WIND / SHADOW / ACOUSTICAL STUDY

Pedestrian Wind Comfort Conditions
Future Configuration
Summer (May to October, 6:00 to 23:00)

Parcel G & H - Northpoint Site - Cambridge, MA

True North

Drawn by: DBB | Figure: 1
Approx. Scale: 1"=80'
Project #1703124 | Date Revised: Sept. 26, 2017

Pedestrian Wind Comfort Conditions
Future Configuration
Winter (November to April, 6:00 to 23:00)

Parcel G & H - Northpoint Site - Cambridge, MA

True North

Drawn by: DBB | Figure: 2
Approx. Scale: 1"=80'
Project #1703124 | Date Revised: Sept. 26, 2017

09:00 AM

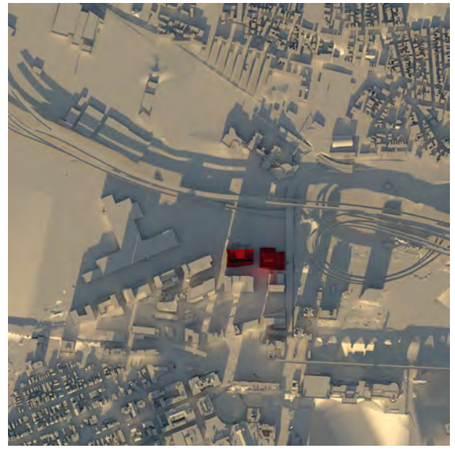
12:00 PM

03:00 PM

summer solstice

spring / fall equinox

winter solstice



ACENTECH

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Cambridge MA 02138
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October 6, 2017

Mr. Jeff Kim
Perkins + Will
225 Franklin Street
Suite 1100
Boston, MA 02110

Subject: Northpoint Site G, Cambridge, MA
Site Noise Assessment
Acentech Proposal No. 628924

Dear Jeff:

As you requested, we have assessed exterior noise emissions and control for the design of the Northpoint Parcel G project as this impacts the nearby community. In particular we have assessed conditions for the building that is planned to be just (nominally) south of the subject building which is the most critical neighboring condition. If acceptable noise conditions are achieved for this receiver, acceptable noise conditions will be achieved for all nearby community receiver locations. There four primary source groups of concern relative to noise emission to the community – 1. the outside air intakes for the penthouse air handling units that serve the building, 2. the exhaust air fans for the building systems, especial serving the laboratories, 3. emergency generators at the roof, and 4. the cooling towers.

The cooling towers

The cooling towers are located in a well at the roof level and a solid roof screen extending up to the top of the tower is planned. The roof screen system will help block sound propagation to the neighbors. The towers are provided with low noise fans to minimize noise emissions. The cooling towers will be specified to achieve a noise level no greater than 85 dBA for the entire 5 - cell tower configuration. This noise emission level is expected to be consistent with achieving a sound level lower than 50 dBA at the adjacent building together with the noise emissions from other building sources. Note that the above noise assessment is for the tower at peak capacity. With the towers operating on their VFD controls, noise emissions to the adjacent community will be substantially lower at off-peak times since the tower noise emissions are a very strong function of fan speed.

Outside air intakes

The outside air intakes for the AHUs are at the penthouse level, oriented away from the critical receivers and in the direction of the MBTA maintenance yard which is a relatively noisy receiver. The building mass will very substantially shield more sensitive neighbor receivers to the south from the noise emission from the AHU intakes. Never-the-less, it is anticipated that the units will be provided with intake silencing to take the curse off the noise emissions from the inlets and this is expected to reduce the noise they produce to no greater than 65 dBA at a distance of 100 from the building facade toward the MBTA site. This is essentially meeting the commercial building noise standard at a distance of 100 ft from the building. This noise emission is comfortably below any applicable requirement.

Exhaust fans and systems

The numerous main exhaust fans associated with the energy recovery systems at the penthouse/roof level will be provided with integral discharge silencers. There are 4 exhaust units, but the number of fans that will be used is not yet fixed. For however many fans there are for each unit, the sound level produced by the total fans associated with a unit at a distance of 50 ft from the unit in any horizontal direction at an elevation equal to the top of the fan discharges will be no more than 50 dBA. The unit supplier is to provide data to verify that this noise emission limit is achieved. This noise emission level is consistent with achieving the desired 50

dBA noise goal at the adjacent critical receiver to the south of the subject building together with the noise emissions from other building equipment.

The development of the exhaust system for the building is not yet advanced enough to know if there will be fresh air bypasses in conjunction with the system, but to the extent there are such bypasses, they will be provided with silencers to control the outdoor noise emissions to a level that is lower than the community noise produced by the exhaust fan discharges.

Generators

The generators are located in a roof well that is shielded from the surrounding community with the roof screen system. The generators will be provided with weatherproof / noise reduction housings to control their noise emissions to the community. The generators, together with their housings will each be specified to have a noise emission level no greater than 75 dBA at a distance of 50 ft, as measured in a free field condition in any horizontal direction from the unit at an elevation approximately equal to the top of the unit. Based on testing one unit at a time, as is planned, this noise emission level from the unit as applied in the project context is expected to produce a noise level no greater than 60 dBA at the critical receiver location which is the daytime noise limit. The generators will not be tested during nighttime hours and will only run during nighttime hours in the event of a true emergency, which condition is expected to be very rare.

* * * * * * *

I trust this summary of the noise emissions and noise control features planned in connection with the building mechanical equipment/systems is consistent with your needs. If you have any questions, please let me know.

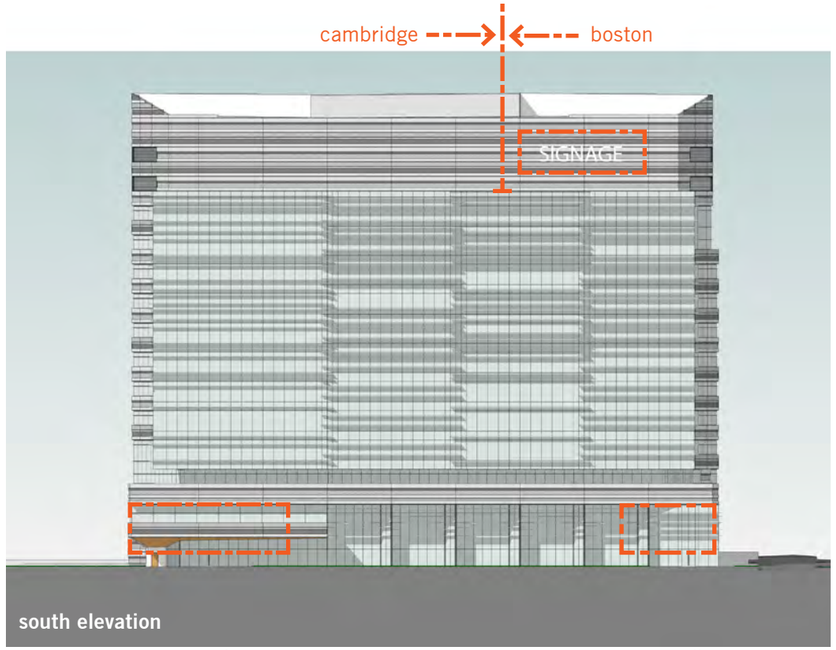
Sincerely Yours,

ACENTECH INCORPORATED

Douglas H. Sturz

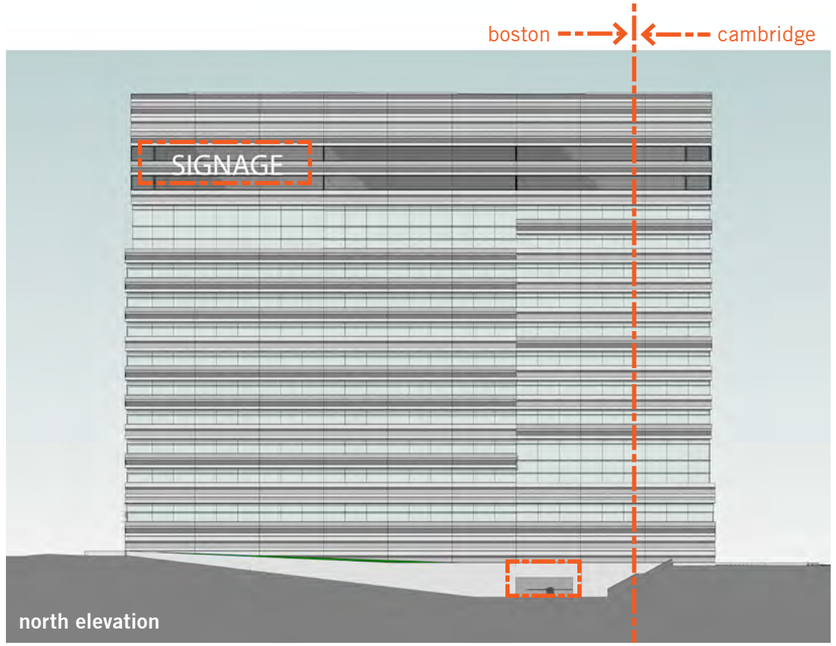
Site Noise Control Assessment

SIGNAGE / LIGHTING STUDY



Type 1 Type 2

Type 1



Type 3

Type 2 Type 4

Type 1 - Building identity signage – Signage communicating the building address is anticipated at the main lobby entrance door. This signage may be in the form of letter and number graphics on the lobby facade glazing (i.e. above or next to the front door) or in the form of freestanding letters and numbers on the building entrance canopy.
This signage may also identify the building tenants.
Type 2 - Ground Floor Pedestrian Signage -
Small sign communicating the location of the elevator lobby for direct pedestrian access to the underground parking garage.
Type 3 - Parking Signage - Signage mounted above the parking vehicular entrance will direct motorists into the parking garage. Additional signage at the parking entrance will provide information about the parking facility. Additional parking signage will direct pedestrians to the parking vehicular entrance, mounted at the pedestrian entrance.
Type 4 - Ground Floor Utility Signage – Small signs will identify the purpose of multiple doors (i.e. Fire Command Center, Electrical Utility Vault, Indoor Bicycle Parking, Loading Dock En-trances) around the Ground Floor of the building

