

The background of the slide is an aerial photograph of a city, likely Boston, showing a mix of residential, commercial, and institutional buildings. There are several large parking lots filled with cars, and a network of streets and roads. Green spaces, including parks and trees, are scattered throughout the urban landscape.

Volpe Site Design Guidelines

October 10, 2017

Background:

- **K2**
- **Connect Kendall**
- **Volpe Working Group**

The Volpe Site:

- **should be a welcoming and lively mixed-use district**
- **Strong sense of place**
- **should be an integral part of Cambridge**
- **should be special: a place of innovation, possibility, and creation**

GOALS

- A diverse and animated downtown district - an active public realm.
- An interconnected network of meaningful and welcoming pedestrian friendly open spaces, integral with the surrounding districts.
- Streets, squares, and parks that are public in use and character, that support a wide range of functions, and are enlivened by ground level uses.
- Buildings that focus on and enrich the public street and open space system, contribute to Cambridge's sense of place, and harmonize with adjacent architecture and open spaces.



Open Space and Site Design

- **Introduction**
- **Parks**
- **Squares and Plazas**
- **Streets**
- **Universal Access**
- **Building Service, Vehicular Access and Parking**
- **The New Volpe Building's Site**
- **Environmental Comfort**

Built Form

- **Introduction**
- **Pedestrian Frontage Zone**
- **Streetwall**
- **Towers**
- **Tops**
- **Building Massing**
- **Connectors**
- **Community Spaces**
- **Architectural Character**
- **The New Volpe Building**
- **Energy Performance and Embodied Energy**

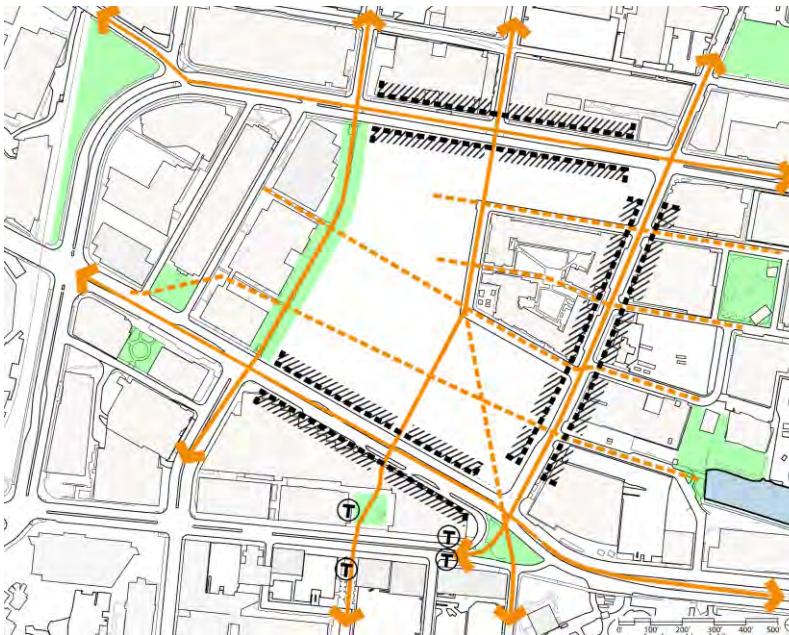
OPEN SPACE AND SITE DESIGN

The network of the site's streets, pathways, squares, parks, and other open spaces should:

- organize the site's buildings and circulation
- connect the site to the surrounding districts



A network of streets and paths makes the site permeable, and connects it to the surrounding districts.



Broadway, Third Street, and Binney Street become double sided streets, enlivened by ground level retail.



Reinforce entry points and nodes connecting the site to the surrounding Kendall Square area.

Open Space and Site Design

The site's open spaces – its parks, squares, streets, courtyards, and gardens – should be legible, beautiful, and memorable places.

They should be public rooms at the scale of the city.



*Rockefeller Plaza, New York City,
a public room at the scale of the
city.*



*The Ramblas, Barcelona, a place of
procession and connection.*



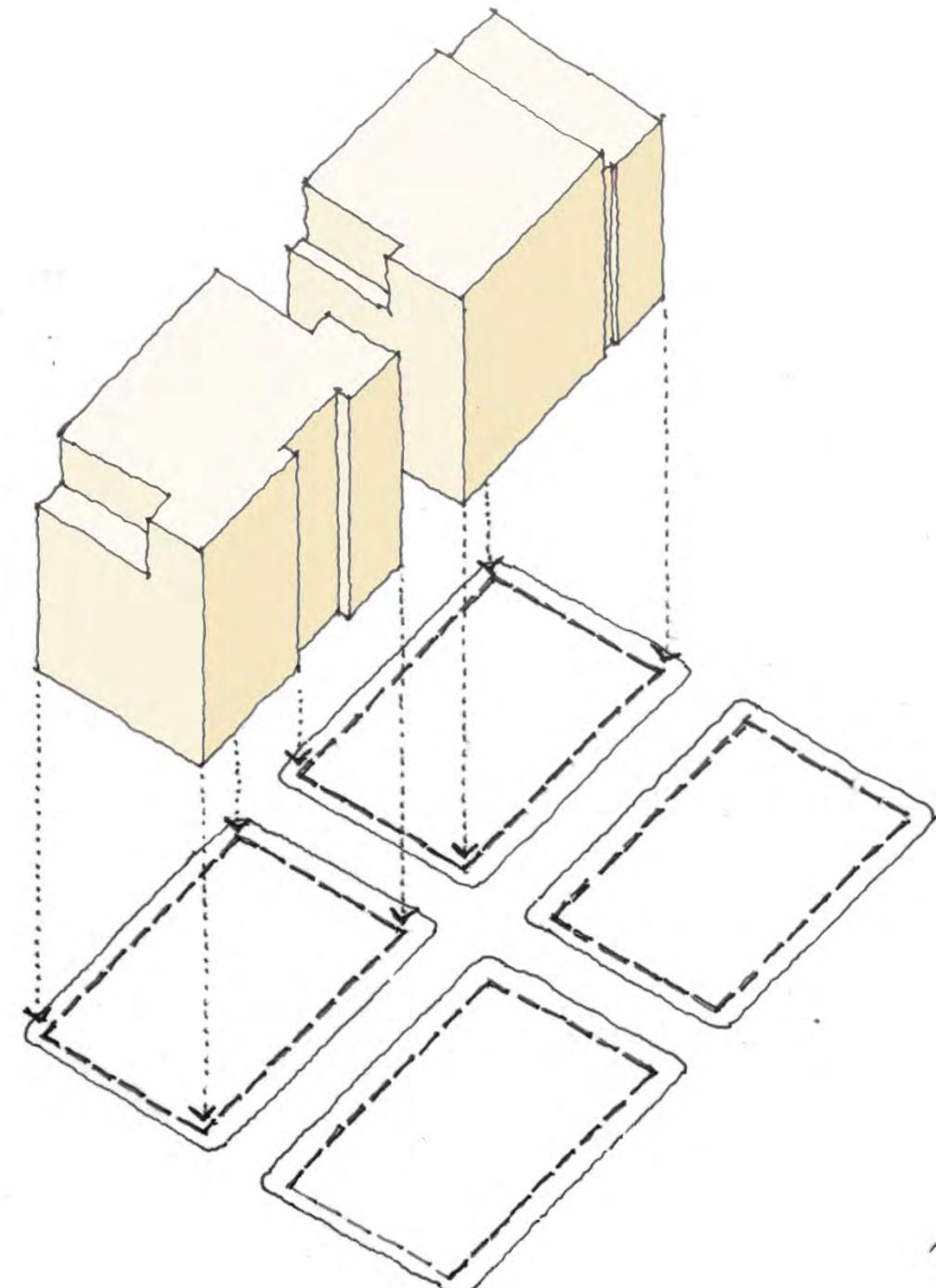
*Post Office Square, Boston,
public space framed by
architecture and enriched by
landscape design.*

Open Space and Site Design

Build-To Lines delineate the borders of city blocks and create continuity in the alignment of building facades.

Generally located at parcel boundaries adjoining streets, squares, or parks, and/or at the inner edge of the public sidewalks.

Build-to lines govern the location of the lower portions of buildings – their streetwalls and pedestrian frontages.



Build-to lines locate building facades to define streets and larger open spaces

Open Space and Site Design

Open spaces should be welcoming and engaging places for public use.

Landscape and streetscape design, building facades, and the programming of building ground floors should create a beautiful and programmatically rich and continuous pedestrian experience.



The lower floors of buildings should be permeable and designed at the pedestrian scale.



Public spaces should accommodate a wide range of uses and foster connection and interaction.

Open Space and Site Design

Incorporate broad open areas of grass or pavement, suitable for a wide range of uses, and also more articulate and specialized areas: planting, seating, low walls, trellises, and pavilions, etc.

The combination of grand spaces and intimate spaces accommodates individuals and groups, and offers a variety of ways of being in and of using the place.



Permeable and occupiable edges: shade and intimate scale.

