

**CITY OF CAMBRIDGE, MA - PLANNING BOARD PRELIMINARY DETERMINATION
PB #383 - 585 THIRD STREET PLANNED UNIT DEVELOPMENT**

RESPONSES TO REQUESTS FOR MODIFICATION AND ADDITIONAL INFORMATION

Submitted 12/13/21

Request	Response	Plan Reference (if any)	
Site & Building Design			
1	Incorporation of a more comprehensive response to the Design Guidelines in the Application Narrative.	See Appendix A.17A-B which provides a more comprehensive response to design guideline compliance along with references to the appropriate drawings .	Appendix A.17A-B and Exhibits 1.1 and 1.2
2	Inclusion of floor plans with key dimensions, such as setbacks and architectural modulations.	See 2.2B and 2.3-2.24 for updated floor plans with key dimensions.	Exhibits 2.2B and 2.3-2.24
3	Explore opportunities for alternative massing approaches for the building that allow it to better connect with the existing built context north of Athenaeum Street and south of Kendall Street.	The proposed curvilinear massing along with rounded, glass corners on all four corners allows for greater separation between the buildings on both sides and thus allowing for better views, to the workers and residents. Such shaping also allows for better solar penetration and at the ground level allows for more public open space to support the unique program of this project. We have also had many conversations with the community over the last couple of years and have received tremendous support for the proposed massing throughout.	
4	Consideration of additional distinctions between the primary front and rear facades, and the more subdued side facades; including changes in plane, material, color, size and format of fenestration.	Because the building includes multiple functions, the perception of primary and secondary façades will change depending on from which direction someone approaches. To support this, we have created a massing and fenestration strategy that is uniform all around with variations derived through the coloration of the facade. The gradual shift of the color gradient surrounding the building and the glossy finish of the façade reflects the surrounding context differently depending on the vantage point while reflecting sun differently throughout the day.	Exhibits 2.30-2.34B
5	Provide revised elevations with dimensions (i.e., floor heights) and sharper image drawings.	These revisions have been made and are reflected in current plans submitted herein.	
6	Provision of additional perspective renderings looking down the side streets and from farther vantage points.	Additional perspective renderings are provided; see updated Vol. 2, Plans and Illustrations including Exhibits 3.25C, 4.1-4.18	Exhibits 3.25C, 4.1-4.18
7	Provision of a materials color palette with photographs of each exterior material included, and specifications for all materials and potential colors, including Glass Visible Light Transmittance and Reflectance.	See Exhibit 2.41.	Exhibit 2.41
8	Clearer drawings illustrating the gradient treatment of the façade specified in the elevation drawings.	See 2.34A, 2.34B and 2.40	Exhibits 2.34A, 2.34B and 2.40
9	Opportunities for variations of the façade colors that better align with existing neighborhood context.	The façade colors are inspired by various New England landscape photos, the colors of which are intended to celebrate the unique and robust arts and cultural program this building offers. See Exhibit 2.42.	Exhibit 2.42
10	Inclusion of a miniature visual mock-up with actual material samples.	A tabletop model representing the detail and building profiles will be presented at the subsequent Planning Board hearing. Physical material samples that are representative of the building's general color range will also be made available at this time. A more detailed mock-up will be provided to CDD at a later stage as the design develops and moves through administrative review ahead of building permit.	