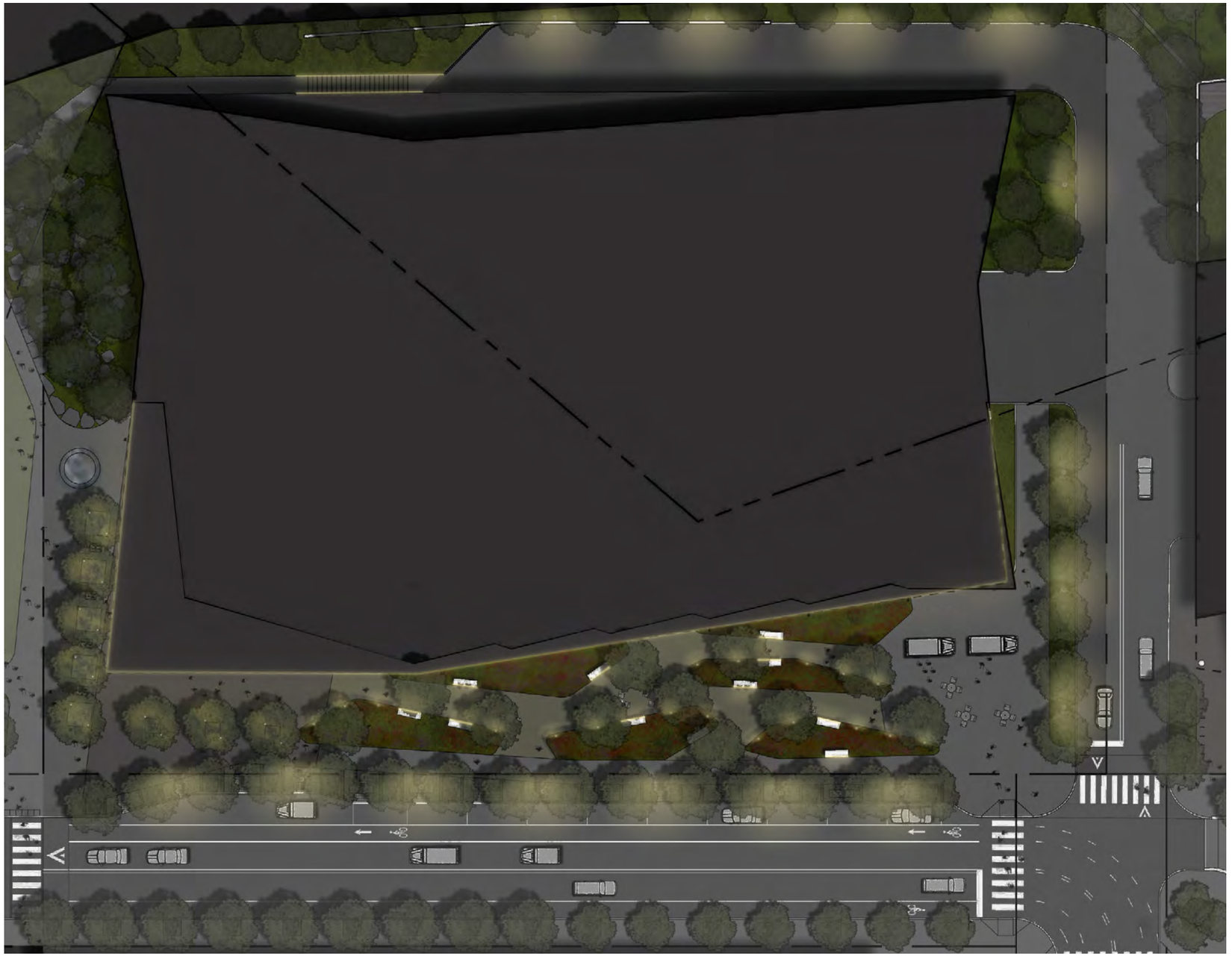
Lighting Concepts

Site Lighting Design

The site consists of mul ple layers of light that can be found throughout the project. Low-level ligh ng integrated in benches and bollards are found primarily along pedestrian paths and plazas. Low-wa age tree uplights in the plaza areas contribute to the texture of the landscaping. A recessed linear downlight element frames the canopy that leads to the entrance of the building.

Post-top mounted area lights along the service entrance are provided for vehicular tra c and pedestrian safety.

The ligh ng for the site will comply with the City of Cambridge and Boston outdoor ligh ng ordinances to allow for the use and enjoyment of outdoor areas, while also miti a ng ligh ng trespass and glare to abu ers and the public at large, reducing light pollu on and promo ng energy conserva on.

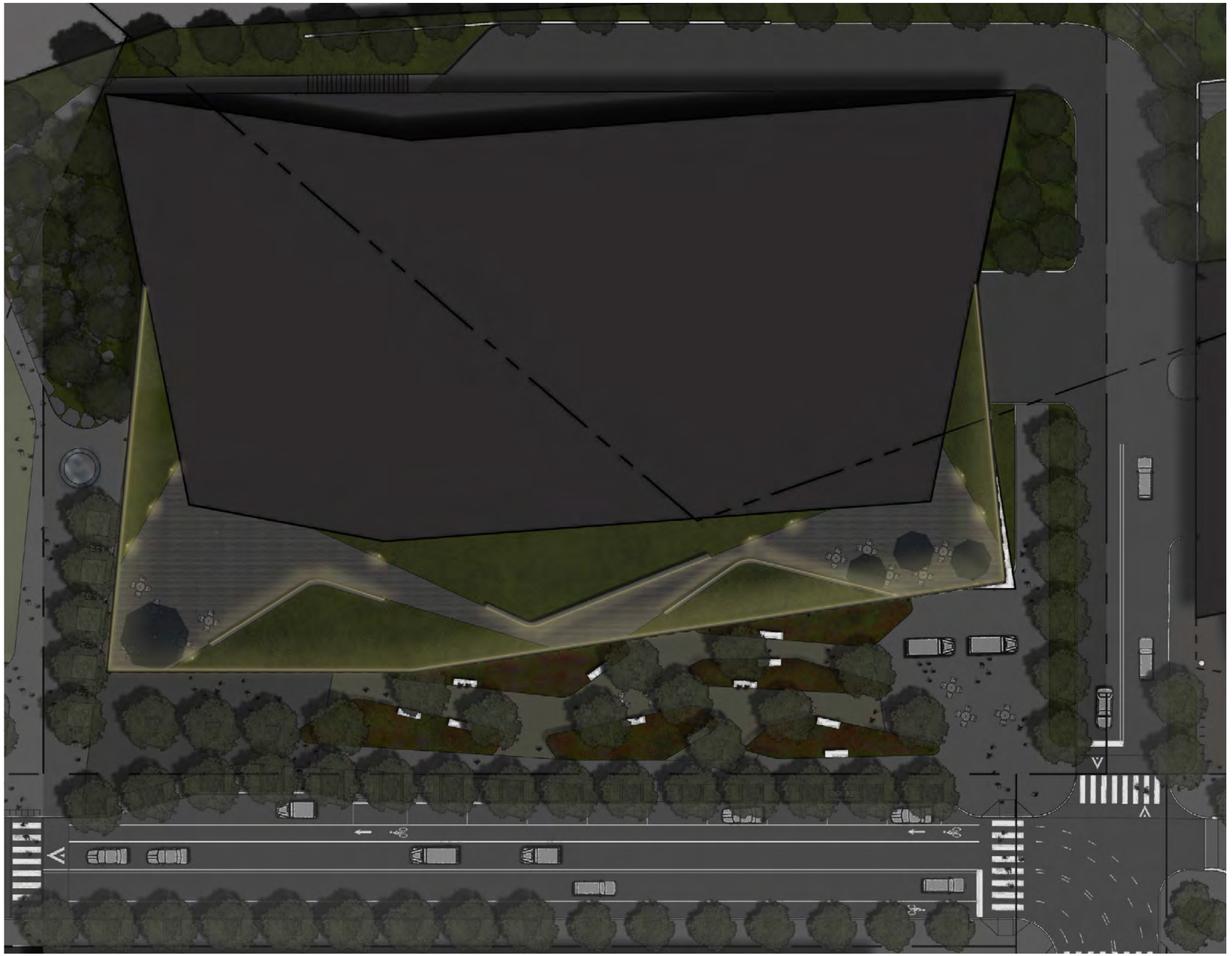


Lighting Concepts

Roof Deck Lighting Design

The design of the roof deck is driven by low-level ligh ng. Pathway lights are concealed under sea ng and around the perimeter of the roof deck. Soft ools of light from bollards create moments that contrast the linear elements that dominate the landscaping and provide egress ligh ng.

The ligh ng for the site will comply with the City of Cambridge and Boston outdoor ligh ng ordinances to allow for the use and enjoyment of outdoor areas, while also miti a ng ligh ng trespass and glare to abu ers and the public at large, reducing light pollu on and promo ng energy conserva on.



DESIGN GUIDELINE / ZONING CHECKLIST

Number	Page	Section	Guideline Description		Check
1	5	Preface	Buildings exhibiting a diversity of architectural expression, establish a comfortable pedestrian scale common to all buildings types, framing streets and enlivening the sidewalks with entrances, life and activity.	The exterior of Building G on the north, east and west sides will receive a horizontal cladding system with a variety of textures and depths to give interest and composition when seen from the highway and the Gilmore Bridge. The building's volume will be articulated to reflect the contrast between the rail-beds to the north and the pedestrian streetscape to the south. From the south the building language will be primarily a curtainwall glazing system. The glazing will be shaded with the appropriate amount of horizontal exterior sun shades. The two languages will use material differences to give hierarchy to the pedestrian facing facades and break down the scale of the building. The use of a dominantly horizontal language will unify the building. The lower two floors of the building as well as the landscape design will be articulated in a way to give interest and scale at the pedestrian level.	✓
2	5	Preface	Each parcel is intended to relate to its immediate surroundings as well as the larger context.	The building corresponds with both surrounding parcels as well as larger context of Northpoint and Cambridge.	✓
3	14	1.3 Masterplan Exhibit: 07 zoning envelope	The building sits within the 220'–0" maximum zoning height limit	Top of the last occupied floor is 194'–0" measured from the mean grade.	✓
4	16	1.3 Masterplan Exhibit: 09 conceptual retail plan	Proposed Retail location per Masterplan	Per Masterplan, retail is concentrated on North First Street. Parcel G does not have any proposed retail.	✓
5	20	2.1 Scale and Massing	Buildings should avoid continuous massing longer than about 200 feet facing streets. If massing extends beyond this length, it should be visually articulated as a composition of smaller masses using different materials or colors, vertical breaks, bays, or other architectural elements.	The form of the building is inflected outward on its wider sides and inward on its narrowest sides and such that it loosely describes the shape of a bowtie when viewed from above. This bowtie form allows the building to appear more slender and elegant when viewed from all sides. This also allows the building to fit with the scale of more narrow residential and office buildings to the south and east. The bowtie inflection breaks up the length of the facade along Dawes St, as does the vertical pattern created by overlapping the sunshades.	✓
6	20	2.1 Scale and Massing	In addition to the above limits, buildings should reflect a rhythm and variation appropriate to the urban context. For example, this can be achieved by expressing bay widths of 16 to 25 feet for residential and 25 to 50 feet for mixed–use and retail.	The typical bay width for the building is 33'-0".	✓
7	20	2.1 Scale and Massing	Buildings should have a clearly expressed base, middle, and top.	The building incorporates a podium, tower and penthouse.	✓
8	20	2.1 Scale and Massing	Buildings should have a carefully articulated base of one of two floors with a high level of transparency, lightness, and detail at the ground floors allowing views inward and outward	A continuous, fully-glazed system is utilized along Dawes Street wrapping around both the Child St and Open Space.	✓
9	20	2.1 Scale and Massing	A line of expression at the second floor is encouraged to humanize the scale of the buildings and create an intimate pedestrian experience. This should be achieved by means of material articulation or architectural detailing	Different materials along with horizontal solar shades expressed the second floor level humanizing the scale of the podium.	✓
10	20	2.1 Scale and Massing	The mid–section of the building should consider light penetration, continuity and consistency of built mass while allowing for individual architectural detailing	The building has incorporated a series external sun shades to reduce solar heat gain and glare and which also articulates the façade.	✓

