



## MEMO

**Date:** 1/14/2017  
**To:** CRA Board  
**From:** Tom Evans, Executive Director  
**RE:** IDCP Conditions of Approval

### BACKGROUND

**Title:** Infill Development Concept Plan for the MXD District of the Kendall Square Urban Renewal Plan

**Applicant:** Boston Properties

**Prepared by:** Sasaki / VHB

**Original IDCP Submission:** 8/9/2016

**Joint Planning Board / CRA Board Hearing:** 9/20/2016

**Revised IDCP Submission:** 11/10/2016

**Second Planning Board Hearing:** 12/20/2016

**Joint Planning Board / CRA Board Hearing:** 1/17/2017

### PROCESS TO DATE

The initial Infill Development Concept Plan (IDCP) submission by Boston Properties (the Applicant) was submitted on 8/9/2016. At a joint hearing of the Planning Board and CRA Board on 9/20/2016, both Boards had the opportunity to review the IDCP documentation and provide feedback. For the hearing, staff memos analyzing the initial submission documents were prepared by the Department of Public Works (DPW), Traffic Parking and Transportation (TPT), Community Development Departments (CDD) and CRA Staff with memos from the CRA's design review consultants. During the hearing, staff and delineated all of the comments from the public and Board members along with the technical memos. This master list of comments was then provided to the Applicant in order to ensure that all parties were working off a common set of issues and facilitate the Applicant's creation of a comprehensive response and revisions document, which was then submitted to CRA and CDD on 11/10/2016.

A CRA Design Review committee meeting was held on 10/19/2016 specifically focusing on the separate 145 Broadway Building Design Review submission provided by the Applicant with the original IDCP on 8/9/2016. This CRA Design Review committee meeting included the active participation of several representatives of CDD and CDD's consultants. While this meeting focused on a single building, it covered refinements of the building's form and relationship to the overall urban design of the IDCP, previewing massing alternatives addressed in the IDCP response and revisions documents submitted 11/10/2016. An outline of the updated IDCP submission was presented to the CRA Board on 11/16/2016.

The Planning Board held a new hearing on 12/21/2016 to reintroduce the IDCP to a new quorum of the Planning Board. City staff prepared new technical memos in response to the additional materials from the Applicant. Members were provided an overview of the original submission and updates provided in the response and revisions document.

## NOVEMBER 2016 IDCP REVISIONS AND RESPONSE TO COMMENTS

On 11/10/2016 the Applicant submitted an update to the IDCP submission, which included the Consolidated Comment List, Response to Comments, and Revisions. The design review herein focuses on the Responses to Comments documents, which contains written responses and supporting graphic materials corresponding to the various issues raised by the public comment, CRA Board members, Planning Board members, CRA and CDD Staff. In many cases, these responses result in substantive changes to the IDCP, the massing and architecture of certain buildings, or additional project commitments by the Applicant. Other responses provide additional studies or documentation of the design rationale for certain decisions that had been made in the planning process.

The Responses to Comments and Revisions cover topics in the order of the original submission, and includes information related to the development program, the open space plan, the retail plan, transportation, infrastructure, environmental impacts, sustainability, and phasing. Some major highlights include: form and massing adjustments to 145 Broadway and 250 Binney; updated bicycle parking locations in the Blue Garage; information about Innovation Space at 255 Main Street; additional massing views from key points in Cambridge; an analysis for a newly proposed solar photovoltaic (PV) array on top of the Blue Garage roof; updated parking access and pedestrian circulation diagrams; updated wind tunnel testing results; a commitment to upgrade all buildings from LEEDv3 to LEEDv4; updates to the design guidelines including precedent images; and revised diagrams of the phasing plans.

