50 CambridgePark Drive Residences

Cambridge, MA / Supplement to Special Permit Application / August 1, 2018

TheMcKinnonCo.
ComplexUrbanDevelopment

Developer

on behalf of

HANOVER COMPANY

Owner

CUBE3 STUDIO
architecture interiors planning

goulston&storrs
counsellors at law
thinkresults

Steven Winter Associates, Inc.
Improving the Built Environment Since 1972

VHB Vanasse Hangen Brustlin, Inc.

BSC GROUP

HALEY & ALDRICH

HANOVER COMPANY

The McKinnon Co.
Complex Urban Development

August 1, 2018

Mr. Ted Cohen, Chairman
and Members of the Cambridge Planning Board
344 Broadway, Cambridge MA. 02139

RE: ***Supplemental Application for 50 CambridgePark Drive***

Dear Chairman Cohen and Members of the Board,

We look forward to coming before you on August 28, 2018 and thank you for scheduling the meeting.

Since our July 10, 2018 Public Hearing, we have had multiple meetings and exchanges with the Community Development Department, Department of Public Works and the Department of Traffic, Transportation and Parking. We wanted to be sure that the Supplemental Application responds to all the issues raised that evening. That spirit of collaboration will continue as we go forward.

This submission contains a single document that both answers the questions we heard on July 10 and provides supplemental plans and graphic detail of all changes from the original application. A complete set of project drawings incorporating all the changes will be delivered to CCDD on Monday August 6.

Thank you again,

Hanover Company

David S. Hall
Development Partner

The McKinnon Company

Richard McKinnon
President

QUESTION 1

Will the Proponent provide a disclosure page to all prospective tenants as to the fact that 50 CambridgePark Drive is located in the Flood Plain?

ANSWER

Yes. Hanover Company will include in all lease documentation and resident information packets a definitive disclosure that 50 CambridgePark Drive is located in a flood plain. Beyond this initial disclosure, a fundamental element of the proposed Triangle Initiative is an ongoing, comprehensive resident and neighborhood communication and education strategy centered on preparedness. Question 6 describes the initiative in more detail.

QUESTION 2

What are some of the public benefits associated with the Transfer of Development Rights in the Application?

ANSWER

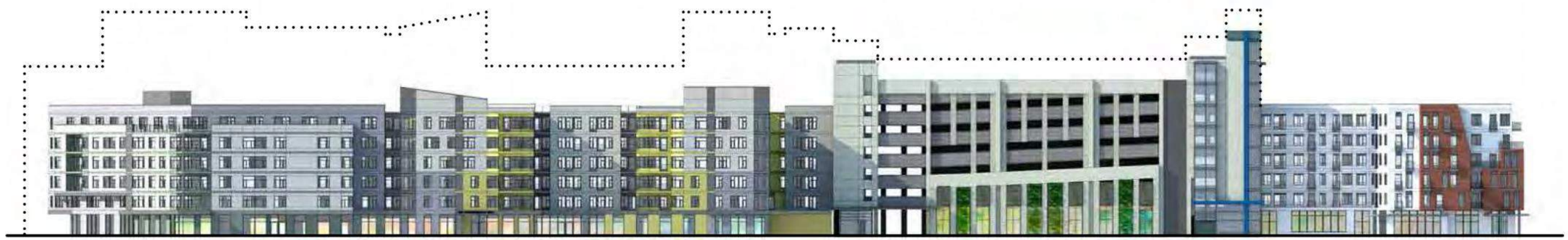
There are four primary benefits to the Transfer of Development Rights in Alewife 6 ("The Triangle") from 88 CambridgePark Drive to 50 CambridgePark Drive:

1. In an urban environment, well-located and properly planned residential density is a public benefit in and of itself. It creates places to live and lends vitality as well as physical and economic activity to the community. The residential density allowed (but not used) at 88 CambridgePark Drive was perhaps mis-located. It is better suited where it can have a real place-making benefit along CambridgePark Drive and our new street.

2. The proposed TDR supports the City's important policy goals of encouraging the creation of additional market and affordable housing in Cambridge. The proposed TDR will create 123 additional housing units at 50 CambridgePark Drive, including an additional 20-25 units of affordable housing. 50 CambridgePark Drive will serve as an important example that developers can make the new 20% affordability requirement work in Cambridge.

3. The proposed TDR allows for a consistency among building heights in the neighborhood that supports sound architectural and planning principles in the Triangle. The removal of square footage from 88 CambridgePark Drive was, some may recall, requested by our neighbors when that project sought its Special Permit. There was a sense among the neighbors, and they were right, that the originally designed 88 CambridgePark Drive was too imposing a structure too close to the much-used bridge on Route 16. In contrast, the proposed TDR at 50 CambridgePark Drive will create the additional housing units discussed above within a building that will be the same height or lower than its surrounding neighbors.

4. The proposed TDR would epitomize smart-growth principles by taking unused residential square footage and deploying it across the street from Alewife MBTA Station. This places density where we most want it, and is consistent with the goals of Envision Cambridge calling for additional density in the Alewife Overlay District.



DIMENSIONAL FORM

Project Address: 50 CambridgePark Drive **Supplement Date: 8/1/18**

	Existing[1]	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	79,321	5,000 sf (min)	79,321 sq ft	
Residential Lot Area (sq ft)	NA	NA	73,727 sq ft [2]	
Lot Width (ft)	232	50 ft	232 ft	
Total Gross Floor Area (sq ft)	NA	198,683 sf	313,647 sf	
Residential Base	NA	147,455 sf	147,455 sf	
Non-Residential Base	NA	6,992	6,992 sf	
Inclusionary Housing Bonus	NA	44,236 sf	44,236 sf	
Transfer of Development Rights	NA	NA	123,000 sf [3]	
Total Floor Area Ratio	NA	1.25/2	3.95	
Residential Base	NA	2	1.86	
Non-Residential Base	NA	1.25	0.09	
Inclusionary Housing Bonus	NA	0.6	0.56	
Transfer of Development Rights	NA	NA	1.45	
Total Dwelling Units	NA	171 units	294 units	
Base Units	NA	132.2 units	132.2 units	
Inclusionary Bonus Units	NA	39.7 units	39.7 units	
Transfer of Development Rights	NA	NA units	123 units [3]	
Base Lot Area / Unit (sq ft)	NA	600 sq ft	600 sq ft	
Total Lot Area / Unit (sq ft)	NA	464 sq ft	270 sq ft	
Building Height(s) (ft)	NA	85'	84'-11"	
Front (North)Yard Setback (ft)	NA	(H+L)/4= 64'	15'-3"	
Front (West)Yard Setback (ft)	NA	(H+L)/4= 99'	27'-10"	
Side (South)Yard Setback (ft)	NA	(H+L)/5= 52'	9'-3"	
Side (East)Yard Setback (ft)	NA	(H+L)/5= 88'	7'-9"	
Open Space (% of Lot Area)	NA	15 %	25 %	
Private Open Space	NA	NA	22 %	
Permeable Open Space	NA	25 %	22 %	
Other Open Space (Specify)	NA	NA	NA	
Off-Street Parking Spaces	NA	308 [4]	179	
Long-Term Bicycle Parking	NA	308	328	
Short-Term Bicycle Parking	NA	37	38	
Loading Bays	NA	0	1	

Use space below and/or attached pages for additional notes:

1. Existing improvements to be demolished as part of this project.
2. Residential Lot Area = Proposed Lot Area - (Retail SF / 1.25)
3. See following page for TDR calculations.
4. Combined residential and retail

Dimensional Form (continued)

Project Address: 50 CambridgePark Drive **Supplement Date: 8/1/18**

88 Cambridge Park Drive				
Total GFA	**Allowed**	**Actual**	**Available**	**Notes**
	453,689	294,000 sf	159,689 sf	

	Available Development Rights	Transfer of Development Rights	Excess Development Rights after TDR	Notes
50 CambridgePark Drive	-123,000 sf	123,000 sf	0	Proposed acquisition of 123,000 sf of TDR from 88 CPD results in additional 123 units at 50 CPD
88 CambridgePark Drive	159,689 sf	-123,000 sf	36,689	
Total			36,689	

QUESTION 3

How does this redevelopment project provide public benefits and enhance the Triangle Neighborhood in addition to those resulting from Transfer Development Rights?

