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МЕМО ТО:

Township of Franklin

Zoning Board of Adjustment

FROM:

Robert J. Russo, PE, PP, CME

Township Engineer

DATE:

March 3, 2021

RE:

Hamilton Street Development, LLC Preliminary & Final Major Site Plan

Report #1

Report #1
Engineering

Block 204, Lots 18-22 587 Hamilton Street Franklin, New Jersey

Our File: PFRZ0204.01/600.01 Application # ZBA-20-00023

As per your request, this office has reviewed the following documents relative to the above referenced preliminary and final site plan application:

- Preliminary and Final Site Plan Application, as prepared by Ronald J. Sadowski, P.E., Engineering & Construction Management, dated August 1, 2020, with a latest revision date of October 30, 2020;
- Boundary & Topographic Survey, as prepared by Braginsky Surveying, LLC, dated August 20, 2020, with no revisions;
- Architectural Plan, as prepared by Michael V. Testa Architect, dated September 10, 2020, with a revision date of October 22, 2020;
- Stormwater Management Report, as prepared by Ronald J. Sadowski, P.E., dated October 30, 2020, with no revisions;
- Environmental Review, as prepared by Ronald J. Sadowski, P.E., dated October 30, 2020, with no revisions;
- Traffic Impact Statement, as prepared by Dolan & Dean Consulting Engineers, LLC, dated August 10, 2020, with no revisions;
- Application Forms.

The following comments are offered with regard to same:

### A. PROJECT OVERVIEW

The project is in the northeast corner of Hamilton Street (C.R. 514) and Miller Avenue. The property is 12,500 square feet and currently contains of a 2-½ story frame dwelling and garage. The project is located in the Hamilton Building District (HBD). The applicant is proposing to construct a three story 3,540 sf apartment building, containing seven (7) 1-bedroom units and two (2) 2-bedroom units with access from Miller Avenue. The applicant is proposing seventeen (17) parking spaces and the following site improvements, including but not limited to, hot mix asphalt parking lot, drywell and porous pavement around to comply with the Township Ordinance, onsite Belgian block curb, off-site concrete curbing, sidewalk, pavers, utilities, grading, lighting and landscaping.



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We defer the review of the zoning related issues to the Board Planner except where they may pertain to engineering issues.

## B. GENERAL SITE IMPROVEMENTS

- 1. An Engineering Cost Estimate will be required once final plans are signed-off on by the Board. Upon approval, applicant shall provide appropriate bonds and Engineering inspection fees and attend a preconstruction meeting, prior to any site work.
- 2. All fees shall be paid by the applicant at the time of adoption of a resolution of site plan approval for the cost of making upgrades and modifications to the geographic information system (GIS) (§112-329).
- 3. At the time the final plans are submitted for signature of the municipal officials, the applicant shall submit CAD-generated data files, prepared by a New Jersey licensed land surveyor, directly translatable into an identical image of the plan per the requirements of Ordinance §112-329.
- 4. Note: An As-Built Plan prepared by a licensed Land Surveyor is to be submitted to the Township prior to any Certificate of Occupancy inspection or the release of performance bonds. General Construction Note No. 20 on sheet no. 2 should be revised accordingly.
- 5. Note: No soil can be imported to or removed from the site until a Soil Importation or Exportation Permit has been obtained from the Township as required by the Ordinance. Soil removal shall be in accordance with §206 of the Ordinance. General Construction Note No. 21 on sheet no. 2 should be revised accordingly.
- 6. Should the Board act favorably on the application, the applicant shall consolidate the lot so that Block 204, Lots 18-22; the final lot number will be provided by the Township Engineering Department. Consolidation deeds, with metes & bounds descriptions, shall be provided for review and approval *prior* to filing with Somerset County Clerk's Office.
- 7. The applicant provided parking calculations on sheet no. 2 in accordance with R.S.I.S. standards 4; 17 parking spaces are required for this proposed use. The applicant is proposing 17 parking spaces; therefore, the parking demand has been met.
- 8. Based on the 17 total parking spaces, one (1) barrier free parking stalls are required, one (1) of which is required to be van accessible. The applicant is proposing one (1) van accessible spaces; therefore, the ADA parking demand is met.
- 9. This office defers to the Fire Prevention Officer as to the appropriate number of Fire Hydrants, Fire Department Connection, and their location. In addition, we defer to the Fire Prevention Officer regarding the need of 'No Parking' fire lane signage and striping.
- 10. The Boundary & Topographic Survey should be signed and sealed.
- 11. Six (6) foot wide sidewalk is required at locations of head-on parking is proposed, in accordance with RSIS requirements. The applicant shall either install the sidewalk as required, or obtain a deminimus exception from RSIS by the DCA. The applicant's engineer should provide testimony regarding same.
- 12. The applicant's engineer should provide intersection sight distance triangles that conform to the latest AASHTO (American Association of State Highway and Transportation Officials) guidelines as published in the current edition of A Policy on Geometric Design of Highways and Streets for the intersection of Hamilton Street and Miller Avenue.



