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BOOK 3: FINANCIAL SUBMISSION

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3.1 RFP GUIDELINES + DESIGN SUMMARY

RFP GUIDELINES + DESIGN SUMMARY

A-URBAN DESIGN GUIDELINES

Proposed buildings and site design must be consistent with the PLAN:

Nubian Square Urban Design Guidelines. The Proposed Property Site along with Parcels 9 and 10 forms the "gateway" into Nubian Square along Washington Street from the north.

RESPONSE: Our proposed project called "NUBA" is a development consisting of two residential blocks located on top of a one-story podium consisting of live/work and institutional uses, and an adjoining parktentatively called "Roxbury Gateway Park".

NUBA refers to a mountain range in one of the most remote in all of Sudan. At one time the area was considered a place of refuge, bringing together people of many different tongues and backgrounds who were fleeing oppressive governments. The people gathered and settled at the foothills of the Nuba mountain range. Our design proposal embraces the idea of connecting different people and welcoming them into the "foothills" of our "mountainous" residential blocks.

To reflect the site's location within the Nubian Square Cultural District, NUBA incorporates a complementary mix of uses and design that is innovative, contextually appropriate, and highlights the historic sites that are adjacent to the Proposed Property Site. Specifically, we have been in direct communication with the proponents of the Nawn Factory building, Benjamin Franklin Institute of Technology and have coordinated our design proposal with theirs.

B-USE GUIDELINES

The use guidelines are reflective of the engagement process and are set forth to ensure alignment with community desires. Key use guidelines are as follows:

I. The base of the building must be a combination of retail, cultural and/or entertainment uses that contribute to the identity of the Nubian Square Cultural District. Office uses are permissible at the ground floor level, provided that they create an active and engaging streetscape to enliven the neighborhood.

RESPONSE: The ground floor of NUBA consists of a museum branch of the NCAAA- National Center of Afro-American Artists, (I) retail space- proposed as a small coffee shop-, (8) "micro" commercial live/ work condominium spaces, a community room, and two residential lobbies. The NCAAA branch is located adjacent to the proposed park and has expressed the intention to use the space as a revolving sculpture garden, and as a place to present lectures and films.

The "micro" live/work spaces are approximately 400sf with large storefront windows and 14'+ high ceilings. With expansive storefronts located directly on Melnea Cass Blvd., these spaces offer the potential for great visibility to passersby and ideal for any business in search of exposure. The relatively small size of the spaces makes them more affordable than a typical storefront retail space. Each micro live/work space will be designed to accommodate a second level loft space that each tenant can customize as desired. With the combination of high visibility, spatial flexibility and lower costs, the micro live/work spaces may be especially attractive to creative professionals such as artists, graphic designers, etc.

NUBA, LLC PARCEL 8| BOSTON, MA 3

RFP GUIDELINES + DESIGN SUMMARY

2. The upper levels are required to have residential uses in order to address the housing needs in Nubian Square. However, partial commercial use is also permitted, as long as housing is a majority of the use of the upper floors.

RESPONSE: The upper floors of NUBA consist of two residential blocks. Building I - closest to the park- is a condominium building and houses 35 units. Building 2- is a rental apartment building and houses 60 units.

C-MASSING HEIGHT AND ORIENTATION

Buildings should employ a variety of setbacks and building heights that create a volume that is articulated, varied and dynamic, responds to special views and corridors, and reinforces existing street wall conditions making certain the building fits well into its surrounding context.

I. New buildings must front and define the street edges along Melnea Cass Boulevard and Harrison Avenue. Buildings must remain set back from the corner of Washington Street and Melnea Cass Boulevard to allow for a significant open space that addresses the historic

significance of the Nawn Factory building and the Eustis Street Architectural Conservation District.

RESPONSE: The proposed NUBA development maintains and reinforces the edges along Melnea Cass Blvd. and Harrison Avenue, and is set back on Washington Street to allow for a park.

2. Building heights may vary from six to fifteen stories with lower heights/massing stepping down towards Washington Street and the Eliot Burial Ground. Building masses above six stories should be set towards Harrison Avenue.

RESPONSE: Our proposal embraces a mid-rise scale as we feel that taller buildings may not be consistent with other developments along Melnea Cass Blvd. To avoid the monotony of the same height from one side to another, our proposal steps from a high of 6 stories on Harrison Ave. down to 5 stories along Melnea Cass Blvd. and down to 4 stores abutting the park.

3. Building massing along Melnea Cass Boulevard should employ visual or physical breaks to provide for light, air and views and reduce a monolithic feel or wall-like effect along the street.

RESPONSE: We have introduced a large "slice" which visually cuts through and separates our upper blocks into two separate buildings. The "slice" aligns with Reed Street across Melnea Cass Blvd. and mitigates the wall-like effect that a monolithic building might otherwise have. In addition, we have introduced a series of "cuts"-in effect chunks excavated away from the larger building. These operations in effect, give the appearance of 5 smaller building masses as opposed to 2 large ones.

Regarding the roofline, we propose a mountainous or hilly roof profile that connects visually to the Blue Hills in the distance. It is this undulating profile that inspired the reference to the Nuba mountains. Specifically, we took the stair and elevator headhouses and shaped the building profiles to hide these protruding, unsightly elements. And we then put green roofs on top of the corresponding angled roof profiles. The overall effect is that of grass covered hills.

RFP GUIDELINES + DESIGN SUMMARY

4.ARCHITECTURAL DESIGN AND CHARACTER

New buildings should contribute to the identity of Nubian Square by recognizing its rich cultural and architectural history through careful consideration of building materials and façade expression.

I. Building character should acknowledge the special nature and gateway opportunity of the corner at Washington Street and Melnea Cass Boulevard.

RESPONSE: The overall building mass of NUBA- is one that steps down from 6 stories on the Harrison Ave. side to 4 stories adjoining the park. The idea is to pay deference to the park and the gateway location by progressively reducing the mass of the building as it gets closer. To create the symbolic gate, the landscape architect proposes a vertical totem at the corner of the park site. Combined the edge of our four-story block, the two elements frame the park space and give it a sense of great significance.

2. The Nawn Factory Site must be considered synergistically and in the design and development of the Proposed Property Site. New buildings may be contemporary in design, but must manifest an awareness of their immediate context by taking into account both the area's history as well as current needs, allowing for a blend of old and new architectural expressions.

RESPONSE: We have been in communication with one of the proponents of the Nawn Factory site and have incorporated their primary design concepts into our proposal. Our design pays great respect to the side elevation of the Nawn Factory by framing it between a residential block and digital totem, and reinforcing this with two lines flanking elm trees. The plaza is designed as a shared outdoor public space with the two buildings sponsoring active ground floor programs to animate it.