ANSWER

- The Project will eliminate multiple existing driveways on CambridgePark Drive and replace them with a single curb cut on the new neighborhood street along the Western boundary of the Site, reducing traffic conflicts and improving the pedestrian and bicycle environment on both streets.
- The design of the new neighborhood street will strengthen area-wide pedestrian and bicycle connections and allow for connection to a future pedestrian/bicycle bridge over the MBTA commuter rail tracks.
- The Project has committed to construct a new bike lane on CambridgePark Drive.
- The Project has committed to provide a new Blue Bikes station adjacent to the Southern edge of the Site.
- The Project has committed to make financial contributions to planning, design and/or physical initiatives to improve access and mobility for the Triangle Neighborhood.
- The inclusion of street-level retail and restaurant uses in the Project will bring lively pedestrian activity to CambridgePark Drive, all the while reducing the need for automobile trips in and out of the Triangle for residents and employees alike.
- The Project has committed to a robust Transportation Demand Management (TDM) program that will add to the effectiveness of the Alewife Transportation Management Association (TMA).
- The Project will improve the Site by creating on-Site flood storage for flood elevation projections associated with existing and projected floodplains. Additionally, the Project will incorporate 220 stormwater infiltration units and reduce impervious surfaces to promote stormwater infiltration and groundwater recharge. This will contain stormwater runoff during all rainfall events to reduce demand on the municipal drainage system.
- Project design includes an on-site sewer holding tank to reduce the potential for combined sewer outfall (CSO) discharges during storm events in the North Cambridge area.
- The streetscape design will use permeable paving materials and incorporate green infrastructure (*e.g.*, bio-filtration tree pits) to promote natural stormwater treatment within the Project's open space.
- The Project will provide at-grade open space for the use and benefit of the public, including a community play area, a bike path, new sidewalks, accessible curb ramps, enhanced landscaping, site furniture, lighting and other amenities in the public realm.
- The Project will incorporate significant street tree plantings – such as thirty-seven (37) four-inch (4") caliper shade trees – along CambridgePark Drive and drive areas shared with adjacent properties. These new street trees will increase tree canopy in the Triangle Neighborhood and reduce urban heat island effect.
- The Project is designed with more than 14,000 square feet of solar-ready roof comprised of white, high-albedo/solar reflectance materials that will contribute to the City's Net Zero Action Plan community goals and reduce the urban heat island effect.
- The Site Action Plan for the Project details climate adaptation measures including flood protection elements for ground level building uses. The Site Action Plan has been developed to promote building resilience and preparedness and calls for ongoing engagement with the City of Cambridge.
- The Project will implement design selections and construction practices anticipated to qualify for a LEED Gold rating.

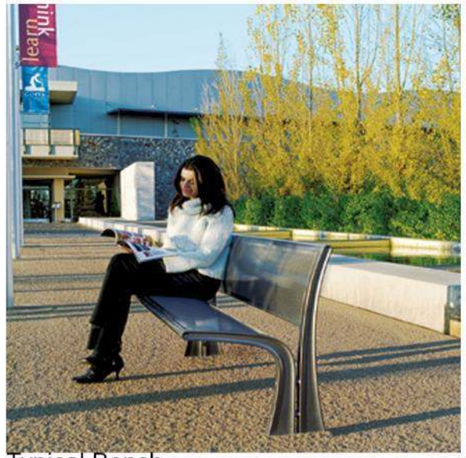
- The Hanover Company will take the lead in establishing the Triangle Neighborhood Initiative, the first privately-led neighborhood resilience, preparedness, and community engagement plan. The Initiative will build social cohesion by educating residents, employees and visitors about the impacts of climate change in the Triangle, and will foster cooperation among property owners and the City to improve the safety and security of everyone within the Triangle. The Initiative will allow the Project to reach beyond the Site to prepare, educate and collaborate with its neighbors to enrich the Triangle's diverse community and adapt to a changing climate. More detailed information about The Initiative can be found in Question 6.

- Once constructed, the Project will generate approximately $600,000 in real estate tax payments to the City of Cambridge.

- The Project will create approximately 250 construction jobs and approximately thirty (30) permanent jobs.

Typical Material Photos
Note: These are representative pictures from other Hanover projects. Final selections and finish will vary.

Dero Bike Hitch (Cambridge City Standard)



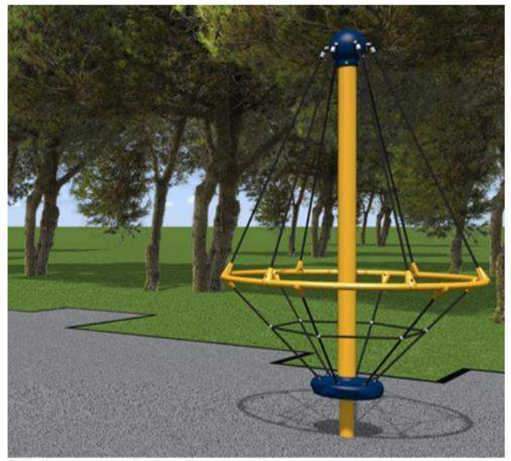
Typical Bench

Permeable Pavers

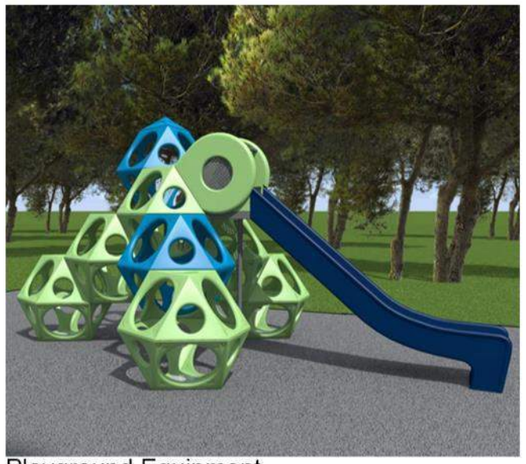
Decorative Planter with Annual Color

Decorative Planter with Annual Color

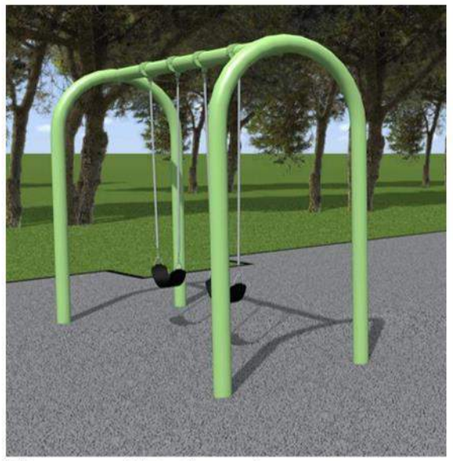
Typical Material Photos
Note: These are representative pictures from other Hanover projects. Final selections and finish will vary.



