

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: 15821

MEPA Analyst: Page Czepiga

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Beth Israel Deaconess Medical Center – New Inpatient Building		
Street Address: 111 Francis Street		
Municipality: Boston	Watershed: Charles River	
Universal Transverse Mercator Coordinates: Zone 19 E: 326209 N: 4689421	Latitude: 42°20'15.4" N Longitude: 71°06'34.6" W	
Estimated commencement date: 2019	Estimated completion date: 2022	
Project Type: Hospital	Status of project design: 30 %complete	
Proponent: Beth Israel Deaconess Medical Center		
Street Address: 330 Brookline Avenue		
Municipality: Boston	State: MA	Zip Code: 02215
Name of Contact Person: Geoff Starsiak		
Firm/Agency: Epsilon Associates, Inc.	Street Address: 3 Mill & Main Place, Suite 250	
Municipality: Maynard	State: MA	Zip Code: 01754
Phone: (978) 897-7100	Fax: (978) 897-0099	E-mail: gstarsiak@epsilonassociates.com
<p>Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:</p> <p>a Single EIR? (see 301 CMR 11.06(8)) <input type="checkbox"/> Yes <input type="checkbox"/> No a Special Review Procedure? (see 301CMR 11.09) <input type="checkbox"/> Yes <input type="checkbox"/> No a Waiver of mandatory EIR? (see 301 CMR 11.11) <input type="checkbox"/> Yes <input type="checkbox"/> No a Phase I Waiver? (see 301 CMR 11.11) <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)? [301 CMR 11.03(6)(b)(13)] – Generation of 2,000 or more new adt on roadways providing access to a single location.</p> <p>Which State Agency Permits will the project require? Department of Public Health: Determination of Need and plan approval; Department of Conservation and Recreation: Construction/Access Permit; Department of Environmental Protection: Air quality and groundwater discharge permits (if required); Massachusetts Historical Commission: Determination of No Adverse Effect; Massachusetts Water Resources Authority: Construction Dewatering Permit (if required), Oil/Gas Separator approval (covered loading dock drainage); TRAC approval (if required pending confirmation on internal programming), Amendment to existing sewer discharge permit (if required pending confirmation on internal programming)</p>		

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Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres: A land transfer from an Agency of the Commonwealth is not required. BIDMC may seek financial assistance in the form of Massachusetts Development Finance Agency bonds.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	0.98		
New acres of land altered		0	
Acres of impervious area	0.69	+ 0.23 ¹	0.92
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	345,000	345,000
Number of housing units	0	0	0
Maximum height (feet)	0	0	200
TRANSPORTATION			
Vehicle trips per day			
Unadjusted ²	185	+ 2,384	2,569
Adjusted ³	185	+ 1,120	1,305
Parking spaces	26	-26	0
WASTEWATER			
Water Use (Gallons per day)	0	34,760	34,760
Water withdrawal (GPD)	0	0	0
Wastewater generation/treatment (GPD)	0	31,600	31,600
Length of water mains (miles)	0	0	0
Length of sewer mains (miles)	0	0	0
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input checked="" type="checkbox"/> Yes (EEA# 7406) <input type="checkbox"/> No			

¹ Exclusive of any planned green roof area.

² Unadjusted trip generation is based on new gross floor area square feet that will be added to the BIDMC campus by the Project.

³ Adjusted trips account for mode share data provided by the Boston Transportation Department.

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Project site is located on BIDMC's West Campus, and is bound by Brookline Avenue, Francis Street, a discontinued portion of Pilgrim Road owned by BIDMC, and the Rosenberg Building (see Attachment 1, Figures 1 and 2). The approximately 42,700 sf site currently includes the Emergency Department patient drop-off, ambulance entrance, main West Campus loading facility (Main Loading Facility) and West Campus oxygen tanks. As described below, the Project site was chosen for development of the New Inpatient Building because it is adjacent to the existing West Campus inpatient services that need to be expanded, and the efficiencies and enhancement of existing services that will be created through the interconnection and integration of the New Inpatient Building Project to the Rosenberg and Farr buildings. The Project site is largely unbuilt, which will avoid the disruptive and expensive relocation of existing hospital programs during construction.

