

CASEY & KELLER, INC.

LAND SURVEYORS + CIVIL ENGINEERS + PLANNERS

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

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Memorandum: Technical Review

To: Township of Long Hill Zoning Board of Adjustment
Board Chair Gerecht and Members of the Board

From: Casey & Keller, Inc.
Richard Keller, PE, PP, CME
Board Engineering Consultant

Re: Application No. 2020-11Z
Missionary Servants of the Most Holy Trinity
Subdivision with Use Variance
1292 Long Hill Road, Block 14204 Lot 71
C Conservation Zone
C&K Project #: 1190102-28 (2020-09Z)

Date: March 15, 2021

Documents Reviewed:

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

1. Subdivision Plan of "Lot 71 Block 14204 Long Hill Road & Pleasant Plains Road Township of Long Hill Morris County New Jersey," prepared by Murphy & Hollows Associates LLC, dated 3/23/2020, last revised 10/19/2020, consisting of 9 sheets.
2. Survey of "Lot 71 Block 14204 Long Hill Road & Pleasant Plains Road Township of Long Hill Morris County New Jersey," prepared by Murphy & Hollows Associates LLC, dated 3/23/2020, consisting of 1 sheet.
3. Completed Township Application for Development, dated 12/2/2020, including addendum, photos and attachments.

Brief Project Description:

The subject property is a 5.68-acre property with frontage along Long Hill Road to the south and Pleasant Plains Road along the westerly and northerly sides of the property. The southern portion of the property along Long Hill Road is currently developed with a 2-story frame dwelling (the Trinity House Retreat Center, formerly St. Joseph Villa) and detached garage. The majority of the property to the north is unimproved woodlands, except for a small shed and a footpath.

The applicant seeks to subdivide the property into three lots: Proposed Lots 71.01 and 71.02, both fronting on Pleasant Plains Road to the north, that will be developed for single-family residences; and the remaining Lot 71 that will encompass the southern portion of the property containing the Trinity House and associated improvements. No changes are proposed to the new Lot 71 portion.

The review of this application is based on the submitted plans and supporting documents and visits to the project site.

1. Observations & Comments:

- 1.1. We defer to the Board's Planner's memo for a detailed explanation of why the proposed minor subdivision results in an expansion of a non-conforming use thereby requiring D variance relief from the Board of Adjustment.
- 1.2. The Board is being asked to approve a Minor Subdivision, which by Ordinance definition does not involve the creation of a new street or the extension of any off-tract improvement. The subdivision merely creates the lot lines for 2 new properties whose development would then be subject to Township of Long Hill development regulations and the zoning requirements for the underlying C – Conservation Zone.
- 1.3. The Subdivision Plans include a Grading Plan and a Soil Erosion & Sediment Control Plan based upon a hypothetical or conceptual development of the 2 proposed residential lots. Since the house footprints are not based upon an actual design, these plans are intended to give the Board general insight as to how the properties could be developed.
- 1.4. Based upon a review of the NJDEP Geo-Web GIS and current FEMA mapping, the subject property does not appear to contain or be near any flood hazard areas or contain any areas of freshwater wetlands.

2. Technical Review

- 2.1. If the Board were to act favorably on the subdivision, the applicant would be required to provide Stormwater Management Calculations in accordance with the requirements of the Stormwater Management section of the Land Use Ordinance (Sec. 146.) Under Section 146.4c. the review of the required stormwater plan resides with the Zoning Board of Adjustment Engineer.

The Applicant should be aware that if the development of these two proposed residential lots involves the disturbance of more than 1 acre of land in aggregate, the development would be classified as a Major Project. Accordingly, the stormwater management must be designed in accordance with the more stringent Residential Site Improvement Standards (RSIS, N.J.A.C. 5:21) and the NJDEP Stormwater Rule (N.J.A.C. 7:8) to include Green Infrastructure as outlined in N.J.A.C. 7:8.

For any stormwater management system that relies on soil permeability for groundwater recharge, the Applicant will also 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. These tests may be performed after issuance of

- the requested Grading & Building Permits, but prior to the installation of the infiltration system(s). However, we strongly recommend that the testing is performed as soon as possible to confirm that the proposed design is feasible. 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.
- 2.2. If the Board were to act favorably on the subdivision, the applicant would be required to submit septic system designs for each lot in accordance with all Municipal, County and State standards for individual subsurface sewage disposal systems, including those contained in N.J.A.C. 7:9A.
 - 2.3. If the Board were to act favorably on the subdivision, the applicant would be subject to the Landscaping requirements of the zoning ordinance contained in Section 153. Under Section 153.1b. the applicant must provide shade trees to be planted on each of the 3 lots at a rate of not less than 10 trees per acre with the size and species to be consistent with the ordinance guidelines.
 - 2.4. The applicant should confirm that the proposed lot numbers are acceptable to the Tax Assessor's office.
 - 2.5. If the Board were to act favorably on the subdivision, the applicant would be required to submit metes & bounds descriptions for each of the 3 parcels for approval.

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.