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MEMO TO: Township of Franklin
Planning Board

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

DATE: July 21, 2020

RE: **Milon Builders, LLC**
Preliminary and Final Site Plan
Report #1
Engineering
Block 514, Lot 15
16 Heller Park Lane
Franklin, New Jersey
Our File: PFRP0514.03/600.01
Application # PLN-20-00005

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 Major Site Plan, as prepared by Engineering & Land Planning Associates, Inc., dated March 23, 2020, with no revisions;
- Existing Conditions Survey, as prepared by Engineering & Land Planning Associates, Inc., dated September 19, 2019, with no revisions;
- Architectural Plans, as prepared by Architecture Plus, dated May 14, 2020, with no revisions;
- Traffic Impact Narrative, as prepared by Engineering & Land Planning Associates, Inc., dated March 23, 2020, with no revisions;
- Environmental Impact Statement, as prepared by Engineering & Land Planning Associates, Inc., dated March 23, 2020, with no revisions;
- Stormwater Management Report, as prepared by Engineering & Land Planning Associates, Inc., dated March 23, 2020, with no revisions;
- Stormwater Management Maintenance Manual, as prepared by Engineering & Land Planning Associates, Inc., dated March 23, 2020, with no revisions;
- Application Forms.

The following comments are offered with regard to same:

A. PROJECT OVERVIEW

The site is located with frontage along the east side of Heller Park Lane, approximately 600' south of its intersection with Jensen Drive. The property is approximately 2 acres and is located in the M-1 zone. The site currently contains an abandoned paved driveway and utility line. The applicant is proposing to construct a 5,706 sf warehouse including an additional two-story office (1st floor area of 2,112 sf, 2nd floor area of 2,145 sf), parking lot area for 23 spaces. The applicant is also proposing site improvements including but not limited to, a hot mix asphalt parking lot, construction of two (2) infiltration basins and one (1) above ground detention basin to address NJDEP stormwater management rules, concrete curb, sidewalk, utilities, grading, lighting and landscaping.

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



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B. GENERAL SITE IMPROVEMENTS

1. Official street address shall be obtained from the Franklin Township 911 Coordinator.
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 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. A variance is required for the minimum lot area. A minimum lot area of 5 acres is required in the M-1 Zone; the existing lot is 2 acres.
8. A variance is required for the minimum lot frontage. A 300-foot frontage is required in the M-1 Zone; the existing lot frontage is 177.5 feet.
9. This office defers to the Fire Prevention Officer as to the appropriate number of Fire Hydrants and fire department connections and their location, as required. A Knox-box should be installed on the 30' wide access gate. In addition, we defer to the Fire Prevention Officer regarding the need of 'No Parking' fire lane signage and striping.
10. The applicant provided parking calculation listed on sheet no. 4 indicates that the proposed building will require 23 total parking spaces, with 1 space being A.D.A. accessible. Our office takes no exception to same.
11. This office recommends the applicant relocate the proposed handicap parking signage outside of the concrete walkway.
12. The site plan notes there is an existing '4" PVC/Vert. Inv. = 84.50' and it appears to remain. The applicant's engineer should identify what utility this is, as it will be adjacent to the proposed infiltration basin. If same is an existing septic field which would need to be abandoned, then this office defers review of same to the Somerset County Health Department.
13. Barbed wire is not permitted along the top of the proposed chain link fence. Revise plan and details accordingly.
14. Face forming of the proposed curb along Heller Park Lane is not acceptable. A 2' wide asphalt repair strip should be delineated on the site plan.
15. A variable height curb/wall is not permitted within the Municipal right-of-way.
16. Asphalt repair limits required for the proposed utilities servicing the site should be delineated on the site plan.
17. A proposed stop bar marking should be added supplementing the proposed stop sign.



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18. Revise Site/Civil No. 5 to state, 'All concrete used for site work shall have a minimum 28 day compressive strength of 4,500 psi, air-entrained.'

C. GRADING AND UTILITY COMMENTS

1. The applicant should provide top and bottom of curb elevations at the end of the handicap ramp delineating full faced curb. It appears elevation FS:86.90 represents TC 86.90 and BC 86.40.