## CRA STAFF ANALYSIS OF IDCP RESPONSE AND REVISIONS SUBMITTED 11/10/2016

### CHAPTER 1: DEVELOPMENT PROGRAM

#### 145 Broadway

*Revised Massing:* The original building massing was received favorably by the CRA. However concerns regarding the extent of overhang above the service drive and the sheer elevation of the western façade were raised by reviewers. The Response to Comments provides revised concepts related to the cantilevered mass of the east façade, further details on the various façade treatments, and an additional bay ‘puncture’ on the west façade. The new cantilever design was discussed with the Design Review Committee as an improvement for internal design functions, which if fitted-out with open concepts could better emphasize the inter-locked design concept. The additional puncture was not viewed by the Design Review Committee as a necessary addition, and this is reflected in the preferred concept in the Response to Comments.

*Retail and Active Use in Lobby:* The Response to Comments illustrates a new lobby configuration that shifts the garage shuttle elevators to the core of the building, to provide a ground floor layout that is more interactive with Broadway Park. While not a requirement of the Active Ground Floor requirement of zoning, the gesture to open up to the open space aligns with the design goals of the area.

The 145 Broadway design has minimized the size of the office lobby, and made extra efforts in this submission to enhance active frontage on three sides of the building. The Response to Comments document provides a Retail and Active Use calculation to comply with the calculation provisions of Article 14 MXD Zoning and Kendall Square Urban Renewal Plan (KSURP) for 75% of the linear frontage of new buildings.

## **250 Binney**

*250 Binney Massing:* The building design presented in the Response to Comments document includes various moves to reduce the scale of the overall building and breakdown some of the larger façade planes. The revised building massing reduces the building height, increases the setback off Binney Street, and realigns the angles of the façade. The exterior terrace was also moved from the 3<sup>rd</sup> floor to the 4<sup>th</sup> floor in order to escape the dense oak tree canopy along the established 6<sup>th</sup> Street Walkway. The higher base floor also serves to reduce the area of the largest portion of the eastern façade. Overall the changes to the massing are affective at breaking down the scale of the structure, however some of the revisions such as the sharper angle of the southeast corner deserve further study. The CRA expects that further refinement of the building envelope, the selection of materials and the outdoor terrace condition will be addressed in the future 250 Binney design review procedure.

*250 Binney Loading Docks:* The Applicant reconfigured the curbing and landscaping associated with the loading dock and committed to design visually improved loading dock doors during the future 250 Binney Design Review process. It is expected that further refinement of that ground-level loading dock treatment will be addressed in the future 250 Binney Schematic Design Review.

### **Residential Buildings:**

*Balconies:* The Applicant confirmed its intention to include balconies in the residential buildings and included balconies in the IDCP Design Guidelines, providing precedent images of potential treatments. The CRA appreciates this commitment as it considers the inclusion of balconies in residential buildings important for creating more human-scaled building designs, and providing positive livability amenities to households in a dense urban environment.

*Blue Garage Façade:* The Applicant further refined the *Adapted Garage Structures* section of the IDCP Design Guidelines. Any architectural or graphic treatment as described in the IDCP Revisions document on the Blue Garage façade should avoid the need for additional lighting, mechanical or power upgrades, and if using reflective materials. The CRA expects to review further details on garage façade graphic treatments during the design review of the residential buildings.

*Residential Building Character:* The Response confirms the design goal that the two phases of residential development shall be visually distinct. The CRA appreciates the effort to provide this building with a unified façade linked to the ground level rather than present a building perched on the garage. The CRA encourages the design to fully explore opportunities to add usable space to any areas feasible, given the constraints of the parking functions and garage circulation.

### **Innovation Space Conceptual Design and Operational Details:**

For the planned commercial square footage within the entire IDCP, the Applicant is required to build 52,600 SF of Innovation Space and has been incentivized by the zoning to build an additional 52,600 SF of Innovation Space totaling as proposed up to 105,200 SF of Innovation Space within the 255 Main Street building. The Applicant has acknowledged multiple scenarios related to the operation of Innovation Space, although none has been settled on yet.

