

Northland Newton Development Design Guidelines

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Prepared by
Northland
INVESTMENT CORPORATION

Prepared for the City of Newton
Special Permit Application



Table of contents

Guideline instructions

Why design guidelines?	i
Design guidelines structure	ii
Approvals and process flow chart	v

Section 1 | Neighborhood Design

1.1	Connectivity to surrounding context	2
1.2	Block structure	13
1.3	Street design	16
1.4	Public space network	23
1.5	Signage	26
1.6	Sustainability	32

Section 2 | Site Design

2.1	Building/street relationship	36
2.2	Open space design	40
2.3	Streetscape design	53
2.4	Parking and service	56
2.5	Sustainable design	61

Section 3 | Building Design

3.1	Overall architectural character	65
3.2	Building height / massing	71
3.3	Façade articulation	75
3.4	Ground level design	85
3.5	Roofscape design	108
3.6	Materials	112
3.7	Lighting	115
3.8	Sustainable design	117



Guideline instructions

Why design guidelines?

Large projects, multi-phase developments like Northland's require by-right approval for a project that will realistically proceed in phases and necessitate some design flexibility to track with the market through its incremental implementation and long-term lifespan (such as during retail re-tenanting).

The city needs adequate certainty that the project is built as envisioned today and to a high enough standard of quality.

Design guidelines are a tool that can reconcile these concerns.

Design guidelines are customary regulatory instruments for large, multi-phase projects throughout the region and across the country.

About these design guidelines

- ◆ Crafted collaboratively by Northland, city staff, and the city's peer reviewer (Form + Place)
- ◆ Structured by city staff for applicability to any project of comparable scale (the pictures might change but the rules are transferable)
- ◆ Addresses master planning, public realm design, and architecture
- ◆ Holistically emphasizes walkability, connectivity, community, placemaking, sustainability – not just about design details.

How these guidelines are structured

These guidelines are organized in sections distinguished by scale (neighborhood, site, building). This organization reflects the iterative design and permitting processes from preliminary master planning to rezoning/special permit to building permit. Design guidelines in this document are structured as follows:

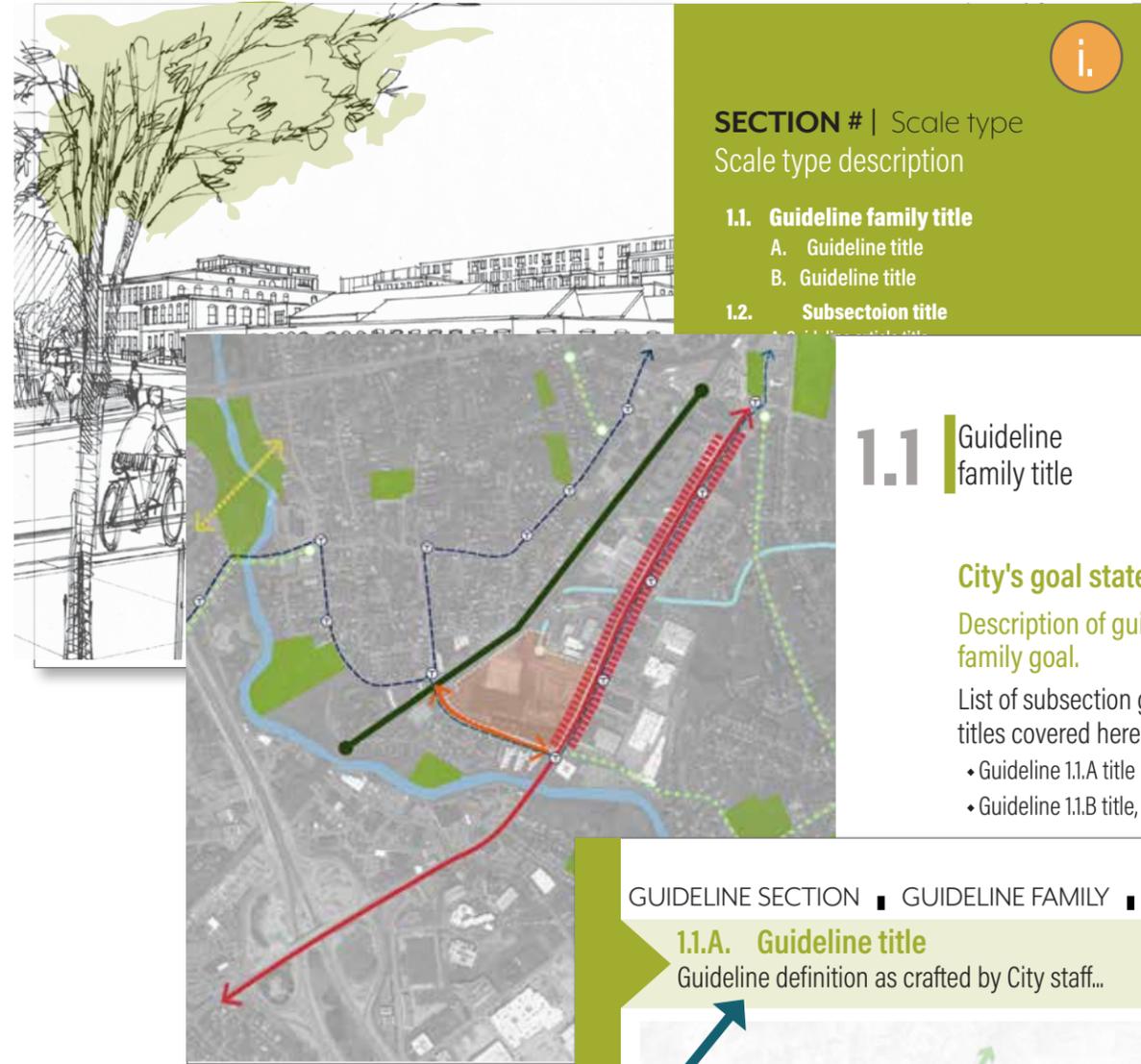
- i. Guideline section (1, 2, and 3);
- ii. Guideline family (1.1, 1.2, etc.); and
- iii. Guideline (1.1.A, 1.1.B, etc.).