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

D. LANDSCAPING AND LIGHTING COMMENTS

1. Applicant provided a tree replacement calculation, indicating 229 replacement trees are required by of Ordinance §222- Trees. 9 replacement trees are proposed. This office defers to the Township Planner as to the adequacy of the tree calculation, as well as the adequacy of the proposed landscaping and buffering to adjacent properties, respectively. It appears the applicant will need to make a contribution to the shade tree commission.
2. The applicant shall revise the Landscaping Plan to include the following note: "All plant relocations/substitutions shall be submitted to the Township for review and approval prior to installation".
3. Provide a detail showing 36" of clearance between the face of the light pole foundation and full height (6") curb face. In the event this offset cannot be achieved, the light pole foundation base shall be at minimum 30" in height.
4. The applicant should review the lighting plans to verify that all lighting requirements are met with a minimum illuminance of 0.2 FC. The parking lot and property line areas do not meet this requirement.

E. POTABLE WATER DISTRIBUTION SYSTEM

1. This office defers review and approval of the water system improvements to the Township Water Department.
2. 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.

F. ENVIRONMENTAL IMPACT COMMENTS

1. A Letter of Interpretation for the freshwater wetlands shown on Block 514 Lot 15 should be obtained from the NJDEP to verify the limits of wetlands shown on the site plan. The Applicant's engineer should provide the original letter of interpretation, and the approved wetlands map, to verify the wetlands and buffers shown on the plans.
2. The Applicant's engineer should submit an NJDEP application for Flood Hazard Area Applicability Determination to determine if the stream/ditch traversing the site is a regulated stream (Raritan River Tributary) within the property. A copy of the FHA Applicability Determination should be provided to this office.



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3. The Environmental Assessment for this project states in section 4.1.5 (page 10) that "construction is proposed to encroach on the 50' wetlands transition area..." Therefore, the Applicant should obtain a NJDEP Freshwater Wetlands permit to allow the transition area disturbance. A copy of the freshwater wetlands permit should be provided to this office prior to plans sign off.
4. Section 6 - Permits and Approvals of the Environmental Impact Statement should be revised to provide a complete list of all permits & approvals required for this project.
5. A Conservation/Preservation Area shall be created in accordance with §112-147 of the Franklin Township Land Development Regulation Ordinance. The Township preservation area boundary line shall be established using the most restrictive of the Flood Hazard Area, Stream Preservation Corridor and Wetlands Buffer lines.
6. Provide a Conservation/Preservation Area Easement Deed, with a metes and bounds description, of the Township preservation area boundary line. The deed shall be submitted for review and approval prior to filing with the Somerset County Clerk's Office.
7. Preservation Area Markers shall either be set or bonded for prior to application sign-off.

G. STORM WATER MANAGEMENT:

1. The property in question, Lot 15 Block 514, consists of approximately 2.0 acres. The property is currently vacant and was a residential property with a single-family dwelling that has been demolished. Runoff from the site drains to an unnamed tributary to the Raritan River.
2. Development of the proposed warehouse facility will disturb approximately 1.32 acres of land and will create approximately 0.68 acres of new impervious surface. The project exceeds the threshold of 1 acre of disturbance and creation of more than ¼ acre of impervious surface; therefore, it is classified as a major development for stormwater management purposes. In accordance with Township Ordinance, major projects must comply with water quantity control, water quality and groundwater recharge standards.
3. The project site is located within the review zone of the Delaware and Raritan Canal Commission and the applicant should obtain approval from the Commission. A copy of the permit should be provided to this office.
4. The project in question 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.
5. The Applicant's engineer should submit a NJDEP application for Flood Hazard Area Applicability Determination to determine if the stream/ditch traversing the site is a regulated stream (Raritan River Tributary) within the property. A copy of the FHA Applicability Determination should be provided to this office.
6. The Applicant must obtain a Soil Erosion and Sediment Control Plan Certification from the Somerset-Union Soil Conservation District. A copy of the certification must be provided to this office.
7. There is insufficient pipe cover at Prop. B-Inlet #1.
8. In accordance with BMP requirements, exfiltration may not be included in routing calculations for quantity control. The routing calculations for infiltration basins 1 and 2 are not in accordance and should be revised accordingly.
9. The Grading Plan should be revised to provide a minimum cover of 12 inches on top of the proposed 12" HDPE outflow pipe from the proposed detention basin. Revise contours accordingly.
10. The construction detail for the Up-Flo Filter should be revised to show the correct diameter and invert of the inlet and outlet pipes, rim elevation of the access manholes, peak flow rate for the water quality and 100-yr storm events and the acreage of impervious surface draining to the unit. In addition, the Applicant's engineer should



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verify that the unit provides the minimum driving head in accordance with manufacturer recommendations. Revise detail accordingly.

