

City of Cambridge Department of Public Works

Katherine Watkins, Commissioner

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January 25, 2023

TO: Planning Board

FROM: James Wilcox, PE

Acting City Engineer

RE: 75 First Street: PUD Major Amendment

We are in receipt of the PUD Application for Amendment #7 for the First Street PUD, dated November 30th 2022. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

Based on the submitted documentation, the Applicant demonstrates general understanding of the DPW requirements and we anticipate being able to work with the team to ensure that all DPW Standards related to site work and utility design are met.

The DPW will require additional information and clarification related to the projects measures to address its resiliency to flooding. We have outlined our concerns below.

Resiliency to Flooding:

The Application presented an initial discussion related to how the development will address the future surface flooding as was modeled as part of the City's Climate Change Venerability Assessment with the PUD Application. This memo was dated November 28, 2022. The DPW commented on this submission and noted to the Applicant that the memo did not address the City's resiliency standards. An updated memo, dated January 23^{rd,} 2023 was submitted to DPW.

The updated memo correctly identifies the flood elevations, both associated with Sea Level Rise / Storm Surge events, that the DPW would look for the Project to address, as listed below.

2070 10-year Flood Elevation 21.8 CCB 2070 100-year Flood Elevation 23.5 CCB

The information provided related to how the project will address the flooding elevation is not sufficient to demonstrate that the City Standards have been met. We have outlined some of our concerns below and plan to review these concerns with the Applicant as the design progresses.

Related to the Applications proposal to address the "Build" to standard for the 2070-10 year event, we acknowledge that all residential units are established above this elevation, on the second floor and above. However, the elevation of the First Floor is established at elevation 21.0 CCB. This is below the elevation of 21.8 CCB, of the design event. The DPW will need additional information to confirm that this standard is met with the proposed measures.

The DPW will look for passive protection of the structure up to the 2070-10 year event, ideally
establishing the floor elevation above the design flood. The Application proposes sand bags and
gasketed doors at all first floor entrances. The DPW will look for specific details and specifications
for these measures to ensure that the protection is adequate. Deployable measures are not
adequate to address this Standard.

With respect to the "recovery" standard for the 2070-100 year elevations, there appears to be inconsistencies between what is noted in the resiliency discussion and what is shown on the plans.

The graphical plans show and electrical room on the first floor and the elevator mechanical room
in the basement, both below the 2070-10 and 100 year flooding elevations. Clarification and
details of how these spaces will be deigned to meet the standards will need to be provided.

Urban Forest:

The Urban Forestry division has confirmed that there are no significant Trees on the Parcel thus, a Tree Study was not required. The DPW will ask that the Applicant confirm the projects impacts, including those during construction, on trees in the vicinity of the development.

- Applicant should evaluate impacts on Street Trees along both the First Street and Spring Street frontages.
- Trees on an abutting parcel have significant canopy that extends into the project parcel. The Applicant shall address the potential impact on these trees in establishment of the building structure.

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. 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.

Private Utilities:

The Application provides some narrative related what will be required at the site to support the private utility connections. The DPW will review scope of this work in the Right of Way for the entire buildout prior to any construction commencing, as it will be critical for us to evaluate construction impacts and surface mitigation requirements.

Public Infrastructure:

As the development progresses through the 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.

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 the time of the Building Permit Application, to confirm that all DPW Standards have been met.

We look forward to working 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,

James Wilcox, PE

Acting City Engineer

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