11	20	2.1 Scale and Massing	The base and middle should be built to the street line with courtyard openings and setbacks for cafes where appropriate	The tower mass of the building is pushed as far north on the property as possible allowing direct light and sky-dome visibility to benefit the landscape and public spaces along Dawes Street.	✓
12	12	2.1 Scale and Massing	Use variations in height and architectural elements such as parapets, cornices and other details to create interesting and varied roof lines and to clearly express the tops of buildings	The parapet rises sharply to the north reflecting the larger scale of the MBTA railroads and I-93.	✓
13	21	2.1 Scale and Massing	Demonstrate responsible use of lighting and energy consistent with sustainability requirements.	The building is design for silver certifiable LEED V4 BD+C Core and Shell.	✓
14	21	2.1.1 Build to Line	Build to line is a line that runs parallel to the property line at which construction of a building facade is to occur at NorthPoint that. It is a suggested set back from the property line and varies from street to street and parcel by parcel and is intended to provide a generous sidewalk and public realm design along all NorthPoint streets. While no structural elements can be placed beyond the build to line, certain architectural elements and projections that maintain the spirit of the set back can be considered as a part of the design review. See “EXHIBIT: 12 BUILD–TO LINE DIAGRAM”	The building conforms with the Design Guideline Built-To-Line.	✓
15	21	2.1.2 Public Streets	Use architectural expression on any portion of the building above 65 feet to prevent continuous massing. Buildings should have a clearly expressed base, middle, and top. This may be achieved through changes in material, fenestration, architectural detailing, or other elements	The building incorporates a podium, tower and penthouse with inflections on facades to prevent continuous massing. The pattern of sunshades further prevents continuous massing.	✓
16	21	2.1.2 Public Streets	Plot guidelines provide for additional sidewalk width by defining parcel and build to line to provide for wider sidewalks. For retail and office uses, build to the lot line or provide small setbacks (5 to 15 feet) from the right–of–way for café seating, benches, or small open spaces	The building conforms with all setbacks indicated in the Design Guideline, and provides a wider sidewalk zone along Dawes St.	✓
17	21	2.1.2 Public Streets	Locate loading docks on side streets or service alleys whenever possible, and away from residential areas and open spaces	The loading dock is located on the eastern service and parking garage access drive.	✓
18	21	2.1.3 Park Edges	Locate buildings to minimize shadows on NorthPoint Common, especially in the afternoon	Parcel G is located north of Northpoint Common and therefore will not cast shadows on it.	✓
19	21	2.1.3 Park Edges	Surround public parks with uses that create an active ground floor environment throughout the day and evening and increase safety for park users	Along the adjacent open space, landscape materials, planting and site furniture and outdoor exercise equipment will be chosen to extend the open space of the park to the building.	✓
20	21	2.1.3 Park Edges	Shops, cafés and other public uses that enliven the parks are encouraged adjacent to open spaces	Site furniture and outdoor exercise equipment will be utilized to activate this area.	✓
21	21	2.1.3 Park Edges	For retail and office uses, build to the lot line or provide small setbacks (5 to 15 feet) from the right–of–way for café seating, benches, or small open spaces	The building conforms with the Design Guideline Built-To-Line requirements.	✓
22	23	2.1.6 Commercial Massing and Articulation	Exhibit: 17 Commercial Massing Precedent	The building is designed in a similar manner to that shown in the Exhibit 17 massing and precedents.	✓
25	27	2.2 Mixed Use Blocks or Commercial Blocks	Office/ R&D uses are discouraged from occupying extensive ground–floor frontage. Where these uses do occur, they should occupy no more than 200 to 250 feet of continuous frontage along public streets	The tenant frontage along Dawes St is less than 250'-0". Pedestrian entries are located at the southeast and southwest corners.	✓
26	27	2.2 Mixed Use Blocks or Commercial Blocks	Ground floor frontage should generally be permeable and massing elements should be human scaled	Large amounts of glass will be used at the ground floor. The façade treatments are in keeping with the human scale.	✓
27	27	2.2 Mixed Use Blocks or Commercial Blocks	Entrances should be located on public streets, and at or near corners when appropriate. Entrances should relate well to crosswalks and pathways that lead to bus stops and transit stations	The main entry is located in the southwest corner to respond to the site pedestrian connection points. A second pedestrian entry is located at the southeast corner.	✓
29	27	2.2 Mixed Use Blocks or Commercial Blocks	Blank walls should be avoided along all public streets, courts, and pedestrian walkways	Large amounts of glass within a column and sunshade frame will be used along Dawes St.	✓

30	31	2.3.2 Architectural Character – Commercial	Create varied architecture and avoid flat facades by using recessed or projected entryways, bays, canopies, awnings, and other architectural elements. Where buildings are set back at upper stories, lower roofs may be used as balconies, balustrades, and gardens. Utilize architectural articulation such as changes in material, fenestration, architectural detailing, or other elements to break down the scale.	The exterior of Building G on the north, east and west sides will receive a horizontal cladding system with a variety of textures and depths to give interest and composition when seen from the highway and the Gilmore Bridge. From the south the building language will be primarily a curtainwall glazing system. The glazing will be shaded with the appropriate amount of horizontal exterior sun shades. The two languages will use material differences to give hierarchy to the pedestrian facing facades and break down the scale of the building. The use of a dominantly horizontal language will unify the building. The lower two floors of the building as well as the landscape design will be articulated in a way to give interest and scale at the pedestrian level.	✓
31	31	2.3.3 Architectural Character – Lighting	Public Realm and exterior building lighting is an important consideration for the identity of the project and enhancing the retail, pedestrian nighttime safety and neighborhood connectivity for NorthPoint. However, lighting design shall be respectful of its impact on surrounding context including the other residential buildings in NorthPoint and surrounding neighborhoods including East Cambridge.	Pedestrian lighting provided. All lighting will have sharp cut-off to mitigate light pollution.	✓
32	32	2.4 Environmental Guidelines (LEED Principles)		The building is design for silver certifiable LEED V4 BD+C Core and Shell.	✓
33	33	2.5 Parking / Service	Underground parking is preferable. All parking garages must provide direct pedestrian access to the street	There are 3 levels of underground parking with dedicated public pedestrian elevator and stair the southeast corner of the building.	✓
34	47	3.2 Streetscape and Circulation	Refer to Cambridge Pedestrian Plan and the Cambridge Bicycle Plan for additional guidance on creating a safe and pleasant environment for pedestrians and bicyclists and for guidance on sidewalk width and street trees. The pedestrian experience in and around transit stops should be designed to be pedestrian and bicycle friendly. Expanded sidewalks in public realm in and around such stations are encouraged whenever feasible.	Pedestrian and Bicycle experiences are being provided per the Design Guidelines.	✓
35	47	3.2A Character	Use streetscape elements such as trees, benches, signage, and lighting to support active pedestrian uses and to reinforce the character and identity of each district.	Dawes St. frontage and terrace will use street trees, plantings, benches, lighting to reinforce the character of the parcel.	✓
36	47	3.2A Character	Design streets to encourage pedestrian and cycle activity, and to control vehicle speed in residential areas.	Street design is being provided per design guideline requirements.	✓
37	47	3.2A Character	In the design of new streets, provide sufficient pavement width to accommodate on−street parking and short−term loading where appropriate in order to provide short−term parking and to serve local retail and building uses.	Short-term parking is provided at the Dawes St. drop-off area.	✓
38	47	3.2A Character	In the design of new streets, pathways, and parks, provide pedestrian− scale lighting to enhance pedestrian safety.	Street design is being provided per the Design Guidelines	✓
39	47	3.2A Character	Numerous entrances along principal pedestrian routes are encouraged both for safety and to enhance the pedestrian environment.	All pedestrian entrances are located along Dawes St.	✓
40	47	3.2A Character	Major entrances should be located on public streets and at or near corners wherever possible. Entrances should relate well to crosswalks and pathways that lead to bus stops and transit sections.	All pedestrian entrances are located along Dawes St.	✓
42	48	3.2.1 First Street	The developer will provide expanded sidewalks and bicycle accommodation from the transit hub to the center of the NorthPoint.	Bicycle accommodation is being provided per the Design Guidelines.	✓

CAMBRIDGE ZONING ORDINANCE **PB #179 Amendment #6 (Major) - Northpoint PUD** Memorandum dated January 13, 2015 2. Undated parking ratios	Per this memorandum the parking ratios for Parcel H have been adjusted from the City of Cambridge's Zoning Ordinance Article 6 and are as follows: Office: Maxinum of 0.9 spaces/1,000 s.f. Lab/R&D: Maxinum 0.8 spaces/1,000 s.f.	This project includes the following: 451,000 GFA 60%/40% Lab-Office: Lab: 270,600 GFA - 217 Spaces Office: 180,400 GSF - 163 Spaces Total: 379 Spaces 100% Office: 451,000 GFA - 406 spaces This project will have 406 parking spaces.	✓
521 CMR - SECTION 23.2.1 **521 CMR - SECTION 23.2.2**	401 - 500 Spaces requires a minimum of 9 accessible spaces. One in every eight accessible spaces, but not less than one shall be van accessible.	This project will have 12 standard + 4 van accessible parking spaces.	✓
521 CMR - SECTION 23.4.1 **521 CMR - SECTION 23.4.2** **CAMBRIDGE ZONING ORDINANCE** **Article 6.42**	Accessible Parking: 8'–0" Wide + 5'–0" Access aisle Length equal to local zoning req's Maneuvering Aisle Width: 22'–0" Regular Spaces: 8'–6" x 18'–0" Compact Spaces: 7'–6" x 16'–0" (50% Maximum) Handicap Spaces: 12'–0" x 18'–0"		✓
CAMBRIDGE ZONING ORDINANCE **Article 6.104.1** **Article 6.104.2**	Long Term Bicycle Parking shall be provided within the building containing the use or uses that it is intended to serve, or within a structure whose pedestrian entrance is no more than two hundred feet (200') from a pedestrian entrance to such building. Short term bicycle parking on a private lot shall be located within fifty (50') feet of a pedestrian entrance to the building or buildings containing the use or uses it serves. For buildings or uses requiring more than eight (8) Short–Term Bicycle Parking Spaces, some of the required spaces may be located at a greater distance from the entrances , so long as eight (8) Short–Term Bicycle Parking Spaces are available within fifty (50') feet of any entrance.	Long term bike parking is located on the west side of the building right behind the building lobby. Short term parking is located right next to the building entry lobby and by the Garage Lobby located on the southeast corner of the building within fifty feet of both entrances.	✓

CAMBRIDGE ZONING ORDINANCE **Article 6.105.1 - e**	Where twenty (20) or more Bicycle Parking Spaces are required, at least five percent (5%) of the required spaces must provide an additional two feet (2') of space parallel to the length of the bicycle to accommodate tandem bicycles or bicycles with trailers.	Required: 0.05 X 136 = 6.8 spaces Provided: 14 spaces	✓
CAMBRIDGE ZONING ORDINANCE **Article 6.107.2** **Article 6.107.3**	LONG TERM BICYCLE PARKING REQUIREMENTS: 0.30 / 1,000 GFA (OFFICE) 0.22 / 1,000 GFA (LABS) SHORT TERM BICYCLE PARKING REQUIREMENTS: 0.06 / 1,000 GFA (OFFICE) 0.06 / 1,000 GFA (LABS)	Two potential scenarios are outlined below: <u>Long Term:</u> 60%/40% Lab-Office: Lab: 270,600 GFA - 0.22 X 271 = 60 Spaces Office: 180,400 GFA - 0.30 X 181 = 55 Spaces Total: 115 Spaces 100% Office: Office: 451,000 GFA - 0.30 X 451 = 136 Spaces <u>Short Term:</u> 60%/40% Lab-Office: Lab: 270,600 GFA - 0.06 X 217 = 17 Spaces Office: 180,400 GFA - 0.06 X 181 = 11 Spaces Total: 28 Spaces 100% Office: Office: 451,000 GFA - 0.06 X 451 = 28 Spaces This project currently provides 144 Long Term spaces and 28 Short Term spaces which satisfies both scenarios.	✓
CAMBRIDGE ZONING ORDINANCE **Article 6.83**	Minimum Number of Off Street Loading Bays to be as follows: <u>OFFICE / R&D (Category F)</u> (0) < 10,000 GFA (1) 10,000 GFA – 99,999 GFA (2) 100,000 GFA – 299,999 GFA (+1) Per additional 200,000 GFA	This project includes a total of 451,000 GFA of office/lab space. Total of 3 bays required. This project will provide a total of 3 Loading Bays.	✓
CAMBRIDGE ZONING ORDINANCE **Article 6.91**	Where a building or lot contains uses requiring compliance with loading facility categories C,D,E, and F, the first required bay shall be no less than ten (10) feet in width, thirty (30) feet in length and fourteen (14) feet in height. Each additional required loading bay for categories C,D,E, and F... shall be no less than ten (10) feet in width, fifty (50) feet in length, and fourteen (14) feet in height.	All three bays are sized for following: 52' L X 12' W X 14' H	✓

LANDSCAPE DESIGN

MBTA COMMUTER RAIL FACILITY

+ MEX

+ MEX

+ MEX

Retaining Wall

NORTH LANDSCAPE

SERVICE ROAD

+ 15

+ 32

+ 32

C

C'

D

D'

3

SOMERVILLE

CAMBRIDGE

BOSTON

CAMBRIDGE

Service Yard

BOSTON

CAMBRIDGE

BUILDING H

Water Feature

Bike Rack, Typ.

