

City of Cambridge Department of Public Works

Owen O'Riordan, Commissioner

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TO: Planning Board

FROM: Katherine F. Watkins

City Engineer

RE: 301 Vassar Street Special Permit Application

We are in receipt of the Special Permit Application materials, dated December 17th, 2020 for the redevelopment of 301 Vassar Street for the MIT West Campus Graduate Student Dormitory Project. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

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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 engineering review at the time of the Building Permit Application.

Talbot Street Outfall:

The Application acknowledges the location of the City owned Talbot Street Drainage Outfall within their proposed Central Plaza. The DPW will look to understand that the corridor of the pipe is kept clear of structures and plantings that may impact the viability of the pipe and the DPW's ability to maintain it. Properly sized plantings with details specific to protect the infrastructure can be considered. Attention to this will be critical as the Applicant is working with other City Departments to understand how the Central Plaza is designed to be programmed and to allow for safe connections for various modes of transit.

Right-of-Way Changes:

The DPW has been working collaboratively with the Applicant and other City Departments on the Applicants proposal for work in the Vassar Street right of way. As we noted related to other recent development proposals this corridor has had an improved cross section implemented in phases over the past number of years. DPW supports the continuation of the improved Vassar Street cross-section, with consistent layout and materials, for the full frontage of the development.

We will continue to work the Applicant and other City Departments as the design progresses to consider revisions to incorporate current City Standards while maintaining the consistency of the

corridor. Some design aspects that we are interested in working with the Applicant on are specifics on the materials, details of the curb cuts and crossings, alignment and details of the separated bicycle lane, tree planting locations and details, and the potential to underground overhead wires to achieve continuity with remainder of corridor.

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*.

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 and has committed to elevating critical infrastructure. The DPW will continue to review the plans to ensure that as the proposal is developed other critical infrastructure is also protected.

Sewer Infrastructure and Capacity:

The DPW is in agreement with the discussion provided related to the Project's anticipated sewer flow generation.

The project will generate new flow volume to the City's sewer system that will trigger mitigation in the form of I/I removal. This mitigation requirement will be satisfied by work already completed by the Applicant and their partners in the Talbot Street Outfall Project. Prior to the occupancy of the building, the City will need formal correspondence and calculations from the Applicant confirming the final design flow and accounting for the I/I mitigation being addressed by the project.

As the Application has also discussed, the DPW has requested that they meter the existing sewer infrastructure in the vicinity of the Site to confirm capacity and allow for better understanding of the Projects impacts on our infrastructure. The DPW is committed to reviewing the meter data, once available, and working with the Applicant to address any concerns that the data identifies.

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.

The Application provided a narrative description of the proposed Stormwater Management System. The discussion notes that the stormwater quality and quantity standards will be met with implementation of typical BMP's. There is some discussion of providing for some stormwater reuse for cooling purposes, which the DPW would encourage and support.

The Applicant will be reminded that all designs shall be 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:

As is indicated in the Application, the Urban Forestry Division of the DPW has reviewed the Applicants Tree Plan for compliance with the Tree Ordinance and approve the proposal for mitigation. At the time of the building permit submission, the Applicant shall provide confirmation that the Building Permit Plans are in conformance with the submitted Tree Plan and/or the current Tree Ordinance and if needed shall submit a revised tree plan for review and approval by the DPW.

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

Sincerely,

Katherine F. Watkins, P.E.

City Engineer