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13. The design and placement of all traffic signs and striping shall follow the requirements specified in the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," (MUTCD) published by the U.S. Department of Transportation and adopted by the N.J. Department of Transportation. Same should be noted on the site plan.

## C. GRADING AND UTILITY COMMENTS

- 1. The applicant cannot utilize the 6" water main on Miller Avenue for service for the site.
- 2. Water mains/services shall be installed in pavement areas only.
- 3. Remove the valve and cap for future use.
- 4. Three (3) valve cluster should not be installed for the proposed fire hydrant.
- 5. Remove the third valve for to water services.
- 6. The applicant should provide in table format all sewer mains/ utility crossings (including lateral crossings) with corresponding clearances to reflect the avoidance of conflicts with other underground utilities.
- The applicant should add the following notes to the plans:
  - All constructions shall comply with the current rules and regulations/ or ordinances of Franklin Township, NJDEP, AWWA and all applicable regulatory agencies having jurisdiction.
  - The minimum clearances between water mains and sanitary sewers shall be in accordance with the State standards, i.e. Minimum horizontal clearance between water main and sanitary sewer in parallel shall be ten ft. (10'), Minimum vertical clearance between pipe crossing shall be eighteen inches (18") with the sanitary sewer below the water line. If such minimum vertical clearance cannot be provided, the sanitary sewer shall be encased in concrete ten ft. (10') from each side of the crossing or a total of twenty ft. (20').
  - Water mains crossing storm sewers or drains where the clearance between the pipes is less than
    eighteen (18") inches, pier supports for the storm line shall be provided in order to prevent the load
    transfer to the affected utility.
- 8. The proposed 101' contour in the lawn area located in the northwest corner of the property appears to be mislabeled and should be revised.
- 9. Provide existing top and bottom of curb grade elevations at 50 feet, on center.
- 10. Provide spot grade elevations for the proposed sidewalks and driveway crossings at 50 feet, on center. Applicant shall demonstrate ADA compliance.
- 11. Provide spot elevations demonstrating ADA compliance for the proposed handicap ramp at the intersection of Miller Avenue and Hamilton Street. Grades should be provided along the curb gutter, transition area, the ramp and landings, for further review.
- 12. Provide a new street sign at the intersection of Miller Avenue and Hamilton Street.
- 13. Approval of the Hamilton Street streetscape shall be obtained from the Board Planner.



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## D. STORM WATER MANAGEMENT.