Each 'family' subsection leads with a goal statement provided by city staff which informs and provides a performance metric for subsequent guidelines (in other words, a subsection's guidelines have been engineered to support and help achieve the stated goal).

Each guideline dictates a specific design component to support the city's goals and priorities as expressed by the goal statements.

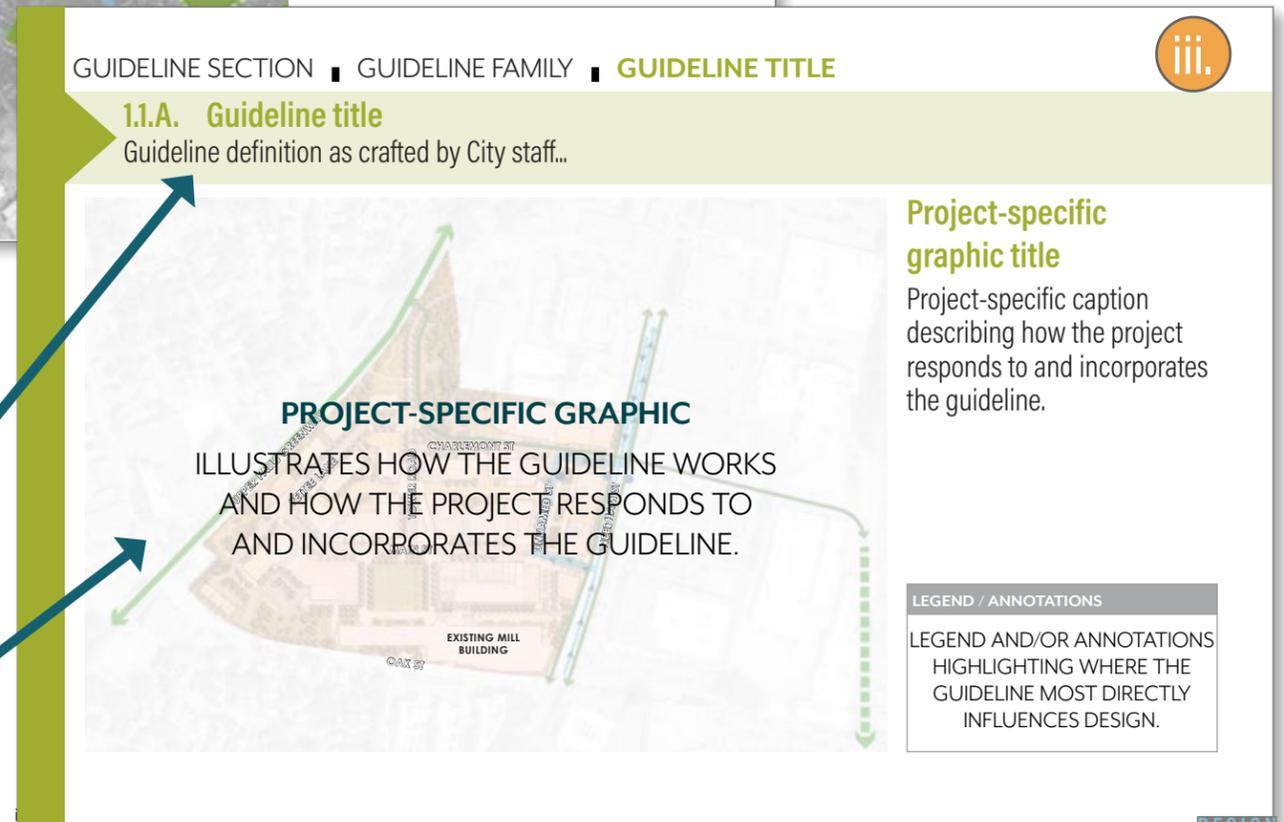
Each guideline dictates a specific design component to support the city's goals and priorities as expressed by overarching goal statements. Each guideline text was written or directed by city staff.

Each guideline's graphic(s) simultaneously explain how the guideline works and demonstrates how the Northland project fulfills its spirit and letter.



With over **50 guidelines** ranging in scale and granularity from project-wide pedestrian connectivity to façade fenestration details, this tool provides comprehensive design regulation.

Each subsection of guidelines is shaped by a goal statement produced by city staff



Hierarchy of approvals

Each guidelines section applies to a different stage of the approvals process:

Approvals phase	Governing guidelines section
Pre-application master planning	Neighborhood design
Special permit/rezoning application	Site design (and neighborhood)
Building permit application	Building design (and site and neighborhood)



Consistency rulings

Approvals are based on a consistency determination between the submitted design and all governing guidelines.

The process requires the applicant to submit a documentation of how the project fulfills all applicable guidelines. The documentation will be reviewed to confirm consistency between the guidelines and the project's design.

Ideally, the applicant and the City begin a dialogue in advance of official submission to help ensure final design achieves the City's goals and expectations.

Regarding this project: Northland, city staff, and the city's peer reviewer have been in dialogue for months regarding the formulation of this process and the positive consistency between Northland's design and final guidelines text.

Special permit approvals

Special permit approval is contingent in part on Northland’s proposed design demonstrating consistency with the goals and guidelines in the neighborhood and site design sections.

As this project is currently subject for special permit, Neighborhood design and Site design guidelines shall govern the submission.

