

## MEMORANDUM

TO:	North Castle Planning Board
CC:	Adam Kaufman, AICP North Castle Conservation Board Yosef Melamed, R.A. Ralph Alfonzetti, P.E. Daniel Simchi
FROM:	John Kellard, P.E. Kellard Sessions Consulting Consulting Town Engineers
DATE:	February 24, 2022 Updated May 20, 2022
RE:	Daniel Simchi Byram Ridge Road Section 101.01, Block 2, Lot 65

As requested, Kellard Sessions Consulting has reviewed the site plans submitted in conjunction with the above-referenced project. The applicant is proposing a new, four (4) bedroom, 5,684 s.f. residence with a pool and rear deck. Access is provided from Byram Ridge Road with a new curb cut. The property is ±1.003 acres in size and located in the R1-A Zoning District. The project site includes New York State Department of Environmental Conservation (NYSDEC) regulated wetlands (K-19) and a local, on-site wetland. The rear portion of the property is within the FEMA Zone A Special Flood Hazard Area. The applicant is proposing a new, four (4) bedroom septic within the front portion of the property and a domestic well within the wetland buffer. Stormwater mitigation is proposed within three (3) rain gardens. The residence is located approximately 17 feet from the wetlands and site grading is proposing up to the wetland boundary.

A revised application was submitted, which provides a slightly smaller house which is repositioned further from the wetlands and which the pool has been eliminated. In addition, the driveway has been shifted providing ten (10) feet of separation from the northern property line, septic has been redesigned, wetland mitigation has been updated and a new landscape plan has been provided.

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#### **GENERAL COMMENTS**

1. Approximately 70% of the property is wetlands or wetland buffer, requiring a majority of the improvements, except septic system, to be located within the buffer. A local Wetland Permit and New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetland Permit is required for the project. The applicant had a wetland delineation performed by Paul Jaehnig and surveyed by TC Merritts Land Surveyors. The boundary will need to be verified by the Town Wetland Consultant.

The proposed residence, pool and rear deck are located within 17 feet of the local wetland. Grading within the rear yard for the proposed rain gardens is extended to the wetland boundary. The Planning Board may wish to discuss with the applicant options available which could increase the setbacks between the improvements and wetland boundary.

The proposed septic system has been reduced in size which permitted the setback between the house and wetlands to be increased to approximately 40 feet. The rain gardens have been eliminated, replaced with an infiltration system within the rear yard approximately 20 feet off the wetlands and grading within the rear yard has been minimized.

The applicant will be required to prepare a Wetland Mitigation Plan for the project, in accordance with Chapter 340, Wetlands and Watercourse Protection of the Town Code. The Mitigation Plan will need to illustrate and quantify the proposed disturbance areas. The plan will need to include the total wetlands and wetland buffer area on-site, total disturbance areas within each and the total pervious and impervious surfaces pre- and post-development. Mitigation will need to be provided at a minimum ratio of 2:1.

A wetland mitigation plan has been submitted. The applicant notes that 4,872 s.f. of wetland buffer disturbance will occur and therefore they have provided 10,292 s.f. of mitigation.

The application should be referred to the Conservation Board for their review and recommendations. The wetland application should also be coordinated with the review and comments from the NYSDEC.

2. The rear portion of the property is within the FEMA Zone A Special Flood Hazard Area. A Floodplain Development Permit will be required in accordance with Chapter 109 – Flood Damage Prevention of the Town Code.

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**3.** The application will require Westchester County Department of Health (WCHD) Approval of the proposed septic system and domestic well. The applicant needs to submit copies of the WCHD Approval.

The Health Department will need to confirm that the setbacks between the rain gardens and septic/well and between the porous driveway and septic system are acceptable to their Department. Rain gardens have been eliminated. Please confirm the required separation between the pervious driveway and septic.

- 4. The proposed driveway curb cut and any utility installation within the Town right-of-way shall require a Curb Cut/Road Opening Permit with the Town of North Castle Highway Department.
- 5. The applicant is proposing a pervious driveway. The applicant will need to perform soil testing to be witnessed by the Town Engineer. Test locations and results shall be shown on the plan. Please contact my office to schedule the testing.

The porous asphalt detail should be modified after soil tests are performed to specify exact dimensions for gravel layers.

### Please provide calculations.

6. The applicant is proposing to mitigate stormwater impacts through treatment within the three (3) rain gardens and the porous driveway. Stormwater calculations are provided on the plans for sizing of the rain gardens. The applicant's professional will need to provide additional information within the calculations. Please provide clarification regarding the design storm (25-year or 100-year), area of impervious surfaces being treated within rain gardens, details specific to the different soil media void ratios, how ponding areas were arrived at and proof that sufficient gravel and infiltration is available to mitigate driveway runoff.

The applicant should provide details of the rain gardens.

The applicant has revised the stormwater mitigation design to Cultec infiltrators. The applicant will need to perform soil testing to be witnessed by the Town Engineer. The applicant will need to address water quality mitigation and pre-treatment. Since the infiltration system will have discharge, the emergency overflow discharge should disperse the flow across the downgradient wetlands.

7. The plan shall illustrate the proposed location of footing drain discharge, clarification if the discharge will be pumped and mitigation of discharge.

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# 8. Please provide dimensions at the driveway platform area at the garage.

9. Please coordinate the Architectural Site Plan and the Engineering Site Plan so that they both depict the identical site improvements.

### Comment addressed.

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 MELAMED ARCHITECT, P.C., DATED MAY 9, 2022:

- Cover Sheet (A-000.00)
- Building Information & Zoning Analysis (A-001)
- Architectural Site Plan (A-002)
- Wetland Disturbance & Mitigation Diagrams (A-003)
- Existing Condition & Proposed Mitigation Plan (A-005)
- Proposed Planting Plan (L-100)

### PLANS REVIEWED, PREPARED BY ALFONZETTI ENGINEERING, P.C., DATED MAY 3, 2022:

- Site Plan (Sheet 1 of 2)
- Sight Distance Plan (Sheet 2 of 2)

### JK/dc

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Municipal/Northcastle/Corresp/018SitePlans/2022-05-20\_NCPB\_Simchi - Byram Ridge Road\_Review Memo.docx