

2.0 SUMMARY & PROJECT DESCRIPTION

Section 2

2.0 SUMMARY & PROJECT DESCRIPTION

2.1 Proposed Project Summary

Boston Medical Center recognizes the immediate need to address the space and physical constraints of its existing campus, consolidate clinical services to the West Campus, and accommodate the growth in clinical services through four proposed projects. The projects will allow campus development supportive of the institution's mission and will ensure BMC continues to be an industry leader and provider of quality patient care.

BMC is initiating Large Project Review for the following four projects:

- ◆ Moakley Cancer Center Addition
- ◆ New Inpatient Building Phase 1
- ◆ Energy Facility
- ◆ New Patient Transport Bridge

The proposed projects will accomplish the following objectives:

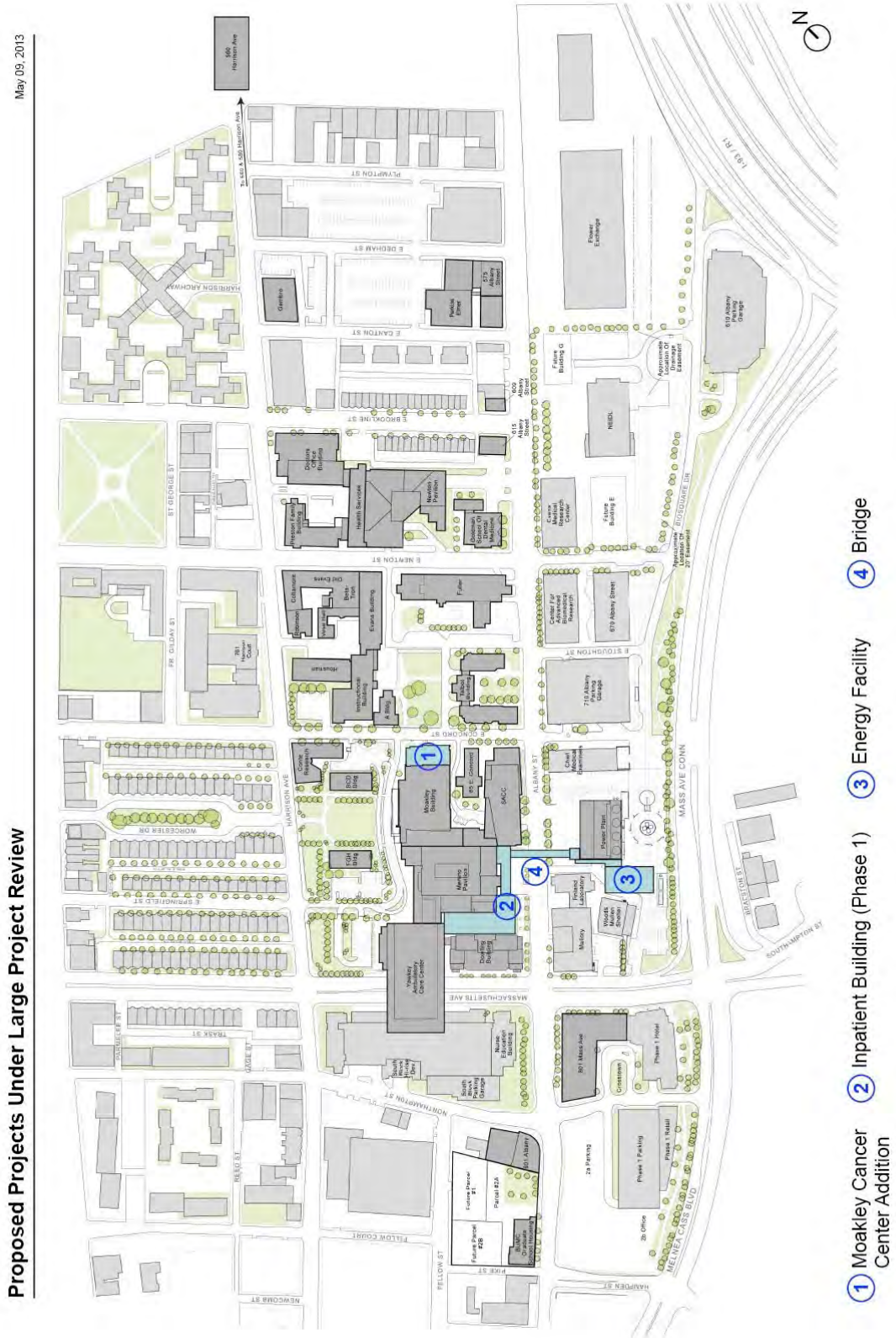
- ◆ Consolidate clinical functions in proximity to core medical services;
- ◆ Meet current patient care standards and improve patient experience;
- ◆ Enhance day-to-day operations to support clinical programs;
- ◆ Improve departmental adjacencies and patient flow through “right-size” design of clinical buildings and care spaces;
- ◆ Improve operational efficiency;
- ◆ Upgrade and expand the Emergency Department and Trauma Center;
- ◆ Create clear way finding pathways and internal connections through the West Campus;
- ◆ Improve patient access by relocating the Emergency Department Drop-off and Entrance to the rear of the Moakley Cancer Center, accessed via Shapiro Drive;
- ◆ Centralize loading to the south side of Albany Street away from the Hospital Entrance separating service areas for patient care area;
- ◆ Reduce existing curb cuts along Albany Street;
- ◆ Minimize potential vehicle conflicts with pedestrians and foster a more user-friendly experience;
- ◆ Expand Ambulance drop off area; and
- ◆ Replacement of the “yellow utility tube” with a patient transport, material and utility bridge.

The proposed projects under Large Project Review are summarized below.

See Figure 2-1 Proposed IMP Projects Under Large Project Review.

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Figure 2-1 Proposed IMP Projects Under Large Project Review



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2.1.1 Moakley Cancer Center Addition

BMC is proposing the construction of an approximately 27,800 square foot outpatient addition at the site east of the existing Moakley Cancer Center building along East Concord Street. The new Moakley Cancer Center Addition will facilitate both inpatient and outpatient program consolidation within the campus core. Completing the Moakley Cancer Center Addition first will allow BMC to begin operational reorganization necessary for other IMP projects to commence.

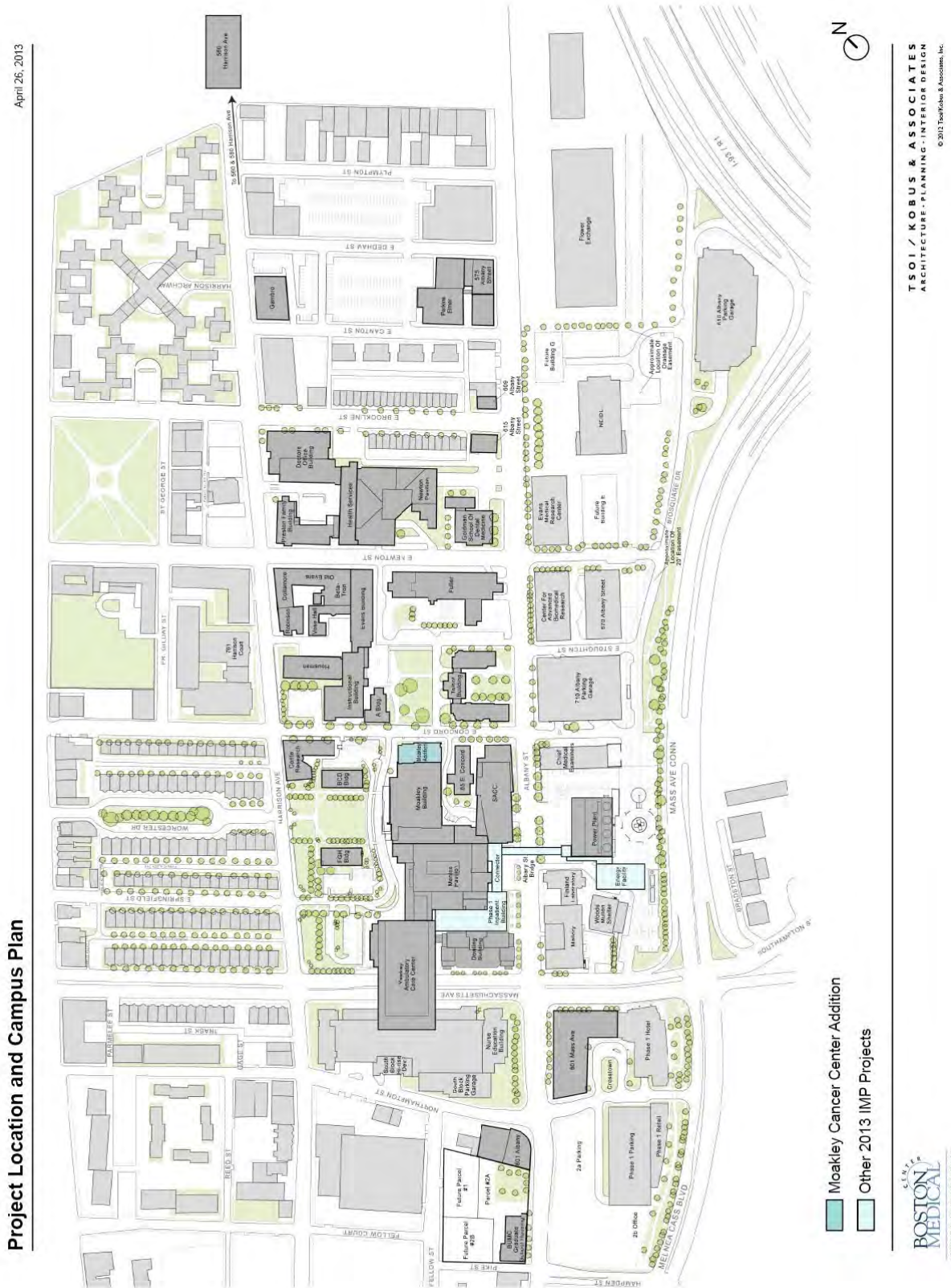
The Moakley Cancer Center Addition will provide adequate space for departments being displaced by the proposed expansion of the Emergency Department and the Trauma Center as well as the Centralized Surgical Department within the existing Menino Pavilion and Moakley Cancer Center. The displaced departments include Endoscopy and Digestive Disorders. The building will also accommodate increased volume in outpatient care.

The Project will be a 3-story building above grade and approximately 27,800 square feet with a typical floor-plate of approximately 7,000 square feet. The Moakley Cancer Center Addition is proposed in this central location to take advantage of proximity to current outpatient services and utilize existing campus and building infrastructure. Alignment of the new addition with the surrounding context will further define and promote existing campus pedestrian connections, which are essential to maintain and strengthen the urban fabric.

See Figures 2-2 to 2-12 for Floorplans, Sections and Elevations.

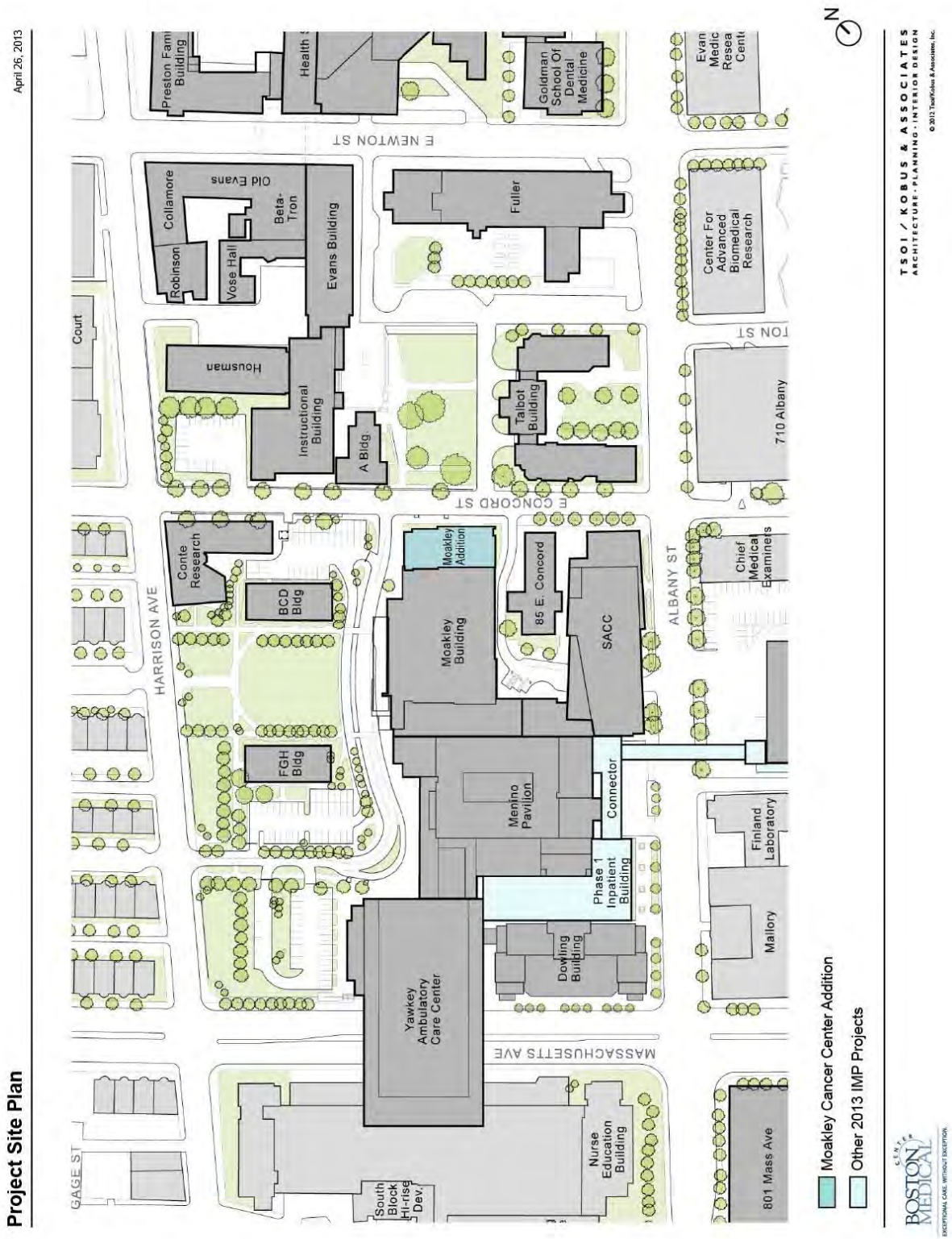
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Figure 2-2 Moakley Cancer Center Addition Project Location and Campus Plan



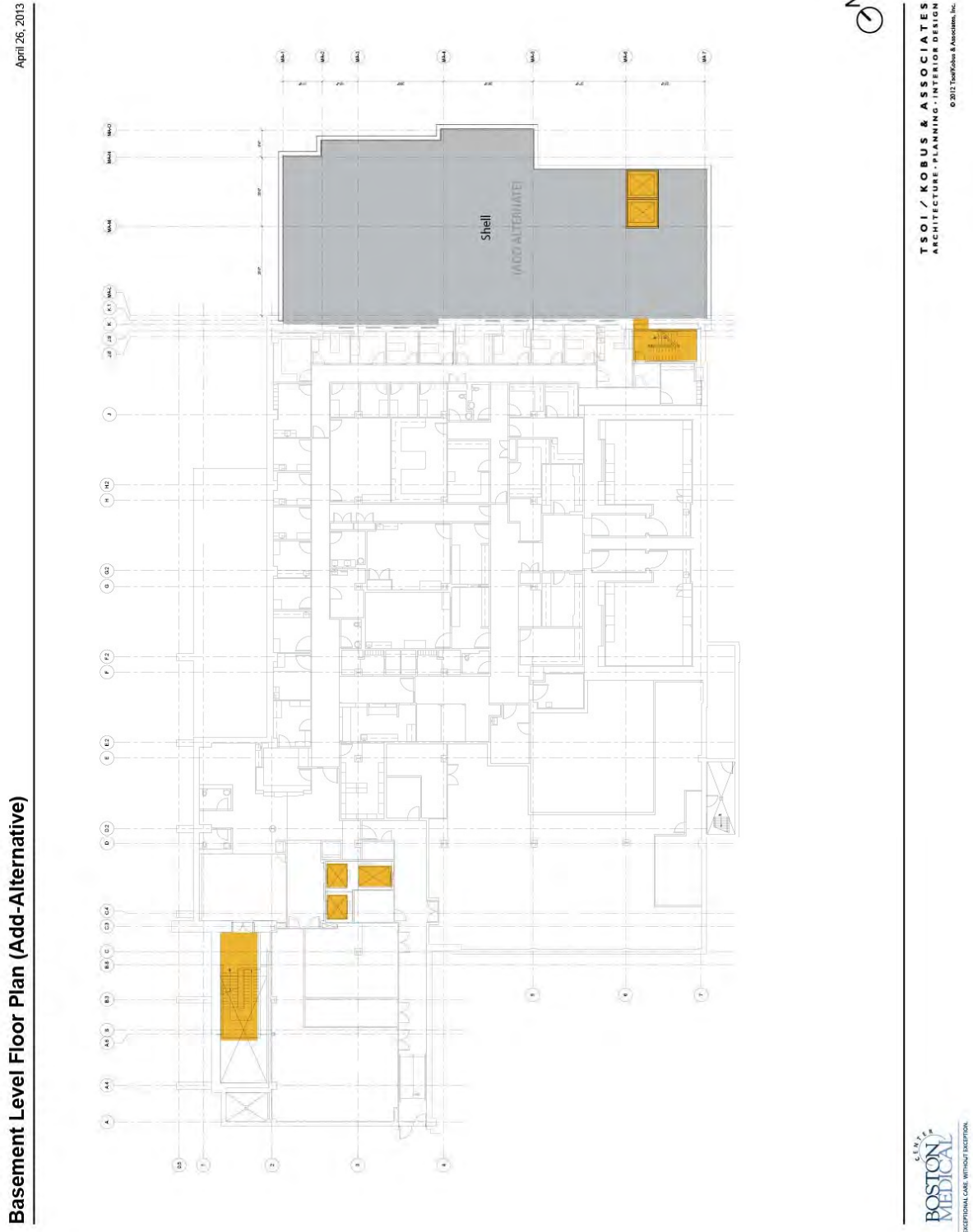
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Figure 2-3 Moakley Cancer Center Addition Site Plan



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Figure 2-4 Moakley Cancer Center Addition Basement Level Floorplan



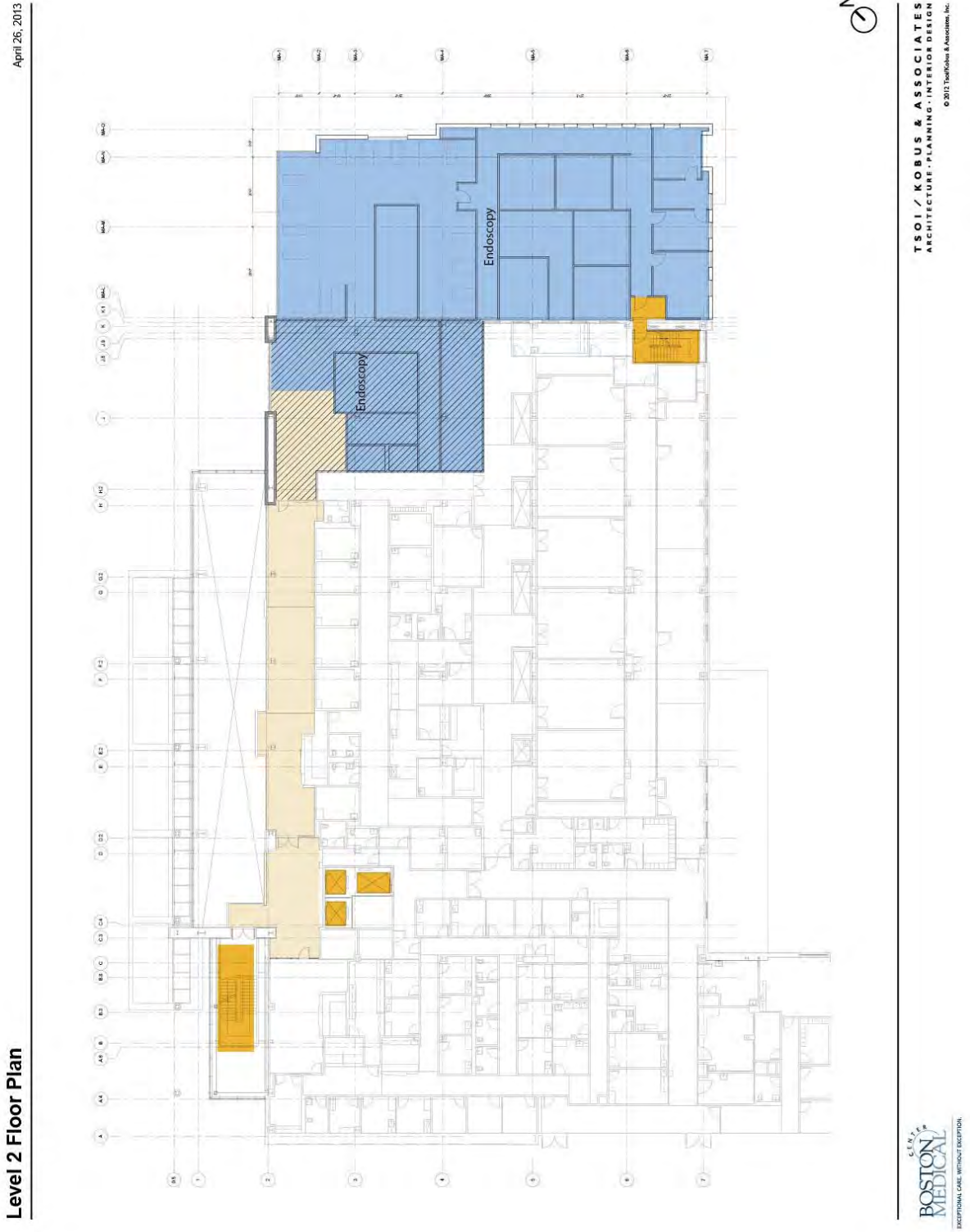
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Figure 2-5 Moakley Cancer Center Addition First Level Floorplan



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Figure 2-6 Moakley Cancer Center Addition Second Level Floorplan



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Figure 2-7 Moakley Cancer Center Addition Third Level Floorplan

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Level 3 Floor Plan



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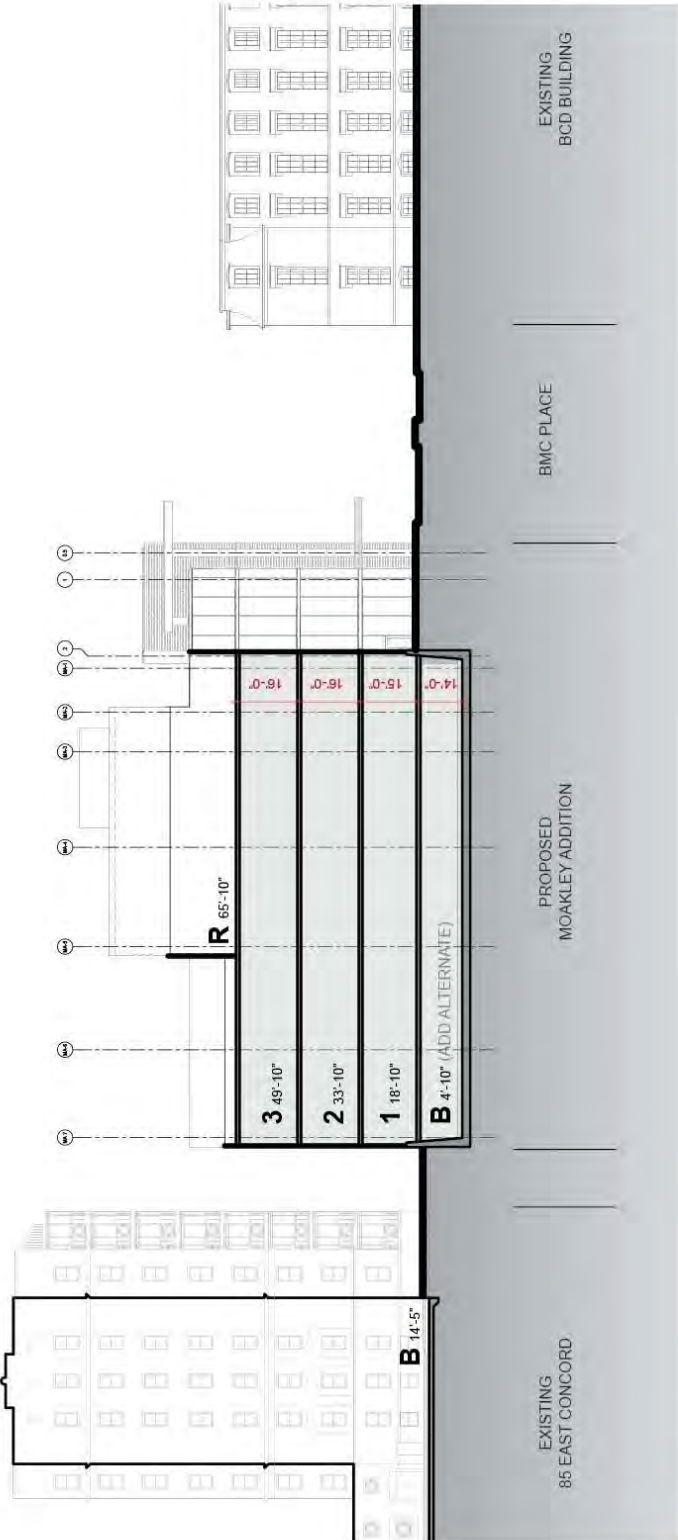
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Figure 2-8 Moakley Cancer Center Building Section Looking West