Approvals phase	Governing guidelines section	
Pre-application master planning	Neighborhood design	Sections currently governing approval
Special permit / rezoning application	Site design (and neighborhood)	
Building permit application	Building design (and site and neighborhood)	

When Northland returns for building permit approval, submitted architectural design must demonstrate consistency with the guidelines’ building design section.

Approvals phase	Governing guidelines section	
Pre-application master planning	Neighborhood design	Sections that will govern building permit approval
Special permit / rezoning application	Site design (and neighborhood)	
Building permit application	Building design (and site and neighborhood)	

Building permit approval

The process does not require demonstrating consistency with the building design guidelines section at this time – not until Northland submits building permit applications.

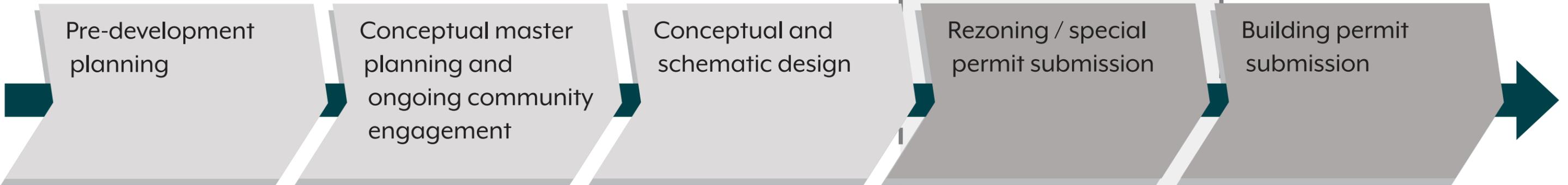
However, to help the community understand how the guidelines work at all levels and because Northland is already developing detailed design concepts, Northland volunteered to provide representative project-specific illustrations for the building design section.

Northland will likely update building design details and illustrations upon filing for building permits but future changes will remain consistent with the building design guidelines as required by this process.

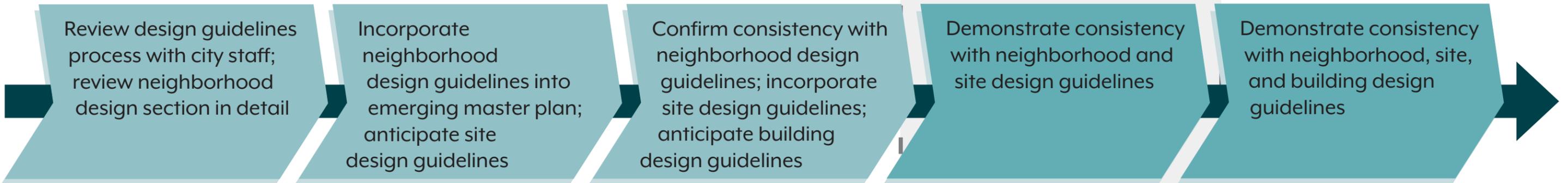
Process flow chart

Informal steps

Design development process



Design guidelines review process



Approvals process





SECTION 1 | Neighborhood Design

Creating a cohesive public realm at the district level

1.1. Connectivity to surrounding context

- A. Compatibility with local area vision plan
- B. Vehicular connectivity to surrounding context
- C. Transit interface
- D. Pedestrian connectivity to surrounding context
- E. Bike connectivity to surrounding context
- F. Streetscape continuity to surrounding context
- G. Edges
- H. Scale transitions
- I. Sight line
- J. Cultural/historic connectivity

1.2. Block structure

- A. Walkable blocks and permeability
- B. Pedestrian environment continuity

1.3. Street design

- A. Street hierarchy
- B. Street sections

1.4. Public space network

- A. Diverse open space network
- B. Public art

1.5. Signage

- A. Sign family
- B. Sign placement
- C. Signage distribution and wayfinding system

1.6. Sustainability

- A. Promote sustainable planning and design



1.1

Connectivity to surrounding context

City's goal statement

Neighborhood-scaled developments should focus on addressing transitions to their abutting contexts – which can be diverse in nature – knitting together with existing fabric in ways that are sensitive to surrounding communities.

The following guidelines address connectivity to the surrounding context:

- A. Compatibility with local area vision plan;
- B. Vehicular connectivity to surrounding context;
- C. Transit interface;
- D. Pedestrian connectivity to surrounding context;
- E. Bike connectivity to surrounding context;
- F. Streetscape continuity to surrounding context;
- G. Edges;
- H. Scale transitions;
- I. Sight lines; and
- J. Cultural/historic connectivity.

1.1.A. Compatibility with local area vision plan

New developments should be compatible with local area vision plan and reflect its top priorities and goals such as pertaining to building and open space design, programming, and mobility.

Vision statement Needham Street Area Vision Plan

- ◆ The Needham Street area will be a prosperous mixed-use district that emulates many of the positive aspects of Newton's villages. The area will be designed for all ages and connected to transportation options.
- ◆ The Needham Street area will continue to reflect its industrial history and current commercial strength while adding diverse residential options and modern innovation industries. It will also be supported by a mix of cultural and recreational opportunities.
- ◆ Future growth will incorporate environmentally sustainable technologies and design.



A Vision for Environmental Health

Improve health of existing open space and create diversity in new open space

The Community Engagement Group also discussed new open space desires. Expanding and linking the trails in the area was among the top priorities heard. There was also interest in expanding nature education, potentially with a community-nature center and interpretive signage along the trails. In the context of new development, there was interest in creating new open spaces with diverse activities from plazas to playgrounds, sports fields to quiet lawns.

Newton has an opportunity to cultivate community stewardship in the Needham Street area with residents and local businesses. While developing this vision plan, the passion of the resident community in the Needham Street area became clear. First community involvement in creating and maintaining the Greenway was frequently noted. Newton can expand support for volunteer groups that monitor the status of natural resources and participate in protecting and maintaining them.

