

- There is a man-made containment pond on the eastern edge of 760 East St. Water flows into this pond through the inlet on the southeast side of the pond, and the outlet is located on the north end of the pond. This outlet feeds an intermittent watercourse that flows northwest, under Boston Hill Road and eventually flows into Burnap Brook near 850 East St. The pond and the stream have excessive siltation due to their location downhill and downstream of several farm fields and farm ponds, and due to a lack of adequate maintenance for many years prior to the current homeowner's occupation of the property. This siltation has filled the stream channel and, during heavier flows, causes the water to be diverted over the stream bank, flowing downhill over the 760 East St. property, and crossing the 768 East St driveway downhill of their existing stream crossing (culvert). *[See "2019 Aerial Photo" for example]*
- The homeowner has attempted to rectify this by constructing a new stream channel downhill of the existing channel. He excavated a trench from the stream channel near the 768 East St. driveway crossing, continuing south toward the southwest corner of the pond, and eventually connected this new stream channel/trench to the pond. *[See "Photos from Agent Site Visit 06.29.2023" for information]*
- This new channel creates a high potential for erosion due to its unstable streambanks and excessively steep sides. The proposal to remedy this is to:
 - Retain and stabilize the newly created section from the new pond outlet on the southwest end of the pond that wraps around a small hill and rejoins the existing stream channel at a low spot behind the hill.
 - The existing stream channel (downstream of the new section) will need to be maintained by removing the deposited silt and sediment to restore adequate depth to handle higher flows and prevent overtopping its banks and flowing downhill outside of the channel.
- All excavated areas to the northwest of the connection between the new stream channel and the existing channel will be filled and restored. This area has already been graded by the homeowner to raise the elevation on the downhill side of the stream channel. This grading will be left in place to help contain the water inside of the stream channel. This area will also be planted with native trees to shade the channel, stabilize the soil, and prevent invasive and primary vegetation from impeding water flow in the channel.
- The pond outlet that was created by the homeowner will remain on the southwestern end of the pond. This will provide the pond with more flow throughout the entire pond, compared to the previous outlet at the northwestern end of the pond--which leaves the southern end of the pond with little to no water circulation. This should improve the water quality in the pond.
- As of June 29, 2023, the pond outlet that was created by the homeowner has been blocked using rocks and soil, which restored flow to the previously existing stream channel. This dam will remain in place pending permit approval from the commission, and pending completion and stabilization of the new stream that was created by the homeowner.

- The newly excavated stream channel will be stabilized using a combination of larger stones and gravel to line the bottom of the stream. Larger stones have been used in areas to slow water velocity through the channel, and to provide aeration to the stream. These stones will be left in place, and more will be added as necessary. The sides will be sloped away from the stream bottom at an approximately 2:1 slope, and will be stabilized using an appropriate combination of erosion control mats and/or seeding with grass or native vegetation. After the streambanks are properly stabilized, the dam will be removed, and water will be allowed to enter the new stream channel.
- Construction and dam removal will be completed during periods of low flow.
- The Wetlands Agent will be contacted prior to dam removal to inspect the stream channel for proper stabilization.