Playground Equipment



Playground Equipment



Playground Equipment

Typical Dog Run with Artificial Turf

Hubway Bike Share Station

SCALE: 1" = 60'

0' 30' 60' 120'

AT GRADE OPEN SPACE AND PERMEABLE AREA

KEY	AREA	% LOT
GREEN AREA	8,936 SF	11.27 %
PERMEABLE AREA	8,936 SF PERMEABLE	
PUBLICLY BENEFICIAL	9,861 SF	12.43 %
PERMEABLE AREA	7,814 SF PERMEABLE	
PRIVATE	1,292 SF	1.63 %
PERMEABLE AREA	1,292 SF PERMEABLE	

CALCULATIONS

LOT AREA = 79,321 SF

AT GRADE OPEN SPACE	AREA	% LOT
REQUIRED 15% OF 79,321 SF =	11,898 SF	15%
PROVIDED GREEN AREA + PUBLICLY BENEFICIAL + PRIVATE OPEN SPACE =	20,089 SF	25.33 %
PERMEABLE AREA	**AREA**	**% LOT**
REQUIRED 25% OF 79,321 SF =	19,830 SF	25 %
PROVIDED PERMEABLE GREEN + PUBLICLY BENEFICIAL + PRIVATE OPEN SPACE =	18,042 SF	22.75 %
PERMEABLE AREA INCLUDING STORMWATER DETENTION		**% LOT**
STORMWATER DETENTION	7,040 SF	8 %
PERMEABLE GREEN + PUBLICLY BENEFICIAL + PRIVATE OPEN SPACE =	18,042 SF	22.75 %
TOTAL PERMEABLE GREEN + PUBLICLY BENEFICIAL + PRIVATE OPEN SPACE + STORMWATER DETENTION =	25,082 SF	31.62 %

QUESTION 4

How does this redevelopment project meet the sustainability and resiliency goals of the City of Cambridge?

ANSWER

The Project is working with the City of Cambridge to further its sustainability and resiliency goals. The Project team has worked extensively with staff from the Cambridge Community Development Department (CCDD), the Traffic, Parking & Transportation Department (TPT) and the Department of Public Works (DPW) to incorporate sustainable and resilient elements into the design of the Project as shown on the attached graphic. Green building practices have been incorporated into the Project starting below grade, continuing through the streetscape, and following through the building itself up to the roof. The significant environmental benefits of these sustainable design elements and practices, for both the Project and the public, are detailed in Question 3.

SOLAR-READY ROOF

- Over 14,000 sq feet of solar-ready space on building roof.
- Conduit infrastructure installed in advance

GREEN BUILDING DESIGN

- Investment in training Construction and Operations Teams in green building practices
- Building anticipates meeting LEED Gold standards

REDUCE URBAN HEAT ISLAND EFFECT

- Energy efficient white roofing materials to be used.
- Permeable paving materials to be used at street level.

LANDSCAPE FEATURES

- Increase tree canopy through inclusion of 51 new street shade trees.
- Planting along streetscape and pedestrian amenities. (street furniture, lighting, bicycle racks, etc.)

RESILIENT DESIGN MEASURES

- Increase on-site flood storage. (under building)
- Increase stormwater infiltration/groundwater recharge. (220 stormwater chambers)
- Site Action Plan, including flood protection measures, to prepare for a changing climate.

ALTERNATIVE TRANSPORTATION

- Provide new bicycle racks and 'Blue Bikes' in public realm.
- Construct new bicycle lanes in Triangle neighborhood.
- Provide TDM benefits to encourage use of MBTA public transit (across from Alewife T Station)

SOCIAL COHESION

- Build a community through engaging public spaces and neighborhood businesses.
- Social programming for residents and visitors.
- Educate through "Triangle Neighborhood Initiative" for a climate-ready community.

Green Factor Score Summary

Existing

Parcel Size = 79,321 SF
Landscape Area (Soil Depth < 24") = 0 SF
Landscape Area (Soil Depth > 24") = 3,700 SF

Shrubs = approx. existing 75 plants
Small Trees = 17 existing small trees
Small/Medium Trees = existing 7 trees
Medium/Large Trees = existing 9 trees
Large trees = existing 1 tree

Vegetated Walls = approx. 200 SF (trellis system on existing building – sparsely vegetated)

Drought-tolerant or native plant species = 3,700 SF (assumed)
Landscape Visible from Public R.O.W. = 3,700 SF

EXISTING GREEN FACTOR SCORE ESTIMATE – 0.07

Proposed

Parcel Size = 79,321 SF
Landscape Area (Soil Depth < 24") = 60 SF
Landscape Area (Soil Depth > 24") = 8,083 SF
Bioretention Facilities = 900 SF (Biofiltration Tree Pits)

Shrubs = 500 plants
Small Trees = 6 trees
Small/Medium Trees = 29 trees
Medium/Large Trees = 27 trees
Large trees = 42 tree

Permeable Paving (Depth 6-24") = 5,460 SF

Drought-tolerant or native plant species = 5,000 SF (assumed)
Landscape Visible from Public R.O.W. = 5,000 SF

PROJECT GREEN FACTOR SCORE ESTIMATE – 0.25

(Information listed above is an abridged version of Green Factor Score features only. Official City of Seattle Green Factor Score Card has been completed and submitted to City of Cambridge Department of Public Works for their review.)

Tree Mitigation Summary

Existing Trees To Be Removed

TOTAL SIGNIFICANT DBH TO BE REMOVED—145 inches/17 trees
(majority of trees to be removed are Norway Maples and Tree of Heaven along property boundary – see Project Tree Study)

New Trees to be Planted

9 - 5" Caliper Street Trees (adjacent to 100 CPD) = 45 inches
42 - 5" Caliper Street Trees (adjacent to Project) = 210 inches
Total New Street Trees = 255 inches/51 trees

7 – 4" Caliper Deciduous Trees (Site) = 28 inches
56 – 2-3" Caliper Evergreen Trees (Site) = 139 inches
6 – 3" Caliper Ornamental Trees (Site) = 18 inches
Total New Site Trees = 185 inches/69 trees

22 Courtyard Level Trees (3-4" Caliper) = 78 inches
Total New Courtyard Level Trees = 78 inches/22 trees

TOTAL NEW TREES TO BE PLANTED – 518 inches/142 trees

Typical Street Trees

Street Tree Fall Color

Typical Ornamental Trees

Typical Ornamental Trees

Partial Concept Plant List

Trees

Quercus borealis rubra	Northern Red Oak
Carpinus betulus 'Fastigata'	Pyramidal European Hornbeam
Pinus Strobus	White Pine
Picea pungens 'Fat Albert'	Fat Albert Colorado Spruce
Picea glauca	White Spruce
Betula nigra	River Birch
Acer palmatum var. dissectum	Crimson Queen Japanese Maple
Juniperus chinensis 'Iowa'	Iowa Upright Juniper
Thuja occidentalis 'Emerald Green'	Emerald Green Arborvitae

Shrubs

Chamaecyparis obtusa	Compact Hinoki Falsecypress
Miscanthus sinensis 'Yaku Jima'	Dwarf Miscanthus
Taxus media 'Hicksii'	Hicks Yew
Rhododenron catawbiense	Catawba Rhododendron
Rhododendron PJM	PJM Rhododendron
Juniperus chinensis 'Sea Green'	Sea Green Juniper
Hydrangea quercifolia 'Alison'	Oakleaf Hydrangea
Cornus sericea 'Arctic Fire'	Red Twig Dogwood
Prunus depressa	Sand Cherry
Buxus microphylla 'Green Mountain'	Green Mtn. Boxwood

Groundcovers

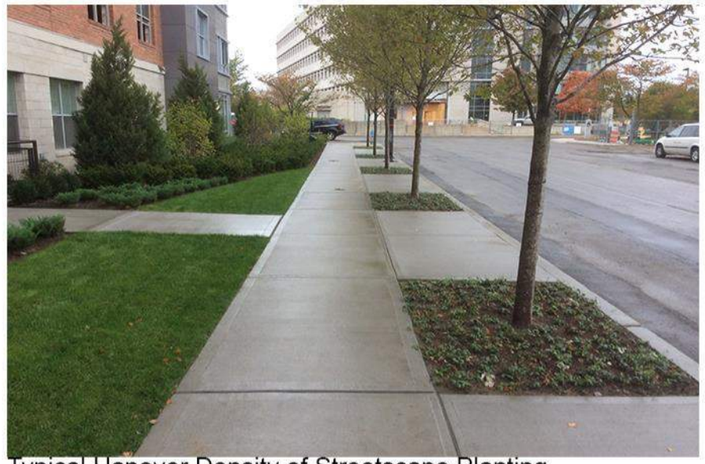
Taxus media 'Densiformis'	Dense Yew
Juniperus virginiana 'Grey Owl'	Grey Owl Juniper
Juniperus horizontalis	Andorra Juniper
Parthenocissus tricuspidata	Boston Ivy
Pachysandra terminalis	Pachysandra
Hosta 'Big Mama'	Big Mama' Hosta

Typical Planting Photos

Note: These are representative pictures from other Hanover projects. Final selections and finish will vary.

