


**MEMORANDUM**

TO: North Castle Planning Board

CC: Adam Kaufman, AICP  
Tom Abillama, AIA  
Chris Kalian

FROM: John Kellard, P.E.   
Kellard Sessions Consulting  
Consulting Town Engineers

DATE: September 23, 2021

RE: Chris Kalian  
99 Byram Ridge Road  
Section 101.01, Block 1, Lot 13

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As requested, Kellard Sessions Consulting has reviewed the site plans submitted in conjunction with the above-referenced project. The applicant is proposing to raze an existing residence and develop a new single-family residence in a similar location. At the recommendation of the Planning Board, the applicant is no longer utilizing a portion of the existing foundation to better situate the house on the lot. Associated improvements include reconstruction of the existing driveway and construction of a new on-site wastewater disposal system. The existing private drilled well is to be maintained. The property is ±1.34 acres in size and located in the One-Family, R1-A, Zoning District.

Our previous comments are provided below for reference with our most current in **bold**.

**GENERAL COMMENTS**

1. As previously noted, the plans, notes and stormwater calculations on Sheet SP.3 continue to refer to the previously proposed pool and associated improvements and should be removed from the plan.

**The plan no longer includes references to the previously proposed pool and associated improvements.**

**Comment addressed.**

2. As previously noted, it appears that the applicant is proposing to maintain only a small portion of the existing foundation. To do so, however, the orientation of the house remains somewhat awkward in that it does not face the street as the neighboring houses do. Rather, it is rotated toward the neighboring residences to the north and south. The Planning Board should discuss whether it would be appropriate to have the applicant consider rotating the house clockwise so that it, more traditionally, faces the street. It appears that the house could be rotated in the same general location which may also provide for improved driveway access and improved views to the rear of the lot as opposed to the neighboring residence.

**As suggested and discussed with the Planning Board, the applicant has revised the proposed layout to orient the house toward the street. This appears to provide a better use of the site without potential impact to the neighboring properties.**

**Comment addressed.**

3. The applicant has provided site plan packages prepared by the Project Architect and Civil Engineer. As previously noted, the plans must be coordinated as it relates to proposed grading and retaining walls, stormwater collection and mitigation system layout, tree removal and protection, temporary erosion and sediment control, etc. We will reserve detailed comment on these various improvements until the plans have been clarified and coordinated.

**Although the applicant's cover letter indicates that plans prepared by the Civil Engineer and Landscape Architect have been coordinated and submitted, this office has not received these additional plans for review. The prior comments noted above should be addressed and submitted for review.**

4. As previously requested, the plan shall illustrate and dimension the minimum required yard setbacks and allowable building envelope.

**The requested yard setbacks have been indicated on the plan and it appears that the layout of the structure complies with bulk zoning. This should be verified by the Building Inspector.**

**Comment addressed.**

5. As previously requested, the plan shall illustrate any proposed grading, including spot grades, as appropriate, and coordinate same between both plan sets. Specifically, the plan shall illustrate proposed grading for the rear and side yards to correspond to the architectural elevations provided and accommodate the walk-out lower level, etc.

**Upon review of the architectural drawings, it appears that the basement level will not have a walk-out condition. The proposed grading should be clarified and coordinated with the civil drawings to be submitted. Slopes should be limited to 1 vertical to 2 horizontal.**

6. As previously requested, the plan shall include a note clearly stating that “Prior to Issuance of a Building Permit, all walls, equal to or greater than four (4) feet in height, shall be designed by a NYS Licensed Professional Engineer.” Provide construction details and specifications on the plan.

**The previously requested note and any details related to retaining wall design shall be included on the site plan prior to approval.**

7. As previously requested, the plan shall clearly state that “Prior to the issuance of a Certificate of Occupancy, the construction of all walls, equal to or greater than four (4) feet in height, shall be certified by the Design Professional.”

