

# Institutional Master Plan Notification Form

## *Boston Children's Hospital*



*Submitted to:*  
**Boston Redevelopment Authority**  
One City Hall Square  
Boston, Massachusetts 02201

*Submitted by:*  
**Boston Children's Hospital**  
300 Longwood Avenue  
Boston, Massachusetts 02115

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*In Association with:*  
**Bard, Rao + Athanas Consulting Engineers, LLC**  
**Elkus Manfredi Architects**  
**Goulston & Storrs**  
**Haley & Aldrich, Inc.**  
**McNamara/Salvia, Inc.**  
**Payette**  
**R.W. Sullivan Engineering**  
**Shepley Bulfinch**  
**Vanasse Hangen Brustlin**

August 2015

**Epsilon**  
ASSOCIATES INC.

Institutional Master Plan Notification Form

# BOSTON CHILDREN'S HOSPITAL

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**Shepley Bulfinch**  
**Turner Construction**  
**Vanasse Hangen Brustlin**

**August 2015**

Presented to the BRA Board on October 15, 2015

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## Chapter 1.0

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Introduction

## 1.0 INTRODUCTION

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### 1.1 Introduction

The Children's Hospital Corporation and its affiliated entities<sup>1</sup> known collectively as Boston Children's Hospital (Children's or BCH or the Hospital) is the nation's premier pediatric medical center and has a commitment to being a worldwide leader in the advancement of children's health. Boston Children's Hospital is the #1 ranked pediatric hospital nationwide according to the 2015-16 edition of Best Children's Hospitals by U.S. News & World Report. Children's is ranked in the top four of every evaluated specialty. Since the magazine began ranking hospitals over 20 years ago, Children's has continuously been ranked as one of the top pediatric hospitals in the country.

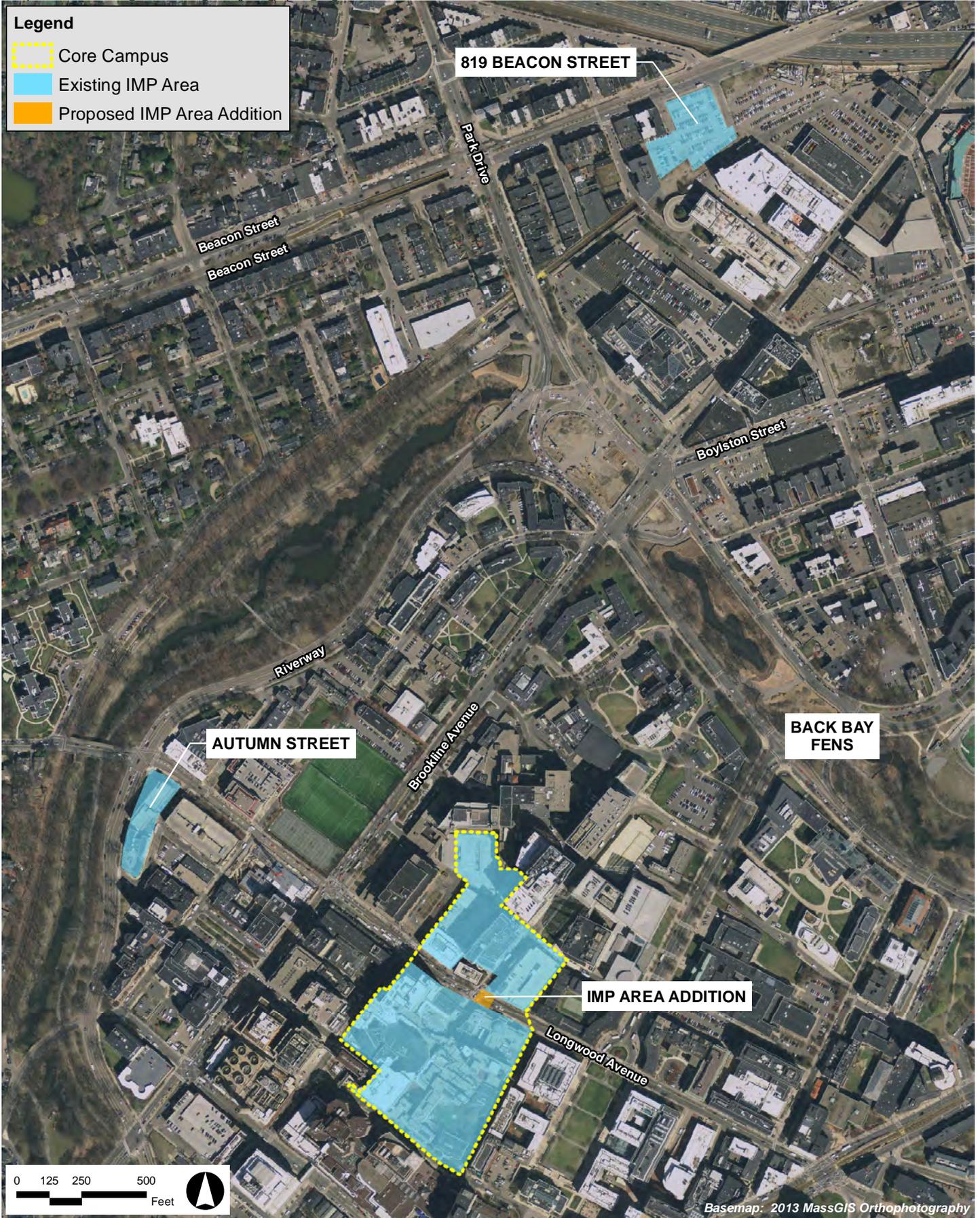
Founded in 1869 as a 20-bed hospital for children, Children's has grown significantly and has a legacy of firsts that have improved the practice of pediatric care across the world. Children's is a comprehensive center for pediatric and adolescent health care guided by the values of excellence, sensitivity, leadership, and community. These core attributes run throughout the Hospital's four interwoven missions: providing the best clinical care to children, researching new cures for diseases, training the next generation of pediatric caregivers, and improving the health and well being of children with a special emphasis on making Boston a better place for families to live, work, and play.

