



CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

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To: Planning Board
From: Suzannah Bigolin, Urban Design Planner
Date: March 23, 2018 DRAFT
Re: **PB #179, North Point PUD Parcel I Residential building, retail pavilions and open space**

The Special Permit for the North Point Planned Unit Development (PUD) was originally granted by the Planning Board in 2003, and since that time has been modified several times through the PUD amendment process. The most recent major amendment (number 6) was granted by the Planning Board on July 26, 2016. Three residential buildings have been completed on site, and the first commercial project "Building JK" is currently under construction.

DivcoWest is now seeking design review approval for a residential building, two retail pavilions and open space on Parcel I. The special permit requires that each building and its associated park, street segment cross-section, streetscape details, and other associated physical improvements be subject to design review and approval by the Planning Board. The Parcel I design review submission also includes a request for approval of the subdivision of the parcel into three separate parcels for each of the buildings and the open space.

The Planning Board's review of the buildings and landscape design is guided by the conditions of the special permit, which includes the goals and objectives of the *Eastern Cambridge Planning Study*, the guidelines established in the *Eastern Cambridge Design Guidelines*, and utilization of the *North Point Design Guidelines* as a design reference.

Review Process

Staff has collaborated with the City's urban design consultants, Over, Under, to review the design materials and to provide comments, organized by topic, on the following pages.

Parcel I is one of the most prominent sites in North Point situated at the intersection of North First Street, North Point Boulevard, North Point Common and Dawes Street. This mixed-use/residential parcel also consists of the retail plaza and park at the end of Water Street.

Relevant Design Objectives and Guidelines

In addition to the *Eastern Cambridge Design Guidelines*, guidelines specific to the site were developed as part of the original PUD process in 2003 and have subsequently been amended as part of the recently approved Major Amendment. The *North Point Design Guidelines* that are most relevant to Parcel I are summarized in the attached Appendix.

The Special Permit strongly endorses the need to set back the upper floors of tall buildings “in order to celebrate a strong cornice line at lower levels of those buildings.” If the applicant wishes to vary from these provisions, the design rationale for any proposed variation should be clearly presented and should explain how the alternative approach achieves the intent of the guideline.

The Special Permit also calls out the need for buildings along North Street (now Dawes Street), which is designated as a tight, narrow urban street, to receive close attention. “Each design should contribute to the creation of an intimate urban street; the concern is that without careful design of the details of the street itself and of the buildings fronting on it, it might have a crowded and oppressive feel.”

Building I Residential

Siting and Massing

- The overall massing strategy includes a series of three vertical volumes that step down towards the Parcel I park, combined with a two-story podium, which helps break down the overall scale of the project. The volumes have clarity and set up thoughtful relationships with the existing and future surrounding context, particularly the building’s interfaces with the east-west retail plaza and North First Street. Balconies and other treatments enrich the volumes and help to provide a human scale.
- The podium is an area of concern for staff due to its low profile, which is significantly lower than the recommended streetwall height of 65-feet outlined in the design guidelines. At two stories, the podium does not define the public realm at the desired urban scale. In response to staff concerns, the Applicant has advanced several solutions, which are discussed in the “Podium” section below.
- The relationship of the building to Dawes Street is not as well resolved as North First Street or the open space. This is primarily due to the lengthy, low podium, and the fact that very little of the taller building volume aligns with the street in plan. Additional ground level perspectives and an aerial view from Dawes Street would help to examine this issue more fully. Furthermore, there are some discrepancies between the plans and perspectives concerning the number of retail bays that should be rectified.
- Supplemental design studies of the smallest volume’s relationship with the park have been submitted. While staff agree that the proposed design scheme in plan appears to be an effective solution, it would be helpful to see 3-dimensional drawings to assess whether it would be preferable

for the building to address the Parcel I open space with a façade instead of a corner. This could be achieved by rotating the west façade to be perpendicular to Dawes Street.

Podium

- In response to earlier staff comments about the podium's scale, the Applicant increased its perceived scale through the location of a rooftop trellis at the southern portion of North First Street. Vertical columns continue this taller scale along the resident amenities terrace, and a solid metal parapet builds up the massing along Dawes and North First Streets. These elements help mitigate the problem, but should be improved by better integrating the parapet, and potentially the trellis, into the podium design itself. Further study is recommended.
- The zone of open cable railings along the southern edge of the amenities terrace potentially weakens the reading of the devices meant to increase the podium scale, particularly since there is only one bay of solid parapet along either end of the podium. Staff would encourage further study of a greater presence of the solid parapet across this facade.
- It is unclear if the solid parapet is flush with the podium structural elements below or set back. The perspectives show it as flush (preferred), whereas the facade details show it as set back. It should also be investigated whether the trellis at the southeast corner of the building, at the third-floor level, could be moved or extended east so that it is closer to the street wall.
- The second-floor treatment of the corner of the podium requires further study. On some sides, the glass is flush, other times it sets back for a balcony. In the North First Street corner, near the pedestrian plaza, this makes an awkward arrangement that is better solved near the North First and Dawes intersection.

