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MEMO TO: Township of Franklin
Zoning Board of Adjustment

FROM: Robert J. Russo, PE, PP, CME
Township Engineer

DATE: May 18, 2021

RE: **Saint Sharbel Maronite Church
Preliminary & Final Site Plan
Report #1
Engineering
Block 261; Lots 1-6
526 Easton Avenue
Franklin, New Jersey
Our File: PFRZ0261.01/600.01
Application # ZBA-20-00027**

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

- Site Plan, as prepared by Remo Engineering, LLC, dated December 9, 2019, with a latest revision date of March 1, 2021;
- Architectural Plan, as prepared by WM Michael Campbell AIA, Architect and Planner, dated October 27, 2020, with a latest revision date of December 16, 2020;
- Lot Consolidation Plan, as prepared by Lakeland Surveying, dated June 4, 2020, with no revisions;
- Stormwater Management Plan, as prepared by Remo Engineering, LLC, dated March 1, 2021, with no revisions;
- Sanitary Flow Report, as prepared by Remo Engineering, LLC, dated March 1, 2021, with no revisions;
- Environmental Impact Assessment, as prepared by Remo Engineering, LLC, dated September 10, 2019, with no revisions;
- Traffic Engineering and Parking Evaluation, as prepared by Klein Traffic Consulting, LLC, dated September 3, 2020, with no revisions;
- Application forms.

The following comments are offered with regard to same:

A. PROJECT OVERVIEW

The site is located at the southeast corner of the intersection of Easton Avenue (C.R. 527) and Franklin Boulevard (C.R. 617), with additional frontages along Reeve Street and Blake Avenue. The subject site encompasses Block 261 in its entirety. The site currently contains an existing church and five (5) existing dwellings. The property is approximately 1.665 acres and is located partially in the Office-Professional (OP) Zone and the R-7 Zone, respectively. Churches and other similar places of worship are a conditional use in this zone and subject to the requirements of §112-37 of the Ordinance. The applicant is proposing to demolish the existing church and four (4) of the dwellings on the site. The applicant is proposing to construct a 35,699 square house of worship with 100 parking spaces. The applicant is also proposing site improvements including but not limited to, construction of concrete curb, sidewalk, hot mix asphalt parking lot, stormwater facilities, 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. Official street address shall be obtained from the Franklin Township 911 Coordinator, as required.
2. 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 pre-construction meeting, prior to any site work.
3. 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 Tax Maps and geographic information system (GIS) (§112-329).
4. 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.
5. 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. Same should be noted on the site plan.
6. 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. Same should be noted on the site plan.
7. Copies of any easements, exceptions, deviations, or liens on the property should be presented to the Board.
8. Provide a copy of the referenced existing condition plan entitled, 'Topographic Survey Property 526 Easton Avenue Tax Lots 1-6 – Block 261 Lots Tax Lots 3 & 4 – Block 262 Township of Franklin, Somerset County, New Jersey' dated November 20, 2019, prepared by Jeffrey S. Grunn, NJ Land Surveyor License No. 43399.
9. Places of worship are a conditional use in the R-7 Residential Zone and the O-P Office-Professional Zones, respectively.
10. A variance is required for the Building Setback. A minimum of 50 Feet is required for the walls of the main building which shall be set back in compliance with the zone district requirements, but in no case less than 50 feet from the abutting street right-of-way line. The structure has three (3) frontages as noted below:
 - Easton Avenue proposed frontage setback is 18.51';
 - Reeve Street proposed frontage setback is 21.50';
 - Franklin Boulevard proposed frontage setback is 27.17'.
11. In accordance with Ordinance §112-88 for the off-site parking lot interior driveways shall be at least 26 feet wide for two-way traffic movements when ninety-degree angle parking is proposed in the A zone. The applicant is proposing 24-foot wide driveway aisles. The applicant should request a variance for same.
12. A variance is required for buffering. Either fifteen feet (15') or twenty-five feet (25') of heavily landscaped buffers are required, as noted in Ordinance §112-37.K.1 or 2. This office defers review of the buffer to the Board Planner.
13. A variance is required for maximum building coverage. Maximum building coverage of 20% is permitted in both the R-7 and O-P Zones. The applicant is proposing a building coverage of 20.5%.
14. A variance is required for maximum impervious coverage. In accordance with Ordinance §112-37.I.1 a maximum impervious coverage of 60% is permitted in the R-7 zone, and 45% in the O-P Zone. The applicant is proposing