**The previously requested note related to certification of construction of retaining walls shall be included on the site plan prior to approval. The plan refers to a boulder retaining wall. No detail of the boulder wall has been provided. Wall Detail #3 shows two (2), 3-foot walls, however, no distance is specified between the walls. Wall Detail #2 shows a single wall, however, no height limit is provided. Also, Wall Detail #2 shows a driveway adjacent to the wall, however, Plan SP-4 does not show a wall adjacent to the driveway. Also, it appears 8-10 foot walls are required at the pool.**

8. As previously requested, the plan shall include a driveway profile demonstrating compliance with Section 355-59, Driveways of the Town Code. The profile shall include dimensions, grades and vertical curve data as needed to demonstrate compliance with specific provisions related to maximum allowable grades for the platform area and drive. The profile should illustrate the location of the edge of existing roadway, property line and termination at the garage. A centerline alignment shall also be provided corresponding to the profile. The “average grade” noted on Sheet SP.4 does not satisfy this requirement.

**The plan proposes to reconstruct and extend the existing drive. The previously requested profile and supporting data, demonstrating compliance with Town Code, shall be provided with particular attention given to the platform grade at the street, maximum driveway grade (not average) and grade at the garage. The site plan shall also illustrate the various dimension of the driveway width, turn around area and platform at the garage. Also, the grading of the driveway does not comply with regulations or profile. Site grading shows slopes proposed greater than 1 vertical to 2 horizontal. Please revise. Also, the steep slope adjacent to the garage will not permit access at this location. Please address.**

9. As previously requested, the plan shall indicate a maximum curb cut width of 18 feet, as required by the Town Highway Department. Any required restoration within the Town right of way shall be illustrated and detailed on the plan. In addition, the plan proposes to regrade/reconstruct the existing driveway. The plan shall dimension the driveway width and platform area at the garage and indicate whether the drive will be curbed. Provide details.

**This comment remains to be addressed and is based on prior plans prepared by the Civil Engineer not submitted with this application.**

10. As previously requested, the applicant shall submit a Landscape Plan for consideration by the Planning Board. The plan shall include a table summarizing the trees to be removed and indicate the locations of proposed trees, specifying the size, quantity, and species of all proposed planting. The landscape plan referenced by the applicant was not include with the latest submission. We note that the previously submitted Landscape Plan will require coordination with the Site Plans prepared by the Architect and Engineer, so that all tree removal and disturbance areas are accounted for and mitigated and that clearing for the proposed septic system and other site improvements are illustrated. As recommended, the applicant agreed to request a waiver from the Westchester County Department of Health (WCHD) to maintain the existing trees located within the area of the proposed septic expansion area.

**This comment remains to be addressed and is based on prior plans prepared by the landscape architect not submitted with this application.**

11. The applicant has indicated that a plan has been submitted to the WCHD for review and approval of the proposed septic system. The applicant shall continue to update the Planning Board in this regard.

**Copies of plans approved by the WCHD shall be provided. The site plans shall be updated and coordinated to reflect the proposed improvements.**

12. The Civil Engineer's plan, Sheet 1 of 2, has been revised as requested to provide the minimum 100 ft required separation distance from the proposed stormwater mitigation system to the existing drilled well, as required by the WCHD. We note, however, that the location, size and type of infiltration system differs from that shown on the Architect's site plan and must be coordinated. Further, the plan proposes to locate the infiltration system topographically upgradient of the septic field which is not permitted by the WCHD. The plan shall be revised accordingly and confirmation from the WCHD provided to verify compliance with their regulations.

**This comment remains to be addressed and is based on prior plans prepared by the Civil Engineer not submitted with this application.**

**The plans should verify adequate separation from the on-site well, as well as the off-site wells and septic systems on adjacent properties. Two (2) forms of calculations are provided for the project, one requiring 12 Cultec units and the other 6 Cultec units; please clarify.**

13. The Stormwater Calculation and Design, Sheet SP.3, appears to propose the infiltration system to be installed entirely within fill and on slopes with a grade steeper than 15%. The NYS Stormwater Management Design Manual limits fill for infiltration systems to no more than the top quarter of the system and in areas of lesser natural slope. The plan shall be revised accordingly to comply with regulations. In addition, it appears that the sizing and curve number calculations were performed for a 25-year storm event. The calculations shall be updated to mitigate through the 100-year storm event using Extreme Precipitation Rainfall Data from the National Resource Climate Center (NRCC) isohyetal maps.