Boston Children's Hospital is located in Boston (with satellite facilities in Waltham, Lexington, Weymouth, Peabody and North Dartmouth). Figure 1-1 shows Children's IMP Area, including the Core Campus located in the Longwood Medical and Academic Area (LMA), the Autumn Street buildings and 819 Beacon Street, as the IMP Area will exist subsequent to enactment of the Map Amendment being submitted for approval with this IMPNF.

This Institutional Master Plan Notification Form (IMPNF) seeks to add one proposed project to Children's IMP, a proposed Pedestrian Connector linking the Patient and Family Parking Garage to the Main Building over Longwood Avenue (the Project). Children's is also seeking a Map Amendment to designate the land area of Longwood Avenue over which the Pedestrian Connector will be constructed as part of the IMP Area.

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<sup>1</sup> Affiliated entities include The Children's Medical Center Corporation, Fenmore Realty Corporation, Longwood Research Institute, Inc., 333 Limited Partnership, CHB Properties, Inc. and Longwood Corporation.



The Pedestrian Connector of approximately 3,250 square feet will create a direct and clear path from the Patient and Family Parking Garage to the Main Lobby, while also providing a weather-protected, safe passage for pedestrians. In addition, the Pedestrian Connector will improve vehicular conditions at the intersection of Longwood Avenue and Blackfan Street as a consequence of locating valet operations and a patient discharge area within the Patient and Family Parking Garage itself, in addition to their current locations at the Main Entrance.

Children's continues to take steps to implement the 2013 IMP Amendment Projects approved in the 2013 IMP Amendment and also continues to undertake on-going campus improvement projects, including the Main Lobby renovation and Main Entrance improvements, and general operational improvements across Children's campus. Therefore, this IMPNF also modifies the description of the Patient and Family Parking Garage Addition approved in the 2013 IMP Amendment to reflect the addition of approximately 1,420 square feet of new lobby space with a footprint of approximately 710 square feet, and to reflect the addition of approximately 600 square feet for a Vestibule which will be part of a Rooftop Garden to be constructed on the roof level of the Main Building.