11	Explore opportunities to use nano walls/operable windows and doors on the south façade along Kendall Street so that a seamless connection with the open space can be created.	Glass pivot doors have now been added to the building's southern side at the cafe to enable indoor outdoor connection. See Exhibit 6.	Exhibit 6
12	Explore opportunities to make the Public Commons a double-height space along Third Street to give it more prominence alongside the commercial/lab lobby.	Along Third Street, the floor-to-floor height of the Public Commons is 20 feet. The design of the ground floor strives to create a welcoming entry with a cafe, while also using series of large oculouses within the ceiling to enhance the sense of scale. The intention is not to create a grand scale at this entry as the program doesn't support it and may also work against the welcome invitation. ON the other hand, a three story space is created on the eastern end with the winter garden and theater to establish the appropriate scale for that function. See Exhibits 4.4, 4.7, and 4.8.	Exhibits 4.4, 4.7, and 4.8
13	More information related to the ground floor design details, such as glass specification and details of the glass wall system. Opportunities to include more structural glass into the ground floor.	The entire ground floor public area utilizes structural glass throughout to make the space more transparent, further enhancing the indoor-outdoor relationship. The ground floor façade system consists of triple pane insulating glass units glazed onto laminated structural glass mullions with custom thermally broken concealed stainless steel fittings. The system below the canopies consists of triple pane insulating glass units four side structurally glazed onto adapter frames which is toggle glazed into thermally-broken extruded aluminum frames. Pivot doors on south and east sides allow for seamless connection during warmer months to connect the indoor and outdoor spaces. The soffit of the upper facade also plays an important role in defining the frame of the ground floor facade, but also makes it dramatic along south and north sides where it reaches pedestrian height.	Exhibits 2.37, 2.38, 2.39
14	Provision of zoomed in/focused elevations of the ground floor façade details.	See Exhibits 4.7, 4.8 and 4.18.	Exhibits 4.7, 4.8, 4.18
15	Opportunities to add fenestration or occupied ground level spaces with windows between loading/servicing areas wherever possible.	Structural columns are behind the façade between the loading dock coiling doors. Adding windows at these locations is undesirable as it will make the loading dock and the columns visible. We have developed a detailed strategy to make the loading dock facade attractive. See Exhibits 3.24 and 3.25A	Exhibits 3.24, 3.25A
16	Opportunities to use architectural loading doors designed to complement the overall façade composition.	Murals will be integrated on four coiling doors while the other loading/servicing panels, louvers and egress doors are disguised with decorative screen to provide a clean consistent look. Please note: these murals have not yet been designed; the Applicant will work with 585 Arts to curate local artists for these loading dock doors. See Exhibit 3.25A, 3.25B, 3.25C as illustration.	Exhibits 3.25A, 3.25B, 3.25C
17	Provision of more detailed street-level elevations of the ground floor and a perspective rendering looking down Athenaeum Street towards the loading docks.	More detailed street-level elevations are included herein. See Exhibits 4.7, 4.8, 4.18 and 3.25C.	Exhibits 4.7, 4.8, 4.18 and 3.25C
18	More information related to the proposed gloss finish of the façade material.	Metal panel integrated into the exterior unitized curtain wall will be finished with three coat metallic custom color Polyvinylidene Fluoride (PVDF).	
19	More information related to night-time lighting mitigation measures, and inclusion of a night-time rendering to better understand the visual impacts of the interior lighting.	The building will utilize motion sensors that turn lights off when space is unoccupied. Perimeter soffit detail further minimizes light fixture appearance to ensure light levels will be low. See Exhibit 4.5.	Exhibit 4.5
20	Explore opportunities for differentiating the public space entrance along Third Street from the lab lobby, through differentiated building façade/entrance design, changes in section, signage, lighting, etc.	The entrance canopy has been split into two separate canopies. While the general language of the two canopies will be consistent, the signage and lighting will be different to highlight the prominence of the Ground Floor Public Commons. Further, the ground floor design of the public space is uniquely designed to draw one's eye through the space and will work together with the canopies and doors to be unmistakable. See Exhibits 4.7 and 4.8.	Exhibit 4.7 and 4.8
21	Opportunities to provide improved screening for the exposed lab stacks, or demonstrate that they will not be visible in longer range views of the building. If necessary, provide technical justification for their exposure.	The façade has been extended above the upper-most occupiable floor to provide improved screening for most mechanical equipment. The exposed lab stacks are unnoticeable at the ground-floor and from long-range views, and are required per code. See Exhibit 14. NFPA Standard 45 - Section A.7.4.11 states 'Exhaust stacks should extend at least 10ft (3m) above the highest point on the roof to protect personnel on the roof. Exhaust stacks might need to be much higher to dissipate effluent effectively, and studies might be necessary to determine adequate design.' ANSI Z9.5 Section 5.4.6 Exhaust Stack Discharge states 'In any event the discharge shall be a minimum of 10ft (3m) above adjacent roof lines and air intakes and in a vertical up direction.'. See Exhibit 4.6.	Exhibit 4.6

