

CLA Engineers, Inc.

Civil • Structural • Survey

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November 14, 2024

Stacy Radford
Zoning & Wetland Officer – Dept. of Land Use & Development
Town of Montville
310 Norwich-New London Tpke., Uncasville, CT 06382
Via Email: sradford@montville-ct.org

RE: Inland Wetland Application 24 IWC 9
2268-2284 Route 32 – Horizon View
CLA-7873C

Dear Stacy:

CLA Engineers, Inc. (CLA) has received the following application materials for the above referenced project:

1. Inland Wetlands and Watercourses Application dated 9/20/24
2. Cover Letter dated 9/27/24
3. Wetland Impact Letter prepared by Lucas Environmental dated 9/19/24
4. Wetland Summary Letter prepared by Lucas Environmental dated 8/23/24
5. Site Plans (parts 1-10) prepared by RJO'Connell & Associates dated 9/25/24
6. Complete Stormwater Report (parts 1-4) prepared by RJOC dated 9/25/24
7. Application Response Letter dated 10/25/24
8. Revised Stormwater Report (parts 1-5) prepared by RJOC dated 10/25/24
9. Revised Site Plans (parts 1-11) prepared by RJOC dated 10/25/24

CLA staff (Kyle Haubert & Molly Ahern) have reviewed the revised application documents, and have performed an additional field walk to review the existing conditions. The original comments from our October 17, 2024 letter are included below in italics and the status of the comment is given in bold:

1. *Final plans should be signed by a representative of Lucas Environmental.* **Addressed**
2. *During the site walk CLA noted the presence of wetland vegetation (Phragmites australis) south of the inland wetland boundary on the site plans. The Soil Scientist should address the presence of this vegetation and confirm the inland wetland boundary.*
 - a. Response (Lucas Environmental): LE concurs there is common reed (Phragmites australis) occurring outside the delineated wetland boundary. Common reed grows in marshes, but it also grows along the wetland-upland interface and can be found in upland areas. Common reed spreads not only by seeds but it also spreads rapidly with rhizomes that generate roots and stalks. Rhizomes may exceed 60 feet in length and grow more than six feet per year. This allows the plant to reach low-lying groundwater and tolerate a variety of conditions, including dry upland sites. It is not uncommon for common reed to grow outside a delineated wetland

resource area. In order to determine the wetland boundary on this particular site, soils were relied upon heavily as a wetland indicator given the aggressive and invasive nature of the common reed present. Soils were examined in accordance with the 1987 "Corps of Engineers Wetlands Delineation Manual" (Department of the Army, Technical Report Y-87-1), the Northeast and Northcentral Regional Supplement v. 2.0 (2012), and the Field Indicators for Identifying Hydric Soils in New England (Version 4). If upland soils were encountered in areas infested with common reed, it was not included within the wetland boundary, even though common reed is a wetland indicator species.

b. CLA concurs with the explanation for the presence of common reed. CLA has reviewed the inland wetland delineation and concurs with the limits as flagged by the Soil Scientist.

3. Page 5 of the Wetland Impact Assessment prepared by Lucas Environmental identifies groundwater recharge as a principal function of the wetland, but later notes that the wetland "does not appear to significantly contribute to surface and underground water". These statements appear to conflict with each other; Please explain and/or provide more detailed information. **Addressed**
4. An alternatives analysis should be provided describing alternative options to achieve project goals and explain why these alternatives were not selected.
 - a. *Response (RJOC): The wetland in question has been created from the discharge of the off-site roadway and neighborhood drainage system located to the north of the property along Cedar Lane. Over the years, a large degree of accumulated sediment has built up in this wetland system (see photos attached). Given this, the existing sediment accumulation is proposed to be removed as part of the development program. A catch basin/sediment trap will be utilized to collect the future sediment that would otherwise be deposited in this area. The offsite stormwater will be conveyed around the proposed development utilizing a headwall to collect, divert and attenuate the off-site runoff. The location of the headwall presents the ability to allow vehicle circulation around the property, including emergency vehicle and truck access. The vehicle circulation provides an increased level of safety and convenience for the future residence of the property, as well as providing the amount of parking spaces to satisfy the zoning code. Alternative designs were considered to further minimize direct impact to the onsite wetland area, but were ruled out as they failed to allow for the proper collection and diversion of the off-site runoff around the development or otherwise interfered with necessary traffic circulation around the building or the required parking for the project.*
 - b. The alternatives considered as noted above should be illustrated or documented with a descriptive narrative and quantified impacts. Detailed information should be provided on why each alternative was rejected in favor of the proposed development. Please provide this documentation for review.**

5. Soil profile logs or data should be provided for all test pits or borings performed on the site. There appear to be additional test pits or boring located on the site plan than included in the Whitestone records provided. **Addressed**
6. A detail for the catch basin/sediment trap inlet structure should be provided. **Addressed**
7. The detention basin and infiltration system designs utilize an existing permeability rate based on soil gradations. CLA would recommend using half this rate for design purposes in accordance with the Stormwater Quality Manual. **Addressed**

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

Very truly yours,
CLA Engineers, Inc.



Kyle Haubert, P.E.