This IMPNF is being submitted as a proposed IMP Amendment under the Expedited Review Procedure of Section 80D-9.2 of the Boston Zoning Code. Pursuant to Section 80D-9.2, a proposed amendment to an IMP may be submitted under an expedited review procedure if: (1) such amendment proposes no changes to the IMP other than the addition of one or more Proposed Projects, and (2) each of such Proposed Projects meets the requirements of Section 80D-9.2(b), viz. that such project does not meet the size thresholds for Large Project Review and, inter alia, the Proposed Institutional Project is an exempt project, as provided in Section 80D-2(2). Section 80D-2(2) refers to exemption from a requirement to be consistent with an Institutional Master Plan. Section 80D-2(1)(b)(i)(2) exempts Proposed Institutional Project for erection or extension of an Institutional Use which does not affect an aggregate gross floor area of more than 20,000 square feet.

The Project and Campus Improvement Projects including the Patient and Family Parking Garage Addition Modification and the Main Building Rooftop Garden Vestibule are otherwise exempt projects [erection or extension not exceeding 20,000 square feet (sf)], which are being electively included in the Children's Institutional Master Plan. No other changes to the approved Institutional Master Plan are proposed.

## **1.2 History of Institutional Master Plan**

The Boston Redevelopment Authority Board approved the Children's IMP and a Map Amendment creating the "I" Overlay District in April 2008 (the 2008 IMP). The Boston Zoning Commission approved the 2008 IMP and Map Amendment No. 491 creating the "I" Overlay District on May 28, 2008, which were approved by the Mayor on May 29, 2008.

The term of the 2008 IMP was 10 years, from 2008 to 2018, and included one project, the Main Building Vertical Addition.

Upon subsequent internal review by Children's, the approved Main Building Vertical Addition was deemed infeasible due to construction constraints associated with cost efficiency and the inability to meet the demand for patient care during the construction process. However, due to the need for space that would have been provided by the Main Building Vertical Addition, on April 29, 2009 Children's submitted an Institutional Master Plan Notification Form/Notice of Project Change (the 2009 IMPNF/NPC) for the Main Building Expansion on Binney Street to replace the approved Main Building Vertical Addition. The BRA approved the 2009 IMP Amendment and a proposed Map Amendment expanding the "I" Overlay District to include a portion of Binney Street and the building at 333 Longwood Avenue in February 2010 (the 2009 IMP Amendment.) The 2009 IMP Amendment and Map Amendment No. 581 were approved by the Boston Zoning Commission on March 24, 2010, and subsequently approved by the Mayor on March 30, 2010. The 2009 IMP Amendment included one new project, the Main Building Expansion on Binney Street (now referred to as the Mandell Building).

On October 12, 2012, Children's submitted an Institutional Master Plan Notification Form/Project Notification Form (IMPNF/PNF) to further amend the 2008 IMP, as amended by the 2009 IMP Amendment, by adding three new Projects (the 2013 IMP Amendment Projects, consisting of the Boston Children's Clinical Building, 819 Beacon Street and the Patient and Family Parking Garage Addition) and to initiate review of these Projects under Articles 80B, 80D and 80E.

The 2013 IMP Amendment as well as a Map Amendment to include 819 Beacon Street within the "I" Overlay District, were approved on November 14, 2013. The Boston Zoning Commission approved the 2013 IMP Amendment and Map Amendment No. 578 on December 11, 2013 which were approved by the Mayor on December 20, 2013. The approval also extended the term of the IMP to 2023.

## Chapter 2.0

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### Project Description

## 2.0 PROJECT DESCRIPTION

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### 2.1 Proposed Institutional Project

The Project consists of the construction of a Pedestrian Connector connecting the fourth floor of the Patient and Family Parking Garage to the mezzanine level of the Main Building over Longwood Avenue, providing a weather-protected and safe passageway for patients and visitors directly to the Hospital's Main Lobby and passenger elevators (see Figure 2-1). The Project includes approximately 3,250 square feet of new construction connecting to the Main and Pavilion Buildings with a clearance height of approximately 21 feet over Longwood Avenue, and a total height not to exceed 46 feet. This new connection is especially important for many physically challenged patients and families with young children who will be able to cross the congested Longwood Avenue intersection protected from difficult weather conditions without having to complete their crossing in the few seconds allowed by the pedestrian crossing signal phase (see Figure 2-2).