3. Proposals shall express the distinction of retail, commercial, and other public uses at the ground level in order to animate the edges of the street and help define the character of the neighborhood along Melnea Cass Boulevard and Washington Street

RESPONSE: Our proposed ground floor has a unique scallop shape which gives each ground floor tenant its own identity. The scallop shape originates from the desire to give each existing tree space for its canopy to grow uninterrupted. The resulting shape was then reflected into the footprint for each micro live/work space.

4. Proposed buildings must maintain the continuity of the street wall and provide a high percentage of transparency at the ground level in order to achieve a continuous and engaging pedestrian experience along Melnea Cass Boulevard.

RESPONSE: The ground floor has continuous storefront glass along three sides. The glass follows the scalloped podium shape except at the entry points. Here the glass is set back to create an entrance with a covered roof

RFP GUIDELINES + DESIGN SUMMARY

5. Architectural detailing (windows, doors, exterior cladding, masonry,etc.) should be attractive and be executed using materials of the highest quality, as well as being compatible with existing buildings in the area. Materials usage should strive to ground the building in the present and convey stability into the future.

RESPONSE: The building exterior is made primarily of a terra cotta rain screen system and matching integrated windows. The primary colors are brick orange/red and a dark gray. The orange/red color and vertically oriented punched windows are reminiscent of historic factory and mill buildings from the area. The dark grays are used on the sides or the inset areas. We have also introduced green painted vertical accents. The green color symbolically connects the trees and grass on the ground floor with the green roofs on the upper floors and roof. Conceptually then, the materiality of the new building is a reflection of local historic, contemporary and landscape design.

Because of the desire to create an energy efficient building, we are able to express the extra depth with deep recessed windows and panels. We also use this extra depth to introduce green colored accents on the inside faces of some of the panels. The accents are only visible when seen from oblique angles- and as a result, the building appearance changes depending upon where it is being viewed. On the sides and inset areas, some of the panels are outfitted with vertical light strips. These lights will help to brighten the area at night for safety/security and also to animate the building's unique forms.

5. ACCESS AND CIRCULATION

New development must be oriented strategically to make easy connections through the building(s) to nearby community amenities such as transit stations, landmarks and public parks as well as create and strengthen major public corridors to enhance pedestrian activity, encourage public transit and promote bicycle use. Proponents are particularly encouraged to coordinate with proponents for the adjacent Nawn Factory site in terms of access and circulation.

I. Primary pedestrian building entrances should be on Melnea Cass and Washington Street, with vehicular and service access from Harrison Avenue. The successful proponent will be expected to explore shared vehicle access from Harrison Avenue with the adjacent Harrison

Supply site, now proposed for redevelopment by the Benjamin Franklin Institute of Technology ("BFIT") for the relocation of its South End facility. Proponents are encouraged to contact BFIT for more information.

RESPONSE: Primary building entrances for the two residential buildings are located on Melnea Cass Blvd. Nearly all of the micro live/work spaces and the community room also have direct entrances off of Melnea Cass Blvd. (One of the units has its entrance on Harrison Avenue.) The NCAAA museum branch has its main entrance off the park plaza on the Washington Street side of the site. Vehicular access is located on a narrow driveway off of Harrison Avenue. The driveway leads to the ground floor parking garage of NUBA and can also be shared by the future BFIT development. There is also a bike path which runs parallel to the driveway and passes through the plaza between the Nawn Factory and our development.

RFP GUIDELINES + DESIGN SUMMARY

driveway and passes through the plaza between the Nawn Factory and our development.

2. Design should respond to landscape, pedestrian and bike accommodation improvements that are part of the Boston Transportation Department's Melnea Cass Design project by providing secure on-site bike storage for users and residents, in order to encourage bike use.

RESPONSE: Each residential building has its own bike storage room. We will also provide an outdoor bike rack along one side of the plaza space.

3. Proposals must demonstrate provisions of adequate but not excessive on-site parking for new residents, employees, and/or customers and strategies to prevent overburdening street parking used by area residents.

RESPONSE: We will provide 40-44 parking spaces inside a ground floor garage. The garage is not visible from any of the public streets surrounding the project site.

4. Safety, views and ease of navigation must be promoted in the design of the Proposed Property Site. Night safety is a particular concern of neighborhood residents, so structures must be designed with clear site lines. In addition, exterior lighting design must create well-lit open spaces and eliminate dark pockets in streetscapes.

RESPONSE: We will develop a comprehensive lighting design that will support and encourage activity on the ground floor on all four sides of the building. The park and plaza were purposefully designed to be open and highly visible from every direction. Landscape lights will illuminate the underside of the proposed Elm trees creating a well-lit, inviting area. As mentioned in the architectural detailing section, we will have some integrated vertical light strips set into the building façade. These lights are intended to brighten the area around the building for both safety and security. Our design also includes roof decks for the residential buildings. These spaces will also be illuminated using the same integrated vertical light strips as in the exterior façade.

6. OPEN SPACE/PUBLIC REALM/PUBLIC ART

The quality of the public realm surrounding any new development will play a significant role in shaping the everyday experience of the district. A project should strive to define a distinct and memorable public realm with innovative landscape design, enhanced paving, distinctive street furniture (light fixtures, benches, street trees) and create opportunities for temporary and

permanent public art. Accordingly, projects should address each of the following, keeping in mind the context of the area as a designated cultural district:

I. Provide a new distinct and memorable public realm, with an enhanced sidewalk experience around the site that creates an active, vibrant, and attractive public area that encourages people to gather.

RFP GUIDELINES + DESIGN SUMMARY

RESPONSE: We will re-pave the entire site area and add planting as indicated on the Site Plan.

2. Repair and/or replace, as appropriate, any alteration or damage of existing sidewalks, paving, lights and street trees that occurs during construction.

RESPONSE: Yes.

3. Create an inviting open space at the corner of Washington Street and Melnea Cass Boulevard, consistent with the Conservation and Preservation Requirements for the Park on page 13. This space should recognize the historic character of the adjacent Nawn Factory and Eustis Street Architectural Conservation District, and be designed as a gateway to the Roxbury Heritage State Park in accordance with the Roxbury Heritage State Park Master Plan.

RESPONSE: See proposed Landscape Design.

4. Provide a public realm of sidewalks, street trees, and street furniture that is well integrated into the Proposed Property Site and creates a continuous and engaging street level activity along Washington Street from Melnea Cass into Nubian Square.

RESPONSE: See proposed Landscape Design.

5. Create a bold and inventive site design incorporating public art, particularly installations that are interactive and have a direct influence on the community, encouraging a sense of place.

RESPONSE: See proposed Landscape Design.

6. Place disposal areas, accessory storage areas or structures and dumpsters at the rear of the property. Such areas must not abut the Eliot Burying Ground and must be appropriately screened from view.

RESPONSE: The trash, recycling, and storage areas will be located inside our ground floor garage area and not visible to public view.