Traffic & Transportation

22	Opportunities to provide landscaping (low in height) around the proposed Bluebikes station, so that it is not the dominant feature/backdrop to the plaza.	Because this area is on an existing underground parking garage with limited structural capacity, landscaped elements will need to be in planter pots. The planters will feature shrubs of varying heights to, as noted, downplay the presence of the Bluebike station along the South Plaza edge.	Exhibit 3.22
23	More information related to the proposed parking schematic and whether the project will remain compliant with the parking maximums set forth in the PUD-CDK zoning.	The Project provides no new parking and is therefore compliant with the parking maximums applicable to the site in the PUD-CDK zoning. The existing 350 Kendall and 650 E Kendall garages will serve current and future users through the utilization of surplus capacity that exists today, the implementation of shared parking actions, and other parking management strategies that help to balance demands to the available supply, as further described in the TIS submission. Of the 2,238 spaces permitted for the existing development under PUD Special Permit #141 by the City of Cambridge, 2,181 are built out including 2,147 in the 350 Kendall and 650 E. Kendall garages and 34 surface spaces. The 350 Kendall garage is a four level, below-ground parking facility with a total of 1,409 registered spaces. The 650 E Kendall garage is a six-level, below-ground parking facility with a total of 738 registered spaces. Both existing garages are open to visitors, and the 350 Kendall garage contains 150 commercial spaces, per the existing Special Permit #141 and the associated PTDM Plan for PTDM Project F-2.	See PTDM for more information.
24	Opportunities to provide weather protection for the proposed short-term bicycle parking spaces.	The porous nature of this building, along with its highly programmed edges, makes it difficult to locate bike racks under the building canopy to provide weather protection. Moreover, the bike racks are located along the sidewalk for high visibility and ease of access, and therefore, more structured bike shelters would create visual and physical barriers in contrast to the goal of creating an open, fluid indoor/outdoor area that lures visitors from all directions.	
25	Opportunities to provide bike air pumps and bike repair tools that are available to the public somewhere on the site, such as the Public Commons.	A bicycle repair station will be provided next to the short-term bike parking along the north side of the site (at the corner of Third Street and Athenaeum Street). The repair station is located within the public right of way and will be accessible to the public.	Exhibits 3.6 and 3.13B.
26	Information about how vehicles will be discouraged from dropping visitors off on the west side of Third Street, instead of along Kendall Street during events at the Arts and Culture Center.	A pick-up/drop-off zone will be provided along Kendall Street (East) directly in front of the theater's main entrance. Having this convenient drop-off zone will discourage TNCs from dropping off/picking-up further away on Third Street. In addition, the theater's address will be on Kendall Street (East) and not a Third Street address, which will help pull people into the site instead of dropping off on Third Street.	Exhibit 3.23B
27	Opportunities to reduce/condense the number of loading bays proposed.	A study completed by St. Onge, included herein as Appendix B, demonstrates the need for the number of loading bays proposed, including the need for one bay dedicated exclusively to theater use and two bays for trash. This leaves three loading bays for approximately 500,000 SF of office/lab space which is already condensed but sufficient. The number of loading bays remains consistent with approved zoning.	See Appendix B
28	Clarification as to whether PB-141 should be amended to allow for PUD-CDK uses to park in off-street garages reserved for PB-141 buildings and uses. Demonstrate that minimum parking requirements under PB-141 would not be violated.	No modification is required to PB-141 on account of this PUD-CDK Special Permit. Minimum parking requirements were established for PB-141 per PUD-3 zoning regulations and each existing building under PB-141 benefits from easement rights ensuring the minimum number of required spaces are available to it within the PB-141 garages. Furthermore, the total number of minimum spaces among all buildings in PB-141 is 1,353 spaces, well below the 2,174 existing spaces in the garage. The 406 spaces in the garages that will be earmarked for use under this PUD-CDK Special Permit are within the capacity available for use, as further described in the TIS submittal.	