Currently, patients and visitors must cross Longwood Avenue at the corner of Blackfan Street at street level. The intersection is very active with approximately 600 pedestrian crossings and 1000 vehicle crossings per hour. This can make traversing the street difficult, especially in inclement weather and for people in wheel chairs and families guiding small children by hand and in strollers (see Figure 2-3). Since there is no direct street level access to the parking in the Garage, under current conditions patients must either take a stair or an elevator from any level in the Garage to the existing lobby at grade. Due to a large number of Children's patients and visitors requiring strollers, wheelchairs and with small children in tow, substantially all users of the Garage use the Garage elevators rather than stairs.

Faced with the difficulty of crossing Longwood Avenue at street level, many people choose to use valet parking available in the BCH Autocourt rather than self-parking. This increases vehicular congestion both in the Autocourt and on Longwood Avenue, since each valet usage involves four movements through the Longwood/Blackfan intersection. Vehicles are brought to the Autocourt by the families, moved from the Autocourt to a remote parking space by a valet, retrieved by the valet and returned to the Autocourt, and then driven from the Autocourt by the families. In addition, under current conditions patient discharges occur at the Autocourt and can last 30 to 45 minutes, thus further increasing congestion at the Autocourt.

Under the proposed conditions, the Pedestrian Connector will create a clear and direct access between the Garage and the Main Lobby. Both a valet service and a patient discharge area will also be located within the Garage itself. This will reduce usage and







congestion of the Autocourt and eliminate two of the current trips through the Longwood/Blackfan intersection involving use of valet service in the Autocourt. It is anticipated that the development of the Pedestrian Connector will result in a 75% reduction in pedestrian crossings from the Garage to the Children's Main Lobby and Hospital facilities south of Longwood Avenue and a 20% reduction in BCH Autocourt traffic, greatly increasing safety both for Hospital patrons who use the Pedestrian Connector and for general pedestrians and vehicles on Longwood Avenue.

The Pedestrian Connector will also be integrated in a clear path of travel to the Main Lobby and the Hospital information areas. Once families and patients are in the Garage elevator, signage will be provided to the Pedestrian Connector level where people will be able to freely and safely traverse Longwood Avenue. The Pedestrian Connector will connect to Main and Pavilion buildings providing access to all Boston Children's Hospital departments located south of Longwood Avenue.

## 2.2 Update to Campus Improvement Projects

### 2.2.1 *Patient and Family Parking Garage Addition Modification*

The Patient and Family Parking Garage Addition Modification includes several elements to improve the Garage, but the most visible element is the slender metal and glass addition on the corner of Longwood Avenue and Blackfan Circle. The existing lobby, stairs and elevators located on this corner are unenclosed and are subject to Boston's seasonal temperature extremes. For the patients and families that use the Garage, the heat of summer and chill of winter can add an extra challenge to what is already a complicated hospital visit. To ease the situation, the proposed Patient and Family Parking Garage Addition Modification will enclose the stairs, elevators and lobby, allowing them to be heated and cooled, and will provide several amenities to make visitors' arrivals and departures more convenient. The simple structure is designed to improve the appearance of the Garage on this highly visible corner. The Modification rises the full height of the Garage to enclose the existing stairs and elevator lobbies and then rises above to conceal new mechanical equipment. A street level canopy adds pedestrian scale to the corner and helps simplify the Garage signage. On the inside, the addition encloses the existing stair, adds two new elevators, enlarges the ground floor lobby and contains a new 4<sup>th</sup> floor lobby to connect to the Pedestrian Connector. Both the ground floor and 4th floor lobbies will have seating and restrooms and the ground floor lobby will have a vending area for families. The fourth floor lobby will open directly to four short-term parking spaces that families can use while moving to and from their cars.

The Patient and Family Parking Garage Addition Modification includes the addition of approximately 1,420 square feet of new lobby space with a footprint of approximately 710 square feet and a height to the top of the last occupiable space of approximately 88'-3" <sup>2</sup> in the Patient and Family Parking Garage.

Figures 2-4 and 2-5 show the Patient and Family Parking Garage Addition Modification without and with the Pedestrian Connector respectively.

### **2.2.2 Main Building Rooftop Garden Vestibule**

As part of the goals of the Hospital to increase green and gathering spaces for patients, visitors and staff throughout the Core Campus, the Hospital will be constructing a garden on the roof of the existing Main Building. The garden is being designed as a contemplative oasis, offering a home away from home with the amenities and uses of a family backyard. The main lawn area will offer a multitude of playful, contemplative programming: from toddler barefoot play to yoga.