7. Advance the goals of the Roxbury Cultural District to find and recognize Roxbury's cultural assets, and create tools, strategies, resources, and spaces that elevate the arts in Roxbury.

RESPONSE: With the museum branch of the NCAAA on the ground floor and adjoining the park, we will provide engaging, active public spaces to elevate the arts in Roxbury. With these anchoring spaces in place, we believe that creative professionals will be attracted to buy into the micro live/work spaces and thus fulfill the vision of a vital creative community on site.

7. RESILIENT DEVELOPMENT AND GREEN BUILDING DESIGN GUIDELINES

Proposed projects should support the community's and City of Boston's Carbon Free, Climate Resilient, and Healthy Community goals including the 2019 Carbon Free Boston report and DND's Zero Emission Buildings guidebook for affordable housing projects.

RFP GUIDELINES + DESIGN SUMMARY

RESPONSE: The roofs and lower roofs will be green roof design to mitigate against heat retention. On the ground floor, our scalloped podium design is sensitive to preserving the canopies of existing trees. Maintaining these canopies will mitigate against heat retention around the building.

a) Greenhouse Gas Reduction. New buildings should be designed as green low energy all electric structures that prioritize enhanced building envelope solutions and passive system

strategies and that are optimized for and include onsite solar renewable energy generation. As necessary projects should identify off site and procured renewable energy solutions sufficient for achieving net zero carbon emissions.

RESPONSE: Please see the report from the Green Consultant. But generally, our buildings will be designed as green low energy all electric structures and have a roof area for onsite solar renewable energy generation.

b) Higher Temperatures and Heat Events. Proposed projects should reduce heat exposure and heat retention in and around the building(s) and surrounding district. Strategies should include the use of building and paving materials with high Solar Reflectance and Solar Reflectance Index values and increased shade areas through landscaping, expanded tree canopy and shade structures. At a minimum, projects should achieve the LEED Sustainable Sites, Heat Island Reduction credit. Proponents should consider the inclusion of Green Roofs with plantings, especially for accessible roof spaces and sites limited access to open space.

RESPONSE: The roofs and lower roofs will be green roof design to mitigate against heat retention. On the ground floor, our scalloped podium design is sensitive to preserving the canopies of existing trees. Maintaining these canopies will mitigate against heat retention around the building.

- c) More Intense Precipitation: Proposed projects should integrate strategies to both mitigate the impact of storm water flooding to the Proposed Property Site and reduce the Proposed Property Site's contribution to storm water flooding in the neighborhood. Strategies should focus on pervious site materials, enhanced landscaping and Low Impact Development measures to capture, retain, and infiltrate storm water.
- d) Rising Sea Levels: Proposed projects should reduce risks of coastal and inland flooding through elevating the base floor, critical utilities, mechanical systems and infrastructure above anticipated flood levels. Proposed projects should utilize flood proof materials below any future flood level and relocate vulnerable uses to higher floors.

RESPONSE: The project will be lyfted up, if necessary, to incorporate the factors mentioned above.

e) Sheltering in Place: Proposed projects should provide for a cool/warm community room and essential systems to allow for extended sheltering in place and accommodation of local residents during an extreme situation

RESPONSE: We have a generously-scaled community room on the ground floor at the corner of Melnea Cass Blvd. and Harrison Ave. The space will be outfitted with kitchen and accessible bathroom and will be furnished with comfortable seating.





NUBA at Roxbury Gateway

INTRODUCTION

Our proposed project called "NUBA" is a development consisting of two residential blocks located on top of a one-story podium consisting of live/work and institutional uses, and an adjoining park- tentatively called "Roxbury Gateway Park".

NUBA refers to a mountain range in one of the most remote in all of Sudan. At one time the area was considered a place of refuge, bringing together people of many different tongues and backgrounds who were fleeing oppressive governments. The people gathered and settled at the foothills of the Nuba mountain range. Our design proposal embraces the idea of connecting different people and welcoming them into the "foothills" of our "mountainous" residential blocks.

To reflect the site's significant location within the Nubian Square Cultural District, NUBA incorporates a complementary mix of residential, cultural, and commercial uses that is innovative and contextually appropriate. At the same time, the proposal connects beyond its site- gaining formal inspiration for the roof profile from the distant Blue Hills to the south. And to the north, residents on the upper floors and roof decks enjoy uninterrupted views to the the skyline of Boston.

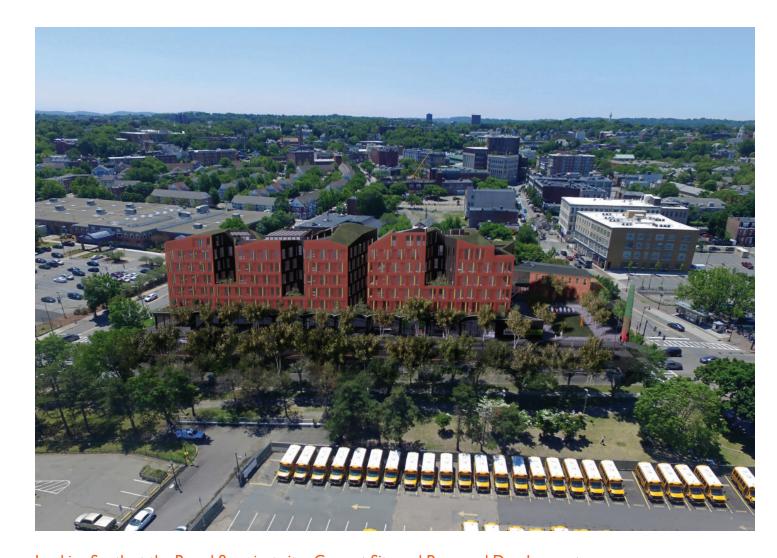






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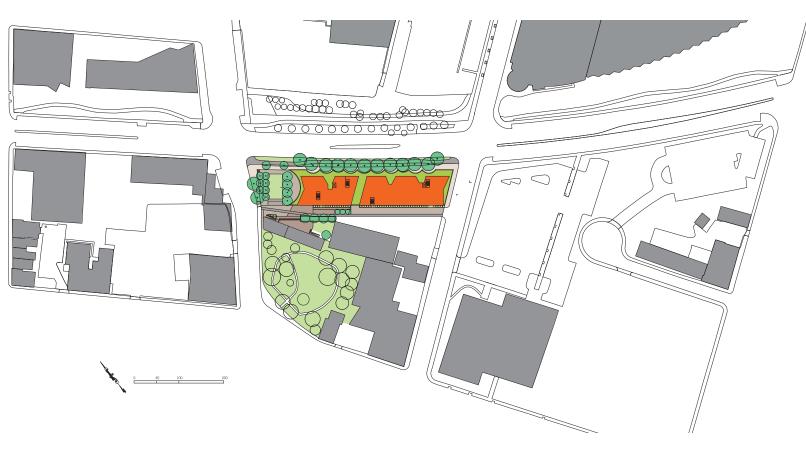
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Looking South at the Parcel 8 project site- Current Site and Proposed Development



