

APR 22 2025

To: Members of the Inland Wetlands and Water Courses Commission, Town of Ledyard CT  
April 2025

## Significant Issues in Opposition to IWWC#25-5SITE - 19, 29 & 39 Military Highway

### Coastal Boundary Area

As noted on the site maps, there is a section of wetlands on this property defined by the CT DEEP as Coastal Boundary; and Section 1.1 of the Ledyard IWWC Regulations reminds us how critical it is to preserve wetlands for this and future generations. The massive, proposed development in question cannot be considered healthy for these wetlands. The proposed epiccleantec system has only three systems currently in use, all in San Francisco where the average rainfall is 23" per year. **This cannot be compared to our area with 50" of average rainfall, a much higher water table and soil that cannot absorb excess amounts of fluid.**

The CT DEEP Permit Application for Wastewater Discharges from Subsurface Sewage Treatment and Disposal Systems submitted in May 2024 confirmed that there is a coastal hazard area adjacent to the site and potentially affected by the project, as well as freshwater wetlands and watercourses on the site, adjacent to it, and off-site but possibly affected. (Part IV)

According to the IWWC Regulations (Section 7) any applicant must show how the proposed regulated activity may have an impact on wetlands or water courses. And in making their decision, the Commission must consider the "impacts of the proposed regulated activity on wetlands or water courses outside the area....[and] the possibility of further avoiding reduction of the wetland's or water course's natural capacity to **support desirable biological life, prevent flooding, supply water...and provide recreation and open space....**[The Commission must also consider] the interference with the exercise of other property rights, and the impairments or **endangerment of public health, safety, or welfare.**" (10.2)

According to Cole's Wetland Evaluation included with the current application, dated February 20, 2025, FEMA has designated this area **Floodplain Zone AE, with a significant, high risk of flooding.** (p. 2) The National Wetland Inventory classifies it as PSSIE, poorly drained, with Timakwa and Natchaug mucks (p. 4). Whitestone's earlier report stated that **"the site soils are prone to erosion by precipitation and runoff,"** that groundwater in the soil tested as low as 1.8 fbg, and that shallow perched water [water sitting on impermeable soil] might be encountered in areas on the property. (Geotechnical Investigation, March 2024, Section 5.4) **Impermeable soil, as you know, prevents infiltration, leading to increased runoff, potential flooding, and soil erosion.**

Just downstream from the property in question is the Avalonia Conservancy property called Cranberry Pond (seen on old maps as Moulthrop Pond and described in this application as an "impoundment of Pine Swamp Brook"). The pond with its bordering woods is a place much in use over the years by canoers, kayakers, ice-skaters and people fishing, as well as town residents observing and appreciating local wildlife making its home throughout all these wetlands. It includes beavers (with a dam on the stream included within the DEEP boundary on the property); great blue and night herons; great egrets (DEEP "threatened"); ospreys, bald eagles, owls; mallard, wood, black,

hooded merganser and bufflehead ducks; breeding mute swans, Canada geese; otters; bass and pickerel; and decades-old snapping turtles, as well as painted and musk turtles, and sighting of a spotted turtle (DEEP “special concern”).

Smith Pond, further downstream, is designated by the Ledyard Conservation Commission as an area that is “unique and fragile.” It is classified as a National Diversity Data Base; and this downstream pond is not even mentioned in Cole’s report when talking about the stream flowing to Mill Cove and the Thames River. The wildlife in this entire watercourse will definitely be affected by increased and polluted water flow, light, traffic and noise, not to mention the construction process itself.

Whitestone in his 2024 report said **the construction process “will likely consist of temporarily lowering the groundwater table and/or removing surface water runoff, infiltrating water, or trapped water.”** (Section 5.4) We ask, where is this water to go?

### Sewage

Past discussions with Avalonia Conservancy have warned how our single home septic systems could affect the pond and the waterways. It is hard to imagine how discharge from a septic system for 278 living units (460 bedrooms) might not cause worse problems. Is the epiccleantec system adequate to handle the total sewage generated? The proposed apartments for Gales Ferry are estimated to use 69,000gpd (gallons per day), mostly coming into the complex from Groton Utilities, according to the updated letter from epiccleantec February 2025. Their website states that the blackwater system for Ledyard could process and recycle 50,000 of these 69,000 gallons being brought in, which would be used for “landscaping purposes.” **Where do these 50,000 gallons go, day after day? Into the site soil?**

Is there a local contractor who will be in charge of maintaining this system? Epiccleantec’s website promises that their systems are monitored 24/7—from California. We wonder what would happen in an emergency. Does the system has a generator powerful enough to keep it running during our local power outages, sometimes lasting for days? Connecticut TR-16 (Guides for the Design of Wastewater Treatment Works) requires that **“All new wastewater infrastructure must be able to provide for uninterrupted operation** and be protected from physical damage during a 100-year storm.” What will power this generator, and where will it and its fuel tank be located? Has DEEP approved this?