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Section A - Looking West



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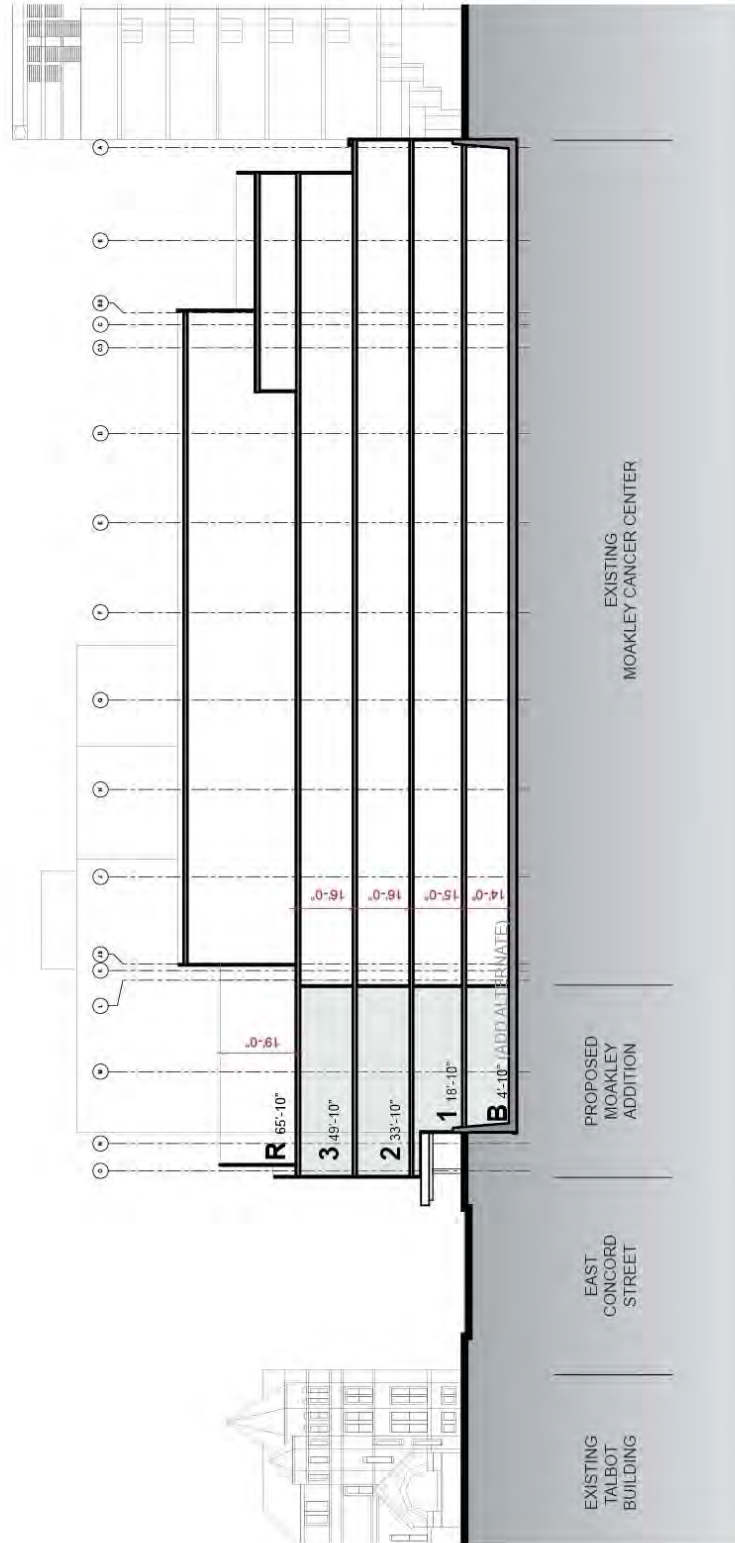
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Figure 2-9 Moakley Cancer Center Addition Building Section Looking South

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Section B - Looking South

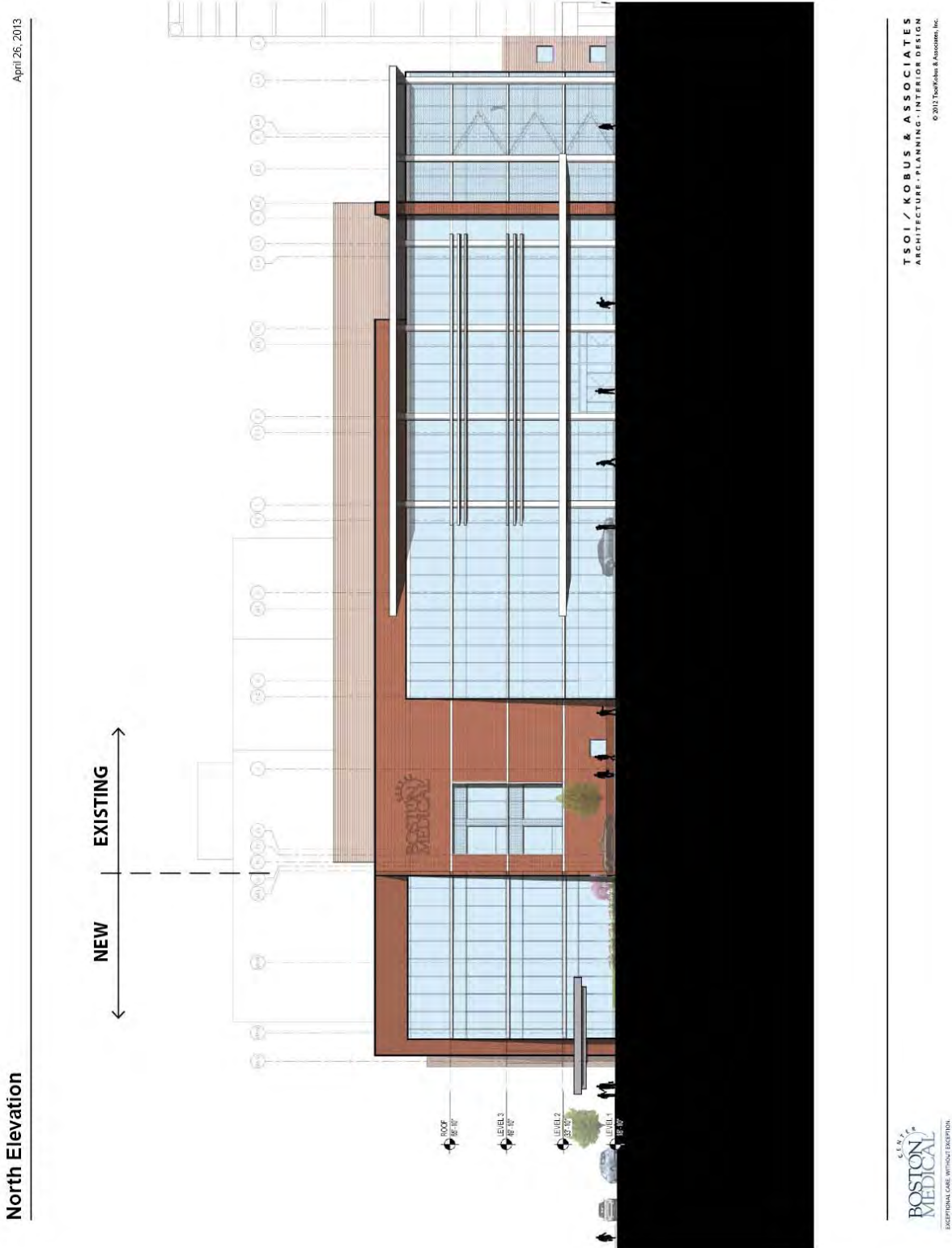


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Figure 2-10 Moakley Cancer Center Addition North Elevation



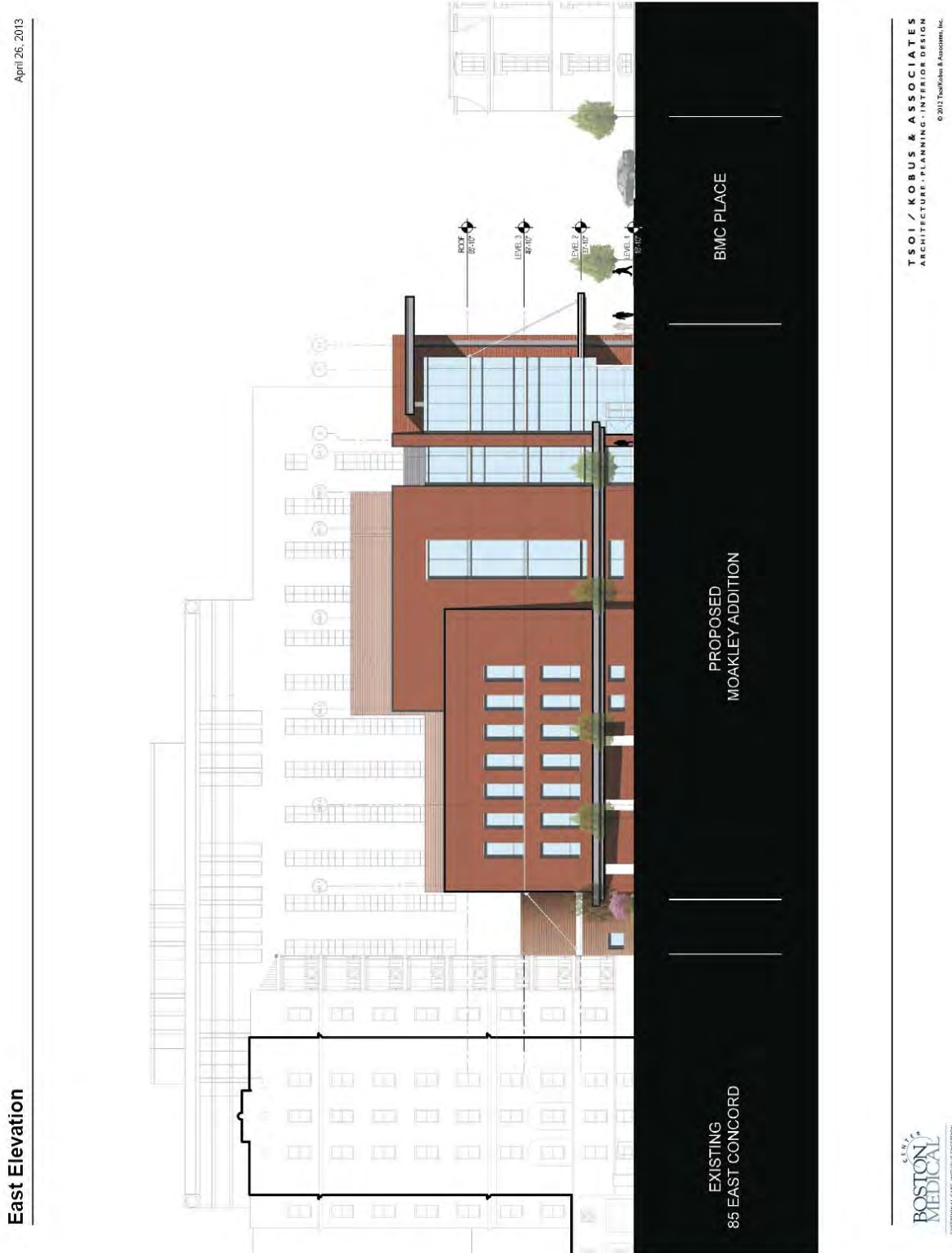
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Figure 2-11 Moakley Cancer Center Addition South Elevation



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Figure 2-12 Moakley Cancer Center Addition East Elevation



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2.1.2 *New Inpatient Building Phase 1*

BMC is proposing to construct the first phase of the New Inpatient Building. Upon relocation of the displaced departments to the Moakley Cancer Center Addition, the expansion of the Emergency Department and Trauma Center and consolidation of other critical care departments can be completed with the New Inpatient Building.

In July 2010, Boston Medical Center consolidated its two emergency departments, merging service of the Newton Pavilion Emergency Department into the Menino Pavilion Emergency Department. The unified departments enhance patient care by combining all required resources in one location. However, the existing configuration of clinical spaces in the Menino Pavilion is inadequate due to the increase in Emergency Department volumes and for the scope of the services provided (trauma, adult acute, pediatric acute, psychiatric, and urgent care). In addition, the consolidation of the Radiology Department requires significant expansion of that service. The first phase of the New Inpatient Building will allow the reconfiguration of the first floor to accommodate both an expanded Radiology Department and Emergency Department and Trauma Center. The proposed building will also accommodate the consolidation of all interventional procedure space on the second floor and facilitate the consolidation of all inpatient beds on upper floors.

The New Inpatient Building Phase 1 will be located on the site of the eastern portion of the present Dowling Building. This will necessitate the demolition of the existing 19,000 square foot, 3-story portion of the Dowling Building along Albany Street (east section of the building located between the Dowling Tower and the Menino Pavilion) which is currently used for administrative and support functions. The New Inpatient Building Phase 1 will be 4-stories above grade at approximately 78,800 square feet with a typical floorplate of approximately 16,700 square feet on levels one and two and approximately 9,350 square feet on levels three and four. The building's southern face is set back from Albany Street to allow further sidewalk improvements intended to promote a user-friendly experience. The facade engages this streetscape providing a clear and continuous edge further defining the pedestrian path.

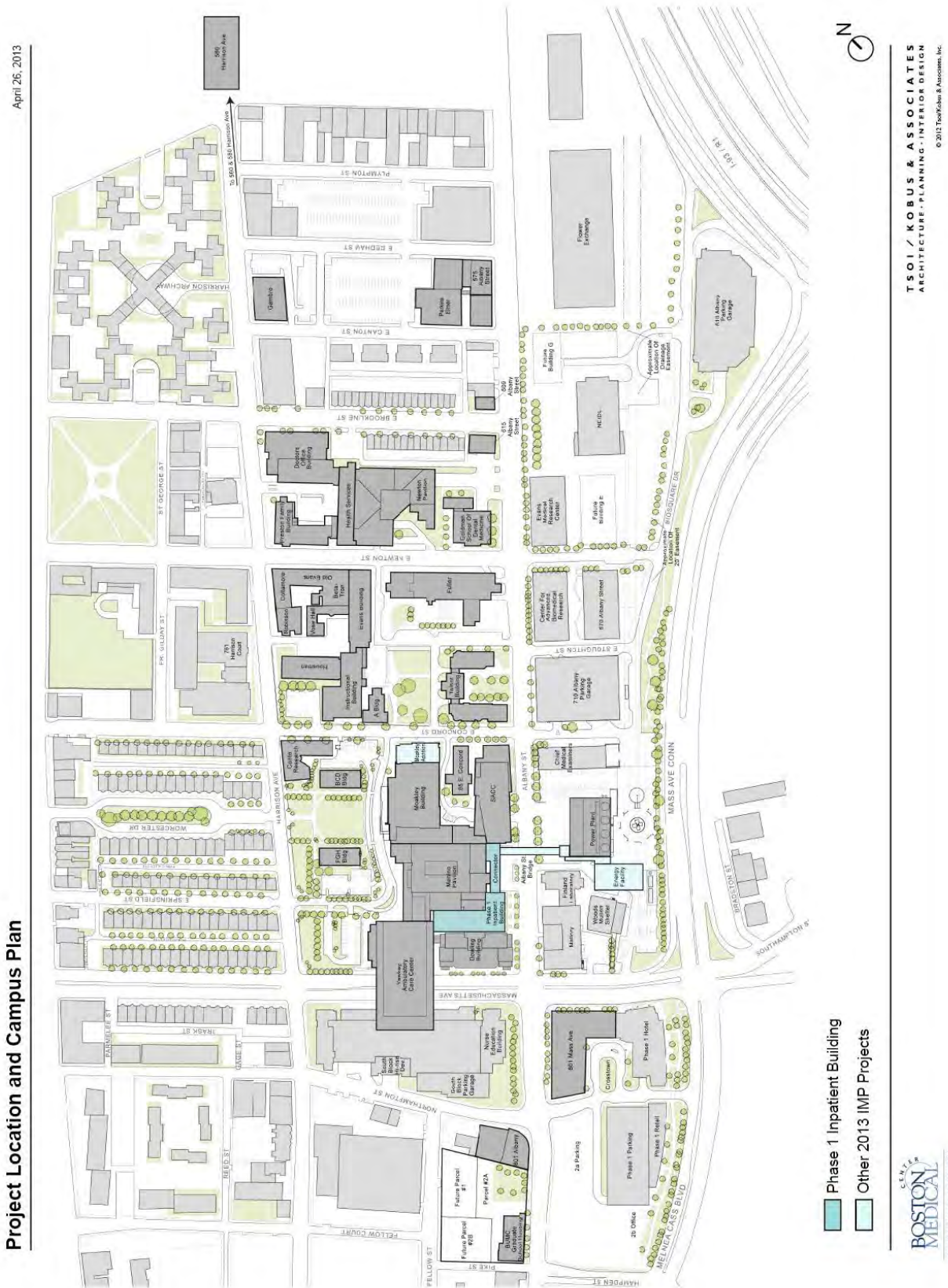
The Emergency Department drop-off and entrance will be relocated to the rear of the Moakley Cancer Center, accessed via Shapiro Drive. This action will further remove vehicular traffic from the north side of Albany Street, minimizing potential conflicts with pedestrians and fostering a more user-friendly experience.

Phase 1 will also provide increased support and circulation space and vital connections to adjacent campus buildings via a connector wing. The connector wing will span over the existing ambulance bays to the south of the Menino Pavilion. The first level will extend from Level 2 of the New Inpatient Building Phase 1 and will align with Level 2 of the existing Menino Pavilion while the second level will align with Level 3 of the Menino Pavilion and Level 3 of the Shapiro Ambulatory Care Center.

See Figures 2-13 to 2-23 for Floorplans, Sections and Elevations.

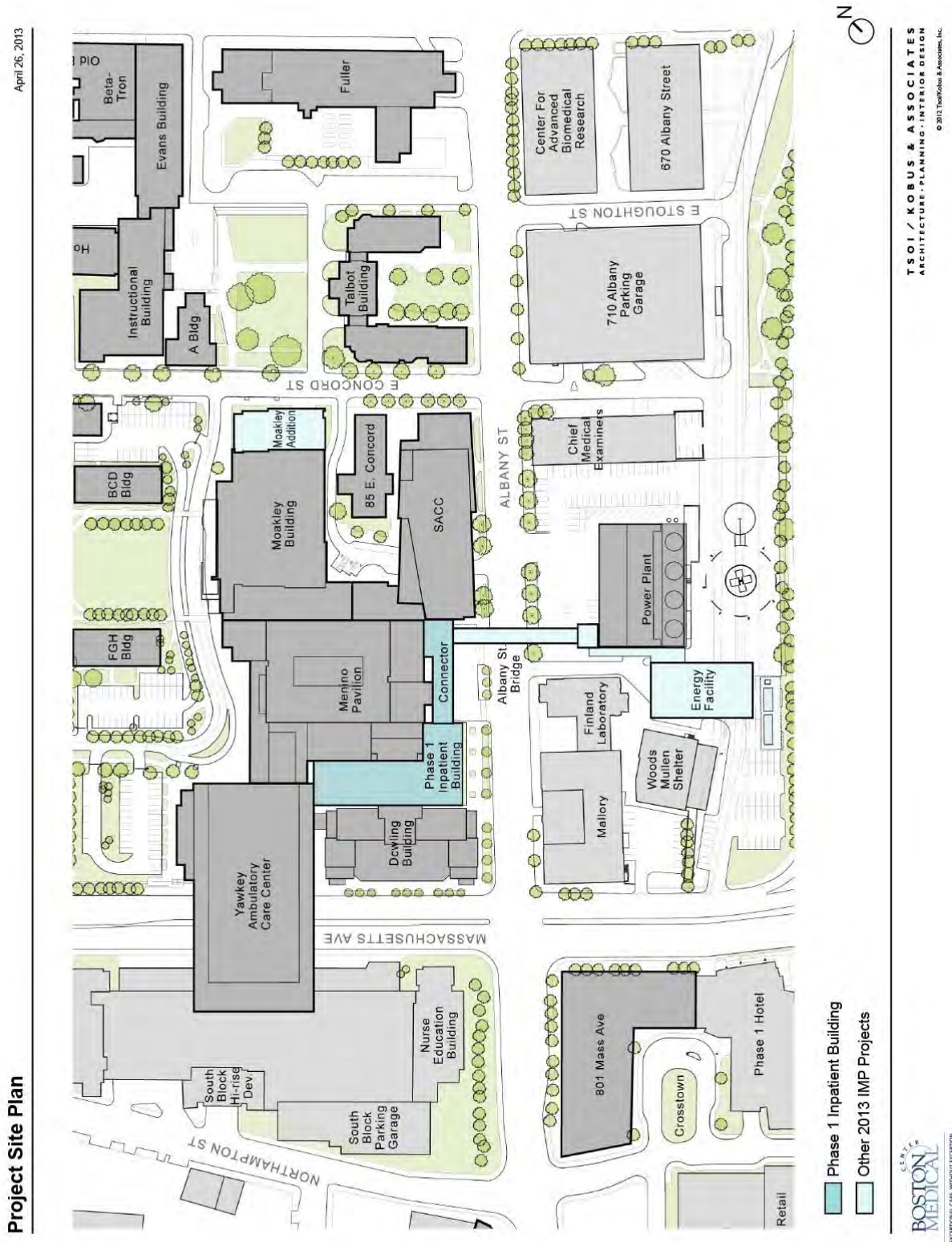
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Figure 2-13 New Inpatient Building Phase 1 Location and Campus Plan



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Figure 2-14 New Inpatient Building Phase 1 Site Plan