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- an impervious coverage of 72.2%. The Zoning Schedule on sheet no. 2 of the site plan indicates that the existing impervious coverage on the site is 68.6%; however, the Stormwater Management report indicates that the existing impervious coverage is 45%. Coordination between the documents is required. In addition, the applicant's engineer should supply testimony on the existing impervious coverage and indicate if the existing condition complies with the zoning ordinance.
15. The applicant's engineer indicated a variance is required for the maximum building height. A maximum building height of 35' and 2.5 stories is permitted in both the R-7 and O-P Zones. This office defers review of same to the Board Planner.
 16. A variance is required for the light fixture height. In accordance with Ordinance §112-37.K3 light fixtures shall be limited to 15 feet in height where located adjacent to a residential zone. The applicant is proposing to install light fixtures at a height of 18 feet. It is unclear if the proposed lighting design complies with the requirement that light levels shall not exceed 0.0-foot candles beyond the beyond the property line zoned.
 17. A variance is required for parking, the applicant's engineer indicated that 100 parking spaces are required for the project. In accordance with Ordinance §112-37.D1, parking shall be provided at one parking space for every three seats (one seat shall be considered 22 inches in calculating the capacity of pews or benches) or a minimum of one parking space for every 15 square feet of worship area. The sanctuary contains 26 pews at 23 feet (7,176 inches) and 2 pews at 18.5 feet (444 inches) totaling 7,620 inches of pew length. There are 346.4 seats (7,620/22) proposed per the ordinance; therefore, 115.5 spaces are required (346.4/22). The proposed Fellowship Hall is approximately 4,029 sf. 268.8 parking spaces are required for the Fellowship Hall. Therefore, 384 spaces are required for this application, at a minimum. Please note, the use of the mezzanines above the sanctuary and Fellowship Hall are unclear. If the mezzanines are proposed for use during services, the areas of same must be included in the parking calculation. Testimony should be provided to the Board Planner's satisfaction regarding how this occupancy figure was calculated. In addition, the applicant should provide testimony regarding the number of anticipated special occasions that may occur at the site and how same will impact parking.
 18. Proposed lot number, Block 261 Lot 1.01, is acceptable. Provide a Consolidation Deed with metes and bounds description attached for review and approval prior to filing with the Somerset County Clerk's Office.
 19. The existing dwelling located on Lot 3 is to remain and the lot is proposed to be consolidated into the application. The applicant should clarify the use for the existing dwelling.
 20. The site plan should note that the existing utility pole located at the proposed driveway entrance along Franklin Boulevard should be relocated.
 21. Sheet no. 4 of the site plan notes that all concrete curb and sidewalk along the property frontage will be replaced. The site plan should be revised to clearly show the curb and sidewalk removal/replacement limits. The existing driveway apron and concrete curb for lot no. 2 and 6 should be removed and replaced with sidewalk and full faced curb.
 22. The applicant should perform the following additional offsite improvements:
 - The applicant's engineer has noted that all sidewalk along the property frontage will be reconstructed. Therefore, the handicap ramps at the intersection of Franklin Boulevard and Blake Avenue, Blake Avenue and Reeve Street, Reeve Street and Easton Avenue, and Franklin Boulevard and Easton Avenue, should be constructed to the latest ADA standards. This office defers to the County regarding review of ADA ramps within the County R.O.W.
 - Individual ramp designs should be provided, delineating, curb elevations, ramp elevations and ADA compliant 4' x 4' landings.
 - Cast-in-place detectable warning surfaces are required at all handicap ramp locations within the municipal and County right-of-ways;
 - Upgrade the inlet at the northeast corner of the intersection of Blake Avenue and Franklin Boulevard with a bicycle safe grate and N-Eco curb piece;