Evergreen Screening at Utility Meters

Evergreen Screening at Electrical Transformers



Typical Hanover Density of Streetscape Planting

Typical Hanover Density of Streetscape Planting

QUESTION 5

What are the advantages of having a more unified ownership on CambridgePark Drive?

ANSWER

Affiliated partnerships of Hanover and Longfellow Real Estate Partners/Morgan Stanley have interests in upwards of 80% of the property on the Triangle. More unified ownership on CambridgePark Drive enables an ease and efficiency of communication and negotiation between neighbors, and with the city. This has already proven itself in five (5) critical areas of the Project: (i) transfer of development rights, (ii) new street, (iii) Triangle Initiative, (iv) shared use easements, and (v) collaboration on retail and merchandising mix.

This creates advantages and opportunities:

1. Transfer of Development Rights: Requires a contractual agreement between owners that may not have been possible under disparate ownership.

2. New Street: The new street sits partially on Longfellow Real Estate Partners/ Morgan Stanley property at 150 CambridgePark Drive, with portions on the 100 CambridgePark Drive property. Early on, these owners recognized the obvious benefits of a new street for their office buildings and have collaborated with Hanover to plan this public benefit on private land.

3. Triangle Initiative: Hanover will lead this initiative, which requires extensive outreach and collaboration among neighbors, made easier by fewer property owners. Beyond planning, if an emergency arises, these efficiencies will become real. A detailed description of this initiative can be found in Question 6.

4. Shared Use Easements: Today, a highly complicated and arcane set of easements govern the use of drives, common areas, and parking between Hanover and Longfellow/Morgan Stanley properties. In certain instances, these instruments create operational confusion. The two parties are crafting a single, cohesive, and flexible document to replace the tangled web of existing agreements. This will make common maintenance easier to administer, to the benefit of current owners, future owners, and the public

5. Retail and merchandizing mix: Hanover and Longfellow/Morgan Stanley have begun collaborating on identifying the ideal merchandising mix and proper placement for all ground-level retail and amenity spaces in our respective buildings.

QUESTION 6

What is the Triangle Neighborhood Initiative and how does it promote climate preparedness and social cohesion between residents, employees, and visitors along CambridgePark Drive?

ANSWER

The Triangle Neighborhood Initiative is the first privately-led climate resilience and preparedness initiative in Cambridge. It is designed to engage neighborhood stakeholders and the City of Cambridge to work collaboratively to understand and respond at a neighborhood level to the potential physical and social stressors associated with a changing climate. This effort will be strongly based upon the *DRAFT Cambridge Climate Change Preparedness and Resilience Plan for Alewife District* and the Mayor's Special Advisory Committee on Neighborhood-Based Resiliency's *Assessing and Improving Neighborhood-Based Resiliency in Cambridge*. The Project developer, the Hanover Company, has engaged a resiliency planner to lead this initiative by drafting the climate change preparedness and resilience plan and engaging with the City of Cambridge, property owners along CambridgePark Drive, and other stakeholders. The Hanover Company is very excited to take the lead role on this Initiative, which has been well-received by CambridgePark Drive neighbors, and is scheduled to commence stakeholder meetings in late Fall 2018.

This Initiative will work to develop methods of communication and preparedness such that the City, together with all Triangle residents, property managers, office workers and ownership groups, become well-educated on the opportunities and challenges associated with the Triangle Neighborhood and are prepared to support each other before, during and after potential storms and other stressor events. Improving social cohesion is integral to the success of the initiative, to ensure that all CambridgePark Drive stakeholders feel a strong connection to the neighborhood and each other regardless of income level, length of residency/use and other superficial factors, and are better able to adapt to climate stresses.

The Hanover Company has extensive experience developing residential communities throughout the country that focus on common space amenities and social programming, such as barbeques, fitness classes, and other events, to foster lasting connections among their residents. The Triangle Neighborhood Initiative will strive to extend that experience beyond the individual residential buildings and into the CambridgePark neighborhood to benefit all stakeholders.

The Triangle Initiative Examples will explore preparedness measures such as:

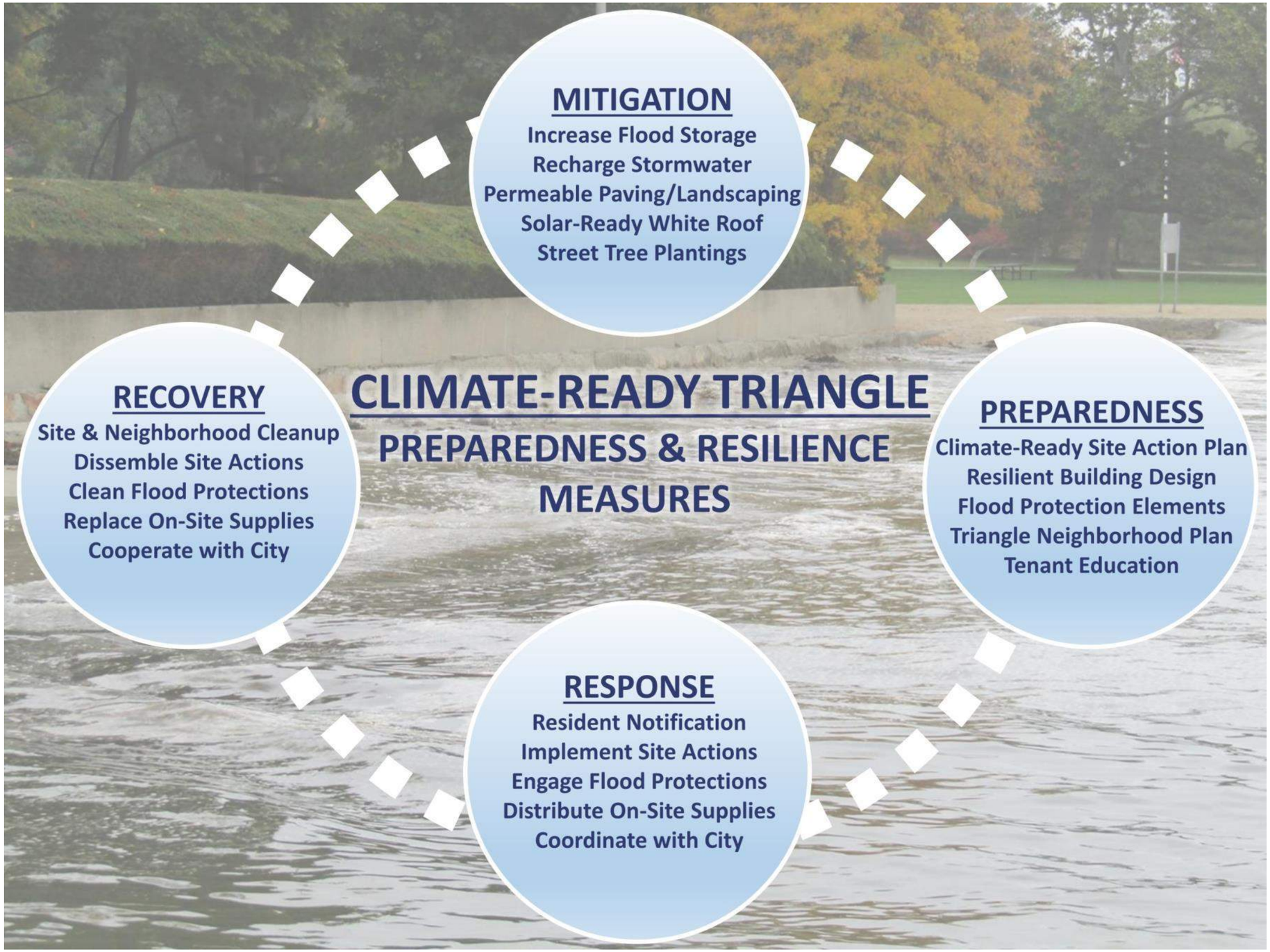
- Creation of a Neighborhood Community Group to share/educate about site preparedness measures, foster collaboration for post-storm cleanup efforts, and other coordination.
- Collaboration on neighborhood event notification measures and other communication tools to enhance community preparedness and build awareness of evolving site action plans.
- Identify and promote multiple neighborhood “Resilience Hubs”: locations powered by backup power generation that provide heating/cooling systems for climate comfort, access to electrical charging stations for cell phones and other devices, refrigeration for necessary medical supplies and other perishables, and other supplies such as bottled water, first aid supplies, Automated External Defibrillators (AEDs) recommended by Massachusetts Emergency Management Agency (MEMA).
- Coordinate Parking Management Strategies to provide secure parking options on upper levels of protected parking garages during storm events.
- Leverage educational and awareness opportunities to build social cohesion and teach residents, employees, visitors and others in the Triangle Neighborhood of the opportunities, challenges and adaptive capacity of the community.

