

## TOWN OF LYNNFIELD

## DEPARTMENT OF PUBLIC WORKS

JOHN M. TOMASZ DIRECTOR

CHARLES L. RICHTER, P.E. TOWN ENGINEER

55 SUMMER STREET

LYNNFIELD, MA 01940

TEL: 781-334-9500

FAX: 781-334-9509

WWW.TOWN.LYNNFIELD.MA.US

## **MEMORANDUM**

**DATE:** March 12, 2021

TO: Emilie Cadematori, Director of Planning and Conservation

FROM: Charles L. Richter, P.E, Town Engineer

CC: Peter Ogren, Hayes Engineering

RE: 160 Moulton Drive Stormwater Bylaw Permit

The Department of Public Works has reviewed the submittals for the development at 160 Moulton Drive from the developer's engineer, Hayes Engineering, and the correspondence of the peer reviewer Linden Engineering Partners, LLC. From the review of these materials and from what has been seen on the site the Department has determined the following:

• The existing site contains a significant amount of impervious area with no structural drainage. Presently approximately 72% of the site is impervious. The stormwater generated from this impervious ground cover sheds across the parking lot and off of the building draining uncontrolled to Oak Street and over the wall at the rear of the property. What little infiltration occurs happens when the stormwater flows over the vegetated area between the parking lot and the wall at the rear. During

larger storm events this uncontrolled flow of water has caused flooding and erosion issues at the ballfields adjacent to the site at Newhall Park.

- Through the redevelopment of the lot the developer is proposing to reduce the overall runoff generated from the site by reducing the impervious area and greatly increasing infiltration. The developer is proposing to shrink the impervious cover on the site from 72% to 52% helping to reduce the runoff generated. In addition to this the developer is proposing to infiltrate the runoff from the roof of the proposed building which will further reduce the overall runoff from the site. This reduced amount of runoff will be channelized to the drainage system located in Suntaug Street with a pipe connection through a proprietary particle separator.
- The drain system in Suntaug Street is already designed to handle the stormwater shedding from 160 Moulton Drive through infiltration with an overflow connected to a catchbasin located in the Newhall Park parking lot. The proprietary particle separator will add improvements to the water quality from this runoff. All of these improvements will reduce the flooding risk for Newhall Park and will improve the water quality to the receiving water.

Overall the Department believes that the stormwater design for the redevelopment of 160 Moulton Drive complies with the requirements of the Stormwater Bylaw and greatly reduces the risk for flooding for Newhall Park. The combination of the reduction of impervious ground cover, the significant increase in infiltration, addition of TSS removal, and the proposed pipe connection to the drainage system in Suntaug Street will make significant improvements to the runoff generated by the site and reduce erosion. To ensure the design is properly implemented, the Department recommends the permit conditions outlined by Linden Engineering are adopted by the Conservation Commission.