

Civil & Environmental Engineering Consultants 174 Main Street, Beacon, New York 12508 Phone: 845-440-6926 Fax: 845-440-6637 www.HudsonLandDesign.com

July 25, 2019

Mr. Dave Buckley City of Building Inspector 1 Municipal Center Beacon, NY 12508

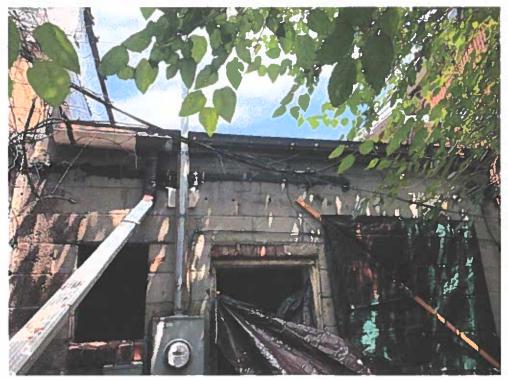
Re: Infiltration and Inflow Investigation

Early Terrible Wine Bar 305 Main Street Site Plan City of Beacon, New York Tax ID: 5954-36-908866

Dear Mr. Buckley,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation (I&I) at the above referenced parcel as required by the City of Beacon. The investigation was conducted on July 11, 2019 at the existing building located at 305 Main Street, which consists of a one-story masonry building that is currently vacant.

The first phase of the study consisted of an exterior inspection of the building on July 11, 2019 to determine the location of roof leader discharge points. The building has a gentle sloping roof from front to back. There is evidence that the roof leader was previously connected to sanitary sewer system, but it is currently disconnected and discharges to the ground to the rear of the building. The past connection to the sanitary sewer system is below grade and covered with plywood. Based on these observations, none of the rooftop runoff is connected to the sanitary sewer system. The existing pipe that is connected to the sanitary sewer will be removed as part of the project.



View of roof gutter and roof leader on rear of the building



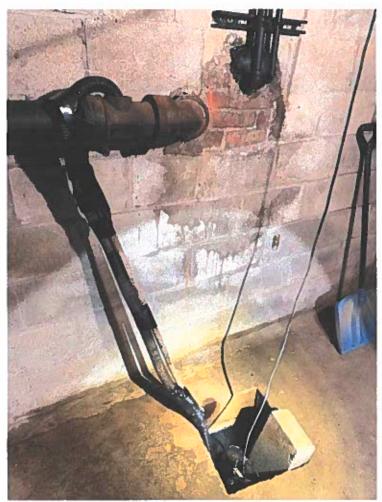
View of roof leader discharge point



View of past roof leader connection to the sanitary sewer

The second phase of the study consisted of interior inspection of the building on July 11, 2019 to determine if there are any illicit connections to the building sewer line from sump pumps, floor drains and the like. HLD personnel located the last section of the interior sanitary sewer plumbing. The sanitary sewer lateral flows northwest out of the building towards under the adjacent building and is assumed to connect to the sanitary sewer collection system in Main Street. At this time, no dye tests were conducted to verify flow direction.

A single sump pump was observed along the northwest basement wall with a discharge to the building sewer lateral. It was observed that the sump pump discharges directly into the sewer lateral, and ultimately to the City of Beacon's sanitary sewer system. The photo on the next page shows the sump pump and force main pipe discharging to the sanitary sewer lateral.



View of basement sump pump and connection to sanitary sewer

On an average day, during a 1-year storm event, it is assumed that the existing sump pump will cycle approximately 20 times, discharging 120 gallons of water to the City of Beacon's sanitary sewer system.

Based on our observations, HLD believes that there are illicit stormwater connections from the building located at 305 Main Street to the City of Beacon's sanitary sewer collection system. The sump pump will be disconnected from the sanitary sewer and redirected to the roof leader at the rear of the building. The roof leader will also be extended to direct the discharge away from the building.

We recommend that the following mitigation notes be placed on the plans for the project:

- The remaining pipe that previously served to connect to the roof leader to the sanitary sewer system will be removed.
- The sump pump will be removed and rerouted to the roof leader discharge location.

Should you have any questions, please feel free to call me at 845-440-6926.

Sincerely,

Eric S. Rogge, P.E. Senior Engineer

cc: Douglas Ballinger (via email)

Michael A. Bodendorf, P.E. (HLD file)

