

December 18, 2025

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

35 Knickerbocker Road  
Block 2, Lot 37  
Borough of Demarest, Bergen County, NJ  
Joint Planning Board Application - Engineering **Review #3**  
Colliers Engineering & Design Project No. DEZ0056

Dear Mr. Greco:

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 renovate and expand the existing dwelling and construct a new 2-story addition, driveway, rear patio, curbing, drainage improvements and other related improvements.

- a) Site plans consisting of one (1) sheet, prepared by Thomas Skrabble, PE, dated August 28, 2025 **last revised December 2, 2025;**
- b) Architectural Plans consisting of three (3) sheets, prepared by Sung Park KIRA, dated December 30, 2024, last revised August 25, 2025;
- c) Property Survey consisting of one (1) sheet, prepared and signed by Jeffrey O. Males PLS, dated July 28, 2016, last revised July 21, 2025;
- d) Zoning officer denial letter, prepared and signed by Michael Greco, dated June 4, 2025;
- e) Variance Application for the subject property and attachments; signed and dated September 3, 2025.
- f) **Abutting property correspondence for Block 2, Lots 41 and 30.**

The Property Owner/Applicant is:

Hyun Jin Park & Hyun Joo Lee  
c/o Matthew Capizzi, Esq  
205 Fairview Avenue  
Westwood, NJ 07675

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 property survey, the site is currently occupied by a 1.5-story single-family dwelling with associated paver driveway, masonry wall, walkways, patio, and other related improvements. The Applicant is proposing to construct a new 2 story addition, driveway, rear patio, curbing, drainage improvements and other related improvements.

The property is a rectangular shaped undersized parcel consisting of 6,000 SF. The property is located on Knickerbocker Road, between Lenox Avenue and Hardenburgh Avenue. The dwelling front faces Knickerbocker Road and driveway access is provided on Knickerbocker Road. The property is located in the residential 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: D

Use: Single Family Residential

Description	Required	Existing	Proposed	Complies
Lot area**	10,000 sf.	6,000 sf.	6,000 sf.	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Lot Frontage**	100 ft.	60.0 ft.	60.0 ft.	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Lot depth	100 ft.	100 ft.	100.00 ft.	<input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No
Front yard setback	25.0 ft.	39.3 ft.	27.7 ft.	<input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No
Side yard setback (north)**	10.0 ft.	9.9 ft.	9.9 ft.	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Side yard setback (south)	10.0 ft.	10.6 ft.	10.6 ft.	<input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No
Rear yard setback	30 ft.	30.7 ft.	30.7 ft.	<input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No
Rear yard width**	100 ft.	60 ft.	60 ft.	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Building Height	24/30 ft.	26.7 ft.	26.7 ft.	<input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No
Max Building Coverage*	20 %	18.5%	25.33 %	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Residence/Parking *	25 %	29%	37.50 %	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
Improved Lot Coverage*	30 %	46.40%	41.83 %	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No

Floor Area*	30%	30%	36.98%	<input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No
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N/A = not applicable  
 \* = variance required  
 \*\* = pre-existing non-conformance

**B. The Following Variances Appear to be Required:**

1. Minimum Lot Area – There is a pre-existing non-conformance for lot area of 6,000 SF where a minimum of 10,000 SF is required. The Applicant does not propose to bring lot area into conformance by acquiring additional land.
2. Minimum Lot frontage – There is a pre-existing non-conformance for lot frontage of 60 ft where a minimum of 100 ft is required.
3. Minimum side yard setback – There is a pre-existing non-conformance for the side yard setback of 9.9 ft where a minimum of 10 ft is required on the northern side of the dwelling.

We note that the Applicant does not propose to encroach further into the setback than the currently existing dwelling but the encroachment is being expanded with the proposed addition.

4. Minimum rear width – There is a pre-existing non-conformance for rear width of 60 ft where a minimum of 100 ft is required.
5. Building Coverage – The Applicant is proposing a max building coverage of 1,520 SF (25.33%) where the maximum of 20% is permitted.  
 A variance is required for this condition.
6. Impervious Lot Coverage – There is a pre-existing non-conformance for impervious coverage of 2,784 (46.40%), where a maximum of 30% is permitted. The Applicant is proposing to reduce the impervious coverage to 2,510 SF (41.83%) but still above the maximum required. This equates to a net reduction of 274 SF.  
 A variance is required for this condition.
7. Max Residence/Parking Coverage – The Applicant is proposing a max residence/parking coverage of 2,250 SF (37.50%) where the maximum of 1,500 (25%) is permitted.  
 A variance is required for this condition.
8. Max Livable Floor Area – The Applicant is proposing a livable floor area of 2,219 SF (36.98%) where a maximum of 30% is permitted.  
 A variance is required for this condition.

