

George J. Saraceno, Senior Civil Engineer

TO: Lenore Mahoney, Executive Secretary, Zoning Board of Appeals

DATE: May 9, 2019

RE: **Site Plan Review (SPR) – 2 & 3 Burke Lane
Cedar Place Apartments**

The Town of Wellesley Department of Public Works (DPW)- Engineering Division has received a copy of the design package with a cover letter from your office dated April 24, 2019 for the SPR project at 3 Burke Lane. The hearing date for the project is scheduled for May 16, 2019. The applicant's design team consists of Guerriere & Halnon, Inc. of Milford, MA and Dixon Salo Architects Incorporated of Worcester, MA. The documents provided include a Stormwater Report dated April 16, 2019, Official Development Prospectus dated February 26, 2019 and General Civil Plans, including a Landscaping Plan and Lighting Plan dated February 25, 2019. The applicant must provide a copy of the Site Plan Approval Review Plans and Submittal Checklist.

The applicant (Cedar Place LLC) is proposing an apartment complex called Cedar Place Apartments, with mixed-income or 40B development at 3 Burke Land. Three Burke Lane, is bounded by Worcester Street to the north, Burke Lane to the east and residential property to the west and south. The lot size is approximately 40,219 square feet. A single family two-story home exists on the property. The elevations change on the property from a higher elevation of 141' to the southwest to a lower elevation of 105' to the northeast. The property is wooded at the rear edges of the lot to the west. There are no visible ledge outcroppings. The existing house has gas, electric, telecommunications, water and sewer services. There is a retaining wall at the front of the property within the Burke Lane road layout. The project is located in a Single Residence 15,000 square foot Zoning District. There are no known wetlands on the property or in close proximity to the site. The project is not in a Water Supply Protection District.

The project consists of constructing a new 2.5-story building with 16 rental units. Fifteen units will be in the newly built 2.5 story building and one unit in the three-bedroom single family home. The existing single family home will be preserved with an accessory unit converted to on-site property management. The project includes adding 26 total parking spaces, 1.5 parking spaces per unit, on-site drainage system, new utilities, new pavement, sidewalks, retaining walls and landscaping. The square footage of the proposed apartment building is 7,545 square feet. The footprint of the existing two-story dwelling is 2,880 square feet.

Three test pits were performed on the site, DTH #4, #5 & #6. The test pits were excavated to a depth of 120". The top layer consisted of sandy loam to loamy sand and finally to sand in the C2 layer. No groundwater or redoximorphic features were encountered in each test pit. The test pits were conducted in the location of the proposed parking lot, as porous pavement is proposed to infiltrate stormwater runoff.

Provided below are DPW comments regarding the proposed SPR Project.

Memo to Lenore Mahoney

May 9, 2019

Page 2

GENERAL

1. The architectural plans submitted by Dixon Salo Architects of Worcester, Massachusetts shall be stamped and signed by a Registered Architect in Massachusetts.
2. The Existing Conditions Plan, Sheet 2 of 7, should show the utility connections to the existing dwelling. Include pipe size and material type. Add flow direction arrows for the sanitary sewer main in the street.
3. The plan elevations must be shown on the Town's benchmark system. Revise the plans accordingly and note that the plan elevations are on the Town benchmark.
4. Three (3) benchmarks were provided for the project on existing catch basins and a sewer manhole.
5. The minimum required front and side setbacks have not been met and require a waiver from the ZBA.
6. The proposed elevation of 109' is a foot higher than the top of wall at that location, 108'.
7. Show the limits of the proposed Cape Cod berm proposed for the project. The proposed sidewalk work will require a new curb to be installed.
8. The neighbor's driveway at 15/17 Burke Lane is encroaching onto the property. Has the applicant discussed the driveway encroachment with the neighbors to resolve the issue?
9. Provide the cut and fill calculations for the project.
10. Provide a copy of the Construction Management Plan that shows the development of the site with staging, contractor parking, truck routing to the site, construction dewatering, concrete washing area, construction fencing, tree protection, hours of work and emergency contact information.
11. Provide the location and information on the backflow prevention device and water meter proposed for the new building. The installation of the backflow prevention device must be inspected by the Town's Water and Sewer Division.
12. The project narrative mentions that the project is located on two lots, 2 & 3 Burke Lane. The applicant's engineer should clarify the location of the two parcels and include the square footages of each.
13. The proposed estimate discharge of sewer from the new development is 3,630 gal./day. Provide a statement/calculations that the existing sanitary sewer system is able to handle the additional flow generated as a result of this project.
14. Provide a statement that the water consumption for the new development will not adversely impact the existing water main distribution line.
15. Building elevations should show the proposed elevations at roof ridges. Notes say maximum height is 30 feet. Narrative states 41 feet height for proposed building.
16. Provide calculations related to 5% interior and 10% total landscaping area for the proposed parking lot areas.

