

Exhibit:

B-1



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November 5, 2020

Kaplan Companies
433 River Road
Highland Park, New Jersey 08904

Attn: Mr. Bret Kaplan
General Counsel

Re: **Borough of Sayreville
Camelot at Ernston Road LLC Site Plan
Block 347.01; Lots 3.01; Block 366, Lot 1
Our File No. PSAP0366.01**

Dear Mr. Kaplan:

Our office is in receipt of your September 29, 2020 letter which provided additional information and revised plans for our review relative to the above referenced project.

We have reviewed the additional information provided and determined that the application can now be deemed complete and a number of the previously outstanding items as noted in our November 19, 2019 report have been satisfactorily addressed.

This application has tentatively been scheduled for a public hearing at the Planning Board meeting on Wednesday, December 2, 2020. Please advise if this date is acceptable to your office.

Transmitted herein for your information, please find one (1) copy of an updated Technical Engineering Review as prepared by our office for this project. The items contained in this report will be discussed in further detail at the Planning Board meeting.

Should you have any question concerning this matter, please do not hesitate to contact this office.

Very truly yours,

Jay B. Cornell, P.E.
Borough Engineer's Office

JBC/blr
Enclosure

cc: Planning Board Secretary
Michael Fowler – Board Planner
Abbington Engineering, LLC



**BOROUGH OF SAYREVILLE
CAMELOT AT ERNSTON ROAD
PRELIMINARY AND FINAL MAJOR SITE PLAN**

- TECHNICAL ENGINEERING REVIEW -

Our File No.: PSAP0366.01/600.01

A. SITE GRADING & GENERAL COMMENTS

1. The Applicant will be required to obtain the following governmental approvals necessary to implement this project:
 - a. Middlesex County Planning Board Approval,
 - b. NJDEP Treatment Works Approval,
 - c. NJDEP Bureau of Safe Drinking Water,
 - d. NJDEP – Freshwater Wetland Permits,
 - e. NJPDES – Construction Activity Stormwater Discharge Authorization,
 - f. Borough of Sayreville – Soil Erosion and Sediment Control Plan Certification,
 - g. Borough of Sayreville – Soil Removal or Fill Placement Permit,
 - h. Borough of Sayreville – Tree Removal Permit,
 - i. Jersey Central Power & Light.

2. The RSIS defines a “Residential Access Street” as the lowest order, other than rural street type, of residential street. It carries traffic having destination or origin on the street itself. It appears that this definition applies to all the onsite roads that provide direct access to the driveway/garage combinations at the front of all the proposed buildings. Accordingly, the following RSIS street classifications should be assigned based on an average daily traffic for mid-rise apartments of 5.5 trips per dwelling unit:
 - a. Drive Aisle “A” (stations 0+18 to 7+50) – Residential Access (<1500 ADT), High Intensity Development (>8 D.U./Acre), with no on-street parking,
 - b. Drive Aisle “B” (stations 0+25 to 3+60) – Residential Access (<1500 ADT), High Intensity of Development (>8D.U./Acre), with non-parallel on-street parking,
 - c. Drive Aisle “D” (stations 0+12 to 5+30+/-) – Residential Access (<1500 ADT), High Intensity Development (>8D.U./Acre), with non-parallel on-street parking,
 - d. Drive Aisle “D” (stations 5+30+/- to 7+50+/-) – Multifamily Court (<300 ft. long), High Intensity Development (>8D.U./Acre), with non-parallel on-street parking.

All remaining onsite roads should be considered parking areas and access aisles.

3. The proposed site plan does not fully comply with the following RSIS design requirements for Residential Access Streets and the Applicant is requesting de minimus exceptions for same.
 - a. The minimum horizontal curve radius shall be 100 feet (measured from centerline of the street),
 - b. The minimum tangent length between horizontal reverse curves shall be 50 feet,
 - c. The minimum curb radii at intersections shall be 25 feet,
 - d. Sidewalk required along both sides of the street,



Technical Engineering Review
Camelot at Ernston Road
Page 2 of 6

- e. Intersection sight triangles based on a 25 mph speed limit (15 mph speed limit proposed),
- f. Horizontal and vertical curve sight distances based on a 25 mph speed limit (15 mph speed limit proposed).

The aforementioned de minimus exceptions should be discussed with the Board.