**This comment remains to be addressed and is based on prior plans prepared by the civil engineer not submitted with this application. Any modifications to the stormwater plan and design calculations shall be coordinated with the architectural plans. For clarity, we recommend that the stormwater design and conveyances be limited to the Civil Engineer's plans.**

**The applicant has had severe difficulty developing a Stormwater Pollution Prevention Plan for this project. The proposed infiltration system can not service the pool or pool deck and it hasn't been detailed whether all roof leaders can be piped to the proposed practice.**

**The infiltrator detail is not consistent with the elevations provided on the plan for the infiltration system. Furthermore, the system does not have three (3) feet of porous soils below the system. The system also can not be built within an area of fill (up to 3 feet proposed).**

**The mitigation design was based on net increase of impervious surface for the project. It does not address water quality treatment or pre-treatment practices.**

**Also, the applicant does not provide a plan for the discharge of overflow, which will dissipate energy or disperse flows prior to leaving the project site.**

**The applicant needs to develop a realistic stormwater mitigation plan, which complies with New York State Stormwater Management Design Manual and meets Westchester County Department of Health setback requirements to wells and septic systems.**

14. As previously requested, the plans shall illustrate the area of the proposed stormwater mitigation system and primary and expansion septic areas to be cordoned off during construction.

**This comment remains to be addressed and is based on prior plans prepared by the Civil Engineer not submitted with this application.**

**Comment addressed.**

15. As previously requested, the plan shall clearly illustrate and quantify the proposed limits of disturbance of the overall project, inclusive of the home construction, driveway reconstruction, septic field and any associated site improvement areas. The plan shall note that disturbance limits shall be staked in the field prior to construction. The applicant has acknowledged the need to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Chapter 173 - Stormwater Management of the Town Code for disturbances over 5,000 s.f.

**This comment remains to be addressed and is based on prior plans prepared by the Civil Engineer.**

16. As previously requested, the applicant shall perform deep and percolation soil testing in the vicinity of the proposed mitigation system to be witnessed by the Town Engineer. The test locations and results shall be shown on the plan. Contact this office to schedule the testing.

**The applicant has not yet scheduled testing to be witnessed by this office. The applicant has performed testing, however, testing was not to the depths required.**

17. As previously requested, the applicant shall provide an updated tree survey for at least all trees within and 20 feet beyond the limit of disturbance. The plan shall illustrate all trees eight (8) inches dbh or greater to be removed and/or protected. Provide details.

**As previously requested, the sizes of the trees to be removed and protected shall be provided. It appears there are several trees that will need to be removed but are indicated to remain. If trees are to remain but are within the limit of disturbance, those trees shall require tree protection. Please clarify.**

18. As previously requested, the applicant shall prepare an Erosion and Sediment Control Plan to illustrate the location of all required temporary erosion control measures, including, but not limited to, temporary construction access, silt fence, inlet protection, tree protection, erosion control blankets, construction sequence, etc. Provide details.

**The current plan illustrates minimal temporary protection measures and does not account for all improvement areas such as the septic system. Silt fence shall be provided downgrade of all disturbance areas.**

**The applicant needs to prepare a realistic plan to control erosion for this steeply sloping site. The plan needs to divert upgradient runoff and provide an area where off-site flows can be collected and allowed to settle and be filtered prior to discharge.**

19. As previously requested, all plans shall be signed and sealed by the Design Professional. We note that the plans prepared by ARQ are not signed and it appears that Sheet 2 of 2 is missing from the submission.

**The plans provided by the architect have been signed and sealed. No plans were received from the Civil Engineer or Landscape Architect.**

**Comment addressed.**

20. As previously requested, the plans shall include a note indicating the source of the survey and topographic data, including the referenced datum, utilized for the development of the plan.

**The requested source of the survey data shall be indicated on the plans.**

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 TOM ABILLAMA ARCHITECTS, DATED SEPTEMBER 10, 2021:**

- Title Sheet (T.1)
- Cover Sheet/Map/Notes (C.01)
- 3D Renderings (C.02)
- Aerial View & Streetscape (C.03)
- Site Plan (SP.1)
- Site Diagrams & Zoning (SP.2)
- Stormwater Calculations and Design (SP.3)
- Site Grading (SP.4)
- Site/Retaining Wall Details (SP.5)

**PLAN & REPORT REVIEWED, PREPARED BY ARQ:**

- Site Drainage Plan (1 of 1), dated August 31, 2021
- Stormwater Pollution Prevention Plan Report, dated August 23, 2021

JK/dc