SITE DEVELOPMENT & GRADING PLAN

1. The proposed curb cut should include a painted crosswalk and 12" wide stop bar, 4' from the crosswalk. A detail should be provided for both the stop bar and the crosswalk. The crosswalk must match the Town standard detail for crosswalks.
2. Provide details for the proposed retaining walls including drainage if necessary and

limits for this project. The proposed retaining wall along the southern lot line appears to connect through to the next lot. Who is the owner of this portion of the retaining wall moving forward?

3. The project must meet the current ADA accessibility requirements for the new parking lot including accessible parking spaces and ADA ramps. Detectable warning panels are required for wheelchair ramps and should be shown on the site plan. We recommend cast iron panels either federal yellow or non-painted panels and a note should be added to the detectable warning surface detail.
4. The proposed retaining walls are over 13' and require a separate review as specified in the retaining wall bylaw for the Town. Provide the type of retaining wall, such as Ready Rock Block or approved equal proposed.
5. A drainage system is typically required behind the retaining wall as shown on the detail provided. Show the location of the piping on the Site Development and Grading Plan, Sheet 3 of 7 and the discharge area or end of pipe in either direction.
6. The proposed stormwater infiltration system should be a minimum of 5' from the building foundation and 5' from the property line.
7. The proposed stormwater infiltration system must be inspected by the Town Engineer or representative during installation. The applicant shall provide an as-built plan for the infiltration system by providing swing ties of the inspection ports.
8. Show the location of the proposed concrete sidewalks per the pavement and concrete sidewalk detail provided on the Site Details Plan, Sheet 4 of 7.
9. Label a 6"x6" tee connection for the proposed 6" CLDI fire service connection for the new building.
10. We recommend that a 4" CLDI pipe branch off the 6" CLDI fire service line be located closer to the building.
11. Show the existing utilities for the Existing Dwelling #3. We recommend TV inspecting the existing sanitary sewer connection to determine the condition of the pipe. The applicant should consider replacing the existing water service depending on the age and condition of the pipe.
12. Label the pipe type for the drainage pipe that conveys stormwater runoff from area drains around the site to the on-site stormwater infiltration system.
13. The design engineer should consider adding an underdrain system to the porous pavement areas as there is no degree of certainty that the soils alone will allow infiltration to groundwater. We would recommend that a conventional drainage system be provided at the low point of the parking lot at 7 Burke Lane in the event that the porous pavement is no longer viable for infiltration.
14. Clarify the invert elevations for the proposed yard drains 1-4 as the invert out is lower on the upstream end of the pipe.
15. Show the location of the proposed electric conduits for the parking lot lights and provide a detail of the type of light proposed for the project. Add a trench sectional detail for the proposed electric conduit. Are the proposed light fixtures required to be Dark Sky compliant?
16. New trenching on Burke Lane requires milling and paving. The limits of milling and paving should be determined by the Town's Street Occupancy Permit Inspector. Add a note to the plan that the trenching on Burke Lane shall be milled and paved as specified by the Town Engineer.

SITE PLAN DETAILS

1. Provide a copy of the sanitary sewer service cleanout, which is a wye connection between the proposed sewer manhole and the building foundation.
2. The pavement thickness for the proposed sidewalk shall be 3.5", 2" binder course and 1.5" top course.
3. Provide a detail for the proposed water service pipe connections as specified on the Site Development & Grading Plan, Sheet 3 of 7.
4. Add a detail for the proposed yard drains shown on the Site Development and Grading Plan, Sheet 3 of 7.
5. Remove from the Construction Sequencing Plan at the top of the sheet note A and B as there is noted on the plans no wetlands on the site or in close proximity to the site.
6. The Porous Pavement detail should include a note that the bottom of the excavation should be scarified prior to adding the geotextile and washed stone. We believe an underdrain system should be added to this detail.

