

TOWN OF SOUTHBOROUGH



STEWARDSHIP COMMITTEE

17 COMMON ST · SOUTHBOROUGH, MASSACHUSETTS 01772

<https://www.southboroughtown.com/southborough-stewardship-committee>

August 7, 2023

Dear Conservation Commissioner,

Given our mission and duty at Breakneck Hill Conservation Land, the Stewards wish to share our significant concerns regarding the 40B Housing proposal for 120 Turnpike Road. In short, the Stewards do not support the proposal. Furthermore, we are aware of an existing variance that restricts the property so that a third building is not allowed. The Stewards support that restriction.

Southborough's Breakneck Hill Conservation Land, the largest town-owned conservation land—a crown jewel—abuts the proposed development. Therefore, if this proposal does proceed, we offer the following recommendations given the development's significant potential to adversely affect the wildlife and habitat that the Stewardship Committee has worked tirelessly to enhance and protect.

Below we highlight our significant concerns and related recommendations:

- **Wetlands Protection.** Existing wetlands and wetland buffers support habitat at Breakneck Hill and are important to biodiversity. Therefore the Stewards recommend that if the project proceeds, it
 - **Abides local bylaws concerning wetlands.** Following the local wetland bylaws is in the best interest of the Conservation land which abuts the proposed development.
- **Implications of Running Water.** During the site walk on July 24, a Steward observed water flowing where the proposed building would be. Altering the flow of water can have unintended consequences to the conservation land and proposed development. Whether that represents a seasonal stream or something else is unknown, thus the Stewards recommend
 - **Researching the nature of that water flow and its implications for the construction and conservation Land.** Being well-informed about that water flow and its implications can forestall unintended consequences and missed opportunities.
- **Outdoor Lighting:** Light sources at night cause harm to wildlife. This is especially true for insect populations that are food sources for birds and other animals. But the harms extend to other types of wildlife as well, affecting migratory patterns of birds, behavior of predators, and more. All of these are of concern to the Stewards and their work at Breakneck Hill, which has an existing population of fireflies. Fireflies are known to be in decline and especially vulnerable to outdoor lighting, which disrupts their life cycles. Therefore we recommend that if the proposal proceeds, it be required to
 - **At a minimum, abide the town's lighting bylaws.** This should be a minimum expectation for the development.

- **Utilize dark sky lighting.** Dark sky lighting directs light to the ground and not the sky, minimizing any light pollution.
- **Utilize motion detectors for lighting after 10pm.** This would further limit the adverse affects of outdoor lighting.
- **Consult with local expert on light pollution, Dr. Destin Heilman.** Southborough is lucky to have a subject matter expert locally in Dr. Heilman and we urge that he be consulted.
- **Parking:** The proposed parking lot is both large and likely visible to those visitors to the Breakneck Hill Conservation Land, adversely affecting their experience. Furthermore it will likely have lighting, contributing to the light pollution referenced above. Therefore we recommend
 - **Use the lowest ratio of parking spaces to housing units possible.** The proposed ratio of parking spaces to housing units is 1.9 in the proposal, but during the site walk, a Steward was told it could be reduced to 1.7 per unit, which represents 12 fewer spaces.
 - **Position the parking lots further from the boundary to Breakneck Hill Conservation Land.** Preserving as much as we can of the special experience of visiting Breakneck Hill's trails is a priority of the Stewards. To that end, we recommend the parking spaces be placed as far from the boundary as possible, maintaining as many trees as possible.
- **Historic Stone Wall.** The border of the Conservation Land is marked by a historic stonewall, in part owned by the town as part of the Conservation Land. We recommend that the development
 - **Preserve and protect the stone wall.** The stone wall is a visible and historic feature of the property and should be preserved so it can be enjoyed into the future.
- **Access to Trails:** The Stewards welcome and encourage any future residents of the proposed development to enjoy Breakneck Hill Conservation Land. The Stewards would like to designate a single trail access point for the residents, therefore we recommend
 - **Coordinating with the Stewards to determine where to best establish a trail from the proposed development to the trails at Breakneck Hill.** Determining trail access points is squarely within Stewardship's responsibilities. Establishing a single entry point helps us manage the property.
- **Landscaping:** The landscaping that a project of this magnitude will require creates a major opportunity to further the conservation goals at Breakneck Hill Conservation Land, which abuts the proposed project. Given the ongoing research at Breakneck Hill being led by Dr. Robert Gegear, the Stewards have made important strides in establishing much-needed habitat for at-risk species. The proposed development could undermine, or if our recommendations are heeded, further support this important work. Therefore if the proposal proceeds, we recommend that
 - **Require landscaping plants be restricted to plants native to our ecoregion and include plants from Dr. Gegear's research-based list.** The plants native to our ecoregion can easily be identified via Gobotany, an easy-to-use resource offered by Native Plant Trust. And Dr. Gegear's plant list is available at <https://gegearlab.weebly.com/plant-list.html> . Because native plants evolved in this region, they tend to be easy to grow, low maintenance, and drought resistant.
 - **Prohibit hybrid plants and cultivars.** These plants offer little to no wildlife value and can spread to the conservation land, undermining the habitat there.
 - **Maximize tree preservation.** The existing proposal, if implemented, means this large building will be very close to the conservation land, negatively affecting the views and experience of visitors at