Ground Floor Public Commons

29	Study of public space precedents that demonstrate a similar scale of public space at the ground floor of a large, commercial/mixed-use building.	Provided herein. Please see Appendix A.16.	See Appendix A.16
30	More information on the public amenities (e.g., public restrooms, free public WiFi) that will be included in the interior public space that can help support a welcoming public atmosphere.	The Ground Floor Public Commons will include public Wi-Fi, publicly-accessible (gender neutral) restrooms, hard and soft seating, USB and other outlets for charging devices and rotating programming. The space is designed to be wheelchair and stroller-friendly throughout to encourage visitors of all ages and abilities.	

- 31 More information on the general limitations or stipulations on the public's access and use of the space. The Ground Floor Public Commons will be publicly accessible during all hours when retail uses are in operation at the Project site, anticipated to be no less than 8 a.m. to 8 p.m. Monday through Friday and during periods when live event programming is occurring in the Arts and Culture Center and for reasonable periods before and after such live event programming occurs. The hours for the Ground Floor Public Commons will be evaluated from time to time and may be adjusted based on community feedback and exhibited demand for access to the space.
- Open space areas on the Project site, exterior to the Building, will be publicly accessible seven days a week, at a minimum between the hours of 6 a.m. and 10 p.m., and otherwise when programming is occurring in such areas.
- All of such publicly accessible areas may be closed to the public from time to time for reasonable periods to allow for response to emergency conditions and to address safety concerns, and/or, following reasonable advance notice to the public, to allow for maintenance, repairs, replacements and other similar operational matters. To balance the public's right of access to the publicly accessible areas and the security of these facilities, security personnel on site, if any, shall permit access to all members of the general public requesting access to interior areas during applicable hours, other than those who are observably intoxicated or otherwise exhibiting erratic behavior.
- 32 More information on the legal mechanism proposed for guaranteeing public access to the Ground Floor Public Commons, and the anticipated timing of executing such a mechanism. Public access to the Ground Floor Public Commons during the applicable time periods following completion of construction will be memorialized as a condition to the Special Permit, which shall, pursuant to the requirements of Massachusetts General Laws Chapter 40A, Section 11, be recorded in the applicable land registry governing the Project site. In this manner subsequent owners of the Property will be on record notice of the need to comply with the condition in order to enjoy the benefits of the Special Permit.
- 33 More information on how any restrictions or limitations to the public's use of the space will be communicated and made clear to the public. Prior to building occupancy, the Applicant will develop a wayfinding and signage program for the Ground Floor Public Commons that will indicate the areas that are available for public use and advise of any limitations to the same, including hours of operations. The signage program may include use of QR codes or other measures to provide additional information that may not be easily susceptible to including on signage, such as links to programming information for the Ground Floor Public Commons and public safety information. Such signage plan shall include signage located and appropriately spaced in a manner that is visible to users of the public and private sidewalks and streets adjacent to the Project site.
- 34 Additional information related to the anticipated frequency of events and/or programming of the interior public space, and what other activities might be utilized to help draw visitors in during non-event times. Programming of the Ground Floor Public Commons has not yet been set, and will be developed through an iterative process in conjunction with the newly-created nonprofit, 585 Arts, Inc. The intent is to offer diverse, consistent programming as a way to enliven the space and encourage use by different groups, for different purposes, at different times of day. 585 Arts, Inc. will draw on feedback received from artists, young people, and other community members when informing the development team as to the types of spaces, activities and amenities needed to draw visitors in during non-event times. Learning from the community (through surveys, focus groups or otherwise) will be especially important as the team works to bring individuals into the space who would not otherwise feel "at home" in Kendall Square. If and as deemed appropriate by 585 Arts, Inc., BioMed may engage a third-party curator of the space to facilitate activation of the space on an ongoing basis. Fixed elements, such as community-oriented retail, public art installations and reading/gaming nooks, will encourage informal use of the space as well as informed by the team's experience when hosting Culture House in the Canal District previously.
- 35 A description of the full range of proposed retail and/or other consumer establishment uses per Article 4.000 of the Cambridge Zoning Ordinance (CZO). Consistent with the PUD amendment, all retail and consumer service establishment uses under Sections 4.35 and 4.36 of the CZO will be allowed, with the exception of drive-in food service establishments, drive-in consumer service establishments, drive-in theaters, outdoor auto sales facilities, auto service stations, and auto washes unless approved in writing by the Planning Board. Temporary, pop-up, and stall-type retail establishments, rather than traditional box-style stores, may be utilized. Any additional retail uses that are generally open to the public may also be allowed, upon written determination of the Planning Board that such use is consistent with the goals of PUD-CDK.
- 36 Clarification as to whether the Winter Garden is part of the Ground Floor Public Commons or part of the Arts and Cultural Center. The Winter Garden is a part of the Ground Floor Public Commons.