In order to ready the site for redevelopment, BIDMC is in the process of completing four enabling projects in order to move the critical functions currently on the site to other locations during construction. The Emergency Department pedestrian entrance will be temporarily relocated to the main entrance of the Rosenberg Building on Deaconess Road and the ambulance entrance will be temporarily relocated to Pilgrim Road. These Emergency Department entrances are expected to be returned to their current locations and incorporated into the ground floor design of the Project. The Main Loading Facility will be temporarily relocated to the rear of the Libby Building, while the oxygen tanks will be permanently relocated to the small surface parking lot (the Clicker Lot) behind the Libby Building, which is adjacent to a campus drive known as Crossover Street and Autumn Street, both private roadways owned by BIDMC. As part of the ground floor design of the New Inpatient Building, the Main Loading Facility will be returned to its existing location off Brookline Avenue where it ties into existing materials management infrastructure in the Rosenberg Building that will continue to serve the West Campus as well as the New Inpatient Building.

Describe the proposed project and its programmatic and physical elements:

PROJECT DESCRIPTION

The Project includes the construction of a 10 story inpatient clinical building on BIDMC's West Campus that will include up to 345,000 sf of gross floor area (as defined in the Boston Zoning Code). The Project will be up to 200 feet tall with a ground level footprint of approximately 32,000 sf of enclosed space (see Attachment 1, Figure 3 for a ground floor site plan). The building will extend over an additional area of approximately 20,000 sf of area that will be open at the ground level along Pilgrim Road. The majority of this covered exterior space will be used for vehicular patient drop-off and/or ambulance arrival space. The Project will house a range of clinical inpatient programs and inpatient beds (both intensive and acute care), operating and procedure rooms, as well as a range of support services and other functions ancillary to those clinical inpatient programs, conference space and a helipad on the roof (which will be relocated from the immediately adjacent Rosenberg Building). The Project contemplates inclusion of up to 158 inpatient beds (up to 128 medical/surgical and 30 intensive care beds) within that facility. However, only 69 of those beds will be additive to the overall BIDMC bed count that will exist at the time the New Inpatient Building opens (i.e., "net new"), as BIDMC anticipates closing some West Campus beds at the opening of the New Inpatient Building. Additionally, BIDMC anticipates reopening 20 beds by the end of 2024 within existing West Campus facilities. Overall, BIDMC anticipates that up to 89 net new patient beds will be brought on-line in connection with the Project on the West Campus during the term of BIDMC's Institutional Master Plan, which BIDMC is seeking to amend and extend for five years to allow BIDMC to build the Project. No ambulatory (outpatient) services are proposed as part of the Project.

The Project will be designed for the evolving needs of the patients BIDMC serves, with the flexibility to adapt in the future. The Project will include family-friendly, single-bedded patient rooms able to accommodate the sophisticated technology needed to best treat critically ill patients. New, state-of-the-art operating rooms will be large enough to support the latest imaging and other surgical equipment. BIDMC's design goal for the overall Project is to incorporate sustainable and evidence-based concepts to improve clinical outcomes, cost-efficiencies and decrease environmental impacts.

The Project site at the corner of Brookline Avenue and Francis Street makes it an important gateway into the LMA for arrivals from the southeast. The building massing and material palette will be developed to create a strong sense of arrival into the LMA, and to signify the important role that BIDMC plays in serving the Boston community.