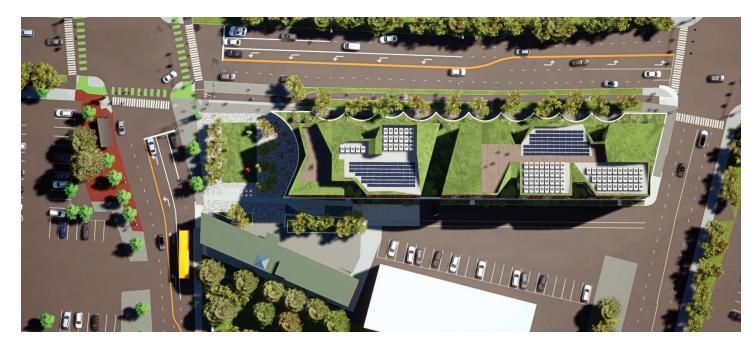




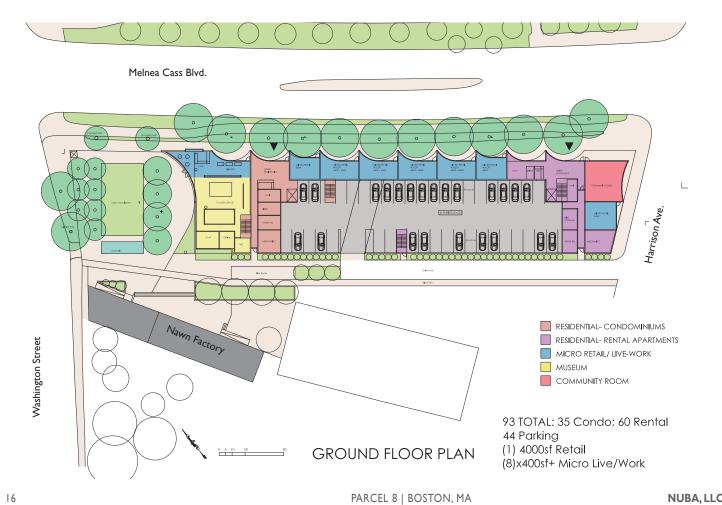
NUBA- at Roxbury Gateway

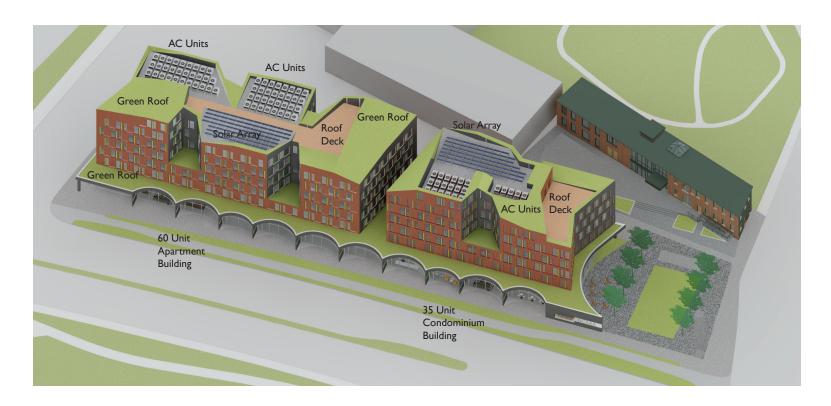


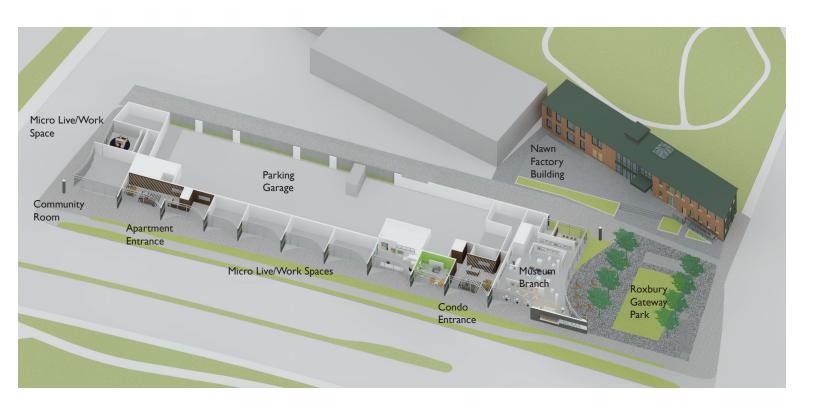
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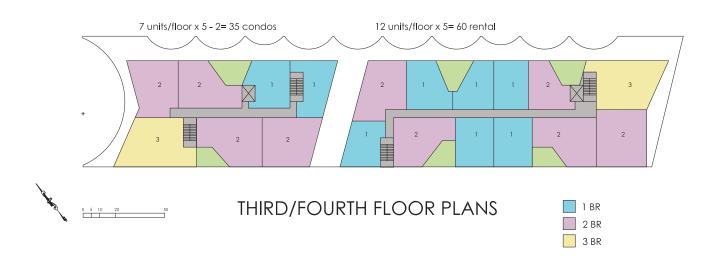


