

MEMORANDUM

TO: North Castle Planning Board

CC: North Castle Conservation Board

Adam Kaufman, AICP Joseph Riina, P.E. Keith Rosenthal

FROM: John Kellard, P.E.

KSCJ Consulting

Consulting Town Engineers

DATE: March 25, 2022

Updated September 26, 2022 Updated November 22, 2022 **Updated October 5, 2023**

RE: Site Development Plan Approval Application

Keith Rosenthal 10 Creemer Road

Section 108.02, Block 2, Lot 60

As requested, KSCJ Consulting has reviewed the site plans submitted in conjunction with the above-referenced project. The applicant is proposing to construct a 4,771 s.f. addition to the existing residence, new septic expansion system and a rain garden to treat runoff. The property is ±5.66 acres in size and located in the R2-A Zoning District.

Two (2) watercourses flow through the property to the on-site pond located within the northeast portion of the site. The pond drains to the New York State Department of Environmental Conservation (NYSDEC) Wetland K-24. The Westchester County GIS Mapping designates the majority of the lands east of the entry drive, cottage and residence as hydric soils.

Our comments follow:

GENERAL COMMENTS

1. A significant portion of the project site may be locally-regulated wetlands. The applicant will need to have a wetland delineation performed, surveyed and included on the Site Plan. Upon flagging

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of the wetlands and prior to surveying the flags, please contact our office to field verify the boundary. Once the delineation is included on the Site Plan, an accurate determination of wetlands and wetland buffers will be established.

The submission notes the plans have been revised to include wetland flagging by Steve Marino, PWS. The plan notes the survey was last updated December 21, 2020. Please confirm on the plan set that the wetland flags were surveyed and update the survey revision date.

An intermittent watercourse has been included on the plan set. Please confirm the intermittent course was surveyed. Pease include the wetland buffer adjacent to the intermittent watercourses.

Comment addressed.

2. NYSDEC Wetland K-24 appears to be in close proximity to the project site. The applicant should contact NYSDEC for an on-site confirmation of their jurisdiction. Please provide verification of their determination.

The applicant has obtained a NYSDEC Freshwater Wetland Permit, dated August 29, 2023, for work within the NYSDEC 100-foot wetland buffer. Work within the buffer will include construction of a rain garden, removal of invasive species and the addition of native plantings.

3. Please provide on the site plan the location of the existing septic system servicing the proposed residence.

The applicant has included the existing septic system servicing the existing residence. The system appears to extend into the area shown as septic expansion area for the accessory structure. Please clarify.

Both existing septic systems are located within the wetland buffer, as well as the expansion area for the accessory structure. Expansion area for the main residence is proposed to be relocated to the top of the hill adjacent to the existing tennis court.

Improvements proposed for the septic system servicing the main residence, which are located within the wetland buffer, include a new septic tank and new piping, as well as a new pump tank and new force main for the future expansion system, if required in the future.

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4. Upon an accurate wetland determination, the applicant should verify with the Westchester County Department of Health (WCHD) their ability to permit the construction of the new septic system proposed to service the main residence.

Also, the existing septic system servicing the cottage appears to be located within hydric soils. The applicant should verify with the WCHD their ability to permit the cottage expansion through the use of the existing septic system.

The applicant should provide the Planning Board with an update on the status of the WCHD Approval. The applicant should provide WCHD Approval of the proposed septic system improvements upon receipt of approval.

The applicant has obtained WCHD Approval NOC-2023-10, dated May 19, 2023, for the construction of an on-site wastewater treatment expansion system to service the expanded residence and existing cottage. Existing on-site treatment facilities can service the facilities with minor modification to the septic tank and piping. Comment addressed.

5. Upon determination of the wetland boundary and its regulated buffer, the applicant will need to establish the actual wetland and wetland buffer disturbances. A Wetland Mitigation Plan will need to be prepared which will quantify total wetlands and buffers on-site, total disturbances and total impervious cover within each. Mitigation will need to be provided at a minimum ratio of 2:1 of the disturbance.

The applicant is proposing to continue use of two (2) existing septic systems located within the wetland buffer. In addition, the applicant is proposing a portion of the building addition, site grading, stormwater piping, rain garden, new septic tank and gravity sewer piping within the local wetland buffer. Future work within the wetland buffer would include a sewage pump station and sewage force main.

The applicant should provide an evaluation of the proposed wetland buffer disturbances and prepare a wetland mitigation plan for the project. Upon preparation of the mitigation plan, the Planning Board should refer the application to the Town Conservation Board for their review and recommendation.