Large open spaces: public rooms at the scale of the city.

Parks

Provide a connection to nature.

Provide opportunities for a range of activities: quiet enjoyment, recreation, outdoor dining or picnicking, temporary markets, organized public events, and public gatherings.



Include a wide variety of types of places to serve the varied needs of the site's residents, workers, and visitors, and of Cambridge as a whole.

Parks

Parks should feel welcoming:
readily accessible for public use
and enjoyment.

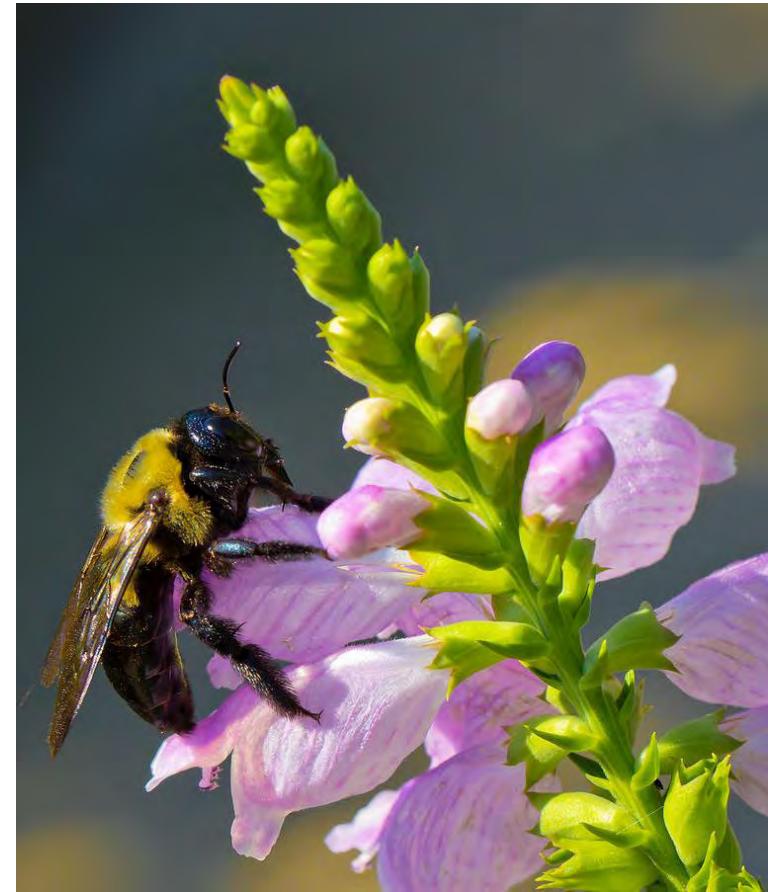


Parks should be bordered by public streets and public buildings to reinforce their open and accessible quality.



Parks

Parks should provide environmental benefits.



In addition to the connection that parks offer their users to nature, parks should provide direct environmental services including stormwater mitigation, cooling, and habitat for native species.

Squares and Plazas

Foci of community life:

- Legible and occupiable spaces.
- Predominately pedestrian.
- Enlivened by outdoor dining, temporary markets, outdoor events and performances.
- Enlivened by the retail and community functions in the ground floors of the buildings that frame them.



Provide clear open areas, suitable for a wide variety of uses; and planting, benches, water features, integral public art, seating for outdoor dining, and areas appropriate for temporary retail.

Streets

Integral parts of Cambridge's street network, welcoming to pedestrians, and linked to the surrounding districts.



A welcoming pedestrian environment, with slow traffic, aligned street trees, and continuous building facades.



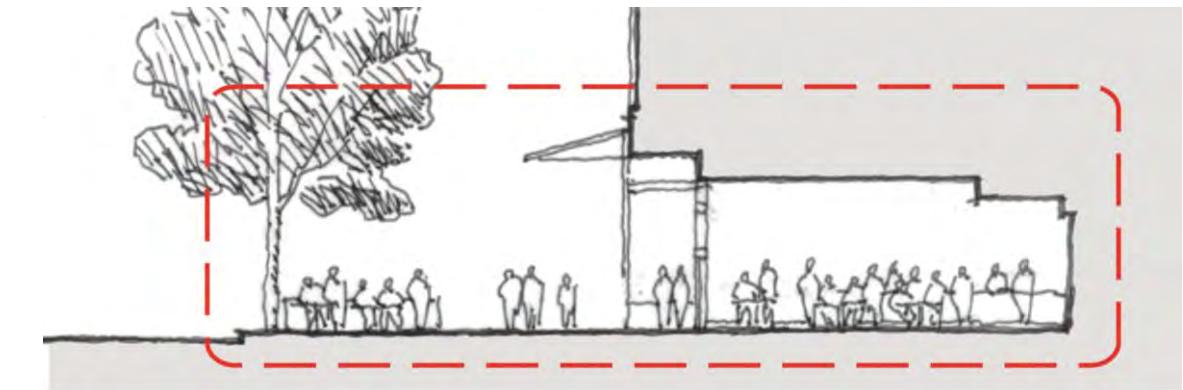
Woonerfs and streets with limited vehicular access.

Streets

Create a visually rich, safe, pleasant, and active pedestrian realm.



Organize seating for outdoor dining, street trees, bicycle parking, and other streetscape components into a linear zone; leave a clear path for pedestrian traffic.



Permeable ground floor facades: extend the public space of the sidewalk into the semi-public/semi-private building interior.



Ground floor retail: as continuous as possible to enliven the street.

Universal Access

Comparable facilities for all people.

Serve people of all ages.

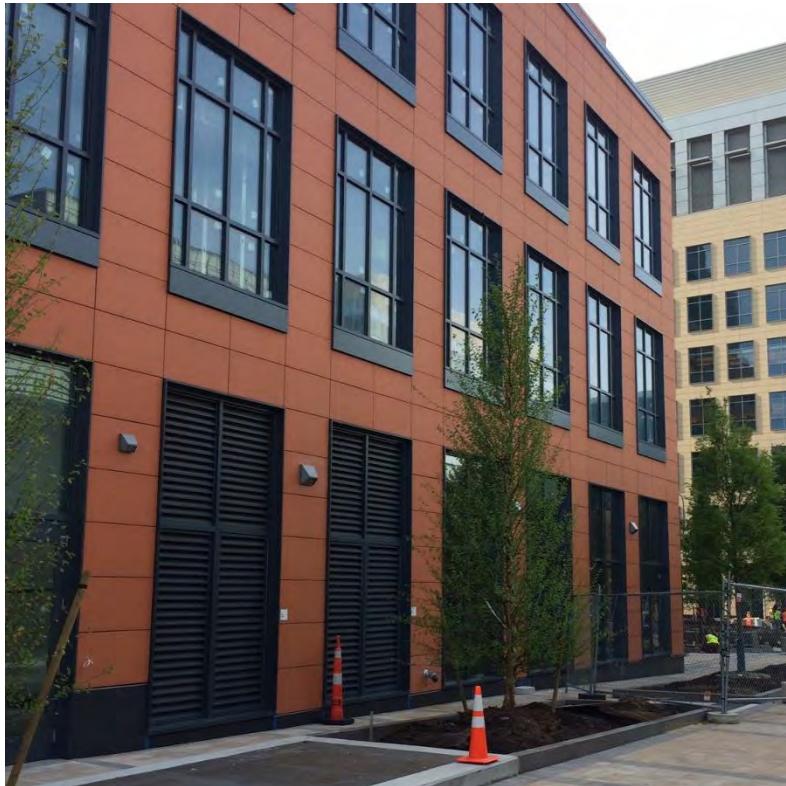
Streetscape elements shouldn't conflict with accessible parking.

Wayfinding signage throughout the site



Building Service, Vehicular Access, and Parking

Design and locate loading and servicing areas and parking entrances to support the quality of the pedestrian experience.



Ground level mechanical spaces and service entrances should be treated as integral parts of the façade.



Entrances to parking and service areas should be discreet.

The New Volpe Building's Site

Landscape design should be as seamlessly continuous with the landscape design of the rest of the site as possible.



Public paths should extend through the site.