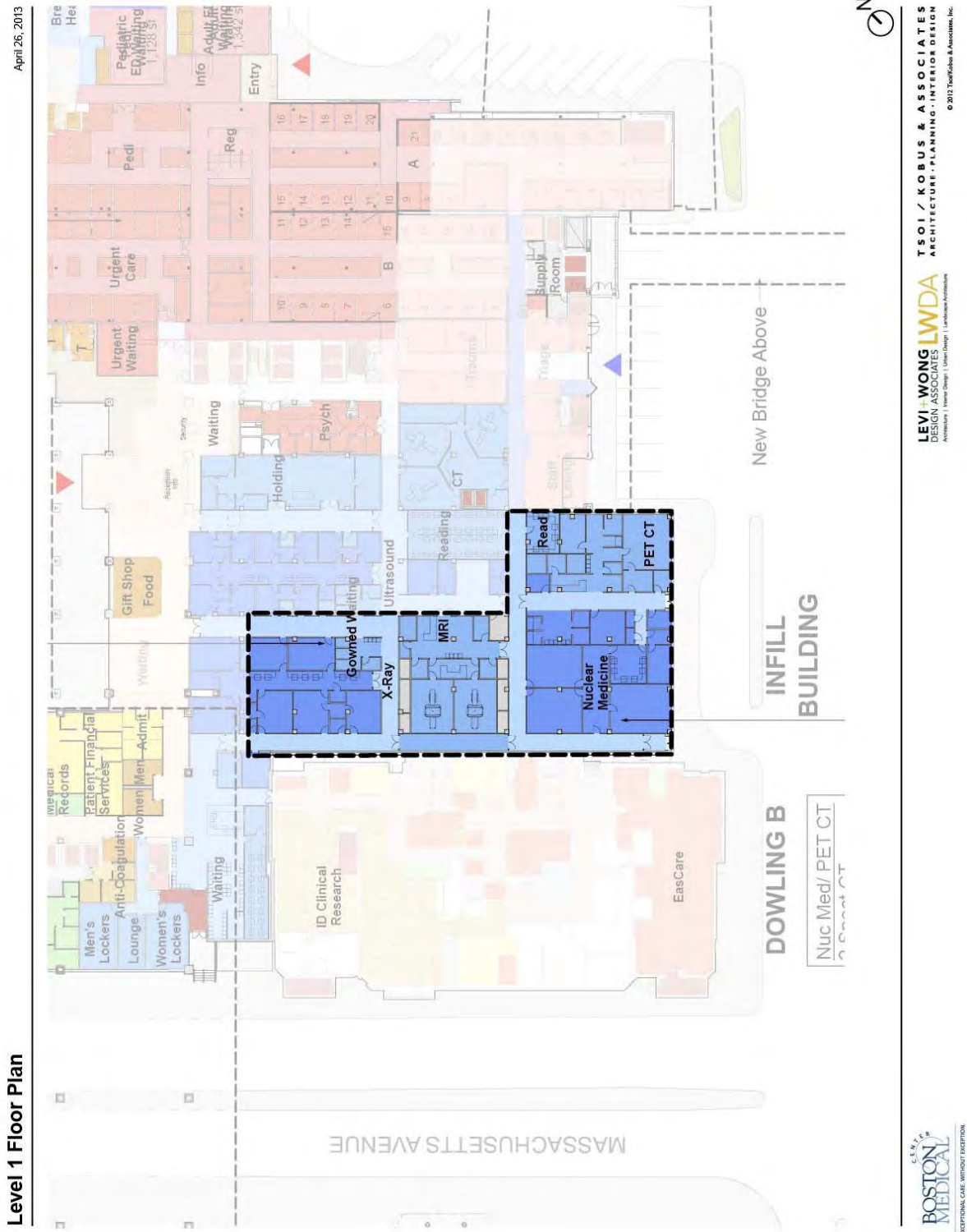
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Figure 2-15 New Inpatient Building Phase 1 Basement Level Floorplan



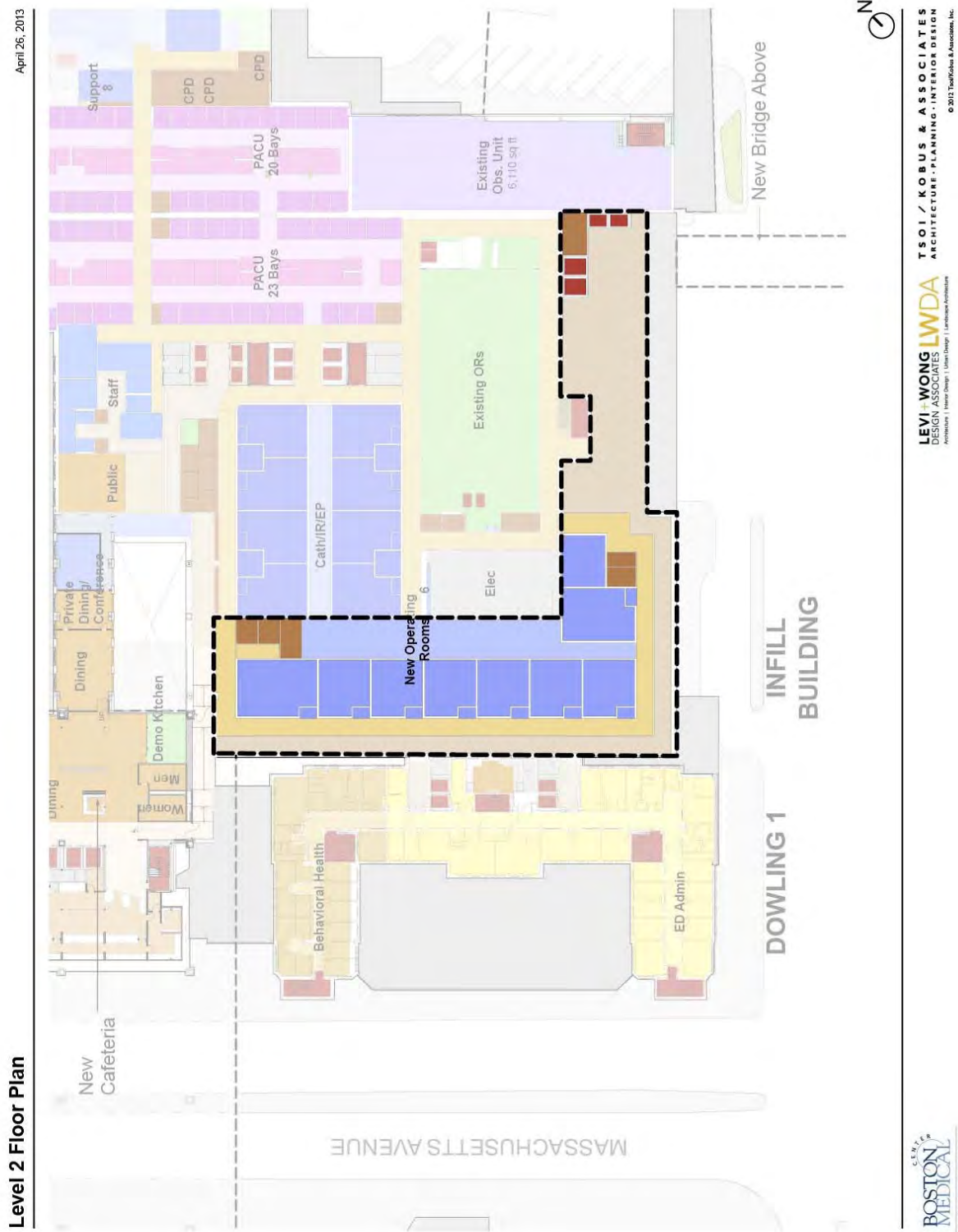
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Figure 2-16 New Inpatient Building Phase 1 First Level Floorplan



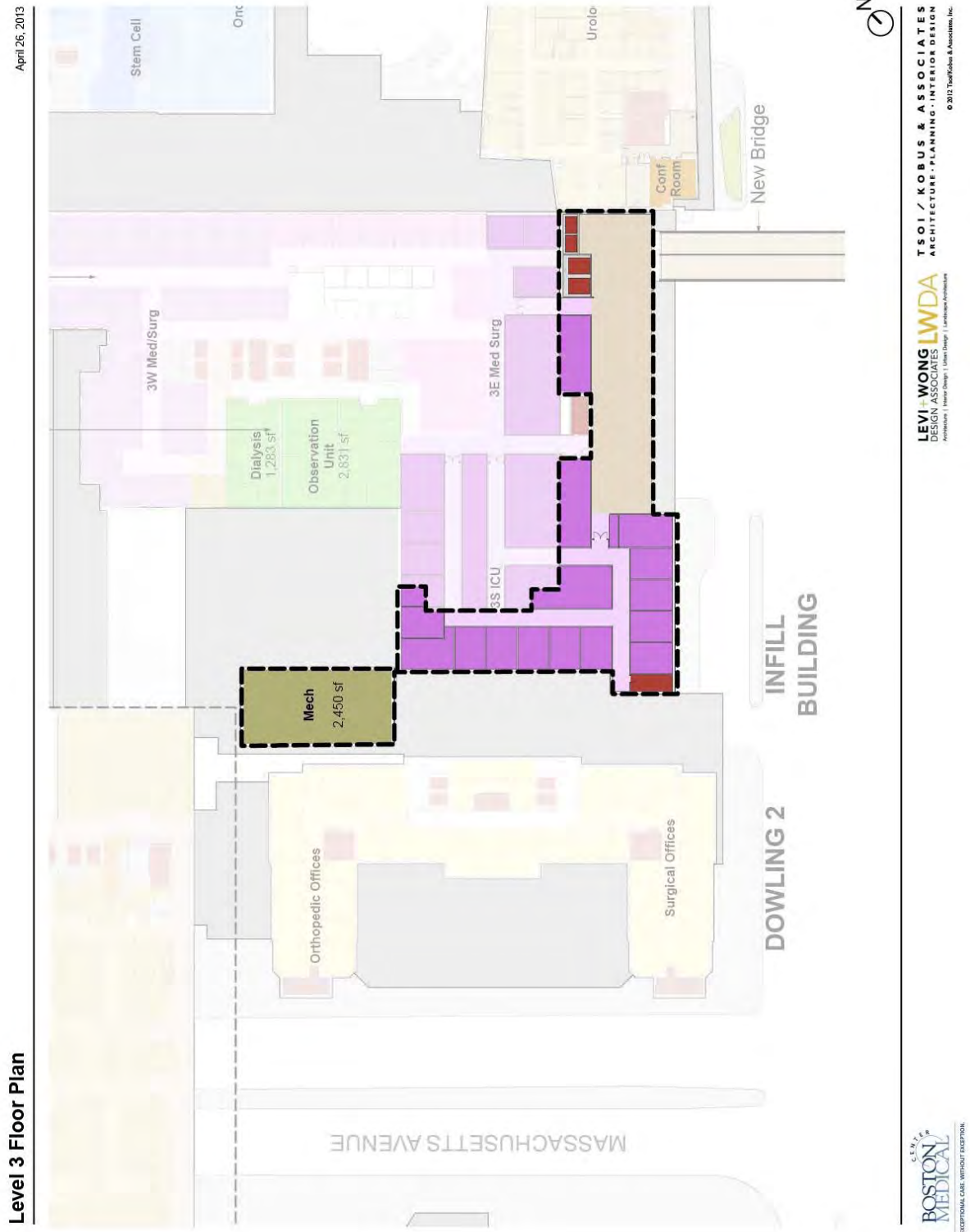
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Figure 2-17 New Inpatient Building Phase 1 Second Level Floorplan



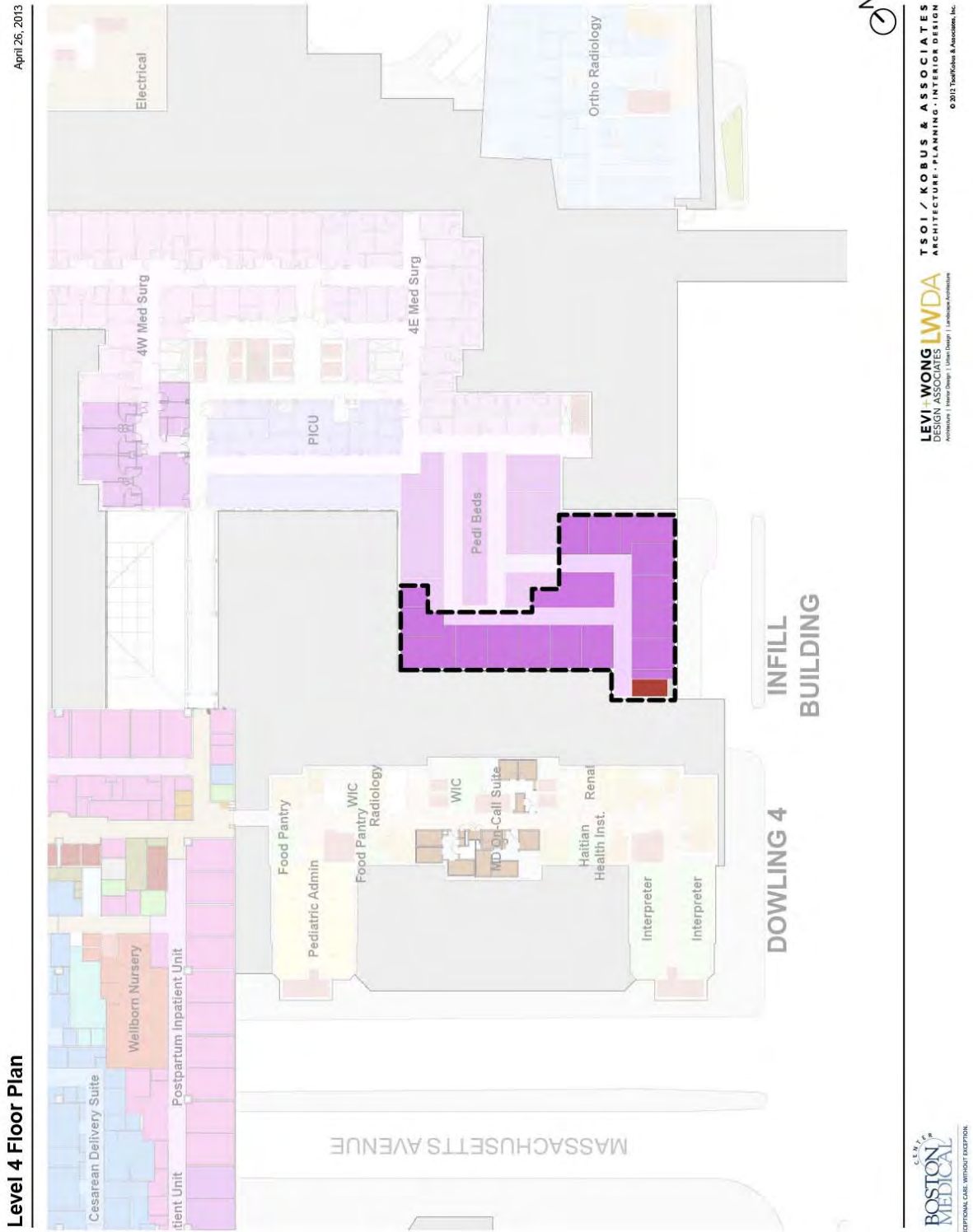
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Figure 2-18 New Inpatient Building Phase 1 Third Level Floorplan



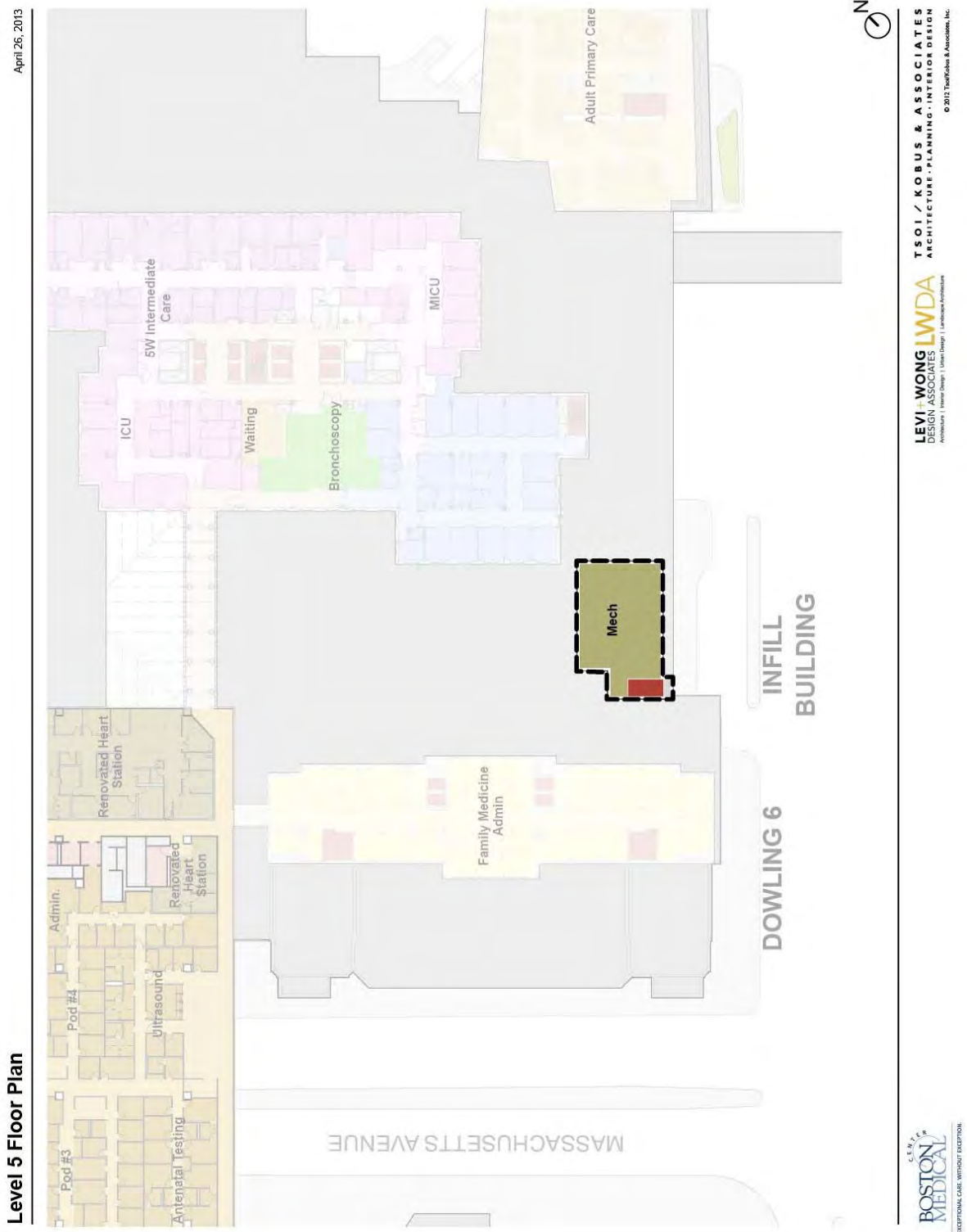
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Figure 2-19 New Inpatient Building Phase 1 Fourth Level Floorplan



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Figure 2-20 New Inpatient Building Phase 1 Fifth Level Floorplan

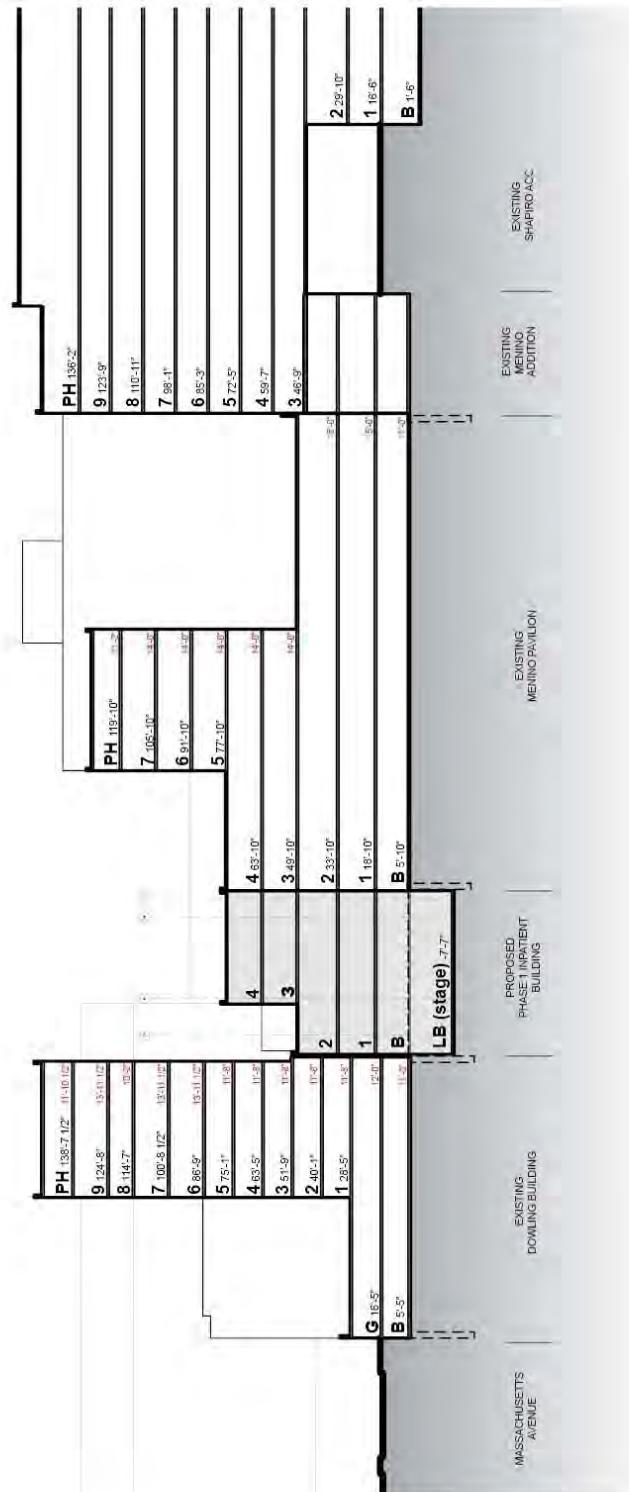


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Figure 2-21 New Inpatient Building Phase 1 Section Looking North

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Section B - Looking North



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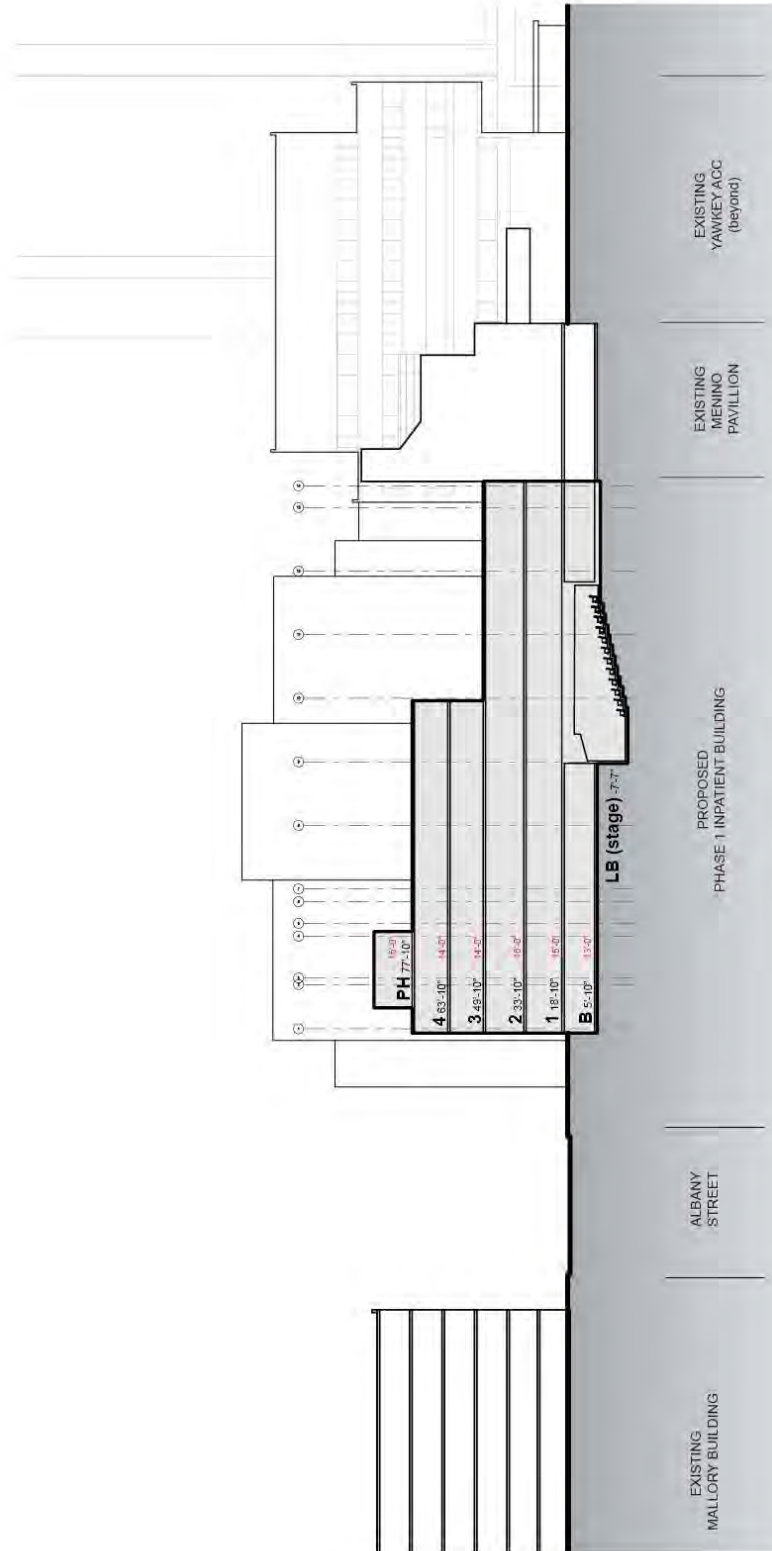
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Figure 2-22 New Inpatient Building Phase 1 Section Looking West

