



City of Cambridge  
Department of Public Works

*Owen O'Riordan, Commissioner*

147 Hampshire Street  
Cambridge, MA 02139  
theworks@cambridgema.gov

Voice: 617 349 4800

TDD: 617 499 9924

February 22, 2022

TO: Planning Board

FROM: Katherine F. Watkins, PE  
City Engineer

**RE: Alewife Park: Project Review Special Permit**

We are in receipt of the Special Permit Application Documents for the Alewife Park Project Review Special Permit Application, dated December 27, 2021. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

Generally, based on the provided documentation and narratives, the DPW does not anticipate the project having any issue meeting all of the requirements of our Department. The DPW has also met with the Applicant and their consultants to review the proposal for the proposed redevelopment project. The Applicant's team have demonstrated an understanding of our Department's requirements and have continuously expressed willingness to work with the DPW to meet the requirements and to address our concerns.

As the project is further advanced, DPW will work with the Applicant to ensure that the requirements noted below are addressed. Formal complete engineering review will be undertaken by the DPW at each phase of the development, at the time of each Building Permit Application, to confirm that all DPW Standards have been met.

**Resiliency to Flooding:**

The Application presents a discussion related to how the redevelopment will address the future surface flooding as was modeled as part of the City's Climate Change Vulnerability Assessment. The Applicant commits establishing the finished floor elevation of each new structure and all critical infrastructure to above the 2070-100 year event, as mapped by the current published City Floodviewer. The DPW supports this effort with some specific items noted below:

- Measures to improve the resiliency of the existing buildings to remain will be reviewed with the Applicant. DPW will look for protection measures to meet the Standards to be passive in nature and not require manpower for deployment, whenever possible.
- The Applicant has been made aware that the flooding elevations may change as the City and regional models are revised with changing conditions and amended parameters. The DPW will

work with the Applicant on addressing revisions to the mapped elevations as the design progresses.

#### **Urban Forest:**

The Tree Study, submitted January 4, 2022 with planting plans revised February 3, 2022, has been Certified by the City Arborist and Urban Forestry Division. If the Planning Board grants the special permit, the DPW recommends the following conditions to ensure ongoing compliance with the Tree Protection Ordinance:

- a. Before applying for a Building Permit, the Permittee shall either provide written confirmation that there has been no change to the Certified Tree Study, or shall provide a revised Tree Study for certification by the City Arborist if plan progression has resulted in changes. The Permittee shall also submit any required mitigation payment to the Tree Fund at that time. The DPW will certify if this condition is met before issuance of a Building Permit.
- b. Before applying for a final Certificate of Occupancy, the Permittee shall provide an As-Built planting plan to the DPW that confirms the following: 1) sizes, species, and locations of all existing trees removed; 2) sizes, species, locations and approximate planting dates of all installed tree plantings; and 3) a revised Tree Study for certification by the City Arborist if plan progression has resulted in changes. The DPW reserves the right to visit the site to confirm As-Built Plan and plant conditions. In instances where Certificate of Occupancy is sought prior to final planting being installed, Permittee shall submit a plan for the work to be approved by the Urban Forestry Division.
- c. One year after final planting installation, the Permittee shall submit an updated report on the plant conditions after the establishment period to be reviewed and certified by the Urban Forestry Division as the projects final compliance with the Tree Protection Ordinance.

#### **Conservation Commission:**

The Conservation Commission reviewed the Project for work in the Flood Plain and approved the proposal with an Order of Conditions, dated February 11, 2022. Compensatory Storage provided for the approved plan is depicted in the updated Appendix H of the Special Permit Application, with the Proposed Conditions Graphics dated December 6, 2021.

The work in the Project Area, as approved by the Conservation Commission, is consistent with the objectives and Requirements of the Flood Plain Overlay District as outlined in Section 20.70 of the Zoning Ordinance.

