

# CLA Engineers, Inc.

Civil • Structural • Survey

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October 16, 2024

Tony Capon, Chairman  
Ledyard Planning & Zoning Commission  
C/O Liz Burdick, Director of Land Use & Planning  
Town of Ledyard  
741 Colonel Ledyard Hwy  
Ledyard, CT 06339-1511  
Via Email: [planner@ledyardct.org](mailto:planner@ledyardct.org)

RE: Third Party Review  
PZ#24-8, SUP24-9CAM – 1737 & 1761 Route 12, Gales Ferry (“GFI”)  
Ledyard, Connecticut  
CLA-7929

To the Commission:

CLA Engineers, Inc. (CLA) has received the following application materials for the above referenced project: Exhibits #1-#6, #13, #14-1, #14-2, #23, and #91 on file for the record on the Town of Ledyard website:

<https://ledyardct.legistar.com/LegislationDetail.aspx?ID=6778331&GUID=A75FACE5-C384-4950-A7DB-8C07B96864B0&Options=&Search=>

CLA staff have performed a field walk of the site on September 5, 2024 and conducted a review of the application documents. The basis of review was the Town of Ledyard Zoning 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).

CLA was in the processes of providing comments on the original application documents when revised Plans and a revised Stormwater Management Report were submitted by the Applicant on September 27, 2024 (Ex. #91). A large number of our original comments had been addressed by the Applicant in the revised documents; we offer the following comments on the revised application materials:

1. Benching of the rock face is a common practice for rock excavations. In our opinion, the rock face would not constitute a “bank” based on 8.16.N.4 of the Zoning Regulations, and would not be required to be graded to a 3:1 slope.
2. CLA recommends that the Applicant/Owner provide the Town with an as-built survey of the excavation at the completion of each phase.

3. Notes should be added to the plans that the excavation limits and the clearing and grubbing limits for each phase should be staked in the field by a licensed surveyor prior to the start of work for each phase.
4. A seed mix for temporary stockpile areas and a requirement for how long after soil placement the seed mix should be installed should be provided on the plans.
5. Where will fueling of excavation equipment and vehicles take place? Measures for spill prevention should be called out on the plans.
6. A material specification or gradation should be provided for the structural fill to be placed over the rock floor. The stormwater calculations appear to attribute Hydrologic Soil Group (HSG) A to the final floor indicating a high rate of permeability. The material specified should ensure that the HSG A rating can be accomplished.
7. Construction details for drainage culvert trenches, drainage structures, and the hydrodynamic separator should be provided.
8. A construction detail for the perimeter fence should be provided.
9. Sheet C-2: A more detailed narrative or construction sequence for the conversion of temporary sediment basins to the permanent water quality basins should be provided. How will the subsoil be protected from the migration of fines during use as a temporary sediment basin?
10. Sheet C-5: Outlet Control Structure OCS-2 call-out indicates a 2" diameter orifice, the Stormwater Management Report indicates a 6" diameter orifice.
11. Sheet C-6: Will the temporary frac-tank and pumping be used only during the phase 1 excavation work? or the duration of the project? How will the pump(s) and frac-tank be sized and maintained?
12. Sheet C-8: The "Typical Water Quality Basin Outlet Control Structure" detail depicts a 12"x12" weir in the structure. This is not included on the plan call-outs or in the Stormwater Management Report. A 6" underdrain is also depicted, but is not included on the plan call-outs or in other details.
13. Sheet C-8: Additional detail should be included on the "Section Through Sediment Basin and Riser". In particular the surface treatment and subsoil section information.
14. Sheet C-11: The material for the 30" subsoil to be placed on the bench planting area should be specified on the plans.
15. Sheet C-11: Specifics on the bench plantings should be provided on the plans. Minimum tree sizes, spacing, and species should be provided.
16. Sheet C-11: A call-out on this sheet indicates the floor is to be stabilized with crushed stone. Elsewhere in the plans it is indicated that the final surface is to be topsoil and seed. This should be clarified.
17. Stormwater Management Report: Changes to runoff volume from the excavation site should be quantified. Will there be any negative impacts downstream from any changes in runoff volume?
18. Stormwater Management Report: Calculations for the required Water Quality Volumes (WQV) for each watershed have been provided. It is not clear in the data provided if this

- volume is stored and retained onsite in the water quality basins. A summary or table outlining the required WQV and WQV provided and retained in each basin should be provided.
19. Stormwater Management Report: Sizing and treated flow rate capacity information for the hydrodynamic separator should be provided.

Thank you for the opportunity to provide this review. Please feel free to call me at our office or email [khaubert@claengineers.com](mailto:khaubert@claengineers.com) with any questions or comments.

Very truly yours,  
**CLA Engineers, Inc.**

A handwritten signature in blue ink, appearing to read "K Haubert".

Kyle Haubert, P.E.