



CITY OF CAMBRIDGE

Community Development Department

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To: Planning Board

From: CDD Staff

Date: September 20, 2023

Re: **PB-368 – Design Review of 25 Broadway (Volpe C1) & Third Street Park**

This memo contains design review comments on the Volpe C1 Building and Third Street Park. Over the past several months, the Applicant has met with staff regarding the project's design. The submission package to the Planning Board includes some design considerations made in direct response to the comments by staff during these meetings.

Overview

The Volpe Exchange Parcel Planned Unit Development (PUD) was originally [approved](#) by the Planning Board in 2021.

MITIMCo, the developer for the project, seeks design review approval for Commercial Building C1 and Third Street Park. The special permit requires that both Building Sites and Park Sites are subject to design review approval by the Planning Board.

Building C1

The Planning Board's review of the buildings and landscape design is guided by the conditions of the special permit ([PB-368](#)), which includes the goals and objectives of the Kendall Square (K2) Planning Study and Design Guidelines, the Planning and Design Principles established by the City's Volpe Working Group (2017), and Volpe Site Design Guidelines (2017).

Building C1 is proposed to be a 250' tall, non-residential development consisting of approximately 407,900 square feet of Office and Laboratory uses with ground floor Active Space. The approved program summary for Building C1, as well as the proposed summary, is provided below:

Dimensional Requirement	Approved	Proposed	Compliant? (Y/N)
Total GFA (Non-Exempt):	401,784	407,893	Y
Exempt GFA:	35,916	29,174	Y
Use:	Technical Office/Laboratory	Technical Office/Laboratory	Y
Retail:	15,000	8,258	Y
Innovation Space:	20,916	20,916	Y
Active Space:	15,000	8,258	Y
Building Height:	250'	250'	Y
Long-term Bicycle Parking:	103	93	Y
Short-term Bicycle Parking:	32	38	Y

The development controls within the approved special permit are largely governed at the Development Parcel level, rather than on a building-by-building basis. As with other approved PUD’s in the City, minor modifications to the floor area and use mix of buildings can be approved administratively as long as the site plan as a whole remains in compliance with the overall limitations set forth in the special permit.

Per Condition #13.a of the Special Permit, the City’s Green Building Requirements in effect at the time of the submittal of a design review application for a building site shall be applied to that building. Building C1 is targeting LEED Gold certification through LEED v4 Core and Shell and/or LEED v4 for New Construction through USGBC. Staff have reviewed these materials and the Green Building Certification issued is attached to this memo. Staff also reviewed Green Factor documentation and the Green Factor documentation is also attached to this memo. The proposed building and site designs are also being reviewed per the city’s recently adopted Flood Resilience.

Third Street Park

The Final Development Plan describes Third Street Park as a major park at the most public corner of the Volpe Redevelopment, which was included in direct response to community input. The park is characterized as an “open lawn”, which will be used for informal games, community gatherings and passive recreation.

The approximately one-acre Third Street Park is located at the corner of Third Street and Broadway, and is bordered by Broad Canal Way to the North and Building C1 to the West. Condition #3c of the Special Permit requires that prior to or at the time of submitting plans for design review of any Open Space denoted as Permanently Guaranteed in the Final Development Plan, the Applicant shall submit a draft deed restriction, covenant, or other mutually agreed-upon legal mechanism for guaranteeing the site is

made available for public use in perpetuity. The City's Law Department confirmed receipt of the draft language submitted by MITIMCo and it is currently under review by the City. The agreed-upon legal mechanism must be executed and recorded prior to the completion of the Open Space.

In addition to Third Street Park and the C1 Building, the Planning Board's review includes portions of Fifth Street and Broad Canal Way as the immediately surrounding streets to the proposed developments. More detailed design comments on these streets are provided in the report from Urban Design staff.