- 37 Information related to the need for an egress stair that separates the lobby and retail space, and opportunities for removing said stair in order to increase the space dedicated to the Public Commons. As requested, the egress stair separating the lobby and retail space has since been removed. Plans and illustrations have been updated accordingly.
- 38 More information and design alternatives related to the interface between the commercial/lab lobby area and the Public Commons; specifically, if the interface should be solid, transparent, or a combination of both to achieve the most welcoming and friendly design. During community conversations to date, there has been an expressed desire to keep the two lobbies separate while designing the partition so that the space can be opened from time to time. Therefore, the partition has been designed as a series of large solid doors that can be opened to connect the two spaces seamlessly if and when desired. Conversely, if there is an event happening in the Pubic Commons and/or a private event is taking place in the lab lobby, the doors can be closed off to provide the needed separation and/or privacy.
- 39 More information related to proposed wayfinding, signage and lighting to draw visitors to the Public Commons from the exterior of the building and the street. The approach to the design of the building overall is to convey a cultural landmark. From this perspective this building will be highly recognizable even from a distance. As one approaches the building along Third Street, the corner of Third and Kendall becomes an important point of arrival for the building. With two story expression of the exterior and the building soffit, a canopy signifying the entry to the public space and a marquee that is installed indicating both public and theater programs will guide pedestrians to the entry. The corner of Third and Kendall is expressed with a high degree of openness, supported by a bright visual element in the ceiling with a public assembly program will also draw visitors into the public space. Along Kendall Street, another entry is more specifically designed for the theater with an awning that flows into the building with the backdrop of the box office. An exterior marquee integrated into the canopy and an interior ceiling fixture visually bring attention to this entrance. This entrance is also highly visible from the parking egress on the corner of Kendall South and East. On Kendall East, the three story expression with the suspended theater and ground floor pivot doors and transparent facade, extend clear visual indication and welcome. At the grade level, the pavement of the inside and the outside is designed as a seamless element that supports the porosity of the project. A detailed signage study and CDK district-wide wayfinding program will be developed prior to building occupancy.
- 40 Opportunities to increase the presence of the Ground Floor Public Commons along Third Street, relative to the proposed commercial office/lab lobby space. As requested, the egress stair separating the lab lobby and Ground Floor Public Commons has been eliminated and this space has been recovered as additional public space.

