 sf will represent net new space. The project includes provision of on-site pedestrian and bicycle facilities; implementation of a Transportation Demand Management (TDM) program to minimize single-occupancy vehicle trips (SOV); and improvements to the stormwater management system consistent with the Stormwater Management Standards (SMS). The project will be required to provide infiltration and inflow (I/I) mitigation.

Jurisdiction and Permitting

The project is undergoing MEPA review and requires preparation of an ENF pursuant to 301 CMR 11.03(6)(b)(13) and 301 CMR 11.03(6)(b)(14) because it requires Agency Actions and will generate 2,000 or more adt on roadways providing access to a single location and will generate 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location. The project requires a Vehicular Access Permit and Chapter 40 Section 54A Approval from the Massachusetts Department of Transportation (MassDOT) and Section 8(m) and Sewer Use Discharge Permits from the Massachusetts Water Resources Authority (MWRA).

The project requires an Order of Conditions from the Cambridge Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from the Massachusetts Department of Environmental Protection (MassDEP)). If the project requires a SOC or other wetlands related permit, the ENF thresholds at 301 CMR 11.03(3)(b)(1)(b) and 11.03(3)(b)(1)(f) may be exceeded because the project may result in the alteration of 500 or more linear feet of bank and alteration of ½ or more acres of any other wetlands. The project require may require a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit for Construction Activities from the U.S. Environmental Protection Agency (EPA).

Because the Proponent is not seeking Financial Assistance from the Commonwealth for the project, MEPA jurisdiction for any future review would extend to those aspects of the project that are within the subject matter of required or potentially required Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations.

Review of the ENF

The ENF included a project description and plans of existing and proposed conditions. It identified environmental resources and potential impacts and included a transportation impact assessment (TIA). It provided conceptual plans and conservative wetland resource impacts estimates for the improvements at the Jerry's Pond Area because these improvements are still undergoing local review. Consistent with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency, the ENF contained an output report from the Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "RMAT Tool"),[2] together with information on climate resilience strategies to be undertaken by the project.

[2] https://resilientma.org/rmat_home/designstandards/

Comments from DCR, City of Cambridge and residents note the project's opportunity to provide valuable pedestrian and bicycle connections within the vicinity of the project area. Comments also note the Proponent's willingness to engage with the community on the project design to ensure it serves the needs of the surrounding community including through the provision of access to ecological resources at the Jerry's Pond Area. Comments from DCR request that the Proponent continue to coordinate with DCR on traffic impacts and mitigation proposed by the project.

Alternatives Analysis

The ENF included an alternatives analysis which assessed a No-Build Alternative, Build Alternative, and the Preferred Alternative as described above. The No-Build Alternative would maintain existing conditions at the site including the approximately 382,000 sf office/lab uses, 11 acres of impervious area, and 722 parking spaces and existing water use (31,515 gpd), wastewater generation (28,650 gpd) and trip generation (4,130 adt). This alternative was dismissed because it would not involve enough office/lab space to meet current market demand and would not have resulted in extensive cleanup of residual contamination from prior owners or restoration for community public access and ecological benefit.

The Reduced Build Alternative would involve an approximately 611,000 sf redevelopment program consisting of 562,900 sf of office/lab uses and 48,100 sf of retail uses currently allowed under existing zoning regulations. This alternative would be developed within the same development footprint of the Preferred Alternative and would result in 9.8 acres of impervious area, 722 parking spaces, 55,000 gpd of water use, 49,972 gpd of wastewater generation, generation of 7,229 net new unadjusted adt (1,944 adjusted adt). This alternative would result in lower water demand and generate less wastewater than the Preferred Alternative due to higher amount of retail uses and less office/lab space. Although the overall building area is less for the Build Alternative compared to the Preferred Alternative, the Build Alternative would result in significantly more unadjusted daily vehicle trips due to the addition of almost 45,000 sf of retail uses. The projected adjusted net new daily vehicle trips for this alternative (1,944 adt) is similar to the Preferred Alternative (approximately 1,693 adt) given the mode share applicable for the urban area (ample public transit, and pedestrian and bicycle facilities). However, similar to the No-Build Alternative, this alternative was dismissed because it would not meet the Proponent's goal of developing a project that includes a sufficient amount of office/lab space to meet current market demand. As asserted in the ENF, this revenue is needed to support the extensive cleanup of residual contamination from prior owners or improvements to the nearby Jerry's Pond Area.

Environmental Justice

As noted above, the project is located within an EJ Population designated as Minority and is within one mile of multiple EJ populations designated as either Minority or Minority and Income. The Proponent asserts that the project is unlikely to have negative impacts to nearby EJ communities because although it will be adding new vehicle trips to the project vicinity, the project includes a reduction of impervious area, improved pedestrian and bicycle circulation and access to ecological resources. The project serves to connect the surrounding neighborhoods that have been historically cut off from one another due to the industrial nature of the previous uses of the project site. The project includes several new pedestrian and bike paths designed to connect the three distinct neighborhoods along Whittemore Ave, Harvey Street, and Rindge Avenue, as well as improvements to existing pedestrian paths. Today these neighborhoods are disconnected and there is not a clear exchange between Jerry's Pond, nearby

recreational facilities and the MBTA Alewife headhouse. Additionally, discussions are underway with Mass Audubon and Green Cambridge around an open-air Ecological Center that could include a tree nursery on the rooftop of the garage to support Cambridge's Backyard Tree Planting Program growing up to 350 trees to be planted across the City every 3 to 4 months.

Notwithstanding these general project benefits, the addition of 2,755 New adt of permanent traffic to EJ populations could exacerbate existing environmental and public health burdens in a manner that creates a disproportionate adverse effect on such EJ populations. Under Section 58 of St. 2021, c. 8, *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy,* and amendments to MEPA regulations due to take effect on December 24, 2021, all projects located within at least 1 mile of an EJ population will be required to provide a comprehensive analysis of any existing "unfair or inequitable" burdens impacting EJ populations, and the potential for the project to add impacts in a manner that creates a disproportionate adverse effect or increases the risks of climate change on the EJ population. I encourage the Proponent to carefully consider project impacts on EJ populations as the project moves to final permitting, and take measures to address any disproportionate adverse impacts through mitigation measures.

Traffic and Transportation

The project requires MassDOT Chapter 40 Section 54A Approval. The project will require a Vehicular Access Permit from MassDOT, as it abuts the state highway layout and has a curb cut along Alewife Station Access Road, which is under the jurisdiction of MassDOT. The project site is bounded to the west by DCR's Alewife Brook Parkway. Establishing trail connections on DCR land will require a DCR Construction and Access Permit. The project will require a License Agreement with the MBTA for improvements to the Alewife Station headhouse. As part of the permitting process, the Proponent should consult with MassDOT, DCR and the MBTA to clarify roadway or property ownership in and around the project site.

The ENF included a transportation study generally consistent with the EEA/MassDOT *Transportation Impact Assessment (TIA) Guidelines*. It described existing and proposed roadway, pedestrian, and bicycle conditions, public transit capacity and infrastructure, roadway and intersection volumes and roadway safety issues. The analysis reviewed future conditions and vehicular and transit operations under No Build and Build scenarios using a seven-year planning horizon.

Trip Generation

The project is estimated to generate 2,755 net new unadjusted adt (6,885 total adt). Trip estimates were based off of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) Land Use Codes (LUCs) 710 – General Office, 932-High-Turnover Restaurant, and 760 – R&D Center. The ENF also includes an adjusted trip generation that reflects mode share. When adjusted for mode share, the project is expected to generate a total (including existing and new uses) of 4,567 new adjusted adt including 220 net-new vehicle trips during the morning peak hour, 159 transit trips, 42 bicycle trips,78 walk trips, and 47 other trips during the weekday morning peak hour and 276 net-new vehicle trips, 108 transit trips, 29 bicycle trips, 68 walk trips, and 32 other trips during the weekday evening peak hour. The mode share estimates are based on U.S. Census data for the census tract in which the project is located. When adjusted for mode share, the project would result in a trip generation of

Safety

The TIA includes a safety analysis for all intersections within the study area. The analysis calculates crash rates using MassDOT data for the continuous five-year period of 2015 through 2019. According to the analysis, the unsignalized intersections of Whittemore Avenue at Magoun Street, Whittemore Avenue at Madison Avenue, and Whittemore Avenue at West Site Driveway exceed the MassDOT Highway District 6 crash rate average. The intersection of Massachusetts Avenue at Alewife Brook Parkway is a Highway Safety Improvement Program (HSIP) Cluster location for the years 2015 to 2017. Massachusetts Avenue within the study area also falls within the 2008-2017 HSIP Bicycle Clusters. The Proponent should consult with the City of Cambridge and MassDOT regarding potential safety improvements at these locations.

Site Access Improvements

The project site is accessed via two existing site driveways on Whittemore Avenue to the west of Seagrave and Alewife Station Access Road that will serve all users including garage traffic, loading, as well as bicycles and pedestrians. Another driveway is also proposed on Whittemore Avenue where the existing surface lot curb-cut is located (between Harrison and Madison Avenue), but this driveway will be restricted for use only by emergency vehicles and occasional maintenance activities, as well as bicycles and pedestrians. Harvey Street will be restricted to emergency vehicles, pedestrian, and bicycle access only. Both restrictions were put in place to prioritize the separation of vehicles and non-motorists and to protect neighborhood roadways from unintended cut-through traffic conditions.

The TIA analysis assumes that most of the new vehicle trips will access/egress the site via either the Whittemore (west) driveway or the Alewife Station Access Road driveway. As indicated in MassDOT's comments, the site driveway on the Alewife Access Road (the "jughandle") should be designed to provide a raised crossing for the shared-use path. The Proponent should also evaluate operational improvements to the jughandle (widening to either two or three lanes, to provide additional capacity for traffic using the jughandle to reach Route 2 westbound, and/or for potential transit priority improvements that would assist the Proponent in reaching their stated mode share goals).

Traffic Operations

The TIA included a comprehensive analysis of 15 study area intersections for the No-Build and Build conditions which indicates that project-generated trips will have minimal impacts with no changes to the level of service for any intersection. Comments from MassDOT concur with this assessment but note that some locations within the study area will continue to operate with excessive delay with or without the project.

Transit

The project site is directly served by five MBTA bus routes: Routes 62/76 (combined route), 67, 77, 83, and 350. Bus route 77 stops on Mass Ave at Magoun St approximately 0.25 miles northwest of the site, while Routes 62/76, 67 and 350 stop at Alewife Station which has a headhouse adjacent to the site. In addition, Route 83 stops at Rindge Ave at Russell Field approximately 0.25 miles south of the

project site. A combined Braintree/Ashmont Red Line service is provided every 9 minutes during the peak period/rush hours and about every 12-16 minutes during off-peak periods.

The ENF includes a transit analysis in compliance with the MBTA's Office of Performance Management and Innovation's (OPMI) methodology for calculating the existing, future No-Build, and future Build comfort metrics (pursuant to the MBTA's Service Delivery Policy) for each bus route within the project study area. Anticipated impacts to bus passenger crowding are minimal. The project will generate few additional transit riders to bus trips already exceeding the MBTA's policy capacity thresholds for passenger crowding, under 2019 service levels and baseline ridership. Comments from MassDOT indicate that the MBTA's Bus Network Redesign initiative is expected to implement changes to these routes in the coming years, addressing service routes, frequency of service, span of service, stop spacing, and coverage area, all which will modify the passenger load profile. However, comments from MassDOT indicate that the transit analysis is based on 2019 routes and timetables. As of the Fall of 2021, approximately half of the bus routes and trips at Alewife Station have been suspended, significantly reducing transit capacity. Additionally, Red Line headways may have not been correctly listed. The Proponent should consult with the MBTA to discuss revising the analysis and determine if the assumed future mode share is reasonable.

As part of the project, the Proponent is coordinating with the MBTA to make certain improvements to the Alewife Station headhouse plaza. Additionally, the Proponent proposes off-site improvements to existing bicycle and pedestrian paths on land controlled by the MBTA and DCR. The MBTA has indicated that they would support the Proponent also looking at infrastructure needs to construct an outbound bus lane on the Alewife on-ramp (outbound), and potentially making infrastructure upgrades and installing the bus lane to improve transit reliability in this corridor. This would match the 'inbound' bus lane recently installed by MassDOT Highway in coordination with the MBTA.

Multimodal Access and Facilities

The project site and related site plan include separated bicycle and pedestrian connections, most importantly a new Linear Path connection from the Minuteman Commuter Bikeway and the Fitchburg Cutoff to the Linear Path using the new service road. In addition, the site design is intended to improve bicycle and pedestrian circulation through the project site and to and from the MBTA Red Line Alewife Station headhouse. Also, outside of lab/office development area, the Proponent has committed to provide public access improvements to Jerry's Pond including a new pedestrian path that serves as a pedestrian alternative from the linear path from Rindge Avenue to the MBTA Alewife Station headhouse; and widening of the path along Alewife Brook Parkway to the MBTA Alewife Station headhouse.

Comments from DCR note that project site is located at the nexus of several existing and planned regional shared-use paths, including DCR's Alewife Brook Greenway within Alewife Brook Reservation. Links between the regional trail connections are not as strong as they could be, and the area around the development site serves more as a barrier than as a connection. The project proposes several welcome improvements, including the proposed restoration of the MBTA headhouse plaza, which is not only an entrance to an important transit resource but also the nexus of the above-referenced regional trail systems and the multi-modal path connecting to the MBTA headhouse as well as an improved and widened multi-modal path running north-south between Alewife Brook Parkway and Jerry's Pond.

Comments from DCR request the chance to coordinate with the Proponent related to a potential trail connection to DCR's Alewife Reservation.

Transportation Demand Management

To reduce site trip generation, the TIA includes a Transportation Demand Management (TDM) program. The Proponent details the following TDM measures in the ENF with the goal of further reducing vehicle trips by employees and visitors of the project:

- Establish membership in the Alewife TMA, which provides employees with the benefit of free access to the shuttle buses operated by the TMA, ride-matching services, and access to emergency ride home to all employees who use alternative commute modes.
- Require tenants to provide, at a minimum, a 50% transit pass subsidy to employees.
- Provide a 19-dock Bluebikes Station to support the Project;
- Provide Bluebikes corporate membership (minimum Gold level) paid by employer for employees who choose to become Bluebikes members;
- Dedicate preferential carpool/vanpool parking spaces on site. Monitor the use of the carpool/vanpool spaces to designated additional spaces as needed to satisfy demand;
- Provide a bicycle repair station, to include air pumps and essential bike repair tools;
- Designate a Transportation Coordinator for the site responsible for:
    - Aggressively promoting and marketing non-SOV modes of transportation to employees, including posting information on the Project's web site, social media, and property newsletters;
    - Informing employees about dynamic carpool (ridesharing) services;
    - Performing annual transportation surveys;
    - Coordinating with the Alewife TMA;
    - Providing up to date information to all new employees through a New Employee Packet;

The Proponent intends to consult with the City of Cambridge and MassDOT to help implement the TDM program. Comments from MassDOT encourage the Proponent to consider additional measures such as exploration of parking cash-out policies for employees on-site who will not be travelling via private vehicle.

Transportation Monitoring Program

The Proponent will be required to conduct an annual traffic monitoring program for a period of five years, beginning six months after occupancy of the full-build project. It would include:

- Simultaneous automatic traffic recorder (ATR) counts at each site driveway for a continuous 24-hour period on a typical weekday and Saturday;
- Travel survey of employees and patrons at the site (to be administered by the Transportation Coordinator); and
- Weekday AM and PM peak hour turning movement counts (TMCs) and operations analysis at "mitigated" intersections, including those involving site driveways.
- Transit ridership counts

The goals of the monitoring program will be to evaluate the assumptions made in the ENF and the adequacy of the mitigation measures, as well as to determine the effectiveness of the TDM program.

Wetlands

The office/lab development will result in impacts to 5.8 acres (251,820 sf) of BLSF including 169,7932 sf of temporary impacts and 82,027 sf of permanent impacts. As described in the ENF, this alteration is associated with regrading and demolition/construction of structures and or access roads. Compensatory flood storage will be provided for all filling in BLSF. As described in MassDEP's comment letter, the Notice of Intent should include cut-and-fill calculations demonstrating that incremental volume will be provided on a 1-foot elevation basis, in accordance with 310 CMR 10.57(4)

As described above, as a condition of local permitting, the Proponent is proposing improvements to the 9-acre Jerry's Pond Area. The area was previously an industrial site and consists of a manmade pond and surrounding area which consists of pavement and shallow topsoil with vegetation. Approximately 18,000 sf of pathways are proposed within bordering land subject to flooding. In these areas, the Proponent is planning to construct boardwalks elevated above the floodplain – thus creating no impact. In the event that the pathways cannot be elevated, the Proponent will construct compensatory storage in the same contiguous floodplain.

The proposed boardwalks are located over approximately 630 feet of bank and approximately 4,000 SF of Bordering Vegetated Wetlands (BVW). The boardwalks are intended to be generally permeable and elevated above the wetland and bank areas with the only intended physical disturbance being supporting structures (i.e. columns). Approximately 29,000 sf of work is proposed within the buffer zones to the BVW and bank. Within the MBTA Alewife Station headhouse improvements limit of work approximately 24,000 sf is within buffer zone to BVW.