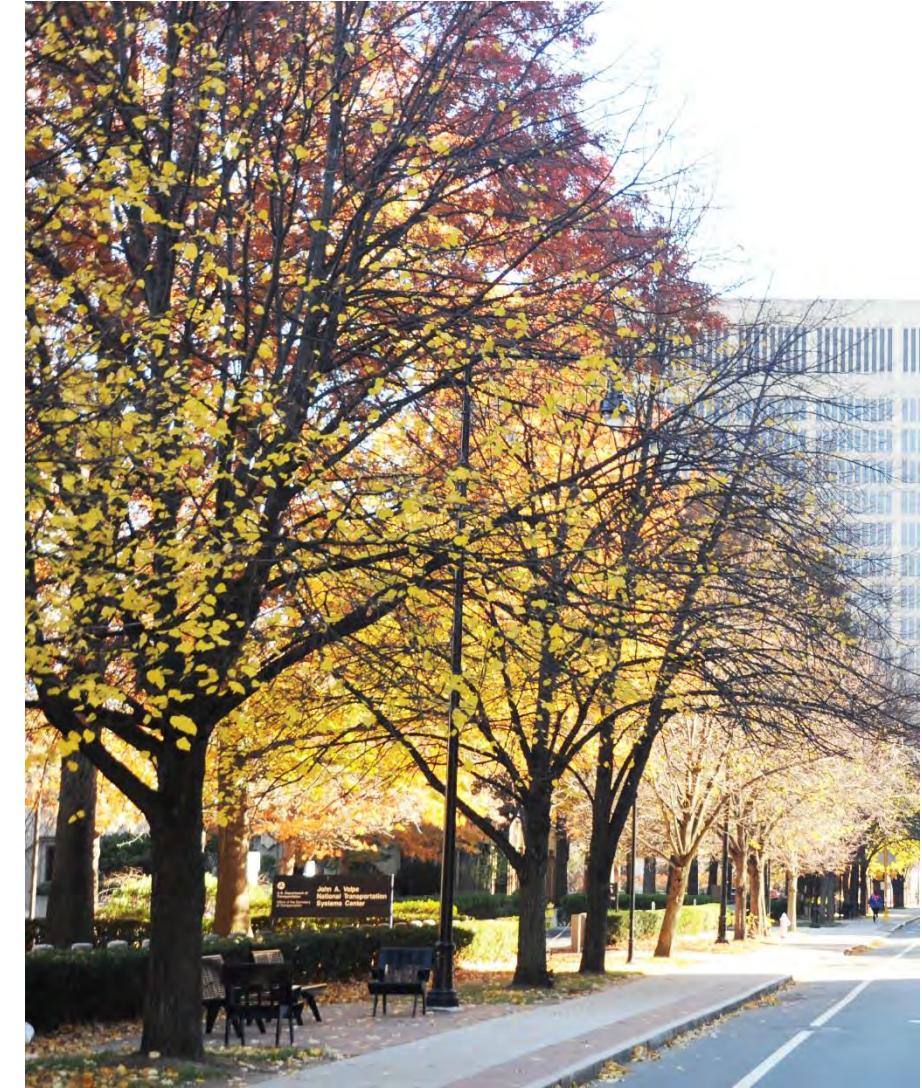
The new building's site should be continuous with the landscape of the entire Volpe district - both within the security zone and outside of it.

Environmental Comfort

The site's open spaces, and the buildings that frame them, should be designed to minimize undesirable environmental impacts.



Buildings and open spaces should be configured to maximize solar access and sky view, and to protect users from wind.



As many as possible of the existing trees in and around the site should be preserved.

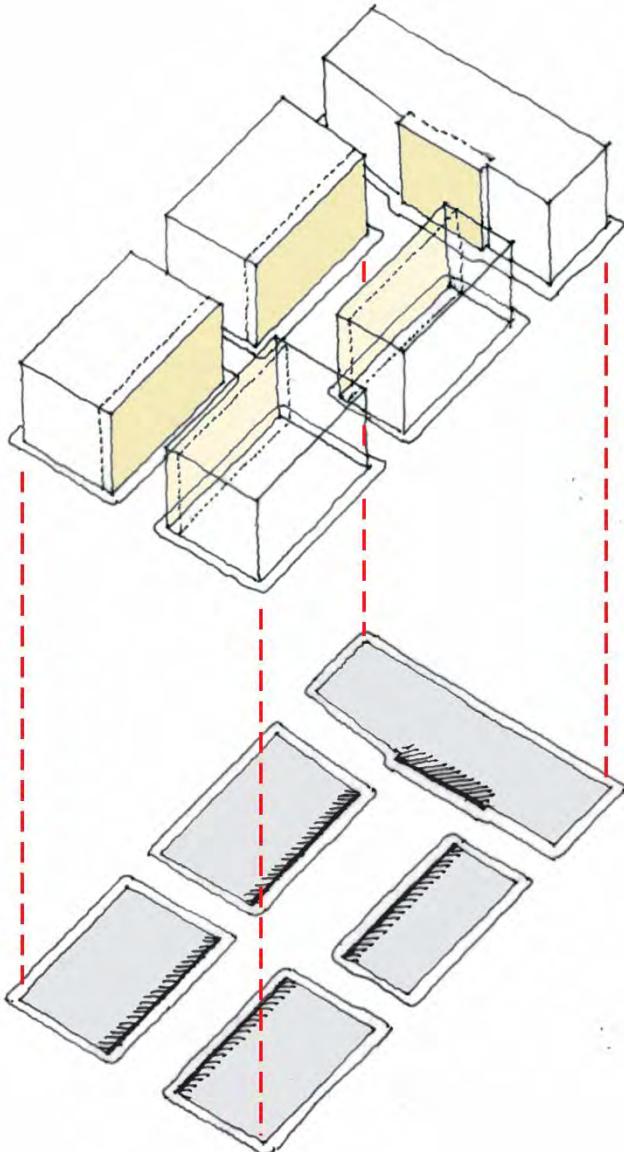
BUILT FORM

Architectural form should define urban space.

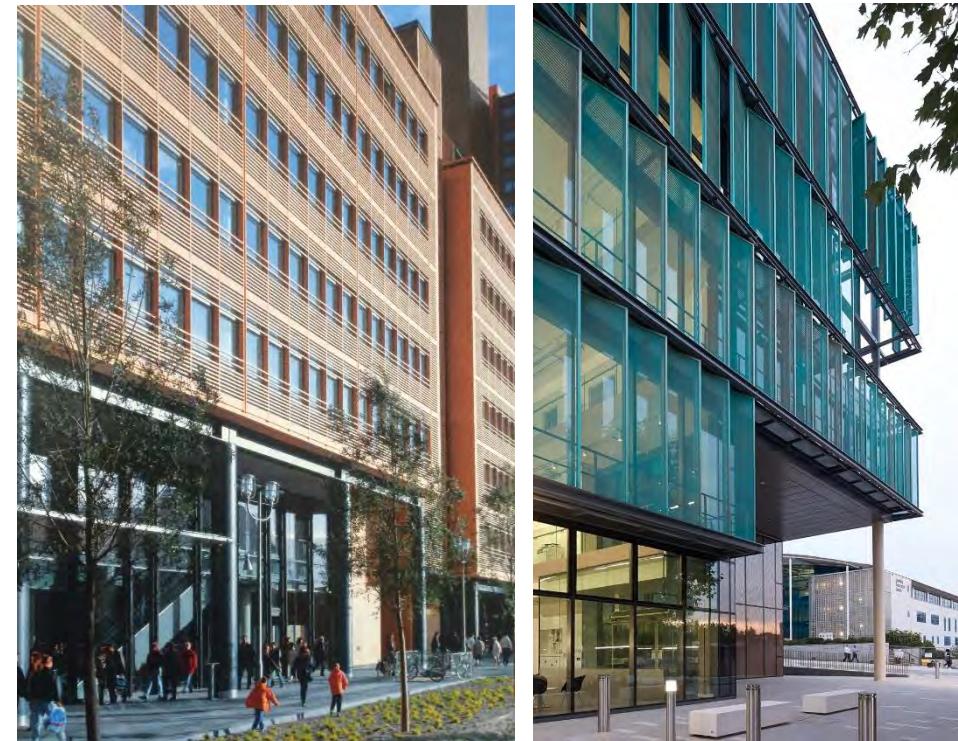
Enhance the quality and amenity of the public realm and sense of place.

Create legible and meaningful public places.

Reinforce Kendall Square's existing and proposed street and open space patterns.



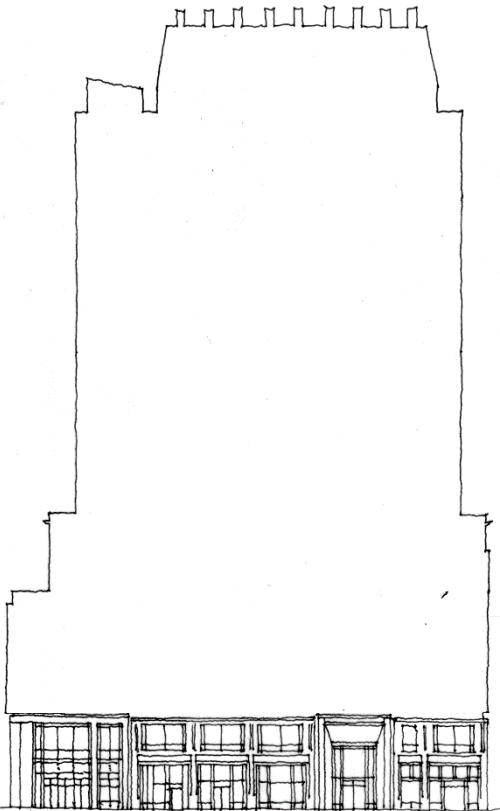
Celebrate important streets and spaces by addressing them with primary facades.