Arts & Cultural Center

- 41 More information on the design of the proposed Performing Arts Center, including details on managing lighting, acoustics and other potential elements which may have effects on surrounding areas during program times. The Performing Arts Center is being designed with acoustically isolated floors, ceilings, and walls including a secondary glazed wall at the stage in order to minimize sound transmission in or out of the space. This will isolate the PAC from surrounding spaces and the building structure, including the adjacent Winter Garden so that simultaneous programming can occur in those spaces. The Winter Garden is being designed with acoustic finish materials that will lessen transmission of noise towards the main building lobby, and a triple-glazed curtain wall to control noise transmission to the outdoors and neighboring buildings during a performance. We are also working closely with the lighting consultant and the theater consultant to design the lighting systems to facilitate the needs of the performance venues while being sensitive to adjacent properties and any light spill concerns. The intent, as best as possible, is to have the theatrical lighting and architectural lighting systems work together in a cohesive manner to minimize any intentional light spill from the property and to prevent direct view of any unnecessary glare sources. Wherever possible, theatrical lighting will be aimed in towards the building and performance areas and not specifically directed outwards, away from the building.
- 42 A logistics plan during event times, showing how visitors arriving/leaving the site will be managed to avoid conflicts between vehicles, cyclists, and pedestrians. A logistics plan for during event times has been created and is included herein as Exhibit 3.23B. Exhibit 3.23B
- 43 Information related to how the service needs (trash, loading, deliveries, etc.) of the arts and cultural center will be managed alongside the regular service needs of the commercial office/lab use. Per the St. Onge study and based on feedback from the 585 Arts operator, the number of loading docks and access to said docks, freight elevators, etc. is adequate to serve the needs of both the Arts and Cultural Center as well as the commercial office/lab building. Each building component has its own reserved docks and loading areas so as to prevent future management conflicts. See Appendix B

Open Space & Connectivity

- 44 More information about the proposed oval planting beds, and opportunities to redesign them so as to avoid creating a physical and visual barrier between the public realm and the ground floor of the building.
- The proposed oval plant beds are limited in number, with only three along Kendall Street (South) - one at each corner and one midblock. All other oval shapes shown in plans are trees planted in pavement. The oval plant beds are strategically designed and located for comfort and activation of the public realm. They are raised to provide ample permanent seating along the edges for the public to enjoy. Furthermore, this design not only provides shade, shelter and scale, it also acts a windbreak at the building corners, creating microclimates that help ensure the spaces directly adjacent to the Third Street entrance and Theater Box Office will comfortably support sitting for extended periods of time. The low shrub layer ensures visual connectivity to the building for those approaching from a distance.
- 45 More information related to the proposed character of each landscape/open space zone, including opportunities to integrate public art and play for both children and adults, in order to activate the landscaping as public space, rather than for a strictly ornamental purpose.
- The landscape is carefully designed to support an active public realm program to be curated by 585 Arts. Flexible art infrastructure (quick couplers and remote power) will be provided at key locations to support future art installations (visual, performing, mixed-media, etc.).
- Each of the open space zones responds to the site's urban context.
- The Third Street landscape focuses on connection and arrival with a new separated cycle track, the preservation of the existing trees and a generous line of new benches under their canopy providing ample room for people to gather. Movable chairs and tables can be located mid block to support future retail. An exterior kiosk will announce performances and events happening at 585 Arts.
- The Kendall Street (south) landscape is about porosity, with cafe tables and chairs spilling out into the plaza under a grove of high canopied trees. A playful mirror maze animates the space for all ages and formally connects with the interior exhibition space. A midblock planter anchors the bike parking conveniently to entrances.
- The Box Office Plaza provides fixed and movable seating amongst another high canopied grove to create a welcoming sense of place for arrival and spill out seating. The center space in the Theater Plaza is open and flexible to support spill out performances from the Winter Garden or open-air performances. A large wooden platform provides a space for lounging in the sun when not used for events. Flush in the ground under a grove of trees is a collection of musical play pieces that encourage people to create a tune. Mirroring the adjacent high canopied trees across the shared street, the Theater Plaza opens to support varying scales of festivals that will connect Termeer Square with Canal Plaza.
- Atheneum, being a through-street, takes cues from its surroundings to stitch back into the larger urban fabric with street trees providing comfort and scale. The loading dock doors will be a canvas for muralists to transform a much needed building service into an opportunity for street art.
- 46 Landscape plans for the upper story terraces.
- Landscape plans for the upper-story terraces are included herein; please see Exhibit 3.15.
- Exhibit 3.15
- The upper story terraces have been designed with microclimates in mind, locating plantings in key areas to mitigate wind and to preserve the spectacular views of the surrounding Cambridge neighborhood and Boston skyline. The footprint of the occupiable space has been carefully calibrated to provide as much extended and intensive greenroof area as practicable.
- 47 Clarification of the landscape views provided in the building renderings, since they appear to be different.
- Revised renderings now accurately reflect the landscape design.