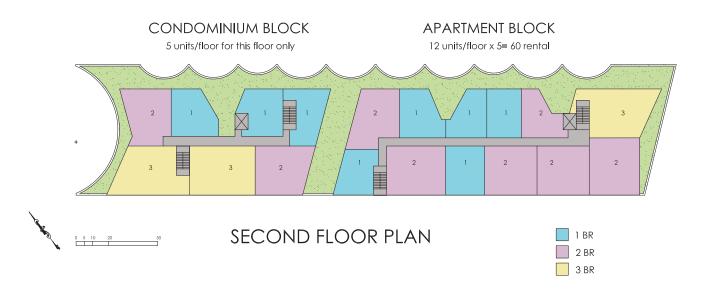
Plan View of proposal in site context







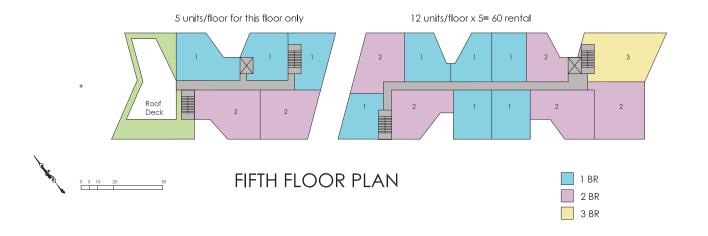


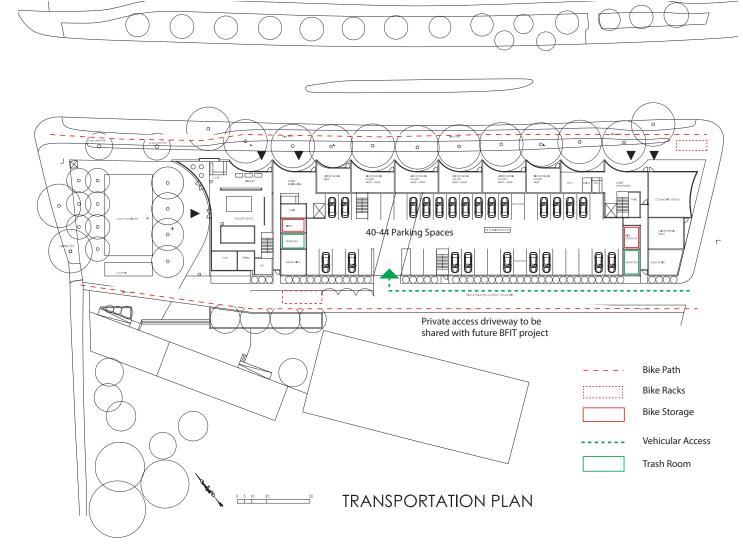














3.7 ARCHITECTURAL DESIGN

ARCHITECTURAL DESIGN AND CHARACTER

The overall building mass of NUBA- is one that steps down from 6 stories on the Harrison Ave. side to 4 stories adjoining the park. The idea is to pay deference to the park and the gateway location by progressively reducing the mass of the building as it gets closer. To create the symbolic gate, the landscape architect proposes a vertical totem at the corner of the park site. Combined the edge of our four-story block, the two elements frame the park space and give it a sense of great significance.

Our design pays great respect to the side elevation of the Nawn Factory by framing it between a residential block and digital totem, and reinforcing this with two lines flanking elm trees. The plaza is designed as a shared outdoor public space with the two buildings sponsoring active ground floor programs to animate it.







ARCHITECTURAL DESIGN AND CHARACTER

The building exterior is made primarily of a terra cotta rain screen system and matching integrated windows. The primary terra cotta colors are brick orange/ red and a dark gray. The orange/ red color and vertically oriented punched windows are reminiscent of historic factory and mill buildings from the area. The dark grays are used on the sides or the inset areas. We have also introduced green painted vertical accents. The green color symbolically connects the trees and grass on the ground floor with the green roofs on the upper floors and roof. Conceptually then, the materiality of the new building is a reflection of local historic, contemporary and landscape design.

Because of the desire to create a net zero building, the exteriors are made with double wall construction. As a result, we are able to express the extra depth with deep recessed windows and panels. We also use this extra depth to introduce green colored accents on the inside faces of some of the panels. The accents are only visible when seen from oblique angles- and as a result, the building appearance changes depending upon where it is being viewed. On the sides and inset areas, some of the panels are outfitted with vertical light strips. These lights will help to brighten the area at night for safety/security and also to animate the building's unique forms.



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MICRO LIVE/WORK SPACES

The Our proposed ground floor has a unique scallop shape which gives each ground floor tenant its own identity. The scallop shape originates from the desire to give each existing tree space for its canopy to grow uninterrupted. The resulting shape was then reflected into the footprint for each micro live/work space.

Each space is approximately 400+ sf. However, the opportunity exists to create a loft space. This space extends over and uses the extra ceiling space from the parking garage.





As the Nubian Square area undergoes a new wave of construction, the design of Parcel 8 should acknowledge Roxbury's role in Boston's industrialization and should celebrate its ethnically diverse development since the middle of the 19th century. Prior to the 1830 fill in of the Back Bay, Parcel 8 held an economically strategic position near the neck that connected Boston to Roxbury and functioned as a gateway to Roxbury's manufacturing district. After the fill in, Roxbury's industries continued to flourish well into the beginning of the 20th century. The Nawn factory building at the edge of the site serves as an important marker of Roxbury's industrial past. The development of the adjacent land should highlight the Nawn factory as a typical example of a business that contributed to Boston's industrialization; most notably, through their aid in the construction of the elevated Orange Line in 1901.

Although originally settled by English colonists, by 1900, Roxbury was home to a diverse array of immigrants from Europe and the Americas, most of whom were workers for the neighborhood's various industries. Throughout the decades, shifts in populations varied from African Americans, immigrants from Jamaica, Barbados, Cape Verdes, as well as Latino residents, forming a vibrant community and mirrors the diversity of Boston as a whole, where about 28% of residents are foreign born, The Roxbury community is a through line to Boston's immigrant past. Through the development of Parcel 8, the project responds to the history of the site and diversity of the neighborhood by providing an inclusive and open public space that engages the community with opportunities to build social infrastructure and wealth.



Dudley Station Area, Washington St.



Nawn Factory Building

Roxbury Historical State Park

The proposal for Parcel 8 includes the establishment of the a gateway park that connects to the historic Nawn Factory Building to form the Roxbury Historical State Park. Respecting the extensive planning initiatives that has occurred on this site, the design creates a park that is open to the public and activates Washington Street with a iconic civic space.

During the development and approval of the park design, the design team will work with the DCR and Boston Parks and Recreations to preserve any archaeology found on site as well as consult with historical experts to appropriately interperate the relevance of the site to Roxbury's storied past.

Links to a historical past

The proposed design of the gateway park frames the Nawn Builidng façade through the allee of elm trees. The historic structures that existed within the park site are highlighted by stone markings on the groundplane. These markings locate the foundations of the structures and bring relevance and authenticity to this historic corner of Roxbury. The site has also be a place defined by water with a historic canal located to the east of the site, bringing prosperity as a center for industry and commerce. The original canal, long since gone, is referenced in the water feature designed as part of the park, bringing a new energy of gathering and community civic space to the corner of Washington Street.

With the development of Parcel 8, the building will house a cultural museum that will feed the activity of the park while the park will serve as a community gathering space where events bring the neighborhood together. Local arts and crafts markets, cultural exhibitions, and temporary arts installations can be programed in the main lawn to provide avenues to build up a strong community identity for Nubian Square. A light tower prominently sits along the axis of Washington Street visually connects Nubian Square from the Bolling Municipal Building to Melnea Cass. The tower provides an iconic gateway to Roxbury and with the purpose of highlighting Roxbury community events and businesses.



Roxbury Heritage State Park Master Plan



Plan: Nubian Square

3 I

GATEWAY PARKRoxbury Historical State Park

- (A) Great Lawn
- B Historical Structures Foundation Marker -- Stone inlays in the ground mark the locations of historic structures.
- C Elm Tree Allee -- The importance of elm trees to the New England landscape is re-created by the planting of newer disease-resistant varieties of elm.
- D Water Feature -- A multi-generational draw to the park that references the influence of water as part of Roxbury's industrial development.
- E Light Tower -- A new iconic feature that marks the gateway into Nubian Square.
- (F) Nawn Building and Plaza
- G Museum Plaza -- Programmable space for the museum and cultural center.
- H Ethnobotanical Garden -- Planted with culturally important plant species for immersive educational feature.





