

OFFICE OF THE
CONSERVATION COMMISSION

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www.harvard-ma.gov



DATE: July 12, 2022

TO: Conservation Commission & Zoning Board of Appeals

FROM: Land Use Administrator/Conservation Agent

RE: Pine Hill Village Status Report

On December 28, 2021 the Harvard Conservation Commission issued a letter to the developer of Pine Hill Village, Peter Cricones, detailing the outstanding items that currently needed to be addressed. On February 4, 2022 the Land Use Administrator/Conservation Agent for the Town of Harvard received responses to the Commission's request. Both the Commission's requests and Mr. Cricones responses are stated below, along with a status update from the Land Use Administrator/Conservation Agent.

Conservation Request: Repair the drainage swale at the entrance off of Stow Road as shown in the detail provided by Markey & Rubin, Inc., dated December 1, 2021.

Answer: We are in the process of repairing it.

Conservation Update: The repair has not been completed. Haybales used to reduce silt from entering the drainage channel cause water to back-up within the swale leading to the channel.



Conservation Request: Verify material to construct Rain Gardens #22 and 23

Answer: Bioretention soil mix was used. Please see attached for the receipts for the material that was used.

Conservation Update: The material used to construct the rain gardens includes more than a bioretention seed mix. The Commission is seeking core samples be taken and witnessed by the Commission or the Nitsch Engineering to verify installation was done according to the approved plan.

Conservation Request: Bioretention cell only has one riser pipe; detail shows two; verify one pipe is sufficient.

Answer: Dan Boudreau is working on a letter to verify that one pipe is sufficient.

Conservation Update: Verification has not occurred

Conservation Request: The rain gardens raisers have flat grates as opposed to rounded grates as shown on the approved detail; verify flat grates are acceptable

Answer: Dan Boudreau is working on a letter to verify that flat grates are acceptable.

Conservation Update: Verification has not occurred

Conservation Request: The installation of the energy dissipation at the outlet at the constructed wetland should be verified with approved detail

Answer: Ian Rubin is working on this; however, he is currently out of the country. Upon his return, we will submit the verification and approved detail from him.

Conservation Update: Verification has not occurred



Conservation Request: Material to construct parabolic swale #8 in front of units 1A and B needs to be verified.

Answer: Yes, this will be verified in the spring

Conservation Update: Verification has not occurred. The Commission is seeking core samples be taken and witnessed by the Commission or the Nitsch Engineering to verify installation was done according to the approved plan.

Conservation Request: Plantings around the constructed wetland are not consistent with the approved plan and some of the trees are dead; replacement plantings shall be in a random pattern.

Answer: Any dead trees or shrubs will be replaced in the spring and will be replaced in a random pattern.

Conservation Update: Plantings have been replaced, however the area is well over grown and should be maintained to help reduce the spread on invasive plants.



Conservation Request: Additional planting required in front of Units 1A and B as shown on the approved plan.

Answer: Yes, this will be done per plan.

Conservation Update: Plantings are still not in accordance with the approved plan.



Conservation Request: Silt on the driveway for units 5 and 7 shall be removed before occupancy.

Answer: This has been done

Conservation Update: Although a berm was installed at the entrance to the driveway silt continues to collect on the driveway between units 5 and 7 as water pools in that area during heavy rain events. The silt sock installed on the edge of the driveway near unit 5 has been removed without approval from the Commission. Silt laden waste is passing over grassy area before accumulating at the edge of the existing erosion control barrier.



Conservation Request: An additional parking space has been installed at units 5 and 7 this pavement shall be removed and replaced with loam and seed as well as the planting as shown on the approved plan.

Answer: The pavement at the additional parking space that was installed at units 5 and 7 has been removed. It will be replaced with loam and seed as well as the planting as shown on the approved plan weather dependent.

Conservation Update: Although the excess pavement was removed in early 2022 no other activity has occurred to rectify the issue.



Additional comment in the letter from the Commission dated December 28, 2021:

Conservation Request: Please be reminded that any changes to the approved plan require either Conservation Commission and/or Zoning Board of Appeal approval prior to the change occurring.

Answer: Also, any changes to the approved plans will be presented to Conservation Commission and/or Zoning Board of Appeal for approval prior to the change occurring.

Conservation Update: A mail kiosk has been added to the west side of the visitor park at the entrance to the development, but was not on the approved plan. This addition was not approved by the Commission, nor the Zoning Board of Appeals.



Conservation Request: To ensure proper installation of any additional rain gardens, please contact this office to arrange an inspection during the installation of these stormwater features.

Answer: And finally, to ensure proper installation of any additional rain garden, you will be contacted to arrange an inspection during the installation of these stormwater features.

Conservation Update: According to the weekly reports from the Developer, rain gardens 16 and 21 were to be worked on the weeks of June 20 and 27, 2022, however no inspection of the installation of these gardens was arranged as previously requested.

Additional Comments from the Land Use Administrator/Conservation Agent

In general, the common areas on the site are not being maintained cause unwanted over growth around the installed landscaping.



Members of the Conservation Commission along with its Agent had spent a considerable amount of time on the site over the years prior to development. The site was originally free from invasive plant species. Since the addition of fill onto the site invasive plant species have been identified on the site, including Japanese Knotweed, Garlic Mustard and Black Locust. The Commission is concerned these invasives will spread into the wetland resource areas on and off the site, including a vernal pool on the adjacent lot, as well as the forested area around the development. The Commission is requesting a plan be prepared to rectify the issue.



The lower Bio-Retention Cell is receiving silt during rain events. Areas in which stormwater is flowing shall be stabilized to reduce silt from entering this cell.



The constructed wetland is acting a sediment basin during construction, however silt in this basin has reached levels that should be addressed to avoid adverse impacts to the wetland resource areas.



Parabolic Channel (PS8) in front of Building #1 is constantly full of silt. Stabilization of issue with riprap, erosion control barriers and silt sacks have only exacerbated the problem. Proper installation and maintenance of this and all of the Parabolic Channels shall be adhered to.



Parabolic Channel 7 (PS7) was designed to be a series of step pools along the main road of the development. As constructed this channel is one long channel that has been stabilized sporadically similar to PS8. Proper installation and maintenance of this and all of the Parabolic Channels shall be adhered to.



A major cause of siltation with the Parabolic Channels and Constructed wetland is the uncontrolled runoff from the upper portion of the site. A plan to properly control stormwater runoff shall be submitted to the Commission for their review.