Since the Innovation Space, and particular the 25% below market set aside, were critical issues in the approvals of the KSURP amendment and the MXD Zoning petition, the CRA will require a specific Innovation Space Operational Plan to be presented to the CRA within 12 months after the final Construction Document approval for the 145 Broadway building. The Operational Plan should include how the Applicant proposes to operate the Innovation Space including the utilization of the below market portion, as well as the design of the Innovation

Space including specifics regarding the entry treatments, interior character, layout, identity and any other building renovations, conforming to the MXD Zoning sections 14.32.5 and 14.32.6 requirements.

The minimum required Innovation Space and bonus Innovation Space represented GFA to be transferred to new buildings must become available for lease before or at the same time as the occupancy of the commercial buildings with which the Innovation Space is associated. Given the broader goal of activating street frontage throughout the MXD area, the CRA has asked that the future proposed retail at 255 Main Street as shown in the IDCP section 4 page 164 be fully explored and implemented as retail space, if feasible, and made available for occupancy at the same time as the initial required Innovation Space. The CRA encourages the Applicant to consider how the 255 Main Street retail and Innovation Spaces may be programmatically connected.

**Massing Views:**

The CRA appreciates the Massing View Studies provided in the supplemental materials. As found during the 88 Ames Street project review, massing decisions of large buildings are fundamental to the view of buildings from a distance. The analysis shows the diversity of forms the IDCP projects will place on the skyline through a variety of heights and horizontal building dimensions. As each building design advances, particularly the residential tower, designers should utilize these and/or other perspectives to illustrate their schematic design within this conceptual framework.

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## CHAPTER 3: OPEN SPACE PLAN

**Broadway Park:**

The applicant indicates that additional detail for open spaces will be provided during the Design Review procedure for their associated building based on the phasing plan. As discussed below, open space design review shall proceed or parallel the design review process of their associated building.

The Applicant indicated they will further study the community table location when Broadway Park is further detailed under the Design Review procedure for the south residential building on Broadway. CRA Staff supports the concept of a singular long community table as a method to encourage more social interaction in parks. CRA Staff encourages the Applicant to explore a community table on rails that could split up and come back together as needed in pieces. The CRA expects the community table design details to be further advanced in the south residential building Design Review procedure.

The Applicant has extended the plaza paving-pattern on the west service drive to meet the east-west path behind the new 145 Broadway building. The CRA questions if this is necessary and asks the Applicant and reviewers to balance the goal of humanizing the driveway with providing safe cues for pedestrians and drivers in this area of intense loading activity. CRA expects further discussion of the extent of the west service drive paver pattern in the Design Review for the south residential building and the associated open space design.

**Blue Garage Roof:**

The Applicant modified the originally submitted plan for the roof of the garage to more specifically delineate where the occupiable spaces would be for building residents of each of the two individual residential building and introduce the concept of solar photovoltaic panels on the remainder of the roof space separating the two different occupiable spaces. The CRA recognizes that on-site renewable energy production is critical for meeting local sustainability goals, however a balance must be found between the placement of solar arrays, and supporting healthy, livable residential environments.

The CRA supports the use of this rooftop space for solar energy production but asks the Applicant to maximize the usability of the roof space for residents while meeting renewable energy expectations of the development. The CRA encourages the Applicant to consider connecting the two residential rooftop spaces to help create a sense of community between the two buildings and to diversify the outdoor amenities available to both sets of residents. It is expected that the use of this rooftop space be further detailed and considered by the CRA during the design review procedure for the residential buildings.

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## CHAPTER 4: RETAIL PLAN

**Retail Viability:** The Applicant detailed the analysis of the retail viability across the IDCP area. The CRA acknowledges that retail space should be designed with as much flexibility as possible and will look for further detail in future reporting regarding marketing efforts, space partitioning and retail incentives such as favorable lease rates and tenant fit-up allowances to induce occupancy by retailers that will add to the vitality of the neighborhood.