Relevant Design Objectives and Guidelines

The Volpe Site Design Guidelines were developed in 2017 and are part of the 2021 approval of the site's PUD. A summary of their most critical recommendations follows:

District-Wide Goals:

- The goal of the Volpe Plan is to create a functionally diverse and animated downtown development: predominantly consisting of handsome background buildings that focus on and enrich the public street and open space system, enlivened by variety and liveliness that articulates the urban pattern. An active pedestrian realm will extend throughout the site, and especially along its main streets and squares both during and after customary business hours. The combination of commercial and residential development throughout the site will maximize hours of activity and improve public security.
- The site's interconnected network of public open spaces – its streets, squares, parks, and courtyards – should constitute its fundamental organizational principle. These spaces should be distinct places – visually and spatially coherent, memorable, and meaningful. They should be framed by the masses and facades of the surrounding buildings, and their form should be reinforced and enriched by the design of their landscape.
- Development in the public and private realms should be integrated in as positive, secure, and elegant a manner as possible. Buildings fronting onto existing streets or public open spaces should complement and harmonize with adjacent, existing or planned architecture and open spaces with respect to use, scale, density, setback, bulk, height, landscaping, and screening. Each individual project should be carefully conceived and executed to the mutual benefit of its immediate neighbors and adjacent neighborhood.
- The city will not support isolated, individual architectural statements that relate only to themselves. The city supports projects that are positive additions to East Cambridge.

Open Space:

- The network of the site's streets, pathways, squares, parks, and other open spaces should organize the site's buildings and circulation, and connect the site to the surrounding districts. The combination and interconnection of these different kinds of public spaces will enrich the experience of the site's residents, users, and visitors.
- Reinforce the spatial coherence of Third Street and Broadway and expand the pedestrian-based retail of these streets.

- Extend the alignments of Broad Canal Way, Fifth Street, and Potter Street through the site.
- The massing and facades of buildings that address streets, parks, and squares should frame them as legible spaces.
- The massing and facades of buildings should reinforce a sense of entry and arrival by emphasizing the contrast in scale between the spaces and the streets that approach them.
- The site's open spaces should be welcoming and engaging places for public and private use and connection.
- Park design should bring together various elements – such as trees, grass, gardens, playfields, flexible open areas, water features, pavilions, loggias, and paved areas – in configurations that accommodate a wide range of uses and enhance visual and functional relationships with adjoining streets, open spaces, and buildings.
- Play areas should be located near residential buildings where possible.
- Park edges should be defined by elements that reinforce a sense of place, such as allées of street trees, bordering paths, other plantings and landscape elements.
- Sidewalks should be wide enough to be safe and inviting, and to accommodate street trees, pedestrian circulation, street furniture, and outdoor seating for restaurants where appropriate.
- Outdoor seating areas for cafes and restaurants, bicycle parking racks, street furniture, etc. should be arranged as a compact linear zone, so as to leave a clear pedestrian travel zone.

Block Guidelines:

- Architectural form should define urban space. It should enhance the quality and amenity of the public realm and sense of place, create legible and meaningful public places, and reinforce Kendall Square's existing and proposed street and open space patterns.
- Create a rich and varied, humanly scaled building with a continuous ground level pedestrian realm.
- Create strong streetwalls to frame streets, parks, squares, and plazas.
- Mitigate building bulk to minimize adverse impacts on the microclimate, including shadows, wind, and urban heat island effects.

Scale and Massing:

- The three-dimensional form of the site's buildings should contribute to the definition of the site's open spaces, with particular emphasis on harmonious, architecturally integrated building forms that create a varied yet coherent pedestrian realm, and on minimizing the amount of shading and loss of sky view in open spaces.
- Building massing should give spatial definition to the site's streets and squares, and increase the compatibility of tall buildings with existing nearby buildings.
- Incorporate elements such as upper floor step-backs, or sensitively incorporate similar materials, and the architectural rhythm, bay size and scale of nearby structures into the new structures.
- Break down building massing to prevent a monolithic appearance and promote a human-scaled presence.

- Depending on their heights, buildings should consist of up to four different, but integrated zones: pedestrian frontage zone, streetwall, tower, and building top.