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Section A - Looking West

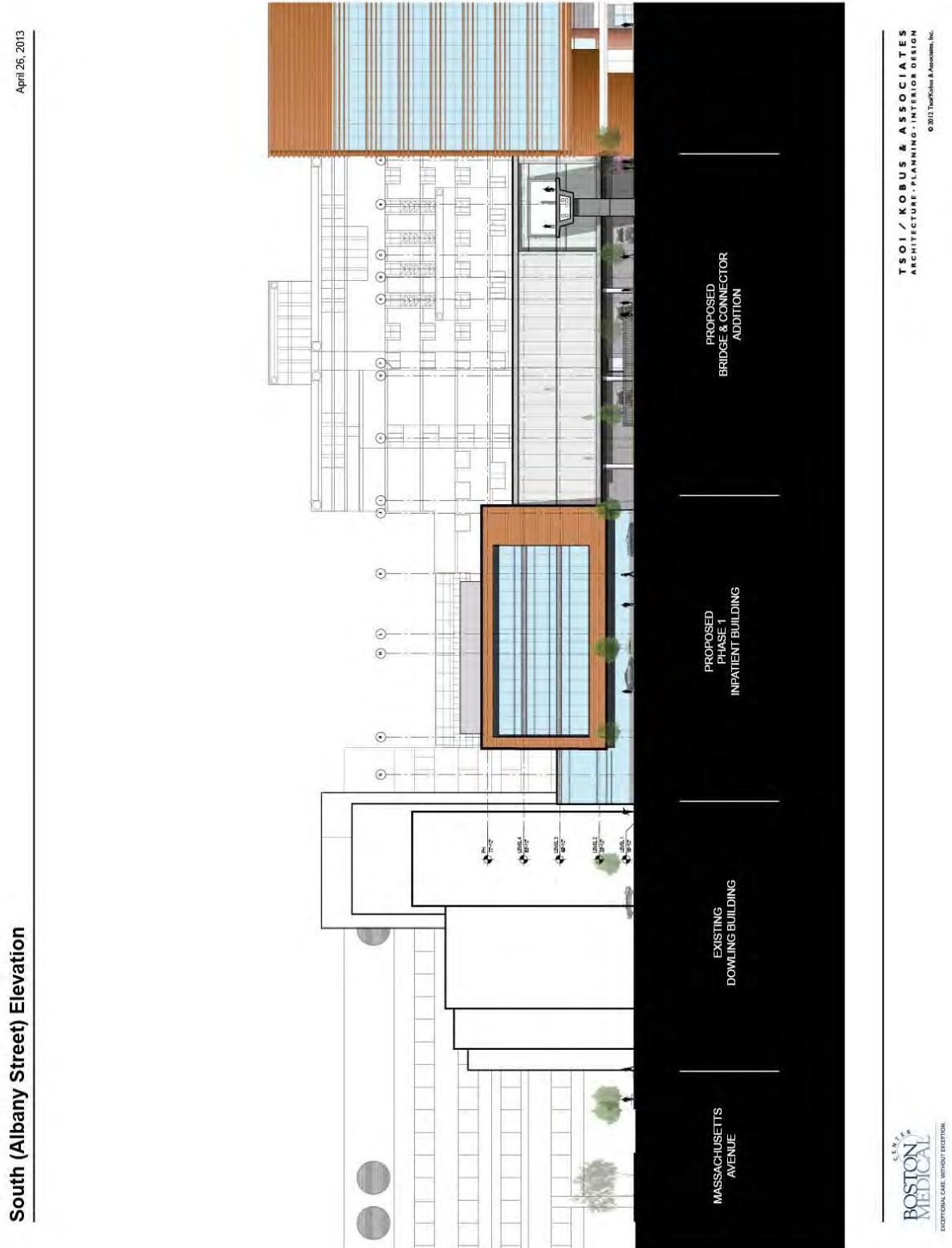


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Figure 2-23 New Inpatient Building Phase 1 South Elevation



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2.1.3 BMC Energy Facility

The BUMC Campus relies on utilities and energy infrastructure facilities that are approaching their operating limits. Boston University Medical Center infrastructure systems are largely dependent on purchased utilities with significant utilization of electrical power and steam. Currently Boston University Medical Center uses a steam distribution system that is at capacity and an electrical distribution system that is not designed to support future growth. The BUMC Campus relies to a lesser degree on natural gas and oil. Those fuel sources are primarily for back-up systems within patient care and research buildings and spaces.

BMC currently utilizes electrical power through two power distribution centers on the BUMC Campus. These stations (at the Power Plant and the Evans Building) are both over 30 years old and are using out of date technology that is not supported by replacement parts without customization or reliance on refurbished equipment. One of these stations is operating within five percent of its rated capacity. The other is presently operating at 65 percent of its capacity, but services an area of significant anticipated growth. Given the age of these stations and projected energy demand, upgrades and modernization of electrical infrastructure will be required in the very near future.

With increased reliance on technology and ever increasing minimum standards, requirements for powering and cooling patient care and research space on the BUMC Campus creates new demands that continues to outpace the ability to reduce the amount of utilities used in total.

BMC now faces the challenge of managing the availability and reliability of energy service that is critical to a major medical center. In order to support the campus growth, keep up with advancements in health care technology, and deliver clinical services 24/7, BMC requires a new energy facility to address these issues. The goals of the proposed Energy Facility project are to reduce demand on existing taxed infrastructure, create energy and system redundancy, increase system efficiency, and reduce overall environmental impact.

The following are the primary objectives of the BMC Energy Facility:

- ◆ Reliability - The Energy Facility will add redundancy to the BUMC Campus existing energy supply and ensure a reliable power system – an especially important concept in operating a major medical center. Currently, electricity is provided to the BUMC Campus by NSTAR and Veolia supplies the steam. The BUMC Campus will stay connected to these existing utility suppliers in the event that back-up energy is needed (e.g. during peak periods, scheduled equipment maintenance, or unexpected shutdowns).
- ◆ Efficiency - The Energy Facility will be located close to where BMC needs the power – a concept known as distributed generation. Placing a facility close to where the power is used is much more efficient and reliable than sending power farther away. This is based on the premise that with shorter distances for power to travel, there are fewer points for system failures. Further, the efficiency of the proposed system is approximately 72% as compared to a conventional single cycle power plant capable of operating at 33%.

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- ◆ Reduced Environmental Impact - With the Energy Facility, BMC will be able to make electricity and steam from the same process – a process known as “combined heat and power” (CHP) or also referred to as “cogeneration”. In this process, a combustion gas turbine is fueled by natural gas to generate electricity. Waste heat from the combustion turbine is then sent to a Heat Recovery Steam Generator to produce usable steam. BMC uses steam to heat buildings and for medical equipment sterilization. Combining electric and thermal energy generation into a single integrated process reduces fuel consumption and the impact on the carbon footprint dramatically.

With the Energy Facility, BMC plans to make approximately 75% of its own electricity and nearly 100% of its own steam.

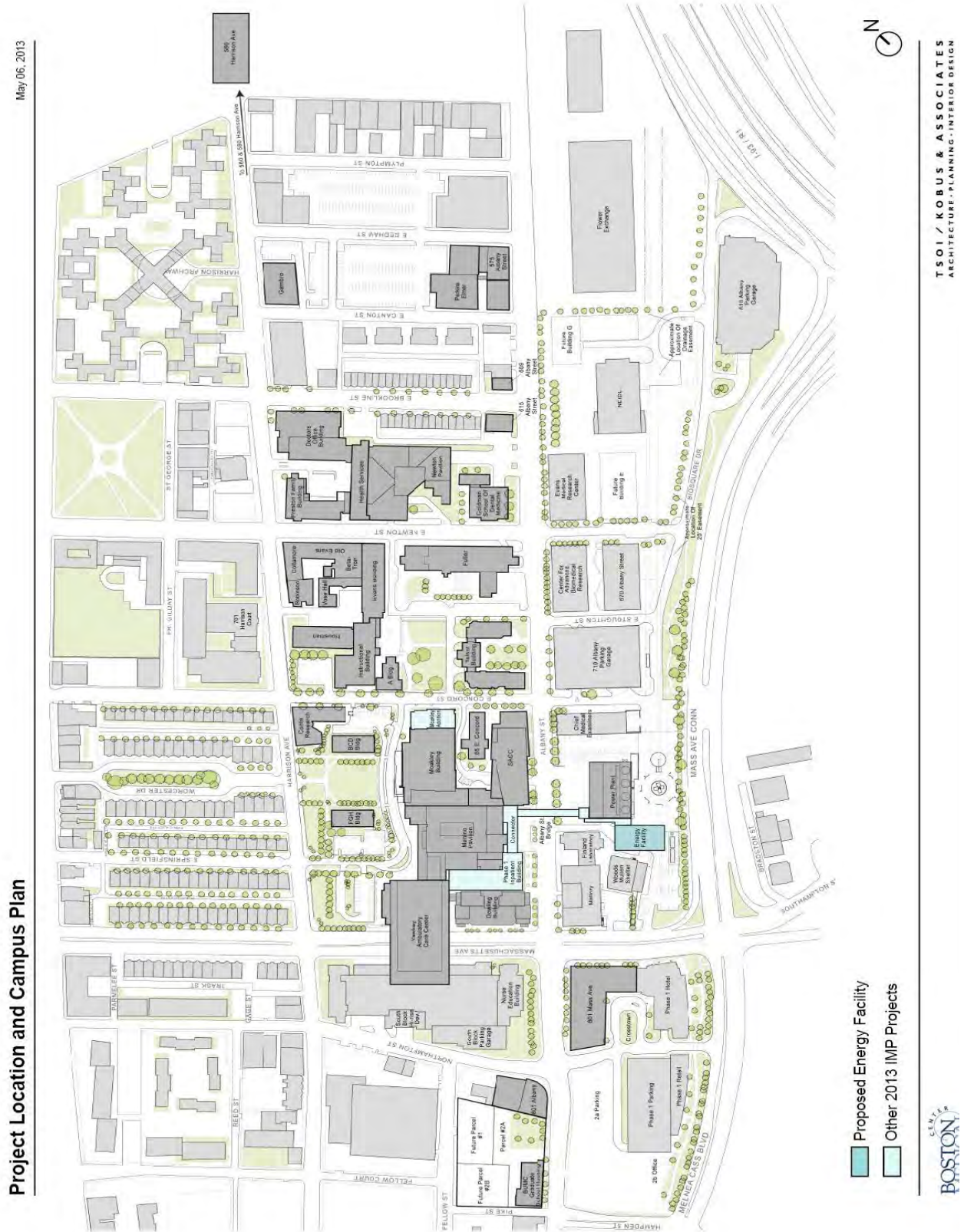
The Energy Facility will be approximately 38,500 square feet with a typical floorplate of approximately 10,000 square feet. At street level, the building will be accessed from the north and south sides for purposes of limited and scheduled equipment maintenance. The Energy Facility will be bordered to the north, east and west by existing buildings.

The Energy Facility, with a similar program, was approved in 2010 IMP for a site on Albany Street to the east of the existing Power Plant. By relocating the project to the west, BMC can utilize the new Bridge as a conduit for power distribution to the main campus from the Energy Facility and create a less encumbered site for future development of the proposed Administration / Clinical Building upon demolition of the existing Power Plant.

See Figures 2-24 to 2-34 for Floorplans, Sections and Elevations.

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Figure 2-24 BMC Energy Facility Project Location and Campus Plan



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Figure 2-25 BMC Energy Facility Site Plan



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Figure 2-26 BMC Energy Facility Basement Level Floorplan



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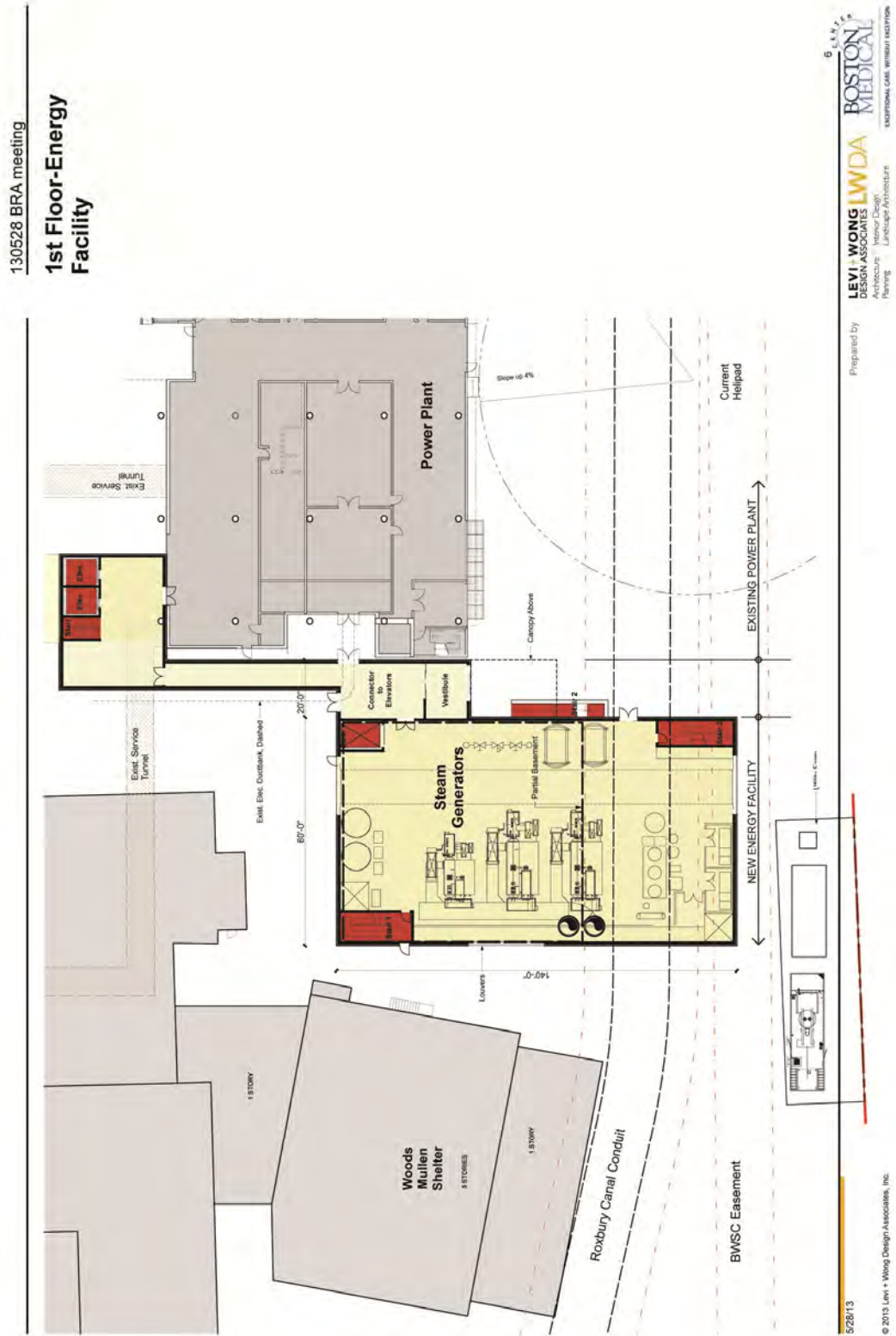
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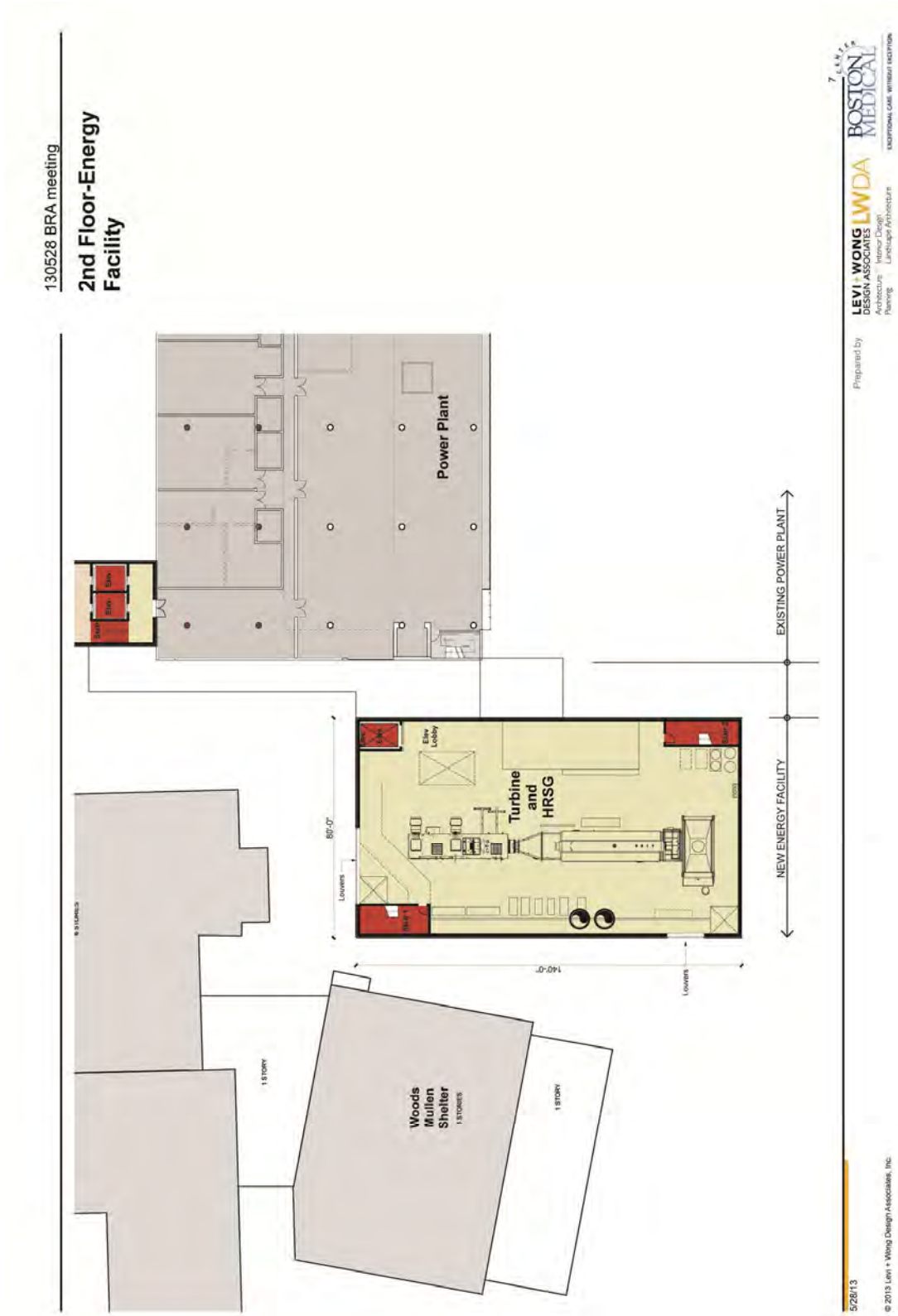
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Figure 2-27 BMC Energy Facility First Level Floorplan



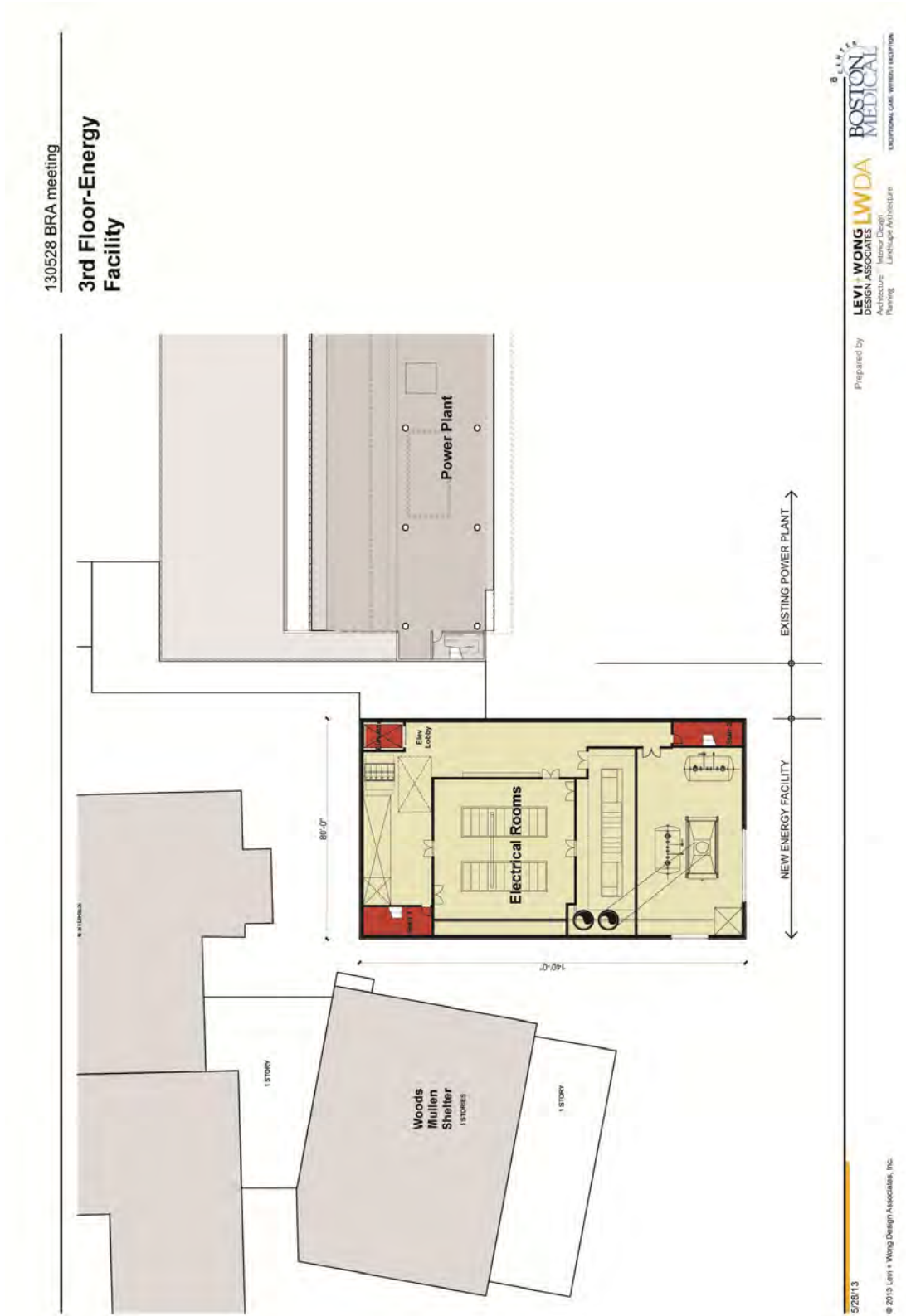
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Figure 2-28 BMC Energy Facility Second Level Floorplan