4. The Applicant should submit a "will provide service" letter from the telephone and cable tv service companies.
5. In accordance with the AH-2 zone district design standards, a minimum ten (10') ft. wide landscape buffer shall be provided between the buildings/parking areas and Main Street, as well as between the buildings/parking areas and adjacent Lot 2.05 in Block 347.01. In addition, all buffer area plantings shall consist of evergreen trees having a minimum height of six (6') feet at the time of planting. The plans do not fully comply with the evergreen tree buffer planting requirements. The Applicant's Engineer should discuss this issue with the Board.
6. In accordance with the AH-2 zone district design standards, no refuse and recycling storage areas shall be permitted between the front of a building and the street. The proposed refuse enclosure between Buildings #1 and #2 does not comply with this requirement and should be revised.
7. In high-density residential areas, all sidewalks that abut the curb shall have a minimum width of six (6') feet. The plans should be revised to comply with this requirement.
8. The Applicant's Engineer should further review that sidewalk handicap ramps are provided at all required locations along accessible routes.
9. The Applicant should discuss with the Board the findings of the Preliminary Assessment Report concerning existing environmental conditions at the subject site. All Areas of Concern (AOCs) should be further investigated or remediated as required prior to the issuance of any building permits for the project.
10. The anticipated time frame for the completion of the club house should be reviewed with the Board.
11. The proposed grading within a number of a lawn areas results in slopes that are less than the minimum 2% required by the Borough Ordinance and should be further reviewed and revised accordingly.
12. The proposed grading within a number of paved areas results in slopes that are less than the minimum 0.5% required by the RSIS and should be further reviewed and revised accordingly.



Technical Engineering Review
Camelot at Ernston Road
Page 3 of 6

13. There are a number of proposed spot elevations and contour lines that are inconsistent with the proposed grading in the immediate areas for same and should be further reviewed and revised accordingly.

B. STORM SEWER SYSTEM

1. The proposed development will result in a disturbance of freshwater wetlands and transition areas, and will require the Applicant to obtain an NJDEP Freshwater Wetlands permit to fill those areas within the property.
2. Proposed wet ponds 1 and 2 are classified as Class IV dams, and in accordance with N.J.A.C. 7:20, a New Jersey licensed Professional Engineer must design the Class IV dam to meet all technical requirements in N.J.A.C. 7:20. The Applicant's Engineer should provide a certification that the basins comply with all applicable N.J.A.C. 20 requirements.
3. As indicated in the drainage report, the total pre-development and post-development peak flow rates for the 2-yr storm event are 0.244 cfs and 0.581 cfs, respectively. The proposed stormwater management plan does not meet water quantity control standards for the 2-yr storm event and should be revised accordingly.
4. Based on the proposed grading, offsite and onsite runoff will pond between Drive Aisle B and the railroad tracks. The Applicant's Engineer should further review this issue.
5. In accordance with BMP Manual requirements, no standing water may remain in an infiltration basin 72 hours after a rain event, in order to allow for sufficient storage for the next rain event. The drainage report should be revised to include the drain time for the 100-yr storm event for the five proposed trenches to verify this requirement.
6. Groundwater mounding impacts must be assessed to identify any adverse impact including the possible reduction in permeability rate for each proposed trench.
7. In accordance with BMP Manual requirements, the maximum design volume to be infiltrated is the volume generated by the water quality design storm. Accordingly, the proposed trenches must include an overflow pipe to drain runoff from storms exceeding the water quality storm event. In addition, all points of access must be covered to prevent sediment or other material from entering the system. The trenches should be revised accordingly.
8. At least one inspection port that extends into the subsoil must be provided in the area of an infiltration trench to monitor its functionality. The maximum design storm depth of runoff must be marked on the structure. A construction detail for the inspection port should be provided on the plans.
9. The drainage report should be revised to include calculations to determine the TSS removal rate for proposed wet ponds 1 and 2. The drainage report should be revised accordingly.



Technical Engineering Review
Camelot at Ernston Road
Page 4 of 6

10. In accordance with BMP Manual requirements, wet ponds with drainage areas less than 20 acres may be permitted if a detailed analysis indicates that sufficient base or groundwater flow is available to maintain the permanent pool depth. A water budget must be included in the analysis. The Applicants Engineer should provide an analysis for wet ponds 1 and 2.
11. An operation and maintenance plan should be prepared for all stormwater management measures incorporated in the design. The maintenance manual shall be in accordance with N.J.A.C. 7:8-5.8 and a copy should be provided to our office for review.
12. In accordance with BMP Manual requirements, post-construction testing must be performed on the as-built underground infiltration trenches in accordance with the Construction and Post-construction Oversight and Soil Permeability Testing in Appendix E of the BMP Manual. Where as-built testing shows a longer time than designed, corrective action must be taken. A note should be added to the grading and utility plan stating this requirement.
13. The cross section of the proposed underground storage detail provided on sheet 25 should be revised to show the SHWT and bottom of trench elevations, and the vertical separation provided between the bottom of the stone and the seasonal high groundwater table. In addition, filter fabric cannot be used at the bottom of the trench and should be removed.
14. Structural calculations for any oversized drainage structures should be provided. A note should be added to the plan indicating same.

