

## MEMORANDUM

TO: Robert Aiello, P.E.

CC: Adam Kaufman, AICP  
North Castle Town Board  
North Castle Planning Board

FROM: John Kellard, P.E. *JK/KC*  
Kellard Sessions Consulting  
Consulting Town Engineers

DATE: February 11, 2019

RE: Mariani Residential (18-021)  
45 Bedford Road

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A significant portion of the referenced project is encumbered by Federally-designated flood plain. The flood plain is part of two (2) watercourses with floodways, Wampus River to the east and Whippoorwill Brook to the southwest.

During the January 14, 2019 Planning Board meeting which I attended for Joseph Cermele, a discussion ensued regarding the project's compliance with Section 177 of the Town of North Castle Town Code – Flood Damage Prevention. It was revealed at the meeting that in order to comply with the Town Code, the project design permits 75% of the parking lot for Building "C" to flood up to a depth of 2.5 feet. It was clear from the discussion that such flooding would not be acceptable and you would re-examine the Flood Control Plan and resubmit a design which would comply with the regulations.

Following the January 14<sup>th</sup> meeting, our office reviewed other aspects of your Flood Control Plan. We have found that certain buildings have basements and mechanical systems which would be located 7 – 8 feet below the base flood elevation. A stormwater drainage system has not yet been designed, however, from our review of the grading plan, the proposed infiltration system location and stormwater basin provide concern whether the system will function during a major storm event.

I call your attention to Section 177 of the Town Code which requires lowest floor elevations including basements to be elevated two (2) feet above the base flood elevation and mechanical, plumbing and electrical equipment located above the base flood elevation. Also, when a flood plain is authorized for development, volume of space occupied by fill or structures below the base flood elevation must be compensated for and balanced by a hydrologically equivalent volume of excavation below the base flood elevation.

As you know, these regulations are in place to protect downstream structures from excessive floodwaters as well as future residents living within these homes from damage to their basements, mechanical systems and vehicles.

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It has come to our attention that the project is presently before the Town Board for zoning approvals. Typically, these issues would be addressed before the Town Planning Board during site plan approval. However, due to the significant portion of this project located within the flood plain, compliance with the Flood Prevention Ordinance may require significant changes to the present proposal. It, therefore, is our recommendation that prior to finalizing zoning for the project that revised designs promised at the January 14<sup>th</sup> meeting be submitted and reviewed for compliance.

I will convey our opinion on the matter to the Town Planner and Town Board by copy of this letter.

JK/pg

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