



John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: North Castle Planning Board

CC: Adam Kaufman, AICP

FROM: David Sessions, RLA, AICP *DS*
KSCJ Consulting
Town Wetland Consultants

John Kellard, P.E. *JK*
KSCJ Consulting
Consulting Town Engineers

DATE: September 22, 2023
Updated November 10, 2023
Updated April 8, 2024

RE: Ana Pereira
4 Tripp Lane
Section 108.02, Block 1, Lot 10

As requested, KSCJ Consulting has reviewed the site plans submitted in conjunction with the above-referenced application. The applicant is seeking to legalize various activities completed by the property owner without first obtaining the required Town approvals/permits. The Building Department has issued several Notices of Violations and Stop Work Orders for the activities, which include construction of a rear addition, cabana, and shed, driveway construction, tree removal over approximately 3/4 of an acre, import of fill material, installation of driveway gates and piers, construction of retaining walls and fence, and construction of a basketball court. The applicant received Conservation Board Approval at its March 19th Meeting. The ±2.06 acre property is located in the R-2A Zoning District.

Our comments are outlined below.

GENERAL COMMENTS

1. The applicant has acknowledged the need to provide confirmation from the Westchester County Health Department (WCHD) that the improvements and expansions to the residence and cabana, as well as the expansion of the driveway and proposed removal of a portion located above the septic fields, do not require upgrades or modifications to the on-site wastewater treatment system.

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The applicant shall continue discussions with the WCHD and provide any correspondence to the Planning Board and this office for review.

The applicant has provided WCHD documents approving a new septic system located on the central to eastern portion of the site. Additionally, a new septic pump chamber, new septic tank, and new force main are also proposed and approved. Comment addressed.

2. **As previously noted, the plan has been revised as requested to illustrate and dimension all minimum required yard setbacks and includes a Bulk Zoning Table. It appears that area variances and/or waivers will be required for the location of the driveway gate, curb cut width and gate pier height. The plan should be referred to the Building Inspector for confirmation.**

3. As previously noted, the applicant will be required to provide a Wetland Mitigation Plan in accordance with Chapter 340, Wetlands and Watercourse Protection of the Town Code, demonstrating a 2:1 ratio for mitigation of wetland and wetland buffer disturbance as a result of the project. The plan will require referral to the Conservation Board for recommendation of approval. Before an appropriate mitigation plan can be prepared for consideration, the limits of the existing wetland areas and associated buffers within and adjacent to the site must be established. Understanding that this is not possible for the subject property due to the fill placement, we note that as part of an ongoing application with the adjacent property to the east (2 Tripp Ln), this office verified that a locally regulated wetland exists at the rear of the site and is accurately depicted on the Tree Mitigation Plan. However, based on review of available Westchester County aerial mapping and topography, it appears that (prior to placement of fill) this easterly system was likely connected to a system on the west side of the property at 6 Tripp Lane through the subject property. The applicant will need to investigate this westerly off-site wetland system to identify the boundary and associated 100 foot wetland buffer. Additionally, a reasonable assumption based on historical mapping must be made to define previously existing wetland areas on the subject property. These areas should be included in the wetland/wetland buffer disturbance and required mitigation calculations. The off-site wetland boundary shall be field located and established with sequentially number flags for confirmation by the Town Wetland Consultant. Please notify this office once the wetland boundary has been established in the field.

On February 8, 2024, this office met with the homeowner and the Design Engineer for a site visit. The intermittent watercourse previously shown bisecting the property has been determined not to exist; therefore, the only regulated on-site area is the 100' buffer associated with an off-site wetland located on 2 Tripp Lane. A markup of the submitted plan has been provided showing the on-site 100' wetland buffer. The applicant has provided a revised Tree & Wetland Mitigation Plan (C-130), which now shows the updated wetland and wetland buffer boundaries. A 2:1

mitigation program has been provided with a combination of invasive species removal, no-mow zone, reestablishing a pre-existing swale and tree replacement within the wetland buffer. This mitigation strategy has been approved by the Conservation Board. Comment addressed.