The project will result in 4,375 s.f. of wetland disturbance, 350 s.f. for the addition to the residence, 660 s.f. for the installation of a new septic tank and sewer piping and 3,365 s.f. for the installation of a rain garden, which will mitigate the runoff from the proposed addition and motor

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court expansion. The applicant should correct the discrepancy in the wetland buffer disturbance area listed for the rain garden on the project site plan.

The applicant has prepared a Wetland Enhancement/Restoration Plan, which includes a combination of invasive species removal and native plantings, totaling an area of approximately 10,000 s.f. of mitigation. Invasive species removal shall include the removal of phragmites along the eastern border of the property, removal of Japanese Knotweed upgrade of the pond and the installation of herbaceous plants along the shoreline of the pond. The mitigation plan should be referred to the Town Conservation Board for review and recommendation.

6. The applicant should show on the plan, trees which must be removed to implement the proposed improvements. The EAF should be revised accordingly.

The project will require the removal of 11 trees, six (6) trees for the addition to the residence, four (4) trees for the rain garden and one (1) tree in the future should the septic expansion area need to be utilized.

7. The applicant should provide a cut and fill analysis of the proposed improvements.

The applicant should provide grading within the motor court confirming all runoff will be directed to DI-1. The elevation of the garage slabs should also be provided.

The applicant has estimated the earthwork for the project to result in 315 c.y. of excavation and 755 c.y. of fill for a net importation of fill of 440 c.y. The applicant will need to submit an application for a Fill Permit with the Town Building Department at the time of Building Permit Application.

8. There does not appear to be any need to install the septic expansion area force main 15 feet below grade. Please correct the force main profile.

Comment addressed.

9. The septic plan indicates two (2) feet of fill or 3,058 c.f. of run of bank fill is required for the expansion system. The profile and plan should reflect the proposed fill. Please explain the need for labeling slope designation extending 107.8 feet below the proposed expansion area.

Comment addressed.

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10. The applicant indicates 31,054 s.f. of site disturbance shall occur with the project. The applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) for the project. The SWPPP should mitigate the increase in runoff due to the proposed improvements. Please acknowledge the increase in impervious surfaces and update computations.

A rain garden is proposed to mitigate stormwater runoff impacts. Please submit updated stormwater computations used to design the rain garden mitigating water quality and water quantity for the project site.

The applicant is proposing the mitigation of runoff from the proposed additions and driveway court expansion through discharge of these areas to a rain garden. A Stormwater Management Plan has been prepared for the project, which confirms mitigation of discharge for the improvements for water quantity (peak rates of discharge for storm events 1-25 years of occurrence, as well as water quality).

Our comments with regard to the Stormwater Management Plan follow:

- a. The applicant should correct tables within Sections 5.1 and 5.2 of the report from a Tc of 5 hours to 5 minutes.
- b. The applicant will discharge from the rain garden to the adjacent freshwater wetlands, immediately downgradient of the rain garden. The applicant should show a diffuser, level spreader, etc., required to dissipate energy and disperse flow at the discharge point.
- 11. The applicant shall provide equipment staging locations, as well as realistic soil stockpile locations based on the cut/fill requirements for the project. Construction fencing should be provided along the disturbance limits bordering wetlands and wetland buffers. Please provide a stabilized construction entrance by the main residence.

The applicant has prepared an erosion and sediment control plan for the project. The plan should include a construction fencing along the disturbance limits in the vicinity of the proposed spa addition and the rain garden, both improvements which are located adjacent to or within the wetland buffer.

Areas adjacent to the spa and the rain garden should only be disturbed during growing seasons when restoration of the disturbances can be immediately revegetated. Disturbances to both of these areas should have a time limit while no vegetation is present. The applicant should also

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detail the means of stabilization for the rain garden embankment. A planting plan for the rain garden with plant quantities should be provided.

The most significant disturbance occurring on-site will be in the vicinity of the additions and motor court. This area will also be used for construction staging. There is minimal protection to control erosion and protect downstream wetlands from siltation. The applicant should examine a more specific stabilization plan for this area with a time limit for exposed soils. When soils are exposed within this area, a temporary sediment pond should be available to control runoff and discharge. The applicant should include a temporary sediment pond in the design.

Upon confirmation of the wetlands, buffers and WCHD requirements, we will be able to continue our review.

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 SITE DESIGN CONSULTANTS, DATED SEPTEMBER 25, 2023:

- Site Plan (Sheet 1 of 6)
- Existing Conditions Plan (Sheet 2 of 6)
- OWTS Tank Relocation & 100% Expansion Design (Sheet 3 of 6)
- Erosion and Sediment Control Plan (Sheet 4 of 6)
- Erosion and Stormwater Details (Sheet 5 of 6)
- Septic Details (Sheet 6 of 6)
- Wetland Enhancement/Restoration Plan (Sheet 1 of 1), dated January 12, 2023

JK/dc

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