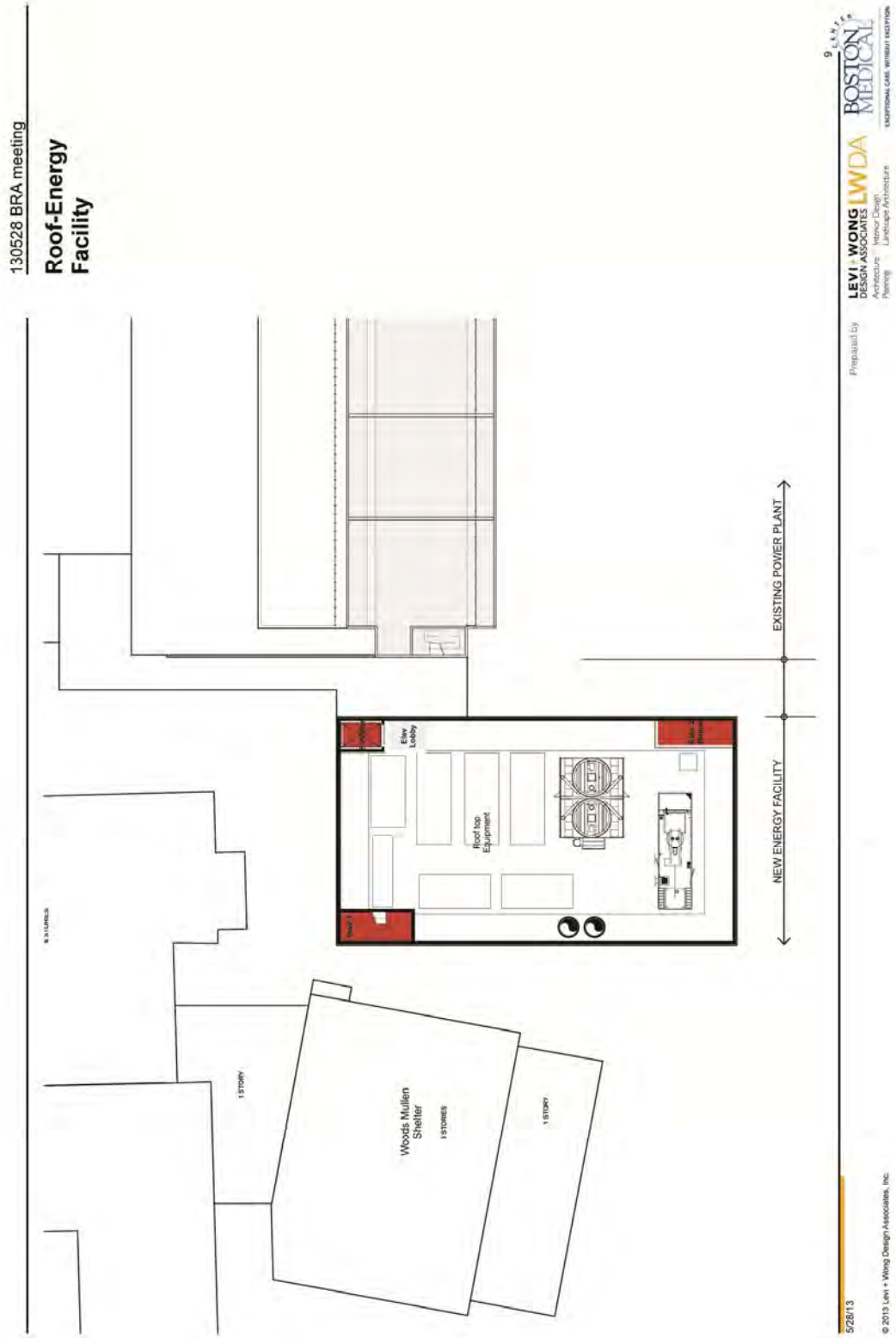
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Figure 2-29 BMC Energy Facility Third Level Floorplan



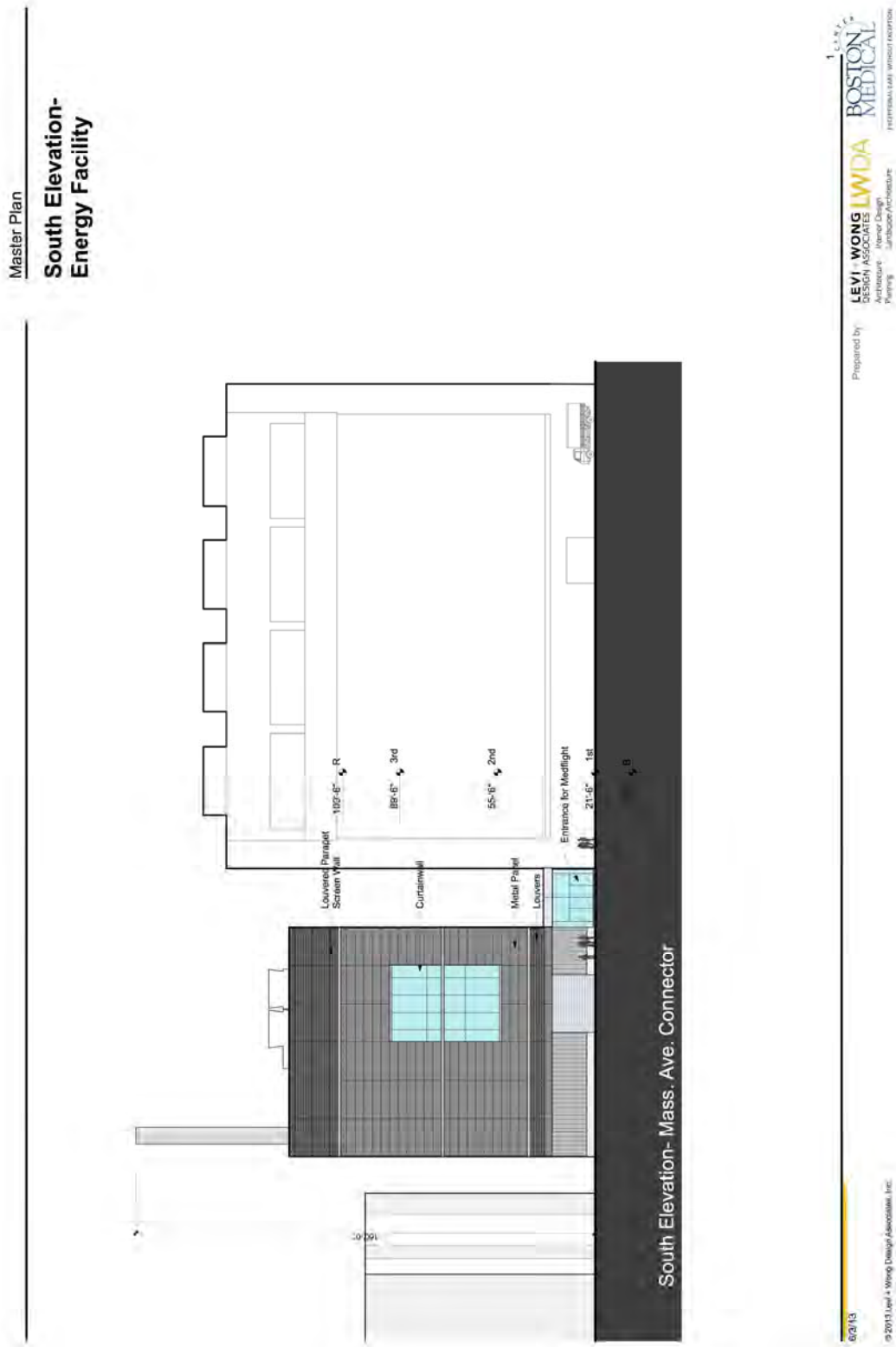
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Figure 2-30 BMC Energy Facility Roof Plan



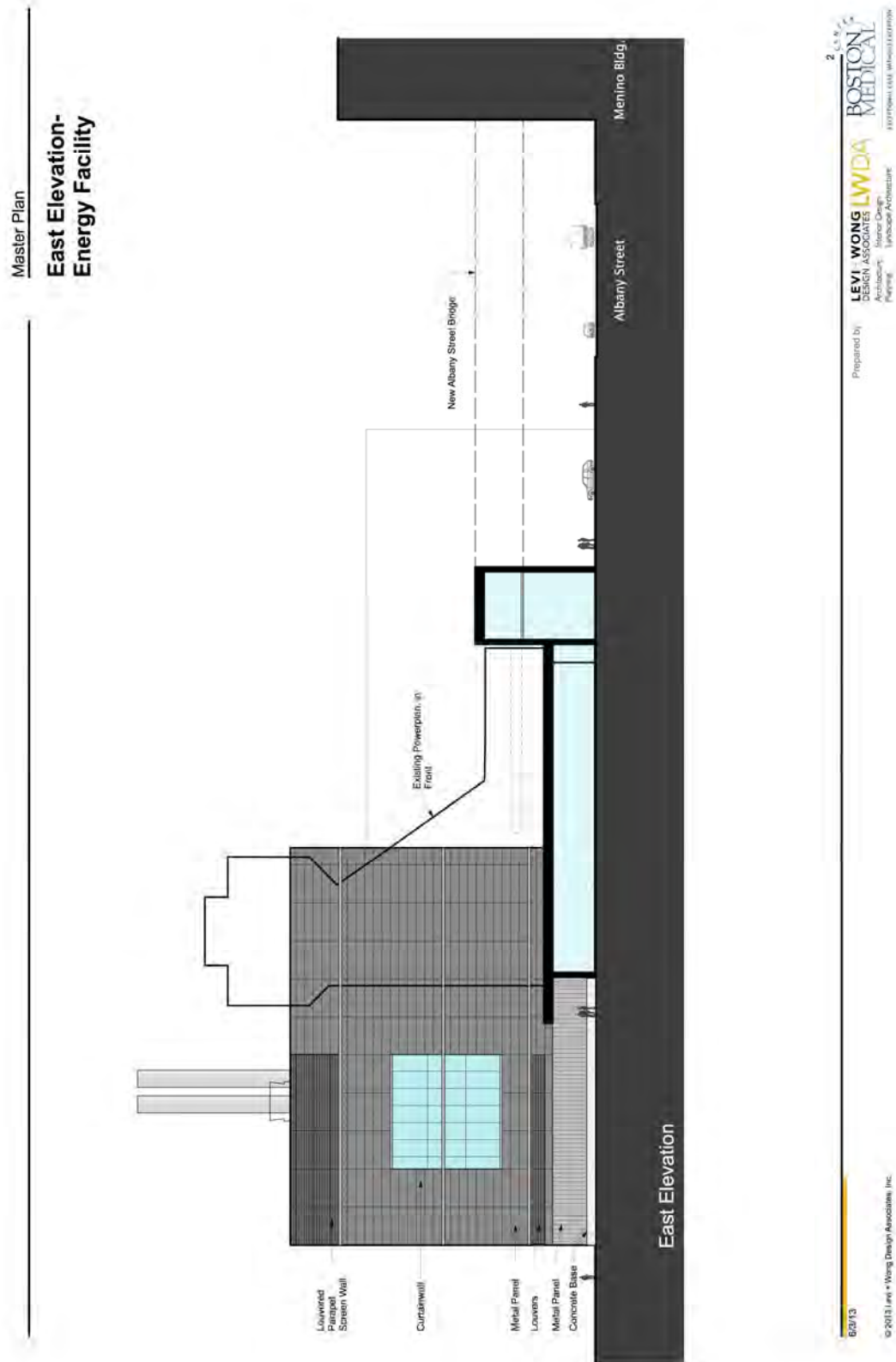
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Figure 2-31 BMC Energy Facility South Elevation



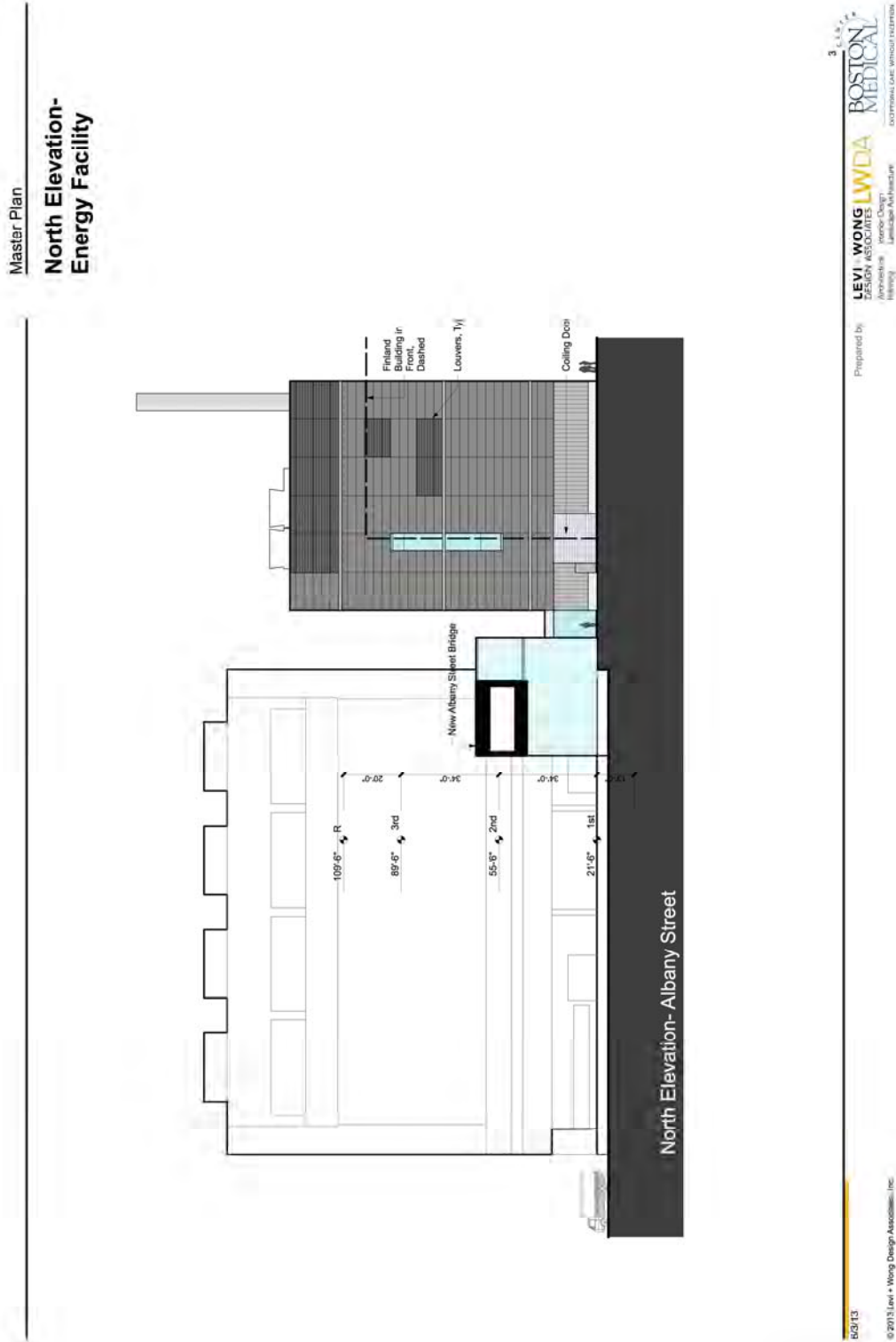
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Figure 2-32 BMC Energy Facility East Elevation



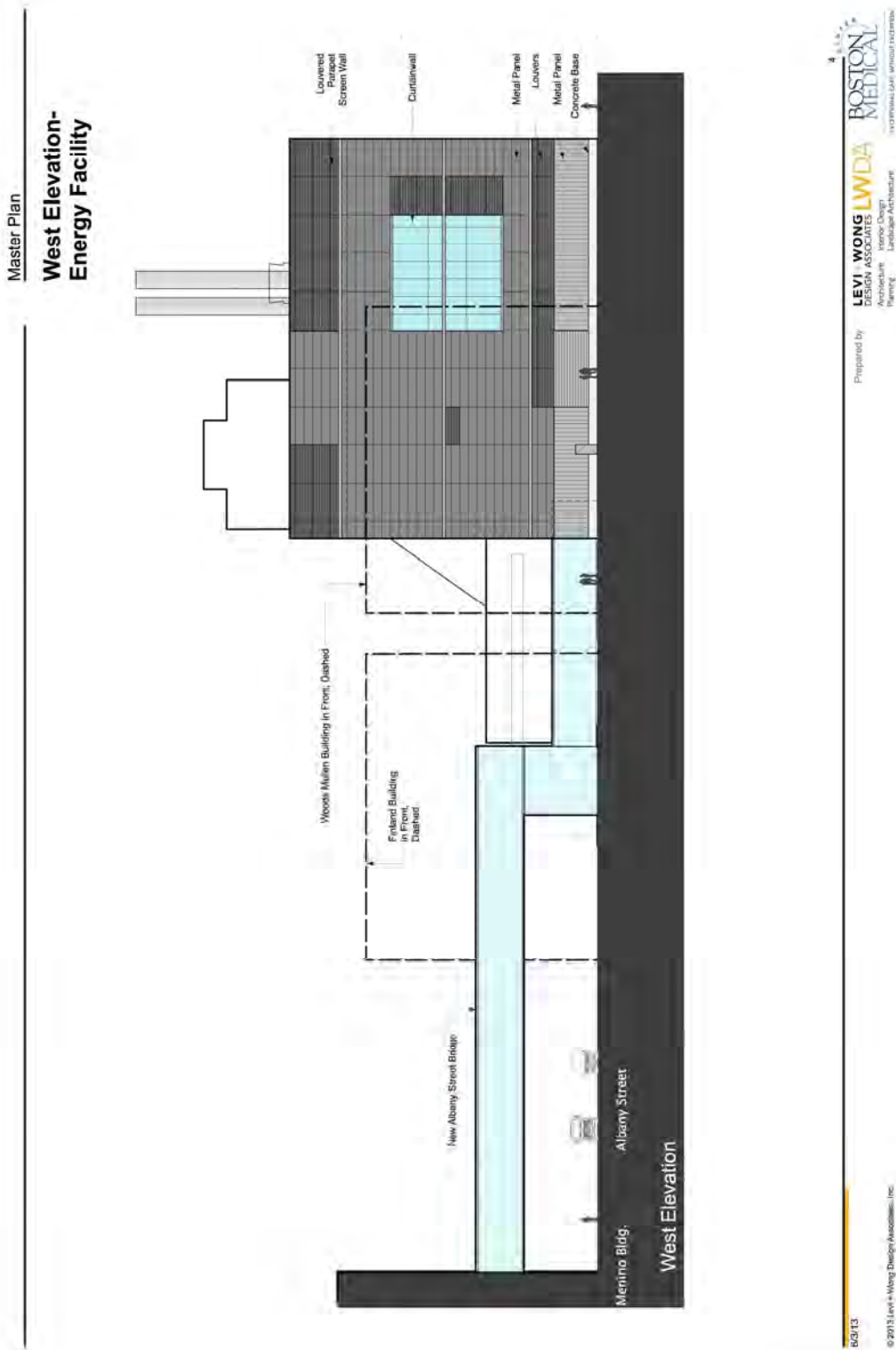
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Figure 2-33 BMC Energy Facility North Elevation



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Figure 2-34 BMC Energy Facility West Elevation



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2.1.4 New Patient Transport Bridge

The new Bridge will improve patient transport and material handling operations. The new Bridge will be a 1-story material, utility, and patient transport Bridge at approximately 7,100 square feet, including a 1 story corridor to provide access for the Med Flight patients from the helipad to the new Bridge. The new Bridge will require the demolition of the existing yellow tube currently used for utility services.

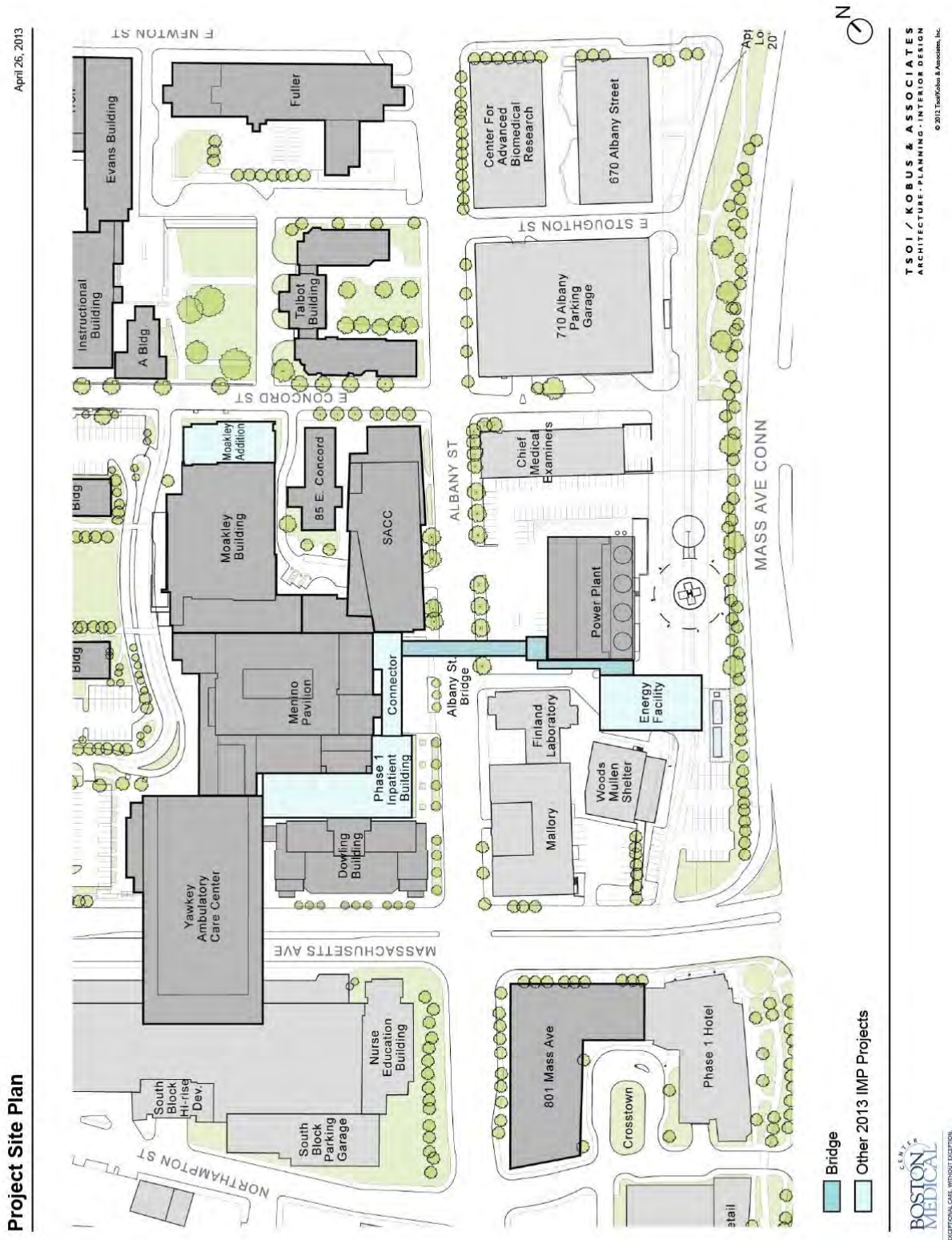
The new Bridge is proposed to cross Albany Street in approximately the same location as the existing yellow utility tube. The 1 story corridor will be constructed at grade located adjacent to the existing Power Plant. Med Flight patients will be transported through the 1-story corridor to the new elevator tower in the Bridge and through the Bridge spanning across Albany Street connecting to the New Inpatient Building Phase 1.

By connecting the north and south sides of Albany Street, the project will provide direct patient transport from the existing Helipad to the expanded Emergency Department and Trauma Center, providing better patient care through increased operational efficiency, and reducing health care costs by eliminating ambulance transport. The new Bridge is also intended to transport clean materials from the newly relocated loading docks on the south side of Albany Street at the existing Power Plant, as well as house necessary utility connections from the existing Power Plant and Energy Facility to the main campus.

See Figures 2-35 to 2-43 for Floorplans, Sections and Elevations.