As the City works with partners to expand and improve open space, the focus of open space design should continue to be on ecological health by replacing invasive species with native plantings, reducing impervious surface coverage, and creating connections between natural areas.

Short-Term Actions

- Develop a community action group to monitor open spaces and provide the relevant City offices with information that may be missed by people who do not live in the area.
- Work with the Conservation Commission to ensure that water quality, stormwater storage capacity, and wildlife habitat are maintained and improved along South Meadow Brook.
- Coordinate with MassDOT to add street trees along Needham Street whenever possible. Require trees on private property along Needham Street in any new development.

Ongoing/Long Term Actions

- Encourage stewardship investment (financial and otherwise) in the maintenance and improvement of existing open spaces
 - e.g. support volunteer clean-up days with residents and businesses to maintain the health of open spaces
- Require new development/redevelopment to incorporate new publicly accessible open spaces in the Needham Street area
- Build diverse new public open spaces that encourage outdoor activity, environmental awareness, and community building; e.g. trails, interactive water features, playgrounds, community gardens, plazas, and public art.

14 Needham Street Area Vision Plan

Design Principles

Summarized here are the design principles that were discussed with the Community Engagement Group for both development and redevelopment along Needham Street.

PUBLIC REALM

- Design public open space as an extension of the architecture and maximize daylight and visual access.
- Design sidewalks with active building fronts to enhance the pedestrian experience.

SITE DESIGN

- Harmonize relationship between buildings, streets, and open spaces.
- Create a defined and active streetwall, render facades with texture and depth.
- Recognize and enhance unique conditions, historic and natural features.

BUILT FORM

- Express a clear organizing architectural idea and harmonize the built form with scale and materials.
- Modulate buildings vertically and horizontally.
- Shape the roofs of buildings.

Needham Street Area Vision Plan - August 8, 2018 41

A Vision for Land Use

Support a mix of uses

Each of Newton's villages has a variety of uses that make it unique and give the village life throughout the day - from the early morning coffee shop to the offices open all day to the residences where people return at night.

The uses along Needham Street evolved from a farming area to an industrial center, then to an office area and shopping destination. There are residential neighborhoods just off of Needham Street, and for a time in the early 20th century, there were plans for Needham Street to be lined with single family homes.

Looking ahead, the vision is for Needham Street to be a mixed-use place linking the villages of Upper Falls and Newton Highlands with a mix of residential, commercial, office, entertainment, recreation, and light manufacturing/production uses. The mix of uses should reflect the industrial heritage of the area, meet the service needs of the adjacent neighborhoods, and provide for the evolving needs of a thriving business center.

In this vision, Needham Street continues to be an economic powerhouse within Newton and a central spine of the N² Innovation District. While office parks meet the needs of some businesses, the majority of office workers now prefer to work in places with housing and dining options within walking distance, and on streets that are lively with pedestrian activity from early morning to evening.

Community Engagement Group members identified the mix of uses that they would like to see along Needham Street between residential, retail/commercial, and office/industrial uses.

Short-Term Actions

- Amend zoning along Needham Street to encourage mixed uses, including housing, community uses, smaller commercial uses, and compatible manufacturing/production uses (e.g. breweries, artisans, R&D lab space, etc.)
- Allow more uses by-right with clear development and design requirements (height, massing, transparency, etc.), along with clear operating standards.

Ongoing/Long Term Actions

- Attract employers and support employees by encouraging housing and transportation options, as well as amenity uses, such as restaurants, retail, and entertainment.
- Work with the Newton-Needham Chamber of Commerce and N² Innovation District to attract new businesses and economic development assets, such as co-working, to the area.

