GOTHAM

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November 14, 2022

Dan Roemer, Building Inspector Dobbs Ferry Building Department 112 Main Street Dobbs Ferry, New York 10522

Re: Proposed Giglio Residence

0 North Mountain Drive (Subdivided from 79 North Mountain Drive

Dear Mr. Roemer:

This letter is to request that this matter be continued at the December 1, 2022 Planning Board meeting. While we have submitted for the Site Plan Review, it is my understanding the first step with the Planning Board is to get a recommendation for the Zoning Board of Appeals (ZBA). The ZBA set December 14, 2022 as the Control Date for the application that we have pending before the ZBA for a variance to permit the development of a building lot with a Net Lot Area of 15,261 square feet in the OF-2 zoning district, which requires building lots to have a minimum of 20,000 square feet. The gross area of the subject property is 23,337 square feet.

Hudson Engineering has been retained to provide the civil engineering for the project and they have dug test pits to a depth of 8 feet and conducted perc. tests to determine the stormwater drainage requirements, as well as confirm the erosion and sedimentation requirements and assess the condition of the rock ledge scheduled for removal. Hudson will be submitting their documents under separate cover.

There were six comments at the November Planning Board meeting that we are addressing in this letter.

1. Use of Permeable Paving -

In an effort to maximize the capacity of the site to manage stormwater, we are proposing the use of permeable paving for the terrace, the walkways, and the driveway. The intent is to make use of the voids in the gravel below the permeable paving to both detain and retain stormwater runoff. We have proposed 1.33 feet of No.2 stone subbase under all permeable paving. Assuming 40% of voids in this gravel, that computes to just over 0.5 cubic feet of storage per square foot of area. In addition to mitigating the rate of runoff from a storm event, this will also spread the water over a large area. This is most effective on a site with significant areas of rock ledge relatively close to the grade, since it allows the water to migrate to the points where it can percolate deeper into the ground. We prefer permeable paving to the use of porous and pervious pavers or paving. While all three All three types require a similar compacted stone aggregate layering process beneath the surface to accept the stormwater and create a "reservoir" prior to the water percolating into the sub-grade or being piped away, we have found that expecting the water to filter through the paving material, instead of around the paving material is too sensitive and requires too much maintenance for continued effectiveness.

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We have provided Sheet A-1.4 "Permeable Paving Plan" prepared by Gotham Design Planning & Development, dated November 14, 2022, submitted with this letter to provide an understanding of the extent of the permeable paving. The square footages of the paving is provided on that Sheet.

2. Rock Removal -

We are experienced with the removal of the type of rock ledge on the subject property using large mechanical hammers. No blasting is being anticipate. Concerns were expressed by neighbors regarding the use of chemicals, with the description sounding a bit like fracking. If the right type of rock is encountered, removal of the rock by drilling holes into the rock and then filling the holes with chemicals such as Dexpan (Non-Explosive Expansive Demolition Grout) that expand while they harden, breaking the rock may be used, but these are not free flowing chemicals that could unintentionally leech into the ground water, contaminating the aquifer.

3. Traffic -

There were several comments about traffic concerns. Since this is a single family home, we do not anticipate that the actual concern is with traffic volume, but more a matter of safety with the driveway exiting on a a relatively narrow road with curves and hills. Luckily, the subject property is located in a section of the road that has good visibility in both directions, although some plant material in the right-of-way may need to be cut back. Signage can be added, if deemed necessary, to notify drivers of the driveway, but we do not believe that this will be necessary, given the visibility of the street from the driveway location proposed.

4. Landscaping -

Susan Jainchill, Landscape Architect, has joined the team and will be providing the Landscaping Plan. Since there may be changes required by the Planning Board to the Site Plan, we have not asked Susan to prepare extensive Landscaping Plans at this point in time. She will be able to provide the concept for the landscaping, which can then be developed into the Landscaping Plan, once the Site Plan has been confirmed. The main intent will be to provide screening of the house from the street and the street from the house, plant material that will help stabilize the steeper sloped areas to prevent erosion and sedimentation, and the planting of material behind the house on the hill that will provide privacy between neighbors.

5. Retaining Walls -

The Site Plan submitted shows several relatively tall retaining walls. We have provided the top and bottom of wall elevations, but anticipate these to be a worse case scenario. As has already been confirmed, there is significant rock ledge on the site. As the excavation and rock removal proceeds, it is our anticipation that the rock ledge will be exposed.

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Our intent is to make use of the rock ledge as practical to provide the stability of the slopes and obviate the construction of dry stone gravity walls to the extent possible. We have had success with this approach with similar sites in the area, including 1 Myrtle Avenue, which we would appreciate your taking a look at. During the Site Plan Review, with the extent of rock ledge unknown, we showed two large dry stone retailing walls behind the garage. Both were able to be eliminated by exposing the rock ledge and allowing the rock ledge to be retained as a site feature, instead of being buried behind the stone walls.

A Construction Detail for the dry stone retaining walls has been added to the Landscaping Plan prepared by Gotham.

6. Steeper Sloped Areas -

The Dobbs Ferry Village Code has two sets of Steep Slope Ordinances. One (Section 300-34), which is the basis for the pending application to the ZBA, requires a deduction from the gross lot area of 25% of the steeply sloped area exceeding 15%, but less than 25%, and 50% of the steeply sloped area of 25% or more. This was a provision that was added to the Code to reduce the yield in the subdivision of properties. The other (Section300-46) addresses Natural and Scenic Resource Protection and was adopted to preserve the natural character of a terrain with hills and rock ledge. This second Section is the Code specifically limits the development of sloped areas of 35% or greater. The placement of the proposed house on the property has worked with this provision and the areas of slopes with 35% or greater have been substantially avoided.

Submitted with the Letter, please find the following:

- A. Sheet SP-1.3 "Tree Removal Plan" prepared by Gotham Design Planning & Development under the supervision of Sirus Miandoabi, P.E., dated as revised November 14, 2022 to add the dry-stone gravity retaining wall detail.
- B. Sheet SP-1.4 "Permeable Paving Plan" prepared by Gotham Design Planning & Development under the supervision of Sirus Miandoabi, P.E., dated November 14, 2022.
- C. A Letter from Gotham Design Planning & Development, dated November 24, 2022, providing a response to the Memorandum dated October 27, 2022, prepared by Anthony Oliveri, P.E., Al Engineers.

We look forward to reviewing this with you at your next regularly scheduled meeting.

Thank you for your time and attention,

Paddy Steinschneider Project Design Coordinator