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Town of Shrewsbury, Massachusetts
W&S Project No. 2160206

July 18, 2016

Ms. Kristen Las
Assistant Town Manager/Economic Development Coordinator
Town of Shrewsbury
100 Maple Avenue
Shrewsbury, MA 01545

RE: Update No. 3 to Proposed Sewer Service Connection – Hydraulic Capacity Study & Report for the Pointe at Hills Farm Chapter 40B Development, Shrewsbury Massachusetts – Final

Dear Ms. Las:

Weston & Sampson has reviewed *Update No. 3 to Proposed Sewer Service Connection – Hydraulic Capacity Study & Report for the Pointe at Hills Farm Chapter 40B Development, Shrewsbury Massachusetts – Final* dated June 28, 2016, submitted by Mr. Thomas Parece, PE, AECOM Project Manager, hereinafter referred to as "Update No. 3." The report has been submitted by AECOM on behalf of St. Pierre & St. Pierre, P.C. of 291 Grafton Street, Shrewsbury, Massachusetts, developers of the Pointe at Hills Farm (the Applicant). AECOM was retained by the Applicant to conduct an impact assessment of the construction of the proposed development on the existing wastewater system in the Town of Shrewsbury.

In addition, we have reviewed, commented on, and had technical discussions with the Town of Shrewsbury and the Applicant as follows:

- *New Sewer Service Evaluation for the Pointe at Hills Farm Development Shrewsbury, Massachusetts* by AECOM, dated August 2015
- *Update to Proposed Sewer Service Connection – Hydraulic Capacity Study & Report for the Pointe at Hills Farm Chapter 40B Development, Shrewsbury, Massachusetts* by AECOM, dated March 8, 2016
- March 28, 2016 ZBA Hearing
- April 8, 2016 Technical Meeting
- *Update No. 2 to Proposed Sewer Service Connection – Hydraulic Capacity Study & Report for the Pointe at Hills Farm Chapter 40B Development, Shrewsbury, Massachusetts* by AECOM, dated May 5, 2016
- May 9, 2016 ZBA Hearing
- May 23, 2016 Technical Meeting
- June 9, 2016 Technical Meeting
- June 27, 2016 ZBA Hearing

We provide the following comments for your use:

Page 2 (Section 1) - Weston & Sampson disagrees with all statements regarding "corrective actions

required to address the capacity issues with and without the Proposed Development". The existing pump stations require corrective actions due to the Proposed Development's additional flow exceeding existing capacity. Without the proposed development, the stations have been functional.

Page 2 (Section 1) - Collection System – "Replace the existing 10-inch DI gravity sewer with a 16-inch PVC gravity sewer or extend the Cherry Street Force Main from 2B-25 to 2B-22." – Weston & Sampson agrees that segment 2B-23 to 2B-22 requires upgrades to accommodate the proposed development, however, the applicant should determine the feasibility of either of these options and present a defined plan and schedule for performing this work.

Page 3 (Section 1), Page 5 (Item 3.1.1) and Page 11 (Item 4.2.1) – The Quail Hollow Pump Station Pump No. 2 has been repaired by the Town and put back in service.

Page 3 (Section 1) - Weston & Sampson disagrees with all statements regarding utilizing the expanded wetwell at Cherry Street. No investigation was performed for this report and not enough information is known on the current condition and function of this expanded wetwell to recommend use.

Page 3 (Section 1) and Page 12 (Item 4.3) – Weston & Sampson disagrees that the actions listed as "preventative" and "predictive" should be addressed by the Town. While these actions may fall under the town's Capital Improvement Plan, they may not necessarily be prioritized to accommodate the proposed development. Therefore, the town should require this work be performed by the Applicant prior to accepting additional wastewater flows.

Page 4 (Section 2) – Inflow/Infiltration (I/I) allowances are low for the project areas noted. We recommend that final design of the pump station and downstream sewer upgrades include I/I estimates in accordance with the Spring 2011 Flow Metering Project report by Weston & Sampson.

Page 6 (Item 3.1.4, Item 3.1.5) - The property count (and type of properties) tributary to Quail Hollow and Stoney Hill Pump Stations appear to be low for commercial/institutional properties. Final calculated design flows should be verified as part of the final upgrade design for the stations. Any increase in proposed design flows should be correlated with the capacity calculations for the gravity sewer interceptors.

Page 6 (Item 3.1.6) - Weston & Sampson disagrees with utilizing the "Final Report - Cherry Street Project Area - Hydraulic Capacity Analysis & Odor Management" report for calculating design flows to the Cherry Street Pump Station. The flows listed from this report are not representative of the entire Cherry Street Pump Station tributary area. Final calculated design flows should be verified as part of the final upgrade design for the station. Any increase in proposed design flows should be correlated with the capacity calculations for the gravity sewer interceptors.

Page 11 (Item 4.2.1) - Weston & Sampson disagrees with the "Upgrade Requirements" related to all three pump stations without the Proposed Development. Without the proposed development, the stations have been functional and do not require upgrades to be performed. This section should be removed from the report.

Page 12 (Item 4.2.2) – Upgrade Requirements all three pump stations with the Proposed Development should include tasks to confirm the design flows as calculated in this report. The Cherry Street Pump Station should also have an item in this section to address the ragging issue at the station.

As discussed in previous meetings/correspondence, we generally agree with the conclusion that the three pump stations require upgrade as a result of the additional flows from the Proposed Development. The specific scope of those upgrades are to be determined by future effort.

We respectfully submit this as our final review and response to the wastewater collection system analysis downstream of the proposed development. Should you have any questions or require additional information regarding this matter, please do not hesitate to contact us.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

Kent M. Nichols, PE
Vice President