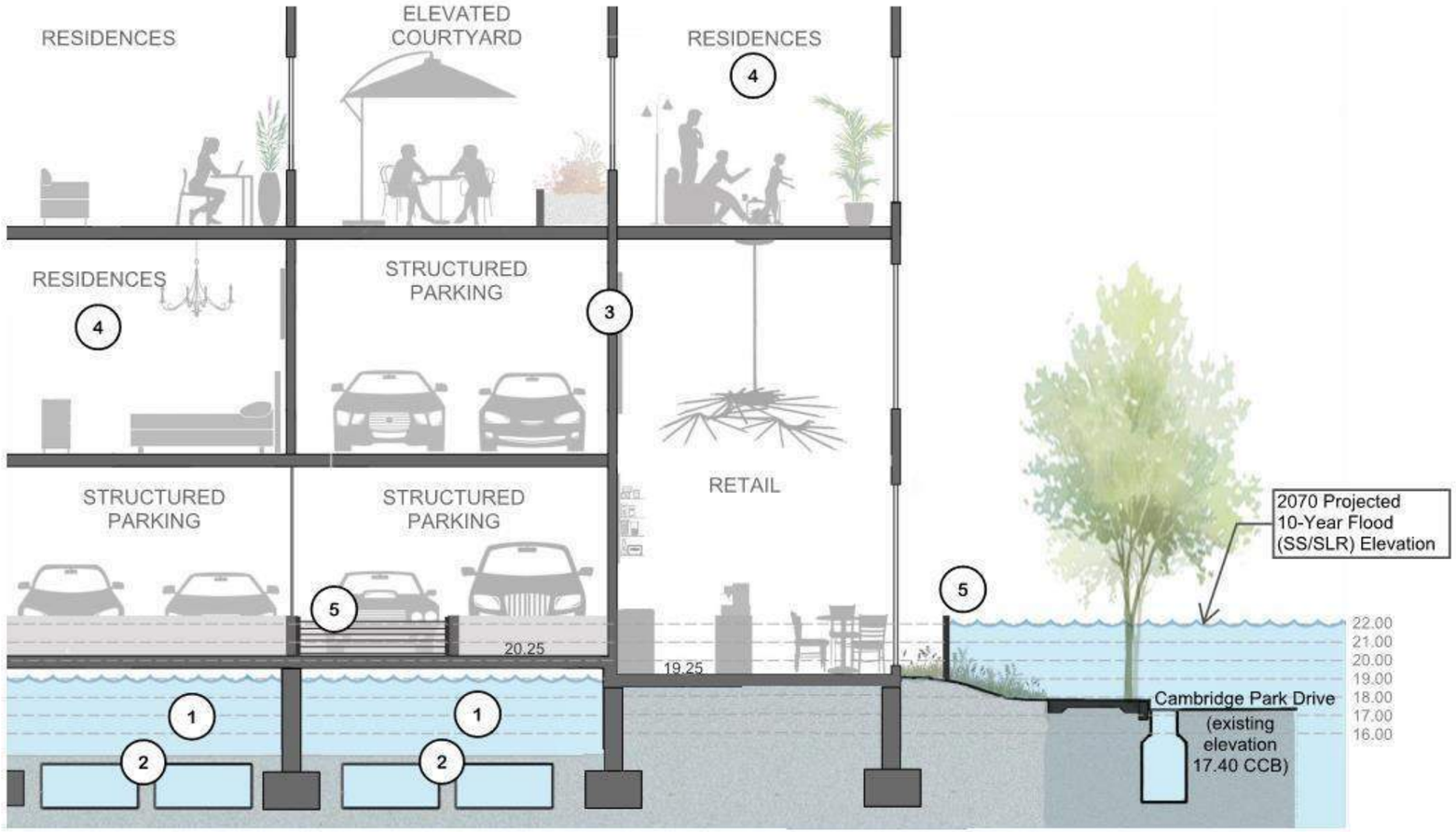
QUESTION 7

How does this redevelopment project respond to the recommendations of the City of Cambridge's on-going climate resiliency work as documented in the *City of Cambridge Climate Change Vulnerability Assessment (CCVA)* and the *DRAFT City of Cambridge Climate Change Preparedness and Resilience Plan*?

ANSWER

The 50 CambridgePark Drive project has incorporated the recommendations and projected flood elevations from the *City of Cambridge Climate Change Vulnerability Assessment (CCVA)* and the *DRAFT City of Cambridge Climate Change Preparedness and Resilience Plan* into the design of the Project as shown on the attached graphics. In addition, the Project team has drafted a DRAFT Site Action Plan in coordination with the City of Cambridge Department of Public Works (DPW) staff to address preparedness, such a flood protection measures, on-site supplies, and other measures to promote the resiliency of the building and its occupants. Flood protection measures are further detailed in Questions 3, 6 and 9.


MITIGATION
Increase Flood Storage
Recharge Stormwater
Permeable Paving/Landscaping
Solar-Ready White Roof
Street Tree Plantings
RECOVERY
Site & Neighborhood Cleanup
Dissemble Site Actions
Clean Flood Protections
Replace On-Site Supplies
Cooperate with City
CLIMATE-READY TRIANGLE
PREPAREDNESS & RESILIENCE MEASURES
PREPAREDNESS
Climate-Ready Site Action Plan
Resilient Building Design
Flood Protection Elements
Triangle Neighborhood Plan
Tenant Education
RESPONSE
Resident Notification
Implement Site Actions
Engage Flood Protections
Distribute On-Site Supplies
Coordinate with City



(1) Flood Storage Area - allows natural passage of flood water below structure through open grates along eastern building perimeter. Increased flood storage for present and future conditions (in excess of projected 2070 10-year flood elevation).

(2) Stormwater infiltration - reduction in impervious area on-site and 220 precast concrete galley chambers designed for groundwater recharge of roof runoff.

(3) Green Building Design - will meet and exceed requirements of LEED (Leadership in Energy and Environmental Design) Silver certification and incorporate a solar-ready energy efficient white roof.

(4) No Residential Units at Ground Level

(5) Building Flood Protection Measures - temporary perimeter and gateway barriers to 2070 projected 10-year (based on SLR/SS) flood elevation (project will strive to exceed the City of Cambridge recommendations).

QUESTION 8

The Proponent is clearly putting the residents well above projected flood elevations by starting the residential units at the second floor. The retail along CambridgePark Drive and ground level amenities have approximately 2-3 feet of potential vulnerability under 2070 flood projections (in a scenario where the Amelia Earhart Dam is breached). What measures will the Proponent take to protect the retail spaces of the building?