Approximately 4,100 sf of boardwalks and viewing platforms are proposed over Jerry's Pond. The only permanent disturbance to this resource would be from the structural supports to the boardwalks and viewing platforms. The ENF states that the boardwalk would not impact wetland resource areas except for the supporting piles. MassDEP notes that shading impacts to Bank and Land Under Water are likely to be deemed alterations and should be evaluated in the NOI. Mitigation may be required.

Stormwater and Wastewater

As noted above, the project will result in the reduction of 1.24 acres of impervious area. The proposed stormwater management system will be designed to comply with the City of Cambridge standards and MassDEP's SMS for new construction projects. The Project proposes to achieve this goal by implementing natural stormwater management and the use of supplemental subsurface detention and/or stormwater infiltration systems, as allowed by the existing on-site subsurface conditions. Under proposed conditions, the project site will not produce changes in either the pattern of or rate of stormwater runoff. Stormwater management controls will be established in compliance with DPW standards. The project is not designed to result in the introduction of any peak flows, pollutants, or sediments that would potentially impact the receiving waters of the local municipal stormwater drainage system.

The proposed building and garage roof areas will discharge through subsurface detention systems designed to reduce peak stormwater rates. Stormwater infiltration systems will be located on the Project Site where existing conditions allow for groundwater recharge. Stormwater infiltration will promote groundwater recharge and reduce stormwater peak rates and volumes, in addition to reducing total phosphorus load from the project site. The final design will incorporate facilities to reduce phosphorus on-site compared to the existing conditions, in compliance with DPW standards. These facilities may include added pervious area, such as green roofs, stormwater infiltration systems, stormwater bio-retention areas, and/or proprietary water quality structures designed to remove total phosphorus from stormwater discharge. The project will implement stormwater Best Management Practices (BMPs) in conformance with DEP's Stormwater Management Standards.

The project will generate wastewater flow of approximately 91,306 gallons per day (gpd), which the is an increase of 62,656 gpd over the estimated existing wastewater generation of 28,650 gpd. According to the City of Cambridge sewer and storm drain maps, the Project site is served by separate City-owned sanitary sewers and storm drains that conveys the wastewater flows to Alewife Brook Conduit, then to MWRA's North Metropolitan Sewer, which conveys flows to MWRA's Chelsea Creek Headworks and ultimately the Deer Island Treatment Plant. In large storms, flows exceeding the capacity of the Alewife Brook Conduit can overflow at several CSO outfalls to Alewife Brook in large storms. To ensure that the project's new wastewater flow does not increase system surcharging and overflows in large storms, the Proponent should fully mitigate the Project's wastewater flow impacts with I/I or stormwater removal in compliance with Massachusetts Department of Environmental Protection ("MassDEP") regulation and in accordance with City of Cambridge I/I policy.

Section 8(m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, allows the MWRA to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA, with the goal of protecting Authority-owned infrastructure. Due to the proximity of MWRA infrastructure to the Project site an 8(m) permit may be required. MWRA prohibits the discharge of groundwater and stormwater into the sanitary sewer system, pursuant to 360 C.M.R. 10.023(1) except in a combined sewer area when permitted by the Authority and the local community. The Project site has access to a storm drain and is not located in a combined sewer area. Therefore, the discharge of groundwater or stormwater to the sanitary sewer system associated with this Project is prohibited. A Sewer Use Discharge Permit is required prior to discharging industrial process and/or laboratory wastewater associated with the project into the MWRA sanitary sewer system. Any gas/oil separators in parking garages associated with the project must comply with 360 C.M.R. 10.016 and State Plumbing Code. The installation of the proposed gas/oil separators may not be back filled until inspected and approved by the MWRA and the Local Plumbing Inspector.

Climate Change

Governor Baker's Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth was issued on September 16, 2016. The Order recognizes the serious threat presented by climate change and direct Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The urgent need to address climate change was again recognized by Governor Baker and the Massachusetts Legislature with the recent passage of St. 2021, c. 8, An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy, which sets a goal of Net Zero emissions by 2050. I note that the MEPA statute directs all Agencies to consider reasonably foreseeable climate change impacts,

including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions. M.G.L. c. 30, § 61.

Effective October 1, 2021, all MEPA projects are required to submit an output report from the RMAT Tool to assess the climate risks of the project. Based on the output report attached to the ENF, the project has a high exposure rating based on the project's location for the following climate parameters: sea level rise/storm surge, extreme precipitation (urban flooding) and extreme heat. Based on the 40-50-year useful life identified for the project, the RMAT Tool recommends a planning horizon of 2070 and a return period associated with a 200-year (0.5% chance) storm event when designing the new lab/office building and parking garage.

The City of Cambridge has developed the Climate Change Preparedness & Resilience Plan ("CCPR"), which is intended to commit to prepare the community for impacts to anticipated climate change. In part to the CCPR, the City has developed an online FloodViewer (v2.1), which provides anticipated flood event elevations for the year 2070. Based on the FloodViewer tool, the current 2070 10-year storm event at the project site is equal to elevation 22.05 Cambridge City Base (CCB), and the 2070 100-year storm event ranges from elevation 22.5 to 23.35 CCB. The project will be designed to set all proposed building Finished Floor Elevations (FFEs) to elevation 24.0 CCB, allowing for a few inches of freeboard from the 2070 100-year elevation of 23.35 CCB. This elevation will allow for the proposed Buildings 3, 4, and 5 (all the new buildings proposed by the project) to be resilient towards the 2070 100-year storm elevation. The proposed new parking garage structure will also be resilient constructed to 24.0 CCB. Additionally, critical infrastructure such as electric switchgear and transformers will be raised above the minimum of elevation 23.35 CCB. While I commend the project for taking proactive measures to prepare for climate change, I encourage the Proponent to consider the further recommendations in the RMAT Tool, which incorporates updated data from the Massachusetts Coast Flood Risk Model (MC-FRM) and other sources.

At locations where it will not be feasible for the Project to meet the 2070 100-year flood elevation, such as existing Buildings 1 and 2 which will be repurposed, temporary deployable flood measures will be installed to provide additional resiliency at critical locations.

For any work in permanently disturbed areas, the Project will fully provide compensatory storage for existing flood elevations. This compensatory storage is currently proposed to be in in land immediately adjacent to the existing floodplain area. As such, the Project is not expected to be altering general floodplain pathways and is not expected to change velocities that could impact adjacent properties and/or functioning of the floodplain.

Greenhouse Gas Emissions

While the project does not exceed the thresholds for application of MEPA's GHG Policy and Protocol, it does involve the development of new office and lab space that will add to GHG emissions from the building sector. I encourage the Proponent to review the comment letter submitted by the Department of Energy Resources (DOER), which provides guidance on energy efficiency measures that may reduce the Greenhouse Gas (GHG) emissions of the project such as:

- Efficient electrification of space heating, including:

  - For highly ventilated spaces (such as a lab/life-science, for example): low temperature, hydronic space heating with heat-input provided by hybrid, in-building, central plant consisting of air-to-water heat pump (primary) and gas boilers (secondary). Size the air to water heat pump to 20-40% of the heating peak load with the objective of providing 90% of the total annual space heating with air source. This approach can also work for speculative lab/life-science spaces, as well.
  - For all other spaces (including office and retail): hydronic space heating with 100% air to water heat pump input, or air source VRF, or air to air heat pumps.
- Building design and construction practices that result in low heating and cooling thermal energy demand intensity (heating and cooling TEDI) by:
  - Maintaining envelope integrity with frames, insulated walls with continuous insulations
  - Thermally broken windows and other components to eliminate thermal bridges
  - Minimizing glass curtain wall assemblies and excessive windows
  - Low air-infiltration, confirmed with in-building air-infiltration testing
  - Energy recovery
  - Management of solar heat gains
- Efficient electrification of water heating, where feasible
- Extensive rooftop solar readiness
- Electric vehicular ready parking spaces

Significant incentives may be available including MassSave® incentives, Alternative Energy Credits (AECs), and Solar Massachusetts Renewable Target (SMART) incentives.

Construction Period

As noted above, the project site is regulated under M.G.L. c. 21E with a RTN 3-0277. There is an Activity Use Limitation (AUL) on the entire project site. Therefore, construction plans will comply with the obligations of the AUL including implementation of a soil management plan, health and safety plan, and an airborne asbestos, dust, and odor management and monitoring plan during construction. Protective covers disturbed during construction will be restored.

All construction and demolition (C&D) activities should be managed in accordance with applicable MassDEP's regulations regarding removal of asbestos-containing material (ACM) and disposal of asbestos-containing waste materials (ACWM), including the Air Pollution Control regulations at 310 CMR 7.09 and 310 CMR 7.15 and the Solid Waste Management regulations at 310 CMR 19.061 and waste ban provision at 310 CMR 19.017. I encourage the Proponent to reuse or recycle C&D debris to the maximum extent. The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the MCP (310 CMR 40.00). All construction activities should be undertaken in compliance with the conditions of all State and local permits.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies, I have determined that an EIR is not required.

K. Theoharides

December 22, 2021
Date

Kathleen A. Theoharides

Comments received:

11/30/2021 Stephen Kaiser
12/13/2021 City of Cambridge
12/13/2021 Department of Conservation and Recreation (DCR)
12/13/2021 Friends of Jerry's Pond
12/13/2021 Lisa Birk, Mike Nakagawa, Joel Nogic, Eppa Rixley
12/13/2021 Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO)
12/13/2021 Massachusetts Water Resources Authority (MWRA)
12/13/2021 Mystic River Watershed Association (MyRWA)
12/13/2021 Cambridge Bicycle Safety
12/13/2021 Stephen Kaiser
12/15/2021 Massachusetts Department of Transportation (MassDOT)
12/22/2021 Department of Energy Resources (DOER)

KAT/EFF/eff

From:	Stephen Kaiser
To:	Flaherty, Erin (EEA); Lauren; Stephen Kaiser
Subject:	"ALEWIFE PARK" Development EEA 16473 ENF
Date:	Tuesday, November 30, 2021 1:28:06 PM
Attachments:	2021-11-30 MAP of Alewife + Jerrys Pond (1).png 2021-11-30 Alewife Brook Parkway and GCP Area.png 2021-11-30 Russell Field and Alewife T Station Area .png 2021-11-30 Jerrys Pond Area AM.png

To : erin.flaherty@mass.gov

From : Stephen Kaiser [skaiser1959@gmail.com]

Comment to MEPA on Revised Alewife Center project Nov. 30, 2021

SITE HISTORY

The Alewife area represents a long history of both traffic congestion and hazardous waste found in the area. In 1970 Alewife Brook Parkway was badly jammed by congested traffic in peak hours. In 2021 extensive congestion and traffic queues extend from Massachusetts Avenue to Huron Avenue in peak travel periods. That is fifty years worth of congestion.

The ENF notes that no past project has been reviewed by MEPA on this site. Please check file 5869, Alewife Center ENF with an EIR required on March 13, 1986, with intensive involvement of developer Spaulding & Slye, now part of JLL -- Jones, Lang, LaSalle since 2005. The only new building constructed was Alewife Center One. Draft EIR approved March 2, 1987 and Final EIR found inadequate on January 20, 1988 , but the Supplemental Final was approved on July 1, 1988.

In the Spring of 1996, a new proposal for a shopping center became a Notice of Project Change, but the plan was withdrawn on March 13, 1996. In subsequent years there was a lengthy debate involving residents and the developer over asbestos wastes on site. An attempt to bring in a professional mediator failed when it was clear that the competing sides had no interest in compromise.

MEPA JURISDICTION

On the basis of information in the ENF, this project gives MEPA review jurisdiction on traffic, sewer and wetlands (if the order of conditions is appealed), but -- if it survives review for segmentation -- the project does not exceed categorical inclusion thresholds for a required EIR. Privatizing site review with licensed site professionals paid for by the developer has not produced a credible solution to dealing with hazardous wastes. A new role for DEP may need to be defined for Alewife.

Former Dewey & Almy property, later acquired by W. R. Grace company has meant decades of site pollution going back to the early years of the 20th century and continuing into the 1970s. The site has a long history of controversy over disposal of asbestos and hazardous wastes on the site. Because of the planned residential uses, the protection of public health in residential communities should be given very close attention.

I foresee the need for borings throughout the site to determine what materials are present below-grade. How can we proceed without such knowledge, whether DEP is involved or not?

In addition to traffic and hazardous wastes, issues of flooding and wetlands have been raised. The record demonstrates that in the years 1986 to 2020, no developer was able to produce a major change to the site. Remediation planning efforts in the period 1995 to 2006 can be found at http://www.alewifeneighbors.org/projects/wrgrace/index.html.

Current ideas are offered at

http://www.alewifeneighbors.org/projects/wrgrace/IQHQ_Alewife_Park_Jerrys_Pond.gif

The work by IQHQ and Ocean River suggests an expanded stance on site development with direct outreach into the community. Moreover, the ENF is being filed very early in the planning process when ideas are still at a conceptual stage. Grace and Spaulding & Slye could never reach this level of conversation, and hostilities were too evident.

SITE POTENTIALS

The new developers may have the only approach that has a change of working, and it will probably require a full set of site protections that are developed as planning proceeds through the MEPA process. A special challenge is to locate housing on the site, and this will require firm knowledge of below-grade contaminants and concentrations, and how to block out any chance of another Love Canal occurring at Alewife. We may need to seal and encapsulate the site, to prevent contaminants from reaching the surface. Site excavations for any reason must be kept to a minimum.

At the local level, a Special Permit SP3 will need to be issued by the Planning Board, which has no budget to hire their own traffic, flooding, or hazardous materials experts. The MEPA process will be vital to providing information to the Cambridge planning Board.

Ocean River admits that “A developer (IQHQ) recently purchased the 26-acre industrial parcel that includes Jerry’s Pond on the south side of the property. We are asking that the city and the developer work with all stakeholders to create safe public

access to Jerry's Pond. Formerly owned by W. R. Grace chemical company, Jerry's Pond is part of a brownfield site in need of attention." Grace once owned it and IQHQ now does.

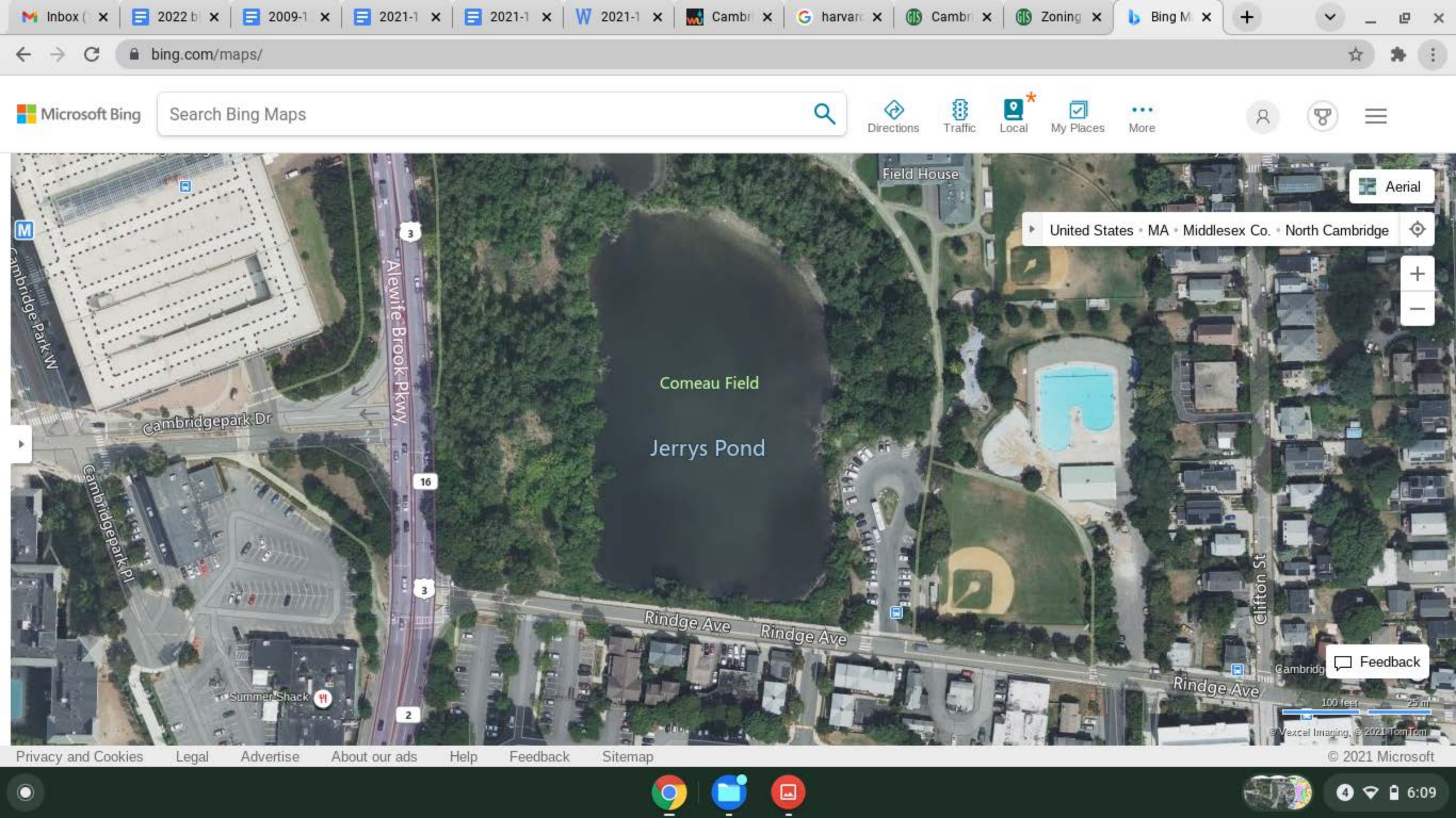
I have attached a zoning map of the project areas and three sequential North-to-South aerial photos showing the site area bounded by Alewife Brook Parkway, Whittemore Avenue, Russell Field and Rindge Avenue. MEPA also has jurisdiction over matters of segmentation and should require full disclosure of property ownership in the area by IQHQ.