Architectural Character:

- The site's buildings should maximize design quality and be compatible with the best existing buildings in Kendall Square, and surrounding historic streetscapes and buildings. They should create a beautiful and engaging environment by combining diversity and variety with a strong sense that the site's buildings are part of a community.
- Architectural design should prioritize the definition and enrichment of open space. Of particular importance is the treatment of the ground plane and lower floors of the projects, which can be seen and experienced directly by the public.
- Projects should relate to human dimensions and provide a sense of intimacy in all aspects of design from building concept development to construction details.
- Development bordering the public domain should be rich in architectural details, pay special attention to the ground plane and silhouette.
- New buildings should be warm and inviting, particularly at the lower levels experienced closely by pedestrians. This should be achieved through the use of a variety of materials.
- Commercial and residential lobbies are expected to consist of no more than 25 feet of frontage.
- Reduce the distinction between exterior and interior space at the ground level to extend the effective public realm indoors and to reveal indoor activity to the street.
- All retail/restaurant/first-floor tenant spaces should preferably be at the same level as the adjoining sidewalk or publicly accessible open space.

Staff Comments

Urban Design

The construction of commercial building C1 at 25 Broadway and Third Street Park will be a significant step toward realizing the Volpe Site's Special Permit (PB-368) and Final Development Plan. The building and park will complete the southeast corner of the site: the building architecturally framing the Park, Broadway, and Broad Canal Way, and activating them with ground floor uses; the Park providing significant public open space at the intersection of Broadway and Third Street and a pedestrian route to the interior of the Volpe site.

Building Design

Massing

- As is appropriate to its role in Cambridge's civic structure – to frame Broadway and Third Street Park and greet those entering Cambridge from Longfellow Bridge – the building's overall massing is strong and clear. Its vertical form and light color will celebrate entry to Cambridge from the Longfellow Bridge and reinforce Kendall Square's sense of place. At its southeast corner, its Broadway and Third Street facades meet at a thin vertical edge, adding drama to the streetscape and reinforcing the distinct identities of both Broadway and the Park.

Typical facades

- At a more detailed level, the building's massing and facades are designed to mitigate its considerable height and bulk, both by distinguishing the lowermost five floors (the streetwall zone) from the upper floors (the tower zone) and by the use of vertically extruded concave scallops to articulate the facades into distinct segments and give the building a vertical emphasis appropriate to its site.
- The vertical continuity of the pilasters between the windows reinforces the façades' vertical grain. The windows are given a ceramic frit whose design assimilates them to the three-dimensional relief design of the pilasters. The resulting repetitive pattern (subtly modulated in response to solar orientation) gives the effect that the building's relatively simple massing is wrapped in a rich fabric.
- The relatively low window to wall ratio and the ceramic frit on the vision glass will help minimize solar heat gain, mitigate light trespass from the interior, and reduce the likelihood of bird collisions.

First and Sixth Floor Facades

- The exceptions to the repetitive pattern of the facades occurs at the first and sixth floors. The sixth floor accommodates amenity spaces for tenants, and the weather enclosure is deeply recessed back from the plane of the facades above and below, creating a wrap-around outdoor terrace with plantings along its outer edge. The terrace's curvilinear soffits and piers are clad with brown/gold metal and contrast with the off-white of the typical office/lab floors, demarcating the streetwall zone below from the tower zone above. The resulting interruption of the building's verticality is perhaps excessive: consideration could be given to providing one or more additional curvilinear piers on each side of the building to create more vertical continuity.
- On the building's south, east, and north sides, where first floor retail spaces face Broadway, the Park, and Broad Canal Way, the first floor is also recessed back from the plane of the tenant floors above. A projecting canopy/soffit with the same gold/brown metal cladding as at the sixth floor will shelter pedestrians.
- In contrast to the design of the sixth floor, however, there is only a single curvilinear pier, located on the Broadway side. Instead, the first floor facades are treated with vertical slats above the shopfront windows which in places extend down to grade as angular piers. A more consistent use of curvilinear piers and soffit, more akin to those of the sixth floor, could be considered to give the building more overall coherence and give the first floor retail spaces more unique settings. In addition, consideration could be given to giving the cantilevered canopy a thinner leading edge.
- The first floor façade on the building's west (Fifth Street) side accommodates the loading dock doors and service entries. The loading dock doors are enhanced by art. Additional opportunities for art should be considered.

Mechanical Penthouse

- The Mechanical Penthouse is treated similarly to the occupied floors below, but is modulated to full opacity, striking an appropriate balance between reflecting its distinct function and providing continuity with the façade below to retain the facades' vertical emphasis.