C. SOIL EROSION AND SEDIMENT CONTROL

1. The stabilized construction entrance detail should be revised to provide specific dimensions for the pad (length and width). In addition, the cross section should be revised to show a 10 ft. paved transition area between Main Street and the stone entrance.
2. The Conduit Outlet Protection calculations for headwalls #10, #22 and #57 should be revised to use the correct formula. The tailwater is less than one half of the pipe diameter but the formula for a tailwater exceeding one half of the pipe diameter was used. The calculations should be revised accordingly.
3. A downstream offsite stability analysis must be performed for each point of discharge. The Applicant's Engineer must utilize the procedure contained in Chapter 21 of the Standards for Soil Erosion and Sediment Control in New Jersey.
4. The stability of the proposed emergency spillways for the wet ponds must be demonstrated via calculations.
5. The Soil Erosion and Sediment Control plan should be revised to include a soil mitigation plan showing disturbed areas exempt from compaction remediation and areas to be tested specifying the number of tests to be conducted and the location of proposed testing.



Technical Engineering Review
Camelot at Ernston Road
Page 5 of 6

6. A Hydrologic Modeling Database – Data Entry Form, with all applicable hydrologic data and BMPs information, should be provided.

D. LANDSCAPING AND LIGHTING

1. In accordance with Borough Ordinance requirements for lighting design, all sidewalks shall have a minimum of one (1) foot-candle lighting intensity along the entire length. The proposed site lighting does not comply with this requirement and should be revised.
2. There does not appear to be any lighting proposed for the pool/barbeque area. The Applicant's Engineer should discuss this issue with the Board.
3. In accordance with the Borough Ordinance, street trees shall be provided along all site frontages at a spacing of fifty (50') feet. The plans do not fully comply with this requirement. The Applicant's Engineer should discuss this issue with the Board.

E. ROADWAY IMPROVEMENTS AND MISCELLANEOUS

1. The Standard Asphalt Pavement (RSIS) Detail indicates two (2) different thicknesses for the surface course, which should be further reviewed.
2. The submitted Fire Truck Turning Exhibit indicates that the design vehicle – BT Fire Truck will encroach into the lane of oncoming (opposing) traffic while both entering and exiting the subject site to/from Main Street. In addition, the fire truck encroaches onto the sidewalk in front of Building #2. Accordingly, the proposed curb radii at the affected locations should be revised to eliminate the truck turning path encroachments.
3. The Applicant's Engineer should review the need for guiderail along the side of proposed Drive Aisle "B" adjacent to the existing railroad, and around the perimeter of the depressed lawn area within the JCP&L overhead power line easement. Guiderail warrant analyses should be prepared in order to determine the need for same.
4. The following construction details should be revised in accordance with the current Borough Standard details for same:
 - a. Typical Pipe Bedding Detail,
 - b. Reinforced Concrete Pipe Trench Installation,
 - c. Water Service Connection Detail,
 - d. Fire Hydrant Detail,
 - e. Type "B" Inlet Detail,
 - f. Type "E" Inlet Detail,
 - g. Drainage Manhole Detail,
 - h. Typical Precast Concrete M.H. Detail.



Technical Engineering Review
Camelot at Ernston Road
Page 6 of 6

5. The Looping Water Main detail should be revised to utilize the restraint method indicated in the Borough Standard Vertical Bend Restraint Detail.
6. The following construction detail should be revised to indicate 4500 psi concrete in accordance with Borough Ordinance requirements:
 - a. Typical Trench Drain.

F. TRAFFIC

1. As indicated in Table 3 of the Traffic Impact Study, there will be a significant increase in average vehicle delay (seconds per vehicle) for the Stegiel Place approach to the Main Street intersection as a result of the proposed site driveway to be located directly across Main Street. The Applicant's Traffic Engineer should discuss this issue with the Board.