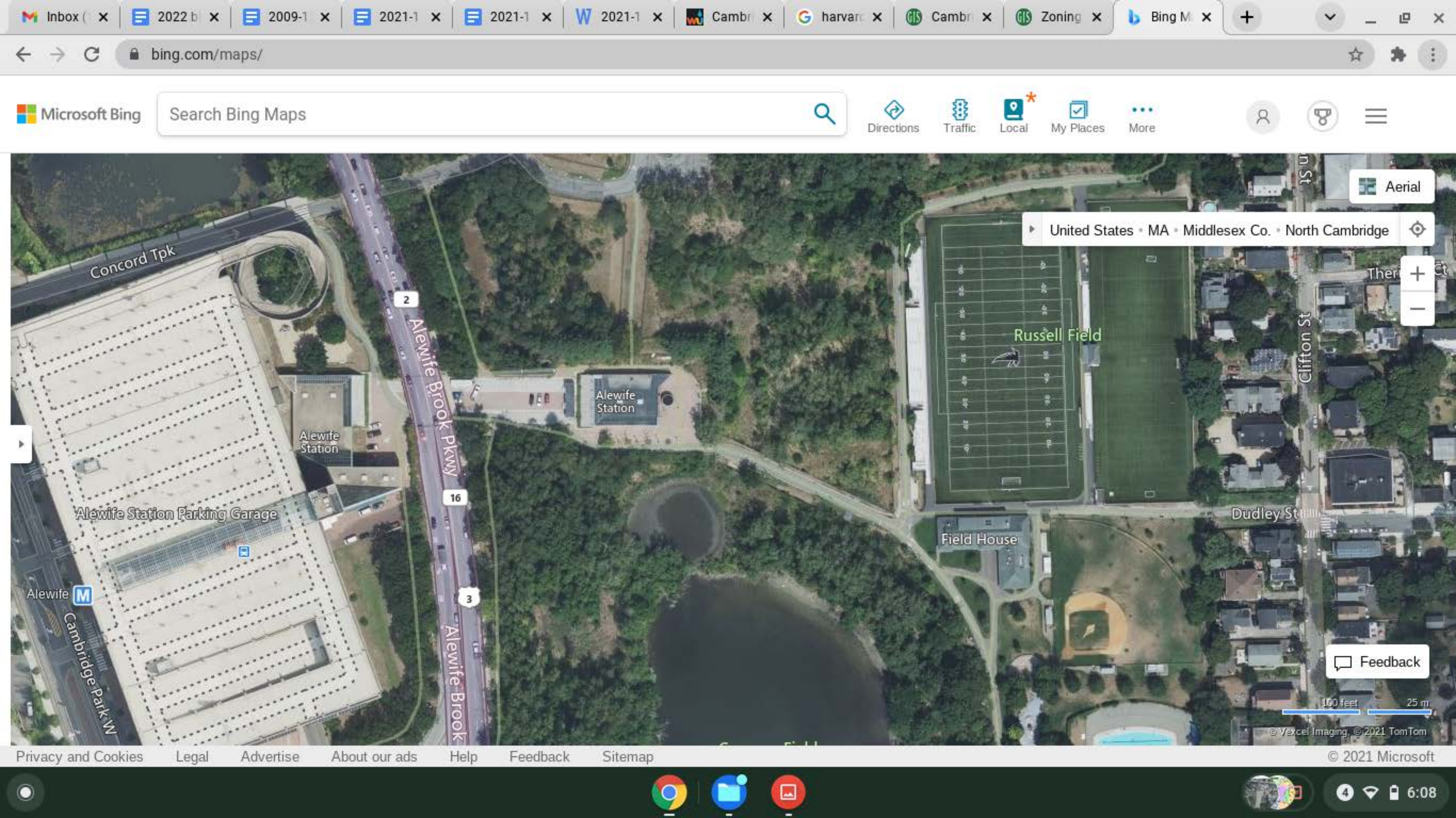
ADDRESSING ALEWIFE TRAFFIC LIMITATIONS

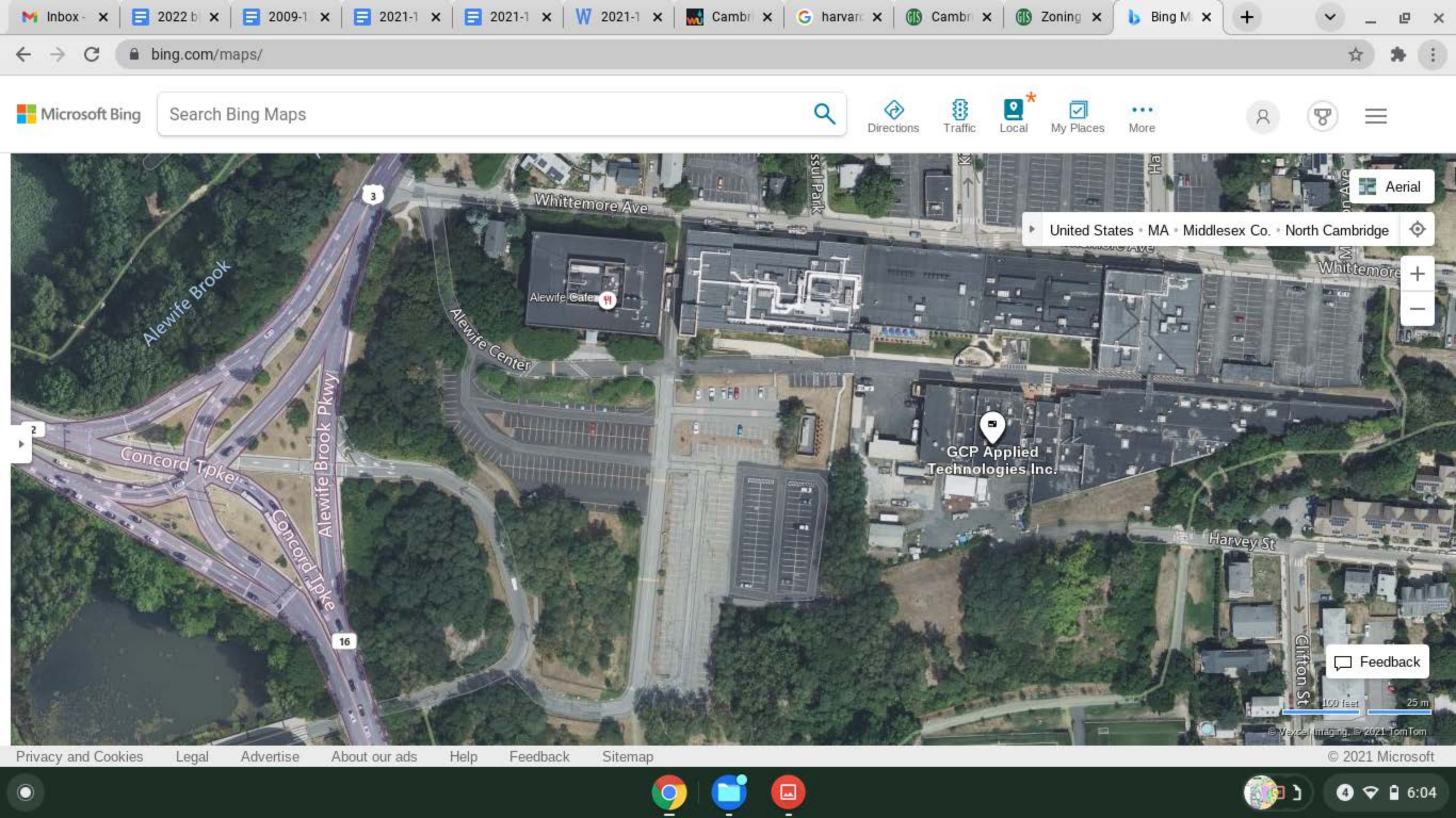
For traffic issues, consultant VHB prepared the NPC for the CRA Kendall Square site (EEA #1891) and is familiar with the methods to count existing traffic volumes and include both a future No-Build condition with a site-Build addition of traffic. They should provide a similar analysis for Alewife in a Draft and Final EIR, so everyone knows where Alewife is headed when it comes to traffic growth.

For local traffic review, assessment of traffic conditions at Alewife should not be automatically trusted to the Cambridge Planning Board. Ever since 1951, the Planning Board has been wrong about traffic in Cambridge, notably by its support of the Inner Belt expressway despite a stunning 1957 traffic study prepared by consultants Coverdale & Colpitts demonstrating that the old elevated Central Artery was inadequate to the task and would be severely overloaded by future traffic. We need a new Coverdale report that tells the traffic truth about Alewife.

==========


Inbox
2022 b
2009-1
2021-1
2021-1
2021-1
Cambr
harvar
Cambr
Zoning
Bing M
bing.com/maps/
Microsoft Bing
Search Bing Maps
Directions
Traffic
Local
My Places
More
Aerial
United States • MA • Middlesex Co. • North Cambridge
Field House
Comeau Field
Jerrys Pond
Alewife Brook Pkwy
Cambridge Park W
Cambridgepark Dr
Cambridgepark Pl
Rindge Ave
Rindge Ave
Rindge Ave
Clifton St
Summer Shack
Feedback
100 feet
25 m
© Vexcel Imaging, © 2021 TomTom
Privacy and Cookies
Legal
Advertise
About our ads
Help
Feedback
Sitemap
© 2021 Microsoft
6:09


Inbox
2022 b
2009-1
2021-1
2021-1
2021-1
Cambr
harvar
Cambr
Zoning
Bing M
bing.com/maps/
Microsoft Bing
Search Bing Maps
Directions
Traffic
Local
My Places
More
Aerial
United States • MA • Middlesex Co. • North Cambridge
Concord Tpk
Alewife Brook Pkwy
2
16
3
Alewife Station
Alewife Station
Alewife Station Parking Garage
Alewife
Cambridge Park W
Russell Field
Field House
Clifton St
Dudley St
Feedback
100 feet
25 m
© Vexcel Imaging, © 2021 TomTom
Privacy and Cookies
Legal
Advertise
About our ads
Help
Feedback
Sitemap
© 2021 Microsoft
6:08


Inbox -
2022 b
2009-1
2021-1
2021-1
2021-1
Cambr
harvar
Cambr
Zoning
Bing M
bing.com/maps/
Microsoft Bing
Search Bing Maps
Directions
Traffic
Local
My Places
More
Aerial
United States • MA • Middlesex Co. • North Cambridge
Whittemore Ave
Alewife Brook
Alewife Cafe
Alewife Center
Alewife Brook Pkwy
Concord Tpke
Concord Tpke
GCP Applied Technologies Inc.
Harvey St
Clifton St
Feedback
100 feet
25 m
© Vexcel Imaging, © 2021 TomTom
Privacy and Cookies
Legal
Advertise
About our ads
Help
Feedback
Sitemap
© 2021 Microsoft
6:04

Cambridge CityViewer

City of Cambridge, MA

Get Link | Help

Search | Selection | Maps | Location | Draw | Share

Maps

Map Themes

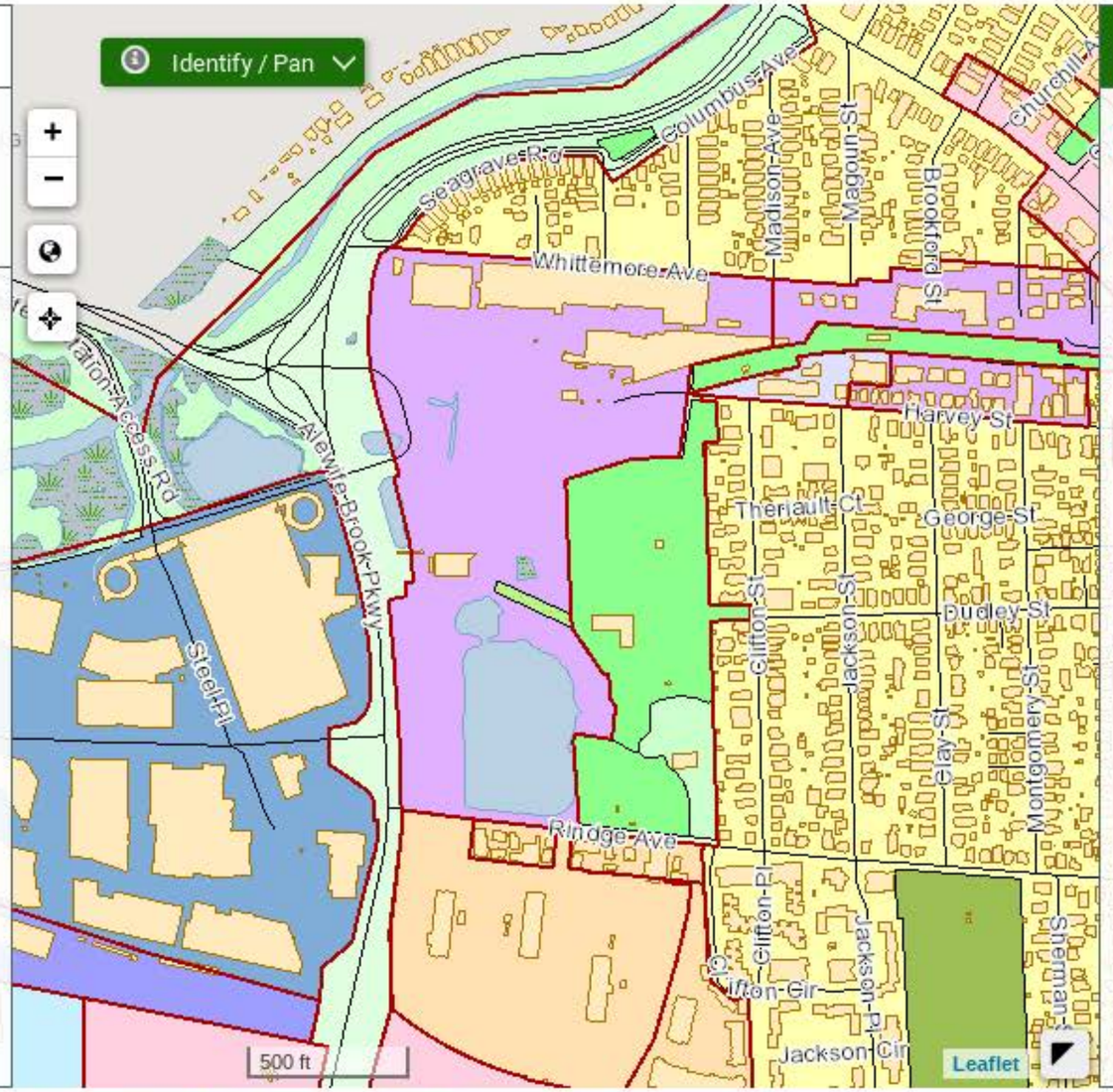
Zoning

Layers

Refresh Map

- Addresses
- Zoning Boundaries
- City Boundary
- Neighborhoods
- Buildings
- Open Water
- Zoning Districts

Identify / Pan



Details

Zone Type: OS

Zone Desc	Open Space
PUD Type	
PUD Desc	
Zone Code	12
Disclaimer	The zoning lines as shown here are approximate, and should be used for planning purposes only. Please refer to documents on file in the City Clerk's office for the exact location of boundaries.

5.1.0 (production)

City of Cambridge
Executive Department

LOUIS A. DePASQUALE
City Manager

December 13, 2021

Kathleen Theoharides
Secretary of Energy & Environmental Affairs
Executive Office of Energy & Environmental Affairs
Attn: MEPA Office, Erin Flaherty, EEA No. 16473
100 Cambridge Street, Suite 900
Boston, MA 0214

Dear Secretary Theoharides:

The City of Cambridge submits the attached comments on the Environmental Notification Form for the Alewife Park project submitted by IQHQ-Alewife LLC. The proposed project is a significant development for our community and has been the subject of substantial community involvement and staff review. The City will continue to work with the proponent as the plans move forward.

If your agency has any questions about the comments, please contact William Deignan of my staff at wdeignan@cambridgema.gov. We appreciate your consideration of these comments.

