CLA Engineers, Inc.

Civil • Structural • Survey

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May 29, 2025

Justin DeBrodt, Chairman Ledyard Inland Wetland and Watercourses Commission C/O Liz Burdick, Director of Land Use & Planning Town of Ledyard 741 Colonel Ledyard Hwy Ledyard, CT 06339-1511

RE: Third Party Review
IWWC#25-5SITE 19,29,39 Military Highway, Gales Ferry Multifamily Application
Ledyard, Connecticut
CLA-7925

To the Commission:

CLA Engineers, Inc. (CLA) has received and reviewed the revised site plans and the application materials for the above referenced project on file for the record on the Town of Ledyard website: https://ledyardct.legislationDetail.aspx?

The basis of review was the Town of Ledyard Inland Wetland Regulations, Town of Ledyard Ordinances, the 2024 CTDEEP Connecticut Stormwater Quality Manual (Stormwater Quality Manual), and the 2024 CTDEEP Connecticut Guidelines for Soil Erosion & Sediment Control (E&S Manual).

We offer the following comments on the materials:

- 1. Please specify whether the project will be completed in one phase or if phased construction is planned. Applicant should consider phasing and/or sequencing to ensure no more than 5 acres of soil is disturbed/exposed at a time as recommended by the E&S Manual. Provide a detailed phasing and construction sequencing plan. ADDRESSED
- 2. It appears that Pine Swamp Brook runs across the property through the identified wetlands. If this is true, please identify the watercourse on the plans. **ADDRESSED**
- 3. Test pit and boring locations should be shown on the site plans. Test pit data should be included on the site plans. ADDRESSED
- 4. Test pits and permeability information should be provided for each of the basins, chambers, and rain garden. NOT ADDRESSED. EXISTING TEST PITS ARE NOT LOCATED WITHIN SEVERAL OF THE STORMWATER MANAGEMENT BASINS. ACTUAL TEST PIT DATA AND SOIL PERMEABILITIES SHOULD BE PROVIDED FOR EACH BASIN.

- 5. Test pit profiles within the Drainage Report appear to indicate water elevation at the time of excavation. These elevations should not be relied on for an accurate representation of the seasonal high-water table for stormwater system design. SEE COMMENT #4 ADDITIONAL TEST PITS SHOULD BE PERFORMED IN THE PROPOSED BASIN LOCATIONS
- 6. The 100-year flood plain line from the FEMA mapping should be depicted on the plans. This line may not correspond with the surveyed elevation in the field but would govern when determining the 100-year flood plain limits. ADDRESSED
- 7. The FEMA Floodway limits should be depicted on the plans. ADDRESSED
- 8. Spot grades should be shown in the basin bottoms and top of berms. ADDRESSED
- 9. There is a conflict in the top of basin elevation for Proposed infiltration basin 1E in the call-out vs. a spot grade on the berm on sheet C-401. **ADDRESSED**
- 10. Will there be footing or foundation drains for the buildings? If so, the locations and discharge points should be shown. **ADDRESSED**
- 11. Engineered slope stabilization measures and benching should be specified and provided for the 2:1 slope to the west of the large parking lot. **ADDRESSED**
- 12. Sizing calculations for the temporary sediment traps on sheet C-601 should be provided.

 ADDRESSED
- 13. The temporary sediment traps appear to be remotely located, temporary measures should be depicted to direct stormwater runoff to these traps. ADDRESSED
- 14. A detailed narrative for the conversion of the temporary sediment trap to the final infiltration basin should be provided. ADDRESSED
- 15. On sheet C601 at the toe of the southerly proposed steep slope extend the silt fence to the limit of disturbance. ADDRESSED
- 16. On Sheet C602 specify an appropriate erosion control blanket and compost filter sock.

 ADDRESSED
- 17. Provide contact information for the party responsible for the erosion and sediment controls. This can be revised as the project proceeds. A CONTACT PERSON SHOULD BE PROVIDED FOR THE TIME BEING, POTENTIALLY THE OWNER. THIS CAN BE MODIFIED PRIOR TO CONSTRUCTION.
- 18. In section 7 of the erosion control narrative, specify that a CTDEEP Construction Stormwater General Permit is required. ADDRESSED
- 19. Maintenance and operations requirements of the infiltration basins, infiltration chambers, and rain garden should be added to the notes on sheet C-602. **ADDRESSED**
- 20. Sheet C-602 Erosion and Sediment Control Notes, Item 11 should require approval from Town Staff prior to removal of erosion and sedimentation control measures. ADDRESSED
- 21. Details and/or a narrative for potential trench or excavation dewatering activities should be provided. ADDRESSED
- 22. The downstream side of the proposed detention basin and infiltration basin appear to be constructed with fill berms. A section detail and material specifications should be provided for these berms. ADDRESSED
- 23. There are two Outlet Control Structure C-30 details (one should be labeled B-30). ADDRESSED

- 24. Drainage Report: A table summarizing stormwater runoff volume for the various storm events should be provided. ADDRESSED
- 25. Drainage Report: A Type D storm distribution should be used in accordance with the Stormwater Quality Manual. ADDRESSED
- 26. Drainage Report: Existing time of concentration travel paths should be shown on the existing watershed mapping. ADDRESSED
- 27. Drainage Report: Identify the source for the exfiltration rates (permeability) for each of the post development ponds/chambers. The Whitestone Report indicates a lower value should be used for design. ADDRESSED WE RECOMMEND PERMEABILITY SAMPLES BE TAKEN WHEN ADDITIONAL TEST PITS ARE PERFORMED TO CONFIRM THE DESIGN RATE.
- 28. Drainage Report: Stormsettler hydrodynamic separator sizing and treatment data should be provided. ADDRESSED
- 29. Per the CTDEEP Stormwater General Permit, the site will require regular inspection. The Commission may wish to receive copies of the inspection reports. THIS COMMENT HAS BEEN ACKNOWLEDGED BY THE APPLICANT.

At this time, due to the outstanding comments noted above, it cannot be determined if the project would have an adverse impact on the inland wetlands.

Thank you for the opportunity to provide this review. Please feel free to call us at our office or email khaubert@claengineers.com or brusso@claengineers.com with any questions or comments.

Very truly yours,

CLA Engineers, Inc.

Land Kyle Haubert, P.E.

Robert Russo C.S.S.