11. The Applicant's engineer should review the need for anti-seep collars to control seepage along outflow pipes and pipes extending through infiltration basins 1 and 2 and the detention basin embankments. Design calculations for the number of collars, spacing and size of the anti-seep collars should be included in the drainage report and construction details of the collars should be provided.
12. The Applicant's engineer should review the possibility of relocating the Up-Flo filter downstream of the detention basin to minimize the size of the treatment device. Revise drainage report and plans accordingly.
13. An access road 18-ft wide at a maximum slope of 1:4 should be provided for infiltration basins 1 and 2 and the detention basin for maintenance purposes. A construction detail of the access road should be provided.
14. Construction details for proposed infiltration basins 1 and 2 should be revised to show the elevation of the bottom of basin, the seasonal high water table, separation from the SHWT provided, the design permeability of the subsoil, invert and maximum water surface elevation for the emergency spillway, top of berm elevation and freeboard provided.
15. The construction detail for the proposed detention basin should be revised to show the elevation of the bottom of basin, the seasonal high water table, separation from the SHWT provided, invert and maximum water surface elevation for the emergency spillway, top of berm elevation and freeboard provided.
16. Post-construction soil permeability tests should be conducted within the most hydraulically restrictive soil horizon between the bottom of the as-built infiltration basin 1 and the seasonal high groundwater table. If permeability testing shows drain times longer than 72 hours, appropriate soil replacement must be conducted and retested in accordance with Appendix E of the BMP Manual prior to bond release. A note should be included on the grading plan.
17. The groundwater recharge analysis for infiltration basin 1 and 2 included in the drainage report shows 15,455 sf of impervious surface draining to each basin. According to the post-development drainage area plan 7,818 sf and 7,677 sf of impervious surface drain to infiltration basin 1 and 2 respectively. Revise calculations for consistency.
18. Routing calculations for Infiltration basin 1 included in Appendix F of the drainage report should be revised to take into account the tailwater elevation at the point of discharge in infiltration basin 2. Revise report and plans accordingly.
19. The Applicant's engineer should verify the need for foundation cutoff walls of relatively impervious material under the berm of infiltration basin 2 and the detention basin. If an impervious core is needed, the standard Franklin Township detail for embankment and detention basin clay core detail should be provided showing the installation of the cutoff wall and the grading plan should be revised to show the extend of the clay core material. Revise plans accordingly.
20. It appears that the minimum cover provided over the 2-6 inch diameter outflow pipe from infiltration basin 1 is not in accordance with minimum manufacturer specifications and should be revised accordingly.
21. The trash racks details for the outflow devices provided on sheet 15 should be revised to specify the spacing between bars, dimensions of the rack and minimum loading capacity to comply with N.J.A.C. 7:8-5.7(a)2 and 7:8-6.2(a).
22. The overflow grate details for the outlet structures provided on sheet 15 should be revised to specify the spacing between bars, and minimum loading capacity to comply with 7:8-6.2(b).
23. Conduit outlet protection for the outflows from basin 1 and 2 and for the detention basin should be designed for the 100-yr storm event. Revise plans and report accordingly.



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24. 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.
25. Provide a Stormwater Maintenance Agreement for the stormwater system to insure future maintenance. A sample agreement is available from the Engineering Department.

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. Water meter pit detail is delineated on the plan set; however, a pit is not delineated on the Utility Plan. Clarification is required;
 - c. Revise the Type B Inlet Detail to delineate an 'N-eco' curb piece;
 - d. All site concrete shall be 4,500 psi, air-entrained;
 - e. Revise the Variable Height Curb/Wall detail to include reinforcement;
 - f. Replace the Concrete Curb detail with the Township standard detail;
 - g. Add the Township Restoration of Street Openings standard detail;
 - h. Remove the Typical Trench Detail for HDPE Storm Pipe detail, Sanitary Sewer Trench detail and Water Service Trench detail. Replace same with the Township Standard Utility Pipe Bedding Detail;
 - i. All sanitary sewer details shall be submitted directly to the Franklin Township Sewerage Authority for review and approval – Comment Only

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 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: Planning Board Secretary