The 2024 DEEP application states that onsite wastewater is treated to a high level, disinfected, and then sent to subsurface dispersal (Part V). **If the chlorine treatment is used, will it enter the discharged water?** And, if so, what harm will it cause to plant and wildlife? Whitestone’s 2024 report included an appendix by Bohler, stating that **only 55% of the total phosphorus and 49% of the nitrogen would be removed by the system.** A study of Cranberry Pond by the Eastern CT Conservation District in 2022 noted that **these nutrients can contribute to cultural eutrophication**, degrading the aquatic ecosystem with excessive plant and algae growth, eventually turning it into a marsh. The Connecticut Water Quality Assessment Report, says that “nutrients, primarily phosphorus and nitrogen, impair both aquatic life and recreational use of Connecticut’s waterbodies and is a serious threat to water quality in Connecticut. Excessive loading of nutrients to surface waters due to wastewater discharges, stormwater or non-point sources such as runoff...can lead to

algal blooms, including blooms of noxious blue green algae, reduction in water clarity, habitat modification, aquatic life-impairments....”

There is a January 2024 letter from epiccleantec to CT DEEP acknowledging that this whole area is located in a **GA groundwater classification zone, meaning mostly private and public wells**. Sewage collected from the buildings would be treated “via an aerobic treatment process followed by membrane filtrations....**High quality effluent (i.e., low strength waste) would then be sent to a subsurface dispersal field for percolation into existing site soils.**” **What about the 19,000gpd not treated by the system? Does it simply get discharged into the site soils?** Some residents living downstream get their water supply from wells, some of which are shallow, dug wells. We fear that the quality of the ground water supplying these homes will be affected in a variety of ways by this major proposed development, causing future health problems for us and our children.

### **Stormwater runoff**

Section 2.1 of the IWWC Regulations defines “discharge” as “emission of any water, substance, or material into waters of the state whether or not such substance causes pollution.” Cole’s report states: “Indirect or secondary impacts to a wetland or watercourse can occur as a result of activities outside of the wetlands or watercourses...[including] alteration of drainage, patterns that could affect the flow regimen of a watercourse, and the discharge of degraded or insufficiently treated surface or groundwater, which may adversely impact the water quality of the regulate resources.” (p.8) It is not just sewage, but also stormwater runoff that is a concern.

The Application Narrative submitted February 24 2025, admits that the **“drainage from outflows will flow into the wetlands.”** It seems the storm water runoff from the roofs, and the water from parking lots contaminated with automotive fluids and salt will apparently flow through subsurface pipes in the ground, be filtered through a stormsettler unit, storm traps, or catchbasins, lead to a forebay and infiltration basin, all ending with scour holes. It would then be **discharged to the subsurface soil at the very edge of the 100’ upland review area and the 100 year flood plain**, flowing south eventually into the wetlands, Cranberry Pond, Smith Pond, Mill Cove, and the Thames River. Has the amount of this water been calculated? **The Line of Disturbance shown on maps of the property actually crosses over and into the 100’ upland review area and the 25’ residential landscape buffer just north of the Avalonia property.** (Site Layout Plan, C-302) There are two designated Dispersal Areas, but they are both uphill, to the north. What goes into these areas and how?

A rough estimate comparing average rainfall in New London County with the water being brought in for use in this complex would suggest that this increased water flow would essentially double the average rainfall on this property. Cole maintained that the wetlands would be “able to detain large quantities of water during storm and flooding events.” (p.7) However, earlier this month, there were waterfalls flowing for days over the spit of land from the DEEP wetlands into Cranberry Pond, with less than ½ inch of rainfall the previous week. [See picture] On occasion, we have seen that the town-owned culvert under Harvard Terrace was not adequate for the water flow after heavy rains, and the road was submerged in 6-12” of water. [See picture] We fear that **with excess water flow**

from upstream, this could happen more frequently, weakening the underlying structure of the road, as well as limiting access to the homes on the street.

#### **Connecticut Coastal Management Act**

The Connecticut Coastal Management Act defines adverse impacts which must be avoided, or at least minimized in order for a project to be lawfully approvable: (CGS section 22a-93 (15) (A) (D) and (G)

**\*Degrading water quality** through the significant introduction into either coastal waters or ground water supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity.

**\*Degrading natural or existing drainage patterns** through the significant alteration of groundwater flow and recharge and volume.

**\*Degrading or destroying essential wildlife, finfish or shellfish habitat** through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species of significant alteration of the natural components of the habitat.

#### **Conclusion**

**We do not believe that there is any way this proposed project can be safely approved.** And we ask: What are the provisions to ensure that any of the proposed protections for the wetlands, the water courses, the wildlife, and for us and our children would be adequate, enforced, and maintained in the future if this project were to be approved?

Submitted by: Mary Brown Larson (Mobby) 53 Harvard Terrace

*Mary B. Larson*

and the following residents of Harvard Terrace who have endorsed this letter:

David Larson--53	Paul & Cecile Magwood--48	Brenna Dillner Hass & Aaron Hass--51
Elayne Tortorigi Pons--57	Linda & Richard Levesque--33	Allison & Tyler Knigge--35
Connor Slack & Vivian Phelan--47	Craig Mateyov & Colleen Moneypenny--7	
Elaine & Brunson Dodge--52	Charlie & Mary Duzy--4	Kevin Cassidy & Heather Hollis--55
Stacy & Jon Alfield--56	Ric & Phyllis Lunato--42	Jonathan Willis--50
Leslie & Lee Traver--10	Larry Rucker--12	Ellen & Norman Atwood--8
Doug & Ann Monaghan--49	John Michaud--44	Wayne Marshall--5





Coastal Boundary Wetlands overflowing into Cranberry Pond, April 14 2025. This is still a time of moderate drought, and the rainfall for the previous week had only been about ½ inch.



6" water from Cranberry Pond flooding Harvard Terrace, March 2010 after a heavy rain.  
In past years on occasion, the water had reached 1' after severe rains.