ANSWER

The Proponent has worked with the City of Cambridge Department of Public Works (DPW) staff to develop a Site Action Plan that includes flood protection measures for the ground floor of the proposed building. The Proponent anticipates three types of flood protections being utilized to protect to 2070 projected flood elevations as follows:

- **Perimeter Barrier Flood Protection Element**s – Free-standing flood protection elements that, when deployed in advance of a storm, are ground-anchored off the building to protect the glass storefront/windows at the retail spaces and main building entry points. These perimeter barriers are typically made of aluminum post and panel assemblies or portable laminate and canvas panel systems, which can be stored flat in the property's parking garage when not in use.
- **Gateway Barrier Flood Protection Elements** – Doorway flood protection elements that consist of drop-in place aluminum planks or passive ground-mounted gate systems to be used at the parking garage entrance, loading dock, and secondary entrance points to the building.
- **Tube Barrier Flood Protection Elements** – Flood containment barriers that are filled with anchoring materials such as sand, water or similar materials to conform to topographic and geometrically unique areas of the Site. These elements will likely be used around ground mounted-utility infrastructure that cannot be further raised in elevation due to utility company requirements.

Note – The Project has committed to annual flood protection trainings and test-installations for property management staff in accordance with the property's Site Action & Long-Term Operation & Maintenance Plan.

QUESTION 9

As part of the Proponent's resiliency planning and preparedness efforts, will measures be taken to allow for a shelter-in-place scenario if recommended by the City of Cambridge?

ANSWER

The Project will include a "resilience hub", a common space to which all residents will have access in the event of shelter-in-place scenario and which will be powered by backup power generation. The resilience hub will provide heating/cooling systems for climate comfort for vulnerable residents, access to electrical charging stations for cell phones and other devices, and refrigeration for necessary medical supplies and other perishables. The resilience hub will also contain other supplies as recommended by Massachusetts Emergency Management Agency (MEMA), such as bottled water, first aid supplies, Automated External Defibrillators (AEDs) and other supplies.

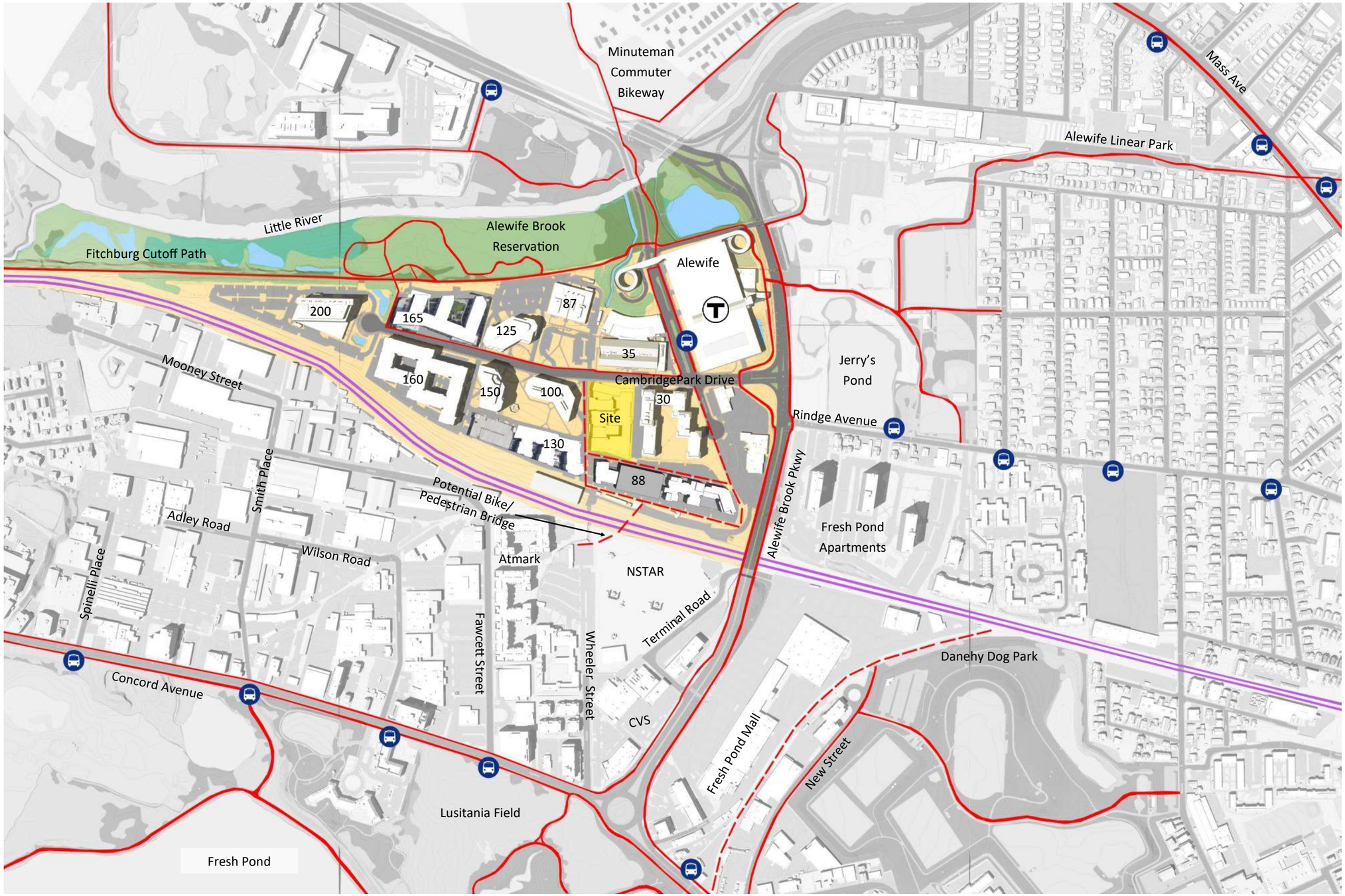
QUESTION 10

How will this project connect to the existing transportation network in the area?

ANSWER

50 CambridgePark Drive is a truly transit-oriented development, located nearly as close as possible to the MBTA Alewife station, where Red Line service and capacity will be substantially increased in the near future by signal upgrades and the addition of 252 new cars. These improvements are anticipated to reduce peak hour headways from 4.5 minutes to 3 minutes and accommodate approximately 7,000 additional passengers per hour.

The new bicycle lane to be constructed on CambridgePark Drive by the Project will fill in a missing connection within both the regional and local bicycle networks, including the nearby Minuteman Commuter Bikeway, the Alewife Greenway, and the Linear Park. In addition, the new street will provide an important connection a future pedestrian/bicycle bridge over the MBTA commuter rail tracks, further enhancing pedestrian and bicycle connectivity within the Triangle and beyond.



LEGEND

	Existing Bike Circulation
	Proposed Bike Circulation
Ⓣ	Alewife Station
	MBTA Commuter Rail
	Bus Stop
	50 CambridgePark Drive