30 Needham Street Area Vision Plan

SELECT PAGES FROM THE VISION PLAN DOCUMENT

Synergy with the Needham Street Area Vision Plan

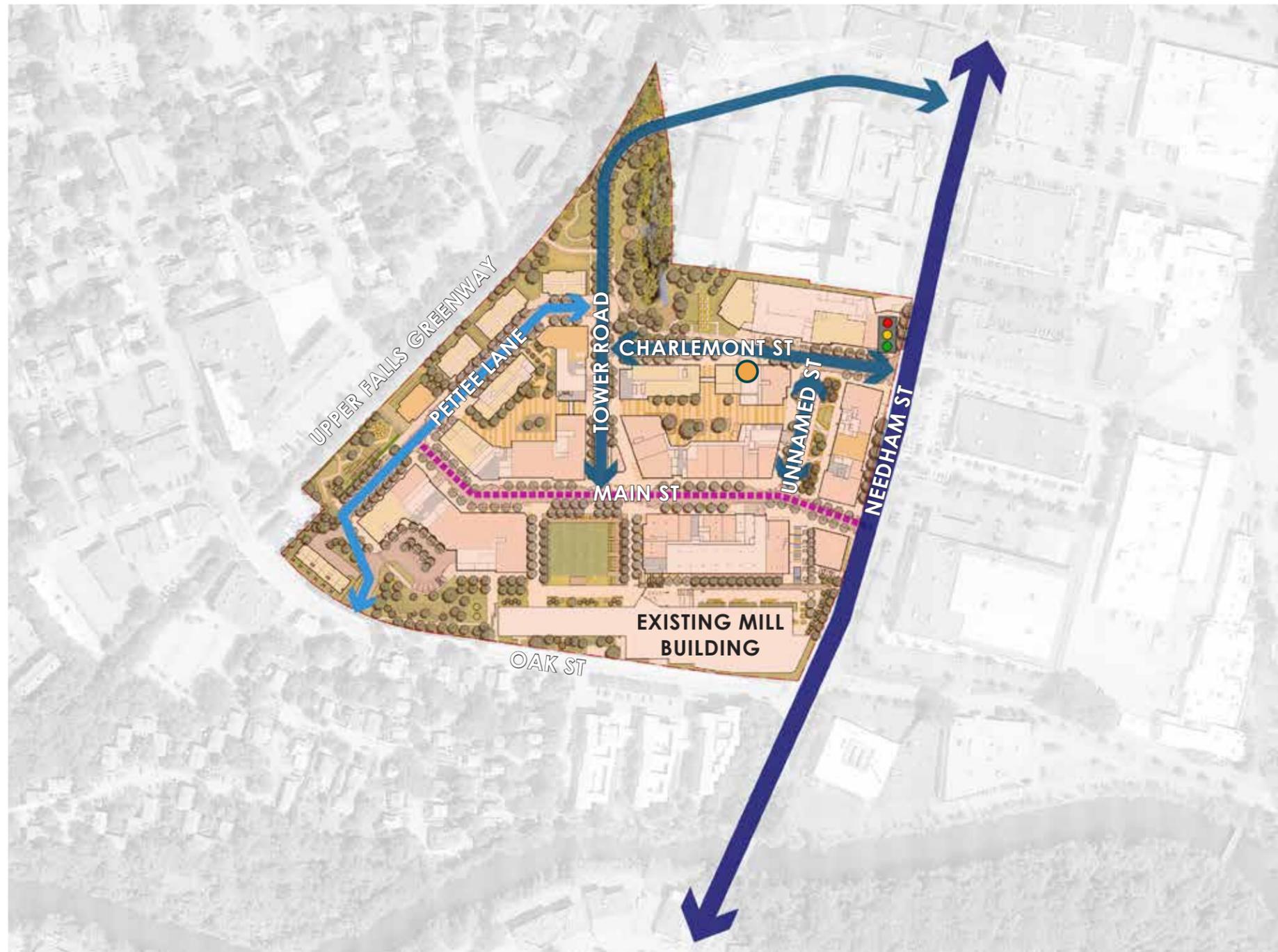
Adopted in August of 2018, the community-driven Needham Street Area Vision Plan establishes a vision and priorities for the future of the Needham Street corridor and surrounding neighborhoods. The Northland Newton Development represents a large and centrally located portion of this plan's study area and, as such, can play a substantial role in advancing the plan's goals and objectives.

This development's master plan embodies many of the recent Needham Street Area Vision Plan's top priorities and advances many of its recommended implementation strategies in the areas of environmental health, transportation, land use, design, and implementation.

- ◆ The proposed development aligns squarely with the Needham Street Vision Plan which seeks to transform the corridor into a prosperous mixed-use center that emulates the positive aspects of Newton's villages.
 - » **Environmental**—restoration of open space; creation of diverse, multi-use natural areas encouraging activity and environmental education; support healthy lifestyles.
 - » **Transportation**—creation of a walkable environment supporting diverse transportation modes; creation of convenient transposition connections to local neighborhoods and regional destinations.
 - » **Land use**—creation of a vibrant destination with distinct identity offering a diversity of homes, businesses, and gathering places for community life.
 - » **Design**—buildings and public spaces will be designed at a scale to engage people at the street and promote an active pedestrian environment.
- ◆ The development creates a mixed-use center in the spirit and tradition of Newton's historic village centers.
- ◆ The development will connect to, reinforce, and build upon the Newton Upper Falls village center.
- ◆ The development will advance the evolution of the N-Squared Innovation District and spawn future commercial growth along the corridor.
- ◆ The development will support the growth of a regionally competitive knowledge sector employment hub.

1.1.B. Vehicular connectivity to the surrounding context

Establish logical connections to the existing street network that promote intuitive access into/out of the development; enhance existing connections where applicable; and are compatible with surrounding context.



Traffic flow

The development's street network balances the need for quick and easy car access from Needham Street with the desire to create a safe, walkable environment for pedestrians and mitigate cut-through traffic through Upper Falls center.

Charlemont Street and Tower Road provide primary high-volume entrances to the district from Needham Street equipped to handle anticipated traffic flow but designed to control vehicle speeds for pedestrian safety and comfort. These streets lead directly to the project's largest parking garages, keeping the bulk of its traffic off its signature Main Street and residential Pettee Lane.

Main Street and Pettee Lane are secondary accesses which include numerous raised intersections and bulb-outs that limit capacity and travel speeds.