Facades

- Detailed drawings of the facade systems have been provided, which give a clear presentation of depth, relief, scale, and shadow. The elegant and restrained façade approach described in the renderings is supported by staff. Generally, the façade system will have four inches of depth from the outer surface to the window frame, and an additional inch back to the glass surface. The two-story ganging of elements also appears to create sufficient shadow and the facades are animated by balconies that provide additional relief to the surface. The railings of the balconies at the second floor overlooking the retail plaza could perhaps be more opaque to provide privacy to residents.
- The window/bay pattern on the various facades could use additional refinement. On the east façade, for instance, one window bay appears to be narrower than the rest. Other facades tend to have a stricter logic. The south-facing facades are the most irregular, with at least three different bay widths. Some window proportions appear quite wide as a result.
- The desire to create interesting and varied roof lines is another element of the design guidelines. In the small and medium volumes, the proportions of the horizontal precast element at the rooftop should be further examined as the building tops seem interrupted.
- Further information on the thickness of the wall surface that extends beyond the top of the tallest volume should also be provided. The renderings show this as a very thin veneer of precast material

extending higher than the building, and staff would encourage a thicker material presence. Whether the openings need louvers, or some other kind of screening, should also be considered.

Ground floor design and uses

- The North Point Master Plan calls out North First Street and the retail plaza as designated retail zones and the northwest corner of the residential building as “potential retail”. The project successfully responds to these requirements with retail being placed at the three most prominent corners of the building, and wrapping around the retail plaza and park interface.
- Bay rhythms on the main building facade, transparency into retail, multiple retail entrances, and shadows created by the podium facades establish a public realm with sufficient variety, texture, and definition as required in the guidelines.
- The primary residential entrance on North First Street is well-defined and clearly visible. The opportunity to further activate the west, park-facing façade by making the emergency egress a true residential entrance should also be explored.
- The retail facades as depicted in the renderings show a uniform canopy and signage approach. In accordance with the design guidelines, Staff encourage the ability for future tenants to adopt unique signage approaches, and differentiation in storefront design.

Materials, colors and details

- A more muted color palette of grays and whites, with wood accents, is proposed. Samples of glass, the simulated wood panel, and precast elements are expected to be presented at the Planning Board meeting to illustrate the character and color of various façades. As is customary, a materials mock-up will also be assembled prior to construction.
- Given the extent of simulated wood panel proposed at the podium level, careful attention to the selection and detailing of this material is warranted. Likewise, the selection of the precast concrete colors, finishes, aggregate and details will be a key component of the future mock-up review to ensure that the building skin achieves the refined elegance depicted in the renderings.
- Minimizing glass reflectivity, and the treatment of the mullion caps and other design details, will also be important aspects of the continuing design review process.

Parking, Loading and Site Servicing

- Vehicular access, loading and service functions are sensibly located on Dawes Street, away from North First Street and key open space areas.
- Parking is to be located below grade, which is a positive urban design outcome. The parking garage also has direct pedestrian access to Dawes Street, which is recommended in the design guidelines as a way to create a more active public realm.
- Long-term bicycle parking is generally located in the center of the building with direct access from Dawes Street. The first floor bike room has a positive street-level presence, which helps to break up the inactive frontage associated with the back-of-house activities on that street.

- Short-term bicycle parking is distributed in convenient locations across the site. Staff has concerns about the bicycle rack selection and will continue to work with the Applicant to find a suitable rack that meets the landscape design aesthetics and the city's requirements.

Building I Retail Pavilions

- The pavilions are relatively simple in massing and have a similar material language to the small-scale retail buildings already approved by the Board. Given the intent to create "pavilions in the park", opportunities to refine the detailing and distinguish themselves from the mass of the larger building should be explored. Several of the precedent examples benefit from larger overhangs to cast shadow, formal variation in massing, thin profiles, and elegance of curtain wall detailing, which could be used to create a more celebratory presence.
- While the constraints of the multi-use path are understood, staff see a need for greater testing of options for animating the southern face of the pavilions, such as the use of setback seating zones and/ or shaded overhangs.