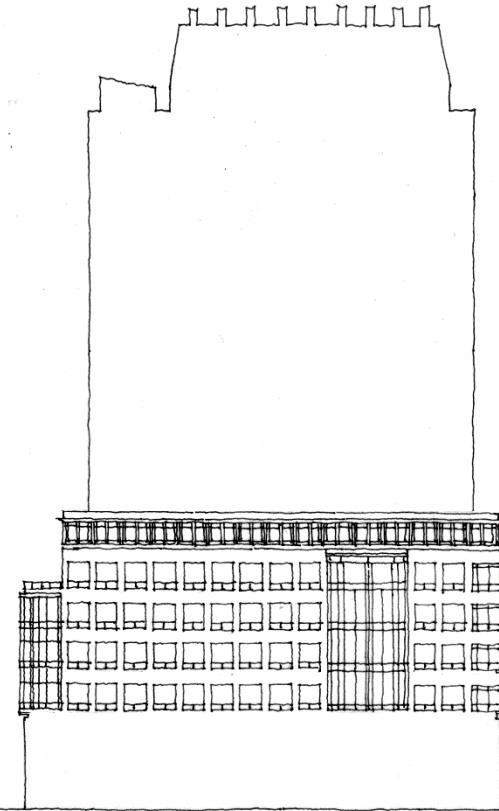
Define and enliven public space by combining consistency and variety.

Built Form

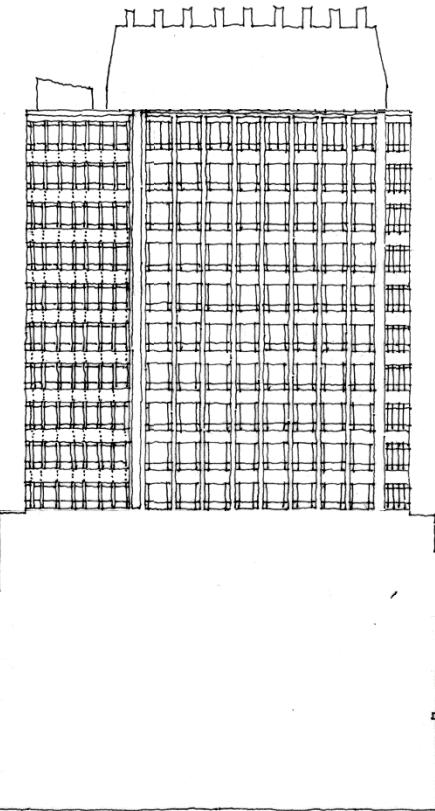
Buildings should respond a wide range of scales: intimate pedestrian, intermediate streetscape, and long-distance skyline views, and the scale and use of existing buildings.



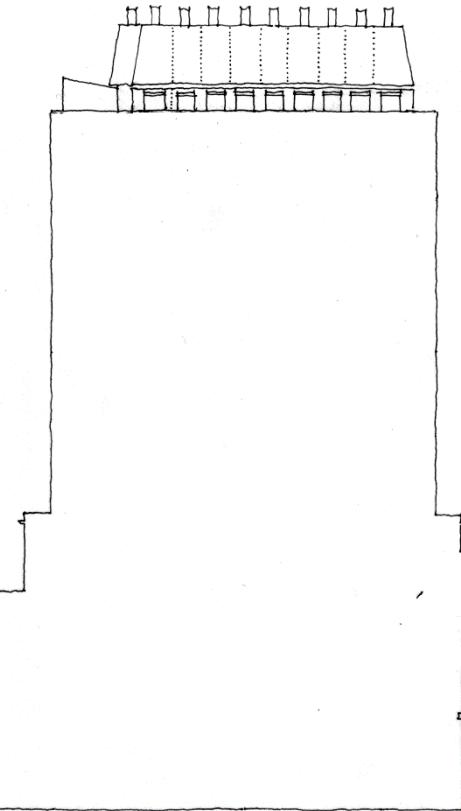
Pedestrian Frontage



Streetwall



Tower



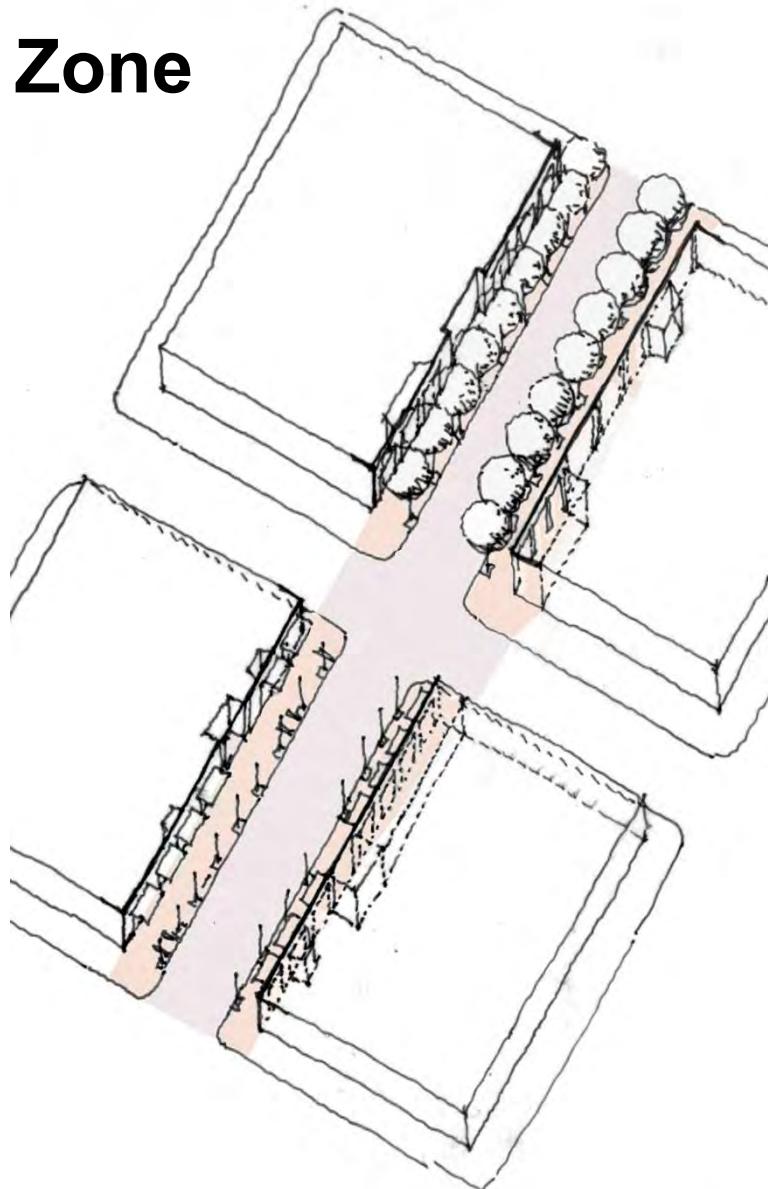
Top

Depending on their heights, buildings should consist of up to four different horizontal zones.

