# City of Cambridge Department of Public Works

Owen O'Riordan, Commissioner

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November 8, 2016

TO: Planning Board

FROM: James Wilcox

**Director of Engineering Services** 

# **RE: 35 Cambridge Park Drive:**

Subsequent to our July 27, 2016 letter to the Board, the Applicant for the redevelopment of the site at 35 Cambridge Park Drive has submitted Permit Applications and documentation to the DPW for review. The following is a summary of DPW's review of the submitted documents.

# 20.70 Flood Plain Overlay District

DPW has reviewed the Incremental (per foot) Flood Storage Capacity Calculations submitted by VHB on September 28, 2016 and the Stormwater Control Permit Application submitted on September 16, 2016. The documentation submitted demonstrates that the project has met the Criteria in Section 20.75. There is no filling or encroachment that would impair Special Flood Hazard Areas to carry or discharge flood waters. The submitted flood storage capacity calculations show an increase in flood storage for the parcel for both FEMA 1% annual occurrence flood elevation and the City of Cambridge CCVA 2030 100 year flood elevation. The project proposes a 75,000 gallon stormwater holding tank that will not cause any nuisance or hazard.

# 20.90 Alewife Overlay District

Per the submitted Stormwater Control Permit Application, the project proposes to increase permeable area on the site by 6,935 square feet. This increase in permeable area does not meet the 25% requirement in Section 20.96.1, but the project proposes to make significant stormwater management improvements on the site. There is currently no stormwater management system on the parcel in the existing condition and all stormwater is currently discharged uncontrolled off of the site. The project design demonstrates that the proposed 25 year 24 hour peak discharge rate (5.18 cfs) is less than the existing 2 year 24 hour peak discharge rate (7.60 cfs). The design also includes a 75,000 gallon stormwater holding tank. While the tank does not meet the retention/detention requirements, site constraints such as available area and shallow groundwater restrict the size of the tank.

The proposed project meets the ten stormwater management standards in Section 3 of the Concord –Alewife Area Stormwater Management Guidelines to the extent practicable for a redevelopment project. Because of the extent of the proposed stormwater improvements, DPW recommends an as of right reduction of the permeable area requirement.

# Climate Change Vulnerability Assessment

The proposed project is a renovation of an existing building with a proposed addition. The building is slab on grade construction with no below grade facilities. The proposed first floor elevation is 0.74 feet above the 2030 100 year flood elevation as determined by recent DPW modeling. The applicant has committed to placing mechanical and electrical equipment well above the 2070 100 year flood elevation. The applicant has also agreed to submit a flood recovery plan for the 2070 elevation. This plan will be reviewed by DPW at the time of building permit application.

The submitted documentation demonstrates how the redevelopment will meet the DPW requirements outlined in the July 27<sup>th</sup> letter, including but not limited to addressing design standards related to Flood Plain Mitigation and Stormwater Management.

A thorough review of the development and finalization of design details will completed, by our Department, as part of the Building Permit Review Process.

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

Sincerely,

James Wilcox
Director of Engineering Services