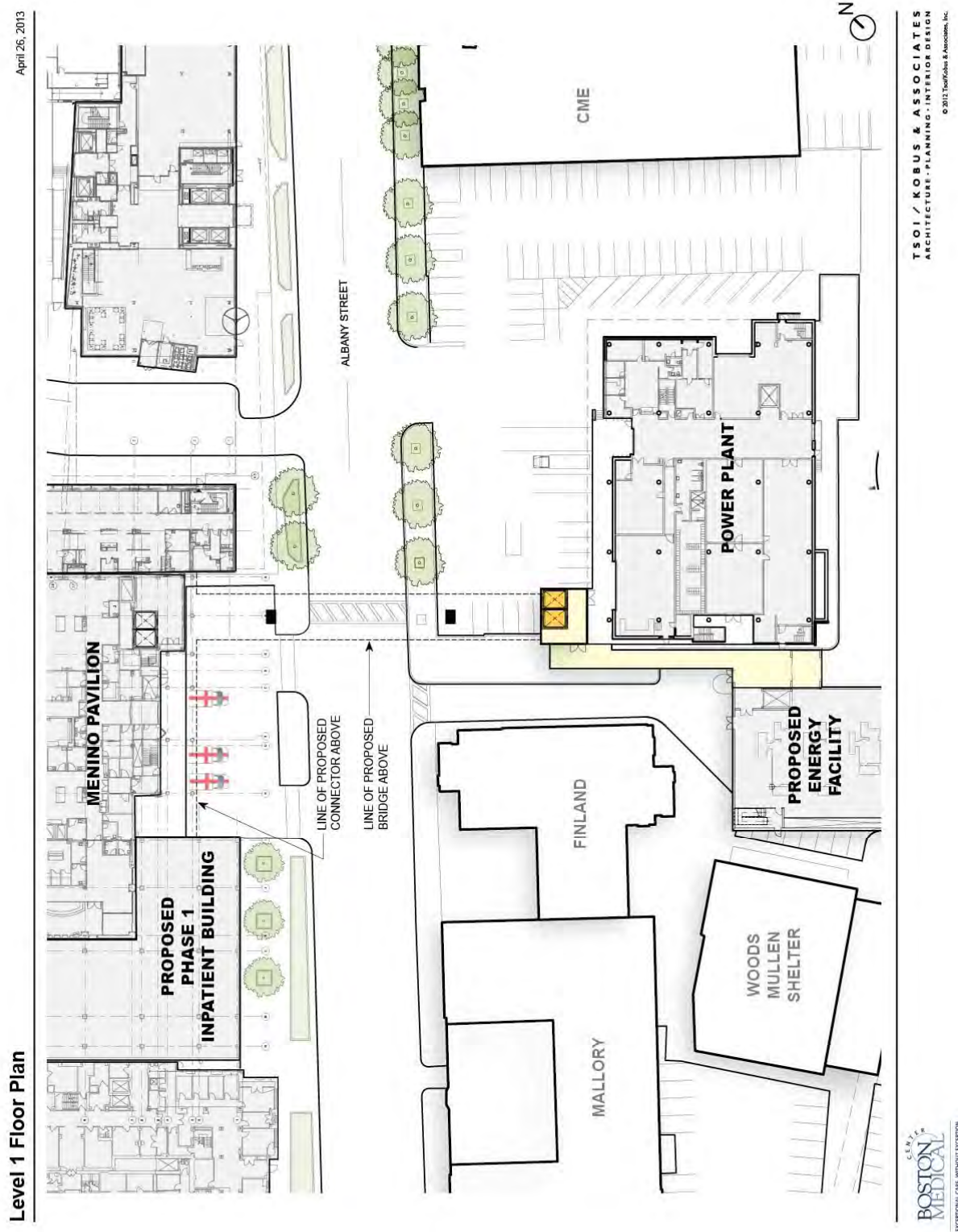
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Figure 2-36 New Patient Transport Bridge Site Plan



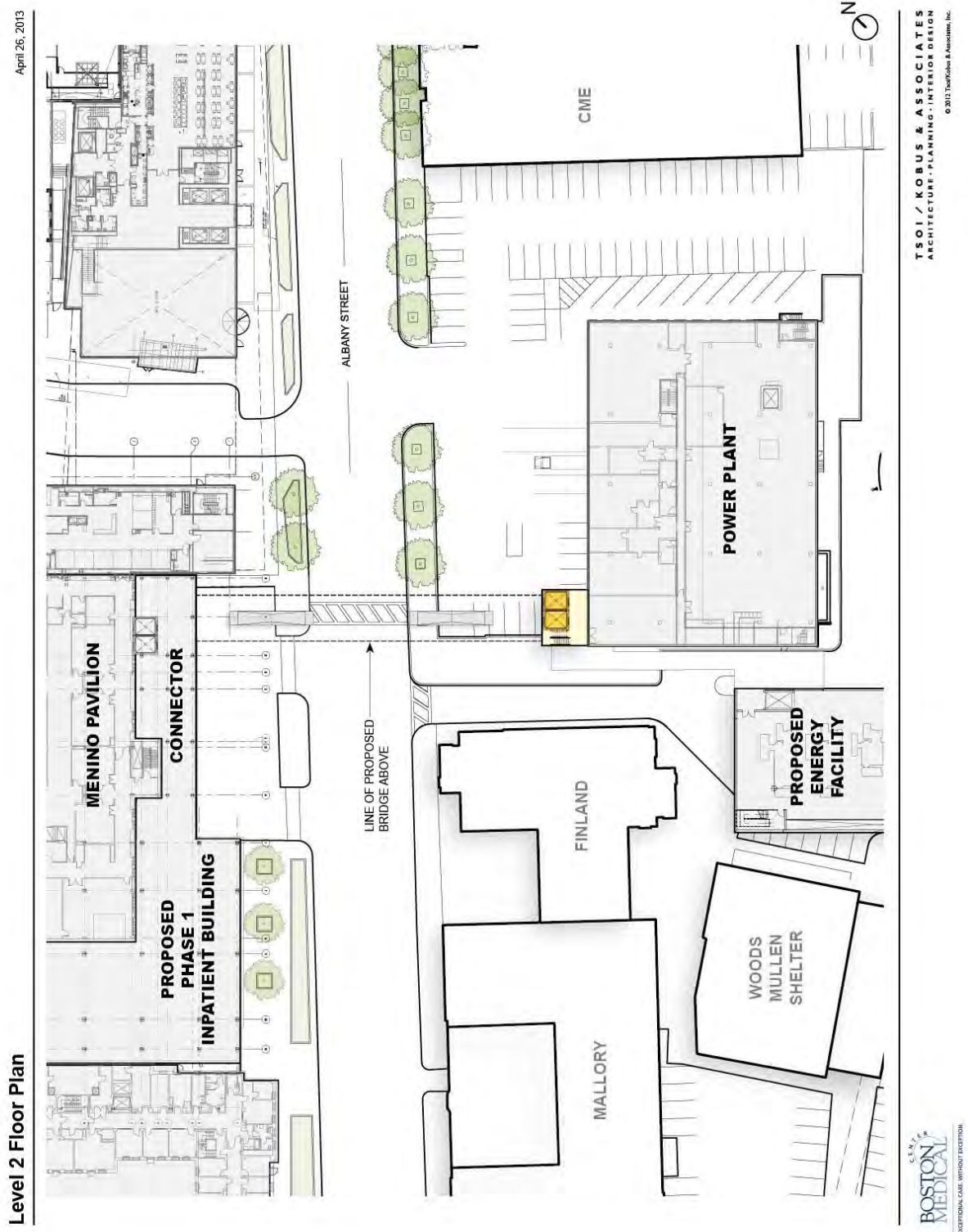
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Figure 2-37 New Patient Transport Bridge First Level Floorplan



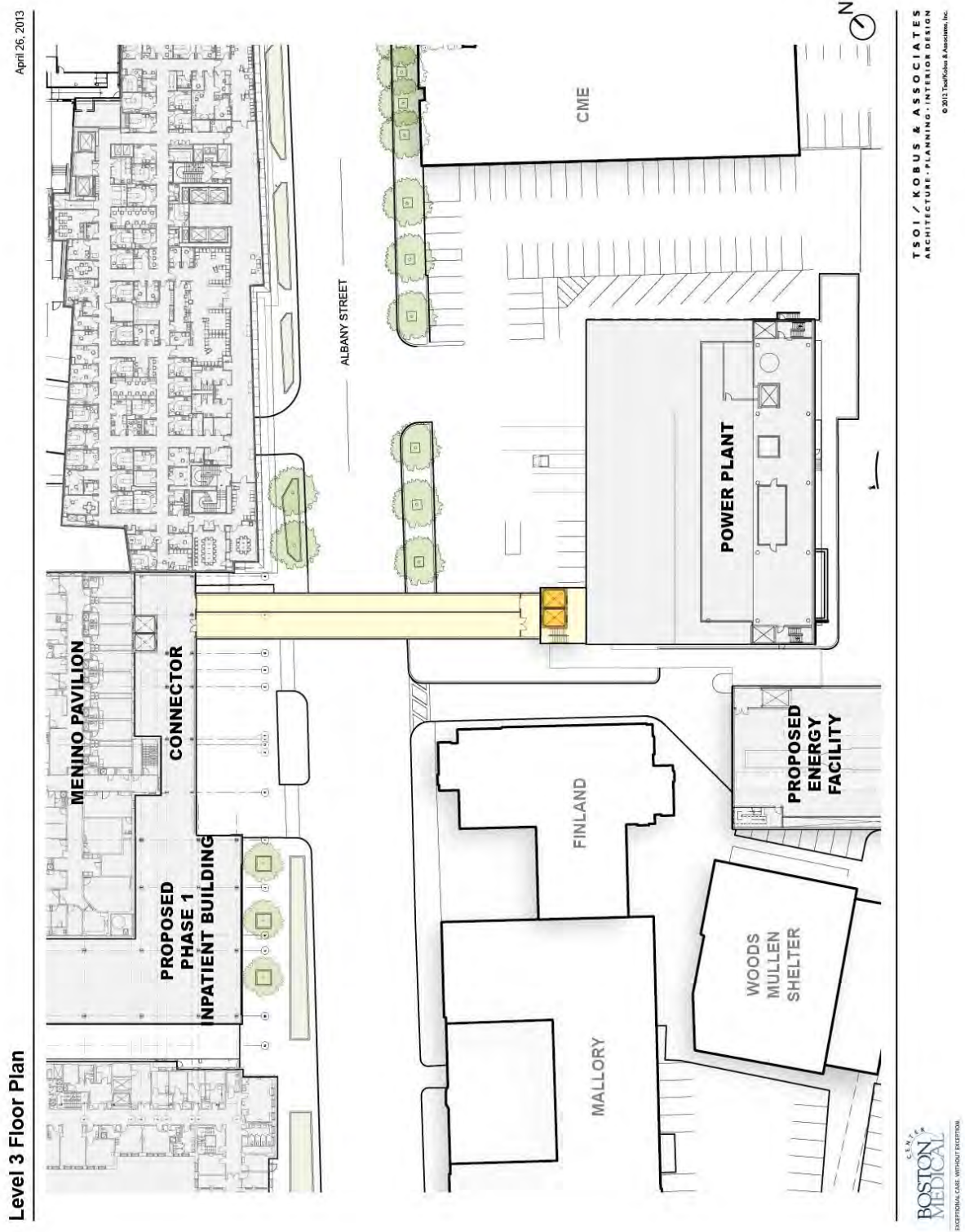
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Figure 2-38 New Patient Transport Bridge Second Level Floorplan



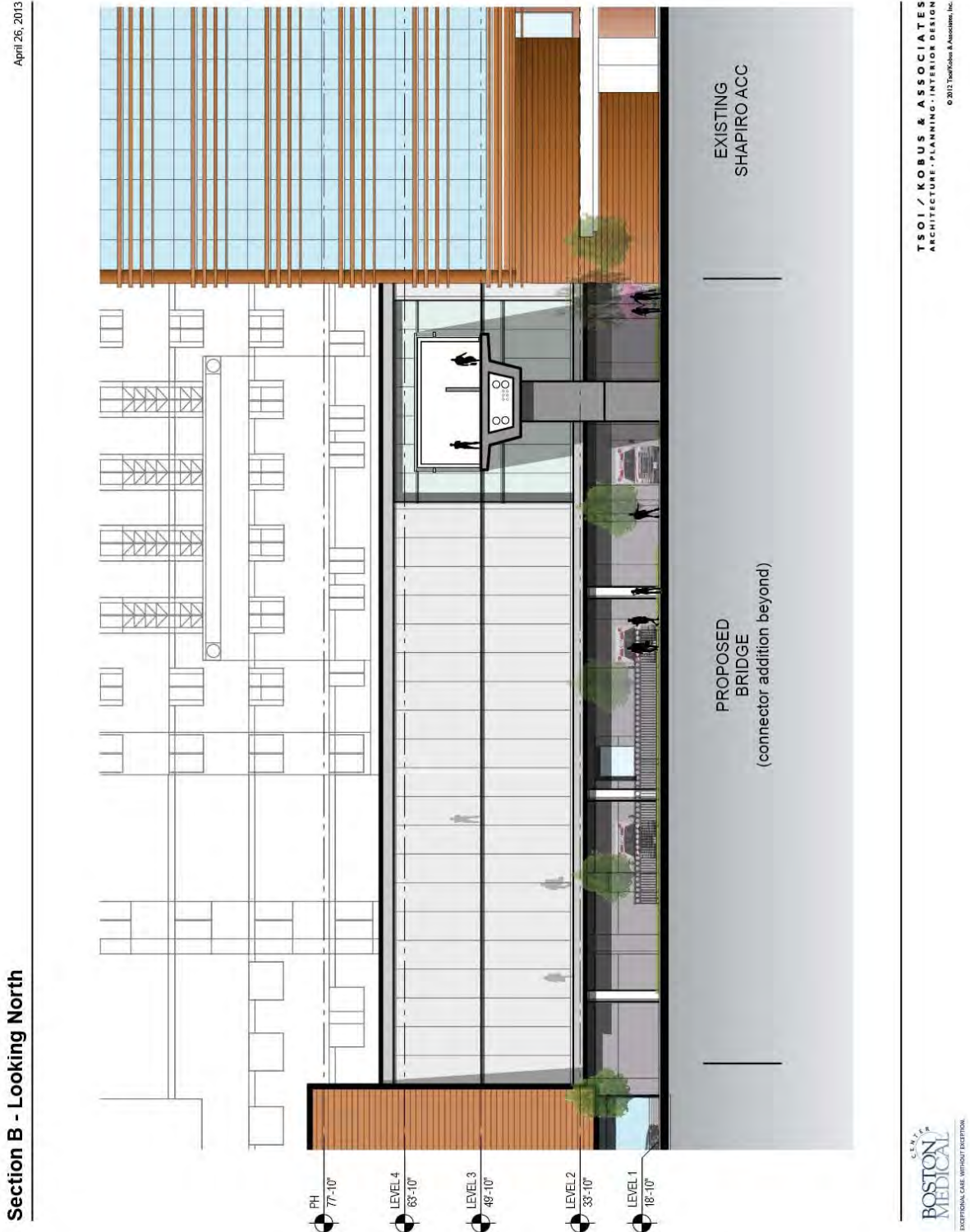
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Figure 2-39 New Patient Transport Bridge Third Level Floorplan



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Figure 2-40 New Patient Transport Bridge Section Looking North

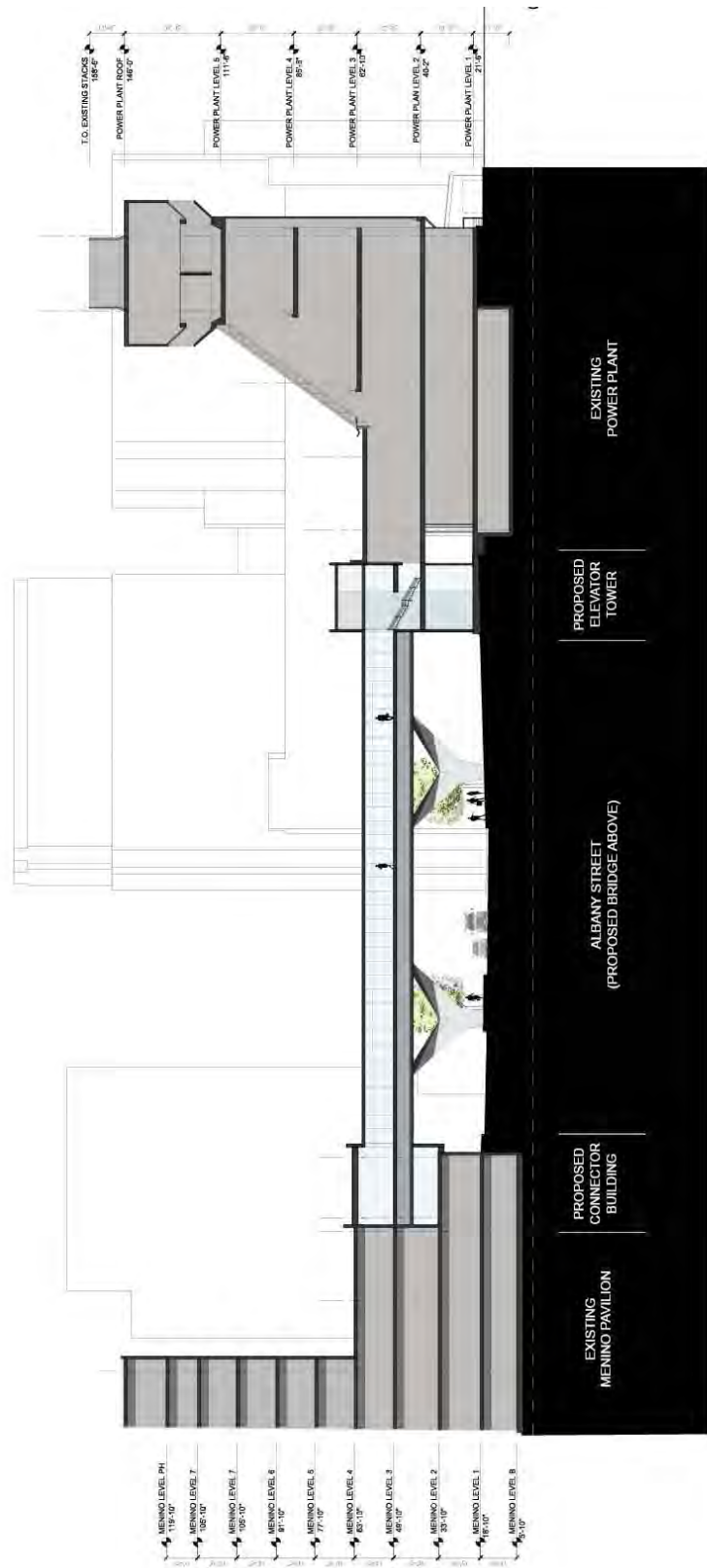


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Figure 2-41 New Patient Transport Bridge Section Looking East

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Section A - Looking East

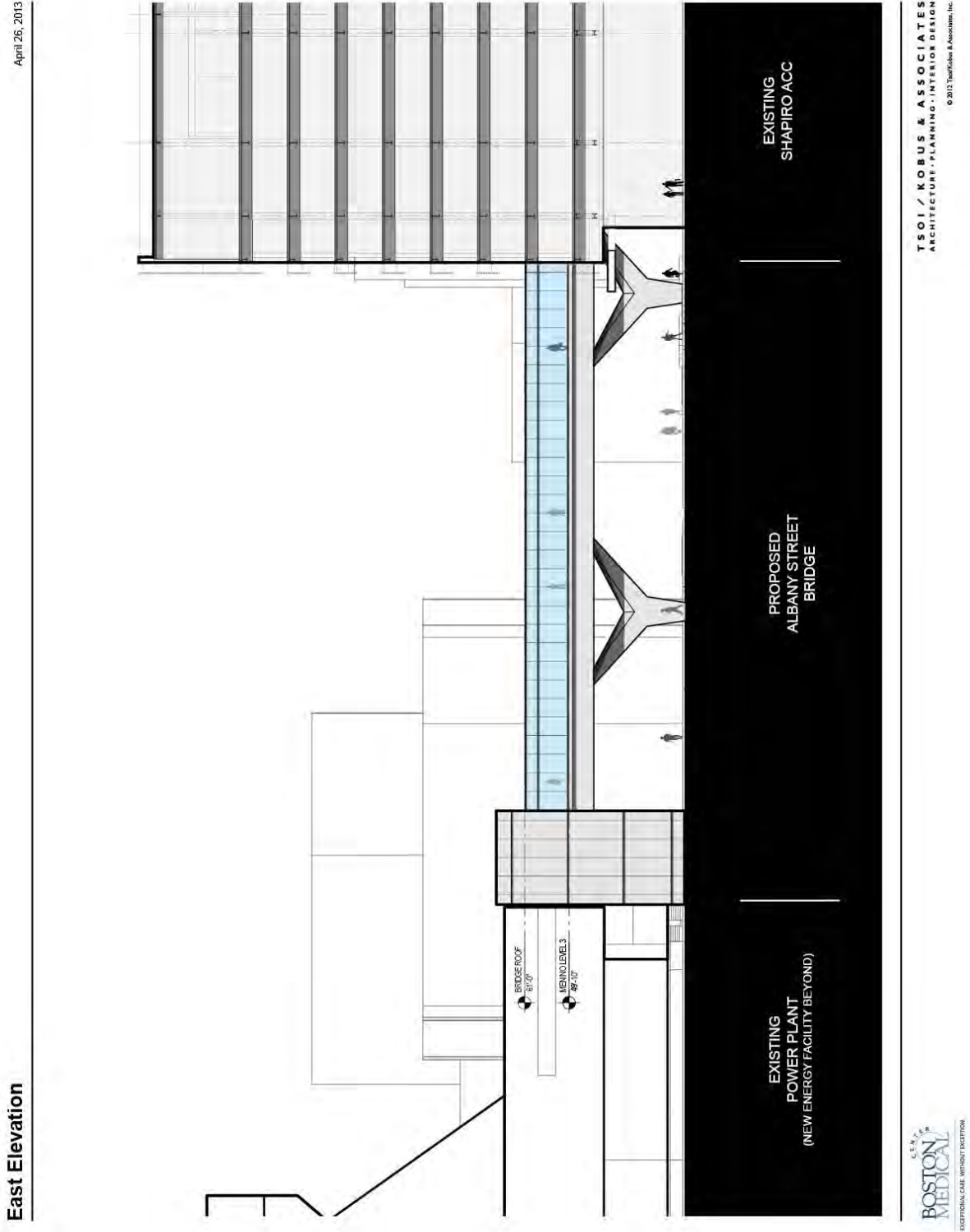


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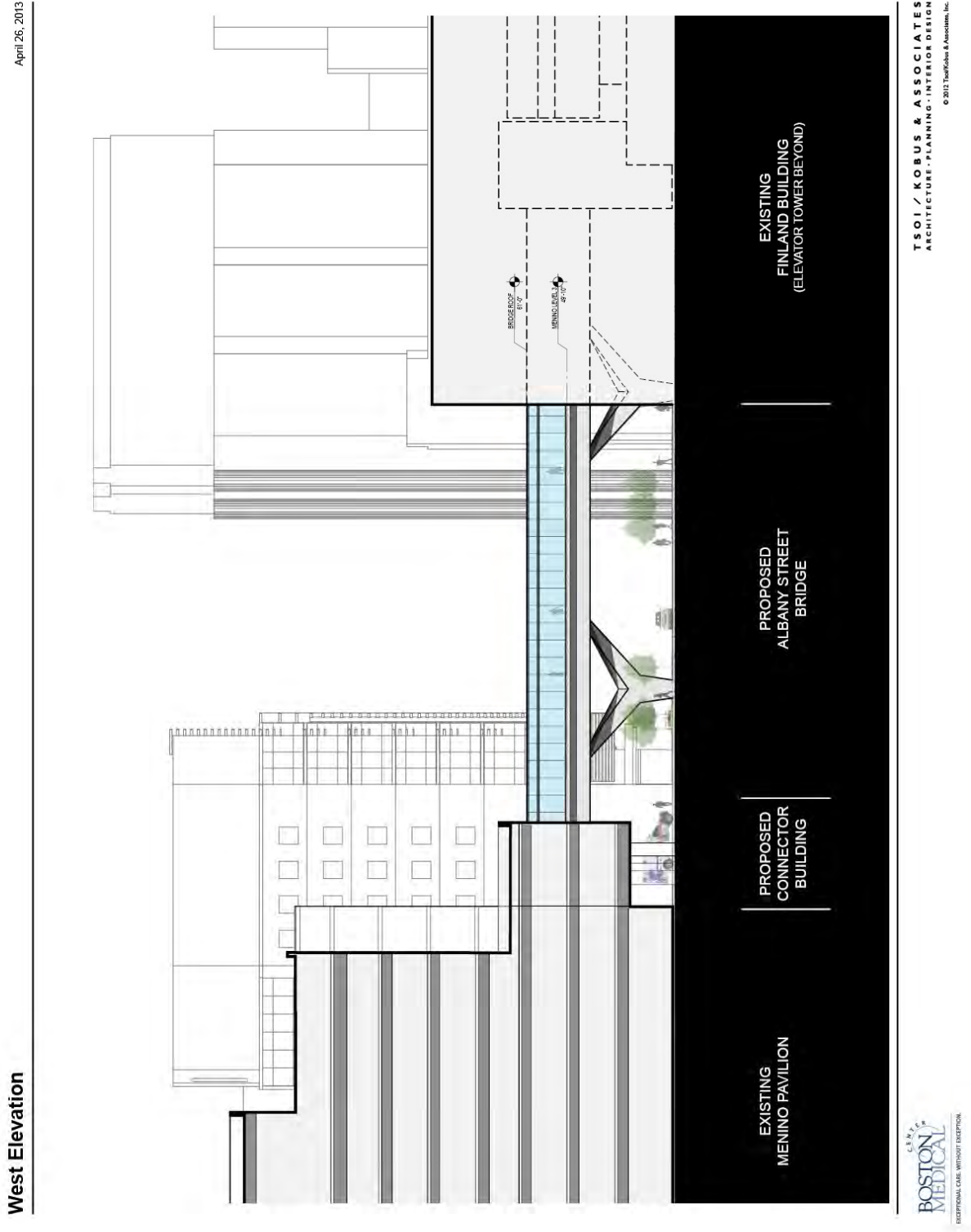
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Figure 2-42 New Patient Transport Bridge East Elevation



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Figure 2-43 New Patient Transport Bridge West Elevation



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2.1.5 *Campus Reconfiguration and Relocation Projects*

Boston Medical Center will be undertaking departmental reconfigurations as part of the campus realignment and consolidation to provide better departmental adjacencies and patient flow, operational efficiencies and an improved patient experience. Improvements include reconfiguration of the existing Emergency Department and Radiology Department including a new walk-in patient entrance and expanded drop-off area, renovation of existing inpatient surgery, relocation of existing cafeteria, and relocation of the Maternity Department as well as other enabling projects.