Exposed Aggregated Concrete Pavement, Typ.

BUILDING G

OPEN SPACE

SERVICE ROAD

PL

B

B'

A

Movable Furniture, Typ.

Bench, Typ.

Decomposed Granite Pavement, Typ.

ENTRANCE PLAZA

+ 29

+ 30

PLAZA

1

2

BRIAN MURPHY MEMORIAL STAIRCASE

Concrete Pavement, Typ.

DAWES ST

A'

Stone Setts, Typ.

Proposed Street Tree in Tree Pit, Typ.

DRIVEWAY

TWENTY/20

LOT L/M

CHILD ST

0’ 20’ 40’ 80’

2

DIVCOWEST

Cambridge Crossing - Parcel G

Site Plan - Ground Floor

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC

MBTA COMMUTER RAIL FACILITY

+ MEX

+ MEX

+ MEX

NORTH LANDSCAPE

SERVICE ROAD

+ 15

+ 32

+ 32

D

D'

C

C'

3

SOMERVILLE

CAMBRIDGE

BOSTON

CAMBRIDGE

BUILDING G

Plant Bed, Typ.

Movable Furniture, Typ.

Wood Deck on Pedestal System, Typ.

Bench, Typ.

OPEN SPACE

B

B'

A

+ 70

+ 70

TERRACE

+ 29

+ 30

1

A'

DAWES ST

SERVICE ROAD

PL

BOSTON

CAMBRIDGE

BUILDING H

2

BRIAN MURPHY MEMORIAL STAIRCASE

DRIVEWAY

TWENTY/20

LOT L/M

CHILD ST

0' 20' 40' 80'

3

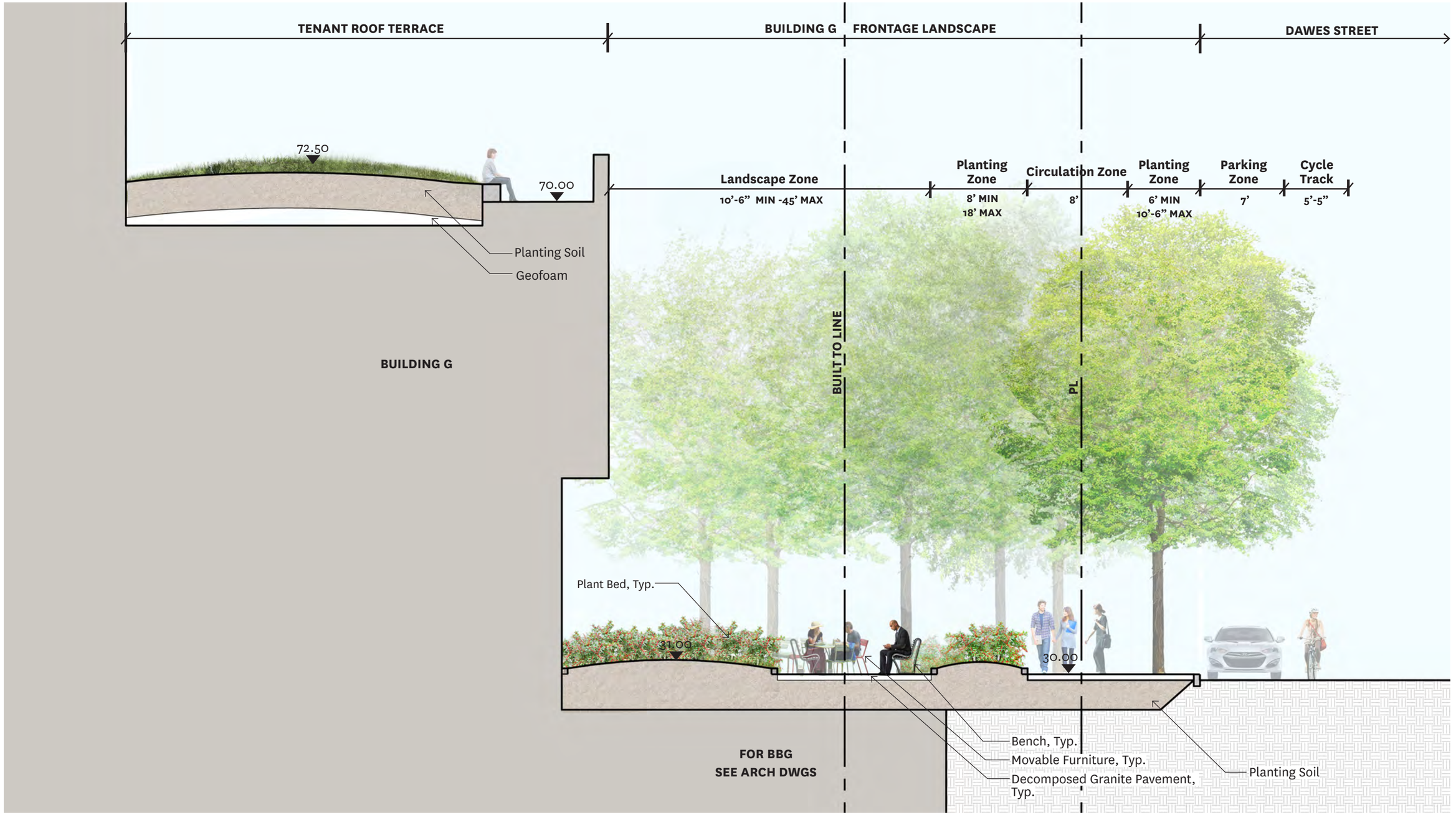
DIVCOWEST

Cambridge Crossing - Parcel G

Site Plan - Terrace Level

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC



SECTION A - A'

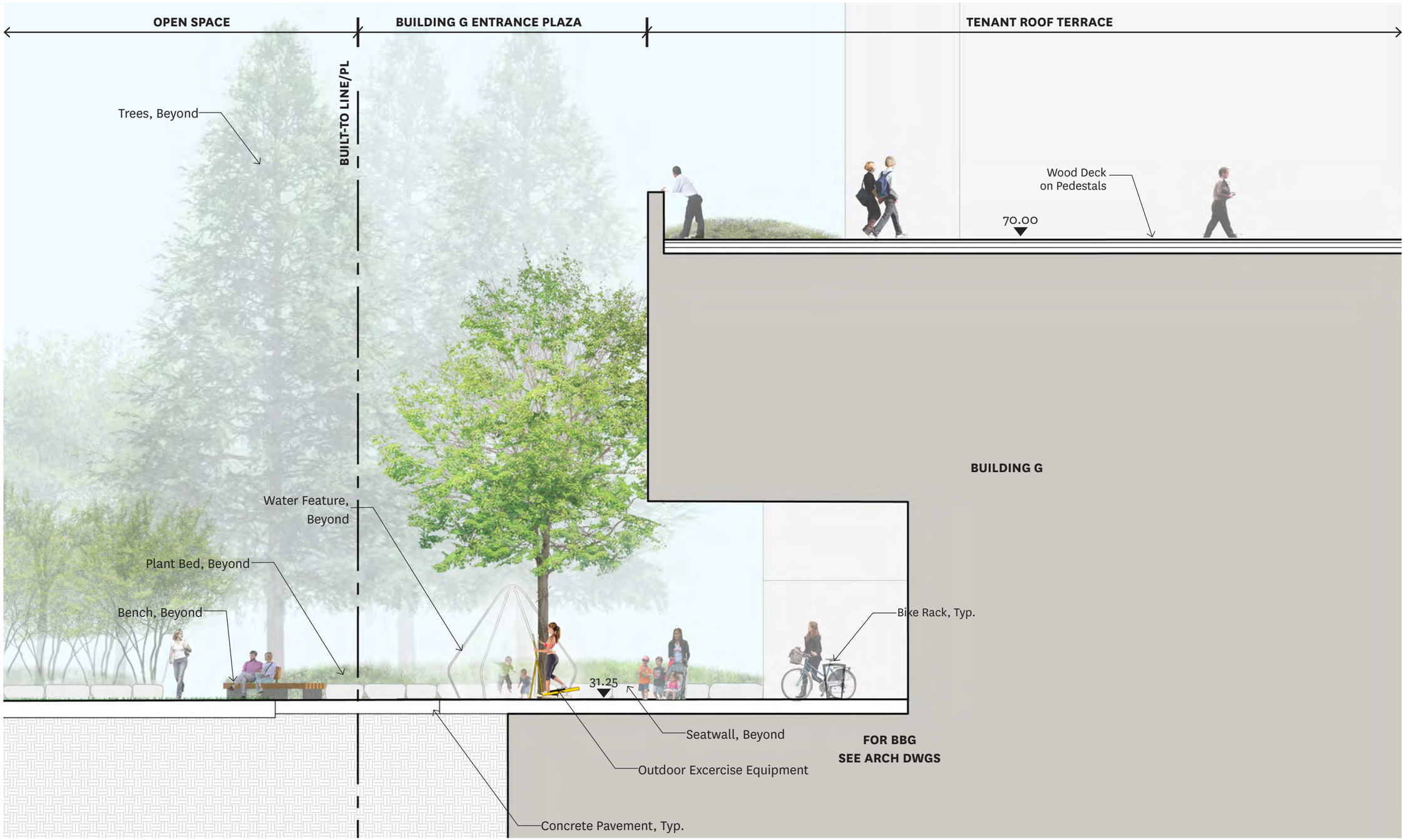
0' 4' 8' 16'

DIVCOWEST

Cambridge Crossing - Parcel G
Site Section

PERKINS+WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC



SECTION B - B'