It is expected that the Project will maintain the existing configuration of the sidewalk along Brookline Avenue and Francis Street in terms of width and materials. Opportunities are also being explored to relocate the small existing open space at the corner of Brookline Avenue and Francis Street to a new, mid-block location at the interface between the Rosenberg Building and the proposed Project. The relocation of this open space would shift this pedestrian amenity to a location closer to current pedestrian activity with the goal of better integrating the open space into the pedestrian environment. Additional opportunities to physically juxtapose landscaped elements with the pedestrian realm will be explored as the Project design progresses. In addition, a new roof garden is being considered for the space between the Rosenberg Building and the New Inpatient Building on the sixth floor. Lighting of the pedestrian realm (including sidewalks, landscaped areas and adjacent building walls) will also be carefully studied and designed to provide an enhanced experience as visitors navigate the site.

The Project will connect to the Farr Bridge and the Rosenberg Building in multiple locations in order to provide convenient access and circulation for patients, families and staff. No demolition of existing buildings will be required for the Project. Construction of the Project will result in the elimination of 14 existing parking spaces currently accessed from Pilgrim Road, and 12 parking spaces in the Clicker Lot; no new parking is proposed as part of the Project.

The Project will be similar in height to other major buildings in the immediate vicinity, including the Farr Building at 185 Pilgrim Road (+/-190 feet) and Dana-Farber Cancer Institute's Yawkey Center for Cancer Care (+/-186 feet) located at 450 Brookline Avenue across the street from the Project site. The height of the proposed building coupled with its close proximity to the Rosenberg Building will require the relocation of BIDMC's existing helipad from the roof of the Rosenberg Building to the roof of the New Inpatient Building.

IMPACTS

The sections below describe the Project's anticipated impacts on the environment.

Transportation

The Project is expected to have limited transportation impacts on the existing roadway network. Approximately 58 vehicle trips in the morning peak hour (37 in, 21 out) and 55 vehicle trips in the evening peak hour (21 in, 33 out) are estimated to access BIDMC with the Project in place. Overall, the proposed Project would generate approximately 1,120 new vehicle trips to the BIDMC campus on an average weekday. The relatively low number of net-new peak hour trips is primarily attributable to the Project use being for the expansion of new inpatient services and because 43% of the beds in the Project are intended to replace existing beds on the West Campus.

To minimize the Project impacts, BIDMC actively supports efforts to reduce auto use for people traveling to the BIDMC campus, particularly by employees. Many actions to support this goal are actively employed by BIDMC, including a Employee Transportation Advisor, membership in CommuteWorks TMA, providing subsidies for transit passes for employees, incentives to walk and bike to work, and location-priced parking. BIDMC will continue to promote and improve its TDM program to benefit its employees and reduce traffic impacts to roadways and parking facilities within the LMA and nearby neighborhoods.

Access into the Project is expected to be accommodated via the existing Rosenberg Building main entrance drop-off on Deaconess Road, with another entrance at the corner of Pilgrim Road and Francis Street that is anticipated to be accessible from the new, replacement Emergency Department drop-off. The potential to support supplemental drop-off/pick-up activities is also being evaluated along Francis Street just to the east of Pilgrim Road. A replacement Emergency Department drop-off and ambulance area is anticipated to be provided within the footprint to the Project and is expected to be accessed from Pilgrim Road and Francis Street. The potential for alternative Emergency Department patient drop-off is also being evaluated. The existing Main Loading Facility will be put back in place with the completion of the Project. This Main Loading Facility is anticipated to function similar to how it operated under current conditions.

The Project will provide no new parking on-site. Twenty-six surface lot spaces that currently support the West Campus will be taken out of service in connection with the Project. Parking for the new inpatient beds will be provided in the existing Pilgrim Road and Francis Street garages which are currently used for patient, visitor and staff parking. Any incremental parking needs for the Project would be satisfied via continued utilization of leased, off-site parking facilities for staff.

Infrastructure

The Project will be connecting to robust existing infrastructure in the streets surrounding the Project site. Water will be obtained from the Boston Water and Sewer Commission (BWSC). Sanitary sewage will be conveyed to separated BWSC sanitary sewers. Energy will be obtained from private utility providers with infrastructure near the Project site. Under the conceptual design, stormwater will be collected on-site and directed to recharge wells located on the BIDMC campus. This recharge will meet BWSC's current site plan requirements and will remove over 65% of phosphorus through infiltration, meeting the Lower Charles TDML requirements. As the Project moves forward, the Project team will continue site investigations necessary to support the stormwater system design.