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- Relocate the existing wood fence adjacent to the western building line so same is located outside of the Reeve Street right-of-way.
23. Relocate the existing tie-in inlet at the proposed driveway exit along Franklin Boulevard so that the 5' flare for the exit movement will not be obstructed by a full faced curb piece.
 24. 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 driveway leading to Blake Avenue and Reeves Street.
 25. The Applicant's Engineer should provide a site circulation plan showing the travel paths of the design vehicles (garbage/rescue squad) to verify that the on-site circulation is adequate for the required service and emergency vehicle access throughout the site. This office defers to the Township Fire Prevention Officer regarding the need to submit an emergency vehicle circulation plan.
 26. 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.

C. GRADING AND UTILITY COMMENTS

1. Delineate all existing water services on the site plan. Existing water services not reused shall be removed at the existing water main.
2. Delineate all proposed water service sizes.
3. 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.
4. The applicant should add the following notes to the plans for construction of the water well:
 - All constructions shall comply with the current rules and regulations/ or ordinances of Franklin Township, NJDEP, AWWA, Somerset County Health Department 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 crossings 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.
 - The minimum depth of cover for the water main/ service shall be four (4') feet from the top of the pipe to the finished grade.
5. The applicant should address the following general grading comments:
 - The applicant should delineate the location of all man doors for entrance/exit to the church, as well as the floor elevation;
 - The first floor elevation is 44.0'. However, the proposed sidewalk grading along the southern building line varies from 41' to 43' and does not tie into the first floor elevation. The applicant's engineer should clarify how this break in grade will be accomplished;
 - The proposed sidewalk grading along the southern building exceeds 6%, which does not confirm to ADA standards. The grading should be reduced to 5% or less, or a ramp will be required;



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- The proposed sidewalk near the southeast corner of the building that ties into the sidewalk along Franklin Boulevard is approximately 25% and is not ADA compliant. The applicant's engineer should review this further;
- Sheet no 4. of the site plan notes that a retaining wall is proposed along the northern building entry. The grading plan should be revised providing grades for the retaining wall. It is unclear if the main building entrance at this location is ADA compliant. The applicant's engineer should supply additional spot elevations, clearly noting the required door landing and back of sidewalk grade, for further review;
- The site plan notes that the finished floor elevation of the basement is 33.0'; however, the architectural plan notes that the finished floor elevation of the basement is 32.5'. Plan coordination is required.
- The site plan notes that the first floor elevation is 44.0'; however, the architectural plan notes that the first floor elevation is 44.5'. Plan coordination is required.
- We recommend the proposed parking lot be regraded so that the slope within the parking lot does not exceed 5% slope.
- Provide additional spot elevations at the handicap parking area demonstrating ADA compliance. Site specific ADA compliance of handicap ramps should be provided by additional spot elevations. ADA compliant landings should be provided;
- Provide additional spot elevations demonstrating ADA compliance along the ADA access route from the handicap parking area to the main building access;
- A minimum slope of 0.50% is required from the western most door location to the van accessible parking space along the southern building line;

The grading will be reviewed further when the above has been addressed.

D. LANDSCAPING AND LIGHTING

1. Relocate the proposed light poles further away from the right-of-way lines and toward the parking lot along all property frontages.
2. Relocate the Landscaping Schedule from sheet no. 11 to the Landscaping Plan, sheet no. 7.
3. The applicant shall revise the Landscaping Plan to include the following note: "Any plant relocations/substitutions shall be submitted to the Township for review and approval prior to installation."
4. This office defers the review of the landscaping to the Township Planner; however, we have the following recommendations:
 - The proposed Northern Red Oak street trees are proposed in/near the sight triangles at the various driveway exits;
 - Relocate all proposed street trees outside of the public right-of-way;
 - The proposed street tree near the Easton Avenue entrance is in conflict with existing landscaping.