THE PARK - LANDSCAPE DESIGN

Situated at the major intersection of Washington St. and Melnea Cass Blvd., the gateway plaza is an invaluable addition to Roxbury's social infrastructure. Through a flexible but structured design, the plaza will become an important community resource by providing space for passive use, as well as a framework for programming by the community and for the community.

Cultural Awareness

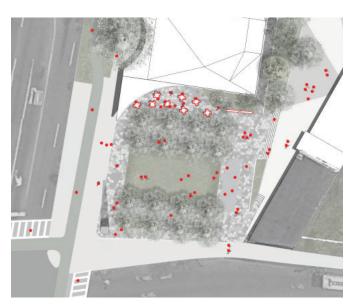
The plaza is an extension of the ground level exhibition space of The Museum, NCAA and creates a platform for community based art. While some users may visit the site specifically to see an exhibit or to access the state park, other users could discover these elements of the site after coming to relax on the lawn or to cool off near the fountain. The site's flexibility also anticipates its use by multiple generations, creating space that is suitable for families, youngsters, and older users.

Social Infrastructure

Since it is located on the corner of a busy intersection, the entire site could function as a town square, using the light tower to advertising its and the neighborhood's events. The design of the light tower, a spire constructed from glass bricks and LED screens, which provides information about Nubian Square activities. Besides providing an active space, the design draws on the idea of "eyes on the street" to provide nighttime safety and reduce crime by creating a well lit park for public congregation.

Community Health and Wellness

In addition to maintaining the existing well-established trees along Melnea Cass, the design places a significant number of trees on the site, contributing to the mitigation of the urban heat island effect, cleaning the air, and providing much needed shade to the pedestrian. The fountain provides further relief from the increasingly hot summers as a cooling station.



Everyday programming provides an active corner for passive recreation while celebrating the historic and cultural values of the location.



Park can host community events such as arts and craft fairs and farmer's markets that adds to the authentic local identity of Nubian Square.







ROXBURY LIGHT TOWER

LED projection screen behind glass block make up the iconic tower at the corner of the park allow for unlimited custom messaging. Currated art and community messaging will be an integrated part of the identity of the park and add to the character of Nubian Square.



PRELIMINARY ZONING ANALYSIS

ZONING CHART

Parcel 8

Project AddressHarrison AveWashington StreetParcel ID802426040802426030

Zoning DistrictRoxbury NeighborhoodZoning SubdistrictRoxbury Heritage State Park, CFOverlaysNeighborhood Design Review

Use Regulation

	First Story	Second Story & Above	Variance?
Multi-family	Conditional	Allowed	No
Community Uses	Allowed	Allowed	No
Cultural Uses	Allowed	Allowed	No

Dimensional Regulation

	Zoning	Proposal	Variance?
Maximum Floor Area Ratio	2.0	2.1 +/- (on average)	Yes
Maximum Building Height	45'	60'-75'	Yes
Minimum Lot Size	none	47,333 sf	No
Minimum Usable Open Space (sf/Dwelling Unit)	50	75sf +/-	No
Minimum Lot Width	none	410 ft +/-	No
Minimum Lot Frontage	none	100 ft +/-	No
Minimum Front Yard (a)	none	Varies	No
Minimum Side Yard	none	Varies	No
Minimum Rear Yard	20'	Varies	Yes

Off-Street Parking

Per Article 80 Review















Resiliency and Sustainability Goals

The Parcel 8 project will address and exceed Boston's resiliency and sustainability guidelines. The project will include a zero-carbon analysis and will incorporate strategies into the design in support of Mayor Walsh's Carbon Neutral Boston 2050 commitment. To mitigate heat island impacts, the project will include light colored pedestrian-oriented hardscape, high-albedo rooftops, and vegetated open spaces. The building will construct and operate a rainwater recharge system, constructed to manage significant rainfall on site. The project will include resilient design to address sheltering in place during an emergency by providing a community room, serving as a gathering spot for neighbors, providing access to potable water during emergencies, and including charging stations for residents and community members.

Green Building Design Plan

- I. Green Buildings: The project strives to be environmentally responsible in its design, construction process, and future operations. Consistent with these goals, the project will be designed to meet City of Boston requirements by achieving LEED certification under the LEED BD+C: Multifamily Midrise v4 criteria. The design will achieve LEED Gold. The preliminary LEED checklists are included at the end of this section.
- 2. Integrated Project Planning: An integrative process will facilitate the design and development team's achievement of green objectives throughout the project life cycle. The project team will include LEED Accredited Professionals and LEED Green Rater to ensure a complete, integrated approach to design, construction, operations and maintenance. A sustainable design focused workshop will be held during schematic design and the team will review and confirm the sustainable design and energy efficiency goals. A preliminary energy use assessment will be conducted using whole building energy modeling. As the project develops, regular design meetings will be held to ensure the entire team is engaged throughout the design and construction process.
- 3. Site Development: The development of sustainable sites is at the center of sustainable design. A site condition assessment will be conducted, and a plan will be developed and implemented if remediation is required. During construction, the project will provide a Storm Water Pollution Prevention Plan per the City of Boston requirements. The construction team will develop and implement an Erosion and Sedimentation Control Plan for the duration of construction. The project will develop a construction and demolition waste management plan that establishes waste diversion goals. In order to mitigate heat island impacts, the project will include light colored pedestrian oriented hardscape, incorporating a high solar reflectance index roof and vegetated open spaces. The project will include a rainwater management and mitigation plan to capture, store and recharge the

rainwater collected from the building roofs. The project will strive to infiltrate stormwater runoff for a 95th percentile 24-hour storm event.

- 4. **Connectivity:** The project is in close proximity to several public services and has access to MBTA bus routes which provides easy connections to the Ruggles Orange line station. The project will explore adding electric vehicle parking spaces and bicycle storage.
- 5. **Water Efficiency:** The project will include specifications for low flow and high efficiency plumbing fixtures within to reduce the amount of potable water used throughout the building. The site will utilize native, adaptive, and/or drought tolerant plant species that require limited irrigation.
- 6. Energy Efficiency: A whole-building energy simulation will be performed for the projects demonstrating both compliance with ASHRAE 2013 and the Stretch Code. The team will analyze efficiency measures during the design process and account for the results in design decision making. Fundamental Commissioning will be pursued and envelope commissioning will also be evaluated as an alternative. To limit fossil fuel use, priority will be given to creating and integrating passive systems, for heating, cooling, and daylighting. The project will explore uses of solar PV and solar thermal domestic hot water. The project will work with utility companies and Mass Save to determine what programs and incentives are available for the project.
- 7. Indoor Environmental Quality: The building will have a healthy interior environment generated through the use of low-VOC containing interior construction and finish materials and maintained through an efficient ventilation system in compliance with ASHRAE 62.1-2010. In accordance with LEED the buildings will be non-smoking, and no smoking will be allowed within 25 feet of the building. The construction management team will develop and implement a compliant Indoor Air Quality Management Plan for the construction and pre-occupancy phases of the project.
- 8. **Materials Selection:** Careful material selection will be performed for the project. Where possible the project hopes to integrate products that are recycled and reclaimed. The project will use locally sourced materials, such as aggregate located within 500 miles of the site.
- 9. **Innovation**: The project team will explore innovative approaches to design and maintenance including green housekeeping and pest management programs.