Lighting

- The building's exterior lighting will accord with Cambridge's draft Outdoor Lighting Ordinance. Decorative façade lighting is eschewed. Uplighting at the sixth floor terrace will be carefully controlled to minimize dark sky impacts.
- Consideration should be given to limiting the hours during which the terrace will be illuminated.
- Additional information should be provided on how light trespass from the building interior will be controlled.

First Floor Plan

- The building's south, east, and north sides accommodate retail spaces and the building lobby. The lobby occupies a broad portion of the Broadway frontage, and so will be a prominent feature of the pedestrian experience. Consideration should be given to activating it by open connections to the adjoining retail spaces. Public restrooms will be provided on the east side of the building, accessible from the Park. The building's west side is dominated by the loading dock and other service functions.
- The elevators serving the underground garage lead to the building lobby, from which separate elevators give access to the building's upper floors. To encourage use of the park and the retail spaces bordering it by building workers, consideration could be given to providing a more direct route from the lobby level garage elevators to Third Street Park.

Sustainability and Resilience

- The building's sustainable features include air source heat pumps, blackwater reuse, and tower facades that are modulated to respond to solar orientation. The building is designed to be ready for conversion to all-electric operation.
- The building will be resilient to the 2070 10% flood level; measures include perimeter curbing (kneewalls below the storefront glazing) with integral passive flood mitigation at doorways and the second floor location of critical infrastructure.

Site Design

In accord with the Volpe Site's Special Permit (PB-368) and its Final Development Plan (June 4, 2021), the project will create a new green public park at the intersection of Broadway and Third Street, construct the adjoining portion of the new Broad Canal Way, continue Fifth Street from Broad Canal Way to Broadway, and preserve most of the existing trees along Broadway and Third Street.

Third Street Park and Third Street

- Third Street Park will consist of an oval lawn, framed by new paths and by existing and new trees and activated by adjoining retail and by planned events and informal uses. It will initiate

the diagonal route from the southeast corner of the Volpe site to the intersection of Fifth and Potter Streets and on toward the park on the south and east sides of the Federal Volpe Building.

- The long-standing plan for Broadway, Main Street, and Third Street (created jointly by the City and the CRA) includes the creation of a new southbound right turn lane on Third Street and a separated bicycle lane on the west side of Third Street. While these are not reflected in the current design of Third Street Park and the site's Third Street frontage, the final design will need to accommodate them.
- There are two rows of existing trees between the Park's central oval lawn and Third Street, a row of pin oaks on the west side of the existing sidewalk and a row of lindens between the sidewalk and Third Street's west curb. The creation of the southbound right turn lane on Third Street will require that the separated bicycle lane be located *between* the two rows of trees. The available width between the two rows of trees is insufficient, however, for a full width sidewalk in addition to the bicycle lane and its buffer zone.
- In meetings with the applicant, staff discussed ways to provide the new bicycle lane plus a narrow sidewalk between the two rows of trees while protecting the tree's root zones, and recommended changes to the path configurations in the eastern edge of the park to create a more gracious secondary north/south route for pedestrians to supplement the narrow sidewalk.
 - The northern end of the tree planting zone and picnic area at the Park's eastern side should be reshaped to create a smoother, more direct, route from the sidewalk on the north side of Potter Street through the eastern edge of the park to the intersection of Broadway and Third Street.
 - The bike rack at north end of the park's east edge should be relocated elsewhere.
 - To help pedestrians bypass congestion on the narrow sidewalk by going through the park, the path proposed across the middle of the tree zone on the east side of the park should be adjusted to facilitate northeast to southwest movement as well as northwest to southeast movement.
 - To further smooth north/south pedestrian movement through the east side of the park, and to reduce the tendency of pedestrians at the intersection of Third Street and Broadway to walk straight across the oval lawn instead of following the path around its perimeter, consideration should be given to providing a somewhat wider throat between the tree planter areas at southeast corner of the park.
- As noted above, public restrooms will be provided in the C1 building, supplemented during events by portable facilities.
- The City's "Healthy Parks and Playground" policies encourage play as an essential aspect of life for all ages, available to everyone. Consideration should be given to providing play and recreational amenities throughout the site, including in Third Street Park and along Broad Canal Way.
- The application indicates a wide variety of types of uses and events in the park: festivals, concerts, movies, performances, markets, and weekday lunches. Clarity should be provided as to the entity that will manage events and where equipment and furniture will be stored.
- While the Park fulfills the design indicated in the Volpe Site's Final Development Plan - providing a clear flexible open space framed by trees and paths with benches for events and informal use -