Breakneck Hill. To minimize that, the Stewards request that as many trees as possible be retained, especially to provide a buffer between the new, massive structure, and to protect the views and experience of visiting and enjoying the trails at Breakneck Hill. Creating that buffer will likely require new trees, and we strongly recommend native trees for that purpose.

- **Educational Signs:** The proposed development features bicycle storage and a dog park. Given the proximity to the conservation land, which the Stewards manage for conservation values (biodiversity, habitat) as well as passive recreational opportunities, it is important that residents understand certain rules. For example, bicycling is prohibited on Breakneck Hill Conservation Land and, if not prohibited, ill-advised on Route 9. And Southborough has bylaws concerning dog waste and control. Therefore the Stewards recommend requiring
 - **Signage be installed concerning the prohibition of bikes from Breakneck hill Conservation Land.** Potential residents would want to know that prohibition.
 - **Signage be installed referencing Southborough bylaws requiring picking up dog waste and maintaining control of dogs.** Dog waste has significant detrimental effects on the environment and the proximity to managed land means lack of compliance can impact the conservation land.
 - **Dog Waste Receptacles Be Available.** We further recommend and encourage installing receptacles for dog waste to make abiding Southborough's bylaws easy and to prevent dog waste from harming the conservation land.
- **Invasive Prevention.** Construction projects can require bringing in large amounts of gravel and loam. Both can be vectors for introducing noxious invasive species, such as Japanese knotweed and jumping worms. Both have potential to be unintentionally brought on site. And both have the potential to seriously damage the conservation land. Therefore, the Stewards recommend that
 - **Precautions reflecting the best current research be required to prevent the unintentional introduction of invasive species.** Japanese knotweed and jumping worms are especially concerning.
 - **Requirements for redress be spelled out in the event that those unintended consequences occur and damage the conservation land.** The Stewards constantly surveil the property for emerging threats such as invasive species. We manage with limited resources. Any new species could undermine our successes and exceed our capacity to address them.
- **Deer Management.** The conditions of the existing site for the proposed building strongly suggest a large deer population is present. This is evidence by the preponderance of hay-scented ferns in the understory, as opposed to any shrubs or other understory plants. Construction will push that herd elsewhere, including route 9, putting lives at risk. That herd will also be pushed more so into the conservation land, abutters' yards, and beyond. Therefore, the Stewards strongly recommend
 - **Deploying a management strategy to balance the deer population with habitat support.** This provides a more humane management approach for the herd and can include special bow and arrow hunting or hiring expert marksmen.
- **Balloon and Lighting Demonstration.** Using balloons and lighting is a helpful technique to demonstrate the scope and impact of the proposal. Floating balloons to the height of the proposed structure gives visual cues of its visibility and impacts on the view from Breakneck Hill. Therefore we request that
 - **A Demonstration be staged involving balloons and lighting.** This should be a public demonstration, advertised locally and in place for several days allowing maximum opportunity for interested parties to observe.

The list above reflects our concerns and recommendations to date. As we learn more, we may identify additional concerns and requests. However, I reiterate that the Stewardship Committee unanimously opposes the location of this proposed development given the clear detrimental implications for the Breakneck Hill Conservation Land.

On behalf of the Stewardship Committee, thank you for your consideration.

Sincerely,

Joyce Greenleaf
Chair, Stewardship Committee