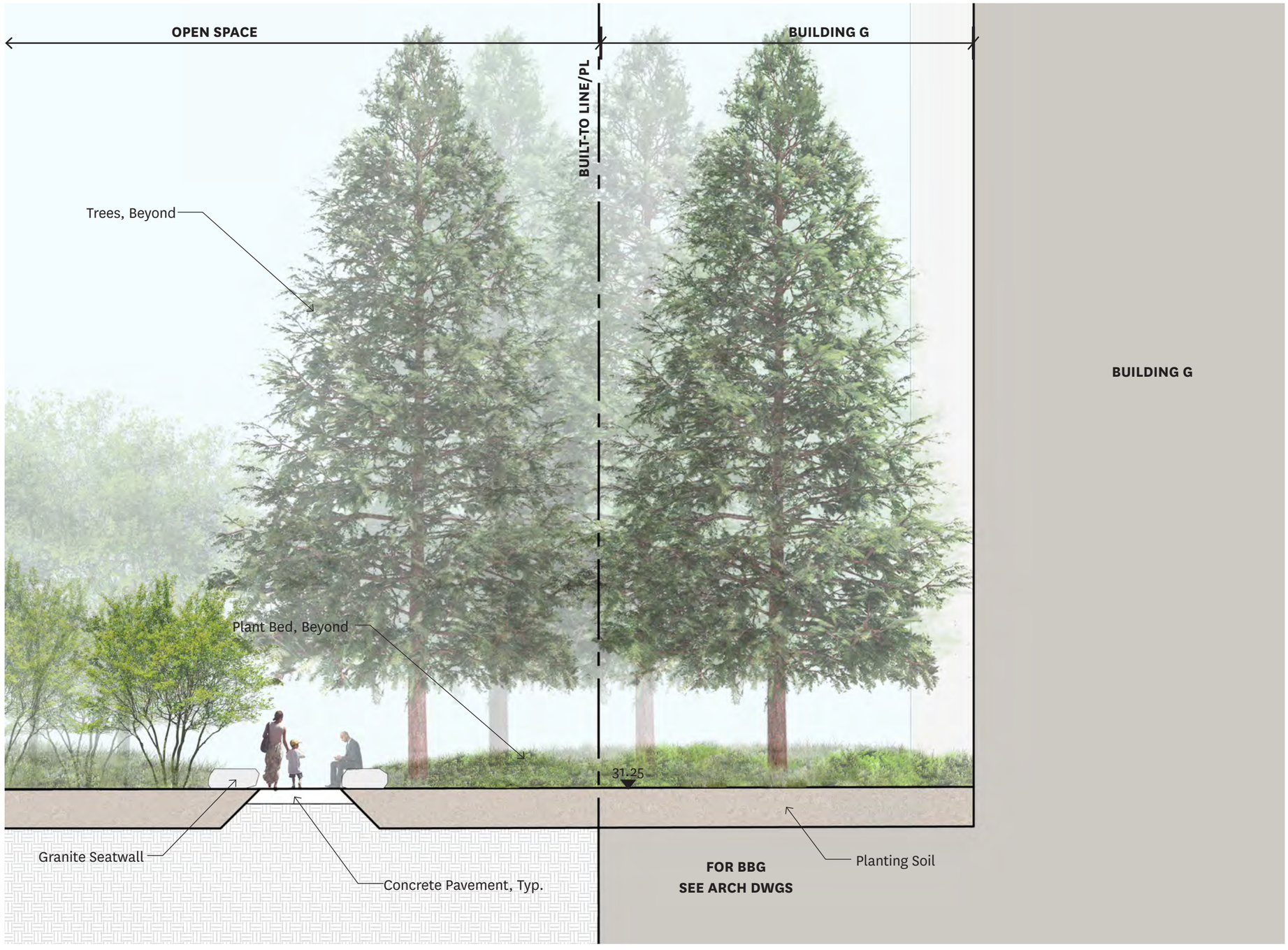
0' 4' 8' 16'

DIVCOWEST

Cambridge Crossing - Parcel G
Site Section

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC



SECTION C - C'

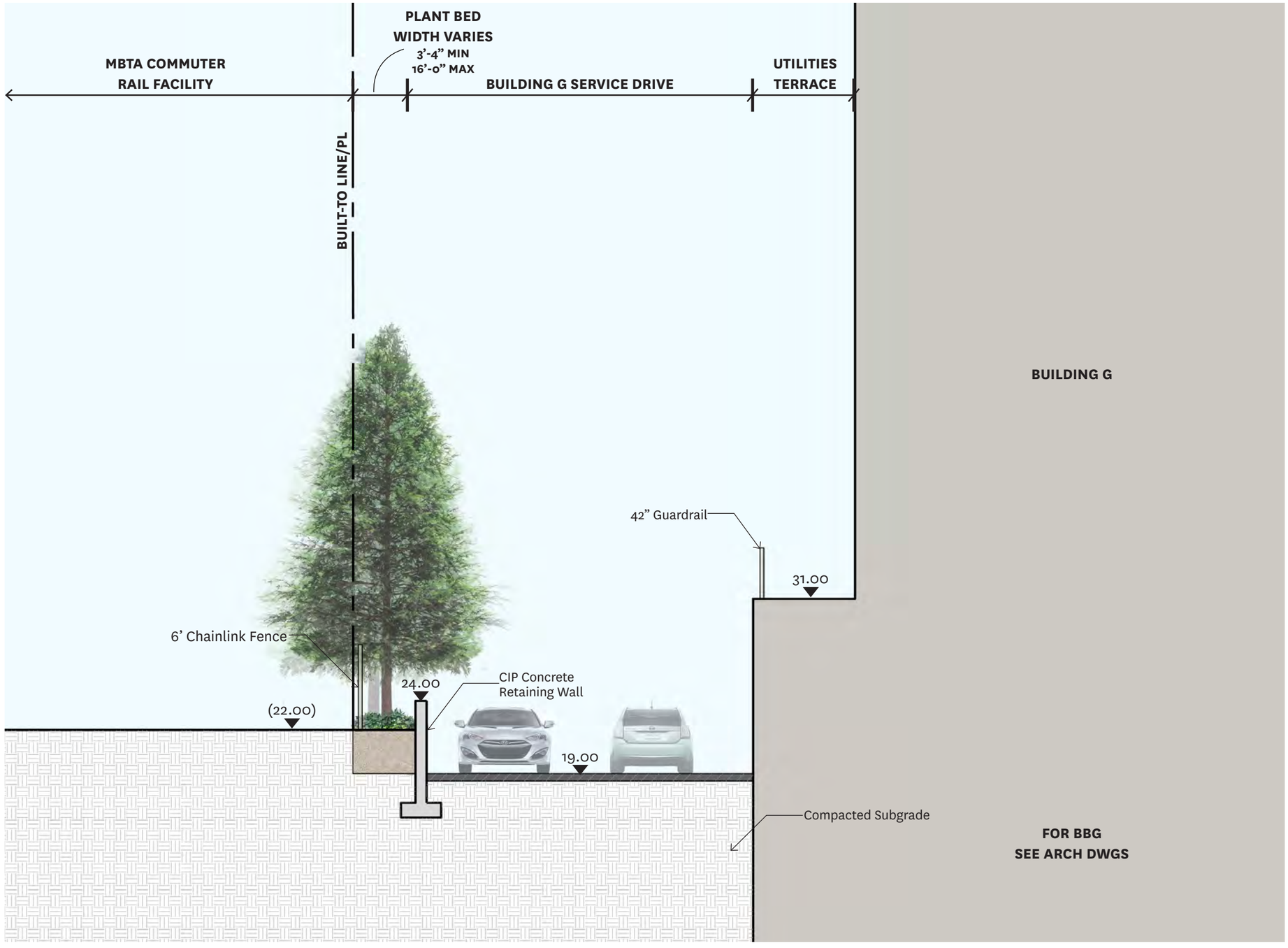
0' 4' 8' 16' 6

DIVCOWEST

Cambridge Crossing - Parcel G
Site Section

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC



0' 4' 8' 16'

SECTION D - D'

DIVCOWEST

Cambridge Crossing - Parcel G
Site Section

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC

PARCEL G FRONTAGE LANDSCAPE LOOKING TOWARDS PARCEL H

VIEW FROM BUILDING H ENTRANCE PLAZA

DIVCOWEST

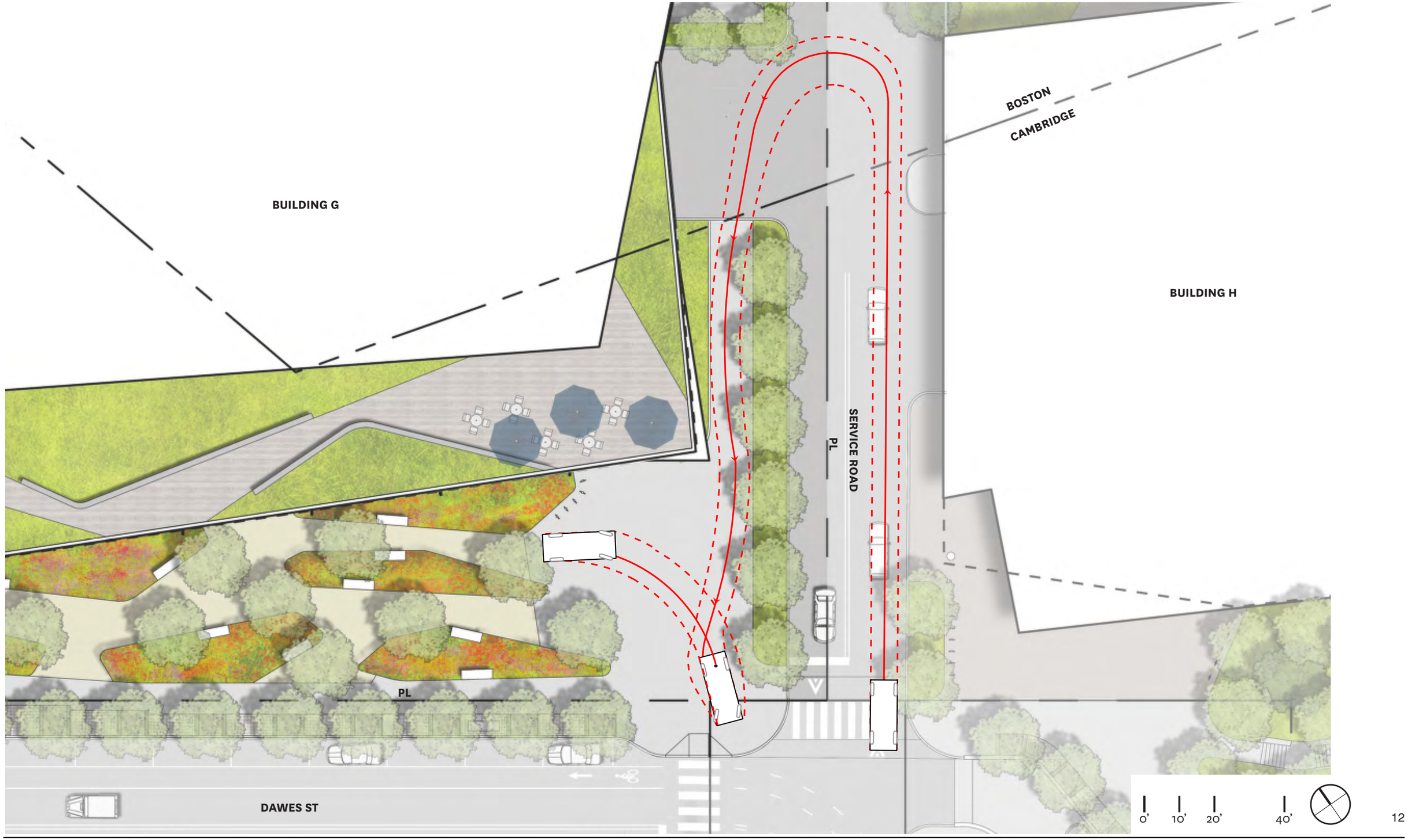
Cambridge Crossing - Parcel G
Rendered Views