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## CHAPTER 5: TRANSPORTATION

**Walkways, Service Drives and Pedestrian Circulation:** CRA Staff concurs with the Applicant's assessment of the importance of maintaining the width of the two service drives in order to allow simultaneous loading/drop off as well as through traffic. CRA Staff requests the Applicant add either pavement markings or paver patterns, and signage to more clearly indicate where certain curbside uses will be allowed to occur. Additionally, as an urban sidewalk with additional activity expected, the eastern sidewalk should be eight feet wide and the CRA requests that the sidewalk width be adjusted to meet this specification, without reducing the width of the service drive pavement. This could be achieved by reducing landscaping between the sidewalk and building, assuming cooperation from landowners who are not the applicant.

The Applicant has supplemented its description of planned pedestrian circulation for the garage including existing signage, wayfinding and environmental graphics in the Blue Garage's mid-garage pedestrian cross-through. As the Binney Street side of the garage will no longer have a public pedestrian access point to the garage, It is expected that additional wayfinding and environmental graphics will accompany the new North Garage design. The CRA expects to see further refinements and details on Blue Garage pedestrian access, circulation and associated wayfinding or environmental graphics during the design review procedure for the residential buildings in the future.

The CRA acknowledges that Applicant has committed to providing further detail on temporary construction access to the Blue Garage during the Design Review procedure for the residential buildings.

### **Loading Management**

The CRA finds the Applicant's commitment to provide a service/loading management plan for each of the residential and commercial buildings prior to issuance of a construction permit for each building to be adequate and consistent with prior practices. CRA expects to see a service/loading management plan accompany the Construction Documents submissions for each building.

### **Turning Radius:**

A clarification diagram was provided to identify drop off locations, including the critical 53' lay by area for moving trucks. As indicated previously, CRA Staff requests the Applicant add either pavement markings or colored paver patterns and signage to more clearly indicate where certain curbside uses will be allowed to and/or should occur in order to better manage the service roads.

**Streetscape Design:** The Applicant acknowledged that the CRA is currently redesigning the streetscape of Binney, Galileo and Broadway in collaboration with multiple City of Cambridge Departments such as DPW, TPT, and CDD. The Applicant and their design team have participated in the ongoing streetscape design process with the CRA, and are expected to continue in this collaborative design effort.

CRA remains concerned about the turning radius of the driveway on Binney Street and requests the Applicant work with CRA's streetscape design team (Alta Planning) on this curb radius, and investigate the possibility of using a rolled curb or truck apron instead of a wide curb-cut area.

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## CHAPTER 7: ENVIRONMENTAL IMPACTS

**Wind Analysis:** Generally desktop wind studies should be used to inform the basic forms and overall district plan (IDCP), and the Applicant has already done this level of analysis. CRA Staff is satisfied with the wind analysis efforts to date, and expects wind tunnel analysis to be performed during Design Review of each building.

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## CHAPTER 8: SUSTAINABILITY

**Resilience:** The Applicant outlined several possible methods for protecting against flooding of the garage structure and major entrances to the buildings. The CRA expects one or more of those methods for flooding protection to be utilized by the Applicant and approved during the Design Development phase in the Design Review procedure for each individual building.

**Cogeneration Feasibility Study, Stretch Code, Target LEED Version, Pathways to Net Zero:** The Applicant committed to completing a cogeneration feasibility study as part of the Design Review of 250 Binney Commercial Building B. The CRA is working with Biogen toward enhancements to the existing cogeneration distribution system, which may provide opportunities for expansion in the future. The Applicant committed to all buildings being in compliance with the Stretch Energy Code for 2017 and designing to LEEDv4 Gold standards for all new buildings in the IDCP.

The 255 Main Street Innovation Space renovation project could investigate opportunities for energy efficiency enhancements. The CRA suggests that any future energy retrofits to existing buildings in Kendall Center be considered as contributions to the Pathways to Net Zero.

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## CHAPTER 9: PHASING PLAN

**Open Space Phasing:** The Applicant has outlined in greater detail the phasing plan for each building and its associated open spaces, and Staff has confirmed that the multiple open space requirements under the KSURP will be satisfied under the current plans. Additional detail for each open space will be expected to accompany each individual building's Design Review submission with comparable levels of detail between the buildings and the associated open spaces.

