



City of Cambridge Department of Public Works

Owen O'Riordan, Commissioner

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June 1, 2022

TO: Planning Board

FROM: Katherine F. Watkins
City Engineer

RE: 15 Wilson Road Special permit Application

We are in receipt of the Special Permit Application materials, dated March 20, 2022, for the redevelopment of the site known as 15 Wilson Road. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

The Applicant has met with the engineering division of the DPW and has been made aware of permitting requirements for the project. The DPW, based on the provided documentation, does not anticipate the project having any issue meeting all the requirements of the DPW as the project will be subject to thorough and complete engineering review at the time of the Building Permit Application.

Citywide Planning Objectives:

The Applicant and their consultants have been engaged in conversations with all relevant City Departments related to how the project's two street frontages address/incorporate the planning objectives set in the Alewife District Plan, issued by the City in the Fall of 2019 as part of the Envision Cambridge Plan. The Applicant is also in the process of developing another parcel subject to similar planning processes.

While the presented street sections are generally in conformance with the City's expectations outlined in the District Plan details of the work in the Public right of way of Wilson Road and Smith Place will need to be reviewed and coordinated with the DPW, other interested City Departments and potential adjacent development projects. Some areas identified as needing some additional review include the transitions at the corner intersection and also limits of the various paving materials.

The DPW anticipates that the street design can be worked out with the various City Department and the Applicant as the plan progresses toward a building permit.

Climate Change / Resiliency:

The Applicant has been asked to address flood level impacts and building resiliency associated with increased flood elevations presented in the November 2015 *Climate Change Vulnerability Assessment*. Flood Elevations associated with the 2070 10-year and 2070 100-year storm events have been provided to the Applicant.

The Applicant is proposing to elevate their structure to establish the first floor elevation above the 2070-100 year event and have started to consider how utility infrastructure to service the site can also be designed to be resilient. The DPW supports the proposal as it will establish the structure to be passively protected from the anticipated flooding events.

In response to the City's Alewife Preparedness Plan , as the project design is progressed, the DPW will work with the Applicant to develop a Site Action Plan. The Site Action Plan shall allow for future building adaptation to flooding and heat risk associated with climate change with an emphasis on providing safety and comfort to the building occupants. The plan shall include the below and be reviewed and approved by DPW and Fire Department staff through the building permit process.

- a. The Action Plan shall be reviewed by the Permittee and property management team every five years through 2070 to confirm the effectiveness of existing adaptation measures and the need for additional measures. The reviews shall be reviewed with DPW and the Fire Department.
- b. The Action Plan shall develop a notification regarding flooding risks that shall be included in the leases to ensure building occupants are informed of the flood risk. This plan shall be operational immediately upon occupancy of the building.
- c. The Action Plan shall develop a building user notification / evacuation plan. This plan shall be operational immediately upon occupancy of the building.
- d. The Action Plan shall develop information, guidance, and resources to assist building occupants sheltering in place, such as a disaster supply kit. This plan shall be operational immediately upon occupancy of the building.
- e. The Action Plan shall detail an operations plan for and flood protection measures. This plan shall be operational immediately upon occupancy of the building.
- f. The Action Plan shall develop the operation of the fire detection and suppression systems to ensure that they remain operable during flood events or loss of power. This plan shall be operational immediately upon occupancy of the building.
- g. The Action Plan shall address elevator operation and heated and cooled gathering spaces in each building in the event of loss of power. This plan shall be operational immediately upon occupancy of the building.
- h. The Action Plan shall identify appropriate public spaces in each building to locate key emergency medical supplies and other emergency response supplies. This plan shall be operational immediately upon occupancy of the building.
- i. The Action Plan shall develop a notification protocol to be utilized in the event of a flooding or other natural disaster. This plan shall be operational immediately upon occupancy of the building.

Stormwater Management:

The submitted documentation includes discussion of the proposed storm water management system for the development. The documentation indicates that the proposed system will meet the Mass DEP and City of Cambridge Concord Alewife Design Standards. Under the City Land Disturbance Regulations due to the project requiring a Special Permit from the Planning Board, the Applicant will need to obtain a Stormwater Control Permit from the Department of Public Works. 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. A thorough review of the design will be completed at the time of this permit submission.

As indicated in the Application, the project does have an Order of Conditions from the Conservation Commission specific to the project work in the Flood Plain. The submitted Notice of Intent documents provided some specifics related to the plans for Stormwater Management which supported the discussion provided in this Application and confirmed that the project should have no issue meeting the City Standards.

Sanitary Sewer:

The Application has indicated that the project will result in an estimated new sewer flow generation of greater than 15,000 gpd which triggers I/I Mitigation at a rate of 4 to 1. The Applicant has been working with the DPW on an infrastructure improvement project that will satisfy this mitigation requirement.

Urban Forest:

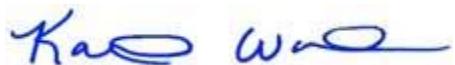
The Tree Study, submitted March 11, 2022, has been Certified by the City Arborist and Urban Forestry Division. If the Planning Board grants the special permit, the DPW recommends the following conditions to ensure ongoing compliance with the Tree Protection Ordinance:

- 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.

Again, to confirm that all of the items above are addressed by the proposal, a thorough review of the development at submission of a building permit and during design and construction will be required by the DPW .

Please feel free to contact me with any questions or concerns related to the comments provided above.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katherine F. Watkins".

Katherine F. Watkins, P.E.
City Engineer