

October 23, 2024

Micheal Greco, Board Secretary
Zoning Board of Adjustment
Borough of Demarest
118 Serpentine Road
Demarest, NJ 07627

109 Lake Road
Block 82.04, Lot 7
Borough of Demarest, Bergen County, NJ
Zoning Board Application Engineering Review
Colliers Engineering & Design Project No. DEZ0045

Dear Ms. Hayden:

Pursuant to your request, our office has reviewed the following plans and other documents filed by the Applicant in support of a Variance Application. The Applicant is proposing to construct a new addition and 2nd floor addition above the patio, stormwater management and other related improvements.

- a) Site plans consisting of two (2) sheets, prepared by Paul R. Ecolano, PE, PP of Ecolano Engineering, dated August 28, 2024;
- b) Architectural Plans consisting of one (1) sheet, prepared and signed by Mario Navedo, AIA, dated August 14, 2024;
- c) Topographic survey of the property consisting of one (1) sheet, prepared and signed by Andrew A. Schmidt, PLS, of Schmidt Surveying, dated July 8, 2024;
- d) Deed for the subject property;
- e) Variance Application for the subject property and attachments; signed and dated September 30, 2024;

The Property Owner/Applicant is:

Jonathan & Lindsey Kestenbaum
109 Lake Road
Demarest, NJ 07627

The Applicant/Owner shall notify the Borough of Demarest Zoning Board of Adjustment of any changes to the above information.

Engineering Review

I. Project Description & Location

According to the site plans, the site is currently occupied by a single-family dwelling with associated driveway, walkways, patio, and other related improvements. The Applicant is proposing to construct a new 2-story addition to the rear of the dwelling, a second story

addition above a new patio and outdoor kitchen area, drainage improvements and other related improvements.

The property is a rectangular shaped parcel consisting of 8,189 SF. The southern portion of the property fronts Lake Road. The property is located in the residence D Zone according to the Borough Zoning Map.

The property is located in Zone X (area determined to be outside the 0.2% annual chance floodplain) as shown on the Flood Insurance Rate Map (FIRM) for the Borough of Demarest dated August 2019.

II. Zoning Requirements & List of Variances / Waivers Requested

A. Bulk Zoning Requirements:

Zone: R-D

Use: Single Family Residential

Description	Required	Existing	Proposed	Complies
Lot area**	10,000 sf.	8,189 sf.	No Change	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Lot Frontage**	100 ft.	70.03 ft.	No Change	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Lot depth	100 ft.	117.14 ft.	No Change	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Front yard setback	25 ft.	25 ft.	No Change	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Side yard setback	10 ft.	12.30 ft.	12.10 ft.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Rear yard setback	30 ft.	49.60 ft.	35.60 ft.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Maximum Permitted Height	30 ft.	<30 ft	28.85 ft.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Max Building Coverage*	20 %	19.70%	27.52 %	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Max. Improved Coverage*	30 %	35.70%	36.27 %	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Max. Residential & Parking Coverage*	25 %	29.00%	33.17 %	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Livable Floor Area*	30%	17.18%	55.00%	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

N/A = not applicable

* = variance required

** = pre-existing non-conformance

B. The Following Variances Appear to be Required:

1. Maximum Building Coverage – The existing coverage is 1,638 SF (20.00%), the Applicant is proposing a building coverage of 2,254 SF (27.52%) where a maximum of 20% is permitted.

A variance appears to be required for this condition.

2. Maximum Improved Lot Coverage – The existing coverage is 2,580 SF (31.51%) and is a pre-existing nonconformance, the Applicant is proposing to increase the improved lot coverage to 2,970 SF (36.27%) where a maximum of 30% is permitted.

A variance appears to be required for this condition.

3. Maximum Residential and Parking Coverage – The existing coverage is 2,100 SF (25.64%) and is a pre-existing nonconformance, the Applicant is proposing to increase the residential and parking coverage to 2,716 SF (33.17%) where a maximum of 25% is permitted.

A variance appears to be required for this condition.

4. Maximum Livable Floor Area – The existing floor area 41.5% and is a pre-existing nonconformance, the Applicant is proposing to increase the livable floor area to 55% where a maximum of 30% is permitted.

A variance appears to be required for this condition.

III. Engineering Review

- A. The Applicant is proposing to increase improved lot coverage from 2,508 SF (31.51%) to 2,970 SF (36.27%) with a net increase in coverage of 390 SF. The Applicant is removing a 226 SF patio in the rear of the dwelling to make space for the 616 SF addition. It should be noted that the window well on the western side of the addition does not appear to be included in the improved coverage calculations.
- B. The Applicant should provide testimony on the setback to the proposed window well on the western side of the addition.
- C. The Applicant is proposing one (1) Cultech recharger 150XLHD chamber to collect and store stormwater runoff from what appears to be the roof area of the proposed addition. We offer the following comments related to the drainage design:
 1. The Applicant has provided design calculations which indicate approximately 390 SF of roof area being collected and conveyed to the proposed Cultech chambers. The Applicant has provided adequate storage for this drainage area. We take no exception to the calculations provided.
 2. The Applicant should provide testimony indicating where the drywells are proposed to overflow.
 3. It is suggested that the drywells are located further from the property boundary if feasible. CED typically recommends at least fifteen (15) feet from property boundaries.
 4. The Applicant has provided an at-grade observation port cap for future maintenance in the Cultech chamber detail.

- D. The Applicant does not appear to propose any tree removal on site. The Applicant should confirm in testimony if there are any trees or other improvements that may be impacted by the proposed construction.
- E. The Applicant has depicted existing and proposed contours on the property. We offer the following comments related to grading:
 - 1. Under existing conditions, the site drains from north to south. The highest point of the property is in the northern corner where elevations are approximately 107 and the lowest point of the property is in the southern corner, where elevations are approximately 101.
 - 2. Under proposed conditions, the high and low points are generally maintained, and drainage patterns should not be substantially impacted. Grading changes do not appear to exceed more than one (1) foot in most locations.
- F. Should the Board act favorably upon this application, the Applicant is hereby made aware that drainage issues may arise during or after the proposed construction. It will be the Applicant's responsibility to remedy any drainage issues caused by the proposed improvements. In addition, water runoff directed to neighboring properties is prohibited. If runoff water does enter neighboring properties as a result of the proposed improvements, the Applicant will be responsible to remedy the situation at no cost to the Borough.

Should you have any questions, you may contact me at (201) 775-1283.

Sincerely,

Colliers Engineering & Design

Nick Chelius, P.E.
Zoning Board Engineer

cc: Board Members (via Zoning Board Secretary)
Michael Greco, Zoning Board Secretary (mgreco@demarestnj.gov)
Julie Falkenstern, Borough Administrator (boroadmin@demarestnj.gov)
Paul R. Ercolano, Ercolano Engineering LLC (paul@ercolanoengineering.com)
Carmine R Alampi, Esq., Applicants Attorney (calampi@alampi-law.com)