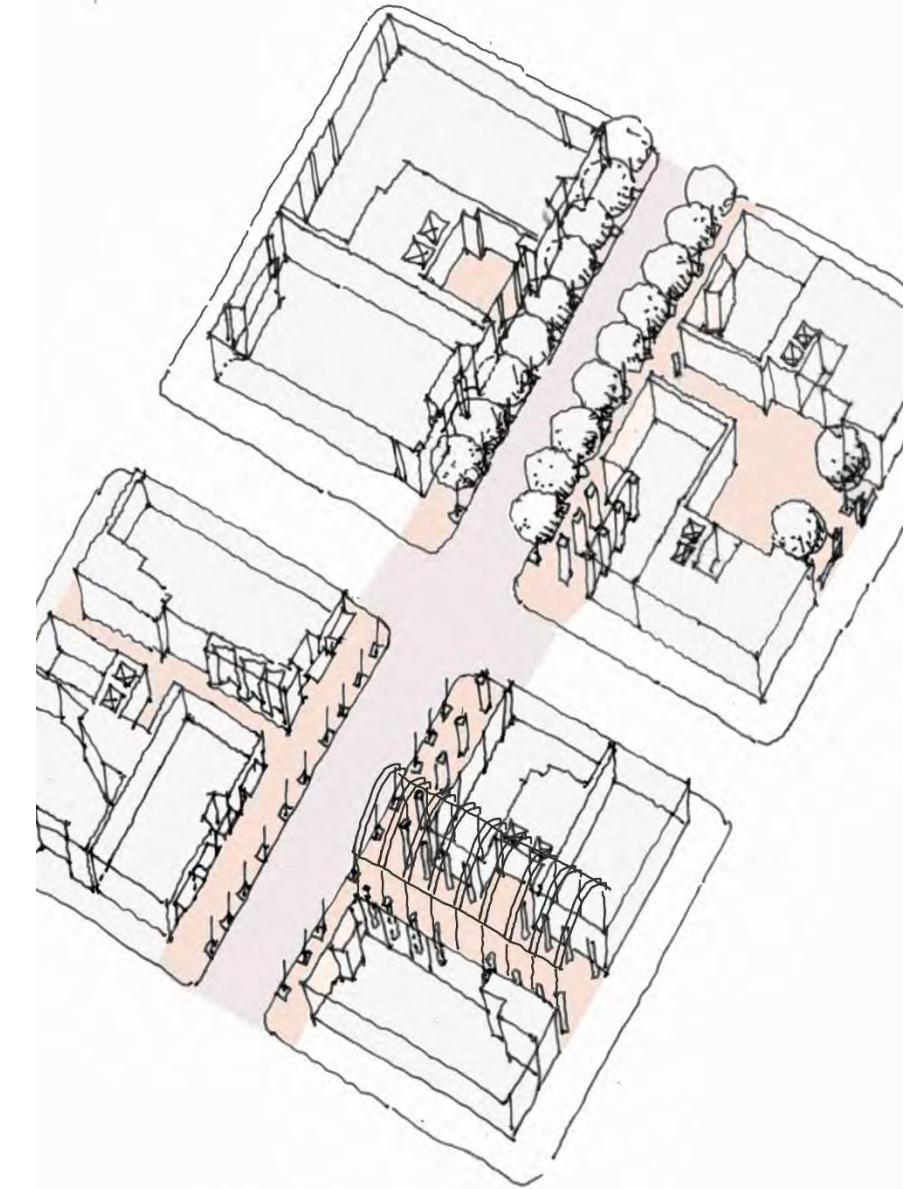
Pedestrian Frontage Zone

Maximize retail and community functions to directly engage pedestrians.

Minimize detrimental impacts on the pedestrian experience.



Define and enliven the space of the street



Permeable ground floors: passages, courtyards, lobbies, retail, and community spaces.

Pedestrian Frontage Zone

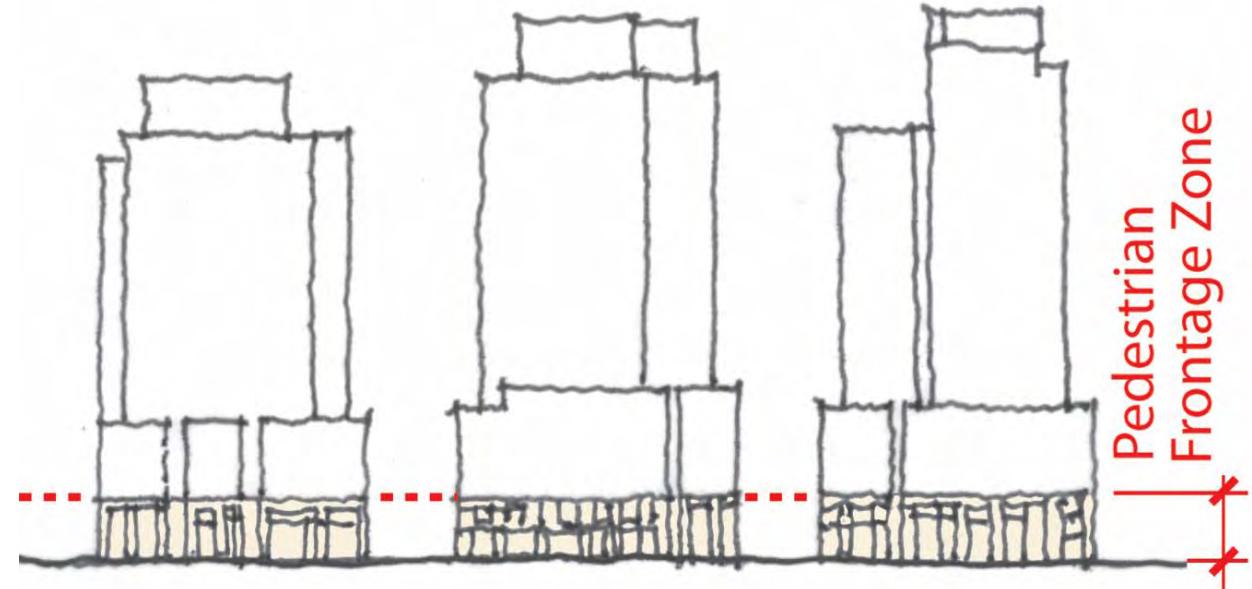
Provide shelter and visual interest at the pedestrian scale.

Maximize transparency.

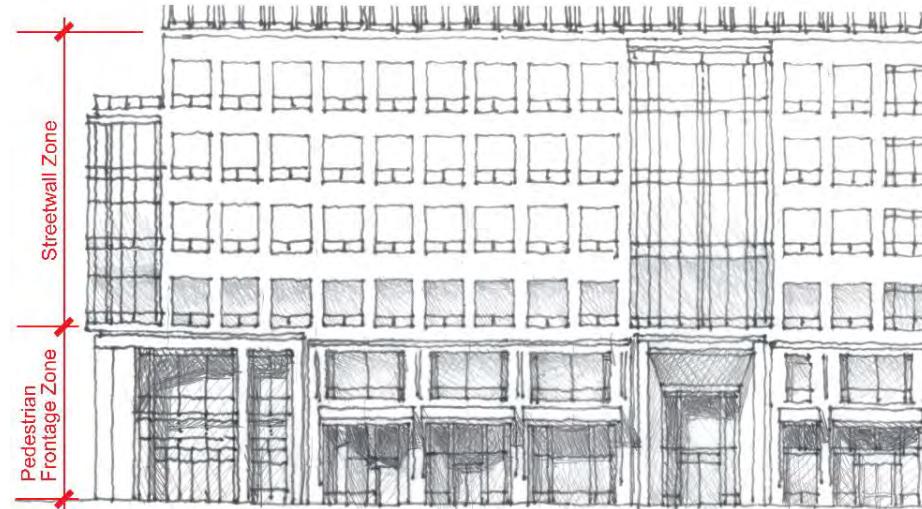
Emphasize the horizontal continuity of the public realm.



***Shelter pedestrians:
provide canopies, awnings, recessed entrances
and shopfronts, and operable restaurant windows.***



Horizontal continuity of the Public Realm



Maximize transparency and provide fine grained pedestrian scale.

Streetwall Zone

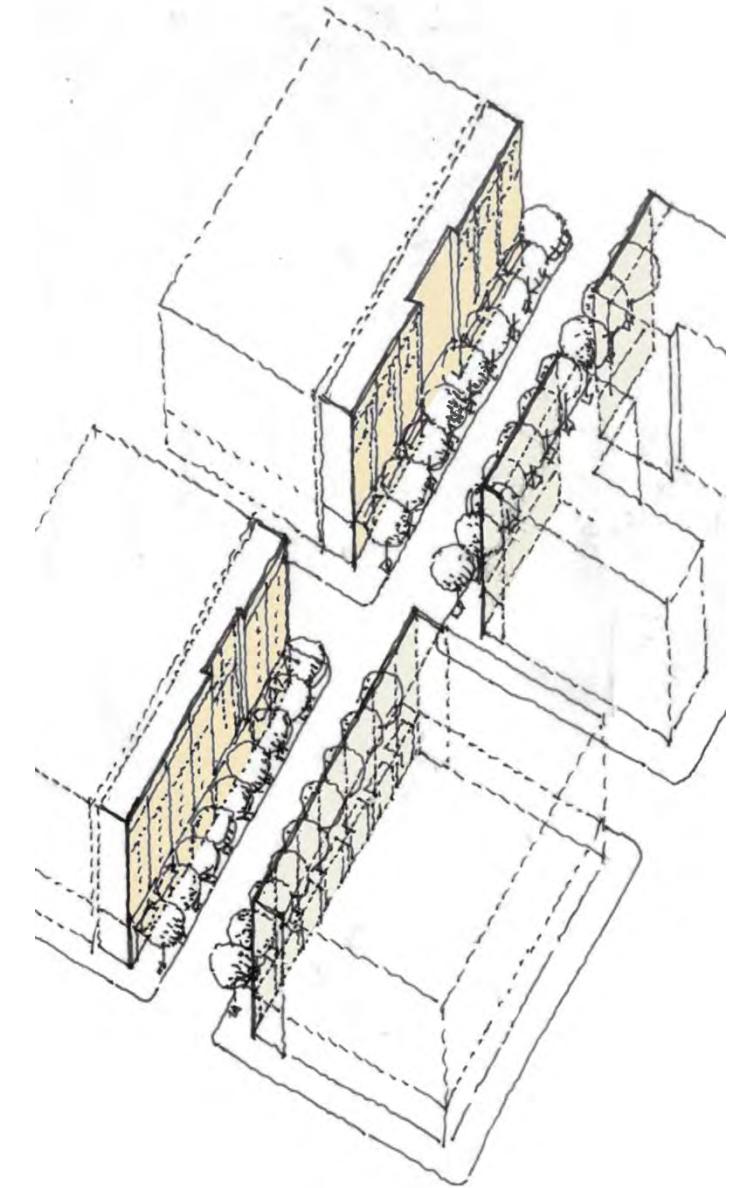
Create beautiful and memorable room-like urban places: spatially define the width and perceptual height of streets and other open spaces.