Open spaces associated with individual projects should be completed at the projected occupancy date of the associated building, based on the phasing diagrams outlined by the Applicant. If site factors delay these installations, the CRA may issue findings of substantial completion, while holding letters of credit, pending final installations of public improvements.

There is expected to be more detail forthcoming regarding the design of the 6<sup>th</sup> Street Walkway as the Applicant moves forward with Design Development for 145 Broadway. The CRA and the Applicant are expected to engage in a thorough and collaborative design process for this CRA-owned walkway.

## IDCP APPROVAL WITH CONDITIONS

The CRA has thoroughly reviewed the IDCP response and revisions submitted 11/10/2016. Throughout the past three month staff have ben provided several opportunities to provide the Applicant with additional feedback and obtain clarifications from the design team. CRA Staff finds that the responses adequate address issues raised by the CRA Board, staff, and its consultants. CRA Staff recommends the approval of the IDCP as modified with revisions submitted on 11/10/2016 under the following conditions:

- Future phases of development with undergo design review in accordance with the Design Review and Document Approval Procedures, approved by the CRA Board. Schematic Designs for future buildings will be subject to joint review by the Planning and CRA Board, and shall utilize the Design Review Committee for input before design submissions are formally submitted. The Applicant shall address ongoing design issues raised within this memo at the appropriate point in the design review process for each phase.
- A specific Innovation Space Operational Plan must be presented to the CRA within 12 months after the Construction Documents phase is approved for the 145 Broadway building for Board approval. The Operational Plan should include how the Applicant proposes to operate the Innovation Space including the below market program and annual reporting to the CRA, as well as the design of the Innovation Space including specifics regarding the entry treatments, interior character, layout, identity and any other building renovations.
- The minimum required Innovation Space based on Infill GFA and the Innovation Space providing transferred associated with each commercial building, must be made available for lease before or at the same time as the occupancy of the associated new commercial GFA. Further, the future proposed retail at 255 Main Street as shown in the IDCP section 4, page 164 shall be delivered and available for occupancy at the same time as the initial phase of required Innovation Space, with to potential to be programmatically part of the Innovation Space function.
- Detailed plans and drawings for the open space associated with a given phase will be provided with or in advance of the associated development phase design review. Thus the schematic design of park areas designated in IDCP will accompany schematic design of the corresponding building design.
- Based on the phasing diagrams outlined by the Applicant any open spaces associated with an individual building project will be substantially completed with or before the occupancy date of the associated building.
- The Applicant and their design team will participate in the ongoing streetscape design process with the CRA for the design of Broadway and Galileo Way, and make corresponding modifications to neighboring open space setback areas and inter-connected circulation plans.
- In each phase, parking needs for the associated building and block should be re-evaluated by the Applicant in order to determine if there is an opportunity to reduce parking capacity related to each new building.
- CRA expects the Applicant to continue or begin reporting back to the CRA Staff and Board upon approval of the IDCP for the following items on an annual or bi-annual basis:
  - *Open Space Programming:* Continued programming of public open spaces shall include new spaces on the north parcel continuing established practice for the Plaza, Rooftop Garden, Connector, Galaxy and other spaces around Kendall Center.

- *Innovation Space*: As described earlier, the Innovation Space Operational Plan should include a proposed format and content for the annual report to the CRA regarding the Innovation Space including the below market innovation space program.
- *Retail Plan*: The Applicant has committed to providing bi-annual Retail Plan updates to the CRA. The format of this report should include updates to certain retail maps provided in the IDCP documentation, as well as outlines of available opportunities for “start-up” retail uses as an entrepreneurial or developmental stage of business.

None of the conditions set forth are intended to impact the ability to further advance the IDCP approval process or initiate the next phase of design. Staff looks forward to the ongoing review of this project.