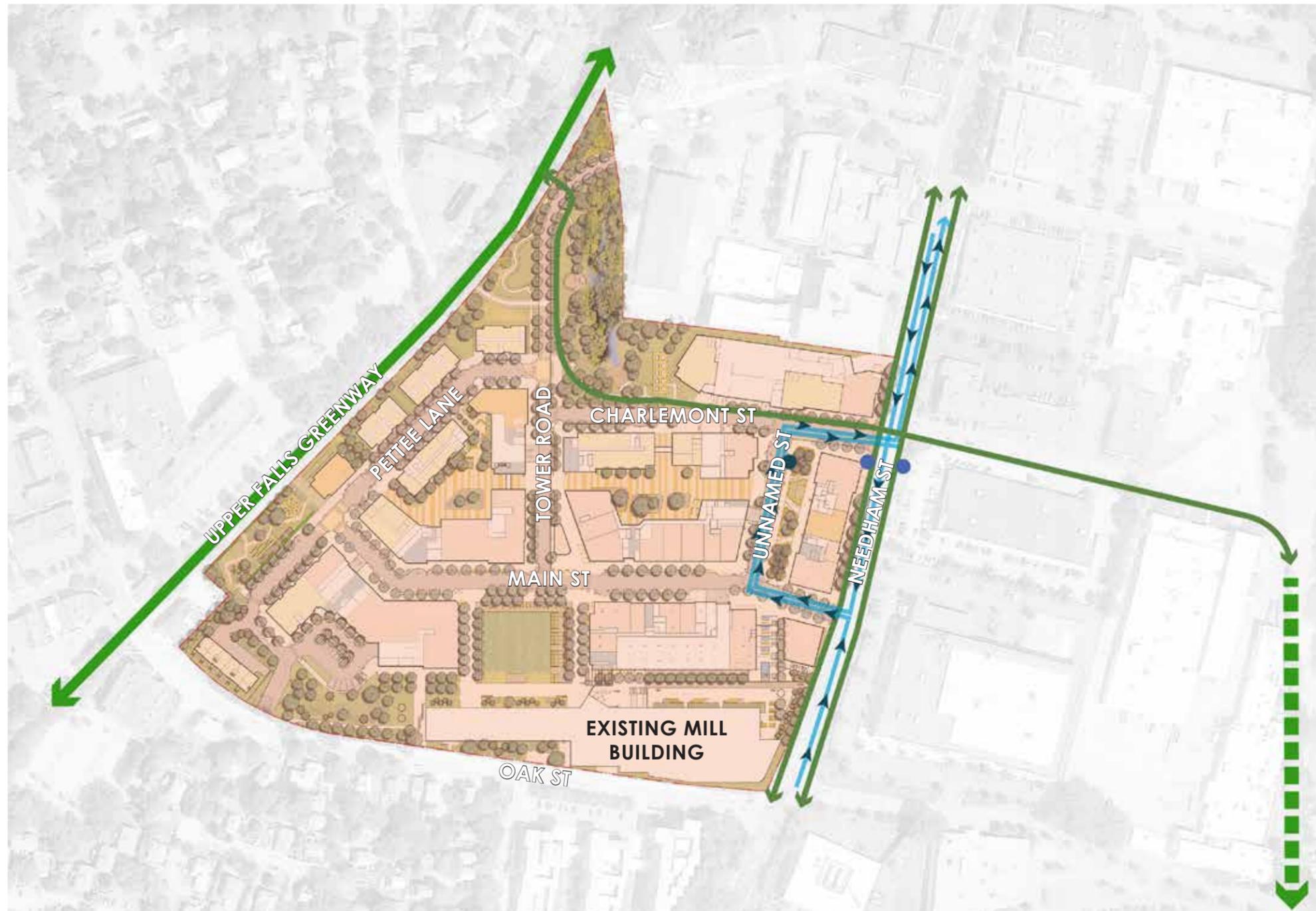
Around the Village Square, the roadway transitions into a shared street raised to sidewalk level where pedestrians and bikes are prioritized over vehicles and traffic flow is particularly light and slow.

LEGEND

- | | | | |
|---|----------------------------|---|--|
|  | Free Flow, High Volume |  | Traffic Signal proposed by MASSDOT |
|  | Slow Flow, Moderate Volume |  | Primary entrance to district garage serving retail, office, and visitors |
|  | Slow Flow, Low Volume | | |
|  | Shared, Slow Street | | |

1.1.C. Transit interface

Establish logical connections to the existing street network that promote intuitive access into/out of the development; enhance existing connections.