LEED BD+C: Multifamily Midrise v4 - LEED v4

Parcel 8 Scorecard

Location: Harrison and Melnea Cass, Boston, MA 2119,

Note: The information on this tab is READ-ONLY. To edit this information, see the Credit Category tabs



Integrative F	Process	Preliminary Y	0 of 2	M 0	Verified	0
IPc	Integrative Process		0 of 2	0		



Location an	d Transportation	Preliminary	Υ	15 of 15	M	0	Verified	0
LTp	Floodplain Avoidance			Required				Not Verified
Performance Path	1							
LTc	LEED for Neighborhood Development			0 of 15		0		
Prescriptive Path								
LTc	Site Selection			8 of 8		0		
LTc	Compact Development			3 of 3		0		
LTc	Community Resources			2 of 2		0		
LTc	Access to Transit			2 of 2		0		



SSp Construction Activity Pollution Prevention Required Not Verified SSp No Invasive Plants Required Not Verified SSc Heat Island Reduction 0 of 2 0 SSc Rainwater Management 2 of 3 0	Sustaina	ble Sites	Preliminary Y	4 of 7	M 0	Verified	0
SSc Heat Island Reduction 0 of 2 0 SSc Rainwater Management 2 of 3 0	SSp	Construction Activity Pollution Prevention		Required			Not Verified
SSc Rainwater Management 2 of 3	SSp	No Invasive Plants		Required			Not Verified
•	SSc	Heat Island Reduction		0 of 2	0		
On Northwis Book Control	SSc	Rainwater Management		2 of 3	0		
Nontoxic Pest Control 2 of 2	SSc	Nontoxic Pest Control		2 of 2	0		



Water Eff	iciency	Preliminary \	Y 6 of 12	M 1	Verified 6
WEp	Water Metering		Required		Not Verified
Performance F	Path				
WEc	Total Water Use		0 of 12	0	
Prescriptive P	ath				
WEc	Indoor Water Use		6 of 6	0	6
WEc	Outdoor Water Use		0 of 4	1	



ı	Energy and A	Atmosphere	Preliminary Y	23.5 of 37	Л О	Verified	21.5
E	Ε A p	Minimum Energy Performance		Required			Not Verified
E	E Ap	Energy Metering		Required			Not Verified
E	ΕAp	Education of the Homeowner, Tenant or Building Manager		Required			Not Verified
E	EAc	Annual Energy Use		21.5 of 30	0		21.5
E	EAc	Efficient Hot Water Distribution System		2 of 5	0		
E	EAc	Advanced Utility Tracking		0 of 2	0		

RESILIENT DEVELOPMENT + LEED CHECKLIST

(44)

Materials	s and Resources	Preliminary Y 1.5 c	of 9 M 0.5	Verified 0
MRp	Certified Tropical Wood	Req	uired	Not Verified
MRp	Durability Management	Req	uired	Not Verified
MRc	Durability Management Verification	1 of	1 0	
MRc	Environmentally Preferable Products	0.5 c	of 5	
MRc	Construction Waste Management	0 of	3 0.5	



Indoor Env	ironmental Quality	Preliminary Y	10.5 of 18	M 1	Verified	4.5
EQp	Ventilation		Required			Not Verified
EQp	Combustion Venting		Required			Not Verified
EQp	Garage Pollutant Protection		Required			Not Verified
EQp	Radon-Resistant Construction		Required			Not Verified
EQp	Air Filtering		Required			Not Verified
EQp	Environmental Tobacco Smoke		Required			Not Verified
EQp	Compartmentalization		Required			Not Verified
EQc	Enhanced Ventilation		3 of 3	0		3
EQc	Contaminant Control		0.5 of 2	0		0.5
EQc	Balancing of Heating and Cooling Distribution Systems		2 of 3	0		1
EQc	Enhanced Compartmentalization		0 of 3	0		
EQc	Combustion Venting		2 of 2	0		
EQc	Enhanced Garage Pollutant Protection		1 of 1	1		
EQc	Low-Emitting Products		1 of 3	0		
EQc	No Environmental Tobacco Smoke		1 of 1	0		



Innovation		Preliminary Y	2 of 6	M 1	Verified	0
INp	Preliminary Rating		Required			Not Verified
INc	Innovation		1 of 5	1		
INc	LEED Accredited Professional		1 of 1	0		



Regional Priority		Preliminary Y	2 of 4		Verified	0
RPc	Regional Priority		2 of 4	0		

Point Floors	
The project earned at least 8 points total in Location and Transportation and Energy and Atmosphere	Yes
The project earned at least 3 points in Water Efficiency	Yes
The project earned at least 3 points in Indoor Environmental Quality	Yes
Total Preliminary Y 64.5 of 110 M 3.5 Verified	32

Certification Thresholds Certified: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80-110

boston planning & development agency

Climate Resiliency Checklist

NOT FOR FILING

3.10

NOTE: Project filings should be prepared and submitted using the online Climate Resiliency Checklist.

A.1 - Project Information

Project Name:	NUBA			
Project Address:	429 Melnea Cass Blvd, Roxbury MA 02119			
Project Address Additional:				
Filing Type (select)	NA			
Filing Contact	Kamran Zahedi	Urbanica, Inc.	kzahedi@urbanica boston.com	617-654-8900
Is MEPA approval required	NA		06/22/2020	

A.3 - Project Team

Owner / Developer:	NUBA, LLC
Architect:	Stephen Chung
Engineer:	Fernandez & Associates, Bryant Associates, RSE Associates
Sustainability / LEED:	CLEAResult
Permitting:	McKenzie & Associates
Construction Management:	

A.3 - Project Description and Design Conditions

List the principal Building Uses:	Residential (including Live/Work), Public Park, Cultural Space, Parking
List the First Floor Uses:	Live/Work, Public Park, Cultural Space, Parking
List any Critical Site Infrastructure and or Building Uses:	

Site and Building:

Site Area:	47,333 SF
Building Height:	60-75 Ft
Existing Site Elevation – Low:	Unknown
Proposed Site Elevation – Low:	Unknown
Proposed First Floor Elevation:	Unknown

99,400 SF	Building Area:
6 Stories	Building Height:
Unknown	Existing Site Elevation - High:
Unknown	Proposed Site Elevation - High:
0 Story	Below grade levels:

Article 37 Green Building:

LEED Version - Rating System :	V4
Proposed LEED rating:	Gold

LEED Certification:	No
Proposed LEED point score:	65 Pts.