it could do more to provide amenity and variety for its users. Consideration could be given to adding more topographic relief (grade changes, rocky outcroppings, etc.), play features, art elements, etc., particularly in the Park's tree-shaded perimeter.

Pavilion

- The pavilion at the northeast corner of Third Street Park adjoins Broad Canal Way and is proposed as a food venue. It is meant to activate both the Park and Broad Canal Way, articulate the juncture between these spaces, and draw pedestrians into the site from Third Street.
- The current form of the pavilion seems to not fully respond to the potential offered by its critical site. Consideration should be given to:
 - Providing more transparent facades.
 - Providing a more deeply cantilevered roof to give the structure a lighter appearance and provide more shade and shelter.
 - Giving the structure a more whimsical/playful form to contribute to the liveliness of the park.
 - Giving the pavilion a stronger thematic relationship to the curvilinear piers and soffit of the C1 building's first and sixth floors to contribute to a welcoming sense of shelter and to the pavilion's relationship to the C1 building.
- Staff notes that the lunch market in Kendall Square is primarily on Tuesday, Wednesday, and Thursday. Efforts should be made to ensure that the Pavilion is active through the week and into the night. Alternative uses instead of food should be considered, including pop up retail uses, or a cultural programming kiosk. The pavilion's programming and hours of operation should be coordinated with performance events at 585 Kendall Street.
- The pavilion should support the programming proposed for the park. A programming alternative to the current proposed use can be an 'artist-in-residence' approach where artists or cultural organizations can use the pavilion for a predetermined period and are responsible for activation of the space and the park.

Broadway and Third Street

- As part of realizing the CRA/City of Cambridge's Conceptual Streetscape Redesign Project for Broadway, Main, and Third Streets, the scope of the C1 Project will include improvements to the full width of Broadway. In the area adjoining the C1 project, the existing curbs and trees will remain in place. Adjustments will be made to the roadway striping, an active curb zone will be created, a raised/grade-separated bicycle lane will be added on the north side, new street trees will be planted, and a new public sidewalk created on the north side of the tree zone, partially within Building C1's property line.
 - All aspects of the design should be closely coordinated between the project's designers and City staff, including the optimal length of the active curb zone. The final design approval will be determined by City staff.
 - The Scope will also include the south side of Broadway: a raised separate bike lane, modified curbs, reconstructed sidewalk, and other elements as required in the City and CRA's streetscape redesign.

- The project’s “limit of work” line should be clarified to incorporate the entire public right of way, including the south side sidewalk, separated bike lane, and other design elements.
- The application indicates sidewalk seating for the building’s first floor retail spaces facing Broadway. The proposed sidewalk appears to have adequate width to accommodate the seating; its layout should follow the recommendations of the City’s [“Outdoor Dining in Public Areas”](#) guidelines (2021).
- Lush low plantings are shown in the tree beds along Broadway. Consideration should be given to protecting them from pedestrian traffic by low barriers or other means.
- A new underground box drain will be installed along the site’s Broadway frontage, potentially impacting the roots of the existing trees. Every effort should be made to minimize damage to the trees.

Fifth Street

- The proposed curb cut/apron on Fifth Street is very long. Consideration should be given to reducing its uninterrupted length by dividing it by an island or to changing the loading dock to an angled design.

Bicycle Parking

- The site plan provides short-term bicycle parking, long-term indoor bicycle parking in the parking garage, and two Bluebikes stations. Staff is available to collaborate on detailed dimensional, locational, and clearance information as the design progresses.

Interim Plan

- From the application, it appears that the C1 project will precede the projects on the adjoining sites to its north and west. A more detailed interim plan would clarify how C1’s sitework will meet existing conditions on these sites, and the appearance of the garage entry/exit ramp at Potter Street.