Sincerely,

Louis A. DePasquale
City Manager

City of Cambridge
Comments on Environmental Notification Form
EEA No. 16473, Alewife Park, Cambridge

General

The proposed development of new buildings, redevelopment of existing buildings, and upgrades to area pedestrian and bicycle paths and public access to Jerry's Pond at the Alewife Park site is an important project for the community. The proponent has worked with the City and the community to develop a concept and design that will benefit Cambridge residents and visitors. We appreciate the numerous benefits incorporated into the project, including the preservation of existing open space and the improvement of meaningful multi-modal connections to existing transit stations and area multi-use paths. With that in mind, we offer the following comments to further enhance the project.

The project is subject to a Project Review Special Permit from the Cambridge Planning Board, which includes urban design review and transportation impact review. If the special permit is granted, it will contain conditions to ensure ongoing conformance with the City's development objectives. The review process is expected to start soon, and the City will continue to work with the proponent as the project develops.

Transportation

- The City is generally enthusiastic about the access improvements to, and circulation around Jerry's Pond. The new connections on the west edge of Jerry's pond for people walking and bicycling is an important and welcome improvement.
- We recommend the removal of one proposed access point between the MBTA headhouse and the path 'rotary' intersection to reduce the overall impervious area adjacent to the pond and still allow for plenty of pond access opportunities. Please see blue oval on the image on the following page to indicate the suggested removed connection. (Figure 1.7 – Commitment Areas" from ENF.)
- In general, there are many pedestrian-only paths indicated. This type of facility does not often result in people walking bicycles and therefore we advise that paths be assumed to be multi-modal. This is particularly true of the path along the access road from the northwest corner of the site as well as the path between building 4 and 5. The interior path on the eastern edge of Jerry's Pond is one that could reasonably function as a walking-only path.
- The size of the proposed Bluebikes bike share station is recommended to increase from 19 docks to 27 docks given the anticipated demand at this location. Please show the Bluebikes station on Figure 5.22b.
- Per City policy, it is important to encourage bicycling and walking and disincentivize driving alone trips. To this end, we recommend that the Multi-Modal Path to Alewife Station shown on figure 1.10 not end at the service road / north west corner of the parking garage, but that the design of the service drive be reviewed so that people biking and walking are given priority over service vehicles. One idea is to create a narrower, one-way service road and a wider, adjacent multi-use path.
- At the intersection of the Communal Garden entrance and the hard turn in the existing multi-use path, please widen this path area significantly. This is a known area of conflict among bicyclists, joggers, and pedestrians. Widening this area will reduce the number of "close calls" and uncomfortable interactions among path users traveling at different speeds. It is imperative

to mitigate the increase in conflicts at this corner that will inevitably arise because of the additional trips that will be generated by this proposed development.

- Additionally, we feel that an east-west path connection through the site from the east side of the MBTA headhouse to the northwest corner of the football field is greatly needed. This has been specifically requested by the City's transportation advisory committees and others in the community. It can be a natural boardwalk type of path if that is desirable. This path option will further reduce conflicts at the corner by the community gardens.
- Gates at Whittemore Ave, Harvey St, and other entrances should be constructed in a way that allows unrestricted pedestrian and bicyclist access and is aesthetically consistent with the local developed environment.
- Please identify the expectations for how people bicycling will traverse the area and transition from Rindge Avenue to the multi-use paths, including detailed designs as to how people can traverse this area safely.
- While we support the proposal in concept, we would like to work with the proponent further on the exact design details of the provisions for people walking and bicycling in the section next to Jerry's Pond. The proposal indicates in the "Jerry's Pond – Commitment Areas Project" narrative section that *"The design of the Jerry's Pond Commitment Area will accommodate a 10-foot bidirectional, multi-use path along Rindge Avenue (Figure 1.10)"*. However, Figure 1.10 only shows a bi-directional multi-use path between the north edge of the MBTA Head house and the proposed parking garage. Please confirm that the narrative is correct and provide an appropriately labeled corresponding figure or diagram indicating the path along Rindge Avenue / southern edge of Jerry's Pond. Please also note that standards call for any vertical elements (poles, signs etc.) be offset from the path by at least 2'.

Transit, Parking, & TDM

- Additional motor vehicle trips are expected on the Route 2 off-ramp and the Route 2/16 on-ramp to access this development at all hours. The MBTA bus routes and private shuttles (including the Alewife TMA and 128 Business Council) that use these ramps currently experience significant peak-period delay and unreliability. In order to ensure that these additional motor vehicle trips do not further cause delay or unreliability for MBTA bus routes and private shuttle operations, the proponent should work with the MassDOT Highway Division and the MBTA Transit Priority group to secure an agreement to design and construct a dedicated bus lane on the Alewife on-ramp (i.e., the "jughandle" ramp). According to the documents submitted in the Environmental Notification Form, much of this ramp is located on the proponent's property. The Applicant, in coordination with MassDOT and the MBTA should complete an analysis, building on work already completed for a study by the Metropolitan Planning Organization, and determine the preferred position of the dedicated bus queue lane(s) or queue jump lanes and determine a funding mechanism and timeline for the work to be completed. Please see attached document labeled *"Jughandle – Alewife Park_IQHQ TIS Final"*
- The Project should work with the city and DCR to evaluate adding a new crosswalk across Alewife Brook Parkway at Cambridgepark Drive to provide new pedestrian access between Jerry's Pond and Alewife Station. To encourage sustainable forms of traveling (transit, walking and bicycling) and discourage single occupancy vehicle travel, the Project should charge market rate parking fees for 100% of the parking spaces. Fees should be charged daily versus monthly as this is a tried-and-true method to discourage drive alone trips.
- We recommend that 5% of parking spaces permanently be reserved and signed for High Occupancy Vehicle (HOV) parking spaces.

    - The proponent should consider offering carpool parking spaces at discounted rates.
    - The Project should provide 100% employee transit pass subsidies and not 50% as recommended in the ENF.
- In addition to the TDM measures listed above, the TDM program should include the following measures to shift trips out of cars and into bike, walk, and transit:
    - Real-time transportation information screen at all building lobbies, which will promote and support sustainable forms of travel and be a benefit to employee and visitors to the site.
    - Annual transportation event, which highlights the Bluebikes membership subsidy and MBTA transit pass subsidy
    - 100% market rate parking charged by the day
    - Pre-tax purchase for all federal fringe benefit categories
    - 27-dock Bluebikes station + on-site placement
    - Gold-level Bluebikes membership
    - Showers/lockers
    - Bicycle tool stand with pump
    - Electric outlets in bike rooms for charging small electric devices such as e-bikes and e-scooters
    - Alewife TMA membership
    - On-site TDM coordinator
    - Emergency ride home program
    - Car/vanpool matching
    - Hire Cambridge residents
    - Also Consider providing a free shuttle service to Porter Sq commuter rail station. This service could be eliminated if/when a commuter rail stop is available at Alewife.
    - To align with recent requests from the Cambridge City Council for electric vehicle charging in development projects, the Project should install 25% of new parking spaces with EVSE Level 2 chargers and the remaining spaces be EV-ready (wiring installed and sufficient capacity) for 100% of the spaces.

Source: Gensler

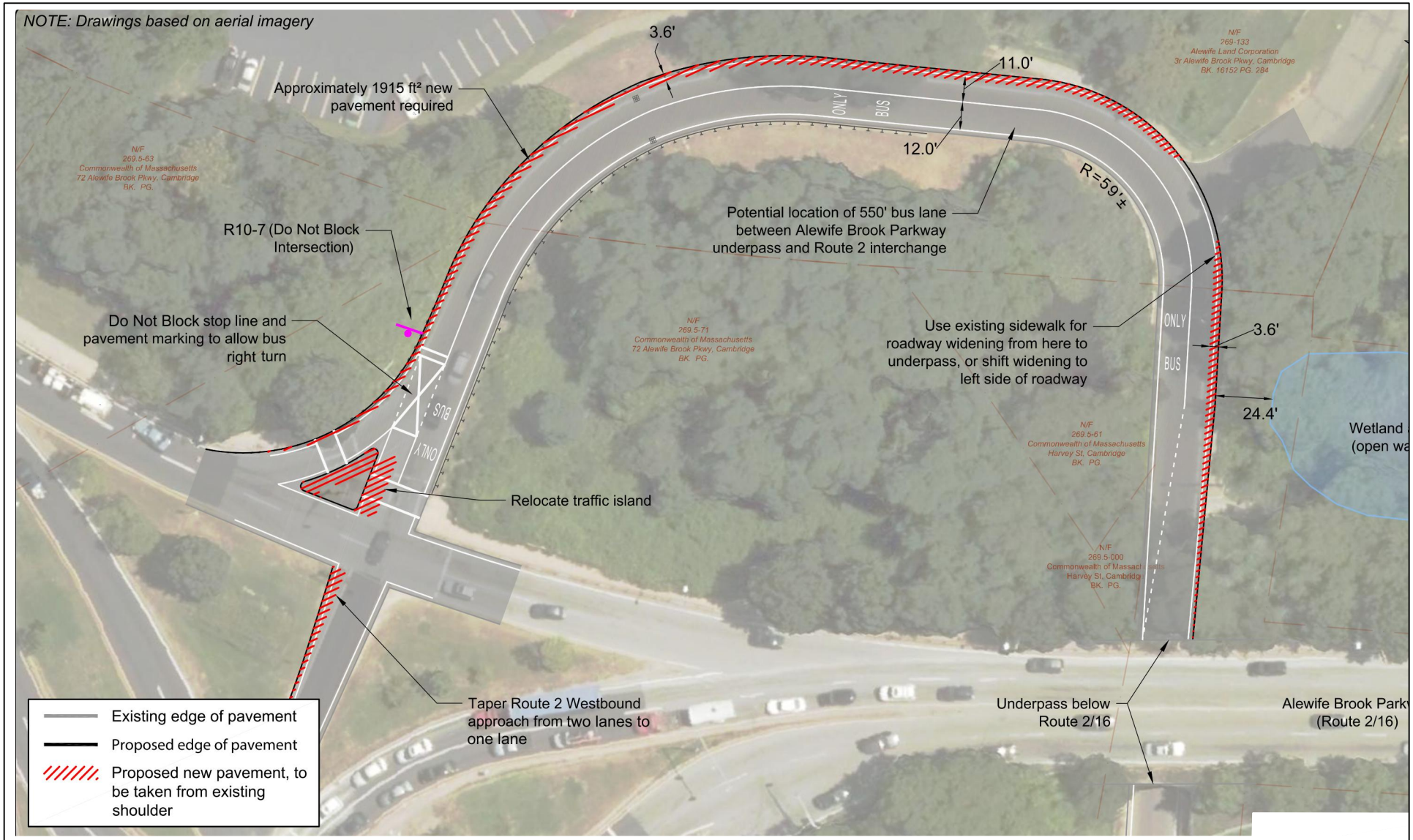
Figure 1.7

Commitment Areas

Alewife Park Redevelopment
Cambridge, Massachusetts

City of Cambridge
Comments on Alewife Park ENF, EEA No. 16473

Attachment



Source: Boston Region MPO Bus Priority Feasibility at Alewife Station Bus Lane Concept at Jug Handle Approach

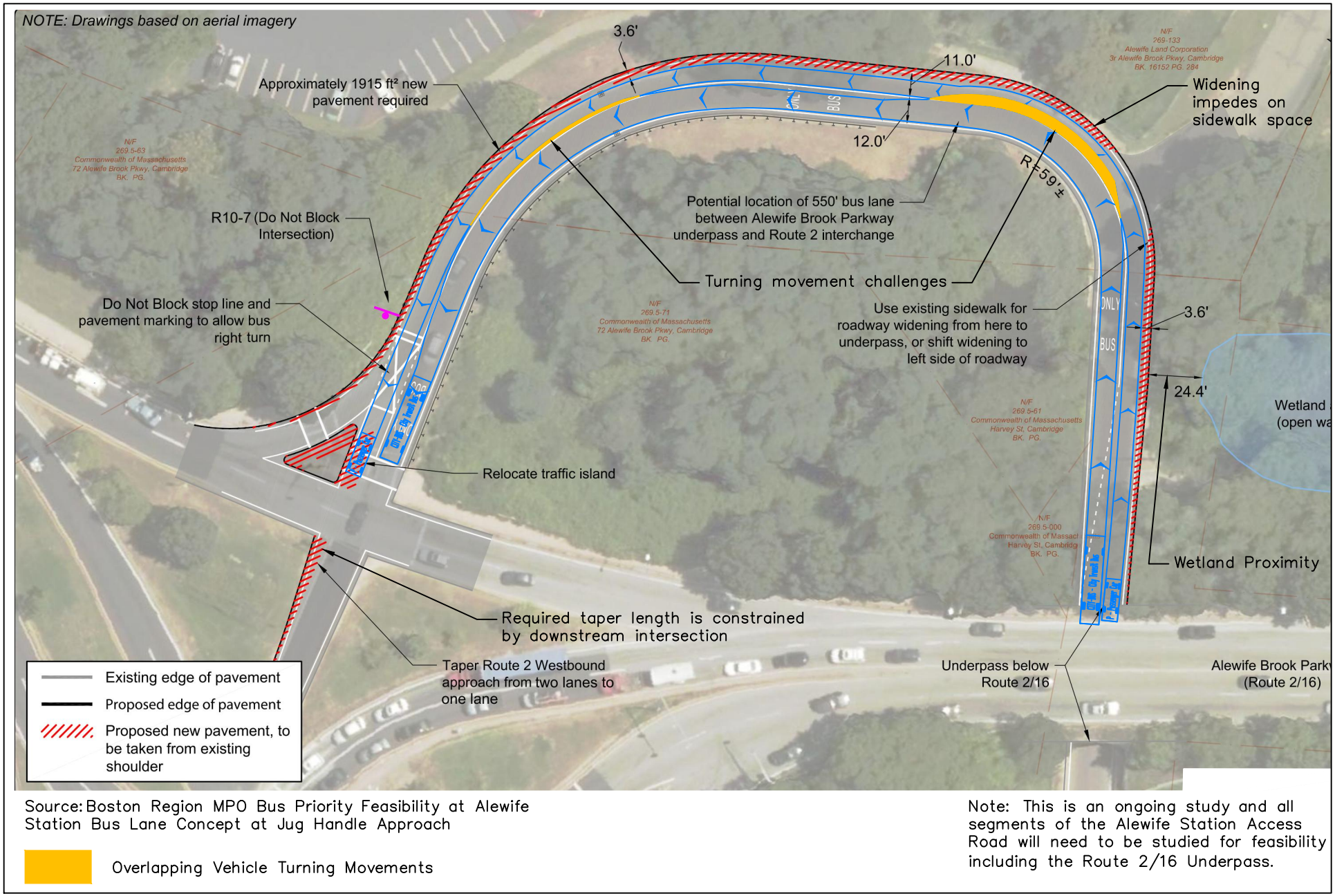
Note: This is an ongoing study and all segments of the Alewife Station Access Road will need to be studied for feasibility including the Route 2/16 Underpass.

0 30 60 120 Feet

Alewife Station Access Road
MPO Bus Lane Concept

Alewife Park Redevelopment
Cambridge, Massachusetts

Figure 10.j.1



Source: Boston Region MPO Bus Priority Feasibility at Alewife Station Bus Lane Concept at Jug Handle Approach

Overlapping Vehicle Turning Movements

Note: This is an ongoing study and all segments of the Alewife Station Access Road will need to be studied for feasibility including the Route 2/16 Underpass.

0 30 60 120 Feet

Alewife Station Access Road
Bus Lane Feasibility

Alewife Park Redevelopment
Cambridge, Massachusetts

Figure 10.j.2

dcr
Massachusetts

December 13, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: Erin Flaherty, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EOEEA #16473 Alewife Park ENF

Dear Secretary Theoharides:

The Department of Conservation and Recreation ("DCR" or "Department") is pleased to submit the following comments in response to the Environmental Notification Form ("ENF") submitted by IQHQ-Alewife LLC (the "Proponent") for Alewife Park (the "Project").

As described in the ENF, the Project will redevelop a 19.6-acre former industrial site for mixed uses. Several existing buildings will be demolished and two buildings totaling 184,000 sq ft will be reused. The Project is adjacent to DCR's Alewife Brook Parkway. The Project proposes new public pedestrian and bicycle connections to the Alewife Linear Park. DCR's Alewife Reservation, including a trail corridor along the Little River, is located just to the west of the Project site.

The Project site is bounded to the west by DCR's Alewife Brook Parkway. Increased traffic generated by the Project will result in impacts to Alewife Brook Parkway and associated intersections. DCR requests that the Proponent contact DCR to discuss the Traffic Impact Assessment and mitigation strategies.

The development site sits at the nexus of a number of existing and planned regional shared-use paths, including DCR's Alewife Brook Greenway within Alewife Brook Reservation. Links between the regional trail connections are not as strong as they could be, and the area around the development site serves more as a barrier than as a connection. The Project proposes several welcome improvements, including the proposed restoration of the MBTA headhouse plaza, which is not only an entrance to an important transit resource but also the nexus of the above-referenced regional trail systems. Also welcome is the 12' multi-modal path connecting to the MBTA headhouse as well as an improved and widened multi-modal path running north-south between Alewife Brook Parkway and Jerry's Pond. DCR requests the chance to coordinate with the Proponent related to a potential trail connection to DCR's Alewife Reservation. Establishing trail connections with the Reservation would require a DCR Construction and Access Permit for work activities on DCR land.