Building Envelope

When reporting R values, differentiate between R discontinuous and R continuous. For example, use "R13" to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

R33.9	Exposed Floor:	R41	Roof:
(R)	Slab Edge (at or below grade):	R37.5	Foundation Wall:
	area and together should total 100%):	s's are of total vertical	Vertical Above-grade Assemblies (%
(U)	Wall & Spandrel Assembly Value:	0%	Area of Opaque Curtain Wall & Spandrel Assembly:
R37.5	Wall Value	85%	Area of Framed & Insulated / Standard Wall:
U0.16	Window Glazing Assembly Value:	14%	Area of Vision Window:
(SHGC)	Window Glazing SHGC:		
(U)	Door Assembly Value:	1%	Area of Doors:

Energy Loads and Performance

Electrical Generation Output:

System Type:

For this filing – describe how energy loads & performance were determined	To be determined		
Annual Electric:	(kWh)	Peak Electric:	(kW)
Annual Heating:	(MMbtu/hr)	Peak Heating:	(MMbtu)
Annual Cooling:	(Tons/hr)	Peak Cooling:	(Tons)
Energy Use - Below ASHRAE 90.1 - 2013:	%	Have the local utilities reviewed the building energy performance?:	Yes / no
Energy Use - Below Mass. Code:	%	Energy Use Intensity:	(kBtu/SF)
Back-up / Emergency Power Syste	em		

(kW)

(kW)

Emergency and Critical System Load	ds (in the event of a service interruption)
Lineigency and Onlical System Load	as (III the event of a service interruption)

ai Systeiii Lu	aus (iii the event of a	Service interruption)	
Electric:	(kW)	Heating:	(MMbtu/hi
		Cooling:	(Tons/hr

Number of Power Units:

Fuel Source:

RESILIENT DEVELOPMENT + CLIMATE RESILIENCY CHECKLIST

B – Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing GHG emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon neutrality by 2050 new buildings performance will need to progressively improve to net carbon zero and positive.

B.1 - GHG Emissions - Design Conditions

a a		
	For this Filing - Annual Building GHG Emissions:	(Tons)
For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:		
	Energy efficiency and greenhouse gas reduction are considered engineering;	in design and
Describe building specific passive energy efficiency measures including orientation, massing, envelop, and systems:		
	Buildings are connected to reduce energy emission. Green roofs absorb greenhouse gas. Building envelops are tight.	are used to
Describe building specific active energian	gy efficiency measures including equipment, controls, fixtures, and	d systems:
	Energy-efficient appliances will be used. Solar panels will be inst	alled on roof tops.
Describe building specific load reducti	on strategies including on-site renewable, clean, and energy stora	age systems:
	Solar energy will be used.	
Describe any area or district scale em distributed energy systems, and smar	ission reduction strategies including renewable energy, central er t grid infrastructure:	nergy plants,
	Green roof; solar energy	
Describe any energy efficiency assistance or support provided or to be provided to the project:		
3.2 - GHG Reduction - Adaptation St	rategies	
Describe how the building and its syst	ems will evolve to further reduce GHG emissions and achieve anr	nual carbon net

C - Extreme Heat Events

timeline for meeting that goal (by 2050):

Annual average temperature in Boston increased by about 2°F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the

3.10 RESILIENT DEVELOPMENT + CLIMATE RESILIENCY CHECKLIST

C.1 - Extreme Heat - Design Conditions 7 Deg. Temperature Range - Low: Temperature Range - High: 88 Deg. Annual Heating Degree Days: Annual Cooling Degree Days What Extreme Heat Event characteristics will be / have been used for project planning Days - Above 90°: Days - Above 100°: 2 Number of Heatwaves / Year: Average Duration of Heatwave (Days): Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area: Large portion of open space will be planted. Green roof. Tight building envelops. C.2 - Extreme Heat - Adaptation Strategies Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves: Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations: D - Extreme Precipitation Events From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25". There is a significant probability that this will increase to at least 6" by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts. D.1 - Extreme Precipitation - Design Conditions In. 10 Year, 24 Hour Design Storm: Describe all building and site measures for reducing storm water run-off: D.2 - Extreme Precipitation - Adaptation Strategies Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

RESILIENT DEVELOPMENT + CLIMATE RESILIENCY CHECKLIST

Current FEMA SFHA Zone Base Flood Elevation:

What Zone:

No

3.10

Ft BCB

E - Sea Level Rise and Storms

Under any plausible greenhouse gas emissions scenario, sea levels in Boston will continue to rise throughout the century
This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for
those already in the floodplain.

Is any portion of the site in a FEMA SFHA?

Is any portion of the site in a BPDA Se Hazard Area? Use the online <u>BPDA SL</u> to assess the susceptibilit	R-FHA Mapping Tool	No	
If you answered YES to either of the Otherwise you have completed the o		lease complete the following questions k you!	_
represented on the BPDA Sea Level R coastal flood event with 40 inches of highest Sea Level Rise - Base Flood E	nediate and future ad ise - Flood Hazard Are sea level rise (SLR). L levation for the site. T ical facilities and infra	aptation strategies for managing the floodi ea (SLR-FHA) map, which depicts a modeled se the online <u>BPDA SLR-FHA Mapping Tool</u> he Sea Level Rise - Design Flood Elevation astructure and any ground floor residential	d 1% annual chance to identify the is determined by
Sea Level Rise - Base Flood Elevation:	Ft BCB		
Sea Level Rise - Design Flood Elevation:	Ft BCB	First Floor Elevation:	Ft BCE
Site Elevations at Building:	Ft BCB	Accessible Route Elevation:	Ft BCE
Describe site design strategies for ada areas, hard and soft barriers, wave / v		e including building access during flood eve water systems, utility services, etc.:	ents, elevated site
		n will be achieved including dry / wet flood pod barriers, waste and drain water back floo	
Describe how occupants might shelte water provisions and the expected av		oding event including any emergency powe neasures:	r, water, and waste
Describe any strategies that would su	pport rapid recovery a	after a weather event:	
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E.2 - Sea Level Rise and Storms - Adaptation Strategies		
Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:		
Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:		

A pdf and word version of the Climate Resiliency Checklist is provided for informational use and off-line preparation of a project submission. NOTE: Project filings should be prepared and submitted using the online <u>Climate Resiliency Checklist</u>.

For questions or comments about this checklist or Climate Change best practices, please contact: $\underline{\text{John.Dalzell@boston.gov}}$

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December 14, 2017 revised



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