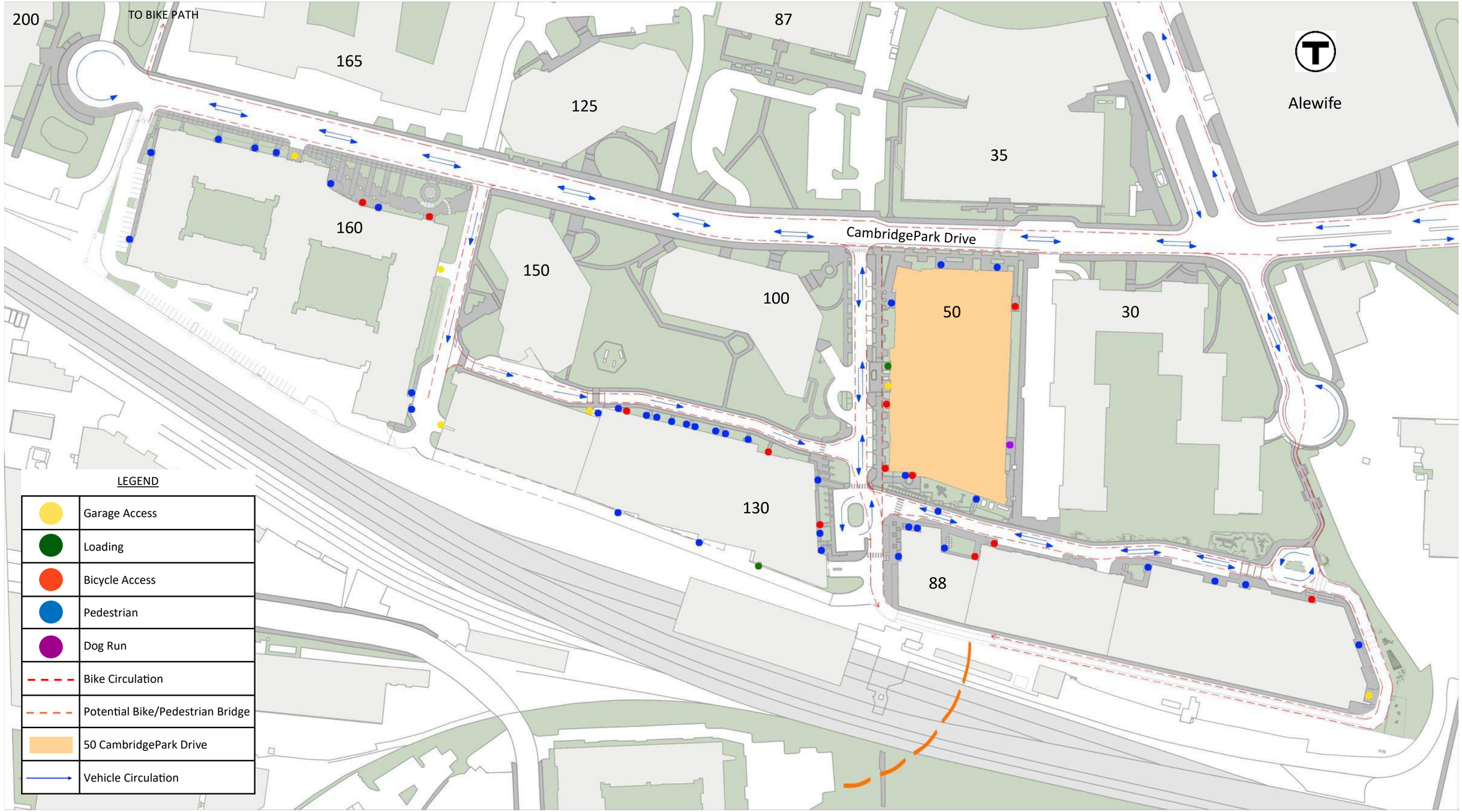
QUESTION 11

How do the proposed at-grade improvements at 50 CambridgePark Drive, including the new street, bike pathway and pedestrian amenities, connect to the surrounding area and promote a publicly beneficial open space and multi-modal connectivity?

ANSWER

The Project will eliminate multiple existing driveways on CambridgePark Drive and replace them with a single curb cut on the new neighborhood street along the Western boundary of the Site, reducing traffic conflicts and improving the pedestrian and bicycle environment on both streets.

The design of the new neighborhood street will strengthen area-wide pedestrian and bicycle connections and allow for connection to a future pedestrian/bicycle bridge over the MBTA commuter rail tracks. This will make it easier for neighbors to access the Project's at-grade open space, which will include a community play area, a bike path, site furniture, and other amenities in the public realm.


200
TO BIKE PATH
165
125
87
35
Alewife
160
CambridgePark Drive
150
100
50
30
130
88
LEGEND
Garage Access
Loading
Bicycle Access
Pedestrian
Dog Run
Bike Circulation
Potential Bike/Pedestrian Bridge
50 CambridgePark Drive
Vehicle Circulation

QUESTION 12

Will any additional vehicle trips, regardless of small number, be acceptable in light of existing traffic congestion in the area and the single cul-de-sac roadway serving the Project?

ANSWER

The Project is consistent with the goals of the Concord-Alewife Plan's objectives to enhance mobility and reduce dependence on auto travel, which in turn support the City's goals to improve air quality. The project will generate a moderate number of new vehicle trips, and as a result it performs well under the Planning Board's TIS evaluation criteria, established to determine the impact and acceptability of a project. Indeed, the TIS analysis does not reflect the elimination of many other vehicle trips from existing office and residential development due to the introduction of retail, as well as the elimination of vehicle trips arising from the current office use of the Site.

Peak period traffic congestion in the area is fully recognized, but it is largely a regional traffic problem. More than 80% of vehicle trips using Route 2 and the Alewife Brook Parkway corridor have no origin or destination in the area. The situation is exacerbated by the role of Alewife station as a regional park-and-ride facility for the Red Line. As a result, traffic congestion is effectively beyond the City of Cambridge's control. This should not be allowed to stifle either the development of much-needed housing in Cambridge or the Concord-Alewife Plan's objectives to transform the CambridgePark Drive area into a vibrant mixed-use area supported by diverse mobility.

QUESTION 13

Is the parking supply adequate to support the Project demand?

ANSWER

The proposed parking supply for the Project reflects the continuing reduction in parking demand experienced at other residential projects in the CambridgePark Drive area. The lower bound of the City's recommended parking ratio is a cornerstone for successful transit-oriented development because it allows residents with low dependence on automobiles to choose to live in a location where alternative mobility supports their lifestyles. The adjacency of the MBTA, the availability of car-sharing (Zipcar) and bike-sharing (Blue Bikes), and the proximity to the local and regional bicycle network make this possible, and is further enhanced by the continuing addition of retail to CambridgePark Drive's mix of uses. As a result, the Project is proposing a reduced vehicle parking supply of 179 spaces, matched two-fold by bicycle parking, that supports the City's goals to reduce auto emissions and improve air quality.

QUESTION 14

The South courtyard appears small and contributes to a feeling of density. Would you explore ways of expanding this courtyard including removing the units above the loggia or removing units on the South side?