Resiliency, Stormwater and Sewer Infrastructure, and the Urban Tree Canopy

- The DPW has continued its conversation with the Development team and finds the Design Review package consistent, with respect to DPW purview, with what was presented in the Special Permit. The DPW will continue to work with the applicant as the project progresses to Building Permit applications to review items specific to resiliency, stormwater and sewer infrastructure, and urban tree canopy.

Arts and Culture

- Third Street Park and Building C1 will be in the center of the new Third Street Creative Corridor. Consideration could be given to incorporating creative businesses or arts organizations in the retail tenanting plan.
- The wayfinding plan for the C1 building, and Third Street Park should connect the Volpe site with the rest of Cambridge and particularly the other cultural venues along Third Street.

- The operation of the pavilion should consider the operations and traffic of the upcoming performance venue (<https://www.585arts.org/>) that will bring crowds to the site. Performances at the new venue will happen primarily after 5:00 pm on workdays.
- The application mentions that a new “Arts Innovation Program” will be created within 30 days of the building’s Certificate of Occupancy. Consideration should be given to creating it earlier, so that the building’s and site’s arts programs can inform the architectural and landscape designs.
- Greater clarity should be provided on the managing entity for the programming of Third Street Park. Clarification is needed whether it will be the Arts Innovation Program, a different new organization, or an existing one within MIT.
- Consideration should be given to evaluating the effect of the building’s concave east façade on sound in the park and nearby areas.
- At present, art is underrepresented in the site and building design, consisting only of murals on the loading dock doors, a custom trench drain cover, and historical references inscribed in Broad Canal Way’s paving. Consideration should be given to giving art a much more prominent role within the public realm. Possibilities include the treatment of Broad Canal Way’s paving pattern, sculptural elements on Broad Canal Way and in the Park (potentially including a significant art element at the corner of Third Street and Broad Canal Way), the design of street furniture, additional murals at the building’s first floor facades, etc.
- Consideration should be given to art opportunities that would help link Third Street Park to Community Center Park (the future park opposite X), such as a paving pattern that extends across Broad Canal Way or other art elements that would reinforce a relationship between the parks.
- Clarity should be provided on where tables, chairs, performance features, recreational, and movable play equipment will be stored.

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 discussion to a future date, or as conditions for ongoing design review by staff if the Board decides to grant design approval:

1. Revisions to Third Street Park and the Third Street frontage to accommodate the southbound right turn vehicular lane and the separated bicycle lane on Third Street, and north/south pedestrian flow through the eastern part of the Park.
2. The detailed design of the improvements to the full width of Broadway, including the vehicular roadway, separated bicycle lanes, striping, sidewalk, street furniture, curbs, curb cuts, crosswalks, and trees and their planting beds.
3. The design of the Fifth Street loading dock and its curb cut/apron.
4. The species of trees and other plantings, the protection of existing trees, the precise locations of new trees, and planting standards.
5. Further development of Third Street Park to offer a richer experience to users.
6. Further development of the Pavilion’s uses and architectural form.
7. Further development of the design of Broad Canal Way.

8. Locations of site furniture, water fountains, and other park features and amenities.
9. Design and locations of short-term and long-term bicycle parking areas and of Bluebikes stations.
10. Additional possibilities for public art in the sitework and the building's design.
11. Play and recreational features: equipment and locations.
12. Provisions for outdoor dining as part of tenant fit-outs.
13. Review of resiliency, stormwater and sewer infrastructure, and the urban tree canopy with staff.
14. Interim site plan.
15. Wayfinding.
16. The location of the public restrooms and the route to them.
17. Retail tenanting plan.
18. Glass specifications for the first floor retail and lobby spaces and for the typical upper floors: visible light transmission and visible light reflectance.
19. Further development of building facades.
20. Control of light trespass from interior spaces and exterior lighting.
21. A mockup of all exterior materials and colors, to be constructed on site and reviewed and approved before purchase of materials.

