Beth Israel Deaconess Medical Center
Proposed Project:
West Campus New Inpatient Building

BIDMC IMP Task Force – September 6, 2018
New Inpatient Building Project – Introduction

BIDMC is proposing a new inpatient building on its West Campus to better serve our patients, their families and caregivers

- New facilities are needed to
  - meet the increasingly acute, complex needs of the seriously ill patients referred to BIDMC from our network of community providers, and continue caring for local Boston residents, including patients from underserved neighborhoods

The Proposed Project – BIDMC’s first new building on the Boston campus in over 20 years – will meet needs for

- Single-bedded, family-friendly patient rooms that facilitate healing and recovery
- Intensive care beds to treat the most acutely ill
- Expanded surgery, procedure and clinical support spaces that can accommodate latest technologies and team-based care
New Inpatient Building Project – Agenda

- BPDA Process Overview
- BIDMC Presentation
  - Design Update
  - Overview of Technical Studies
  - Summary of Transportation Analysis
  - Project Benefits
- Q&A and Discussion
Public Review & Community Engagement

- Institutional Master Plan (IMP) Amendment and Draft Project Impact Report (DPIR) filed July 20, 2018
  - IMP Amendment: Describes IMP Project; extends IMP term five years
  - DPIR: Responds to Scoping Determination

- BIDMC is committed to open communication and collaboration with community groups, residents, state and local officials and agencies and neighboring institutions regarding the proposed New Inpatient Building

Next Steps in City’s Article 80 Development Review process:

- IMP Amendment and DPIR are under Review
- BIDMC IMP Task Force Meetings - July 11, 2018 and September 6, 2018
- 60 Day Public comment period initiated by filing ends September 20, 2018
BIDMC Campus & Proposed Project Location
Description of Proposed Project

New Inpatient Building Project: Modernize and upgrade patient care and clinical environments to respond to the increasingly acute, complex needs of BIDMC’s patients and BIDMC’s capacity constraints

- Up to 128 Single-Bedded Medical/Surgical Rooms, many of which will replace double-bedded rooms elsewhere on BIDMC’s West Campus (39 net-new Medical/Surgical beds)
- Up to 30 ICU Rooms
- Inpatient Operating Rooms
- High Complexity Procedure Rooms

Approximate Floor Area: 325,000 GFA SF
Approximate Height: 10 Stories (+/- 178’)
New Inpatient Building – Program Stacking - Proposed
New Inpatient Building – Site Plan - Proposed

BIDMC DIPR Figure 5-13 (Expanded View)
New Inpatient Building – Francis Gateway (BIDMC Property)
New Inpatient Building – View from The Riverway

BIDMC DPIR Figure 5-2
New Inpatient Building – Updated
Pilgrim Rd Façade & Gateway Plantings
New Inpatient Building – Previous (DPIR) Pilgrim Rd. Facade
New Inpatient Building – Updated Pilgrim Rd. Facade
New Inpatient Building –
Previous (DPIR) View from Brookline Ave

BIDMC DPIR Figure 5-1
New Inpatient Building – Brookline Ave Design Update

Extent of Lowry Garage shown dashed.
New Inpatient Building – Brookline Ave Design Update
New Inpatient Building – Streetscape “Textured Niches”
New Inpatient Building – Proposed Base Plantings

Francis Planters – Perennial flowers & grasses
Francis Planters – Magnolia
Francis Planters – Inkberry
Textured Niches – Birch Tree
New Inpatient Building – Streetscape Previous (DPIR) Design

BIDMC DPIR Figure 5-14
Streetscape devices and infrastructure not shown.
New Inpatient Building – Streetscape “Textured Niches”

Streetscape devices and infrastructure not shown.
New Inpatient Building – Streetscape “Textured Niches”

Design Precedents
New Inpatient Building – Streetscape “Textured Niches”

Design Precedents
New Inpatient Building – Francis St Drop-off & Canopy Previous Length

Similar to DIPR Figure 5-1 with extent of Lowry Garage shown dashed. Entourage removed to see building geometry.
New Inpatient Building – Francis St Drop-off & Canopy Design Update

Extent of Lowry Garage shown dashed. Entourage removed to see building geometry.
Entourage removed to see building geometry.
New Inpatient Building – Ground Level Elevation Update

Streetscape devices and infrastructure not shown.
Streetscape devices and infrastructure not shown.
In compliance with the BPDA Scoping Determination the following environmental impacts were studied:

- Wind;
- Shadow;
- Daylight;
- Air quality;
- Solid and hazardous wastes;
- Noise;
- Nighttime lighting;
- Flood hazards/wetlands;
- Geotechnical/groundwater;
- Construction impacts;
- Rodent control; and
- Wildlife habitat
- Historic Resources
- Infrastructure
- Climate Change / Sustainability

The DPIR includes extensive environmental assessments to determine the potential effects of the development of the Project and the appropriate mitigation measures.
New Inpatient Building – Environmental Effects

■ Air Quality
  – Microscale analysis of carbon monoxide to provide information on Project’s impact from mobile sources including gasoline, diesel and natural gas fueled vehicle traffic
  – No adverse air quality impacts from increased traffic
  – All predicted CO concentrations are well below one-hour and eight-hour National Ambient Air Quality Standards

■ Water Quality
  – Project includes rainwater harvesting and re-use
  – Excess harvested rainwater directed to groundwater recharge wells
  – Permeable pavers encourage groundwater recharge for surface run-off
  – Green roofs incorporated into design
New Inpatient Building – Environmental Effects

- **Sound Levels**
  - Predicted sound levels from project-related equipment will be at or below requirements of the City Noise Standards
  - Predicted sound levels from project-related equipment are within the nighttime residential limits
  - The Project can operate without substantial impact on the existing acoustical environment
  - Change in helicopter sound levels at locations near future helipad will be imperceptible (< 3 dBA)

- **Light Levels**
  - Street level lighting will be designed to illuminate the ground plane as required to provide for safe navigation of the site by pedestrians and to support vehicular drop-off while limiting light pollution
  - No building façade up-lighting
  - Use of non-reflective building materials
New Inpatient Building – Environmental Effects

- **Building Height**
  - Maximum height allowed is 205’ with exceptional public benefits
  - Project height has been reduced to 178’ in part to minimize shadow impacts
  - Exceptional public benefits including superior workforce development program, new and improved public spaces, exceptional architectural design, energy-efficient and environmentally sustainable design, and use as a hospital for the most acutely ill members of the community

- **Shadows**
  - LMA Interim Guidelines establish a principle of protecting the physical assets of the LMA and include guidelines regarding new shadows on City of Boston parks and boulevards
    - No new shadows on the Emerald Necklace open space most of the day (March 21)
    - No new shadows for more than an hour on any one area on the Emerald Necklace after 10:30 AM
  - Shadow studies were also prepared for the 9:00 AM, Noon and 3:00 PM time periods for the summer and winter solstices and the fall and spring equinoxes and 6:00 PM for the summer solstice and autumnal equinox.
    - No new shadow created on the Emerald Necklace open space and the Riverway parkway during 10 of the 14 time periods studied
    - New shadow is generally limited to surrounding streets and sidewalks
    - New shadow will be cast onto the Emerald Necklace and the Riverway only during the morning time periods
New Inpatient Building – Site Plan - Proposed
New Inpatient Building – Transportation Analysis

- About 53% of all project trips will occur via alternative transportation modes (transit – walk – bike)
- Resultant vehicles trip generation is low
  - AM peak = 37 entering / 21 exiting
  - PM peak = 21 entering / 38 exiting
- Minimal impacts to the surrounding traffic network
  No LOS change from No-Build to Build Condition
- Access scheme minimizes patient valet activity on Brookline Ave
- Loading dock and maneuvering space improved to support efficient access by larger trucks
- Pedestrian conditions substantially improved adjacent to Project site along Brookline Ave, Francis St and Pilgrim Rd
- BIDMC working with the BTD to establish appropriate mitigation plan
New Inpatient Building – Transportation Management

Transportation

– The New Inpatient Building will include **no new parking**; all parking for this facility will be accommodated by the existing parking supply within the BIDMC Campus

– BIDMC actively supports efforts to reduce auto use for people traveling to the hospital campus
  - Member of CommuteWorks Transportation Management Association
  - Subsidies for transit passes for employees
  - Carpool assistance
  - Park & Ride service
  - Location based parking
  - Telecommuting and compressed workweeks
  - Bicycling/walking incentives and amenities, including founding corporate sponsorship of Hubway/Blue Bikes and hosting a station on BIDMC’s East Campus

– The NIB will comply with the City of Boston Bicycle Parking Guidelines
New Inpatient Building – Benefits

- **Patient Care**
  - Increasing access to care
  - New and enhanced inpatient clinical facilities needed to serve seriously ill Boston-area residents now and in the future