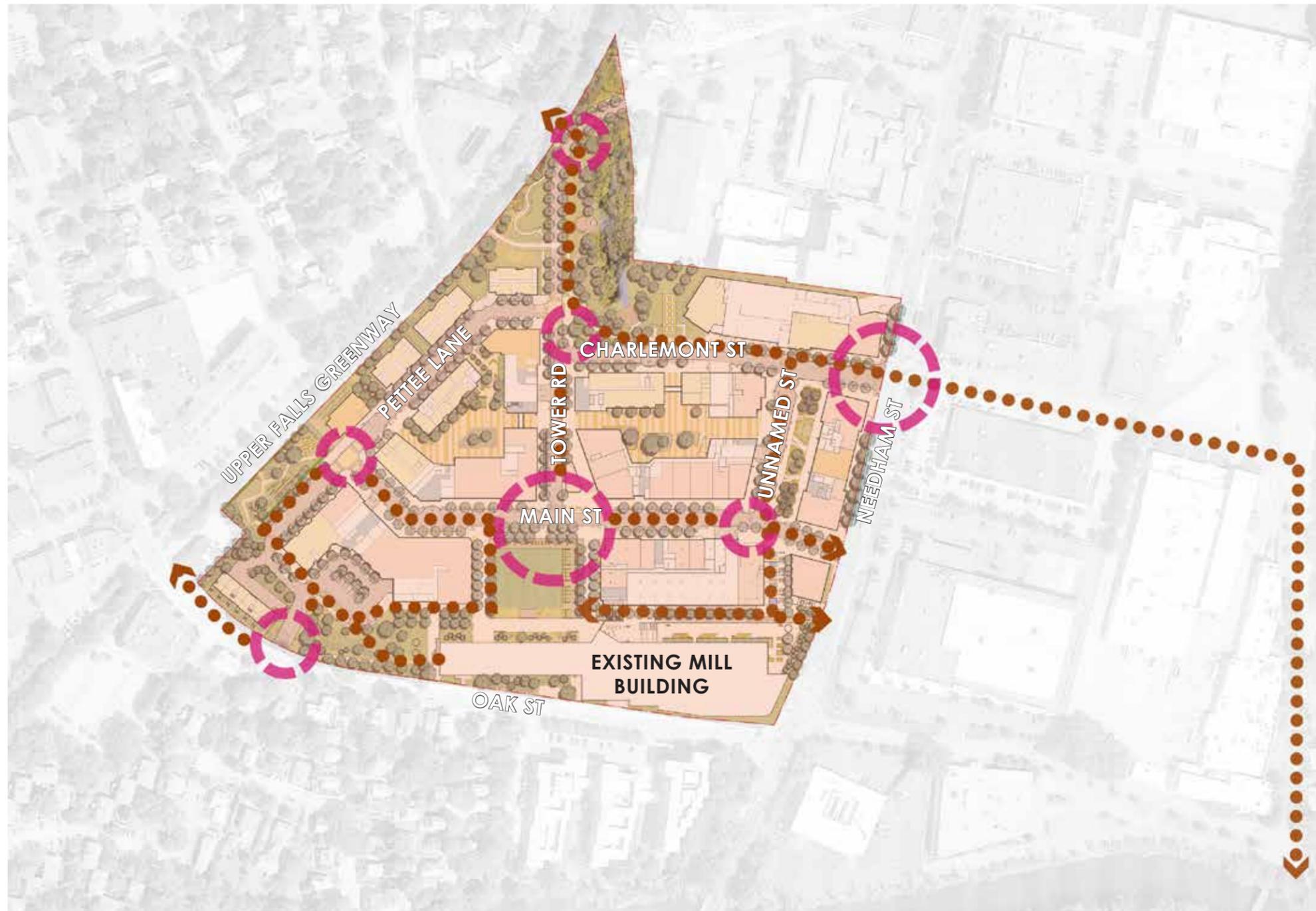


Multimodal transit

Concentrated in and around a “mobility hub” at the intersection of Charlemont and Unnamed Street, the site includes numerous multi-modal connections to local and regional destinations.

1.1.D. Pedestrian connectivity to surrounding context

Establish connections to the existing pedestrian network that promote walkable permeability into/out of the development.



Pedestrian connections

The plan creates a fine-grained network of pedestrian connections within the site and to surrounding neighborhoods, especially at multiple points across the Upper Falls Greenway, along Oak Street to the Upper Falls Village center, and across Needham Street at its intersection with Charlemont Street.

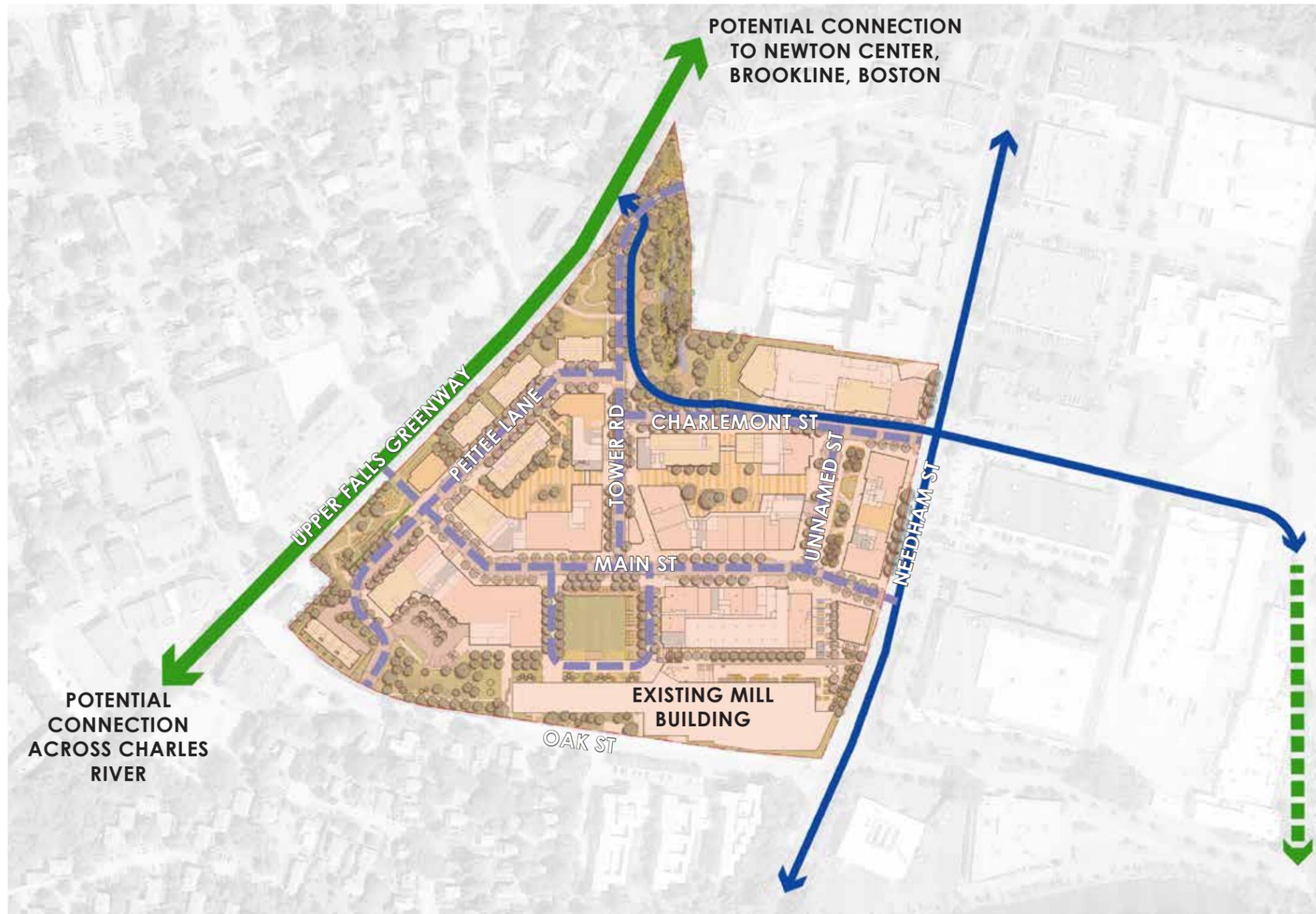
Important connecting “nodes” are emphasized with inviting public realm treatments and gateway elements.