Open Space and Public Realm

- The retail plaza is thoughtfully scaled and landscaped, supported by numerous entrances to activating interior functions. The moveable tables and chairs, umbrellas, and plantings add color.
- The park has been designed as an active space that will accommodate events with a sloped lawn and terrace. A sand play area and water fountain have also been incorporated as key features of the design. The perspective renderings successfully illustrate the character and qualities of these spaces; which continue the less-manicured landscape aesthetic of North Point and will create attractive and interesting open space environments.
- A range of open space amenities are proposed for future residents, including roof terraces, balconies, and functional green roofs. These have good access to sunlight, and overlook the park and retail plaza, helping to activate these spaces.
- More holistic treatment of pedestrian / bicyclist wayfinding remains an important issue throughout the PUD area and should be addressed by the applicant.

Environmental impacts

Wind

- Preliminary results from a Pedestrian Wind Study have been submitted. Based on the wind study diagrams, pedestrian wind conditions around Parcel I are expected to be comfortable for pedestrians in summer and winter. Some areas within the retail plaza do not seem to meet the consultant's criteria for "sitting" comfort, which does suggest some further study and mitigation may be needed to ensure that this space is suitable for its proposed use.

Shadows

- Shadow study diagrams have been submitted with the design review materials. Given the siting of the tallest volume at the corner of North First Street and Dawes Street, shadows are generally not expected to have a significant impact on open space.
- The height of the lower volume facing the park exceeds the guidelines as a setback of 10 feet from the principal façade is suggested for heights above 85 feet (one-third the width of the park). However, at this location, given the surrounding lower scale retail pavilions and podium, and the geometry of the site, this is considered a reasonable departure from the guidelines.

Sustainability

The residential and retail buildings are required to meet the current Green Building Requirement to design to a LEED Silver level. Staff has reviewed the submitted green building materials and has found that all buildings are on track to meet LEED Silver standards. In all cases, there are many possible points available that could result in the projects exceeding the minimum requirements and achieving LEED Gold. Staff strongly encourage the Applicant to pursue this higher level of building performance, including continuing to explore available initiatives and incentive packages.

The North Point Design Guidelines also encourage consideration of the City's Net Zero Action Plan, including projects being built "net-zero ready", or providing a technical narrative for transitioning to net zero in the future. A brief, technical narrative has been submitted for each building.

While there are no plans to install Photovoltaics (PVs) at this time, the residential building and retail pavilions have been designed to be "solar ready". The residential building also includes a green roof, and high albedo roofing.

Continuing review

The following is a summary of issues that staff recommends should be further studied by the Applicant, either in preparing revised materials if the Planning Board continues the review to a future date, or as items for ongoing design review by staff if the Board decides to approve the design review:

- Revised plans, elevations and renderings addressing massing and façade discrepancies.
- Further study of the building's podium scale and façade design.
- Submittal of a final wind study report with recommended measures to improve conditions in specific locations.
- Further information on the transparency and reflectance of glazing, with a particular focus on the visibility of tenant interiors.
- Review of all building mechanicals and appurtenances, including the need to ensure parking exhaust and ventilation is located away from the public realm.
- Review of all exterior materials, colors, and details, including a materials mock-up on the site prior to any exterior materials being ordered.

- Review of potential opportunities to improve projected building energy performance through envelope design, or other measures.
- Review of all proposed public realm, open space and streetscape design details.

The following continuing review issues have been assembled in consultation with TP&T:

- Review of details of the proposed bicycle racks, including type(s), dimensions and clarification that City standards are being met.
- Review of parking, loading, bicycle parking, access and egress, and sidewalk design details by the TP&T and DPW.

Appendix: Relevant North Point Design Guidelines

The *North Point Design Guidelines* integrate and incorporate all North Point-related text of the City's adopted *Eastern Cambridge Design Guidelines* document with the Applicant's suggested elaborations.

