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LOWM 256.18 October 31, 2019

Christopher Leswing, Director of Building and Planning Township of Lower Merion 75 East Lancaster Avenue Ardmore, PA 19003

Re: 112 Bryn Mawr Avenue Subdivision

**Preliminary Plan Review** 

Dear Mr. Leswing:

In accordance with your request for the above referenced submission, we have reviewed a set of seven (7) plans dated 08-23-19, latest revision dated, 10-18-19, and associated stormwater management calculations dated 08-23-19, latest revision dated 10-18-19, prepared by Yohn Engineering, LLC. We offer the following comments for your consideration:

## A. MAJOR ENGINEERING ISSUES

❖ Stormwater –The swale directing runoff past the construction are too close to the proposed structure and to the structure on the adjacent property. The house and swale locations have been requested to be adjusted to provide sufficient distance. Also, in order to improve runoff conditions in the vicinity, it has been requested for the developer to investigate the possibility to connect the basin outflow into the storm sewer in Birch Avenue. Easements would be required to be obtained from the adjoining property. If easements cannot be obtained, additional peak rate of runoff control will be requested to be provided for the proposed improvements.

With the resolution of the above major engineering issue and the remaining comments in this letter incorporated, we recommend that the Preliminary Plans be approved.

## **B. ORDINANCE REQUIREMENTS**

Section 101-6A(1)—All woody vegetation to be retained within twenty-five (25') feet of a building site or disturbed area shall be protected from equipment damage by fencing placed at the driplines. Accurate location of the driplines has not been shown on the plan. The detail shall be revised on the plans as necessary to comply with township standards. Since the tree protection fence has not been shown at the driplines of all trees to remain, the Township Arborist must approve the location of the tree protection fence.

- 2. Section 101-6A(6)—Grade changes around the driplines of trees to be retained shall be minimized. Impacted trees shall be clearly identified on the plan. Treatment of the impacted trees prior to construction to protect the root system shall be performed if/as directed by the Township Arborist. The Township Arborist must also approve the procedure.
- 3. Section 101-6A(8)—Should any trees not scheduled or permitted to be removed be irreparably damaged during construction and die within eighteen (18) months of the conclusion of construction activities, those trees will be required to be replaced in accordance with the provision of Section 101-9A(2). Escrow shall be posted to guarantee the survival of the impacted trees until the allotted time has expired.
- 4. Section 101-6B(2)—If trenches for utilities and/or storm facilities are proposed within the driplines of trees, all disturbed roots must be cut as cleanly as possible. The trench must be backfilled as quickly as possible, avoiding compaction. Tree limbs must be cut back in proportion to the root area loss. This shall be noted on the plan and made a condition of permit issuance.
- 5. Section 121-4E(2c)—Seepage beds must be designed to empty the total design rate control storm volume in twenty-four (24) hours or less. The recharge volume provided was not used for peak rate control. If any of the volume is used for peak rate attenuation, calculations verifying the empty time must be provided in the stormwater analysis. Permeability rates obtained in an acceptable area and at the required depth would be required to be used in the analysis.
- 6. Section 121-4E(4)—A description of how the permanent stormwater control facility will be operated and maintained shall be submitted by the design engineer. The frequency of inspection shall be listed on the plan. The contact information for the party responsible for the operation and maintenance of the facility and all associated piping shall be listed.
- 7. Section 121-15—The runoff crossing to the adjacent properties during the construction phase of the project shall be managed so that the water quality/quantity impact is minimized to the adjacent properties. Diversion berms, stoned construction staging areas, and inlets/piping shall be noted to be provided as required or as directed by the township so as to ensure acceptable conditions during the construction phase.
- 8. Section 121-15—The temporary basin and drainage swales shall be kept a minimum of twenty feet from any basement/crawlspace walls. Also, the swale near the south property line is too close to the structure on the adjacent property and is also very shallow. The house and swale location/design shall be adjusted as necessary to accommodate the requirements.
- 9. Section 121-15—Since adequate volume controls have not been provided in a rate control basin, if direct connection to the existing township storm sewer line through the adjacent property cannot be arranged, additional peak rate of runoff control will be required. The peak rate of runoff from the Ten (10) year post development condition will be requested to be controlled to the predevelopment two (2) year peak rate.

- 10. Section 121-15—In order to improve drainage conditions in the vicinity, it is recommended to investigate conveyance of the basin outflow to the township storm sewer located in Birch Avenue. Discussions regarding the required easements over the property of 105 Birch Avenue would be required. If easements cannot be secured, additional peak rate control above code required minimum values will be required.
- 11. Section 135-17C(5)—The slope of the proposed sanitary lateral shown is flatter than that generally accepted for residential properties. The Public Works Department must approve the final design of the lateral. Separate permits will be required. If an ejector system is proposed, the location of the pumps and tanks and the material, size, location, and connection point of the force main shall be provided.
- 12. Section 135-40—A Planning Module or Exemption must be approved by the City of Philadelphia and the DEP prior to recording the Final Plan.
- 13. Section 155-141.5(2)—It must be verified that the proposed wood decks comply with the provisions of this section regarding spacing and construction over a porous surface in order for them to be excluded from the impervious tabulation.

## C. ENGINEERING COMMENTS

- 1. A Lighting Plan may be required to be submitted. Any required lighting Plan must be approved by the Director of Building and Planning prior to recording the Final Plan.
- 2. The Planting Plan must be approved by the Planning Department and the Township Arborist prior to issuance of the permit/recording the Final Plan.
- 3. The architectural plans must be coordinated with and must comply with the grading proposed with this application.
- 4. The level spreader location shall be noted to be field adjusted in order to maintain existing drainage patterns and conditions.
- 5. An as-built plan shall be submitted for lot No 2.
- 6. The existing length of property frontage shall be corrected on the Zoning Table on sheet No. 2 to indicate 141.11' feet.
- 7. A second Stage plan will be required to be submitted and approved prior to issuance of any permits for lot No. 2.
- 8. A copy of the revised plan shall be submitted with any changes highlighted. A letter shall also be provided with the revised plan indicating how each requested revision has been addressed in the re-submission.

Please advise if we may be of further assistance in this matter.

Very truly yours,

Kevin J. Bowers, P.E.

PENNONI ASSOCIATES
Township Engineer

Cc: Robert E. Duncan, Assistant Township Manager

Yohn Engineering, LLC

Northeast Renovations, LLC C/O Meir Badush, 1744 Federal St, Phila, PA 19146