Certification for Green Building Report - Special Permit Stage (Design Review)

Project: 25 Broadway (MIT Volpe C1)

Date: 7/10/2024

CDD Determination and/or comments for Project Special Permit submission – Design Review

Project summary: 25 Broadway (MIT Volpe C1) is a new commercial building containing 407,162 SF of lab and office space as part of the MIT Volpe redevelopment district.

Green Building Report: 25 Broadway is expected to achieve LEED Gold certification with 75 credit points. The project is seeking formal LEED certification with USGBC.

Status: CDD received the Green Building Report (GBR) for the Special Permit (Design Review) stage. Pursuant to Section 22.25.1 of the Zoning Ordinance, CDD staff have reviewed the project’s GBR and provide the following Determination, Summary of Compliance and Comments.

CDD Determination: The documentation provided by the Applicant is adequate and demonstrates compliance with the Green Building Requirements applicable to the Special Permit stage. A revised submission, with additional documentation specifications, EPDs and LCA narrative will be required at the Building Permit and Certificate of Occupancy stages.

Summary of Compliance:

Green Building Professional Affidavit Certification

Stephen Jay Siebenmorgen, LEED AP of NBBJ, LP, has been identified as the Green Building Professional for the project. The affidavit states that this professional has reviewed all relevant documents for this project and confirm to the best of their knowledge that those documents indicate that the project is being designed to meet the LEED v.4/v.4.1 requirements per Section 22.24 under Article 22.20 of the Cambridge Zoning Ordinance.

LEED Rating System Checklist, LEED and Net Zero Narrative

- Rating System: LEED v4 BD+C Core & Shell with v4.1 substitutions
- ASHRAE editions used = ASHRAE 90.1-2019
- Energy use savings = 48.3% reduction compared to ASHRAE baseline
- Site EUI = 109.7 kBtu/SF-yr. & Source EUI = 300.5 kBtu/SF-yr. (Stretch Code standards)
- GHG emissions reduction = 41.1%; GHG intensity = 7.7 kgCO₂/SF
- Indoor water use reduction = 38.88%; outdoor water use reduction = 50% (below LEED baseline).
- Triple glazing; window-to-wall ratio = 35%; U value for window = .25; Ground level glazing VLT=66%.
- LEED categories and their credit points:
 - Integrative Process – 1 point
 - Location and Transportation – 19 points
 - Sustainable Sites – 7 points
 - Water Efficiency – 6 points
 - Energy and Atmosphere – 19 points
 - Materials and Resources – 6 points
 - Indoor Environmental Quality – 7 points
 - Innovation – 6 points
 - Regional Priority – 4 points

Total LEED credit points = 75 points

Comments:

As part of its continued design review, CDD staff provide comments and recommendations to the Planning Board on how projects might further improve their energy performance and reduce their embodied carbons. Staff believe the following should be considered:

1. Pursue a 20% reduction in embodied carbon and encourage the design team to go beyond meeting the LEED MRC1, Option 2, Path 4 of LEED v4.1.
2. For continued design review purposes, provide a follow-up narrative on the project's proposed building envelope/enclosure system and structure. The narrative should address the enclosure's materials, alternatives, and strategies to reduce embodied carbon. For example, what are alternative systems/materials studied or are being considered for low carbon.
3. For continued design review follow up, update the information provided in the Net Zero Narrative.
4. As part of complementing the LEED requirements and aligning with some of the WELL Building Standard, staff recommend pursuing the Standard's preconditions for Air and Water topics due to their current relevance and critical roles in improving health and wellbeing for building occupants.
5. Staff appreciate the design team's effort pursuing the LEED's indoor environmental quality credit point on Quality Views, but also strongly encourage the design team to pursue the Daylight credit as well for its importance to occupants' health and wellbeing.

CDD Determination and/or comments for Special Permit submission

The Community Development Department (CDD) received the Green Factor Report (GFR) for the Design Review stage. Pursuant to Section 22.96 of the Zoning Ordinance, CDD staff have reviewed the project's GFR and provide the following Determination and Summary of Compliance.

CDD Determination: The documentation provided by the Applicant is adequate and demonstrates compliance with the Green Factor Standard applicable to the Design Review stage.

Summary of Compliance:

- Solar Reflectance Index of Roof – 82
- Solar Reflectance Index of Paving – 33
- Cool Score – 1.48