



City of Shelton
Shelton Conservation Commission
54 Hill Street, Shelton, Connecticut 06484



December 10, 2019

Gary Zahornaksky
Chairman
Inland Wetlands Commission
54 Hill Street
Shelton, CT 06484

RE: Towne Center at Shelter Ridge (#17-14)
LandTech Report

Dear Mr. Zahornasky:

The Conservation Commission has reviewed LandTech's report dated September 10, 2019 for Towne Center at Shelton Ridge (#17-14) and offers the following comments:

- 1. Incomplete Review:** LandTech appears to have thoroughly reviewed documents submitted by the applicant. However, it was our understanding that the review was meant to include documents in support of and in opposition to the proposal. "Exhibit 21: Letter with attachments dated 3/15/18 from T. Harbinson" is listed as a reviewed document, but it seems to have been overlooked as part of the review process. This exhibit includes a 20-page report prepared by the City of Shelton Natural Resource Manager (NRM). Yet, no information from the Natural Resource Manager's report is referenced in the LandTech review, even though there is key information contained in this report that is not contained in other reviewed documents. For example, the Natural Resource Manager's report indicates that a *Connecticut Species of Special Concern*, the Spotted Turtle, has been well-documented near the site. This species dwells in vernal pool and travels overland between vernal pools and therefore can reasonably be expected to visit the Vernal Pool Complex on the subject site. Although the LandTech report discusses the onsite vernal pools at length, there is no mention of this Connecticut listed species or any other mention of Conservation's report. A copy of the NRM report is attached.
- 2. Prudent and Feasible Alternatives:** The NRM report stresses the importance of "Prudent and Feasible Alternatives," a cornerstone of the wetlands decision-making process, and recommends that construction activities be limited to the Bridgeport Avenue corridor as a reasonable alternative to the proposed site plan. The LandTech review lacks any discussion of alternatives. Some portions of the Shelter Ridge site are significantly more sensitive than others, as described in the NRM report. Specifically, the ridgeline and all land draining to the west of the ridgeline would have "high impact" if developed, while lands east of the ridgeline would have a lower impact (see graphic below). These

“high impact” lands drain either into the Vernal Pool Complex, which in turn drains into a stream containing a scenic waterfall on the adjacent open space, or directly into the Far Mill River, which is stocked with trout. This sensitive area is included as part of two designated greenways in the City’s 2009 Open Space Plan.



Construction in areas west of the ridgeline would have a greater negative impact than construction along Bridgeport Avenue. (Image from the NRM report, originally prepared for Planning and Zoning application.)

- Natural Resources Review.** LandTech’s “Natural Resources Review” section discusses numerous concerns about the plans, including the lack of basic data. The focus of this section is on the Vernal Pool Complex, which LandTech inspected and found to be a “very high quality system.” As previously noted, a “prudent and feasible alternative” for this site would be to pull all new construction to the east of the ridgeline, with new construction restricted to the Bridgeport Avenue corridor. This reasonable alternative would eliminate all potential impacts to the Vernal Pool Complex.

The Conservation Commission agrees that the applicant’s submission is inadequate for a project of this size and complexity. The extensive construction proposed to occur within Shelton’s designated greenway system merits the very highest standards for design and review.

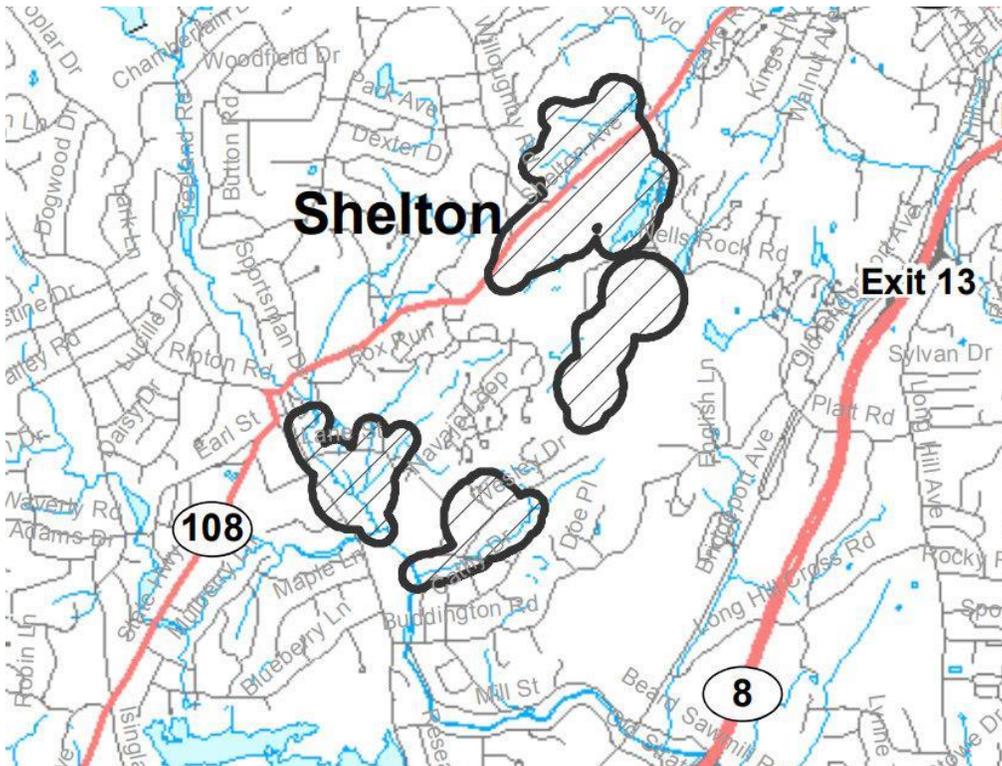
LandTech noted that no rating of the Vernal Pool Complex has been provided, and referenced the “*Best Management Practices Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States prepared by Calhoun and Klemens, 2002.*” Page 9 of this document consists of a Vernal Pool