PERKINS+WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC

VIEW TOWARDS DAWES ST

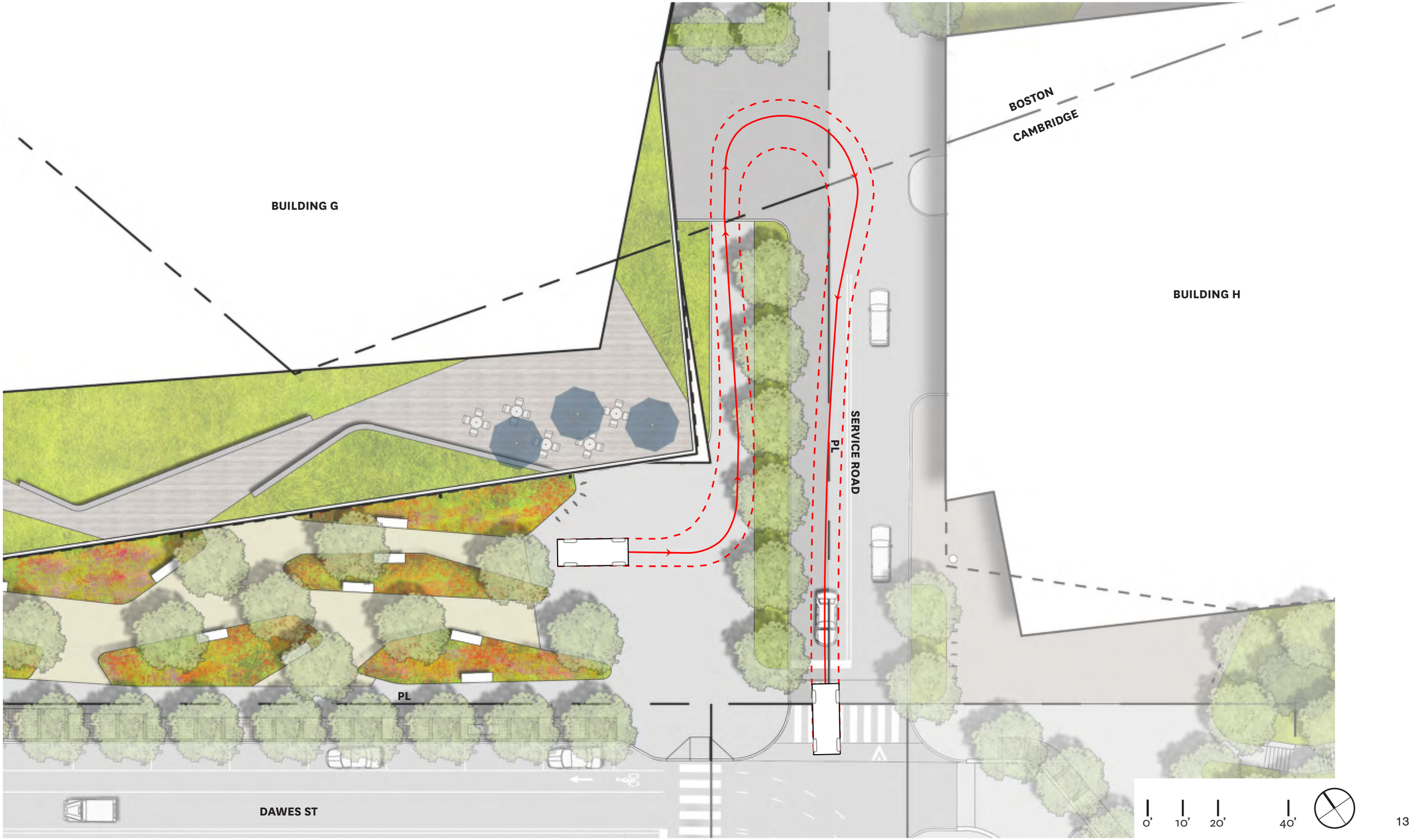
BACK VIEW OF PARCEL G/H FROM GILMORE BRIDGE



DIVCOWEST

Cambridge Crossing - Parcel G
Food Truck Access Diagram - Entry

PERKINS + WILL
MICHAEL VAN VALKENBURGH ASSOCIATES INC



DIVCOWEST

Cambridge Crossing - Parcel G
Food Truck Acess Diagram - Exit

PERKINS + WILL
MICHAEL VAN VALKENBURGH ASSOCIATES INC

MBTA COMMUTER RAIL

PL

NORTH LANDSCAPE

SERVICE ROAD

LP-S

LP-P

SOMERVILLE CAMBRIDGE

BOSTON CAMBRIDGE

BUILDING G

OPEN SPACE

PL

100' - 0" Spacing

SERVICE ROAD

PL

Architect's Lights in Soffit

1 Pedestrian Scale Light Pole

ENTRANCE PLAZA

LP-P

PL

DAWES STREET

Cambridge Crossing Street Light 2

LOT J/K

0' 20' 40' 80'

(REFER TO IMAGES 1, 2)

1 LP-P: Pedestrian Scale Light Pole

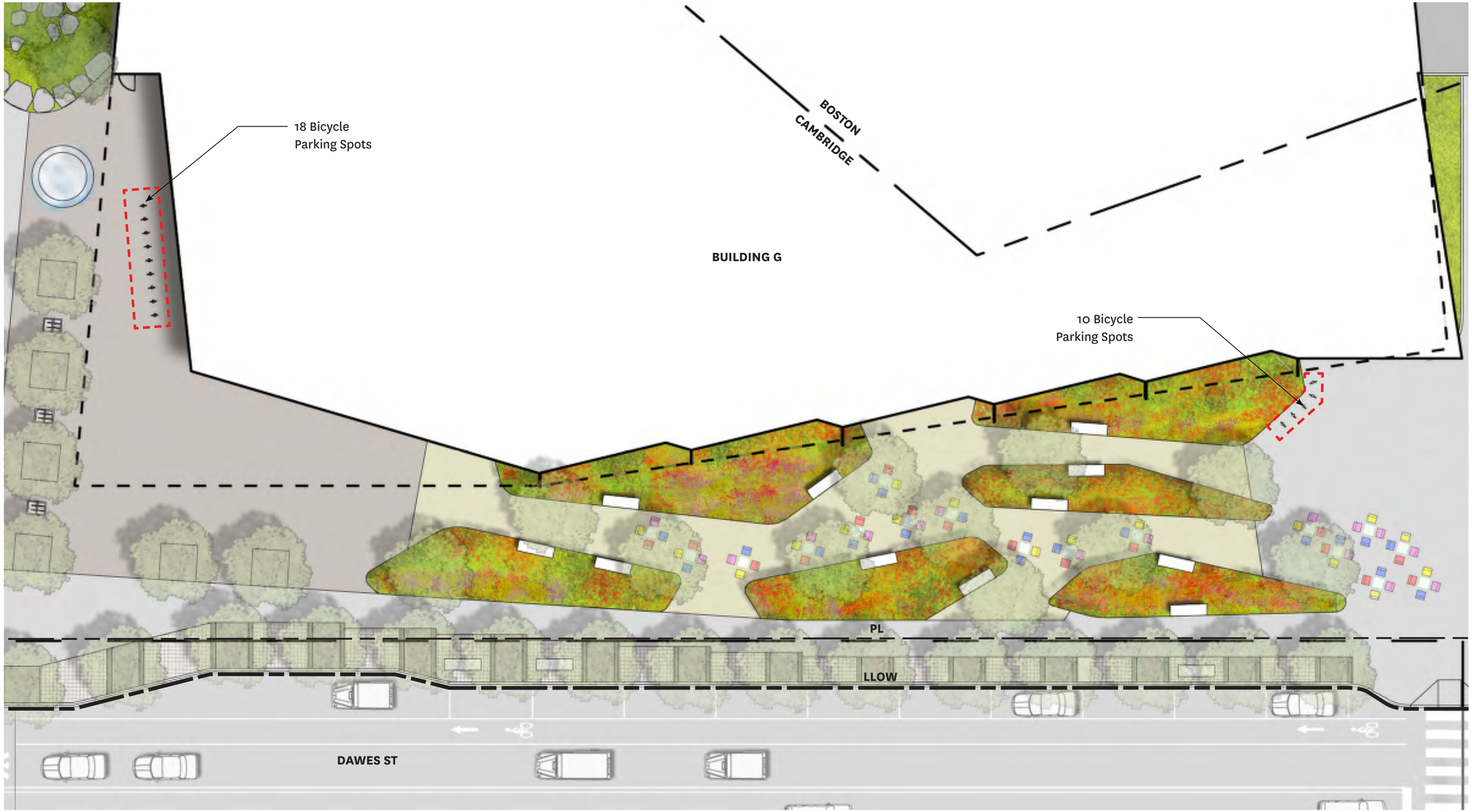
2 LP-S: Cambridge Crossing Street Light

DIVCOWEST

Cambridge Crossing - Parcel G
Lighting Plan

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC



DIVCOWEST

Cambridge Crossing - Parcel G
Bicycle Parking

PERKINS + WILL

MICHAEL VAN VALKENBURGH ASSOCIATES INC

Stone Setts Pavement

Exposed Aggregate Concrete Pavement

Decomposed Granite Pavement

Concrete Pavement

Bike Rack

Trash Receptacle

Planter, Clustered

Planter, Linear

Bench

Backless Bench

Movable Tables and Chairs

Platanus x acerifolia
London Plane Tree “Bloodgood”

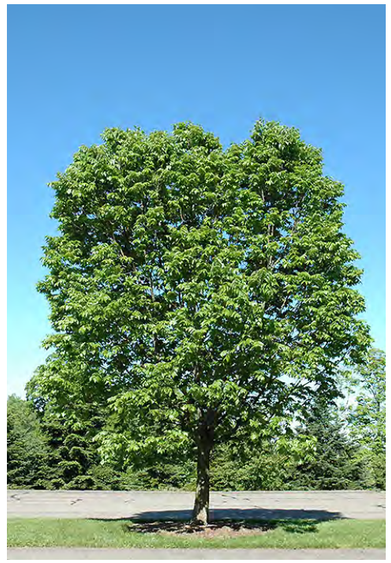
Styphnolobium japonicum
Japanese Pagoda Tree

Gymnocladus dioicus
Kentucky Coffee Tree “Espresso”

Gleditsia triacanthos var. inermis
Honey Locust “Skyline”

All trees are included in the City of Cambridge recommended species list.

Metasequoia glyptostroboides
Dawn Redwood



Celtis occidentalis
Common Hackberry

Abies concolor
White Fir

Picea glauca
White Spruce

Thuja plicata
Western Red Cedar

Ceanothus americanus
New Jersey Tea

Comptonia peregrina
Sweet Fern

Hydrangea arborescens
Smooth Hydrangea

Neviusia alabamensis
Alabama snow wreath

Pieris floribunda
Mountain fetterbush

Spirea latifolia
Broadleaf meadowsweet

Rosa rugosa
Rugosa Rose (Pink)

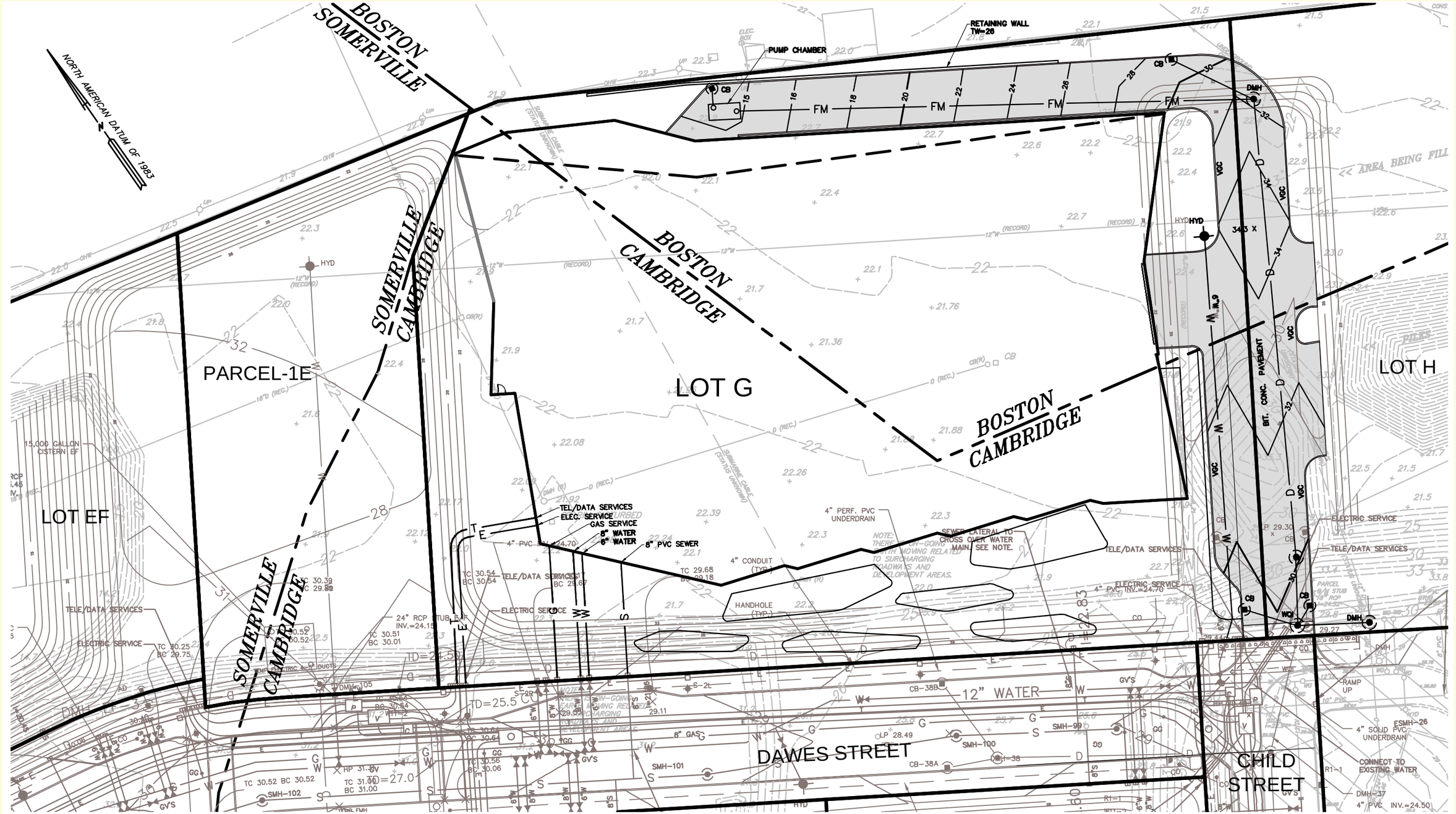
Rosa rugosa
Rugosa Rose (White)