9. There is a retaining wall adjacent to the driveway, top and bottom of wall elevations have not been provided but based on the grades in the area it appears the wall is in excess of two (2) feet. Retaining walls in excess of two feet are considered structures and are not permitted in the front yard area. A potential variance is required for this condition. **The Applicant notes that retaining walls on the site are scheduled to be removed and no retaining walls are proposed. Comment addressed.**

### III. Engineering Review

- B. The title block lists the property as 25 Knickerbocker Road, whereas the application indicated 35 Knickerbocker Road. The application and site plan should be reviewed for consistency. **The site plan has been updated to display 35 Knickerbocker Road in the title block. Comment addressed.**
- C. The Applicant is proposing to decrease the improved lot coverage from 2,784 SF (46.40%) to 2,510 SF (41.83%) with a net decrease in coverage of 274 SF.
- D. The Applicant is proposing two (2) recharger 330XLHD chambers in the front yard area 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 1,520 SF of area being collected and conveyed to the proposed drywells (the roof of the entire dwelling). The Applicant has provided adequate storage for this drainage area. We take no exception to the calculations provided.
  2. It appears that proposed chambers are being installed in front of the property. The Applicant should provide testimony indicating the offset between the foundation walls of the dwelling and the drywell system, as well as the offset to the front yard property boundary. There are concerns that the drywells are located both too close to the dwelling and the property line. A Minimum offset of 15 feet is typically recommended. **Comment remains in effect. The Applicant has rotated the proposed chambers. We note the site plan shows the distance from the dwelling addition as 15 feet and the distance to the property line is shown as 6.2 feet. Testimony should be provided.**
  3. The site plans should provide a callout clearly indicating the location of the chambers and number of chambers proposed. **Comment addressed.**
  4. The Applicant should provide testimony indicating where the chambers are proposed to overflow. **Comment remains in effect.**
  5. A soil test shall be provided prior to the installation of the proposed seepage pits. Soil test shall include information regarding the location of the seasonal high-water table (SHWT) and percolation rate of the soil. **Comment remains in effect.**
  6. The Applicant has provided an at-grade 4-inch PVC observation port cap for future maintenance in the chamber detail.

7. The Borough Engineer shall be notified to inspect the chambers prior to backfilling.  
**Comment remains in effect.**
- 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 generally drains away from the dwelling in a perpendicular fashion. The site is relatively flat with grades ranging from around 117 to 116.
  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. The dimensions of the proposed addition and patio should be added to the engineering plan. **Comment addressed.**
- G. Top and bottom curb elevations should be provided adjacent to the new driveway. **The Applicant has revised the plans to include top and bottom of curb elevations. We note that one callout shows a TC elevation of 16.9 and BC elevation of 116.4 adjacent to the proposed wheel cleaning blanket. This appears to be a typo. The Applicant should review and revise accordingly.**
- H. The site plan should clearly label the extents of any proposed curb, as well as top and bottom of curb elevations. Details for full height curb and drop curb have been provided which show a "Belgian block" type curb. **Comment addressed.**
- I. It appears a portion of the existing masonry wall adjacent to the driveway area will be removed to construct the proposed improvements. The section of wall to be removed should be shown on the site plan.
  1. The Applicant should provide testimony on the height of the wall. Top and bottom of wall elevations should be provided on the plans. **Comment addressed.**
- J. The Applicant has indicated a total cut of 57 CY, and total fill of 56 CY soil is anticipated to complete the proposed improvements. We take no exceptions to the calculations provided.
- K. 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. **Continuing comment.**

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

Sincerely,

Colliers Engineering & Design



Nick Chelius, P.E., C.M.E.  
Joint Land Use Board Engineer

CC: Board Members (via Planning Board Secretary)  
Matthew Capizzi, Applicant's Attorney (via email)

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