Historic Resources

There are no historic resources on the site, and the site is not within an existing historic district.

The Massachusetts Historical Commission has review authority over projects requiring state funding, licensing, permitting, and/or approvals that may have direct or indirect impacts to properties listed in the State Register of Historic Places (M.G. L. Chapter 9, Sections 27-27c, as amended). The submittal of this ENF will initiate the State Register review process.

Green Building

BIDMC has put a high priority on developing a building that is efficient and environmentally friendly, as sustainable design contributes to BIDMC's efforts to create a healthy future for its patients and the community. Enduring and efficient buildings conserve energy and preserve natural resources. The Project will use the Leadership in Energy and Environmental Design (LEED) for New Construction version 4 for Healthcare Facilities rating system to show compliance with Article 37. The LEED rating system tracks the sustainable features of the project by achieving points in the following categories: Integrative Process; Location and Transport; Sustainable Sites; Water Efficiency; Energy & Atmosphere; Materials and Resources; Indoor Environmental Quality; and Innovation. The Project has a preliminary goal of 54 credits (Silver Level). The Project team will continue to evaluate possible credits as the design progresses.

Climate Change Resilience

BIDMC recognizes the importance of ensuring the safety of its patients and staff, as well as its importance as a critical facility that needs to provide uninterrupted healthcare services to the City. Ensuring that the hospital is able to keep operating through extreme events, and recovers to full operation as quickly as possible, is essential to fulfilling its mission.

BIDMC has studied the potential impacts from severe storms, and has made significant improvements over the past several years in preparing the hospital for emergency situations brought on by extreme weather events. In 2014, BIDMC initiated a review of campus facilities and their vulnerability to flooding. Portions of the East Campus were impacted by flooding from the Muddy River, and the experiences of other hospitals from Superstorm Sandy, Hurricane Irene and several major hurricanes over the past decade, reinforce the importance of securing the hospital's systems to ensure patient safety and the hospital's ability to recover quickly from an extreme event. The assessment evaluated the structural vulnerability of the hospital's buildings, type and location of mechanical systems, and the ability to be relocated or flood proofed. Based on the assessment, BIDMC initiated a flood hardening program which included the addition of removable barricades to doors, structural reinforcement, relocation and flood proofing of mechanical equipment, and creating an extensive pump system. An emergency plan is in place to be implemented prior to a storm event to ensure backup fuel for emergency power. If it were ever necessary, the hospital also has a plan for relocating patients within the BIDMC campus or to other network hospitals. The hospital has created the infrastructure necessary to connect a mobile, two megawatt generator to the West Campus for emergency power.

The Project will be designed to successfully address the concerns that were found during the assessment. Critical systems will be located on upper floors and a dewatering system will be installed.

Construction

A Construction Management Plan (CMP) will be submitted to the Boston Transportation Department for review and approval prior to issuance of a building permit. The CMP will define truck routes which will help in minimizing the impact of trucks on local streets.

Construction methodologies that ensure public safety and protect nearby businesses will be employed. Techniques such as barricades, walkways, painted lines, and signage will be used as necessary. Construction management and scheduling—including plans for construction worker commuting and parking, routing plans and scheduling for trucking and deliveries, protection of existing utilities, maintenance of fire access, and control of noise and dust—will minimize impacts on the surrounding environment.

Throughout Project construction, a secure perimeter will be maintained to protect the public from construction activities.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Zoning-compliant Alternative

The Project is undergoing review by the Boston Planning and Development Agency as required for institutional projects. The approval of the Institutional Master Plan Amendment through Article 80 of the Boston Zoning Code will result in the Project being in compliance with zoning.