4. As noted above, there appears to have been a wetland or drainage course that ran through the rear of 4 Tripp Lane. Parts of this wetland/drainage course were filled on 2 Tripp Lane and 4 Tripp Lane, but the original elevations and wetland areas are still located on 6 Tripp Lane. The fill placed on 4 Tripp Lane likely interrupted the flow of water and could have affected any wetland or drainage areas on 6 Tripp Lane. As part of the required wetland mitigation, we would recommend, at a minimum, that a portion of the fill be removed from the rear of 4 Tripp Lane to help restore the natural hydrologic connection between the source of the drainage and the wetlands located on 6 Tripp Lane. Removing the fill would be recommended as only a partial solution to the commitment to mitigate the effects of the fill and construction within the wetland buffers. To determine where the fill removal would be most effective, we recommend that the applicant seek a professional wetlands consultant to determine the location of wetlands on 6 Tripp Lane.

Please refer to Comment #3, above. Comment addressed.

5. As previously requested, the Wetland Mitigation Plan shall illustrate and quantify the previous disturbance areas to the wetland and/or wetland buffer. The plan shall include a summary table that quantifies the total wetland and wetland buffer area on site, total disturbance areas within each, and total pervious and impervious cover pre and post development. Mitigation shall be provided at a ratio of 2:1 minimum. The plan currently indicates approximately 7,775 s.f. of disturbance within the wetland buffer. However, the applicant shall provide an updated wetland/wetland buffer disturbance area and required 2:1 mitigation based on the updated wetland delineation and available aerial mapping noted above. The plan shall include a detailed mitigation table quantifying disturbances and land cover (pervious/impervious) within the wetland and wetland buffer and the mitigation provided.

Please see Comment #3 above. The revised plan includes a summary table, which quantifies the disturbances within the wetland buffer, as well as a mitigation table quantifying the various types of wetland mitigation. Comment addressed.

6. As previously noted, the applicant has cleared a significant number of trees on the property. The quantity, size and species are not known. As required by Chapter 308, Trees of the Town Code, Section 308-25, the applicant will be required to provide a tree restoration plan to mitigate the unapproved removal of existing vegetation. The Planning Board will need to determine whether the restoration plan is ultimately appropriate for the level of disturbance and removals.

Because the actual level of Town-regulated tree removal is unknown, the applicant has used the adjacent property to establish a tree sample area to establish a baseline for the tree mitigation calculations. This office is amenable to this approach. The applicant has identified all trees greater than eight (8) inches in diameter and all trees greater than 24 inches in diameter from the 5,000 s.f. tree sample area. A total of 17 trees were sampled; 13 @ 8 inch dbh or greater and 4 @ 24 inch dbh or greater, which equates to 76% and 24% of the sample area, respectively. Applying this sample area over the ±1.15 acres of tree removal results in a total of 171 trees removed; 130 @ 8 inch dbh or greater and 41 @ 24 inch dbh or greater (not 139 and 32 as presented in the calculations). This results in a minimum total tree caliper of 2,024 inches to mitigate. The applicant is proposing a total of ±146 caliper inches of plantings. The applicant shall update the mitigation requirements, proposed tree planting notes and planting plan accordingly. It appears additional mitigation will be required. The planting notes were also cut off on the plan and should be corrected.

The revised plan states that 692 inches of new trees have already been planted on the property, with an additional 124 inches of trees being proposed, for a total of 816 inches of trees. These new trees, in addition to the invasive species removal program, 31,200 s.f. of meadow seed mix (no-now area), and the reestablishment of the previous swale through the property, comprises the mitigation program. While the 816 inches of trees falls short of the 2,024 inches of trees that were previously removed, the number of new trees already planted, combined with the additional trees proposed to be planted, exceed the number of trees removed. The Planning Board should determine if it will require additional trees to be planted.