The Conservation Commission Filing for which the Order of Conditions was issued ONLY included the development work in the Project Area. Proposed compensatory storage established as part of this approved work shall serve at the baseline/existing condition for any future work in the Flood Plain. The Applicant is aware that any work in areas jurisdictional under the Wetlands Protection Act, including work in the Projects "Commitment Areas", will require review and approval by the Conservation Commission.

#### **Stormwater Management:**

Under the City Land Disturbance Regulations, the Applicant will need to obtain a Stormwater Control Permit from the Department of Public Works, prior to the start of construction of each phase. The permit requirements cover the design standards and long-term operation and maintenance of a management



system for the project site, as well as the construction phase erosion and sedimentation control plans.

The Application included acknowledgement of the City Standards and provided some discussion related to how these standards will be met. The Projects proposal for Stormwater Management was also reviewed and approved through the Conservation Commission process. While the State Standards differ from City requirements, the Applicant is aware of the City requirement and we anticipate the Project being able to meet the Standards of the Stormwater Control Permit.

#### **Sanitary Sewer:**

The Application has indicated that the project will result in an estimated sewer flow generation of approximately 87, 900 ± gallons per day, at full build out, which is an increase of 59,200 ± gallons per day over the existing generation of the site.

This increase will trigger the requirement for the project to remove 4 times the net increase in flow of Infiltration and/or inflow (I/I) from the sewer system. The City is working with the Applicant to establish mitigation for the added flows.

#### **Private Utilities:**

The Application provides some narrative related what will be required at the site to support the private utility connections. The Narrative does not include any specific information related to the scope of the utility work required within the Public Right of way. The DPW will look to understand the scope of this work for the entire buildout prior to any construction commencing, as it will be critical for us to evaluate sequencing, construction impacts and surface mitigation requirements.

#### **Public Infrastructure:**

As the development progresses through the Design Review and Building Permit process, we will review the site and utility design related to DPW standards and requirements. The DPW reserves the right to establish appropriate mitigation measures, related to impacts to public utility infrastructure and the public right of way (streets and sidewalks), throughout the process as the design presents the full scope of these impacts. These may include vibration monitoring; deflection monitoring of existing utilities; pre and post construction videoing; and resident engineering services on the City's behalf, depending on the phasing of the projects.

#### **Review Scope:**

The review comments, certifications and approvals from the DPW on this Application are associated with work proposed in the 19.6 acre area defined by the Applicant as the "Project Area". Work in the Applicant defined "Commitment Areas" has been the subject of discussions with the DPW and the DPW is generally supportive of the proposals.

The specific scope and details of work in the "Commitment Areas" will need independent review and approvals associated with, but not limited to, compliance with Tree Protection Ordinance, conformance with City Stormwater regulations, compliance with the Wetland Protection Act and coordination with other City Departments and State and local agencies with interests/ownership of land areas.



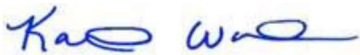
**Project Phasing and Construction:**

With any phased development of this kind, the Applicant should be aware that at the completion of any phase the project shall be in compliance with all DPW standards. The DPW is always willing to consider innovative shared infrastructure solutions, particularly if they can reduce the project's impacts on the environment and community. That said, the phasing of the project shall allow for completion of these shared solutions in a manner that maintains the project's compliance with DPW regulations throughout the phasing of construction.

DPW will look for confirmation from the Applicant at each Building Permit submission and Certificate of Occupancy request that the Project is in compliance with all permitting requirements under our jurisdiction. Areas under our jurisdiction include, but may not be limited to, Stormwater Management consistent with Stormwater Control Permit, Conservation Commission items consistent with Notice of Intent, Urban Forestry items consistent with Certified Tree Study and I/I Mitigation for increased Sewer Discharge.

We look forward to working with the Applicant on this project. Please feel free to contact me with any questions or concerns related to the comments or information provided above.

Sincerely,



Katherine F. Watkins, P.E.

City Engineer

