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N.J. STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS  
CERTIFICATE OF AUTHORIZATION NO. 24GA27985400

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## Memorandum: Technical Review #1

To: Township of Long Hill Zoning Board of Adjustment  
Board Chairman and Members

From: Richard Keller, PE, PP, CME  
Board Engineering Consultant

Re: Application No. 2021-03Z  
224230MAINST LLC  
Block: 11606, Lots: 17 and 18  
224-226 Main Avenue, Stirling, New Jersey  
C&K Project #: 1190102-41-21-3Z

Date: November 14, 2021

## Documents Reviewed:

As part of our engineering technical review, we have received and reviewed the following documents:

1. Engineering Plans entitled "Site Plan for Lots 17 and 18, Block 11606, Main Avenue, Township of Long Hill, Morris County, NJ Area Map;" prepared by Murphy & Hollows Associates, LLC; dated January 22, 2021 with revisions through October 21, 2021, consisting of 6 sheets.
2. Survey entitled "Topographic Survey of Lots 17 & 18, Block 11606, Main Avenue, Township of Long Hill, Morris County, New Jersey," prepared by Murphy & Hollows Associates LLC, dated August 15, 2019 with revisions through October 23, 2019, consisting of 1 sheet.
3. Architecture Plans "Preliminary Floor Plans and Building Elevations," prepared by Architecture Plus, dated September 20, 2021 with revisions through October 27, 2021, consisting of 2 sheets.
4. Color rendering entitled "Preliminary Front Elevation Proposed Mixed-Use Building, Long Hill, NJ 07980," consisting of 1 sheet, prepared by Architecture Plus, undated.
5. Eleven color photographs of existing site.
6. Application with checklists & zoning calculations, dated January 26, 2021 and amended through September 23, 2021.

## Brief Project Description:

The subject property, known as 224-30 Main Avenue is located along the westerly side of Main Avenue, between Somerset Street and Railroad Avenue, directly across Main Avenue from the Sterling Hotel and approximately 350 feet south of the Stirling Train Station.

The property, is comprised of lots 17 and 18 in Block 11606 and is wholly located within the B-1-5 Village Business Zone. The combined properties have a total lot area of 26,880 sf, with an aggregate frontage along Main Avenue of 150.00 feet and a lot depth of 179.20 feet.

Contiguous properties behind the subject property, fronting on Somerset Street and Railroad Avenue are located in the R-MF3 Multi-Family Residential Zone.

The Applicant proposes to demolish the existing improvements on both Lots 17 and 18 to construct a 3-story mixed-use building located in the center of the combined lot. On the ground floor the proposed building would contain 2,466 square feet of professional office space facing Main Avenue. To the rear of the proposed office space would be a 3-bedroom affordable housing unit and a 2-bedroom affordable housing unit. The second floor would contain four 2-bedroom market rate apartments and on the third floor would be two 2-bedroom market rate apartments.

The office space on the ground floor would be slightly elevated above sidewalk level and would be accessed from Main Avenue via steps and an ADA ramp leading to a shallow, covered porch extending across the entire front façade. Access to the residential units and a second means of access to the office space would be accessed via a rear facing portico and ADA accessible ramp that connects to a 21-car parking lot and refuse enclosure. The rear and side yard parking area will be connected to Main Avenue via a 2-way driveway along the northerly side of the subject property.

#### **1. Nature of the Application and Approvals being Sought:**

- 1.1. Since the proposed development requires “d” variances for use and density in addition to a “c” variance for building height, along with Preliminary & Final Site Plan approval, jurisdiction of the application in its entirety rests with the Zoning Board of Adjustment. When this application was originally submitted to the Board of Adjustment, the applicant was seeking a bifurcated approval of the Use and Bulk variances only. As allowed by MLUL, if the “d” variances were approved, the applicant would then make a follow up application to the Board of Adjustment for preliminary and Final Site Plan Approval.
- 1.2. Since Site Plan Approval was not originally being sought, the site plan as submitted to support the Use Variance did not include much of the engineering detail that would be required for Preliminary & Final Site Plan approval.
- 1.3. Based upon the original intent to seek a bifurcated application, the Application for Development Checklist A contained in the application indicates waivers being sought for 14 checklist items pertaining to Site Plans with variances based upon the statement that the applicant was “Presently Applying for Use Variance Only.” Another 13 checklist items that pertain solely to Preliminary and/or Final Site Plans were appropriately left blank.
- 1.4. The applicant team, with input from the Township, recently decided to amend their application and seek concurrent approval for Preliminary and Final Site Plan along with the variance relief required. Based upon this a revised and expanded site plan dated October 21, 2021 was submitted for consideration.

- 1.5. However, an amended application narrative or amended checklist have not been received. Of the 27 open checklist items, 11 require a response and the information required in at least 4 checklist items are essential for evaluation of Final Subdivision Approval:

*Item #41: Calculations verifying suitable capacity of proposed pipes, swales, and other drainage features. No capacity calculations have been provided. Much of the proposed stormwater collection system has no detail.*

*Item #42: The proposed location, direction of illumination, power and type of proposed outdoor lighting, including details of lighting poles, light fixtures and foot candle limits. No lighting plan has been provided.*

*Item #45: Details and locations of all accessory structures including fences, trash enclosures, recycling areas, etc. No construction details/specifications have been provided*

*Item #47: The location and design of any off-street parking and loading areas, showing size and location of parking stalls, loading area, aisles and barriers, curbing, sidewalks, and paving specifications. With the exception of the stormwater detention system, no other construction details/specifications have been provided.*

- 1.6. It is our understanding that the applicant has re-noticed the public to indicate that the applicant is seeking *“for preliminary and final site plan approval, including any variance(s), waiver(s) and/or exception(s) that may be necessary.”*

However, it should be noted that the Agenda and the Application available on the Township website indicate that *“The Applicant is currently bifurcating the site plan approval and seeking only the required use variances at this time.”*

- 1.7. The Applicant’s attorney should clarify the approvals being sought.