See Figures 2-44 through 2-50 for Reconfiguration and Relocation Projects.

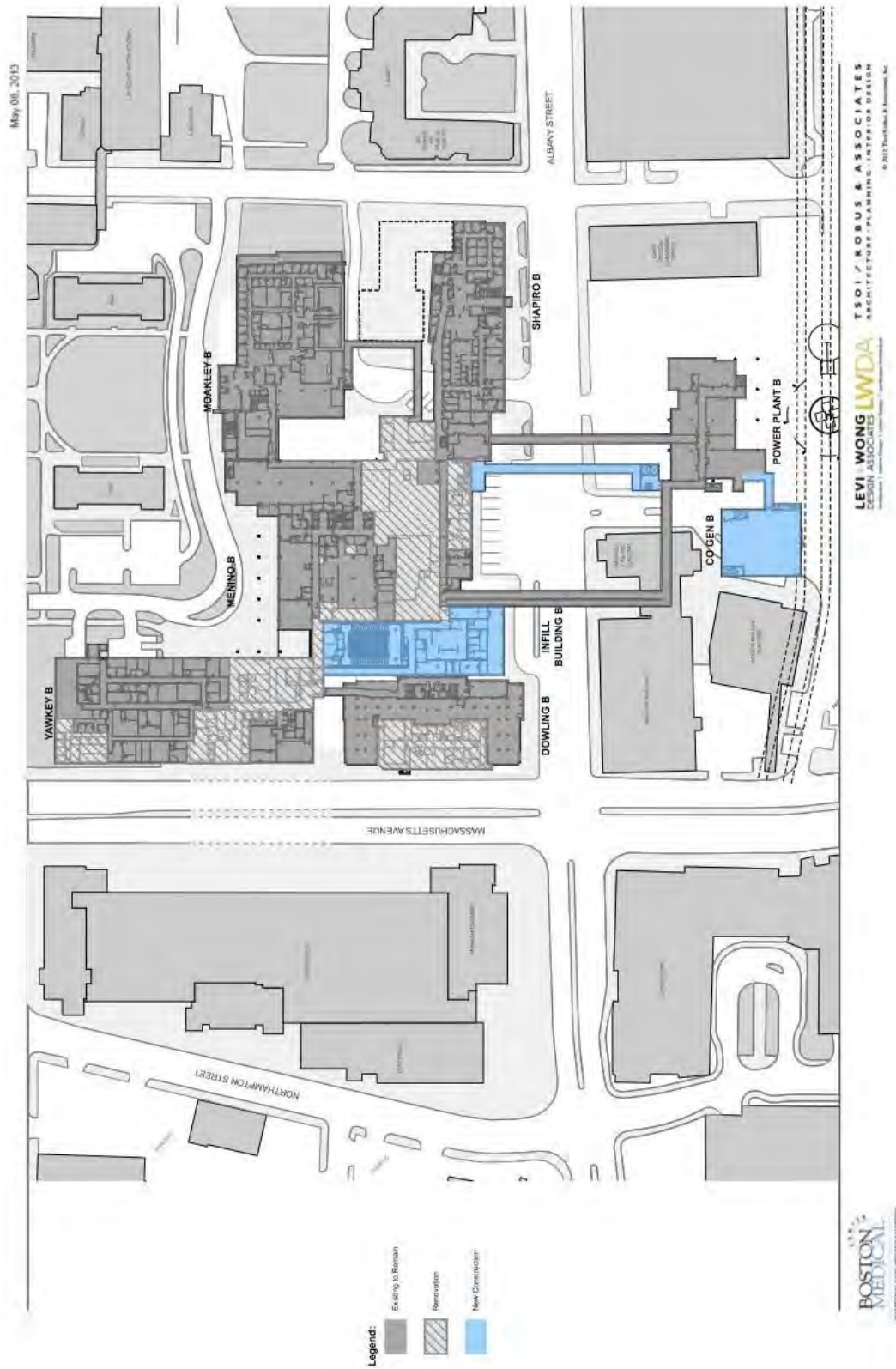
2.1.6 *Campus and Building Maintenance Projects*

Boston University Medical Center will continue to pursue various campus and building maintenance activities throughout the term of the IMP. These include: replacing aging infrastructure throughout the campus; upgrading and replacing finishes in all facilities; ongoing general operational improvements; maintaining plant materials in the constructed planters in the median strips on Massachusetts Avenue completed as part of the Massachusetts Avenue Reconstruction Project; and improvements to the Albany Street sidewalk to enhance the pedestrian experience along the street and to assist patients and visitors in wayfinding.

During the term of the IMP, Boston University Medical Center will also continue to maintain the various open spaces that are located throughout the campus, including the new 12,000 square foot park constructed in conjunction with the Albany Fellows Graduate Student Residence located at 815 Albany Street.

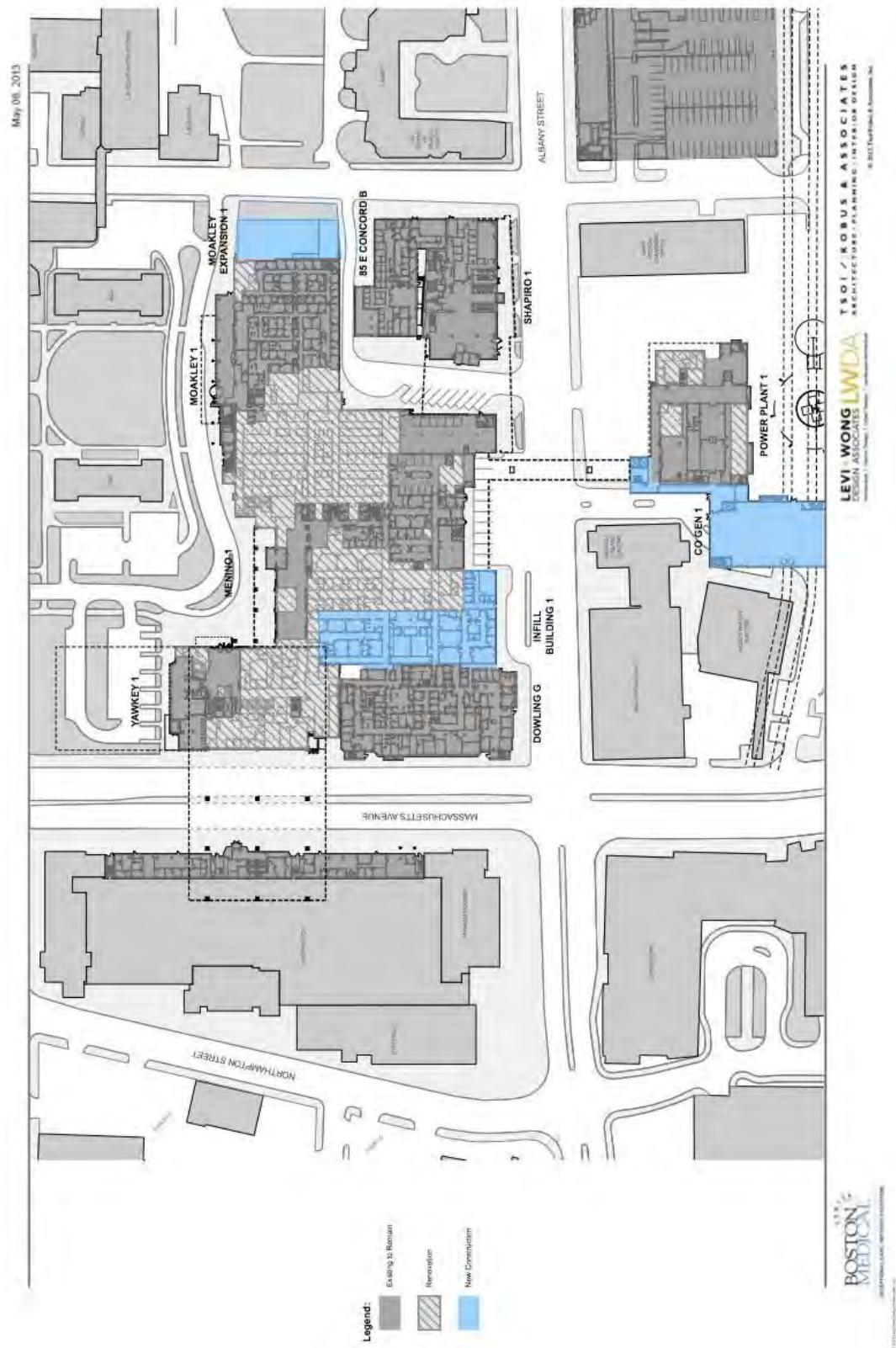
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Figure 2-44 Reconfiguration and Relocation Projects Basement Level Floorplan



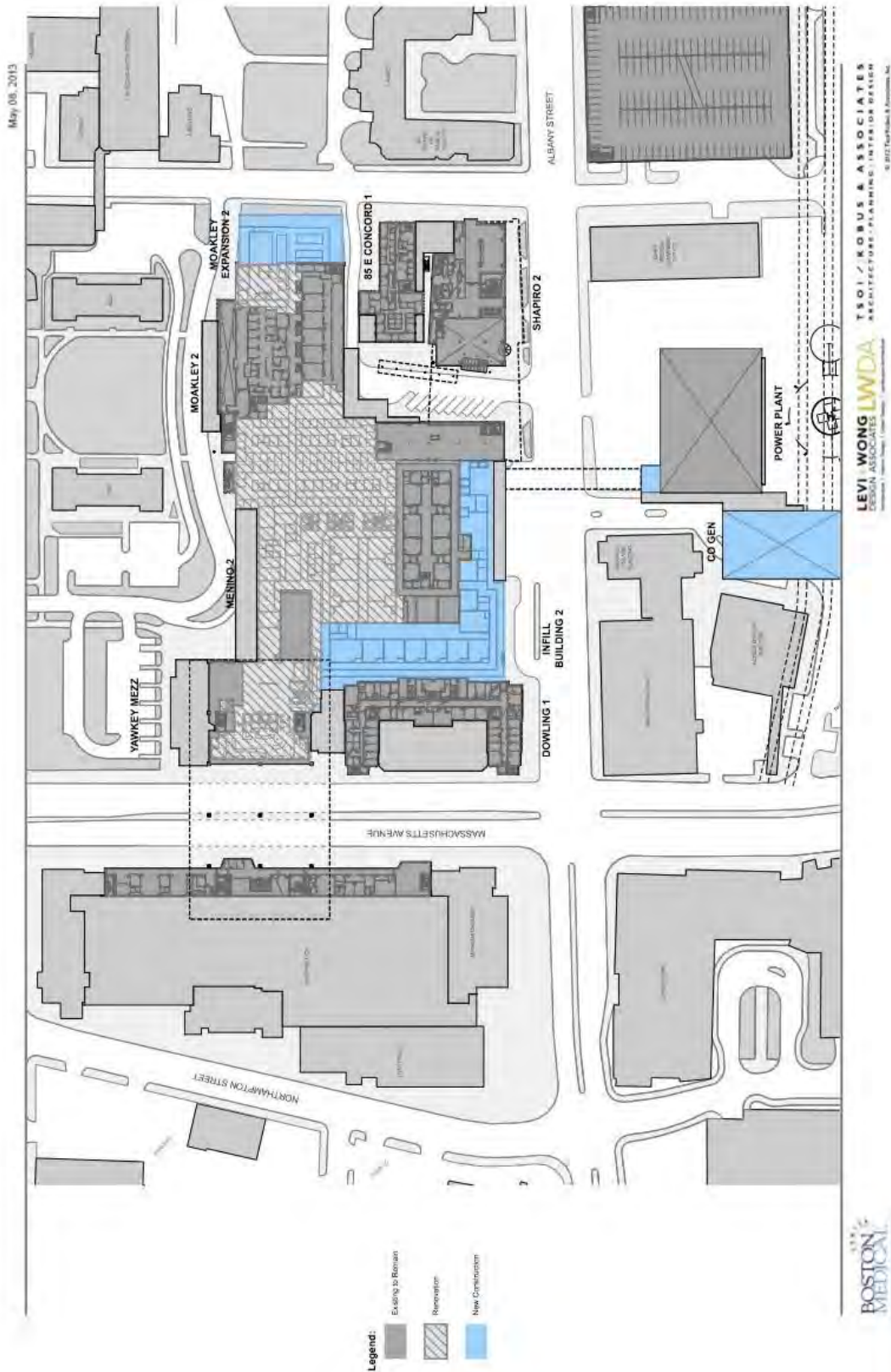
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Figure 2-45 Reconfiguration and Relocation Projects First Level Floorplan



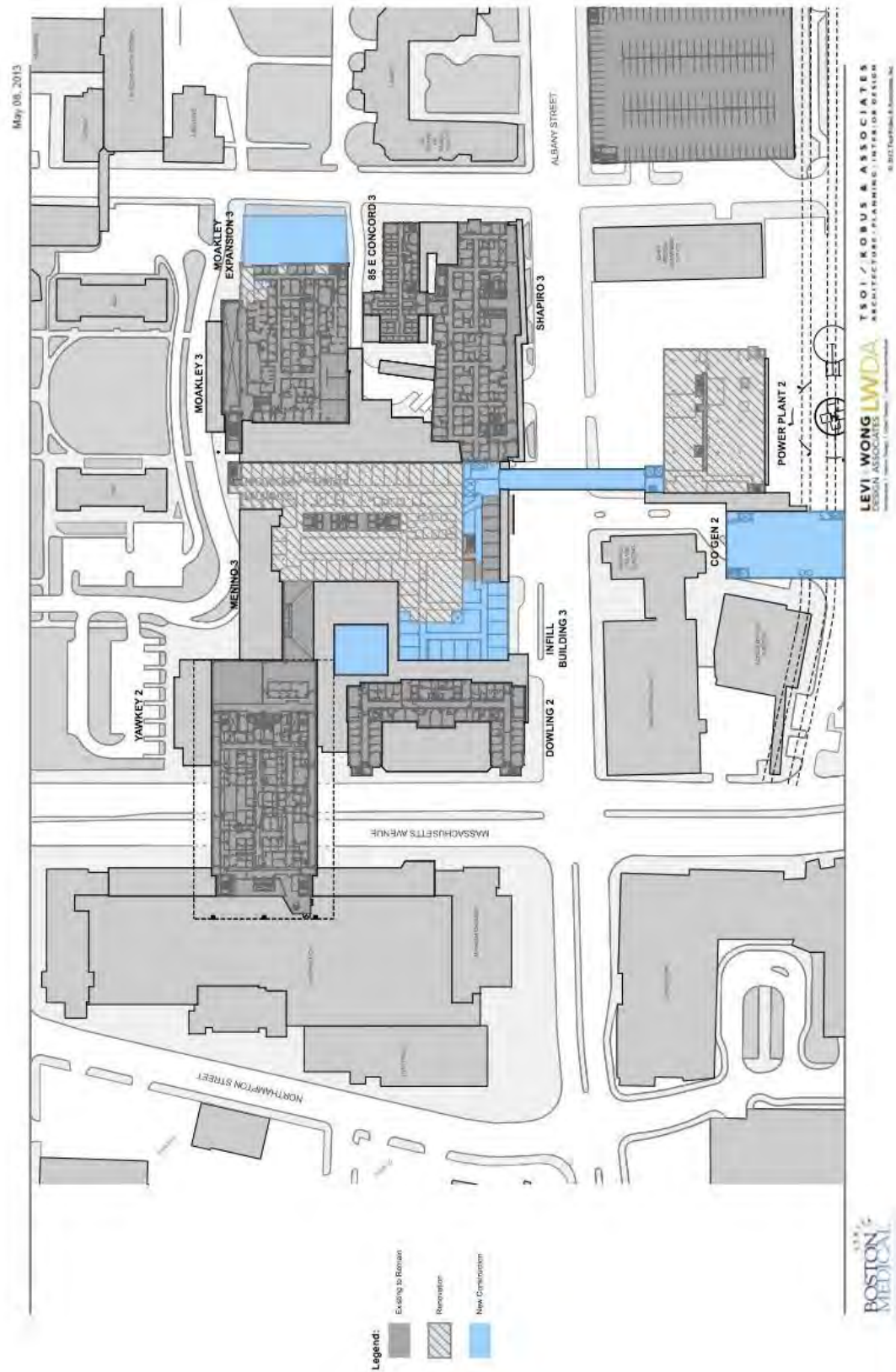
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Figure 2-46 Reconfiguration and Relocation Projects Second Level Floorplan