7. As previously requested, the cut and fill plan should overlay the surveyed topography onto the pre-developed GIS topography to illustrate the cut and fill volumes established between pre-existing conditions and existing conditions. The fill sampling and testing was reviewed by the Town's Environmental Consultant. It was agreed that the fill remain in place with a 24 inch soil cap and a demarcation layer (orange fence or geotextile membrane) placed above the existing fill section. The soil cap shall include a minimum six (6) inch layer of top soil. This has been noted and detailed on the plan. However, the applicant shall prepare a proposed grading plan to illustrate how the add fill will be accommodated on the site and what, if any, added modifications to walls, walks, drives, etc., may be needed as a result. The applicant must also prepare an erosion and sediment control plan to illustrate and detail temporary access to the site and protection of the septic field for the import of clean fill, as well as all temporary sediment and erosion control measures that will be required.

The applicant has revised the scope of the project to propose the removal of approximately 704 c.y. of imported fill, which appears after extensive testing on the site, concentrated in an area

located along the western property boundary. The applicant has stated, during a meeting on August 6, 2023 held at Town Hall, between the Applicant, The Planning Department, and our office, that test pits have revealed that the imported fill did not extend to the rest of the site as originally assumed. We defer to the Board on the acceptance and limits of the new imported fill removals.

8. As previously noted, the property is served by an on-site wastewater treatment system. The plan has been revised to illustrate the location of the existing septic field and tanks based on available WCHD as-builts and record data. It appears that the imported fill material and regarding activities that occurred at the rear of the property also occurred above the existing septic field, potentially compromising its function. The applicant has acknowledged the need to provide a determination, confirmed by the WCHD, that the septic system continues to operate as intended. Any upgrades or modifications that may become necessary will need to be illustrated on the plan and approved by the Westchester County Health Department. If the existing septic field trenches are able to remain, a plan shall be provided to protect measures for the existing septic fields during the removal of the portion of existing asphalt driveway.

The applicant has provided WCHD documents approving a new septic system located on the central to eastern portion of the site. Additionally, a new septic pump chamber, new septic tank, and new force main are also proposed and approved. Comment addressed.

9. As previously noted, the applicant has revised the Stormwater Management Report, as requested, to demonstrate adequate mitigation of the 100-year storm event. Please note the following:
 - a. The plan shall illustrate the connection of the existing 6 inch pool patio drains to the infiltration system.

Comment Addressed.

- b. As a result of the wetland mitigation and required soil removal, total disturbance will exceed one (1) acre. As such, the applicant will be required to obtain coverage under the NYSDEC SPDES General Permit (GP-0-20-001) for Stormwater Discharges from Construction Activity and the submission of a Notice of Intent (NOI). Provide draft copies for review.

Comment Addressed.

10. As previously noted, the plans illustrate existing six (6) foot high black vinyl coated chain link fence and aluminum fence and a proposed four (4) foot high black vinyl coated chain link pool fence; however, fence details No. 10 and 11 are for proposed fences of 5 feet 3 inches and 5 feet 2 inches in height. Please coordinate between the plan and details.

Comment Addressed.

11. **The stormwater treatment system's overflow pipe should not be installed discharging towards the neighboring property. We recommend proposing pop-up emitters on the system or relocating the overflow to an area that will not affect the neighbors.**
12. **A Wetland Mitigation Cost Estimate shall be submitted. The Conservation Board has requested a five (5) year, long-term wetland mitigation maintenance and monitoring plan to ensure that plantings associated with any required wetland mitigation plan will continue to thrive.**

As additional information becomes available, we will continue our review. It is noted that an itemized response to all comments will facilitate completeness and efficiency of review.

PLANS REVIEWED, PREPARED BY JMC, DATED MARCH 25, 2024:

- Cover Sheet (C-000)
- Pre-Existing Conditions Map (C-100)
- Existing Conditions Map and Demolition Map (C-110)
- Tree & Wetland Mitigation Plan (C-130)
- Fill Removal Plan (C-140)
- Site Plan (C-200)
- Gross Land Coverage Plan (C-310)
- Cut and Fill Plan (C-410)
- Construction Details (C-900, C-901)

DS/dc