

City of Cambridge  
Department of Public Works

*Owen O'Riordan, Commissioner*

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October 8, 2020

TO: Planning Board

FROM: Katherine F. Watkins  
City Engineer

**RE: 325 Binney Street Special Permit Application**

We are in receipt of the Special Permit Application materials, dated August 5, 2020 for the redevelopment of the site known as 325 Binney Street. 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 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.

**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*. Precipitation events from the anticipated 2070 100-year storm event will impact the parcel and the flood elevation associated with this event has been provided to the Applicant.

The Applicant is proposing to elevate their structure entrances to above the 2070-100 year flood event thus creating passive protection of the spaces from the flooding occurrence. The DPW will continue to review the plans to ensure that as the proposal is developed other critical infrastructure is also protected.

The proposal also results in a measurable decrease in the impervious coverage of the site from its existing condition of a warehouse building with expansive area of pavement. The proposals increase in the permeable green space and plans to provide for maintained and new trees on the site, will reduce the urban heat island effects at the parcel further supporting goals of the 2015 CCVA.

**Right-of-Way Changes:**

The DPW has been working collaboratively with the Applicant and other City Departments on the Applicants proposal to make changes to the Binney Street and Fulkerson Street cross-sections. The DPW supports the Applicants proposal to set back the building structure to provide for space adjacent to the existing public right of way. This space allows for improvements to the transportation infrastructure for multiple modes of transit and an enhanced pedestrian experience with space to accommodate street tree plantings.

The DPW, consistent with other locations in the City with similar conditions, will work with the Applicants team to establish easements to ensure for the long-term viability of the accessible pedestrian paths on private property.

We will continue to work the Applicant and other City Departments as the design progresses.

**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 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 preliminary design was presented in the Special Permit Application that discussed using a combination of infiltration and blue roof detention BMP's to meeting the City's water quality and quantity requirements. The design team, after discussions with the DPW, presented a design based on the projected 2030 storm events to ensure that the systems will operate effectively under the changing precipitation events.

Consistent with all Special Permits, a thorough review of the design will be completed at the time of building permit submission.

**Urban Forestry and Tree Ordinance:**

A tree study has been submitted to the DPW and is under review. The increase in the permeable space should provide adequate area for the project to provide plantings on-site to mitigate any proposed loss in caliper inches for trees removed to support the development.

The DPW has commented to the project team that proposed tree locations, both onsite and in the public Right of Way, shall be considered for conflicts with existing and proposed utilities. For example, there is a geothermal well field located under a large portion of the Publicly Beneficial Open space and any proposed plantings should be selected and located to be compatible with the underground infrastructure.

The DPW has also asked the Applicant to reevaluate the number and spacing of the proposed street trees along both street frontages. The proposed street trees along Fulkerson Street are a welcome addition to the City's urban forest, but the Applicant shall confirm that the proposed spacing is consistent with the recommendations of the Urban Forestry Master Plan. Similarly, we ask that the Applicant evaluate the Binney Street frontage for opportunities for Street Trees. We understand that there are multiple layers of demands on this frontage to support the bike facility, garage access and drop-off and other active curb uses, but trees to provide shade should be considered to enhance the streetscape.

As mentioned, we would respectfully request that Applicant review the recommendations of the Urban

Forestry Master Plan as they relate to street tree plantings. DPW will review details of the proposed public right of way planting as part of our Building Permit review.

**Public Infrastructure:**


The Applicant understands the DPW requirements associated with public infrastructure and has committed to working with the DPW through the building permit process on design details.

- The applicant indicates that the proposed additional sewer generation will exceed the 15,000 gallon per day threshold and will trigger removal of inflow and infiltration from the sewer system at a rate of 4 times the added flow. The Applicant outlines how this requirement will be met in the Application. Prior to the approval of any Building Permit for the development, the DPW will further review the Applicants plan to address this requirement with the understanding that all I/I mitigation work shall be completed in advance of building occupancy.
- Work in the Public right of way of Binney Street and Fulkerson Street and abutting streets will need to be reviewed and coordinated with the DPW and other interested City Departments.

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