STORMWATER MANAGEMENT
SUPPLEMENTAL INFORMATION

FOR

ENCLAVE AT BOXBOROUGH

STOW ROAD
BOXBOROUGH, MASSACHUSETTS

Prepared For: **BOXBOROUGH TOWN CENTER, LLC**
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September 24th, 2019
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1.0 Purpose and Scope

This is a supplement to the Stormwater Report, Enclave at Boxborough, Stow Road, Boxborough prepared for Boxborough Town Center LLC by Ducharme & Dillis, dated July 15th, 2019 stamped by Greg Roy P.E. Pursuant to satisfying General Condition 1 in the Site Plan Approval and Alternate Access Decision for 700, 750 & 800 Massachusetts Avenue dated August 15th, 2019, please find Ducharme & Dillis' responses to the Stormwater peer-review comments from Places Associates, Inc. dated August 7th, 2019 below.

2.0 Stormwater Comments from Places Associates, Inc.

Stormwater Comments:

1. Stormwater Report 2.2 Standard 2 – add the volumes for Design Point B to substantiate the conclusion of no increase in volume.
2. Provide the TSS calculations for the access roadway.

3.0 Stormwater Responses from Ducharme & Dillis, Inc.

Stormwater Response to Comment #1:

Table 1: Wetland Design Point "B" Volume Summary

	Pre-Developed (acre-feet)	**Post-Developed (acre-feet)**
Design Point "B"		
2-Year	0.000	0.000
10-Year*	0.002	0.006
25-Year	0.014	0.016
100-Year	0.065	0.047

As stated in the Stormwater Report, Enclave at Boxborough, Stow Road, Boxborough prepared for Boxborough Town Center LLC by Ducharme & Dillis, dated July 15th, 2019:

"Design Point B in the Pre-developed condition consists of 91,035 SF of undeveloped woods. Of the 91,035 SF, 79,057 is HSG A & 11,978 SF is HSG B. This results in a weighted CN of 33. Due to the proposed grading & drainage design of the project we have greatly reduced the tributary area of Design Point B to 38,793 SF with a weighted CN of 37. Using the SCS runoff equation, the HydroCAD model computes a trivial increase in flow & volume during the 10-, 25-, and 100-year return frequency. Due to the tributary area reduction, we do not believe there will be an increase in offsite peak flow or volume.
Ducharme & Dillis, Inc. believes that as mentioned, the minor increase in volume during the 24-hour rainfall events of 10- and 25-year return frequencies are

negligible as the 100-year return frequency has a substantial decrease in volume runoff.

Stormwater Response to Comment #2:

Please find the TSS calculation sheet for the temporary access roadway attached to this supplement. The temporary access road has been designed to include an embankment along each side furnished with stump grindings to establish a buffer strip to rely on the shallow, distributed flow through the dense material to reduce flow velocity, allow particles to settle, and to allow for particle interception as the primary mechanism of pollutant removal. The proposed buffer strip is intended to act as a standalone pretreatment stormwater BMP to a temporary disturbance.