



City of Cambridge
Department of Public Works

Owen O'Riordan, Commissioner

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February 11, 2016

TO: Planning Board

FROM: Katherine F. Watkins, PE
City Engineer

RE: 399 Binney Street Special Permit Application

We are in receipt of the Special Permit Application materials, dated January 15th, 2016, for the redevelopment of the site at 399 Binney Street, formerly known as part of One Kendall Square. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

Generally, the DPW, based on the provided documentation, does not anticipate the project having any issue meeting all of 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.

We also have met, on a few occasions, with the Applicant and their civil engineer who have been proactive in gaining an understanding of our Departments requirements as the plans were being developed.

As the project is further advanced, DPW will work with the applicant to ensure the following requirements are met:

Climate Change Resiliency:

1. The project area has been identified in the November 2015 *Climate Change Vulnerability Assessment* as an area that can expect to see an increase in the inland flooding as a result of Climate Change. Projects located in these areas should be considering long term resiliency of the development. The Applicant will be required to provide information related to the following:
 - a. How the development has been designed to mitigate the potential for impact to the site from surface flooding to the anticipated 2030 100-year storm-event flood depths.
 - b. How the development will recover from a surface flooding event consistent with the potential 2070 100-year storm-event flood depths.

Public Infrastructure / Sewer:

1. Requirements for temporary and permanent alterations to the Public Right of Way, based on proposed impacts to the public right of way, will be considered as part of the Building Permit review process.
2. The Project site is located in an area that is subject to known sewer surcharging. Due to this known condition the DPW would like to note the following:
 - a. To provide building occupants with uninterrupted sewer service in instances of a surcharged system the City requires that a storage tank be provided with the capacity to detain the peak 8 hours of flow from the site. The Applicant acknowledges this requirement in the submission materials. The DPW will work with the applicant on the design and operating procedures for this piece of infrastructure.
 - b. As has been indicated to the development team in previous meetings, the DPW would advise against having any plumbing fixtures in the basement level of the building. Even with engineered protections installed the basement level would be extremely prone to future surcharge issues. Additional concerns related to basement space programming will need to be addressed as part of the Climate Change Resiliency comments presented above.
3. The proposed sewer flow is tributary to the City's combined sewer system and therefore will be required to provide mitigation for the additional flow by reducing the inflow and infiltration (I&I) into the system at rate of 4:1. The DPW will work with the Applicant to meet this requirement.

Stormwater Management:

1. 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 permit requirements also include the standard to mitigate the stormwater runoff from the site from the proposed 25-year storm to a rate below the pre-redevelopment 2-year storm event.

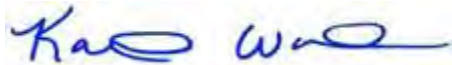
The Applicant has already submitted the above mentioned permit application and our initial review indicates that the project will meet all of the design standards. Our

Department will continue to work with the Applicant to maintain a development that meets the intent and goals of the Requirements.

2. The project is located within the Charles River Watershed for which a Total Maximum Daily Load (TMDL) has been established for Phosphorous, the pollutant of concern. In response to the TMDL the City requires that projects within the watershed treat stormwater to reduce the Phosphorous load by 65% from the existing condition.

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 Watkins", is written over a light blue horizontal line.

Katherine F. Watkins, P.E.
City Engineer