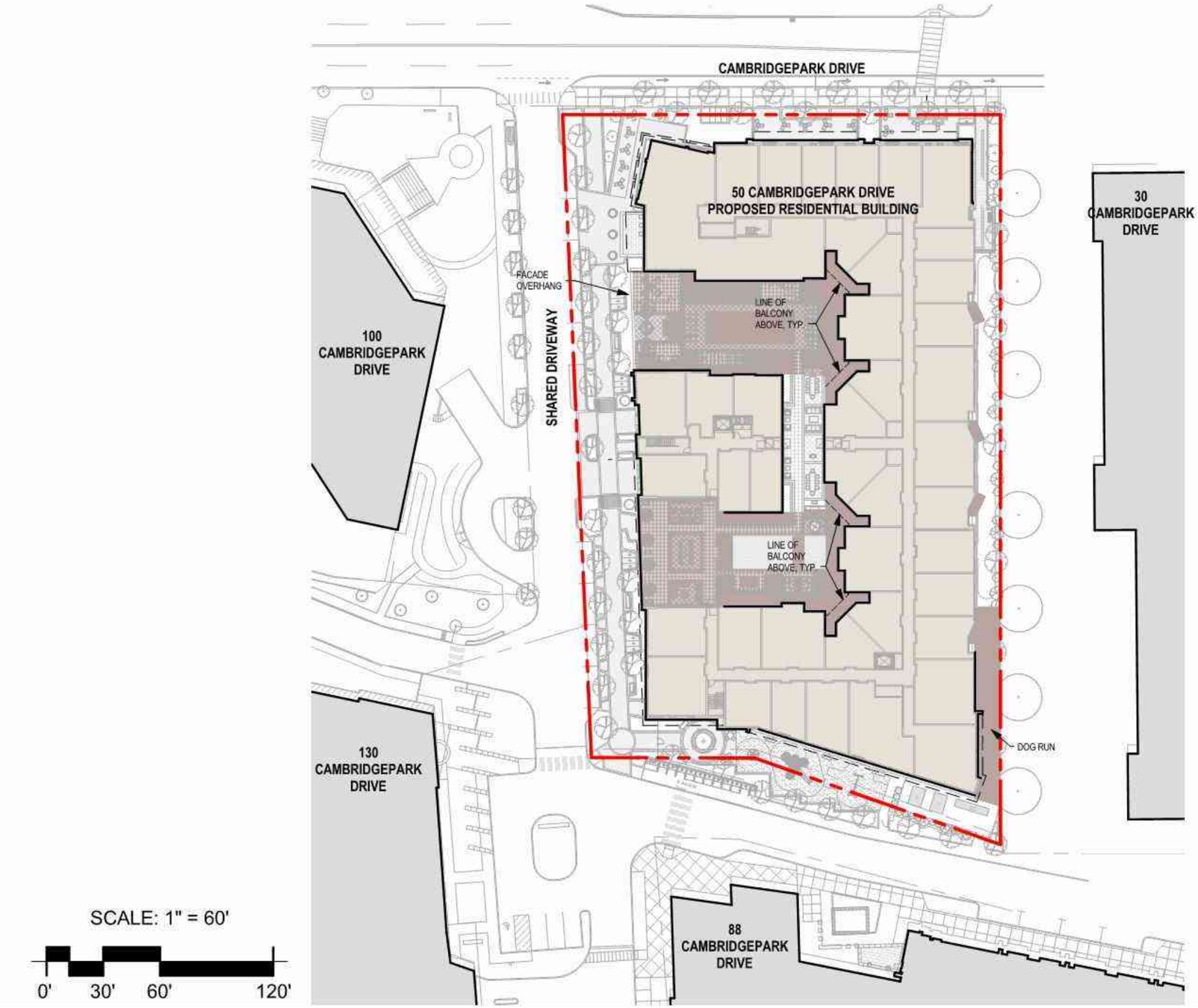
ANSWER

A two-story opening was created along the east façade facing 100 CambridgePark Drive to make the resident experience more welcoming. This opening also creates a direct visual connection to the street and further breaks down the massing along this edge. The additional 2,000 SF of amenity space also adds variety to the outdoor courtyard, providing a large, covered area that enhances the outdoor living experience.

While other options were studied, adding the opening on the West side provides the greatest benefit to the public realm and provides the strongest visual connection to residents by allowing for longer view corridors.

Proposed Perspective Rendering – West (6.11.18)

Proposed Perspective Rendering – West (8.1.18)



PRIVATE OPEN SPACE		
KEY	AREA	% LOT
PRIVATE	14,524 SF	18.31 %

CALCULATIONS		
LOT AREA = 79,321 SF		
PRIVATE OPEN SPACE PROVIDED	AREA	% LOT
DOG RUN (AT GRADE)	1,296	
COURTYARD - NORTH	6,017	
COURTYARD - SOUTH	6,097	
BALCONIES - 4TH	994	
BALCONIES - 5TH	994	
BALCONIES - 6TH	994	
BALCONIES - 7TH	994	
BALCONIES - 8TH	787	
TOTAL PROVIDED =	18,173 SF	22.91 %

UNIT TYPE	6/11/18 QTY	%	7/31/18 QTY	%
STUDIO	43	14.5%	38	12.9%
ONE BEDROOM	175	58.5%	170	57.8%
TWO BEDROOM	73	24.4%	68	23.1%
THREE BEDROOM	8	2.6%	18	6.1%
TOTAL	299		294	

QUESTION 15

Would you reconsider the unit mix in order to provide fewer studio and one bedroom units and more units that can accommodate families?

ANSWER

The unit mix has been revised to more than double the number of three bedroom units. This adjustment to the unit mix and the new opening on the South courtyard results in a net reduction of five units, bringing the total down to 294 units.

QUESTION 16

The West façade of the building has too much of a horizontal emphasis. Would you explore additional locations where the brick could extend down to the ground, lining up the structure between the two-story base and upper floors and simplifying the language at the amenity area below the north courtyard?

ANSWER

The West façade has been redesigned in order to create a more varied pedestrian experience along the shared driveway. Materials and massing have been adjusted to differentiate between retail use, resident entry area, and residential units.

- The porcelain tile façade originally located below the primary amenity courtyard has been replaced with brick as well as set back to allow the "tower" elements on either side to come to the ground and strongly connect to the street.
- A stronger vertical connection has been designed to connect the main resident entry to the amenity space at the second level.
- The two-floor vertical expression on the garage face has been revised to align with the building and strengthen connections between the lower levels and residential levels above.

West Elevation (without entourage)

Proposed Perspective Rendering—Northwest Corner

Proposed Perspective Rendering—Southwest Corner

QUESTION 17

The East façade appears flat and lacks visual interest. Can you address this?

ANSWER

The design of the East façade has been revised to include the following elements:

- Four, five-story bays of projecting, angled balconies on the 3rd-7th floors were added to improve the rhythm and texture of the façade. Two bays are angled south and two are angled north in order to relate to the existing active facades and streetscapes.
- The primary façade is further broken up by recessing the brick below the bays, and by stepping back the top floor to break down the roofline visually from the street.

East Elevation (without entourage)

Perspective Rendering—Northeast Corner

Perspective Rendering – Southeast Corner

QUESTION 18

The proposed resident entry at the bike lounge will be an important entry point and should be emphasized. Can you address this?

ANSWER

- The resident entry at the bike lounge on the East façade has been adjusted to improve visibility from CambridgePark Drive and reinforce it as a resident entry.
- The approach path has been widened and enlarged at the entry to accommodate a bench, and landscaping treatments in the area have been enhanced.
- The storefront entry has been broken into two smaller sections to differentiate them from the retail edge, and canopies have been added.
- Signage has been relocated from above the canopy on the building down to the resident eye level.

Resident Entry at Bike Lounge

QUESTION 19

The building appears to lack detail. Please provide additional information regarding the brick detailing. Would you consider ways to provide more detail and play of shadows such as the use of metal balcony railings and additional balconies?

ANSWER

Building detailing was not adequately shown in the previous presentation, particularly in the brick areas. We have provided additional graphic images to show the design intent, and have added additional details to further enhance the the quality of the facades.

- Window openings in the brick have head and sill details that are now shown at a larger scale, and there are recessed vertical sections of stacked bond pattern adjacent to the balcony locations in an alternate tone to further reinforce the vertical rhythm of the building.
- Brick control joints have been located and shown in these illustrations, and additional details are now provided to illustrate the recessed brick coursing details that are located in several areas around the building.
- Balconies have been revised to reflect metal railings in place of glass, which is being proposed in a darker color to create more contrast in the façade. Railings at the edge of both open courtyards on the West façade are a combination of glass rail and detailed metal posts and rails.

North Elevation (without entourage)

Hanover Post Oak—Photo 1

QUESTION 20

The brick color appears too yellow. Would you reconsider the brick color selection?

ANSWER

We did not intend to propose yellow brick for this building. We believe the interior nighttime lighting at our July 10th hearing made the brick color appear significantly different than it does outside in natural light.

For reference, we have provided photos of other projects that also use the proposed brick, and which we believe reflect its true coloring. We respectfully propose that the Board review the actual mock-up samples of the final brick selections on site.

Hanover Post Oak—Photo 2

Hanover Post Oak—Photo 3

QUESTION 21

Will the Applicant meet again with the North Cambridge Stabilization Committee?

ANSWER

Yes. This will be our third meeting with NCSC. We previously met with them prior to our hearing at the Conservation Commission on that subject.

We then met again with NCSC to show and discuss graphics and text prior to our Special Permit public hearing.

Michael has now kindly scheduled us to return to NCSC on the evening of August 22 to discuss our Supplement to our Special Permit Application, scheduled for a Planning Board hearing on August 28, 2018.