Thank you for the opportunity to comment on the ENF. Please contact Jeffrey Parenti, DCR's Deputy Chief Engineer, at jeffrey.parenti@mass.gov related to the Traffic Impact Assessment. Please contact Gerald Autler, DCR's Trails & Greenways Director at gerald.autler@mass.gov related to potential trail connections. Sean Casey is Director of Construction and Access Permits at sean.casey@mass.gov.

Sincerely,

Stephanie C. Cooper
Acting Commissioner

cc: Jeff Parenti, Gerald Autler, Patrice Kish, Priscilla Geigis, Tom LaRosa

December 13, 2021

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attn: Tori Kim, MEPA Director
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114
Attn: Erin Flaherty, Erin.flaherty@mass.gov

Re: Comments on ENF, Alewife Park, Cambridge, EEA #: 16473

Dear Secretary Theoharides and Director Kim:

We are writing on behalf of *Friends of Jerry's Pond*, a volunteer community group which since 2015, has been deeply involved with issues related to what is today *IQHQ's* site in the *Alewife* area of North Cambridge. Our focus has primarily been on the wetlands of *Jerry's Pond* and the associated open space areas which were once an invaluable community and natural resource and could be again. Over the last year, we have worked diligently with *IQHQ* and directly with the community and with other like-minded organizations including *Mass Audubon, Green Cambridge* and *Alewife Study Group*. Our focus has been on creating an equitable and environmentally restorative outcome for this rare diamond in the rough ~ a "pit that wants to be a pond" in the middle of the city, on the *Red Line* and on the *Minuteman Bikeway*. This is particularly important in light of the past disturbances to the site described below and the environmental justice communities immediately adjacent.

We have had many meetings – online and on-site – with *IQHQ* and the noted groups (and others) about the development and environmental plans. We have enjoyed working with and getting to know *IQHQ* and their consultants – and continue to do so – and we are gratified by their commitment to engaging with the community and improving the project over time.

We have reviewed *IQHQ's* ENF filing and we want to offer our public support for their efforts, recognizing that there are many details which need to be addressed through the permitting process in Cambridge – particularly with regards to the rare opportunity we have at *Jerry's Pond*, to restore and make accessible a unique wetland asset in the middle of a dense affordable housing community and broader residential and commercial area. In the interests of sharing what we have learned about the site in our six years of study and in light of the current plans, we offer thoughts in two areas as described below:

Natural Areas, Ecological Benefits and Climate Resilience:
In the ENF summary and filing there are references to "restoring public access to the surrounding natural areas" and "providing ecological benefits."

One description notes that “surrounding the developed areas to the south and west are mainly vegetated open spaces that range from maintained lawns and shrubs to fenced areas that have remained in a natural state for several years.”

There are also references noting that “on-site climate resilience has been fully incorporated into this project and will remain a priority after development” and that “facilities may include added pervious area.” [underlines added]

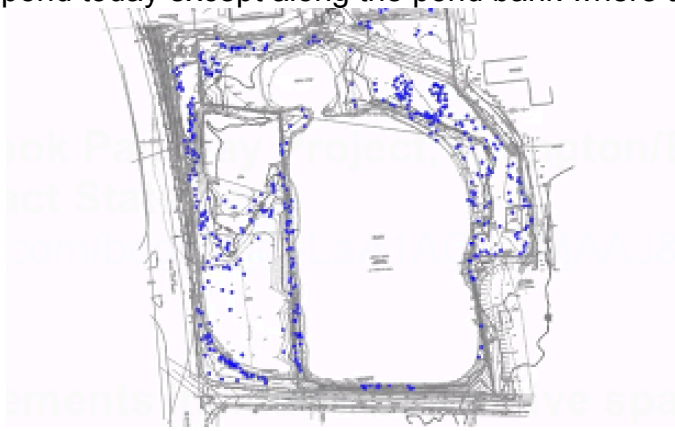
In light of these references – worthy and key environmental goals which we fully share – we would like to provide a few illustrative photos showing that much of the land surrounding the *Jerry’s Pond* area is highly disturbed rather than natural and that it remains paved under a thin layer of topsoil including remnants of retaining walls along the pond banks from prior commercial uses. De-paving and restoring this area would create the natural areas we all seek, while adding climate resilience by significantly expanding the canopy and pervious areas in this flood-prone area.

1. Aerial of the site from 1978 showing that the areas around the pond were largely paved. The diamond shaped building on the southwest corner is a fast food restaurant. The larger building to the north of the restaurant is a metal fabrication facility.

2. Beginning in the 1950’s, there was a fast food restaurant on corner of Rindge Ave. and Alewife Brook Parkway. Note parking behind the restaurant along the pond banks.

3. Aerials from 2001 and 2002 show few trees growing after the site's closure in 1961, suggesting this land is still largely paved 60 years later. Square wetland to northwest appears to be right where the basement for the metal fabrication facility was:

4. Trees larger than 6" from *IQHQ's* tree plan. Few large trees grow on the west side of pond today except along the pond bank where the roots have access to water:



5. 2021 photo of pond bank on west side with retaining wall section adjacent to where restaurant parking area was:

Although discussions are ongoing and designs evolving, to reiterate, we do not have significant objections to *IQHQ's* development proposals on the north part of the site and continue to have productive meetings with them and with fellow community groups. That said, we feel that there is a unique opportunity for the restoration and improvements to the *Jerry's Pond* areas of the site to go beyond the current proposals for cantilevered, hard boardwalks and decks as envisioned in this filing. This land could, and should be de-paved and retaining wall sections removed from the pond banks. The banks could then be re-naturalized and sloped to support biodiverse, emergent wetlands. De-paving would also increase the "on-site climate resilience" and "added pervious area" noted in the filing and referenced above.

To help envision such an outcome, *Friends of Jerry's Pond* has proposed and rendered a concept plan for the south edge of the pond which would create sloped banks vs. the proposed hard-scape decks which would cast the banks into permanent shadow and lack emergent wetlands. This reshaping and re-naturalizing of the pond banks would allow for filtering of road runoff, the planting of an estimated 150 to 175 trees along *Rindge Ave.* and would also provide space for a fully separated two-way bike path and walking paths. This "green infrastructure" would be across the street from approximately 4,000 affordable housing residents in the three *Rindge Towers* and *Jefferson Park* housing developments and nearby for people who do not have easy access to nature.

6. Concept for reshaped pond banks, canopy and separated bike path along *Rindge Avenue:*

IQHQ has indicated a continued openness to discussing these concepts with the community and has confirmed that their *Cambridge Conservation Commission* NOI filing for the *Jerry's Pond* part of the site will not occur for at least nine months while we seek funding, continue design development with community input and work towards a broad consensus. Several environmental organizations have endorsed our proposal including *Manomet, Sierra Club, Green Cambridge* and *Mass Audubon's Science Team* which has reviewed the proposal and stated their support (letter attached.)

Bicycle and Pedestrian Access

We have been impressed with *IQHQ's* improvements to transit and connectivity throughout the site, however we would like to call attention one area – one of the two tunnels under *Alewife Brook Parkway* – where we think the State could facilitate a better outcome. This tunnel is described as the "Alewife Station Access Road vehicular tunnel"(5.4.2) that passes under the parkway. This tunnel represents an important opportunity to improve bicycle access to the *IQHQ* site and beyond and if modestly reconfigured, could encourage bicyclists to avoid passing through the *Alewife MBTA* headhouse plaza which is filled with pedestrians morning, noon and night. The tunnel currently has Jersey Barriers with raised crosswalks on both sides which are rarely utilized and reduce the width of the tunnel, while providing no public benefit.

We kindly request that *MassDOT* study the feasibility of removing these Jersey Barriers and utilizing the additional space instead for a two-way bike path separated by flexible posts or "armadillos" so that bicyclists entering and leaving the *IQHQ* site from the *Minuteman Bikeway* can safely use the tunnel in both directions, while pedestrians, as they do now, would continue to prioritize the non-vehicular tunnel just south which leads to the *Alewife MBTA* headhouse plaza. In the tunnel's current state, bicyclists utilize the *MBTA* headhouse plaza, thus conflicting with a busy pedestrian area.

To complete this bicycle connection into the *IQHQ* site, we also recommend that the *Alewife Station Access Road* sandwiched between *Yates Pond* and the garage side be upgraded with separated two-way bike lanes leading to the tunnel. Finally, for calming of both bicycles and vehicles, we suggest a small raised crosswalk over the *Alewife Station Access Road* where pedestrians enter the T plaza, in order to signal to both vehicles and bicyclists that this is a heavily trafficked area for pedestrians.

These changes would significantly improve bike and pedestrian connectivity through the tunnel, providing more climate-friendly transportation opportunities for *IQHQ's* lab tenant employees and for the community. It completes a direct connection across the *IQHQ* site between *Alewife Linear Park* and the *Somerville Community Path* to the east, and the *Minuteman Bikeway* and *Fitchburg Cutoff Path* to the west. Greater connectivity for bikes and pedestrians through that tunnel has been raised during many public community meetings and aligns with the recommendations of local bike safety advocates.

Thank you for the opportunity to comment – we are grateful for your attention.

Sincerely,
Friends of Jerry's Pond Leadership Team:

Eric Grunebaum
Macky Buck
Rachel DeLucas
John Doucet
Suzanna Schell
Lew Weitzman

Mass Audubon

October 20, 2021

David Surette
Vice President, Development
IQHQ
201 Washington St., Suite 3920
Boston MA 02108
via email to: dsurette@iqhqreit.com

Dear David:

Mass Audubon has been grateful to work in partnership with IQHQ and community groups on the vision for Jerry's Pond over the past six months. IQHQ's support for youth and adult programming at the proposed eco-center pavilion will bring great benefit in allowing Cambridge residents to see the pond as a valuable habitat for wildlife and as a site of ongoing environmental education opportunities for the community.

As plans move forward, Mass Audubon recognizes that many tradeoffs are necessary – and potentially outside support –to accomplish a project of this scope and magnitude. In looking at the project from an ecological point of view, Mass Audubon is in support of the proposed re-naturalization of the pond edges to the greatest extent feasible, in order to ameliorate wildlife habitat and ecosystem health, increase aesthetic value, and expand the opportunity for local residents to enjoy the area and participate in educational programming.

At the moment, the connectivity between the water and the surrounding natural habitats at Jerry's Pond is hindered by the steepness of the pond's banks. Reducing the bank slope incline would naturally enhance the shorelines, create different microhabitats for plants and animals, and increase the biodiversity of the pond. In addition, removing invasive species and planting native species would also improve the water quality by creating a vegetated filtering buffer.

Increasing the structural diversity and complexity of the riparian zone and pond would further enhance the natural attractiveness of the pond and surrounding habitats to wildlife and provide more appealing and natural-looking shorelines while exposing students to a more biodiverse pond habitat. Structural complexity could be achieved by creating islands, wetland areas, underwater bars and shoals, expanded and uneven drawdown zones, and undulating pond edges.

Modifications to the areas surrounding the pond achievable by removing significant paved areas, maintaining healthy and native vegetation, removing invasive plants, and increasing

planting would further increase the functional value of Jerry's Pond, its ability to serve as a reservoir for more significant storm events, mitigate the heat island effect, and improve air quality. All of these attributes would be of great and lasting value to the community and are of particular significance to the neighboring environmental justice community.

We understand that undertaking such a comprehensive restoration would be an ambitious but worthy proposition. Mass Audubon has experience with similar projects and would be happy to offer our scientific expertise in anyway helpful with this project. We are hopeful that with community support, we can all look forward to witnessing the re-naturalization of Jerry's Pond to the fullest extent possible and experiencing the educational and recreational opportunities envisioned for this area.
Sincerely yours,

Flavio Sutti
Conservation Ecologist

208 S. Great Road • Lincoln, MA 01773 • 781-259-9500 • fax 781-259-8899 • massaudubon.org

From:	Eppa Rixey
To:	Flaherty, Erin (EEA)
Cc:	Joel Nogic; Lisa Birk; Mike Nakagawa
Subject:	Alewife Park - Cambridge ENF Comment; EEA NO.: 16473
Date:	Monday, December 13, 2021 10:05:18 AM

Hi Erin,

See below for a comment related to the ENF for EEA NO.: 16473 (Alewife Park - Cambridge). I am emailing this to you directly based on your comment during the public zoom meeting about the site. I also tried to submit this through the MEPA site as a guest but kept getting an error message. Will the comment be formally registered by sending it to you or should I keep trying to submit it on the MEPA site as well?

Thanks!
Eppa Rixey

10th December 2021

To: Erin Flaherty
Environmental Analyst
Massachusetts Environmental Policy Act Office
Erin.flaherty@mass.gov
c: (617) 874-0589

SUBJECT: Alewife Park - Cambridge ENF Comment

EEA NO.: 16473

Dear Erin Flaherty,

We are writing on behalf of Alewife Study Group, a community organization that has been actively engaged on issues related to this site since 1995. We are a group of local resident volunteers with no commercial ties to the site and an extensive track record of advocating for the community. Over the last year we have had numerous conversations with IQHQ about their plans. We have been impressed by their engagement with the community and the

thoughtfulness with which they have approached this project, a welcome change from the previous site owner. We have reviewed their ENF filing and we want to offer our public support for their efforts, recognizing that there are many details which still need to be ironed out as a part of Cambridge's permitting process.

There is however one area of the project that we want to call to the attention of the MEPA Office and MassDOT - the Alewife Station Access Road vehicular tunnel that passes under Alewife Brook Parkway to the west of the IQHQ site and to the north of Alewife station. Under the Transportation Section of the ENF form under section II part C, it describes "potential implementation of a priority bus lane along the Alewife Access Road jug handle adjacent to the site". We have concerns about the feasibility of fitting two lanes of traffic through that tunnel, based on the curved shape of the tunnel ceiling and the height of buses and trucks traveling through the tunnel.

Even if the dedicated bus lane started after the tunnel, we think that there is an important opportunity to improve bike and pedestrian connectivity through the tunnel, which would provide more climate-friendly transportation opportunities for the site and the community. This would complete a direct connection across the IQHQ site between Alewife Linear Park and the Somerville Community Path to the east, and the Minuteman Bikeway and Fitchburg Cutoff Path to the west. Greater connectivity for bikes and pedestrians through that tunnel has been raised as an area of interest during several of our public community meetings and aligns with the recommendations of local bike safety advocates.

If the tunnel were modified and enlarged to accommodate a dedicated bus lane, a standard traffic lane, and also connectivity for pedestrians and cyclists in both directions, we would be supportive.

Sincerely,

Lisa Birk
Mike Nakagawa
Joel Nogic
Eppa Rixey

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

December 13, 2021

Kathleen A. Theoharides, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

Attn: MEPA Unit

RE: Cambridge
Alewife Park
EEA # 16473

Dear Secretary Theoharides:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Environmental Notification Form (ENF) for the proposed Alewife Park in Cambridge. MassDEP provides the following comments.

Wetlands

The ENF states that compensatory flood storage will be provided for all filling of BLSF, but there are no details provided in the document. Cut-and-fill calculations demonstrating that incremental volume will be provided on a 1-foot elevation basis, in accordance with 310 CMR 10.57(4), should be included in the NOI.

The project includes off-site improvements including a proposed boardwalk around Jerry's Pond. The ENF states that the boardwalk would not impact wetland resource areas except for the supporting piles. MassDEP notes that shading impacts to Bank and Land Under Water are likely to be deemed alterations and should be evaluated in the NOI. Mitigation may be required.

Solid Waste

MassDEP's current *Massachusetts 2010-2020 Solid Waste Master Plan*[1] *–Pathway to Zero Waste*, issued in April 2013 identifies a key goal to reduce solid waste disposal by 30% by 2020, from 6,550,000 tons of disposal in 2008 to 4,550,000 tons of disposal by 2020. MassDEP encourages the Proponent to review the plan to identify project management and operations practices that will assist the Commonwealth in meeting its material management goals. More information on the *Solid Waste Master Plan* and yearly update reports can be found at: https://www.mass.gov/guides/solid-waste-master-plan.

Waste Ban

Section 310 CMR 19.017 *Waste Bans* of the Massachusetts Solid Waste regulations prohibit the disposal of certain construction-related wastes in Massachusetts, including, but not limited to, metal, wood, asphalt pavement, brick, concrete, clean gypsum wallboard. Further guidance can be found at: https://www.mass.gov/guides/massdep-waste-disposal-bans.

MassDEP regulations also ban disposal of food and other organic wastes from businesses and institutions that dispose of more than one ton of these materials per week. The ban is one of MassDEP's initiatives for diverting at least 35% of all food waste from disposal statewide by 2020. Diverted food waste may be composted, converted to energy (through anaerobic digestion), recycled, or reused. Additional information on the Commercial Food Material Disposal Ban can be found at: https://www.mass.gov/guides/commercial-food-material-disposal-ban.