A wood trellis will frame the space and offer shelter from the elements within an outdoor café and flowering vines. With extensive seating opportunities throughout the garden and clear views to the play areas, families will be able to safely allow for children of all ages to discover animal sculptures and a rich variety of botanical life (see Figure 2-6). Gathering spaces within the garden will encourage a diversity of uses throughout the day and through the seasons with areas such as a Butterfly Garden, Bird Houses, and a Touch and Feel Garden. From the outdoor terrace, spectacular views will be able to be enjoyed to the North and South highlighting downtown Boston, the Fens, Mission Hill, Mission Church, and the Kevin W. Fitzgerald Park.

Although the main features of the garden are exterior amenities which are not enclosed or covered by a roof and therefore do not constitute either Gross Floor Area or add height, the Garden will include a rooftop Vestibule which will serve as an entry to and from the roof garden and will house a toilet room, vending area, and utility closets. This Vestibule will add not greater than 2,000 square feet and rise to a height of not greater than 186'-8", which is 25' above the roof level of the existing level 11 of the Main Building.<sup>2</sup>

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<sup>2</sup> Elevator penthouses and mechanical penthouse space which occupy less than 1/3 of the total area of the roof are excluded from height under Article 2A of the Boston Zoning Code.



Boston Children's Hospital

**PAYETTE**

**Figure 2-4**  
Patient and Family Parking Garage Addition Modification





## Chapter 3.0

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### Urban Design Objectives

### 3.0 URBAN DESIGN OBJECTIVES

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BCH seeks a design of the Pedestrian Connector that meets the circulation needs of BCH's patients and visitors, while minimizing the impact on the surrounding transportation and built environment. To meet these requirements, the following urban design goals have been developed for the Pedestrian Connector:

- ◆ One level structure of transparent design;
- ◆ Minimize length of the Pedestrian Connector and minimize structure below;
- ◆ Avoid physical intrusion with 1914 original Hunnewell building;
- ◆ Minimize interruption of significant views and vistas, including the view corridor of the Hunnewell Building;
- ◆ Integrate with Main Entrance redesign;
- ◆ Structural feasibility; and
- ◆ Consistency with emergency vehicle requirements below the Pedestrian Connector.

With respect to the importance of Longwood Avenue as a public thoroughfare and the Pedestrian Connector's adjacency to the Hunnewell building, the Pedestrian Connector has been designed to be as visually transparent as possible, crossing Longwood Avenue in a single span (see Figure 3-1). The inverse king post truss structural system visually reinforces the single span of the Pedestrian Connector across Longwood Avenue, and minimizes the number of vertical structural members in the Pedestrian Connector, further enhancing the ability to see through the Connector. Recognizing the importance of the views of the original Hunnewell building and of the corner of Blackfan and Longwood Avenue, the Pedestrian Connector narrows to its smallest overall size in this location to minimize visual obstruction of the original Hunnewell building (see Figure 3-2). A support column for the Pedestrian Connector will be included within the structure of the Patient and Family Parking Garage Addition Modification and will not be visible to the public. Only one column which will be set back from the west bay of Hunnewell along the sidewalk leading to the entry to the Main Building, will be externally visible which will reduce its visual presence. This column will be located in between the vehicular drive and the pedestrian walking area on the sidewalk, reinforcing pedestrian safety by guiding the pedestrians away from the curb. In addition, to celebrate the iconic nature of the 1914 original Hunnewell building and the historical evolution of the Hospital since its inception, the Pedestrian Connector will allow visitors to view the Hunnewell building from a vantage point not afforded by street-level views and will include a timeline along the interior span of the pedestrian connector illustrating milestones in the development of the Hospital (see Figure 3-3).



Boston Children's Hospital

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**Figure 3-1**  
View of Pedestrian Connector from Harvard Medical School



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**Figure 3-2**  
View of Pedestrian Connector from in front of Hunnewell



The Pedestrian Connector design will also complement the Patient and Family Parking Garage Addition Modification lobby and will create a clear connection between the Garage and Main Lobby as well as create a cohesive presence for BCH across Longwood Avenue and a unified architectural expression for the BCH entry. The transparency of the Pedestrian Connector will also enhance way-finding from the Garage by allowing patients and families to maintain a visual connection to their destination as they travel to and arrive at the Main Lobby.