## 2. Observations & Comments

- 2.1. The proposed development is partially located within a flood hazard area which is defined by Ordinance §110 as a Critical Area . Since Ordinance §142.1a. states that *“No principal building, accessory building, parking area, pool, tennis court, patio or deck shall be located in whole or in part within a critical area,”* variance relief from this section will also be required.
- 2.2. Per FEMA, NJDEP and municipal mapping, and as confirmed by the applicant’s engineer, more than 50 percent of the subject property is located within a 100 year (1% chance) flood hazard area. Accordingly, the project will require an Individual Permit from the NJDEP per the State Flood Hazard Area Control Act Rules. (NJAC 7:13.). Should the Board approve the Site Plan and Variance relief requested, any approval would be contingent upon the Applicant procuring all appropriate NJDEP permits.

- 2.3. The proposed building footprint on the engineering site plan does not match the building plans provided. The Applicant should update the Site Plan to show the correct footprint and update the proposed front and rear yard setbacks in the zoning table accordingly.
- 2.4. No existing Sanitary Sewer line is shown in the survey or site plan. The Applicant should identify whether an existing sewer and sewer capacity are available for the proposed project. If no sewer or capacity is available, the Applicant will be required to secure a "Permit to Locate and Construct an Individual Sewage System" from the Long Hill Township Board of Health in conformance with NJDEP standards.
- 2.5. The Applicant should confirm that the two tax lots that make up the subject property will be merged.
- 2.6. The Applicant should confirm that the proposed project will result in the loss of 3 on-street parking spaces.

### 3. Technical Review

- 3.1. In general, the proposed site plan as submitted provides enough engineering detail to support that the project can be engineered to meet both the Township and the more restrictive NJDEP requirements for grading and stormwater management. However there is insufficient detail to meet the "shovel ready" standards usually reserved for Final Site Plan Approval. The applicant will need to provide additional site plan details, including but not limited to:
  - Storm Sewer capacity & line calculations
  - Additional top & bottom of curb elevations
  - All rim and invert elevations for all inlets
  - Additional grade elevations to demonstrate that the handicap parking space and accessible route to the rear door are ADA compliant.
  - All construction details, including, curb, pavement, detention system, refuse/dumpster area, ramps, concrete walks, traffic signage and all other typical site details.
- 3.2. The Applicant will be required to perform percolation/permeability testing in the vicinity of the proposed drywell/infiltration/recharge system proposed. The Applicant shall also locate the seasonal high ground water table to ensure a minimum separation of two (2) feet between the bottom of the infiltration system and the ground water table. Casey & Keller, Inc. and/or the Township Engineer shall be notified a minimum seventy-two (72) hours in advance of this testing so that a representative of either entity may be present. The engineer-of-record, shall be present during percolation/ permeability testing and shall submit a signed and sealed certification regarding the results of said testing. Additionally, the engineer-of-record shall provide calculations, utilizing the observed permeability rate with a factor of safety of two (2), to demonstrate that the proposed recharge systems will completely empty within 72 hours. **Should on-site testing yield undesirable percolation/permeability rates, the Applicant may be required to provide an alternate design which does not rely on percolation consistent with Ordinance Section 146.3b.2.**

- 3.3. The Applicant should identify the method of sanitary effluent disposal and provide construction details as appropriate.
- 3.4. No Lighting Plan has been provided.
- 3.5. The Applicant should identify whether any building or ground mounted signage is proposed and provide the Board with details.
- 3.6. Landscape Plan: The Applicant has provided a comprehensive proposed landscape plan. We note the following:
  - 3.6.1. The Kousa Dogwood to be planted along entry drive will likely get too wide for the space available. The Applicant should consider a narrower/more upright alternative.
  - 3.6.2. The Applicant should consider using Leatherleaf Viburnum instead of Arrowwood Viburnum to get evergreen shrubs along the perimeter of the parking lot.
  - 3.6.3. The proposed River Birch will get very large. The Applicant should consider a smaller species tree against the building.
  - 3.6.4. The Willow Oak proposed, tend to have lower branches that hang down. The Applicant should consider a more upright shade tree for the parking lot island.
  - 3.6.5. The Applicant should provide plantings along the HC building ramps (front & back) and consider evergreen shrubs around the dumpster.
  - 3.6.6. The plan should identify the ground plane treatment throughout the site (grass, groundcover, stone, mulch, etc.)
  - 3.6.7. There is a concern that the installation of drainage/piping along the western property line may damage the existing trees. The Applicant should evaluate and provide specifics on tree removal in this area.
- 3.7. We defer to the Board's Planner for comments regarding zoning compliance and the proofs required in support of the variance requested relief.

**Any revised plans or other documents should be accompanied by a cover letter responding individually to each of the comments presented in this review letter.** The cover letter should also outline those changes to the plans that were requested as well as those not requested or readily apparent.