C&D Recycling

Many construction and demolition materials are currently banned from disposal or transfer for disposal in Massachusetts (https://www.mass.gov/guides/massdep-waste-disposal-bans). Therefore, MassDEP encourages the Proponent to make a significant commitment to construction and demolition (C&D) waste recycling activities as a sustainable measure for the project and to assist in complying with waste ban requirements. MassDEP considers an asphalt, brick, and concrete (ABC) rubble processing or recycling facility (pursuant to the provisions of Section (2)(b) under 310 CMR 16.03), the Site Assignment regulations for solid waste management facilities), to be exempt from the site assignment requirements, if the ABC rubble at such facilities is separated from other solid waste materials at the point of generation. In accordance with 310 CMR 16.03(2)(b), ABC can be crushed on-site with a 30-day notification to MassDEP. However, the asphalt is limited to weathered bituminous concrete (no roofing asphalt), and the brick and concrete must be uncoated or not impregnated with materials such as roofing epoxy. If the brick and concrete are not clean, the material is defined as C&D waste and requires either a Beneficial Use Determination (BUD) or a Site Assignment and permit before it can be crushed.

Pursuant to the requirements of 310 CMR 7.02 of the Air Pollution Control regulations, if the ABC crushing activities are projected to result in the emission of one ton or more of particulate matter or other pollutant to the ambient air per year, and/or if the crushing equipment employs a diesel oil fired engine with an energy input capacity of three million or more British thermal units

[1] Note the Draft 2020-2030 Solid Waste Master Plan is in review and may be finalized in late 2020.

per hour for either mechanical or electrical power which will remain on-site for twelve or more months, then a plan application must be submitted to MassDEP for written approval prior to installation and operation of the crushing equipment.

Asbestos

Pursuant to 310 CMR 7.15 the removal of asbestos from the buildings must adhere to the special safeguards defined in the Air Pollution Control regulations. An asbestos survey to identify all asbestos containing materials (ACM) shall be conducted by a Massachusetts Department of Labor Standards certified Asbestos Inspector. All identified ACM shall be abated prior to demolition activities. The Proponent is required to submit to MassDEP an Asbestos Removal Notification (Form AQ04 (ANF-001)) at least 10 working days prior to initiating work for any project involving asbestos abatement, removal, or disposal. If any ACM will need to be abated through non-traditional abatement methods, the Proponent must apply for and obtain approval from MassDEP, through Application BWP AQ36 - Application for Non-Traditional Asbestos Abatement Work Practice Approval.

Pursuant to 310 CMR 7.09, for any Construction and Demolition, except in a residential building with fewer than 20 units, the Proponent is required to submit to MassDEP a Construction/Demolition Notification (Form BWP AQ06) at least 10 working days prior to initiating work. MassDEP Asbestos, Construction and Demolition Notifications can be found at: https://www.mass.gov/guides/massdep-asbestos-construction-demolition-notifications.

Pursuant to 310 CMR 19.061, disposal of ACWM within the Commonwealth must be at a facility specifically approved by MassDEP. The Proponent is advised that asbestos containing waste materials (ACWM) are a special waste as defined in the Solid Waste Management regulations. There are specific ACWM disposal exceptions for intact vinyl asbestos tile (VAT) and asphaltic-asbestos felt and shingles. The disposal of the ACWM outside the jurisdictional boundaries of the Commonwealth must comply with all the applicable laws and regulations of the state receiving the material. Pursuant to 310 CMR 16.05, ACM including VAT, and/or asphaltic-asbestos felts or shingles may not be disposed of at a facility operating as a recycling facility.

Recycling Infrastructure

MassDEP supports voluntary initiatives to institutionalize source reduction and recycling into operations. Adapting the design, infrastructure, and contractual requirements necessary to incorporate reduction, recycling and recycled products into existing large-scale developments has presented significant challenges to recycling proponents. Integrating those components into developments during the planning and design stage enables the project's management and occupants to establish and maintain effective waste diversion programs.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@mass.gov at (978) 694-3258 for more information on wetlands issues. Please contact John.MacAuley@mass.gov at (978) 694-3262 for further information on solid waste, recycling, and asbestos issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (978) 694-3304.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Eric Worrall, Rachel Freed, John MacAuley, MassDEP-NERO

MASSACHUSETTS WATER RESOURCES AUTHORITY
Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

December 13, 2021

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
Attn: MEPA Office, Erin Flaherty
Boston, MA 02114

Subject: EOEEA #16473 – Environmental Notification Form
Alewife Park, Cambridge MA

Dear Secretary Theoharides,

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Environmental Notification Form (ENF) submitted by IQHQ-Alewife (the "Proponent") for Alewife Park (the "Project") in Cambridge, Massachusetts. The approximately 19.6-acre Project site is bounded by Whitmore Avenue to the north, Alewife Brook Parkway to the west, the MBTA Alewife Headhouse and Jerry's Pond to the south, and Russell Field and the Alewife Linear Park to the east. The site currently contains seven multi-story and single-story structures of various ages. The Project involves redevelopment of the site to include six structures containing a mix of office and life sciences uses as well as associated parking.

MWRA's comments on the ENF relate to wastewater issues and the need for Infiltration/Inflow (I/I) Removal, MWRA Enabling Statute Section 8(m) Permitting, and Discharge Permitting from the Toxic Reduction and Control (TRAC) Department.

Wastewater

The ENF reports that the Project will generate wastewater flow of approximately 91,306 gallons per day (gpd), which the Proponent reports is an increase of 62,656 gpd over the estimated existing wastewater generation of 28,650 gpd. According to the City of Cambridge sewer and storm drain maps, the Project site is served by separate City-owned sanitary sewers and storm drains that conveys the wastewater flows to Alewife Brook Conduit, then to MWRA's North Metropolitan Sewer, which conveys flows to MWRA's Chelsea Creek Headworks and ultimately the Deer Island Treatment Plant. In large storms, flows exceeding the capacity of the Alewife Brook Conduit can overflow at several CSO outfalls to Alewife Brook in large storms

To ensure that the Project's new wastewater flow does not increase system surcharging and overflows in large storms and does not compromise the water quality benefits of MWRA's recently completed $912 million region-wide CSO control program, the Proponent should fully mitigate the

Project's wastewater flow impacts with infiltration/inflow ("I/I") or stormwater removal in compliance with Massachusetts Department of Environmental Protection ("MassDEP") regulation and in accordance with City of Cambridge I/I policy.

Section 8(m) Permitting

Section 8(m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, allows the MWRA to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA, with the goal of protecting Authority-owned infrastructure. Due to the proximity of MWRA infrastructure to the Project site an 8(m) permit may be required. The Proponent should contact Kevin McKenna in the MWRA Water and Wastewater Permitting Group at 1 (617) 305-5707 for assistance related to this matter.

TRAC Discharge Permitting

MWRA prohibits the discharge of groundwater and stormwater into the sanitary sewer system, pursuant to 360 C.M.R. 10.023(1) except in a combined sewer area when permitted by the Authority and the local community. The Project site has access to a storm drain and is not located in a combined sewer area. Therefore, the discharge of groundwater or stormwater to the sanitary sewer system associated with this Project is prohibited.

A Sewer Use Discharge Permit is required prior to discharging industrial process and/or laboratory wastewater associated with the Project into the MWRA sanitary sewer system. For assistance in obtaining this permit, a representative from the proposed laboratory or commercial space should contact Emily Johnson, Industrial Coordinator, in the TRAC Department at (617) 305-5619.

Any gas/oil separators in parking garages associated with the project must comply with 360 C.M.R. 10.016 and State Plumbing Code. The installation of the proposed gas/oil separators may not be back filled until inspected and approved by the MWRA and the Local Plumbing Inspector. For assistance in obtaining an inspection the Proponent should contact Alix Pierre Louis, Regional Manager, at (617) 305-5660.

On behalf of the MWRA, thank you for the opportunity to provide comments on this Project. Please do not hesitate to contact Katie Ronan of my staff at (857) 289-1742 with any questions or concerns.

Sincerely,

Rebecca Weidman
Director
Environmental and Regulatory Affairs

cc: John Viola, MassDEP

Mystic River
WATERSHED ASSOCIATION

December 13, 2021

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attn: Tori Kim, MEPA Director
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: Comments on Environmental Notification Form (ENF), Alewife Park, Cambridge

Dear Secretary Theoharides and Director Kim:

The Mystic River Watershed Association (MyRWA) appreciates this opportunity to comment on the Environmental Notification Form filed for the proposed Alewife Park development in Cambridge, MA.

The Mystic River Watershed Association is a 501(c)(3) nonprofit organization founded in 1972. The organization's mission is to protect and restore clean water and related natural resources in the watershed's twenty-two communities and to promote responsible stewardship of our natural resources through educational initiatives. MyRWA accomplishes its mission by forging links with citizens' groups, universities, businesses and government agencies. These alliances enable MyRWA to accomplish work throughout the watershed, documenting current conditions and advocating for resource management and protection. This collaborative approach creates a strong watershed voice and attracts much-needed public and private resources to the Mystic.

As an environmental organization, MyRWA is particularly attuned to how proposed projects will affect existing conditions within urbanized areas like that surrounding Alewife Brook. MyRWA notes that the Alewife Park ENF is comprehensive and thoughtfully prepared, with strong effort to include contributions from community and citizens' groups.

MyRWA applauds the Proponent for including in its objectives:

- Improving public access around Jerry's Pond, with pathways, boardwalks, viewing stations, seating, and picnic areas.
- Fostering education and community-building by partnering with Green Cambridge and Mass Audubon to build and financially support a new Communal Garden and Ecocenter.
- Creating more connected pedestrian and bicycle connections within this commuter hub.
- Building with green infrastructure principles such as targeting LEED Gold -level certification, planting 100s of trees, and increasing permeable surfaces.
- Managing stormwater with retention strategies that anticipate regular, heavy rainfall.

This development offers a once-in-a-generation opportunity to create sustainable, resilient, and just infrastructure. The Alewife Park project would further benefit the natural resources of the Mystic River watershed if it were to satisfy the following:

Greater care with soil mitigation. Soil test results confirm the area to be heavily contaminated with asbestos and hydrocarbons. The Proponent needs to take every precaution to protect the health of the community during construction activities. This protection should include enclosing and venting across the site in areas as they are actively being disturbed.

More aggressive tree-planting plan. The Proponent outlines a commitment to planting "approximately 500" new trees on the site. We propose the area could support a much denser canopy. Using the Miyawaki method of reforestation, the site would be improved by addition of microforests. Tree planting should be prioritized in areas where people transit through the site whenever possible.

Greater clarity on commitment to maintain new tree planting. The Proponent declares a dedication "to providing the care required to assure sustainability." While the Proponent offers a concrete commitment to host a tree nursery for Cambridge's Backyard Tree Planting Program. The commitment to ensure trees planted on site reach the goal of increasing the tree canopy with mature plantings needs to be met with a plan for watering, maintenance, and replacement of the trees planted.

Stormwater mitigation. Cambridge has highlighted Alewife as the area of the city most vulnerable to extreme flooding from climate change, and one of the six areas in the city most vulnerable to extreme heat, also from climate change. The Proponent includes plans for flood mitigation that can be improved:

- The Proponent identifies the a large area on the northeast of the site for compensatory flood storage. However using the southwest corner of the site (at the intersection of Rindge and Alewife Brook Parkway) for some additional compensatory flood storage would provide the benefits of (a) de-paving and making part of the land permeable and (b) save trees targeted for cutting at the northeast of the site.
- Many portions of the area around Jerry's Pond are paved just under the topsoil. De-paving the entire area around Jerry's Pond will improve the permeability of the site, and will have profound effects on the site's ability to absorb and recharge storm water during flood events.
- The Proponent must meet Cambridge's new development stormwater drainage standards.
- Stormwater run-off in this heavily trafficked area is also a concern. Converting the embankment along Rindge Avenue to wetlands will provide an area to filter road run-off contaminants before they enter the pond.

Connectivity. Remembering that this area sees heavy commuting and recreational use, the Proponent should design bike paths separated from pedestrian paths. Keeping bikes separate from pedestrians and from cars aligns with Cambridge's Complete Streets program.

In closing, we are encouraged to see a development that will redevelop the existing site and provide benefits to the community and to the environment. If you have any questions or require additional information, please contact MyRWA at (781) 316-3438 or by emailing patrick@mysticriver.org

Sincerely,

Patrick Herron, Executive Director
Mystic River Watershed Association

From:	Cambridge Bicycle Safety
To:	Flaherty, Erin (EEA)
Cc:	Katherine Beaty; Ruthann Rudel
Subject:	Alewife Park - Cambridge ENF Comment
Date:	Monday, December 13, 2021 1:59:27 PM

To: Erin Flaherty December 13, 2021

Environmental Analyst
Massachusetts Environmental Policy Act Office
Erin.flaherty@mass.gov
c: (617) 874-0589

SUBJECT: Alewife Park - Cambridge ENF Comment

EEA NO.: 16473

Dear Erin Flaherty,

We are writing on behalf of Cambridge Bicycle Safety (https://www.cambridgebikesafety.org/), a volunteer group of residents working to make Cambridge streets safer, and as neighbors of the proposed IQHQ-Alewife Park development. **There is one critical area of the project that we want to call to the attention of the MEPA Office and MassDOT: the need for improved connectivity between important and highly used off-road bicycle routes connecting the Linear Path, which will run through the site,** with the Minuteman and Fitchburg Paths and with existing and future routes such as the Belmont Community Path, Somerville Community path extension, and the Grand Junction, all of which will rely on the connections at this site.

Specifically, we are writing to ask MASSDOT and the MEPA office to focus especially on improving conditions for people walking and bicycling by creating **a raised table crossing and high quality two-way bike and pedestrian path along the Alewife Station Access Road, from the west side of the IQHQ site through the tunnel to Steel Place.** While IQHQ's current proposal will provide a bypass around Russell Field, it will feed the high volume of commuter bicycle traffic into Alewife Park. Due to lack of markings, poor road quality, blind curves, and narrow paths, foot and bicycle traffic is contentious and dangerous throughout this area.

The current infrastructure, which would be retained in the present IQHQ plan, forces people walking and biking, at a point of low visibility, to cross Alewife Station Access Rd. with traffic speeding up to merge onto Route 2. At rush hour, vehicles already begin to assume two lanes, making it even more difficult for people to cross. Then people on bicycle and foot squeeze onto the narrow boardwalk by Yates pond. A bi-directional physically separated bicycle/pedestrian lanes under the Alewife Access Road tunnel would calm the traffic, making it easier for people walking to safely cross.

We believe the Alewife Station Access Rd. tunnel can accommodate a contraflow bicycle lane and an in-direction bicycle lane, both separated from the motor vehicle lane by flexposts, while providing sufficient space (at least 11 feet) for emergency vehicles, buses, trucks, and cars to utilize the middle of the tunnel. If possible, removing the jersey wall barriers would allow further separation from the motor vehicle traffic and separate spaces for pedestrians and bikes.

Beyond the tunnel, one additional improvement is required to complete the connection between the Linear Path and the Minuteman and Fitchberg paths: adding bi-directional protected bicycle lanes along the Alewife Station Access Road between the tunnel and the intersection with Steel Place. Removing bicycles from the narrow shared pedestrian and bicycle boardwalk along Yates Pond into bi-directional protected bicycle lanes on the road surface would make the area safer and more comfortable for people traveling in all modes. There is plenty of width on the access road to accommodate these protected bicycle lanes. Incorporating a protected bicycle lane on both sides of Alewife Station Access Rd. (one contraflow) and elevating the crosswalk would give the area a road diet, slowing vehicle traffic, and making crossing safer. East of the tunnel, vehicles can begin to queue into two lanes in preparation to merge onto Route 2.

On a separate matter, Cambridge Bicycle Safety would like to point out the IQHQ's multi-use path proposed along Rindge would put pedestrians and cyclists at odds along a narrow and busy corridor. Friends of Jerry's Pond's proposal would create a complete street solution, with separation for people on foot and bicycle. Their proposal is made possible by reshaping the pond, which would provide opportunities for planting 150-175 trees in the public realm to provide shade, reduce heat island, improve air quality, and add to habitat.

These improvements are critical to address in order to ensure safe and efficient passage through this area by the many people who are and will be walking and biking through this busy corridor. In addition, these improvements will move Cambridge closer to meeting its enacted policy goals: to reduce motor vehicle trips, encourage mode shift to sustainable transportation, and eliminate preventable deaths and

injuries that result from inadequate infrastructure.

Please reach out with any questions to info@cambridgebikesafety.org.

Sincerely,
Katherine Beaty
Ruthann Rudel
On behalf of Cambridge Bicycle Safety

From: Stephen Kaiser
To: Flaherty, Erin (EEA); Lauren; Lucien, Lionel (DOT); Garrity, Michael (DOT); Brennan, Andrew (MBTA)
Subject: ENF for Alewife Park" 16473 Oct 13 comment
Date: Monday, December 13, 2021 7:03:34 PM

Re : ENF and Scoping on "Alewife Park" 16473

For many years. Planning officials have identified the Alewife/Route 2 area as a prime development area in Cambridge, but it is also a problem area for traffic, flooding, hazardous wastes, sewer overflows, as well as numerous community issues. Between 1968 and 1995 the Route 2 area was the focus of state highway plans for new roads and bridges.