The Pedestrian Connector will be a beautiful and elegant addition to the BCH campus and the Longwood Medical and Academic Area.

## Chapter 4.0

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### Zoning

## 4.0 ZONING

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The modifications to the IMP Area and the addition of the Pedestrian Connector, the Patient and Family Parking Garage Addition Modification and the Main Building Rooftop Garden Vestibule will add Gross Floor Area to the IMP Area of the Core Campus and will add to the Gross Floor Area of the FAR Lot Area of the Core Campus, thus affecting the Floor Area Ratio (FAR) of the Core Campus, and will add height to the Patient and Family Parking Garage and the Main Building.

Accordingly, the following modifications will be made to the Zoning Section as set forth in the 2013 IMP Amendment.

### *Core Campus:*

**IMP Area and FAR Area:** As stated in the 2013 IMP Amendment, the IMP Area of the Core Campus was 531,289 sf [viz. 429,481 sf + 46,677 sf + 48,891 sf + 6,240 sf], and the FAR Lot Area was 509,351 sf [viz. the IMP Area excluding the 14,777 sf portion of Blackfan Street north of Longwood Avenue, the 921 sf area of Longwood Avenue in front of 333 Longwood and the 6,240 sf area of Binney Street]. After addition of the 2,718 sf being added to the IMP Area, the IMP Area of the Core Campus will be 534,007 sf. The FAR Lot Area will not be modified since the area within a street is not included in FAR calculations, and will remain as 509,351 sf.

**GFA and FAR:** As stated in the 2013 IMP Amendment, the FAR of the Core Campus after construction of the Children's Clinical Building and the Patient and Family Parking Garage Addition, and taking into account the improvements constructed or to be constructed under the 2008 IMP and the 2009 IMP Amendment (2,946,943 sf of GFA), within the 509,351 sf FAR Lot Area of the Core Campus IMP Area will be approximately 5.8 [viz. 2,513,262 + 433,681 sf divided by 509,351 sf]. After addition of the approximately 3,250 sf being added by the Pedestrian Connector, the Patient and Family Parking Garage Addition Modification [approximately 1,420 sf] and the Main Building Rooftop Garden Vestibule [approximately 2,000 sf], the FAR of the Core Campus will continue to be approximately 5.8 [viz. 2,946,943 + 3,250 + 1,420 + 2,000 sf divided by 509,351 sf].

**Height:** Under the 2013 IMP Amendment, the Patient and Family Parking Garage reached a height of approximately 79'8", measured from a base elevation of approximately 21'4" feet as required under Article 2A of the Code. After construction of the Patient and Family Parking Garage Addition Modification, the Patient and Family Parking Garage will reach a height of approximately 88 '-3 ", measured from a base elevation of approximately 21'4" feet as required under Article 2A of the Code<sup>3</sup>.

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<sup>3</sup> Elevator penthouses and mechanical penthouse space which occupy less than 1/3 of the total area of the roof are excluded from height under Article 2A of the Boston Zoning Code.

The Main Building Rooftop Garden Vestibule will add approximately 25' in height to the height of the Main Building as approved in PDA No. 29.

The Pedestrian Connector is proposed to reach a height not to exceed approximately 46 feet.

***Dimensional Requirements:*** All dimensional requirements and any modifications of the requirements of the provisions of the underlying zoning for the Pedestrian Connector, the Patient and Family Parking Garage, as expanded by the Patient and Family Parking Garage Addition Modification, and the Main Building, including the Main Building Rooftop Garden Vestibule, including but not limited to height, yards and parapet setbacks are approved under the 2015 IMP Amendment as shown on the plans approved or to be approved by the Authority under its design development review process.

All other provisions related to zoning of the 2008 IMP, as most recently amended by the 2013 IMP Amendment, remain unchanged.

## Chapter 5.0

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### Public Review Process

## 5.0 PUBLIC REVIEW PROCESS

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Boston Children’s Hospital is committed to an open and inclusive public process. As the IMP Amendment process progresses, Children's will continue to seek input from community representatives, neighbors and stakeholders, as well as public and elected officials. BCH will continue its public outreach efforts during the review process for the Project including participation in a public meeting hosted by the BRA during the comment period on the IMPNF.