MEMORANDUM

TO: Katie DeLuca, Deputy Director, Planning and Zoning / Assistant Town Planner
FROM: Aleksandra Moch, Environmental Analyst
DATE: May 4, 2021
RE: Greenwich Hospital, 16-38 Lake Avenue and 54-64 Lafayette Place, PLPZ 2021 00101
Site plan/landscape design by Redniss & Mead/Shepley Bulfinch, dated April 28, 2021

I have reviewed the above-referenced plans and visited the site. The following comments are offered for your consideration.

1. The proposed new cancer center will replace several buildings and parking lots imbedded in rows of trees and foundation plantings with one large building and a parking area. About 77% of the area will be permanently lost to impermeable cover. To alleviate the increase of storm water runoff, an in-ground infiltration system is proposed to address storm water runoff from the roof.

   No detention is offered for the runoff collected at the parking area. Parking lots are a primary source for non-point source pollution. A failure to treat parking lot stormwater will necessarily mean the receiving waterways will be burdened with additional pollution. The applicant should explain why permeable asphalt, rain gardens within the parking islands and/or other measures were not included.

2. The storm water renovation measures are also lacking. The oil grid separator is limited to the underground parking and it will require a pump to convey potential spills from the area. Would this system be connected to generator to ensure it works during the power outages?

   A closed sand filter system is proposed to treat storm water runoff from the outside parking. Such treatment has several limitations. Sand is not capable of filtrating water born pollution such as nutrients, pesticides, road winter care products, antifreeze liquids, etc. The filtration services the filter can provide is limited to catching of particles including soil, pollens, plant fragments, break dust, etc. and are known to absorb motor oil and gasoline. These particles however, are separated from the storm water flow at the catch basin sumps.

   In order for the applicant to substantiate a level of pollution renovation, a pollutant renovation analysis should be submitted and include an array of parameters associated with this type of development. It is likely, due to the high daily traffic movement through the area, more sophisticated measures will be needed to address storm water quality.
3. Due to the challenging topography, fairly shallow bedrock and ground water, the site will undergo an intensive fill and cut operation. While some cut and fill cannot be avoided, there are areas where excessive fill is a choice made by the designer. Grading within the northeastern corner is meant to bring the garden level with the second floor of the building. Such an approach lessens the environmental values and functions of the great variety of native plant material proposed for the healing garden. The breadth of value a native garden can bring is narrow by having the garden planted in the filled area. Fill material lacks organic matter and natural nutrients which are commonly found in native soils. This will necessitate intensive irrigation of otherwise potable water and more intensive care for the stressed plants.

To provide for a robust healing garden which emanates health and truly supports the patients, the applicant should consider creating an access to the garden from the first floor and relocate the injection rooms to the lower floor. This revised design should be proposed as an alternative which will soften the tall appearance of the building from Lake Avenue, bring the landscaped area to the street level and ease the connection between the healing garden and the pocket park existing on the northern side of Lake Avenue.

4. The proposed cancer care will result in intensive uses of the natural resources. Water for irrigation, high demand for electricity and a lot of medical wastes. To lower the carbon footprint of the building and its operations, the applicant should consider creation of renewable sources of energy in the form of solar panels. Covering a portion of the roof with roof garden will provide insolation moderating the need for heating and cooling.

5. Large parking area offers an opportunity to install electric car charging stations and bicycle racks to promote emission free commuting for the patients and staff and promote good air quality around the building as part of the applicant’s goal of fostering the healing process.

c: Conservation Commission