The last major modifications occurred in 1985 with the "Interim Access" plan to improve circulation to both the Alewife T station and to development lands, and that is what we see today. Yet Alewife has had a long history of traffic congestion, because state Route 2 has stopped at the parkway since 1933 and traffic has been queuing on Route 2 in the morning ever since. In the afternoon queues often extended from Massachusetts Avenue on the north, and to Huron Avenue on the south – in effect one long outbound queue.

State highway officials abandoned any substantial road changes after 1995, probably out of frustration and the lack of simple solutions. For the past quarter century the City of Cambridge has proceeded to advocate for more development and higher density zoning at Alewife, including the Alewife Park site (former Dewey & Almy), the Alewife Triangle and quadrangle areas, as well as development along Route 2. Since 1995 City officials have never had a traffic plan for Alewife, and have shown no interest in the traffic issue.

I note that the full ENF includes a TIS traffic study for the City of Cambridge. It includes some professional work that needs to be recognized. However, MEPA appears to have been excluded from prior scoping.

An initial scoping meeting with Cambridge occurred on January 21, 2021. A transportation scoping letter to MassDOT was sent on July 20, 2021. (p. 90 of 485). I am concerned that an early ENF should have been filed at the beginning of this year to reflect scoping that might be looked for by MEPA. The proponent has prepared a chronology of meetings and discussions which appears admirable, except that it left out MEPA.

The City's scope for the TIS report is much too limited and does not include Concord Avenue and the Quadrangle area. Narrow scopes issued by Cambridge have been a common problem over the years, and the Alewife Park TIS continues this unfortunate pattern.

It is unlikely that we will see another ENF at Alewife seeking a MassDOT access permit, and thus all ENFs will probably lack traffic jurisdiction. The opportunity for such foresight appears to have passed us by, especially for useful MEPA review.

The TIS at Mass Avenue, limited as it is, contains some very strange traffic results. In the AM peak hour, the V/C ratio for the existing Parkway northbound thru-right movement is shown for 2.41, which is impossible for existing conditions. At the same location in the afternoon, the existing V/C is 3.55. Something is seriously wrong with these two calculations.

Capacity calculations are made for other locations and appear competently done, but the results are buried in Chapter 5, pages 5-20 and 5-21. Such calculation summaries are the closest to making even the slightest attempts to describe traffic conditions now and in the future. There is no discussion of existing and future queue lengths. Except for pages 5-20 and 5-21 there is nothing in the ENF text to indicate that there might be any problem on surrounding roads with traffic congestion.

One legal awkwardness relates to the ramp under the parkway curving left towards outbound Route 2. It was built in 1985 as part of the Interim Access plan. Complexities arise from the fact that the MBTA did the original design for the road, the state highway department did the construction, and much of the ramp is on private property. Land ownership involves MassDOT, MBTA, DCR, and IQHQ. The Parkway and land between the parkway and IQHQ are owned by DCR. The DCR ownership is discontinuous – interrupted by a strip of former railroad land originally owned by the B&M railroad and probably acquired in the 19th century. A single spur track connected the Freight Cutoff (now the Linear Park corridor) to the Bedford branch through Arlington Center. It was removed well before 1970.

In 1908 the Metropolitan District Commission made a bulk taking of Little River and Alewife Brook, based on a primary public health concern for malaria from swamplands, but no distinction was made between highways and parks. No railroad lands were taken. If all DCR lands in the area are seen as a single parkland taking, this places DCR as the roadway landowner and MassDOT "parkway land" may be nothing more than an easement. As things have stayed since 1995, the ramp to Route 2 contains a gated entry with access to IQHQ property only. It is a driveway or break in access. Note that figures 5-17 thru 5-20 do not show the connection from the ramp

to outbound Route 2.

The legal status of the ramp, and who has ownership rights, easements and rights to issue driveway permits remains a considerable uncertainty. The proponent should have begun early discussions with DCR to determine the history of land ownership in the area. The legal complexities here may be quite a challenge for Mr. Galluccio to sort out.

My sense of the process to date in terms of public outreach and response to citizen suggestions is it may be the best that can be expected for this site. I have been unable to detect any interest by Cambridge officials, businesses or residents in recognizing and dealing with traffic problems. If indeed there is no interest, it may be that the entire Alewife area is a hopeless case.

Stephen H. Kaiser

Cambridgeport

==========

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Secretary & CEO

massDOT
Massachusetts Department of Transportation

December 15, 2021

Kathleen Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2150

RE: Cambridge – Alewife Park – ENF
(EEA #16473)

ATTN: MEPA Unit
Alex Strysky

Dear Secretary Theoharides:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the Environmental Notification Form for the Alewife Park Project in Cambridge as prepared by the Office of Transportation Planning. If you have any questions regarding these comments, please contact J. Lionel Lucien, P.E., Manager of the Public/Private Development Unit, at (857) 368-8862.

Sincerely,

David J. Mohler
Executive Director
Office of Transportation Planning

DJM/jll

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

cc: Jonathan Gulliver, Administrator, Highway Division
Carrie Lavallee, P.E., Acting Chief Engineer, Highway Division
John McInerney, P.E., District 6 Highway Director
Neil Boudreau, Assistant Administrator of Traffic and Highway Safety
Boston Metropolitan Planning Organization
Planning Department, City of Cambridge

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Secretary & CEO

massDOT
Massachusetts Department of Transportation

MEMORANDUM

TO: David Mohler, Executive Director
Office of Transportation Planning

FROM: J. Lionel Lucien, P.E, Manager
Public/Private Development Unit

DATE: December 15, 2021

RE: Cambridge: Alewife Park – ENF
(EEA #16473)

The Public/Private Development Unit (PPDU) has reviewed the Environmental Notification Form (ENF) for the proposed Alewife Park project in Cambridge by IQHG-Alewife LLC (the "Proponent"). The Development Site is bound by Whittemore Avenue to the north, Alewife Brook Parkway to the west, the Massachusetts Bay Transportation Authority (MBTA) Alewife Headhouse and Jerry's Pond to the south and Russell Field and the Alewife Linear Park to the east (the "Project Site"). The existing site consists of seven multi-story and single-story structures of various use and age. The Project Site also consists of four (4) surface parking lots located on the northern side of Whittemore Avenue that will be used for accessory parking. Adjacent to the existing buildings are surface parking lots and service driveways that provide parking and access to the campus buildings from Whittemore Avenue.

The Proponent intends to redevelop the approximately 19.6-acre site into a mixed-use building that comprises up to approximately 735,500 square feet (sf) of laboratory, research and development, retail, and office (lab/R&D/office) uses, new landscaped and public realm improvements, and approximately 653 parking spaces, including 350 parking garage spaces ("Project"). The Project will result in a net reduction in the number of parking spaces serving the Project Site by 69 parking spaces down from the current existing parking count of 722 spaces. Approximately 198,000 sf of the existing footprints will be demolished as part of the Project, except for two buildings, which will be reused. Therefore only 353,500 sf will represent net new space. The proposed site plan includes six structures connected by a service drive, pedestrian paths, and landscaped areas.

Based on the information presented in the ENF, the Project is expected to generate 2,755 unadjusted new vehicle trips per day. The Project requires MassDOT Chapter 40 Section 54A Approval. The Project will require a Vehicular Access Permit from MassDOT, as it abuts the state highway layout and has a curb cut along Alewife Station Access Road, which is listed as MassDOT-owned property. As part of the permitting process, the Proponent should consult with MassDOT, the Department of Conservation and Recreation (DCR) and the MBTA to clarify roadway or property ownership in and around the Project Site.

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

The ENF includes a Transportation Impact Assessment (TIA) prepared in general conformance with the current MassDOT/EOEEA *Transportation Impact Assessment Guidelines.* MassDOT and the MBTA offer the following comments.

Trip Generation

According to the ENF, the following Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) Land Use Codes (LUCs) 710 – General Office, 932-High-Turnover Restaurant, and 760 – R&D Center would most accurately reflect the proposed development. The ENF also includes an adjusted trip generation that reflects mode share. The mode share estimates are based on U.S. Census data for the census tract in which the project is located. When adjusted for mode share, the Project would result in a trip generation of 220 net-new vehicle trips during the morning peak hour, 159 transit trips, 42 bicycle trips,78 walk trips, and 47 other trips during the weekday morning peak hour and 276 net-new vehicle trips, 108 transit trips, 29 bicycle trips, 68 walk trips, and 32 other trips during the weekday evening peak hour.

Safety

The TIA includes a safety analysis for all intersections within the study area. The analysis calculates crash rates using MassDOT data for the continuous five-year period of 2015 through 2019. According to the analysis, the unsignalized intersections of Whittemore Avenue at Magoun Street, Whittemore Avenue at Madison Avenue, and Whittemore Avenue at West Site Driveway exceed the MassDOT Highway District 6 crash rate average. The intersection of Massachusetts Avenue at Alewife Brook Parkway is a Highway Safety Improvement Program (HSIP) Cluster location for the years 2015 to 2017. Massachusetts Avenue within the study area also falls within the 2008-2017 HSIP Bicycle Clusters. The Proponent should consult with the City of Cambridge and MassDOT regarding potential safety improvements at these locations.

Site Access Improvements

The Project Site is accessed via two existing site driveways on Whittemore Avenue to the west of Seagrave and Alewife Station Access Road that will serve all users including garage traffic, loading, as well as bicycles and pedestrians. Another driveway is also proposed on Whittemore Avenue where the existing surface lot curb-cut is located (between Harrison and Madison Avenue), but this driveway will be restricted for use only by emergency vehicles and occasional maintenance activities, as well as bicycles and pedestrians. Harvey Street will be restricted to emergency vehicles, pedestrian, and bicycle access only. Both restrictions were put in place to prioritize the separation of vehicles and non-motorists and to protect neighborhood roadways from unintended cut-through traffic conditions.

The TIA analysis assumes that most of the new vehicle trips will access/egress the site via either the Whittemore (west) driveway or the Alewife Station Access Road driveway. The site driveway on the Alewife Access Road (the'jughandle") should be designed to provide a raised crossing for the shared-use path. The Proponent should also evaluate operational improvements to the jughandle (widening to either two or three lanes, to provide additional capacity for traffic using the jughandle to reach Route 2 westbound, and/or for potential transit priority improvements that would assist the Proponent in reaching their stated mode share goals).

Traffic Operations

In the ENF, the Proponent provided a comprehensive analysis of 15 study area intersections for the No-Build and Build conditions. MassDOT review of the analysis concurs that the Project-generated trips will have minimal impacts with no changes to the level of service for any intersection. However, we note that some locations within the study area will continue to operate with excessive delay with or without the Project.

Transit

The Project Site is directly served by five MBTA bus routes: Routes 62/76 (combined route), 67, 77, 83, and 350. Bus route 77 stops on Mass Ave at Magoun St approximately 0.25 miles northwest of the site, while Routes 62/76, 67 and 350 stop at Alewife Station which has a headhouse adjacent to the site. In addition, Route 83 stops at Rindge Ave at Russell Field approximately 0.25 miles south of the Project Site. A combined Braintree/Ashmont Red Line service is provided every 9 minutes during the peak period/rush hours and about every 12-16 minutes during off-peak periods.

The ENF includes a transit analysis compliant with the MBTA's Office of Performance Management and Innovation's (OPMI) methodology for calculating the existing, future No-Build, and future Build comfort metrics (as evaluated in the Service Delivery Policy) for each bus route within the project study area. Anticipated impacts to bus passenger crowding are minimal. The Project will generate few additional transit riders to bus trips already exceeding the MBTA's policy capacity thresholds for passenger crowding, under 2019 service levels and baseline ridership. The MBTA's Bus Network Redesign initiative is expected to implement changes to these routes in the coming years, addressing service routes, frequency of service, span of service, stop spacing, and coverage area, all which will modify the passenger load profile. We note that the transit analysis is based on 2019 routes and timetables. As of the Fall of 2021, approximately half of the bus routes and trips at Alewife Station have been suspended, significantly reducing transit capacity. Additionally, Red Line headways may have not been correctly listed. The Proponent should consult with the MBTA to discuss revising the analysis and determine if the assumed future mode share is reasonable.

As part of the Project, the Proponent is coordinating with the MBTA to make certain

improvements to the Alewife Station headhouse plaza. Additionally, the Proponent proposes off-site improvements to existing bicycle and pedestrian paths on land controlled by the MBTA and DCR. The MBTA has indicated that they would support the Proponent also looking at infrastructure needs to construct an outbound bus lane on the Alewife on-ramp (outbound), and potentially making infrastructure upgrades and installing the bus lane to improve transit reliability in this corridor. This would match the 'inbound' bus lane recently installed by MassDOT Highway in coordination with the MBTA.

Multimodal Access and Facilities

The Project Site and related site plan include separated bicycle and pedestrian connections, most importantly a new Linear Path connection from the Minuteman Commuter Bikeway and the Fitchburg Cutoff to the Linear Path using the new service road. In addition, the site design is intended to improve bicycle and pedestrian circulation across the Project Site and to and from the MBTA Red Line Alewife Station headhouse.

Outside of the Project Site, the Proponent is working on various improvements which will improve bicycle and pedestrian travel beginning at the Alewife Station headhouse. The Proponent is committed to working with the MBTA to provide surface improvements to the headhouse.

Also, outside of the Project Site, the Proponent has also committed to provide public access improvements to Jerry's Pond. There are two components of this that are transportation related:

(1) a new pedestrian path that serves as a pedestrian alternative from the linear path from Rindge Avenue to the MBTA Alewife Station headhouse; and
(2) widening of the path along Alewife Brook Parkway to the MBTA Alewife Station headhouse.

Transportation Demand Management Program

To reduce site trip generation, the TIA includes a Transportation Demand Management (TDM) program. The Proponent details the following TDM measures in the ENF with the goal of further reducing vehicle trips by employees and visitors of the project:

- Establish membership in the Alewife TMA, which provides employees with the benefit of free access to the shuttle buses operated by the TMA, ride-matching services, and access to emergency ride home to all employees who use alternative commute modes.
- Require tenants to provide, at a minimum, a 50% transit pass subsidy to employees.
- Provide a 19-dock Bluebikes Station to support the Project;
- Provide Bluebikes corporate membership (minimum Gold level) paid by employer for

employees who choose to become Bluebikes members;
- Dedicate preferential carpool/vanpool parking spaces on site. Monitor the use of the carpool/vanpool spaces to designated additional spaces as needed to satisfy demand;
- Provide a bicycle repair station, to include air pumps and essential bike repair tools;
- Designate a Transportation Coordinator for the site responsible for:
    - Aggressively promoting and marketing non-SOV modes of transportation to employees, including posting information on the Project's web site, social media, and property newsletters;
    - Informing employees about dynamic carpool (ridesharing) services;
    - Performing annual transportation surveys;
    - Coordinating with the Alewife TMA;
    - Providing up to date information to all new employees through a New Employee Packet;

The Proponent intends to consult with the City of Cambridge and MassDOT to help implement the TDM program. We encourage the Proponent to consider additional measures such as exploration of parking cash-out policies for employees on-site who will not be travelling via private vehicle.

Transportation Monitoring Program

The Proponent would be required to conduct an annual traffic monitoring program for a period of five years, beginning six months after occupancy of the full-build project. It would include:

- Simultaneous automatic traffic recorder (ATR) counts at each site driveway for a continuous 24-hour period on a typical weekday and Saturday;
- Travel survey of employees and patrons at the site (to be administered by the Transportation Coordinator); and
- Weekday AM and PM peak hour turning movement counts (TMCs) and operations analysis at "mitigated" intersections, including those involving site driveways.
- Transit ridership counts

The goals of the monitoring program would be to evaluate the assumptions made in the ENF and the adequacy of the mitigation measures, as well as to determine the effectiveness of the TDM program.

MassDOT recommends that no further environmental review be required based on transportation-related issues. The Project is not expected to have a significant impact on traffic operations in the study area. Additionally, the Project is implementing streetscape and public realm features that enhance transit rider, pedestrian and bicycle accommodations, mobility, and safety. Finally, the Project's design and building amenities, parking supply, and TDM program were all developed with the intent of minimizing travel by single-occupant

automobile and maximizing transit use. The Proponent should continue consultation with DCR and the MBTA to address any easement or property right issues associated with access or any proposed improvements. If you have any questions regarding these comments, please contact me at *Lionel.Lucien@dot.state.ma.us*.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
100 CAMBRIDGE ST., SUITE 1020
BOSTON, MA 02114
Telephone: 617-626-7300
Facsimile: 617-727-0030

Charles D. Baker
Governor

Karyn E. Polito
Lt. Governor

Kathleen A. Theoharides
Secretary

Patrick Woodcock
Commissioner

22 December 2021

Kathleen Theoharides, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02114
Attn: MEPA Unit

RE: Alewife Park, Boston, EEA #16479

Cc: Maggie McCarey, Director of Energy Efficiency, Department of Energy Resource
Patrick Woodcock, Commissioner, Department of Energy Resources

Dear Secretary Theoharides:

We've reviewed the Environmental Notification Form (ENF) for the proposed project. The project includes 3 buildings of primarily mixed-use office, life science and laboratory space with some retail totaling 753,500-sf. The objective of this letter is to share strategies for the project to reduce greenhouse gas emissions (GHG) while also improving resiliency and affordability. These strategies include incorporation of:

- Efficient electrification of space heating, including:
    - For highly ventilated spaces (such as a lab/life-science, for example): low temperature, hydronic space heating with heat-input provided by hybrid, in-building, central plant consisting of air-to-water heat pump (primary) and gas boilers (secondary). Size the air to water heat pump to 20-40% of the heating peak load with the objective of providing 90% of the total annual space heating with air source. This approach can also work for speculative lab/life-science spaces, as well.
    - For all other spaces (including office and retail): hydronic space heating with 100% air to water heat pump input, or air source VRF, or air to air heat pumps.