The urban design goals for the district are:

- Create a lively new mixed-use district with strong visual, bicycle and pedestrian connections to East Cambridge
- The new district should be a place to live, work, and enjoy a variety of parks and public spaces
- Establish a new east-west street through the center of North Point, connecting East Cambridge and North Point Park
- Extend First Street into North Point to connect existing and new neighborhoods
- Create a major new public park easily accessible from the relocated Lechmere T station, First Street, and O'Brien Highway
- Form a new retail edge near the relocated Lechmere T station at the intersection of First Street, Cambridge Street, and O'Brien Highway that will complement, rather than compete with, the existing retail on Cambridge Street

Siting, Scale and Massing

- The layout of the North Point neighborhood is driven in large part by the desire to create a contiguous public realm, which is also well integrated into with the surrounding neighborhoods
- Orientation of buildings is suggested to take advantage of exposure to sun and views to the green spaces and surrounding attractions.
- Buildings should avoid continuous massing longer than 100 feet facing residential streets and 200 feet facing mixed-use and retail streets. If massing extends beyond this length it should be made permeable and visually articulated as several smaller masses using different materials or colors, vertical breaks, bays, or other architectural elements.
- In addition to the above limits, buildings should reflect a rhythm and variation appropriate to the urban context. For example, this can be achieved by expressing bay widths of 16 to 25 feet for residential buildings and 25 to 50 feet for mixed-use and retail buildings.
- Buildings should have a clearly expressed base, middle, and top. This may be achieved through a variety of materials, fenestration, architectural detailing, massing, or other elements. Includes:
 - A line of expression at the second floor to humanize the scale of the buildings
 - The mid-section of the building should consider light penetration, continuity and consistency of built mass while allowing for individual architectural detailing
 - The base and middle should be built to the street line with courtyard openings and setbacks for cafes, where appropriate
 - Use variations in height and architectural elements such as parapets, cornices and other details to create interesting and varied roof lines and to clearly express the tops of buildings
- Taller buildings should be articulated to avoid a monolithic appearance and should emphasize vertically-oriented proportions. This should be achieved by setting back the taller portions from

the base and middle. Where appropriate the top sections of the buildings should be designed to emphasize variety within the development.

Public streets

- Set back portions of the building above 65 feet by at least 10 feet from the principal façade where possible.
- Use architectural expression on any portion of the building above 65 feet to prevent continuous massing.
- Corner articulation of buildings is encouraged.

Park edges

- Buildings on parcels facing these open spaces are encouraged to maintain consistent massing and scale that is required for the success of these open spaces (A useful benchmark suggested in the Eastern Cambridge Design Guidelines is that the height of the principal façade of buildings surrounding a park should be no greater than 1/3 the width of the park. For additional height above this limit, buildings should be stepped back by at least ten feet from the principal façade)
- Greater height without setbacks may be appropriate at corners or in specific locations to create architectural variety
- Locate buildings to minimize shadows on North Point Common especially in the afternoon and, where feasible, on other open spaces
- Surround public parks with uses that create an active ground floor environment throughout the day and evening and increase safety for park users, such as:
 - Shops, cafés and other public uses that enliven the parks are encouraged adjacent to open spaces
- For retail and office uses, build to the lot line or provide small setbacks (5 to 15 feet) from the right-of-way for café seating, benches, or small open spaces
- Setbacks used exclusively for ornamental landscaping are discouraged

Rooftops

- The design of rooftops, including mechanical equipment and cellular installations, should be conceived as integral to the rest of the architecture of the building.
- Screening is encouraged to conceal rooftop mechanicals, and the screening should be in the same idiom as the rest of the architecture
- Rooftop mechanicals may be designed to stand out as machinery, in which case it needs to be carefully arranged to give a pleasing visual image
- It may be possible to use both techniques listed above.
- Rooftop mechanical equipment should be designed in accordance with the Cambridge Noise Ordinance, and attention should be given to the placement and shielding of mechanical equipment so as to reduce the noise experienced by receptors on other parcels.

Ground level design and uses

- Street-level façades within the designated retail zone should include active uses such as:
 - Shops, restaurants, and cafes
 - Services for the public or for commercial offices such as fitness centers, cafeterias, daycare centers, etc.
 - Community spaces, such as exhibition or meeting space
 - Art exhibition space/display windows
 - Commercial lobbies and front doors
 - Numerous entrances along principal pedestrian routes are encouraged both for safety and to enhance the pedestrian environment
- Office/ R&D uses are discouraged from occupying extensive ground-floor frontage. Where these uses do occur, they should occupy no more than 200 to 250 feet of continuous frontage along public streets
- Ground floor frontage should generally be permeable, and massing elements and architectural details should be human scaled
- Entrances should be located on public streets, and at or near corners wherever possible. Entrances should relate well to crosswalks and pathways that lead to bus stops and transit stations
- Buildings should have a carefully articulated base of one or two floors with high level of transparency and lightness (30-50 percent transparent) at the ground floors allowing views inward and outward. Blank walls should be avoided along all public streets, courts, and pedestrian walkways.