Site & Building Sustainability

- 48 More information related to the proposed building's anticipated embodied carbon and opportunities for reducing its impact.
- The team has performed a preliminary assessment based on an early DD set of drawings which estimates an embodied carbon intensity is 765 kgCO₂e/m². The team is exploring opportunities to reduce the embodied carbon, which includes increasing concrete SCM content, evaluating material selection for facade panels, and reducing the amount of steel within structure with an increase in strength. More information about the building's anticipated embodied carbon and opportunities for reducing its impact will be provided alongside interim LCA results as part of the Green Building Submission for Building Permit.

49	More detail on how the LEED Gold standard will be achieved, given the LEED charts included in the Sustainability Narrative contains unknowns.	The LEED checklist shared with the Planning Board presentation and the Article 22 Report submitted on 06/02/21 identifies 66 "Yes" points, which exceeds the LEED minimum requirements for Gold, 60 points, with room for buffer. These points are not unknowns at this time and their requirements are being implemented in design and planning for this project.	
		This project is registered with GBCI for a formal LEED review, and the points will be finalized by the GBCI after the LEED Design Submission as well as the LEED Construction Submission, which will occur after the Building Permit and Occupancy phases respectively. The Article 22 and LEED scorecard will be updated to reflect the potential changes as a result of these reviews; however, the project team is not expecting any significant change that could jeopardize the targeted level of LEED Gold Certification.	
50	Information related to how the project responds to the City's Net Zero target for lab buildings by 2030.	This transition has been summarized in the Net Zero Narrative submitted with the Green Building Submission for Special Permit submitted on 06/02/21 and approved, as noted in the Special Permit Certificate dated 7/9/21.	
51	Opportunities to increase daylight penetration within the building.	A daylight analysis is underway and the results will be included with the Building Permit Green Building Submission. The study will approximate the potential LEED points for the Credit EQ Daylight.	
		As the design incorporates a deep floor plate, the potential for Daylight LEED points available to the project may be limited. However, windows are oriented vertically instead of horizontally to maximize daylight and extend higher to the ceilings to bring light deeper into the space.	
		Energy analyses and industry best practices were collated to optimize the fenestration area and design in relation to energy consumption, building loads, and daylight. The envelope design is a balancing act of a variety of metrics. An increased window-to-wall ratio would allow for more daylight, but it would also mean more glare and use of interior shades, which reduces the effective daylight depth. Additionally, larger windows typically result in the use of more energy. An increase in the visible light transmittance could also be considered to increase daylight penetration, but this typically results in an increased SHGC (and thus an increase in cooling load).	
		The project team feels as though the current design reflects the appropriate amount of glass. The building is designed to comply with the City's sustainability and energy efficiency requirements. The design is a balancing act: more glass would allow for more daylight, but it would also use more energy.	
52	Information related to building acoustics and planned mitigation measures for the proposed rooftop mechanical equipment.	The building's acoustics have been designed to ensure full compliance with the City's noise ordinances. Attenuators are being provided for rooftop equipment and the facade surrounding the cooling tower well is being lined with an acoustic barrier. Mitigation measures are further addressed in the Acentech study, attached hereto as Appendix C.	See Appendix C
53	More information related to the rooftop mechanicals, and if they've been right-sized for the proposed building.	The mechanical systems have been right-sized for a 16-story core and shell building with a 60/40 lab/office split. The infrastructure is sized to accommodate 100% outside ventilation air and tracking exhaust at a rate of 2CFM/USF and 1.5CFM/USF for Floors 1-9 and 11-16 respectively and a rate of 0.25 CFM/USF for office space based on ASHRAE 0.4% summertime outside design conditions and wintertime condition of OdegF. The chiller and boiler plants are appropriately sized to condition the outside air as well as support supplemental space heating and cooling loads, and provide process cooling that is often required for equipment dense lab spaces. Additional rooftop space has been reserved for future tenant equipment to support independent hazardous exhaust systems, program specific equipment (e.g. vivarium), additional stand-by power generators, or dedicated cooling equipment that is typical for lab program requirements.	
54	Opportunities to provide additional protection from wind, such as additional canopy trees, pedestrian-scaled structures, and additional building stepbacks.	The landscape design for the ground floor and roof terraces have been carefully calibrated to mitigate wind and create more comfortable microclimates at the ground plane and on the terraces. At ground level, on the southwest corner the addition of shrubbery, hedges and planters in combination with evergreen trees will help to mitigate wind acceleration. The wind direction at this point is lateral, and therefore, screens and ground elements will prove to be more effective than canopies. A select number of pedestrian-scaled raised planters are deployed at key locations to further reduce wind speed while providing fixed seating for people to enjoy the open spaces.	