- Building design and construction practices that result in low heating and cooling thermal energy demand intensity (heating and cooling "TEDI") by:
    - Maintaining envelope integrity with framed, insulated walls with continuous insulation;
    - Thermally-broken windows and other components to eliminate thermal bridges;
    - Minimizing glass curtain wall assemblies and excessive windows;
    - Low air-infiltration, confirmed with in-building air-infiltration testing;
    - Energy recovery;
    - Management of solar heat gains;
- Efficient electrification of water heating, where feasible;
- Extensive rooftop solar-readiness;
- Electric vehicle ready parking spaces.

Experience has shown that the above deliver 50 to 80% less emissions than projects built to Code while improving affordability and resilience. In addition, significant incentives may be available, including MassSave® incentives, Alternative Energy Credits (AECs), and Solar Massachusetts Renewable Target (SMART) credits.

Envelope, Heat Recovery, and Solar Gains

The combination of quality envelope, heat recovery, and management of solar gains can result in significant reduction in heating (and cooling) thermal energy demand intensity (TEDI, units of kBtu/sf-yr)[1]. In addition to reduced utility costs and emissions, the value of a targeted focus on heating and cooling TEDI results in:

- Simplified space heating electrification;
- Reduction, and possible elimination, of perimeter heating systems;
- Improved resiliency;
- Reduced peak demands;
- Improved occupant comfort;
- Reduced maintenance.

[1] Although they have the same units, heating and cooling TEDI is not the same as heating and cooling energy use intensity (EUI). TEDI represents energy requirement, or demand, not energy consumption. For guidance on how to extract TEDI information from building models see "Energy Modeling Guidelines", City of Vancouver, Planning, Urban Design and Sustainability Department, Land Use Development and Policy Guidelines, Version 2.0, amended 18 July 2018 and "Designing to TEDI, TEUI, and GHGI Performance Metrics", International Building Performance Simulation Association (IBPSA), by Chan *et al*

Specific TEDI reduction strategies are:

- High-performance window and walls;
- Thermal-broken windows and components to eliminate thermal bridges;
- Low air-infiltration;
- Ventilation energy recovery;
- Energy recovery during concurrent heating and cooling;
- Solar gain management via external shading and/or low solar heat gain coefficient (SHGC)

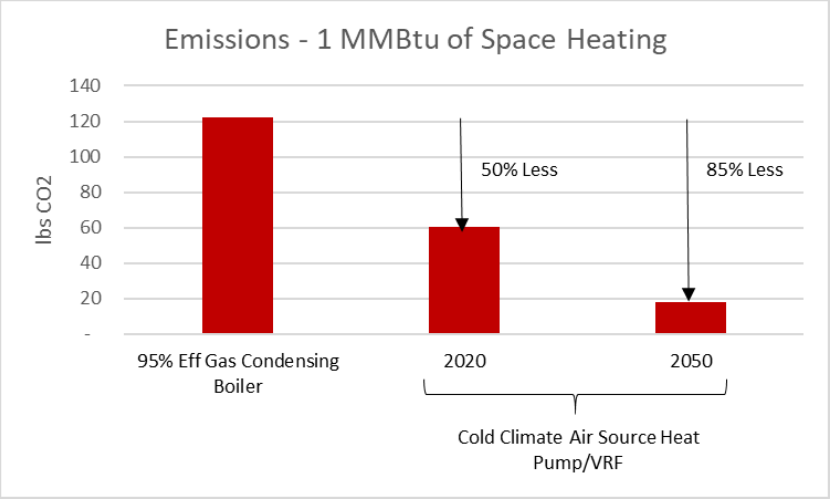
Buildings with curtain wall envelope require high performing windows and high performing opaque spandrels to achieve heating TEDI reductions. High performing windows and high performing opaque spandrels should be carefully evaluated if curtain-wall construction is considered.

Efficient Electrification – Space Heating

Efficient electrification of space heating entails the swapping of fossil fuels (natural gas, oil, and propane), or electric resistance systems, with cold-climate rated air source heat pumps or ground source heat pumps.

Electrification of space is a key mitigation strategy with significant short- and long-term implications on GHG emissions. Massachusetts grid emissions rates continue to decline with the implementation of clean energy policies that increase renewable electricity sources. The implication is that efficient electric space heating with cold climate air source heat pump (or ground source heat pump) has lower emissions than other fossil-fuel based heating options, including best-in-class (95% efficient) condensing natural gas equipment.

Currently, efficient electric heating has approximately **50% lower emissions** in Massachusetts than condensing natural gas heating. By 2050, and possibly sooner, efficient electric heating is expected to have approximately **85% lower emissions** in Massachusetts than condensing natural gas heating. See illustration below.



DOER recommends efficient electrification of space heating paired with the TEDI reduction strategies for all new construction.

Electrifying Space Heating for mixed use office and retail spaces

Office, retail and other mixed use commercial spaces can readily achieve 100% efficient electrification of space heating using either air to water heat pumps, VRF, or air to air heat pumps.

Electrifying Space Heating for highly ventilated spaces (life-science, laboratory)

High ventilation loads have made electrification of space heating a challenge in the past. However, in the last year, more than 90% of lab/office buildings reviewed by DOER have committed to partial electrification of space heating. The approach uses a hybrid of air to water (or ground to water) heat pumps with gas equipment as backup in which the heat pump provides 90% total annual heating end use.

Key strategies for this hybrid approach that we've seen projects of this nature use are as follows:

- Include a hot water distribution loop of 120°F;
- Include an in-building, centralized heating plant consisting of an air-to-water (or ground-to-water) heat pump and a gas-fired condensing boiler;
- Size the boiler for 100% of the peak heating load; size the air source heat pump for 25% to 50% of the peak heating load;
- Prioritize the heat pump operation first and utilize boiler only when loads exceed 20-40% of peak. The objective is to provide greater than 90% of the total annual heating with air source and having a gas heating use of 10 kBtu/sf-yr or less.

We recommend the project consider this approach.

Efficient Electrification – Service Water Heating

Similar to above, due to Massachusetts low electric grid emissions, even swapping from best in class condensing gas to heat pump service water heating results in significant emissions reduction. However, heat pump service water heating is challenging in some building settings.

In most cases, lab/office buildings have low service water loads. Heat pump service water heating using packaged, off the shelf, air source heat pump equipment is potentially feasible. Such units can be distributed throughout the buildings at or near the service water points of use. If water usage is low, we recommend this approach for those building types.

Regular office and retail buildings typically have low service water loads. Heat pump service water heating is recommended for this application.

In some cases, lab/office building can have larger service water loads and/or limited interior space to locate packaged heat pump water heating equipment near point of use. Alternative approaches in these applications include:

- *Centrally located air source water heating:* These systems consist of centrally located air source heat pumps, usually with the compressors outdoors, which provide hot water to water distribution piping to the end use locations. These are usually engineered solutions with less packaged equipment options.

- *Condensing gas hot water heaters*: These systems consist of either centrally located, or distributed, natural gas fired heating equipment. Centrally located equipment is preferable as it allows an opportunity to swap to heat pump water heating in the future.

- Some combination of above.

Opportunities for efficient electrification should be considered throughout the design process.

Solar PV

Rooftop PV can provide significant GHG benefits as well as significant financial benefits. Experience has shown that, with planning, up to 80% of roof space can be set aside for PV on roofs of low-rise, mid-rise, and high-rise buildings.

Even if PV is not installed during building construction, it is important to plan the project to ensure that roof space is set aside for PV and that roof space doesn't become unnecessarily encroached with HVAC appurtenances, diminishing the opportunities for future PV. Electrification of heating and low TEDI can both contribute to enabling more PV as these approaches can reduce rooftop equipment associated with conventional code HVAC.

Electric Vehicle (EV) Ready Parking Spaces

EV charging stations are critical for the continual transition towards electric mobility. Even if EV charging stations are not installed during construction, it is critical to maximize EV-ready spaces as it is significantly cheaper and easier to size electrical service and install wiring or wiring conduit during construction, rather than retrofitting a project later.

Opportunities to maximize EV-ready parking spaces and installed EV parking spaces throughout the design of this project.

Incentives

Buildings which incorporate the above strategies can qualify for significant incentives:

- MassSave® performance-based incentives[2] offer incentives for every kWh or therm saved compared to a program-provided energy model. The above energy efficiency strategies offer opportunities for large kWh and therm savings.

- Alternative Energy Credits (AECs)[3] offer incentives to electrify building space heating using heat pumps and/or VRF. This program also includes multipliers which increase value if the building meets Passivehouse standards or buildings built to HERs 50 or less. These credits may be distributed on a quarterly basis over time; or, may be distributed in a lump sum to the developer if certain conditions are met.

- Massachusetts SMART program[4] provides significant incentives for solar development on top of federal and state tax incentives. SMART includes pathways which allow solar production to be sold without off-takers. This may be of potential interest to building developers as this allows them to develop rooftop solar without necessarily engaging with building tenants. For this reason, setting aside rooftop solar PV areas helps ensure that building owners' ability to monetize the roof is not impacted.

Codes and Baseline

Massachusetts Stretch Code applies to this project. Stretch Code requires a 10% energy performance improvement over ASHRAE 90.1-2013-Appendix G plus Massachusetts amendments including C402.1.5 (envelope), C405.3 and C405.4 (lighting), C405.10 (EV charging), and C406 (three additional efficiency measures).

Three C406 additional efficiency measures should be included in the Baseline when calculating energy use of the Baseline. The same measures should also be incorporated into the final building, as well.

Current Project

In the submission, the project included information about planned GHG mitigation strategies. We are pleased to see the proposed the project committing to utilizing high performing building envelope by maintaining baseline window to wall ratio and using above code wall insulation. Envelope performance is estimated to perform approximately 27% better than baseline code. Additionally, the project will be installing approximately 280 kW of on-site PV with 14,000-sf of rooftop PV and 14,000-sf of parking canopy. We commend the project for these significant efforts.

<u>Lab/office building</u>

The lab/office building space and water heating is proposed to be gas, with no electrification. Additionally, the heating system is designed to distribute 140-degree hot water. This will make it difficult to transition to efficient electrification in the future.

[2] https://www.masssave.com/en/saving/business-rebates/new-buildings-and-major-renovations/
[3] https://www.mass.gov/guides/aps-renewable-thermal-statement-of-qualification-application
[4] https://www.mass.gov/solar-massachusetts-renewable-target-smart

In response to a requirement for a net zero study, the submission included two electrification scenarios:

One scenario uses 100% electrification scenario with air source heat pumps. The submission described this approach as infeasible at this time due to upfront costs.

The submission also discussed a hybrid approach that would use air source heat pumps combined with an electric resistance (not gas) boilers. Note that the submission did not quantitively evaluate or model this scenario nor appears to be committing to this approach.

Both of the approaches above would be unusual approaches, based on our experience. None of the lab/office buildings the DOER has reviewed utilized either of the approaches in the above two bullets.

A scenario that was not included in the net zero study is the hybrid approach described on Page 4. This hybrid approach (heat pump primary with gas secondary where 90% of total annual heating is with heat pumps) is being used on more than 90% of all lab/office buildings submitted to MEPA in 2021. Key to this approach is to use 120F distribution water (not currently proposed 140F), a temperature which is more suitable for heat pump production.

If the goal of the net zero study is to have 100% electrification, we recommend a strategy of using a hybrid (electric/gas) approach for the initial construction with the accommodations necessary to fully electrify in the future. Full electrification could be either 100% air source heat pumps, or, near 100% air source with some small percent electric resistance.

Without this future accommodation approach, full electrification may be deemed too difficult to do today, and miss the opportunity for significant GHG mitigation through hybrid electrification instead of heating with 100% fossil fuel (natural gas).

The hybrid air source heat pump and gas approach described above is used by over 90% of the lab/office projects we reviewed in 2021. The DOER did not see a justification why this commonly used approach is not being used for this project.

Note that the water heating is also proposed to be gas. The project should demonstrate that this lab/office has very high service water loads, justifying gas water heating. Otherwise, the service water heating can and should be readily electrified with air source heat pumps.

<u>Office and retail</u>

The submission is not clear whether there is normally ventilated office proposed, or, whether al the proposed space is highly ventilated lab/office. This should be clarified. If there is any normally ventilated office space, such space can be readily electrified with air source heat pumps.

All the proposed retail space can be readily electrified with heat pumps, as well.

Key Questions

The strategies described above provide pathways to GHG mitigation, increase affordability, and improve resiliency. The following are key questions that should be considered throughout the planning process:

1. Was each space use type modeled separately? Models should be separated by building or building area use type as follows:

    a. Office
    b. Commercial
    c. Retail
    d. Lab
    e. Life-science
    f. etc.

2. Did the project ensure baseline building scenarios meet all requirements including relevant MA amendments? Each building should clearly indicate which three C406 measures are being used in the baseline. C406 measures are required for Code. For example, if the project choses additional solar PV, the solar PV must be installed to meet Code. Energy benefits from C406 improvements should not count toward Stretch Code 10% improvement.

3. Did the project demonstrate compliance with envelope requirements? To demonstrate compliance each building could develop two UA analysis tables, as follows:

    a. One table that shows how the baseline complies with Table 5.5-5 of ASHRAE 90.1 2013 Appendix G plus Massachusetts Amendment C401.2.4. Fenestration limits will vary depending upon building type.

    b. A second table that shows how the proposed complies with 2018 IECC Tables C-402.1.3, C402.1.4, and C-402.4. Fenestration limit should be 30% when calculating minimum performance requirements for all building types.

4. Was above-code envelope used throughout? The following measures should be reviewed:

    a. Above code-threshold envelope should be used throughout (vertical walls, windows, roofs and exposed lower level floors). Priority should be given to increasing continuous insulation and framed insulated wall sections. Distinguish between R value of batt and R value of continuous insulation. Continuous insulation necessarily means insulation that is uninterrupted by hangers, studs, etc. Indicate planned wall assembly U value and wall construction type (mass, wood, metal stud, etc). Confirm that the relationship between R-value and assembly U-factor conform to Appendix A of the Code.

b. Glass curtain wall/spandrel systems should be avoided as these are the lowest performing wall systems.

c. Opaque curtain wall sections shall not have envelope performance larger than R-10.

d. Reduce air infiltration, along with field tests to confirm integrity.

e. Minimum recommended envelope for all building types, in summary, is an envelope with a 15% improved UA over IECC C402.1.5 minimum plus Passivehouse level air infiltration limit of 0.08 cfm at 75 Pa.

f. Low heating thermal energy demand intensity (TEDI). A combination of the above listed high-performing envelope measures paired with and heat recovery can deliver heating TEDI that is significantly smaller than code heating TEDI.

5. Did the project consider additional opportunities for high performing buildings? The project should consider approaches as follows:

   a. Office and retail: Improved envelope as described above. Downsize the HVAC as much as possible. Space heating with either (a) in-building centrally-located efficient electric space heating (air to water heat pump sized at 100% peak heating capacity with no gas boiler back-up) and/or (b) air to air heat pump/VRF . External shading and improved solar heat gain coefficient windows to control space cooling loads. Heat pump service hot water.

   b. Highly ventilated lab/office: Improved envelope as described above. Downsize the HVAC as much as possible. Low temperature (120F), hydronic space heating with heat-input provided by hybrid, in-building, central plant consisting of air-to-water heat pump (primary) and gas boilers (secondary). Size the air to water heat pump to 20-40% of the heating peak load with the objective of providing 90% of the total annual space heating with air source. Gas use for building space heating should be about 10 kBtu/sf-yr or less. Provide accommodations for future fully-electric building using either 100% air source or near 100% air source with back up electric resistance. External shading and improved solar heat gain coefficient windows to control space cooling loads. Electric heat pump service water heating unless very large service water loads justify gas hot service hot water.

6. Did the project evaluate incentives? Including:

   a. Estimate of Alternative Energy Credits

   b. Estimates of MassSave incentives, based on meeting with utility.

7. Did the project evaluate rooftop solar PV? This should include building roof plans showing location of planned solar and location of roof HVAC equipment and other appurtenances.

8. Did the project maximize EV-ready parking spaces. Confirm commitment to installed EV charging station and EV ready spaces.

Sincerely,

Paul F. Ormond, P.E.
Energy Efficiency Engineer
Massachusetts Department of Energy Resources

Brendan Place
Clean Energy Engineer
Massachusetts Department of Energy Resource