Fothergilla gardenia
Dwarf fothergilla

Page	Section	Guideline Description	Compliance	Check
47	3.2A Character	Use streetscape elements such as trees, benches, signage, and lighting to support active pedestrian uses and to reinforce the character and identity of each area.	The streetscapes of Parcel G are planted with high canopy trees with furniture consistent with the rest of Cambridge Crossing, including fixed benches, moveable tables and chairs, bike racks, trash receptacles, and pedestrian scale lighting to support a lively and comfortable pedestrian environment.	✓
50	3.2.2 Dawes Street	Dawes Street is an important east-west connector running between Water Street and the Brian Murphy Staircase. Street trees will be planted on both sides of the street, and an additional landscape area will be provided on the north side of Dawes, between First Street and the Murphy Staircase, to improve the pedestrian experience on this sunnier side of the street. The widened sidewalk area provides opportunities for seating, play, art. LID swales etc. to be incorporated into the public realm.	A row of street trees is planted along the north side of Dawes Street in front of Parcel G. Additional street trees are planted as an informal grove in the widened landscape area between the sidewalk and the building. This area will be planted with linear beds of flowering shrubs with decomposed granite paving, creating areas for fixed benches and moveable tables and chairs to encourage gathering, a place to eat lunch and relax.	✓

Cambridge Crossing (formerly known as NorthPoint)

Boston/Cambridge/Somerville, Massachusetts



BEALS + THOMAS
Civil Engineers + Landscape Architects +
Land Surveyors + Planners +
Environmental Specialists

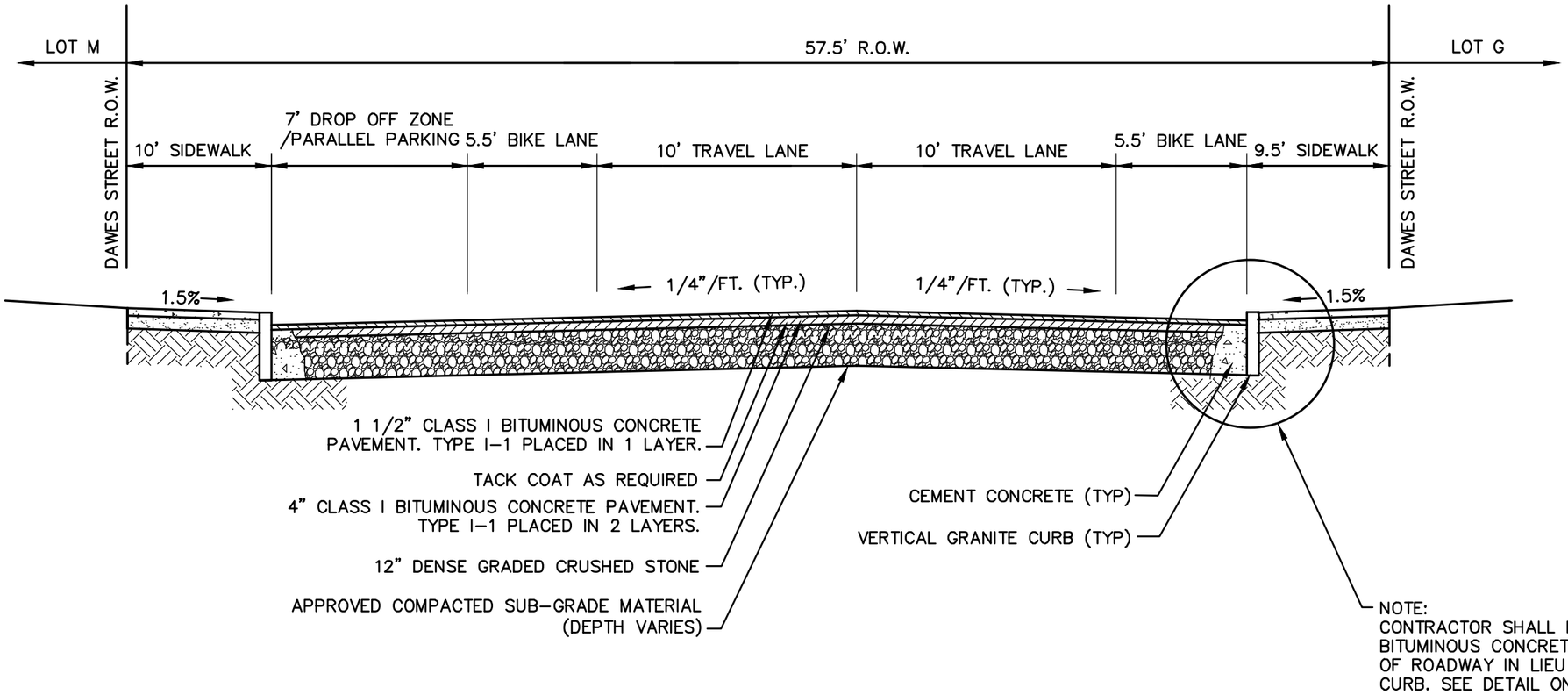
B+T Drawing No. 208451P397A-001 Scale: 1" = 40' Date: 10/23/2017

METERS
0 5 10 25
0 20 40 80 120
FEET

Lot G Site Plan 1

Cambridge Crossing (formerly known as NorthPoint)

Boston/Cambridge/Somerville, Massachusetts



DAWES STREET CROSS SECTION

NOT TO SCALE

BEALS + THOMAS
Civil Engineers + Landscape Architects +
Land Surveyors + Planners +
Environmental Specialists

B+T Drawing No. 208451P397A-002 Scale: Not to scale Date: 10/23/2017

Adjacent Street Cross Section **2**

LEGEND

■ SB	STONE BOUND
■ CB	CONCRETE BOUND
⊙ DH	DRILL HOLE
○ IP	IRON PIN/IRON PIPE
○ IR	IRON ROD
FND	FOUND
EPLP	ESCUTCHEON PIN, LEAD PLUG
CTR.	CENTER

CITY OF SOMERVILLE

CITY OF SOMERVILLE PLANNING BOARD

NO DETERMINATION AS TO COMPLIANCE WITH ZONING ORDINANCE HAS BEEN MADE OR INTENDED BY PLANNING BOARD ENDORSEMENT. NO DETERMINATION OF WETLANDS HAS BEEN MADE OR INTENDED BY PLANNING BOARD ENDORSEMENT.

LOT EF
CAMBRIDGE = 1,321± S.F. or 0.030± AC.
SOMERVILLE = 85,902± S.F. or 1.972± AC.
TOTAL = 87,223± S.F. 2.002± AC.

LOT G
SOMERVILLE = 5,608± S.F. or 0.129± AC.
CAMBRIDGE = 58,562± S.F. or 1.344± AC.
BOSTON = 37,440± S.F. or 0.860± AC.
TOTAL = 101,610± S.F. or 2.333± AC.

LOT H
CAMBRIDGE = 56,805± S.F. or 1.304± AC.
BOSTON = 22,608± S.F. or 0.519± AC.
TOTAL = 79,413± S.F. or 1.823± AC.

PARCEL 1-C
CAMBRIDGE = 36,567± S.F. or 0.839± AC.
BOSTON = 70± S.F. or 0.002± AC.
TOTAL = 36,637± S.F. or 0.841± AC.

LOT JK
CAMBRIDGE = 42,461± S.F. or 0.975± AC.
SOMERVILLE = 20,041± S.F. or 0.460± AC.
TOTAL = 62,502± S.F. or 1.435± AC.

LOT L
30,475± S.F. or 0.700± AC.

LOT M
30,475± S.F. or 0.700± AC.

LOT U
45,969± S.F. or 1.055± AC.

LOT W
20,743± S.F. or 0.476± AC.

BALDWIN SOUTH
19,240± S.F. or 0.442± AC.

CHILD STREET PARK
24,305± S.F. or 0.558± AC.

NORTH POINT COMMON
177,454± S.F. or 4.074± AC.

65,502± S.F. or 1.504± AC.

95,072± S.F. or 2.183± AC.

DAWES (VARIABLE WIDTH) **STREET**
CAMBRIDGE= 74,187±S.F. or 1.703±AC.
SOMERVILLE= 21,332±S.F. or 0.490±AC.
TOTAL= 95,519±S.F. or 2.193±AC.

LEIGHTON STREET
(VARIABLE WIDTH)
6,130± S.F. or 0.141± AC.

NORTH POINT BOULEVARD (VARIABLE WIDTH)

NORTH (VARIABLE WIDTH) **STREET**

NORTH FIRST (VARIABLE WIDTH) **STREET**

EARHART STREET (PRIVATE)

CHILD STREET (PRIVATE - 50' WIDE) (PLAN No. 937 OF 2012)

AUSTIN STREET (TOTAL)

CHARLESTOWN AVENUE

NORTH POINT BOULEVARD (PUBLIC - VARIABLE WIDTH) LAYOUT No. 7598 34388/E, LC Doc. 1153944

BOSTON - SOMERVILLE

BOSTON - CAMBRIDGE

SOMERVILLE - CAMBRIDGE

SUFFOLK - MIDDLESEX COUNTY LINE

CITY BOUNDARY (SEE NOTE 3) FORMER CHANNEL OF THE MILLERS RIVER SHOWN ON HARBOR AND LANDS COMMISSION LICENSE No. 530 (1880)

PRII TWENTY20, LLC 65896/176 LOT N (PLAN No. 937 OF 2012)

N/F COMMONWEALTH OF MASSACHUSETTS (DCR MAINTENANCE FACILITY) 28001/101

N/F COMMONWEALTH OF MASSACHUSETTS 12519/452 PLAN No. 1416 OF 1967

N/F MBTA (SUFFOLK REGISTRY) 8923/22 17577/179 19013/001

N/F SIERRA + TANGO CONDOMINIUM (MASTER DEED) 51285/331 LOT T (PLAN No. 742 OF 2005, PLAN No. 449 OF 2008)

N/F AVB MAPLE LEAF APARTMENTS L.F. 62362/572 (PLAN No. 325 OF 2002) (PLAN No. 90 OF 2008)

N/F DW NP PROPERTY, LLC 65949/156 LOT FP (PLAN No. 597 OF 2010)

J. F. GILMORE BRIDGE (ELEVATED)

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

12/08/2016
DATE

ROBERT J. BUCKLEY, PLS No. 30326

PREPARED FOR:

DW NP PROPERTY, LLC

c/o DIVCO WEST REAL ESTATE SERVICES, LLC
575 MARKET STREET
35th FLOOR
SAN FRANCISCO, CA 94105

RECORD OWNERS:

DW NP PROPERTY, LLC

65949/156
PARCEL 1
PARCEL 2
"CENTRAL PARK" PARCEL
(PLAN NO. 597 OF 2010)
(MIDDLESEX COUNTY)

54949/293
PARCEL 1
PARCEL 2
(PLAN BOOK 2010 PAGES 270, 271)
(SUFFOLK COUNTY)

5			
4			
3			
2			
1			
0	12/08/2016	INITIAL ISSUE	
ISSUE DATE		DESCRIPTION	
ATL	MEB	MEB	RJB
FLD	CALC	DWN	CHK'D

PLAN OF LAND

NORTHPOINT IN CAMBRIDGE AND SOMERVILLE, MA (MIDDLESEX COUNTY)
AND BOSTON, MA (SUFFOLK COUNTY)

PREPARED BY:

BEALS+THOMAS
Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

BEALS AND THOMAS, INC.
Reservoir Corporate Center
144 Turnpike Road
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

DATE: DECEMBER 8, 2016
SCALE: 1"=50'

BTI JOB NO. 2084.02

BTI PLAN NO. 208402P244B-005

SHEET 5 OF 5

PL-5

NOTES

1) THIS PLAN WAS PREPARED FROM AN ACTUAL SURVEY MADE ON THE GROUND USING A ZEISS ELTA TOTAL STATION AND SUBCENTIMETER GPS.