Assessment Sheet. The first question on this form is “Are there any state-listed species (Endangered, Threatened, or Special Concern) present or breeding in the pool?” The answer to the question is likely “yes.” As noted in the NRM report, Spotted Turtles are a Connecticut *Species of Special Concern* that inhabit the vernal pools to the north of Buddington Road. Since this species commonly travels overland between vernal pools, it is reasonable to assume the turtle inhabits the Vernal Pool Complex.

VERNAL POOL ASSESSMENT SHEET

A. Biological Value of the Vernal Pool

(1) Are there *any* state-listed species (Endangered, Threatened, or Special Concern) present or breeding in the pool?
 Yes _____ No _____



Connecticut Natural Diversity Database, showing the locations of nearby Spotted Turtles, a Species of Special Concern.

LandTech reports that “*The ELS report does not mention the diversion of water to different watersheds and if those diversions have a negative impact on the water budgets of onsite wetlands. This should be included.*” Will this diversion impact the scenic waterfall on the abutting Old Kings Highway open space? Might the City’s waterfall be

more likely to dry up during summer droughts?

LandTech expressed multiple concerns regarding the proposed wetland mitigation area. Wetland mitigation should be used as a last resort when there are no alternatives because artificial wetlands are inconsistently effective and prone to failure. This mitigation area would be unnecessary if the prudent and feasible alternative of restricting construction to the Bridgeport Avenue corridor were required by the Inland Wetlands Commission.

4. **Stormwater Management.** LandTech's description of stormwater deficiencies runs six pages long. The applicant wishes to disturb about 72 acres of the site, therefore the downstream impacts on the Far Mill River and Vernal Pool Complex are potentially significant. We find the number of deficiencies troubling for such a large project and sensitive site.

LandTech states that a stormwater permit would be required and recommends that *"the project not be approved by the Commission until such time as the plans are revised to include a stormwater management plan that is in compliance with the DEEP General Permit."* The Conservation Commission agrees.

Separators and infiltrators are specified throughout the site, but the effectiveness of these tools is limited and based in large part on the specific design, ground conditions, and future maintenance. LandTech notes there are no soil tests to demonstrate that water can infiltrate into the ground fast enough for the infiltrators to be effective, that there is no provision for sediment storage in the bottom of the chambers, and no realistic way to fully maintain the infiltrators. *"If approved as depicted on the application drawings, runoff from the project may be discharged to the wetlands and watercourses with inadequate treatment. This can reasonably be expected to result in the discharge of more contaminants than are currently discharged from the site and lead to degradation of resources on and downstream from the property."*

The NRM report discussed thermal pollution as a significant threat to the Far Mill River, since it is stocked with trout each year. Colder waters contain the higher levels of oxygen that are required by trout, yet stormwater discharges from roofs and parking lots typically contain warm water during the summer. The LandTech report did not include a discussion of this issue. Stormwater piped directly into the Far Mill River, as proposed, would pose the greatest potential for thermal pollution compared to stormwater discharged to Wells Hollow Brook. A reduction of the total impervious surface area and elimination of the direct discharge to the Far Mill River via prudent and feasible alternatives would reduce thermal impacts to the Far Mill River.

Although separators and infiltrators can improve water stormwater quality if (and only if) they are well-designed and maintained, they do not eliminate stormwater impacts, and are no substitute for prudent and feasible alternatives. The Vernal Pool Complex, the City's Old Kings Highway waterfall, and Far Mill River would be better off if the prudent and feasible alternative of restricting development to the Bridgeport Avenue corridor was required.

In conclusion, LandTech revealed a long list of serious deficiencies in the wetlands application, although the review did not appear to include Conservation's NRM report and therefore was not comprehensive of the total record. Conservation cannot stress enough that the areas west of the ridgeline are highly sensitive and deserves to be left undeveloped. **Limiting development to the Bridgeport Avenue corridor is a prudent and feasible alternative that should be required by the Inland Wetland Commission.** The PDD mechanism provides flexibility for the applicant to adjust the site plans accordingly, or it would, had the plans not been approved by the Planning and Zoning Commission before the Inland Wetlands Commission had an opportunity to review the project.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Harbinson", is centered below the text.

Thomas Harbinson
Chairman

enc: Report by the City of Shelton Natural Resource Manager, March 2018