- 1. Applicant proposes approximately 0.32 acres of disturbance and approximately 0.09 acres of increased impervious coverage. Therefore, "Minor" Development stormwater management requirements shall be met in accordance with Ordinance §330-5. The applicant is required to infiltrate three inches of rain for the increased impervious area of 3,900 totaling a volume of 885 CF. The applicant is proposing to meet the infiltration requirements utilizing porous pavement and underground dry well/chamber system.
- The property in question is located within the Delaware and Raritan Canal Commission Review zone and is subject to DRCC regulations. A copy of the DRCC approval, or letter of no interest, must be provided to this office.
- 3. The Applicant must obtain a Soil Erosion and Sediment Control Certification from the Somerset-Union Soil Conservation District. A copy of the plan certification must be provided to this office.
- 4. In accordance with the ordinance, the stone porosity used in the calculations should be 33%. The manufacturer typically utilizes a stone porosity of 40%. The applicant's engineer should supply additional information.
- 5. The applicant's engineer should supply additional calculations demonstrating how it was arrived that the dry well has a capacity of 1,048 CF. The storage calculation spreadsheets provided by the manufacturer indicate that approximately 893 CF of storage is provided. The applicant's engineer should clarify.
- The dry well detail should be revised to indicate the proposed filter fabric shall only be placed along the top and sides.
- 7. In accordance with BMP Manual design criteria, the SHWT or bedrock must be at least 2 ft. below the lowest extent of the dry well. The SHWT/bedrock have not been identified on the site plan. Additional information is required from the applicant's engineer to review this matter further.
- 8. The soil log and basin information provided on drawing no. 5 should be revised to identify the surface elevation and bedrock elevations.
- Provide a cross section detail of the underground storage basin/dry well.
- 10. Provide a copy of the soil tests logs that were performed by Eric Rupnarain.
- 11. The applicant is proposing a 486 square foot porous pavement area. The applicant is proposing same to address the remaining 360 square foot impervious area increase remaining after the infiltration of the roof area though the drywell. The applicant's engineer should supply a calculation demonstrating compliance with the ordinance's requirement of 3" of runoff for each square foot of new impervious area.
- 12. The drywell and porous pavement areas shall be designed with an overflow to the surface which shall be stabilized and directed to an existing stormwater conveyance system or in a manner to keep the overflow on the developed property.
- 13. Revise the Porous Pavement Detail to indicate the thickness of the porous pavement, S.H.G.W./bedrock elevation, minimum top and bottom of the proposed stone storage bed elevation, subsoil permeability rate, and porous pavement infiltration rate.
- 14. In accordance with BMP requirements, post-construction testing must be performed on the as-built infiltration basin in accordance with the Construction and Post-Construction Oversight and Soil Permeability Testing section in Appendix E of the BMP Manual. Appropriate notes should be added to the



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Dry Well Plan View provided on drawing no. 8 to ensure compliance with this requirement. Post-construction test results should be provided to the Township Engineer prior to bond release and/or certificate of occupancy request. In addition, a note should be added stating that where as-built testing shows a longer drain time than designed, corrective action must be taken prior to bond release.

- 15. In accordance with BMP Manual design criteria, at least one inspection port with a partially perforated riser, with a removable cap, must be provided in the storage bed of the dry well and porous pavement area, respectively. The inspection port must be anchored; a rebar anchor and a foot plate are required. Provide a construction detail of the inspection port and show the location on the utility plan.
- 16. Provide a Stormwater Maintenance Agreement for the stormwater system to insure future maintenance. A sample agreement is available from the Engineering Department.
- 17. The applicant should provide an Operation and Maintenance Manual (OMM) for the dry well and porous pavement systems, respectively, for review and approval.

# E. MISCELLANOUS

- Revise/Add the following details based on Franklin Township standard details:
  - Add the following note on all of the detail sheets, "In case of discrepancy, Township Standard Details shall hold":
  - b. Township No Parking Fire Lane Sign detail;
  - c. Township Street Name Sign detail;

The Applicant is required to obtain either approvals or letter of no interest from the following agencies:

#### Outside Agencies:

- Delaware Raritan Canal Commission
- Somerset County Planning Board
- Somerset-Union Soil Conservation District

### Township Departments:

- Franklin Township Fire Department
- Franklin Township Police Department
- Franklin Township Water Department
- Somerset County Health Department
- Franklin Township Sewerage Authority

The Engineering Department reserves the right to make additional comments based upon the submission of revised plans or testimony presented to the Board.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

RJR/DM

cc: Zoning Board Secretary