2) NAD83 HORIZONTAL COORDINATE SYSTEM ESTABLISHED BY COORDINATES SHOWN ON PLANS BY GUNTHER ENGINEERING, A DIVISION OF DIGITAL GEOGRAPHIC TECHNOLOGIES, INC. ENTITLED "NORTH POINT, SUBDIVISION PLAN OF LAND IN BOSTON, CAMBRIDGE, AND SOMERVILLE, MASSACHUSETTS..." DATED MARCH 14, 2008, REVISED AUGUST 4, 2010; AND A PLAN ENTITLED NORTHPOINT–"CENTRAL PARK" PARCEL, SUBDIVISION PLAN OF LAND IN BOSTON, CAMBRIDGE, AND SOMERVILLE, MASSACHUSETTS..." DATED AUGUST 16, 2010; SAID PLANS RECORDED AT MIDDLESEX COUNTY REGISTRY OF DEEDS, SOUTHERN DISTRICT, AS PLAN No. 597 OF 2010.

3) SOMERVILLE – CAMBRIDGE CITY BOUNDARY LINE ESTABLISHED BY BEALS AND THOMAS, INC. BY DIGITIZING HISTORIC EDGE OF MILLERS RIVER AS SHOWN ON A PLAN ENTITLED "NOS. 530 & 531, APPROVED BY HARBOR AND LAND COMMISSION", DATED MAY 6, 1880, RECORDED IN SUFFOLK COUNTY AS PLAN BOOK 1505 PAGE 640; AND CALCULATING A BEST–FIT CENTERLINE OF THE HISTORIC RIVER. THE END OF THE CENTERLINE WAS ADJUSTED TO HOLD 250.00' FROM THE ANGLE POINT IN THE BOSTON – CAMBRIDGE CITY LINE AS DESCRIBED IN CHAPTER 312 OF THE ACTS OF 1910.

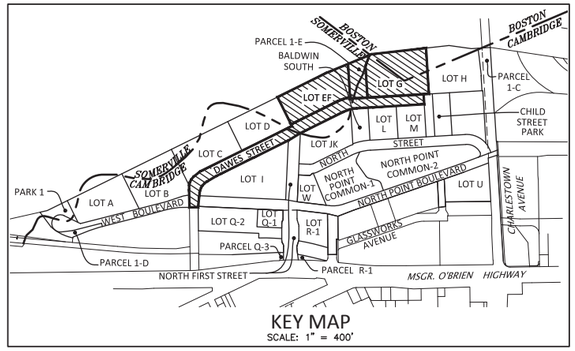
4) FOR ADDITIONAL MONUMENTATION SEE PLANS BY BEALS AND THOMAS, INC. RECORDED AS PLAN No. 90 OF 2008, PLAN No. 937 OF 2012, AND PLAN No. 1151 OF 2016.

5) THIS PLAN IS A RE–DIVISION OF LOT EF, LOT G AND DAWES STREET SHOWN ON A PLAN RECORDED AT THE MIDDLESEX SOUTH REGISTRY AS PLAN No. 1151 OF 2016 AND PLAN BOOK 2016, PAGE 566 AT THE SUFFOLK REGISTRY.

6) THE PARCELS SHOWN HEREON HAVE THE BENEFIT OF AND ARE SUBJECT TO RIGHTS, RESTRICTIONS, AND EASEMENTS NOT SHOWN.

LEGEND

■ SB	STONE BOUND
■ CB	CONCRETE BOUND
◉ DH	DRILL HOLE
○ IP	IRON PIN/IRON PIPE
○ IR	IRON ROD
FND	FOUND
EPLP	ESCUTCHEON PIN, LEAD PLUG
CTR.	CENTER



KEY MAP
SCALE: 1" = 400'

PARCEL 1–E

CAMBRIDGE = 7,699± S.F. or 0.177± AC.
SOMERVILLE = 14,755± S.F. or 0.339± AC.
TOTAL = 22,454± S.F. or 0.516± AC.

LOT G

CAMBRIDGE = 52,184± S.F. or 1.198± AC.
BOSTON = 37,440± S.F. or 0.860± AC.
TOTAL = 89,624± S.F. or 2.057± AC.

LOT EF

72,282± S.F.
or 1.659± AC.

LOT D

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

LOT C

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

LOT B

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

CAMBRIDGE = 74,187± S.F. or 1.703± AC.
BOSTON = 25,805± S.F. or 0.592± AC.
TOTAL = 99,992± S.F. or 2.295± AC.

LOT I

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

LOT Q–2

N/F
DW NP Q, R, V PROPERTY, LLC
69489/200
69785/365
(PLAN NO. 577 OF 2017)
(PLAN NO. 644 OF 2017)

LOT H

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

LOT JK

N/F
DW NP PROPCO JK, LLC
69231/109
(PLAN No. 1151 OF 2016)

LOT L

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

LOT M

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

BALDWIN SOUTH

N/F
DW NP PROPERTY, LLC
65949/156
(PLAN No. 1151 OF 2016)

N/F
MBTA
13117/113
24467/562
PLAN No. 546 OF 1992

N/F
MBTA
(SUFFOLK REGISTRY)
8923/22
17577/179
19013/001

N/F
DW NP PROPERTY, LLC
54949/293 (SUFFOLK)
(PLAN BOOK 2016, PAGE 566) (SUFFOLK)

N/F
DW NP PROPERTY, LLC
54949/293
(SUFFOLK)

N/F
BEHRINGER HARVARD 22 WATER STREET PROJECT OWNER, LLC
60804/121
PLAN No. 983 OF 2012

DAWES STREET (PRIVATE–VARIABLE WIDTH)
NORTH STREET (PRIVATE–VARIABLE WIDTH) (PLAN No. 1151 OF 2016)
WEST BOULEVARD (PRIVATE–VARIABLE WIDTH) (PLAN No. 1151 OF 2016)
NORTH POINT BLVD. (PRIVATE–VARIABLE WIDTH) (PLAN No. 1151 OF 2016)
WATER STREET (PRIVATE–50' WIDE)
NORTH FIRST STREET (PRIVATE–VARIABLE WIDTH) (PLAN No. 1151 OF 2016)
CHILD STREET (PRIVATE–50' WIDE) (PLAN No. 937 OF 2012)

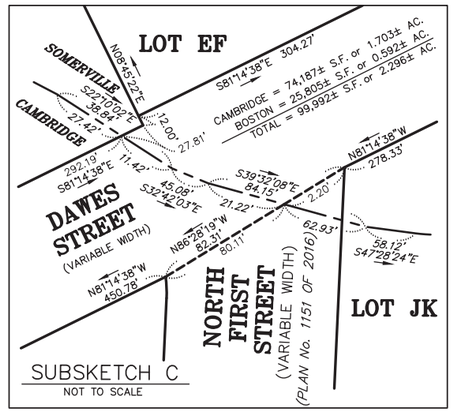
SOMERVILLE CITY LINE
CAMBRIDGE
BOSTON CAMBRIDGE
COUNTY LINE
SUFFOLK MIDDLESEX
SOMERVILLE CAMBRIDGE
BOSTON SOMERVILLE

CITY BOUNDARY (SEE NOTE 3) FORMER CHANNEL OF THE MILLERS RIVER SHOWN ON HARBOR AND LANDS COMMISSION LICENSE No. 530 (1880)

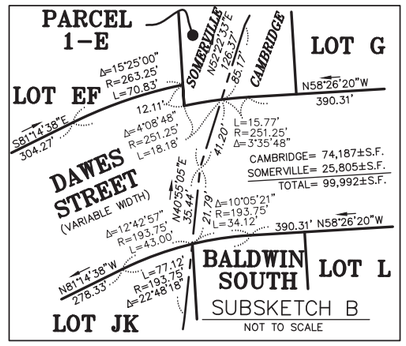
(NOW DESTROYED) 1–1/2" IP FND (BENT)

SEE SUBSKETCH A
SEE SUBSKETCH B
SEE SUBSKETCH C

NORTH AMERICAN DATUM OF 1983



SUBSKETCH C
NOT TO SCALE



SUBSKETCH B
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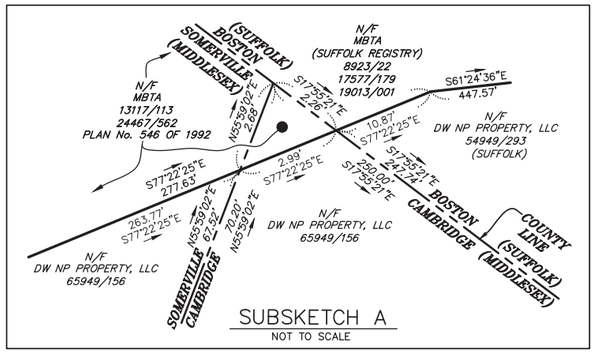

SUBSKETCH A
NOT TO SCALE

CITY OF SOMERVILLE

DATE

GEORGE PROAKIS
CITY OF SOMERVILLE
DIRECTOR OF PLANNING

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

10/4/2017
DATE

ROBERT J. BUCKLEY, PLS No. 30326

PREPARED FOR:

DW NP PROPERTY, LLC

c/o DIVCOWEST REAL ESTATE INVESTMENTS
200 STATE STREET, 12TH FLOOR
BOSTON, MA 02109

RECORD OWNERS:

DW NP PROPERTY, LLC

65949/156
LOT EF
LOT G
PLAN No. 1151 OF 2016
(MIDDLESEX COUNTY)

54949/293
LOT EF
LOT G
PLAN BOOK 2016, PAGE 566
(SUFFOLK COUNTY)

3			
2			
1	10/04/2017	REVISE DAWES STREET AND LOTS EF AND G. CREATE PARCEL 1–E.	
0	12/21/2016	INITIAL ISSUE	
ISSUE DATE		DESCRIPTION	
ATL	MEB	MEB	RJB
FLD	CALC	DWN	CHK'D

PLAN OF LAND

NORTHPOINT IN CAMBRIDGE AND SOMERVILLE, MA
(MIDDLESEX COUNTY)
AND BOSTON, MA
(SUFFOLK COUNTY)

PREPARED BY:

BEALS+THOMAS
Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

BEALS AND THOMAS, INC.
Reservoir Corporate Center
144 Turnpike Road
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T 508.366.0560 | www.bealsandthomas.com

DATE: DECEMBER 21, 2016
SCALE: 1"=50'

BTI JOB NO. 2084.02

BTI PLAN NO. 208402P305B–001

SHEET 1 OF 1

PL