Ground Floor Retail

- At least seventy-five percent of the street frontage of the proposed retail should be occupied by retail uses, including cafés and restaurants
- Retail entrances should be located on public streets, or primary pedestrian areas and on corners wherever possible
- Retail entrances should relate to crosswalks and pathways that lead to bus stops and transit stations
- Retail within North Point should be as transparent as possible to maximize visibility of street-level uses
- Ground floor facades should permit a clear view from the sidewalk to the interior space of the building (seventy-five percent transparent surface is encouraged, and reflective glass is discouraged)
- Blank walls should be avoided along all public streets, courts, and pedestrian walkways
- Create a horizontal change in plane as the building approaches the ground plane
- Plan for tenant awnings or canopies that create a sense of enclosure over sidewalks and provide identity for tenants

- Design the building to accommodate changes in retailers and retail store size over time. This may entail making the ground floor retail facade bay structure flexible, so that in the future retail spaces can be demised to include multiple bays or portions of a single bay
- The design should seek an optimal balance between the architectural identity of the building and that of individual retailers
- Where appropriate, provide a facade bay structure that relates to the architecture of the building while allowing for signage, storefront and architecture within each bay that offers an opportunity for the individual expression of each retail storefront
- Use signage and graphics to create both retail identity and a lively streetscape
- Base building design should consider tenant signage visually as well as structurally
- Signage on multi-tenant buildings should be coordinated and incorporated into the building's architecture

Stand Alone Retail Buildings

- The architectural language of these buildings should be distinctive from the overall architecture of North Point and should belong to and enhance the character of the public realm
- These structures should have interesting roofscapes as they will be highly visible from the majority of the buildings at North Point
- Ground floor and second floor terraces are encouraged to engage and activate the public realm
- Restaurants and cafes are encouraged in stand-alone retail buildings.
- Special attention should be given to the location of commercial kitchen exhaust vents and mechanical equipment, as these can cause noise and other environmental impacts, such as odor, that negatively impact the public realm.
- Design the building to accommodate changes in retailers and retail store size over time
- Make the ground floor retail facade bay structure flexible, so that in the future retail spaces can be demised to include multiple bays or portions of a single bay

Architectural Character

- Careful articulation of large commercial buildings is critical in establishing a human scale at North Point.
- Create varied architecture and avoid flat façades by using recessed or projected entryways, bays, canopies, awnings, and other architectural elements.
- Vary the architecture of individual buildings to create architecturally diverse districts.
- Where buildings are set back at upper stories, lower roofs may be used as balconies, balustrades, and gardens.
- Utilize architectural articulation such as, varied façade planes, changes in material, fenestration, architectural detailing, or other elements to break down the scale.

Residential architecture should follow the below guidelines.

- Create varied architecture and avoid flat facades by using bays, balconies, porches, and other projecting elements
- Maximize the number of windows facing public streets to increase safety
- Where buildings are set back at upper stories, lower roofs may be used as balconies, balustrades, and gardens
- Utilize architectural articulation such as varied facade planes, changes in material, fenestration, architectural detailing, or other elements to break down the scale of large buildings

Parking/Service

- Locate vehicular parking entrances and loading docks on side streets and alleys and provide safe pedestrian access from public streets. Where it is necessary to locate them on the major streets, building design shall try to make them unobtrusive to the pedestrian movement and shall maintain the quality of public realm.
- All parking garages must provide direct pedestrian access to the street.
- The primary pedestrian exit/access to all garages serving non-residential uses should be to the street or a public area.
- Design and locate lighting fixtures in surface parking lots and garages to enhance safety while minimizing light spillover onto adjacent properties and neighborhoods.

Parcel I Block Guidelines

- The building on Parcel I should resolve multiple geometries that converge on this site to create an iconic top of the building that also becomes a visual landmark for North Point
- In designing the top of the building, its presence as it is seen from First Street in East Cambridge, North Point Common and Water Street Park should be considered
- The building design shall give special consideration to the streetscape, scale and character of the park at the end of Water Street, North First Street, Dawes Street and the retail plaza
- Retail frontage should be maximized along North First Street and the retail plaza
- Building configuration shall positively use the orientation and exposure to sun by means of balconies, terraces and bay windows and minimize shadows on parks and surrounding buildings
- Top portion of the building should be set back from the retail plaza and open space to create a comfortable human scale along the plaza and in relationship to small retail buildings
- Massing and articulation of the base/middle/top and horizontal articulation of the length of the facade are critical in defining the character of Dawes and North First Street
- Relationship to Parcel JK and Parcel D buildings should be carefully studied in creating an overall skyline identity
- The design should recognize that the building on this parcel abuts public open space, and take into consideration views, shadows, noise and the public character of these open spaces