Varied continuity of the streetwall enriches the pedestrian experience.



Agreement between facades regarding height, scale, materials and a range of warm colors gives coherence to urban space. Variety of architectural expression enlivens it.



Public space should be defined by the alignment of building facades

Building Towers

Enhance the quality and amenity of the public realm and the sense of a cohesive place.

Minimize the sense of bulk.

Maintain vertical emphasis and continuity.



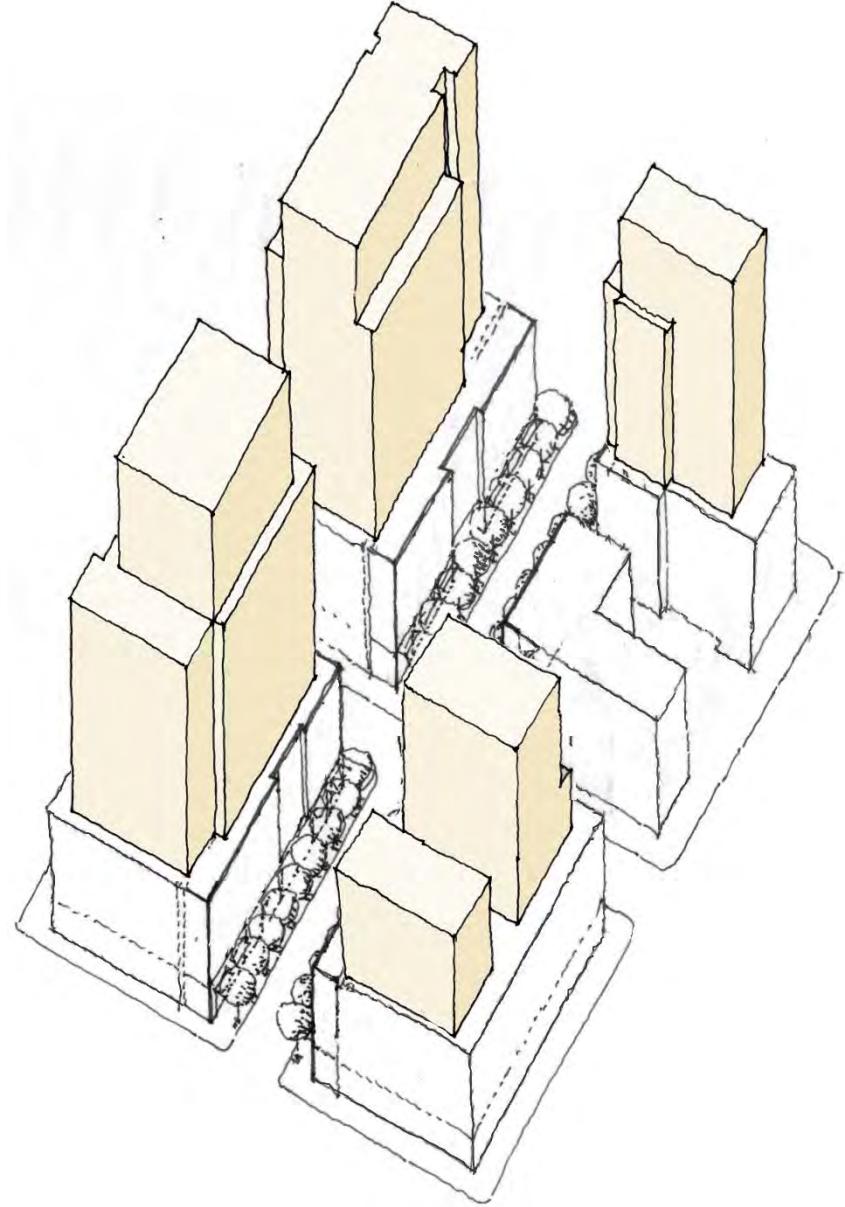
Mitigate bulk by creating a composite of several vertical elements.



Articulate mass and profile to emphasize the tower's slender proportions.



Define space at a large scale and contribute to the skyline.



Building Tops

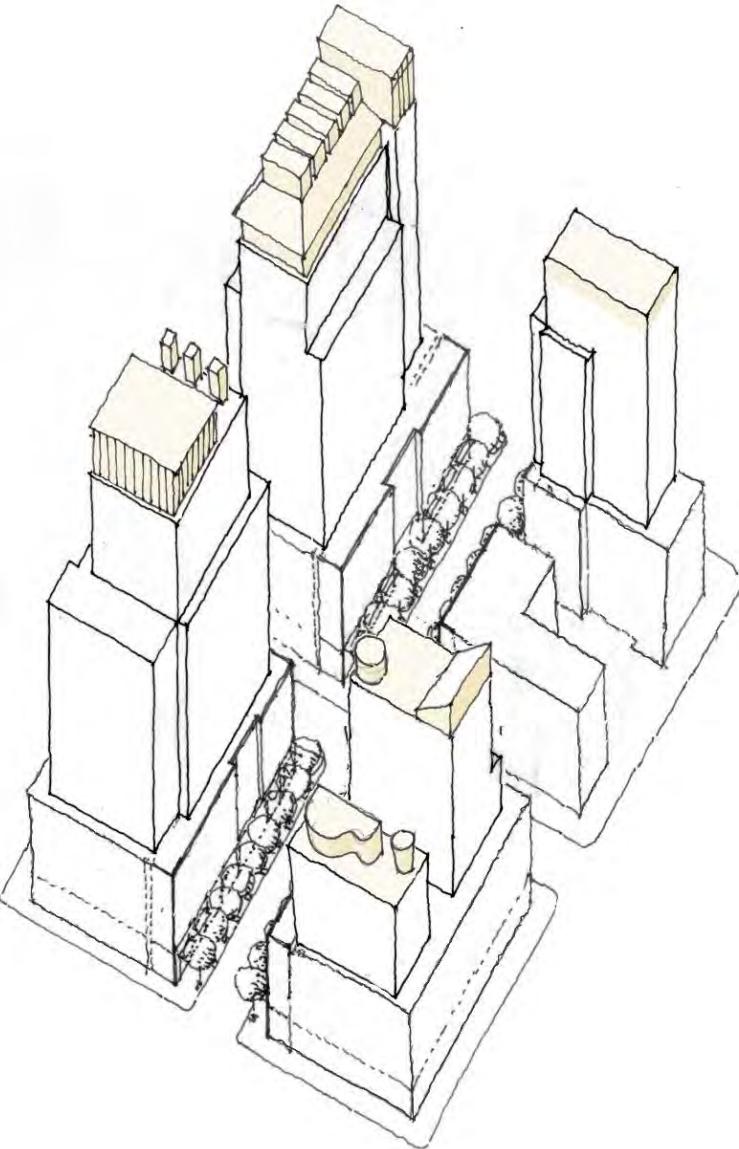
Expressive architectural elements that celebrate the building's union with the sky.

Contribute to the district's profile on the skyline.



Make elegant contributions to the building's overall form.

Mechanical floors: integral components of the building's form and facades.

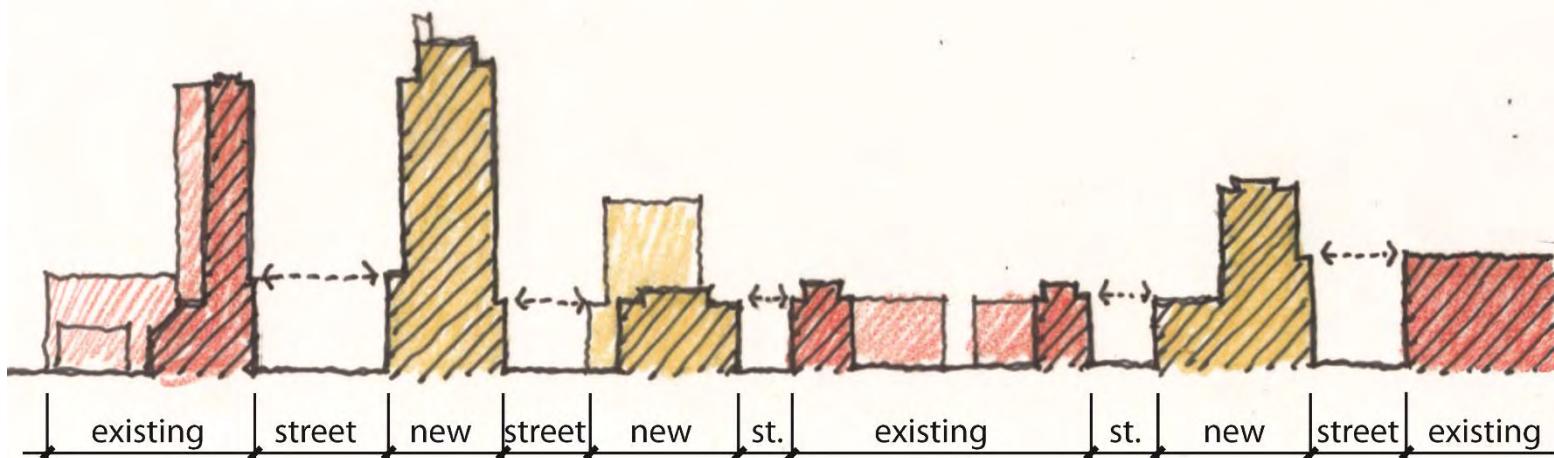


Expressive elements on the skyline.