LANDSCAPE PLAN

1. We recommend using chain link fence for tree protection around the site. Show the trees and existing plantings to be protected during construction.
2. Clarify if there are any existing trees that should be removed prior to construction. Include the type and size of the tree.
3. We recommend utilizing the Town of Wellesley tree planting details and tree protection detail for this project.
4. The proposed planting schedule should include native plants that are suitable for parking lots.

STORMWATER

1. The existing drain line at DMH1 is showing a higher invert elevation from the pipe coming from CB1. Clarify that the pipe is sloped correctly. Add flow direction arrows to the existing drain line on Burke Lane.
2. The Illicit Discharge Compliance Statement should be signed by the applicant's engineer.
3. The Operations and Maintenance Plan shall include a statement that annual inspection logs for the on-site drainage system be submitted to the Town Engineer.
4. Provide a copy of the Operation and Maintenance log form.
5. Provide calculations for pre and post development impervious area as well as calculations for percentage of proposed interior and total landscaping areas required for the parking lot.
6. Show that the project meets the Town's Development Standards.

CONCLUSION

We believe that the applicant's designer engineer consideration of porous pavement as an onsite option for reducing stormwater peak flow rates and volumes to neighboring property and Burke Lane is an excellent idea considering the sandy soils. However, we are not aware of the viability of porous pavement to continue infiltrating stormwater runoff at a constant rate after several years of use. Also, the soils under the porous pavement may not be as suitable for infiltration in

Memo to Lenore Mahoney

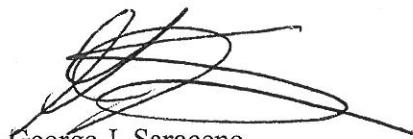
May 9, 2019

Page 5

certain areas, which is why we recommend using a perforated subsurface drainage system to help convey stormwater runoff from the porous pavement surface to the crushed stone sub-base material and underlying soils. The HydroCAD analysis shows a stormwater peak runoff rate and volume from the site as zero c.f.s. and c.f. respectively, which we doubt will be possible given the intense rain events we have been experiencing. A conventional drainage system at the lowest point in the parking lot to redirect stormwater runoff from Burke Lane would be recommended.

If I may be of any further assistance, feel free to contact me in the office at 781-235-7600, x3318 or via email, gsaraceno@wellesleyma.gov.

Sincerely,



George J. Saraceno
Senior Civil Engineer

Cc: David Cohen
David Hickey
Douglas Stewart
Gerry Bruno
Michael Quinn,
Bill Shaughnessy
Michael Grant
Lenny Izzo
Julie Meyer
Meghan Jop

2d 3 Bucke Lane - 463 Cedar Place Apartment

DRS 05/08/19

- BUILDING ELEVATIONS SHOULD SHOW PROPOSED ELEVATIONS AT ROOF RISERS. NOTES SAY MAXIMUM HEIGHT IS 30 FEET. NARRATIVE STATES 41 FEET HEIGHT FOR PROPOSED BUILDING.
- CLARIFY IF ADDRESS IS 2 & 3 BUCKE LANE OR 3 BUCKE LANE
- PROPOSED 26 ON-SITE PARKING SPACES OR 1.62 SPACES PER DWELLING UNIT.
- GUERRIERE ATTALASAR, INC ENGINEERING & LAND SURVEYING.
- LOT AREA IS 40,219 SQUARE FEET.
- DTH #4 - #6, NO FLOWMETER OBSERVED AT 10' DEPTH.
- SHEET 2 OF 7 SHOW HOUSE SERVICE UTILITY LOCATIONS.
- EXISTING DOWNTAPS TO BE REMOVED. 15 PROPOSED RENTAL UNITS IN NEW BUILDINGS
- PARKING:

VEHICLE	2 SPACES
HP	2 "
SUV	16 "
COMPACT	6 " (PARALLEL) 3 ARE GUEST STALLS

PROPOSED RETAINING WALL AT THE SOUTHERN PROPERTY LINE WILL BE UP TO 13.5 FEET HIGH. NEED TO PROVIDE DESIGN PLAN INCLUDING REQUIRED FENCING FOR RETAINING WALL. DRAINAGE PROVIDED?

PROPOSED 3" DOMESTIC WATER AND 6" FIRE SERVICE LINE.

19 COLTEC R 330 X LHD CHAMBERS FOR YARD DRAINS AND ROOF RUNOFF FROM NORTH SIDE OF PROPOSED BUILDING.

• PROPOSED PAVERED PROPOSED TENANT PARKING AREAS.

• SHEET 3 OF 7, SHOW PROPOSED LOCATIONS NO. 1
CINC