- **Community Health Benefits**
  - Will invest over $21 Million in community-based health initiatives; additional $7.4 Million to be paid to DPH for state-wide initiatives
  - BIDMC’s 5 licensed or affiliated community health centers in Boston provide care for nearly 100,000 patients each year
  - 50,000+ Boston residents receive their primary care at BIDMC, Bowdoin Street Health Center and affiliated physician practices
  - $77.5 million - total investment by BIDMC for our Community Benefits mission, including
    - $26.4 million to reducing barriers to care and improving health and well-being of Boston residents
    - $3.6 million - for health disparities research
New Inpatient Building – Benefits

- Development Impact Project Payments
  - Housing Linkage
  - Job Linkage

- Workforce Development
  - Employs approximately 2,800 Boston Residents, as part of a diverse Workforce of over 9,000 employees (FT/PT)
  - BIDMC jobs start at $15/hour and offer benefits
  - Recognized leader in Workforce Development
    - Offers innovative pipeline program that trains incumbent workers into key positions, providing career growth and higher wages
    - Provides pre-college courses, ESOL classes, computer skills classes, financial wellness program and a citizenship program
    - Provides paid summer jobs for over 40 young Boston residents each year, and hosts interns during the school year from Sociedad Latina and other Boston area community organizations
  - Create 80 to 100 permanent jobs; approximately 400 construction jobs
New Inpatient Building – Benefits

- **Architecturally distinguished design**
  - Elegant gateway building to the LMA from the south
  - Building materials carefully selected to enrich pedestrian experience, visually connect BIDMC East and West campus, and sit harmoniously within the LMA neighborhood

- **Environmentally sustainable design**
  - Façade orientation and shading calibration to reduce solar heat gains
  - Low energy heating/cooling systems separated from ventilation for increased efficiency and thermal comfort
  - Heat recovery on air handlers
  - Rainwater harvesting and green roofs
  - High performance envelope design

- **Public Realm Improvements**
  - Enlivened pedestrian experience along Brookline Ave, Francis St, and Pilgrim Rd including widened sidewalks and expanded landscaping
  - Comprehensive design and landscaping approach at the streetscape and building base
  - Renew long-term commitment to provide landscaping and maintenance of City parkland (Joslin Park and the Riverway/Francis Gateway)
New Inpatient Building – Benefits

- Project design celebrates proximity to the Emerald Necklace

  - The New Inpatient Building creates a front lobby framed by the Francis Gateway and gives Beth Israel Deaconess Medical Center an elegant entry facing the Riverway. The design concept for the New Inpatient Building visualizes a vital, inviting entry viewed from the Riverway.

  - Elevator arrival lobbies on each floor will allow for wonderful views for patients, families and staff looking west down the Riverway towards Brookline.

  - The design of the New Inpatient Building lobby and streetscape at Francis and Pilgrim proposes plantings in line with Frederick Law Olmsted’s original vision for the Boston side of the Riverway. Olmsted was a master at framed vistas with the intent that the vistas framing would be best recognized 100 years later when the plantings are mature. Plantings and tree selection for the New Inpatient Building streetscape will be consistent with this ideal.
New Inpatient Building – Benefits

**Transportation System**

- Improving access, mobility and safety in the LMA for vehicles, pedestrians and cyclists
  - Widen Pilgrim Rd to accommodate two way traffic
  - Francis St curbside improvements including access ramps and drop-off areas
  - Enhance valet parking operations
  - Improved loading dock area to support efficient access by larger trucks

- **Bike Amenities**
  - Enables proposed MASCO initiatives for bike lanes along Brookline Ave
  - Provides additional bike parking
  - Provides bike repair stations
  - Currently host a Blue Bike station, with valet service

- Transportation mitigation plan under discussion with BTD and BPDA
The New Inpatient Building advances Beth Israel Deaconess Medical Center’s mission: **to provide extraordinary care, where the patient comes first, supported by world-class education and research.**

The new facility will help to meet the increasingly acute and complex needs of the seriously ill patients referred to BIDMC from our network of community providers, and will enhance BIDMC’s capacity to continue caring for local Boston residents, including patients from underserved neighborhoods.
Questions, Comments & Discussion

Our Mission: To provide extraordinary care, where the patient comes first, supported by world-class education and research.

See BIDMC Project Webpage for more information: http://www.bidmc.org/About-BIDMC/New-Inpatient-Building.aspx