F. ENVIRONMENTAL IMPACT COMMENTS

1. The Environmental Impact Assessment should be revised to provide all information required in Section 112-199 of the Franklin Township ordinance.
2. The environmental assessment report should be revised to include a list of all licenses, permits and other approvals required by municipal, county or state law and the status of each.

G. STORM WATER MANAGEMENT

1. The property in question, Block 526 Lots 1, 2, 3, 4, 5, and 6, consists of approximately 1.66 acres of land. Lot 1 is developed with a 1 story church building and Lots 2, 3, 4, 5 and 6 are developed with single family dwellings. The site drains to the Mile Run Tributary.



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2. The project site is located within the review zone of the Delaware and Raritan Canal Commission and the applicant should obtain a certificate of approval or exception from the Commission. A copy of the permit should be provided to this office.
3. The proposed development will disturb approximately 1.66 acres of land and will create 0.45 acres of additional impervious surface. The project exceeds the threshold of 1 acre of disturbance and creates more than ¼ acre of impervious surface, therefore, it is classified as a major development for stormwater management purposes. In accordance with the Township Ordinance, major projects must comply with water quantity control, water quality and groundwater recharge standards.
4. The proposed stormwater management measures does not comply with water quality standards in accordance with Township ordinance. The drainage report should be revised accordingly.
5. The proposed stormwater management measures does not comply with groundwater recharge standards in accordance with Township ordinance. The drainage report should be revised accordingly.
6. The proposed development proposes more than 1 acre of land disturbance and must obtain a General Permit for Construction Activities from the NJDEP. A copy of the permit must be provided to this office.
7. The proposed development proposes disturbance of more than 5,000 sf of land and the Applicant must obtain Soil Erosion and Sediment Control Plan Certification from the Somerset-Union Soil Conservation District. A copy of the permit must be provided to this office.
8. The Existing Drainage Area Map and Proposed Drainage Area Map included in the drainage report should be revised to provide the impervious and pervious area, the runoff coefficients and show the point of analysis and the flow path used to compute the time of concentration.
9. The drainage report should be revised to include the time of concentration calculations for existing and proposed conditions using the NRCS methodology. Revise peak flow calculations accordingly.
10. The drainage report should be revised to use the runoff coefficients for the corresponding soil hydrologic group as shown on Table 5-3 of the Technical Manual for Land Use Regulation Program or table 7-1 of the RSIS standards. Revise peak flow calculations accordingly.
11. The drainage report should be revised to include an analysis of various duration times to determine the duration time that produces the critical storage volume in the proposed detention basin. The analysis should be conducted in accordance with the procedure for the Modified Rational Method as described in Appendix A9 of the Soil Erosion and Sediment Control Standards in NJ.
12. Runoff hydrographs for the rainfall using the critical duration time should be generated and routed through the proposed detention basin to determine peak outflow from the detention basin. It appears that current routing calculations do not use the critical duration time and should be revised accordingly.
13. In accordance with BMP Manual requirements, the lowest elevation in a subsurface detention basin including any bedding material, must be at least 1 foot above the seasonal high groundwater table. The Applicant's engineer should perform the required soil testing to determine the seasonal high groundwater table and demonstrate compliance with this requirement.
14. Trash racks must be installed at the intake to the outlet structure and they must meet criteria provided in N.J.A.C. 7:8-5.7(a)2 and 6.2(a). Construction details must be included in the plans.
15. Due to the difficulty in removing accumulated sediment from the proposed underground detention basin, all runoff to the basin must be pre-treated to remove at least 50% of the TSS from the runoff volume. Revise proposed basin accordingly.