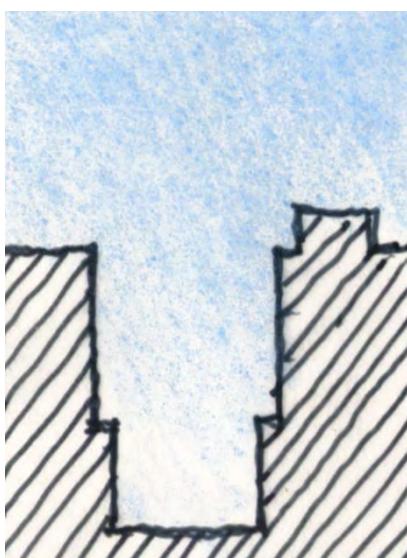
Building Massing

Give spatial definition to the site's open spaces.

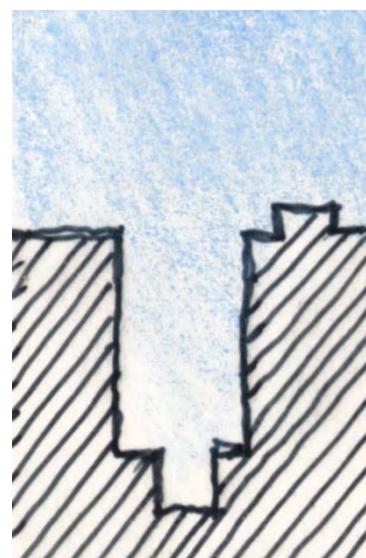
Maximize the compatibility of tall buildings with existing nearby buildings and with the site's open spaces.



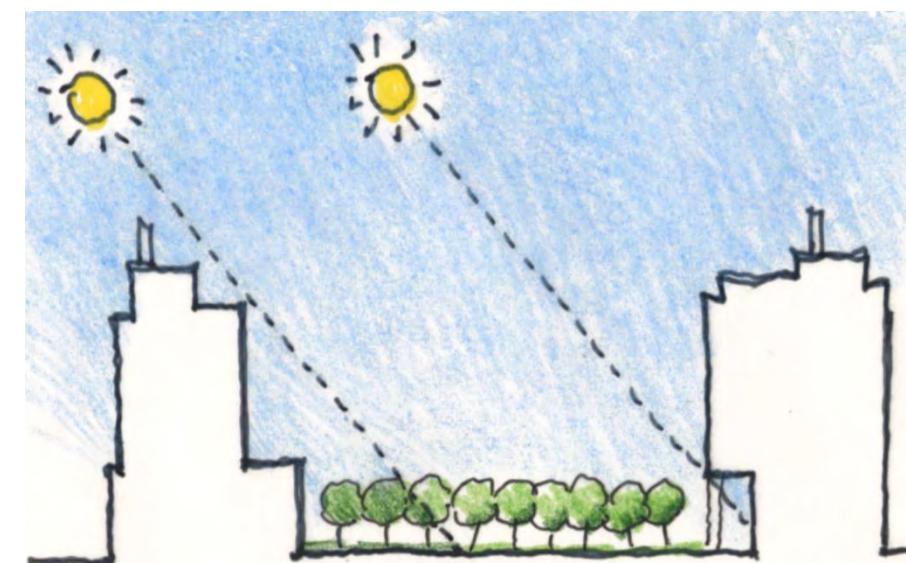
Overall building heights, and the heights of their streetwalls should respond to existing buildings in and around the site.



Shallow stepback at a higher level on a wide street



Deeper stepback at a lower level on a narrow street



Buildings on the south sites of primary open spaces should step back from them to maximize light, air, and skyview.

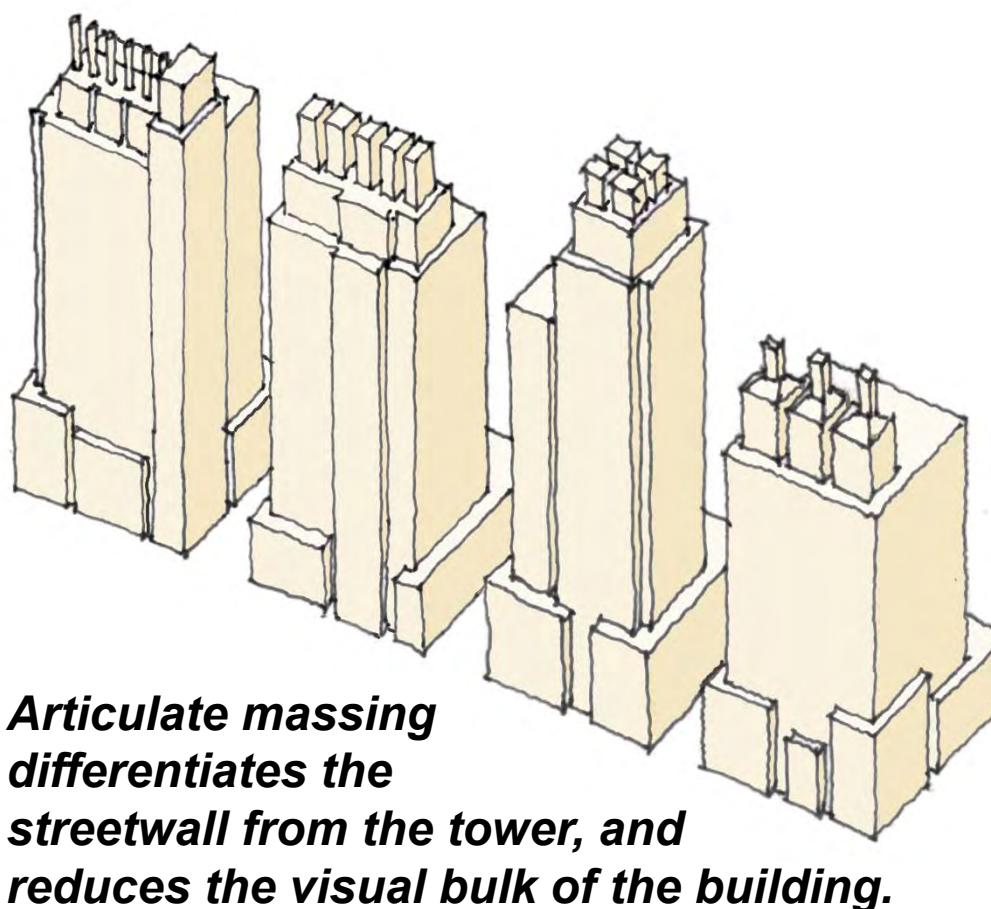
Building Massing

Incorporate a system of setbacks and step-backs, based on the four horizontal zones.

- Minimize the extent of cast shadows, loss of sky view, and wind.
- Minimize the visual dominance of towers.



Regardless of the scheme, massing should prioritize the Sixth Street Walkway and the primary open spaces within the site.



Articulate massing differentiates the streetwall from the tower, and reduces the visual bulk of the building.



Streetwall and tower: differentiated by massing and integrated by facade design.

Connectors

Upper floor connectors are not encouraged.

Where they occur, they should be:

- Transparent
- Setback from public spaces
- With adequate headroom



Community Spaces

Welcoming and inviting to the public.

Located on or within parks or squares to permit overflow.

Have their own visual identities – be directly accessible from streets and other public open spaces.



Architectural Character

Combine diversity and variety with a strong sense that the site's buildings are parts of a community.

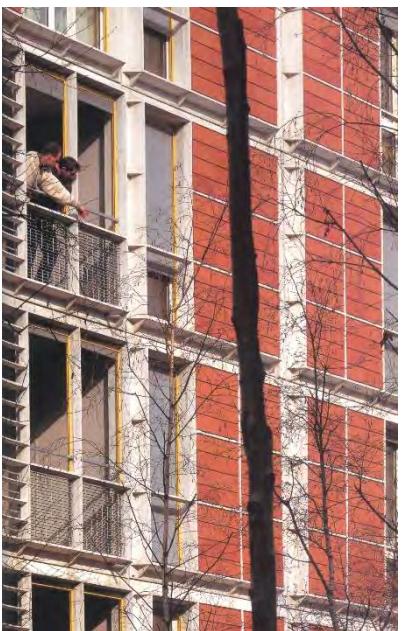
New structures-should be harmonious with and enhance Eastern Cambridge's historic character, and where appropriate, also be iconic and innovative.