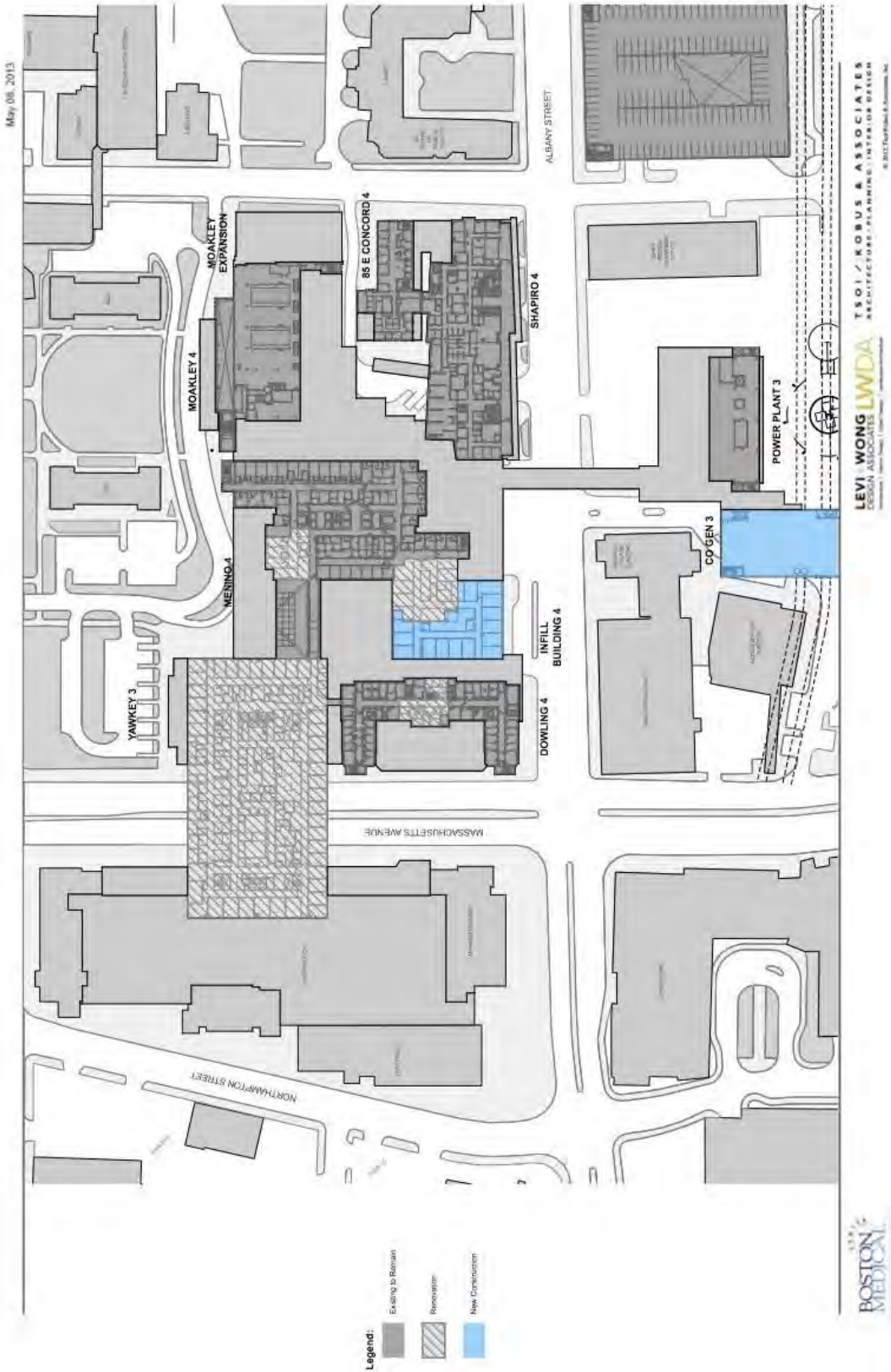
2.0 SUMMARY & PROJECT DESCRIPTION

Figure 2-47 Reconfiguration and Relocation Projects Third Level Floorplan



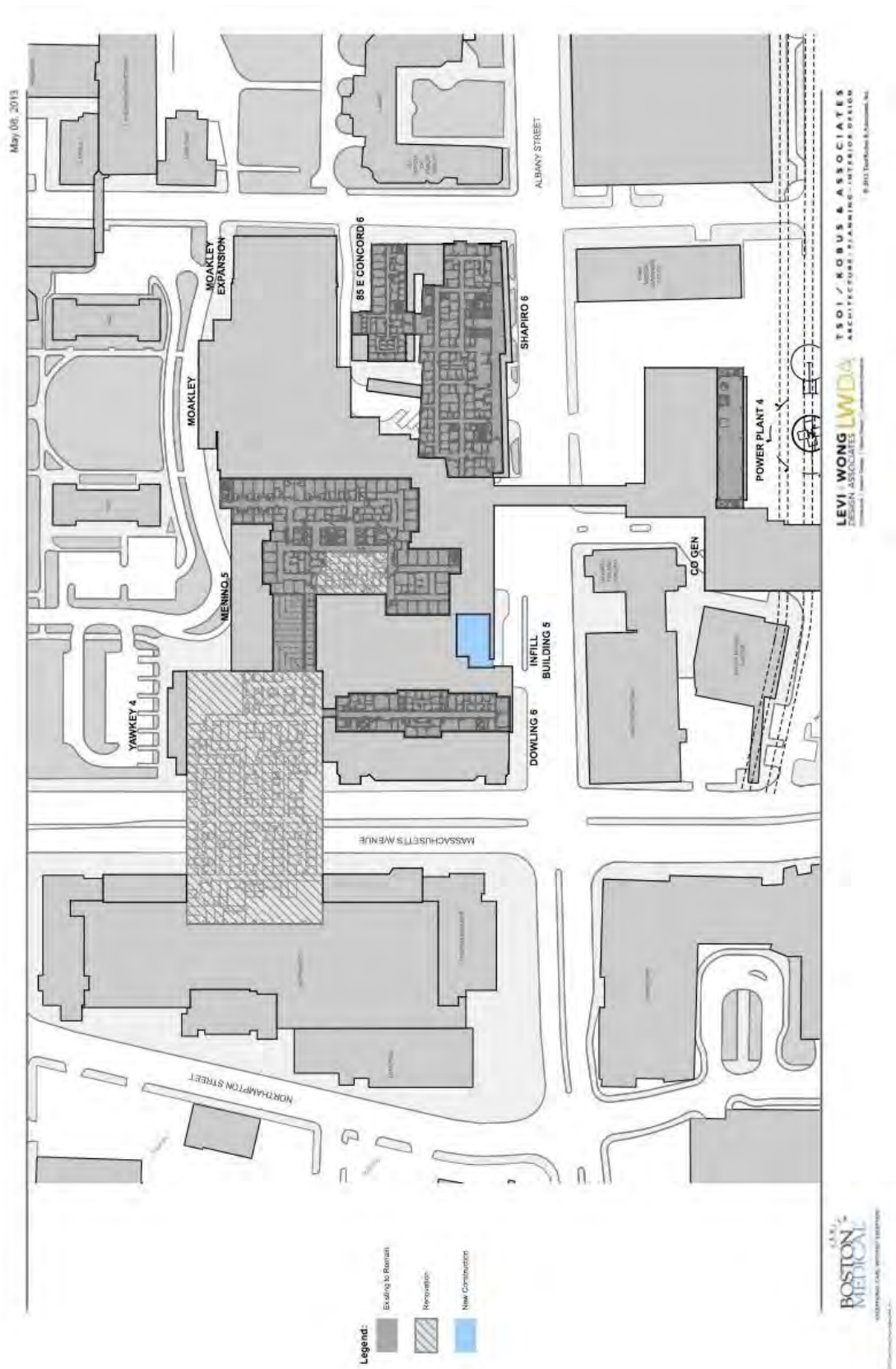
2.0 SUMMARY & PROJECT DESCRIPTION

Figure 2-48 Reconfiguration and Relocation Projects Fourth Level Floorplan



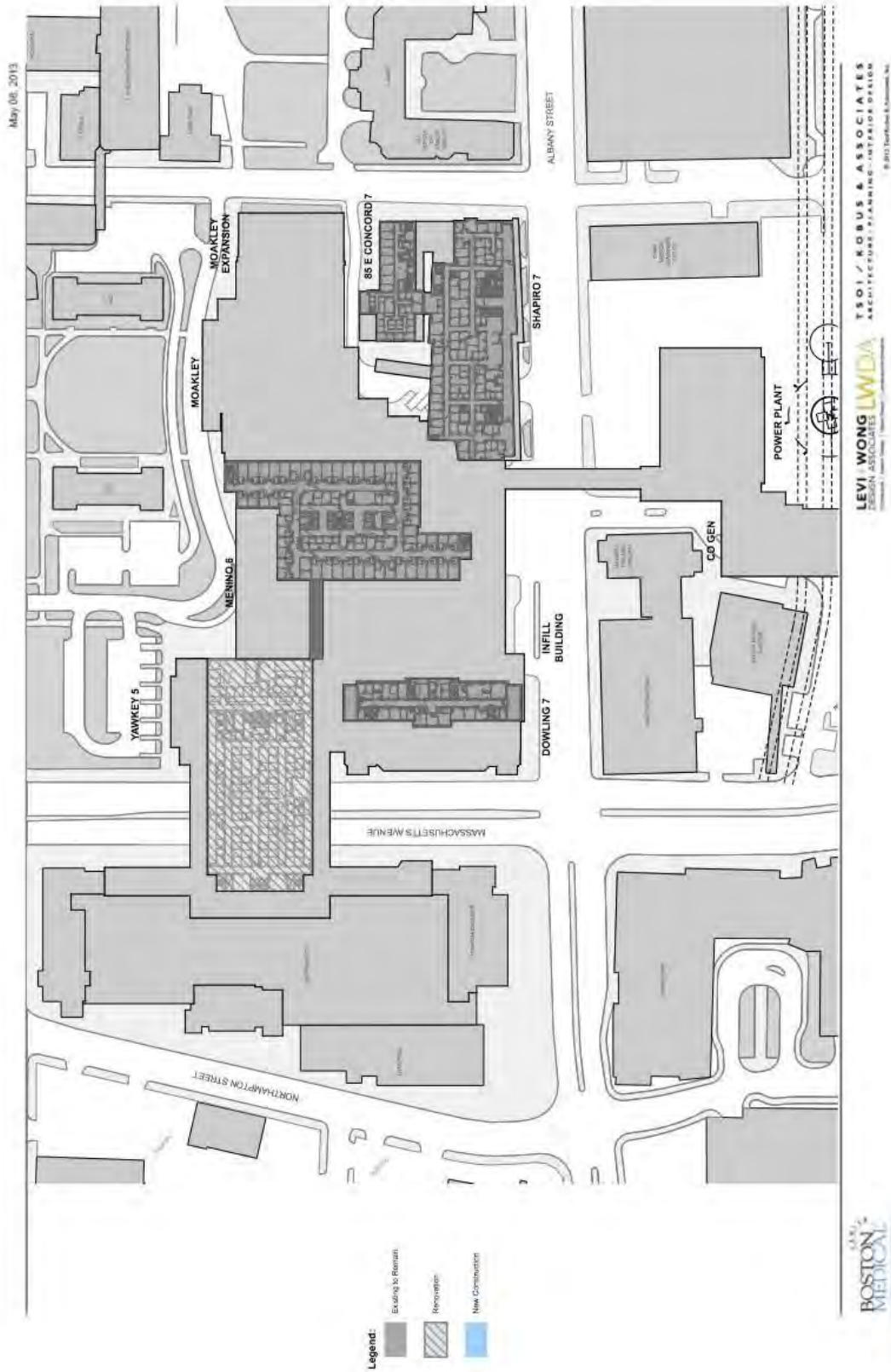
2.0 SUMMARY & PROJECT DESCRIPTION

Figure 2-49 Reconfiguration and Relocation Projects Fifth Level Floorplan



2.0 SUMMARY & PROJECT DESCRIPTION

Figure 2-50 Reconfiguration and Relocation Projects Sixth Level Floorplan



2.0 SUMMARY & PROJECT DESCRIPTION

2.1.7 Support Operations and Infrastructure

The existing loading dock at the Menino Pavilion is undersized for the current and future needs of the Boston University Medical Center's West Campus. The current loading dock location creates a problematic situation forcing trucks to back up off Albany Street and overhang the pedestrian sidewalk while parked.

In the first five years of the IMP, an interim loading dock and materials handling area will be created to alleviate conflicting vehicular and pedestrian circulation caused by the current configuration. The interim loading dock will be located on the north face of the existing Power Plant on Albany Street, utilizing the existing dock and contiguous storage spaces. The current curb cut along Albany Street will be slightly modified to allow trucks to maneuver on site and access the interim docks at the north face of the existing Power Plant. This relocation will immediately alleviate the current truck access condition by transferring all movement from Albany Street to the parking lot in front of the existing Power Plant.

Materials will be processed within the existing Power Plant with space created to manage clean and soiled materials. Clean materials will be transported to the Central Processing Department in the basement of the Menino Pavilion using the new elevator tower and through the new Bridge. Due to the relocation of the loading dock, a new below grade tunnel is proposed beneath Albany Street to transport soiled materials from the Menino Pavilion to the Power Plant. This new tunnel will replace the current function provided at the existing loading dock that will be relocated to the interim location at the existing Power Plant. The new tunnel will be used for transporting soiled materials, including medical waste and trash, while clean materials will be transported through the new Bridge providing for improved safety in material handling operations.

The interim relocation of the loading dock and materials handling provides a solution that is consistent with Boston University Medical Center's broader urban design goal for continued transformation of the Albany Street image. This action promotes the separation of service vehicles and pedestrians by removing truck circulation from the north side of Albany Street. This solution provides for the consolidation and elimination of three existing curb cuts along the north side of Albany Street. On the south side of Albany Street, the existing curb cut located between the existing Power Plant and Finland Building will be reduced to one lane. The existing curb cut in front of the Power Plant for truck access will be relocated to better align with existing loading docks.

The curb cut consolidation in conjunction with proposed sidewalk improvements similar to those associated with the Shapiro Ambulatory Care Center will foster a more unified, continuous, and pedestrian friendly streetscape.

2.2 Project Site

The proposed projects will be located within the West Campus. See Figure 2-51 Project Sites Locus Plan below. (See also Figure 1-6 Campus Adjacencies Plan and Figure 2-1 IMP Projects Under Large Project Review for additional reference.)

2.0 SUMMARY & PROJECT DESCRIPTION

2.2.1 Moakley Cancer Center Addition

The Proposed Moakley Cancer Center Addition will be located directly east of the existing Moakley Cancer Center and has frontage along East Concord Street. The north face is located along the Moakley and Menino drop-off drive and is aligned with the northern edge of the existing Moakley Cancer Center building. The south face is also aligned with the existing building and has frontage along Shapiro Drive. The east face abuts East Concord Street further defining the existing pedestrian travel path while creating a distinct bookend to the green behind the Talbot building.

2.2.2 New Inpatient Building Phase 1

The New Inpatient Building Phase 1 is located on the north side of Albany Street and is proposed to replace the 3-story section of the existing Dowling Building and the current Emergency Department drop-off adjacent to the Menino Pavilion. The first phase of the New Inpatient Building is an infill project bordered directly on the north, east, and west sides by the Yawkey Ambulatory Care Center, Menino Pavilion, and the Dowling Tower, the remaining portion of the Dowling building, respectfully. The connector wing will span above the existing ambulance bays to the south of the Menino Pavilion. The first level will align with the existing Menino Pavilion Level 2 while the second level will align with Menino Pavilion Level 3 and Shapiro Ambulatory Care Center Level 3. The south edge of the project site engages the pedestrian streetscape along Albany Street.

2.2.3 BMC Energy Facility

The proposed Energy Facility site is located adjacent to the existing Power Plant at 750 Albany Street on the BUMC Campus and north of the Massachusetts Avenue Connector. The other immediately abutting properties include the Finland Building located just to the north which accommodates offices of the Boston Public Health Commission, and the Woods-Mullen Shelter to the west which is a homeless shelter.

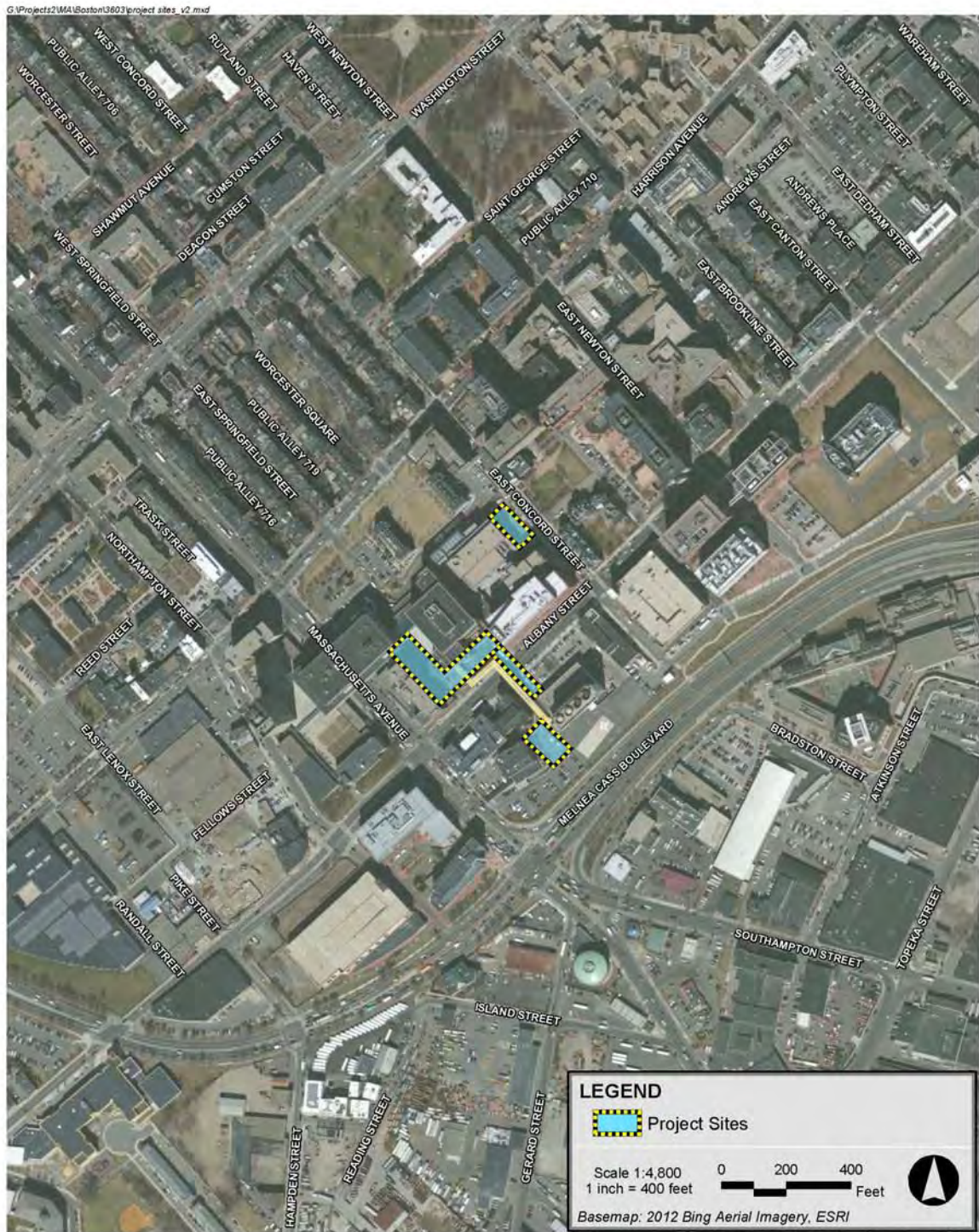
The site is currently occupied by BMC's oxygen farm and is also used as an access way to a paved parking area at the corner of Massachusetts Avenue and the Massachusetts Avenue Connector. A portion of the project may be located on land currently owned by University Associates Limited Partnership. The Energy Facility will require the existing Med Flight helipad to be shifted to the east. The site also extends to the south toward the Massachusetts Avenue Connector and spans the Roxbury Canal. The general area is urban in nature.

2.2.4 New Patient Transport Bridge

The new Bridge will be located within the Boston University Medical Center West Campus. The project site is located both on the north and south sides of Albany Street with the Bridge proposed to cross south to north over Albany Street in the approximate location of the existing yellow utility tube.

2.0 SUMMARY & PROJECT DESCRIPTION

Figure 2-51 IMP Project Sites Locus Plan



Boston University Medical Campus (BUMC) Boston, MA



Figure 1
Project Sites

2.3 Building Program and Approximate Project Dimensions

2.0 SUMMARY & PROJECT DESCRIPTION

2.3.1 Moakley Cancer Center Addition

The proposed Moakley Cancer Center Addition is comprised of departments displaced by the proposed expansion of the Emergency Department and the Trauma Center as well as the Centralized Surgical Department. The addition will house the displaced departments including Endoscopy and Digestive Disorders. It will also provide for increased volume in outpatient services. Minor renovations will be made to the existing Moakley Cancer Center to allow circulation within the building. The Moakley Cancer Center Addition will be approximately 27,800 square feet and approximately 66 feet in height from grade to the top of the roof screen.

2.3.2 New Inpatient Building Phase 1

The proposed first phase of the New Inpatient Building will provide expanded space for the Emergency Department, Trauma Center, Centralized Radiology Department, Surgical Department and Inpatient beds. The project along with renovations within the existing Menino Pavilion will allow for the consolidation of clinical functions to the West Campus. The connector wing will also provide increased support and circulation space and vital connections to adjacent campus buildings aligning with the existing Menino Pavilion Level 2, Menino Pavilion Level 3 and Shapiro Ambulatory Care Center Level 3.

The New Inpatient Building Phase 1 will be approximately 78,800 square feet and approximately 74 feet in height from grade to the top of the roof screen.

2.3.3 BMC Energy Facility

The proposed Energy Facility is comprised of spaces designated for primary mechanical equipment which includes three (3) dual fuel steam boilers, a combustion turbine generator (CTG) with a matched heat recovery steam generator (HRSG). The CTG will have a heat recovery steam generator to comprise one complete power island. The power island will be provided with auxiliary systems and ancillary equipment necessary for production of steam and electricity through cogeneration.

The Energy Facility will also include associated electrical switchgear and a transformer vault, emergency electrical rooms as well as auxiliary equipment/systems and associated distribution infrastructure. Auxiliary equipment/systems include natural gas compressors, life safety/emergency generators, cooling towers, air handling units, condensate and feed water tanks/pumps, treated water system, control system, natural gas, chemical treatment, ammonia, fuel equipment/piping, and plant air systems. Other programmed spaces include a Control Operator room.

A utility farm will be required for additional equipment including a generator, gas compressor for turbine and control isolation transformer. This farm will be located to the south of the Energy Facility along the Massachusetts Avenue Connector and will be screened by a low, concrete wall. Landscaping will be provided to screen it further from the Massachusetts Avenue Connector vehicular approach.

2.0 SUMMARY & PROJECT DESCRIPTION

The Energy Facility will be approximately 38,500 square feet and approximately 100 feet in height from grade to the top of the roof screen. Emissions stacks will be approximately 160 feet in height from grade.

2.3.4 New Patient Transport Bridge

The new Bridge will be comprised of spaces for patient transport, clean material handling, and utility connections. The new Bridge will also consist of 1-story corridor located at grade adjacent to the existing Power Plant to provide access for the Med Flight patients from the helipad connecting to a new elevator and stair tower in the Bridge. The new Bridge will be approximately 7,100 s.f. and approximately 43 feet in height from grade. The elevator overrun will be approximately 50 feet in height from grade. (The Bridge mass begins 27 feet from grade and will be 16 feet in height.) The 1 story corridor will be approximately 16 feet in height from grade.

Table 2-1 below provides a detailed list of program components for each project.

Table 2-1 Proposed Project Square Footage Table

MOAKLEY CANCER CENTER ADDITION	Square Feet	Program and Comments
Level 0 (basement)	6,600	Add Alternate - Shell Space
Level 1	6,600	Otolaryngology, ENT Expansion
Level 2	7,300	Endoscopy
Level 3	7,300	Digestive Disorders
Total Moakley Cancer Center Addition	27,800	
NEW INPATIENT PHASE 1	Square Feet	Program and Comments
<u>New Inpatient Building Phase 1</u>		
Level 0 (basement)	13,700	250 seat Amphitheater
Level 1	16,700	Radiology, Emergency Department
Level 2	23,500	Surgical Support, Circulation, Connector
Level 3	13,400	Inpatient beds, Connector
Level 4	9,400	Inpatient beds
Level 5	2,100	Mechanical
	78,800	

2.0 SUMMARY & PROJECT DESCRIPTION

Table 2-1 Proposed Project Square Footage Table (continued)

BMC ENERGY FACILITY	Square Feet	Program and Comments
Level 0 (basement)	8,250	Fire Protection Equipment, Entering/Incoming Utility Services
Level 1	10,750	Three Boilers, Water Treatment and Chemical Treatment Equipment, Fuel Oil Equipment, Condensate Surge Tanks, Blowdown Heat Recovery
Level 2	9,750	One Combustion Turbine Generator and Heat Recovery System Generator, Turbine/HRSG Auxiliary Equipment, Control Room, Plant Air Compressors
Level 3	9,750	Electrical Switch Gear, Transformer Vault, Emergency Power Room
Roof	0	Air Handling Equipment, Three Gas Compressors, Cooling Tower, Boiler Stack, HRSG Stack
Total BMC Energy Facility	38,500	
NEW PATIENT TRANSPORT BRIDGE	Square Feet	Program and Comments
Level 1 (at grade)	2,100	Med Flight Corridor
Level 3	5,000	Patient and Material Transport
Total New Patient Transport Bridge	7,100	

2.4 Anticipated Permits, Reviews, and Approvals

Table 2-2 on the following page catalogs the permits, reviews, and approvals anticipated throughout the process for the proposed IMP Projects. Those specifically related to the Energy Facility include Department of Environmental Protection, Division of Air Quality Control, Environmental Results Program, and the Department of Public Safety, Storage Tank Permit.

2.0 SUMMARY & PROJECT DESCRIPTION

Table 2-2 Anticipated Permits, Reviews and Approvals

Agency Name	Permit / Review / Approval
Federal	
Federal Aviation Authority	Construction Permit for Temporary Airspace Obstruction
State	
Executive Office of Environmental Affairs, Massachusetts Environmental Policy Act	Secretary's Certificate
Department of Public Health	Determination of Need Plan Review Approval
Massachusetts Historical Commission	State Register Review
Department of Environmental Protection, Division of Air Quality Control	Non-Major Comprehensive Air Plan Approval Environmental Results Program Certification
Department of Environmental Protection, Division of Water Pollution Control	Groundwater Discharge Permit Clean Water Act - Pre-treatment Standards Sewer Extension/Connection Compliance Certification
Massachusetts Water Resources Authority	Sewer Use Discharge Permit Individual Discharge/Sewer Permit
Department of Public Safety	Storage Tank Permit
State Fire Marshall	Flammable Storage License
Massachusetts Health and Educational Facilities Authority	Project Financing, if required
Local	
Boston Redevelopment Authority	Article 80 Large Project Review
Boston Landmarks/South End Landmark District Commission	Application for Certificate of Appropriateness Article 85 Demolition Delay, if required
Boston Civic Design Commission	Design Review
Boston Groundwater Trust	Groundwater Trust Certification
Boston Transportation Department	Construction Management Plan
Boston Air Pollution Control Commission	Air Quality Control Permit
Boston Water and Sewer Commission	Construction Dewatering Permit Sewer Use Discharge Permit Stormwater Management Plan Groundwater Trust Certification Site Plan Approval
Boston Inspectional Services Department	Building and Occupancy Permits
Boston Public Improvement Department	Street and Sidewalk Occupancy Permits Specific Repair Plan / Discontinuance
Boston Public Works Department	Street Opening Permit Curb Cut Permit
Boston Fire Department	Plan Review
Joint Committee on Licenses	Flammable Storage License

2.0 SUMMARY & PROJECT DESCRIPTION

2.5 Zoning

The proposed Project is located within the Boston University Medical Center Institutional Master Plan area and shown on Map 1p of the south End Neighborhood District which was adopted by MAP Amendment No. 273 by the Boston Zoning Commission on June 28, 2000, subsequent to the approval by the BRA on May 18, 2000 of the BUMC IMP. In accordance with the provisions of the Boston Zoning Code and Article 64, the South End Neighborhood District Zoning, projects within the district are subject to the provisions of the approved Institutional Master Plan. The Boston University Medical Center IMP was approved by the BRA on May 18, 2000 and the Zoning Commission on June 28, 2000 and approved by the Mayor on July 13, 2000. In accordance with provisions of Section 80D-8, Renewal of Institutional Master Plan, The Boston University Medical Center IMP Renewal was approved by the BRA on June 22, 2010 and Zoning Commission on August 4, 2010 and approved by the Mayor on August 5, 2010. In accordance with provisions in Section 80D-2, institutional projects are required to be consistent with the approved Institutional Master Plan. Upon the approval of this proposed 2013 IMP Amendment by the BRA and the Zoning Commission, the projects named herein will be deemed to be consistent with the provisions of the Boston Zoning Code.

2.6 Public Review Process

The Boston Redevelopment Authority (BRA) has established a Task Force representing the area community to participate in the public review of the Project as part of the Boston University Medical Campus IMP. By filing this IMPNF/PNF, BMC formally initiates the IMP Amendment review process under Article 80D and Large Project Review Process under Article 80B with the Boston Redevelopment Authority.

The Proponent has engaged in meetings with the BRA, the Worcester Square Neighborhood Association and the South End Landmarks District Commission staff. The Proponent will also meet with the Task Force throughout the process and will continue an open and inclusive public process with all necessary public agencies and interested parties. Table 2-3 below provides a list of meetings that have been held to date.

Table 2-3 Community, Public, City Agency Meetings

Date	Group	Location
2/19/13	Boston Redevelopment Authority	City Hall, 9 th Floor
3/18/13	Boston Redevelopment Authority	City Hall, 9 th Floor
5/28/13	Worcester Square Neighborhood Association	Newton Pavilion
5/30/13	Boston Redevelopment Authority	City Hall, 9 th Floor
6/6/13	South End Landmarks District Commission Staff	City Hall, 8 th Floor