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16. The modified Rational Method recommends the use of antecedent precipitation factor of 1.25 for the 100-yr storm event. Revise peak flows for the 100-yr storm event accordingly.
17. The proposed Drainage Area Map should be revised to delineate the limits of the tributary area draining to the detention basin and areas bypassing the basin. Compute separate to peak flow rates for each portion to demonstrate compliance with water quantity control standards.
18. The drainage report should be revised to include an inlet drainage area map showing the drainage area, time of concentration and runoff coefficient to each inlet. In addition, pipe sizing calculations should be provided.
19. The stormwater conveyance system is design for the 25-yr storm event but runoff from the 100-yr storm event is required to be conveyed to the detention basin. The Applicant's engineer should provide capacity calculations to demonstrate runoff will be conveyed to the basin as it appears that overland flow from some inlets is not possible.
20. The use of sumps in the proposed inlets is not allowed in Franklin Township. The construction detail should be revised to eliminate the 2 ft deep sump.
21. The Applicant's engineer should provide a capacity analysis for the existing storm sewer line on Franklin Boulevard to demonstrate adequate capacity to receive the 100-yr peak flow from the proposed underground Detention Basin. Revise drainage report accordingly.
22. The grading and drainage and utility plan should be revised to include the maximum water surface elevation for the water quality, 2-yr, 10-yr, and 100-yr storm event for the proposed underground detention basin.
23. The drainage report should be revised to include an Annual Groundwater Recharge Analysis to demonstrate compliance with groundwater recharge standards. Revise drainage report accordingly.
24. The Outlet Structure detail included in the construction plans should be revised to show the water quality, and the 100-yr maximum water surface elevations.
25. The Grading, Drainage and Utility Plan should be revised to show the downspouts and stormwater laterals from the proposed building to the detention basin.
26. As per BMP Manual requirements, no standing water may remain in a detention basin 72 hours after a rain event. The drainage report should be revised to document compliance with this requirement.
27. The construction detail for the outlet structure should be revised to show all outflow devices with invert elevations, inlet and outlet pipe size and inverts and the required trash rack in the upstream side of the outflow devices.
28. The drainage report should be revised to include pipe sizing calculations for the conveyance system onsite.
29. The Applicant's engineer should determine soil testing required to design stormwater management measures to address water quality and groundwater recharge standards.
30. An executed Major Development Stormwater Summary (Attachment D of the Tier A MS4 NJPDES Permit) shall be submitted to this office for review and approval.
31. Stormwater Maintenance Agreement for the stormwater system should be provided to insure future maintenance. A sample agreement is available from the Engineering Department.
32. The applicant should provide an Operation and Maintenance Manual (OMM) for the storm sewer, basin and outlet control structure, for review and approval.



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H. MISCELLANEOUS

1. Revise/Add the following details based on Franklin Township standard details:
 - a. Add the following note on all of the detail sheets, "In case of discrepancy, Township Standard Details shall hold";
 - b. Revise the Storm Tank Cross Section – Vehicular Traffic Areas for the site specific installations at the point with the smallest amount of coverage;
 - c. The Handicap Parking detail dimensions do not match the layout shown sheet no. 4. Plan coordination is required;
 - d. Remove the Concrete Curb detail on sheet no. 13. Add Township Concrete Vertical Curb detail;
 - e. Remove the Concrete Walk detail on sheet no. 13. Add Township Concrete Sidewalk detail;
 - f. Remove the Depressed Curb at Driveway detail on sheet no. 13. Add Township Drop Curb at Driveways detail;
 - g. Add the Township Concrete Curb & Gutter detail;
 - h. Provide the Township Utility Pipe Bedding detail;
 - i. Remove the 'J-Eco' Curb Piece and add the Township a 'N-eco' Curb Piece detail;
 - j. Remove the Inlet Type 'B' detail and add Township Inlet, Type B detail;
 - k. Add the Township Sign Posts detail;
 - l. Add the Township Hydrant & Valve Installation detail; if required.
 - m. Add the Township Fire Department Connection detail; if required.
 - n. All sanitary sewer details shall be submitted directly to the Franklin Township Sewerage Authority for review and approval, as required.

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
- New Jersey Department of Environmental Protection

Township Departments:

- Franklin Township Fire Department
- Franklin Township Police Department
- Franklin Township 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