Define and enrich public open space. Ground and lower floors are of particular importance.

Architectural Character

Buildings should be richly detailed, with warm and inviting colors and materials, particularly at their lower levels. They should use typical Cambridge materials, most importantly masonry.



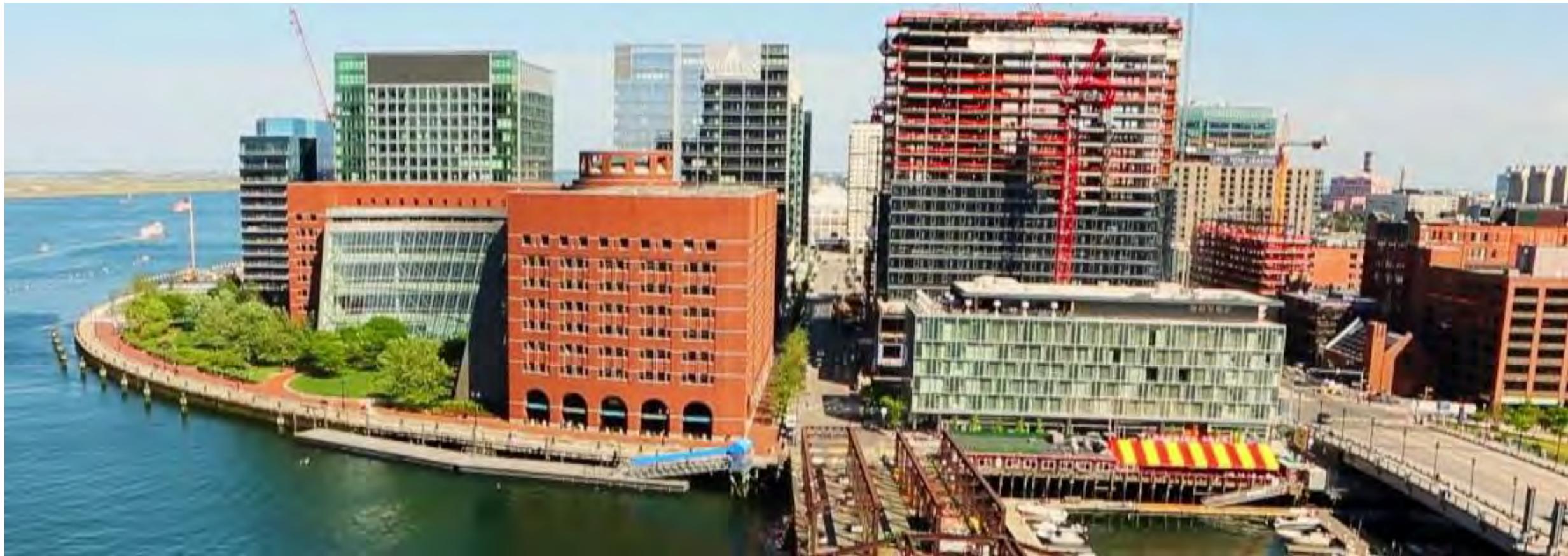
Emphasize human scale.

Incorporate elegant masonry details and articulated window openings.

Create a community of buildings.

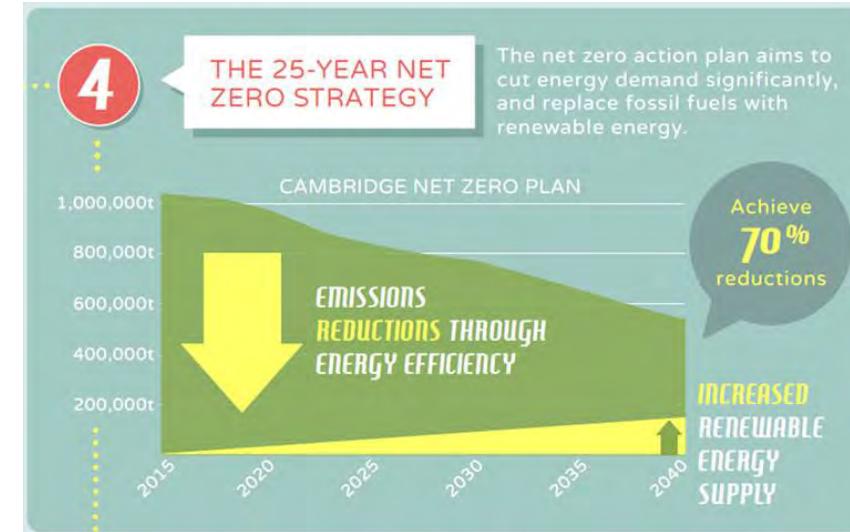
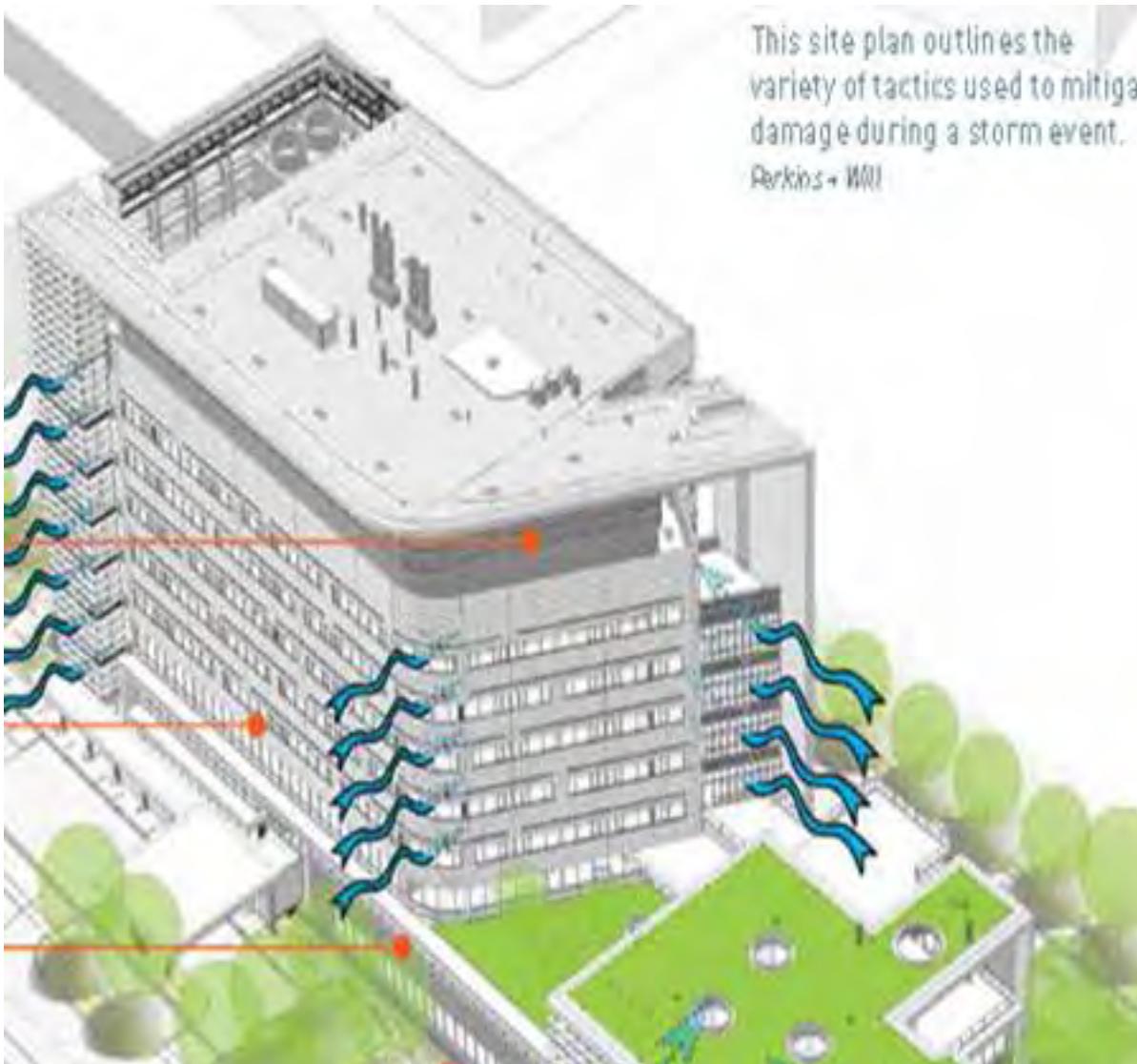
The New Volpe Building

Should be part of the community of buildings on the site.



Energy Performance and Embodied Energy

Minimize energy use and the embodied energy of their components



An aerial photograph of a cityscape, likely Boston, showing a mix of residential, commercial, and institutional buildings. Notable landmarks include the John F. Kennedy Library and Museum, the New England Aquarium, and the Massachusetts Institute of Technology (MIT) campus. The image captures a variety of architectural styles, from modern glass skyscrapers to historic brick buildings, all set against a backdrop of streets, parks, and parking lots.

Volpe Site Design Guidelines