55	Inclusion of seasonal mean wind speed figures to provide a more comprehensive understanding of wind issues.	The wind study has been updated accordingly. The 95% wind frequency and the average wind velocity have been plotted in the results on the iteration from the 02-12-21 wind study for both wind directions 240° and 300°. In the case of the terraces, summer 95% frequency velocity has been plotted.	See Appendix D
56	Opportunities to improve the building's façade performance through variations such as the addition of horizontal sunshades, vertical fins, etc.	Per the new energy code, the window-to-wall-ratio of the building is around 35%, which is already low compared with other buildings in the area. Additional sunshades/fins would further compromise daylighting within the building.	
57	More information related to the use of motorized window blinds or special glass on the south and west façade to address light trespass concerns.	The Core and Shell lighting strategies will be designed and implemented in such a way so that lighting is directed at interior surfaces (walls and ceiling planes) and not aimed out through the exterior building envelope. Any fixtures that are near the perimeter of the building will be selected and located in a sensitive manner to prevent the peak candle power of that fixture from lighting directly through and out of any perimeter glazing. As such, no motorized window blinds or special glass is being contemplated.	
58	Updating the proposed wind study to include the taller building proposed for the Volpe Exchange Parcel site.	The Volpe buildings have been reflected in the wind study.	See Appendix D
59	More information on the opportunity to preserve and/or relocate existing mature trees on the site.	As part of the site analysis, an arborist was retained to determine the health and longevity of the existing site trees. This report notes that the existing trees slated to be removed for construction purposes are not mature trees, but rather, fairly new plantings whose health is in fair to mostly poor condition. The project team will conduct a follow-up assessment to determine whether any of these trees, given their current size and condition, would be candidates for relocation.	
60	More information on the proposed path to Net Zero for the building, either through purchasing renewables, working with the steam energy provider, or alternative actions.	Please see the Net Zero Narrative submitted with the Green Building Submission for Special Permit submitted on 06/02/21 and approved, as noted in the Special Permit Certificate dated 07/09/21. The project will use Vicinity Steam in lieu of natural gas in preparation for the conversion to a Net Zero building.	
61	More information related to the proposed special permits to reduce green roof area, such as the total reduction proposed, and ISD's determination as to whether future tenant mechanicals may be included in exempted areas.	Prior to submission of its initial Special Permit Application, ISD indicated that the green roof ordinance does not allow future tenant mechanical areas to be treated as exempt and, therefore, the Applicant requested a Special Permit to reduce the requirement below 80% of non-exempt roof to 21% (based on then-preliminary design calculations). Based on the <i>current roof</i> design, and with increased green roof terraces developed since the original Application was filed, the new calculation of the actual area of green roof coverage is approximately 44%, as shown in Figures 2.26 and 2.27. The area that is reserved for future tenant mechanical equipment, and is necessary to accommodate future tenants in a building that is being built on a speculative basis, is approximately 9,437 square feet, which remains necessary for meeting the market standard for rooftop equipment available to prospective building tenants.	Exhibits 2.22-2.27