Alternatives Analyzed

An analysis was conducted to determine the best approach to meeting BIDMC's Needs and Objectives. Three options emerged from this analysis:

1. Renovations to existing space;
2. Building off-campus; and
3. Building on-campus.

Renovation of the existing space was determined to be infeasible given the limited options on-campus. The footprints of existing buildings do not provide adequate space for renovations in order to comply with current Department of Public Health (DPH) guidelines without significant loss of medical/surgical beds and reduced clinical capacity as well as multiple, expensive and disruptive relocations of existing patient services to allow for such renovation. Existing floor-to-floor heights do not allow for continuing improvement to above ceiling utilities and infrastructure for future technological advances.

Off-campus locations were economically inefficient because building off-site would require the acquisition of new land and duplication of numerous existing campus support services in the off-campus location.

Other on-campus building sites were evaluated to determine the feasibility of building on-campus. The location of the selected Project site will allow BIDMC to meet its defined objectives for new and expanded inpatient facilities in the most cost effective and efficient manner, with as little disruption as possible to ongoing operations during construction.

The Project and its location adjacent to the Rosenberg Building, BIDMC's most recent inpatient clinical facility, will allow the Project's new inpatient facilities and services to be interconnected and integrated with the existing inpatient services in Rosenberg (including the Emergency Department with its level 1 trauma center) and the interconnected Farr Building complex. This integration will enhance and improve the existing West Campus inpatient services and

will allow for shared and efficient use of clinical support services.

The adjacencies of the New Inpatient Building to the Emergency Department and Rosenberg operating rooms will also provide connectivity to allow rapid movement of patients under cover from Rosenberg to patient rooms in the Project. Patients will be able to move from the Emergency Department or operating rooms in Rosenberg to inpatient beds in the New Inpatient Building more quickly, safely and efficiently, allowing more throughput in the Emergency Department which will help to alleviate overcrowded conditions in the Emergency Department. The proximity of the New Inpatient Building to the Rosenberg and Farr Buildings and the interconnections to these West Campus buildings will also provide operational efficiencies by allowing the Project to share clinical support services, such as pharmacology, radiology, dietary, and pathology, with the existing inpatient program in Rosenberg and Farr.

In addition, the New Inpatient Building will add to BIDMC's climate resilience. BIDMC recognizes its importance as a critical facility that needs to provide uninterrupted healthcare services to the City and the region. The Project design will incorporate systems that will allow the building to be resilient to future climate change impacts, as well as incorporating measures to decrease the Project's impact on climate change.

No-Build Alternative

The No-Build Alternative would leave the site as it currently is, and BIDMC would continue to have a significant need for new inpatient beds and facilities to treat its patients. If not at the proposed location, these needs will need to be met elsewhere, likely at an increased cost and loss of efficiency inherent in locating the proposed uses on the Project site.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

BIDMC provides significant public benefits to the surrounding community and City of Boston, including, but not limited to, increasing access to care, promoting healthy living, providing violence intervention, prevention and recovery services, creating employment opportunities and workforce development, and contributing economic benefits. The Project will enhance these programs, services and contributions, and will also provide additional Project-related benefits, including:

- ◆ Creating a new architecturally distinguished building at the gateway from the south to BIDMC's campuses on Brookline Avenue and the LMA generally;
- ◆ Providing new and enhanced in-patient clinical facilities needed to serve seriously ill Boston area residents now and in the future;
- ◆ Enhancing the pedestrian experience on Brookline Avenue and Francis Street;
- ◆ Creating approximately 80 to 100 new full-time equivalent permanent jobs during operation of the Project, and approximately 400 construction jobs per day during construction;
- ◆ Providing housing linkage and job linkage contributions as provided in Article 80B of the Boston Zoning Code as applicable; and
- ◆ Providing community-based health initiative contributions as provided in the Massachusetts Department of Public Health Determination of Need Program under 105 CMR 100.

If the project is proposed to be constructed in phases, please describe each phase:
The Project is not proposed to be constructed in phases.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify _____)
 No

If yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.