LEGEND

-  Pedestrian connections
-  Key intersections

1.1.E. Bike connectivity to surrounding context

Strengthen existing links to local and regional bike networks and organize/design streets to promote safe, comfortable, and convenient bike mobility. Incorporate bike storage facilities.



Bike facilities

The site is flanked with important new bike corridors – the Upper Falls Greenway to the west and dedicated lanes along Needham Street to the east. The plan creates links between these routes at multiple points: an off-street bike lane along Charlemont Street and a shared street design along Main Street. A potential greenway connection could also connect the east end of Charlemont with the Charles River.

The development will include bike parking throughout, both in the public realm and integrated into mixed-use buildings.

1.1.F. Streetscape continuity to surrounding context

Promote design, dimensional, and functional continuity with existing or planned streetscapes at/along development edges.



Streetscape Continuity

Each of the site's three edges engages a different streetscape environment. As such, the project engages with each uniquely. The project's Needham Street streetscape seamlessly integrates with the design for MassDOT's planned streetscape improvements along the greater Needham Street corridor.

Along Oak Street, the project largely preserves its historic mill building frontage and adds improved park space and enhanced sidewalks in front of new townhouses.

The project celebrates the Upper Falls Greenway with active uses along parts of its length and numerous connections between the path and the development's streets and activity centers.

1.1.G. Edges

Create inviting and visually permeable edges around the project that integrate with surrounding neighborhoods.



1 Transform Restore overgrown South Meadow Brook into urban amenity.



4 Connect with and build upon historic Upper Falls village center.



7 Transform underused paved areas into green places.



2 Transform abandoned edge into neighborhood pedestrian connection.



5 Replace vacant and obsolete buildings.



8 Reinforce a walkable context.



3 Connect to Greenway



6 Turn pedestrian-hostile Needham Street into a walkable streetscape.



9 Celebrate history and create a gateway to the corridor.



10 Mitigate existing hard building edge.

Strategies to improve edge conditions

The site's edges vary considerably from the historic showcase of 156 Oak Street to a Needham Street corridor uncomfortable for pedestrians to considerable overgrowth obscuring South Meadow Brook and blocking connections across the Upper Falls Greenway right of way.

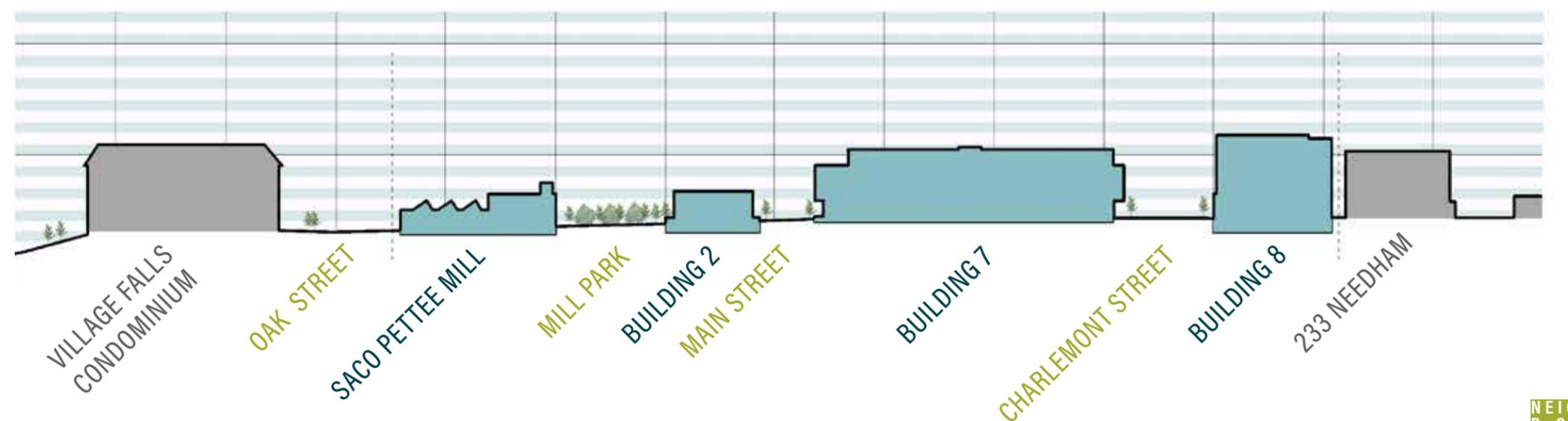
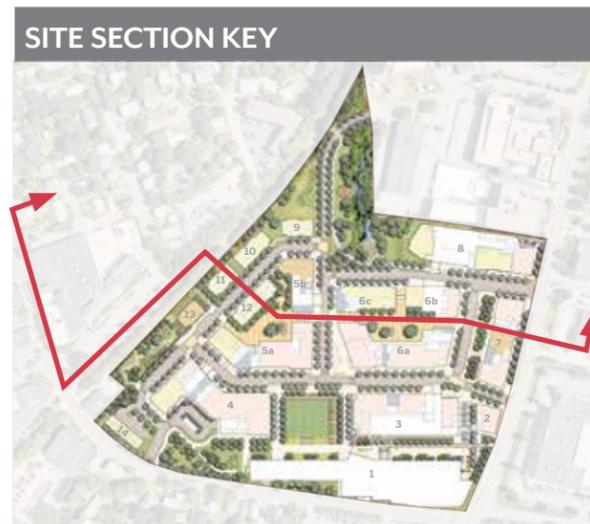


1.1.H. Scale transitions

Distribute height across the site to create gradual scale transitions relative to surrounding neighborhood context.

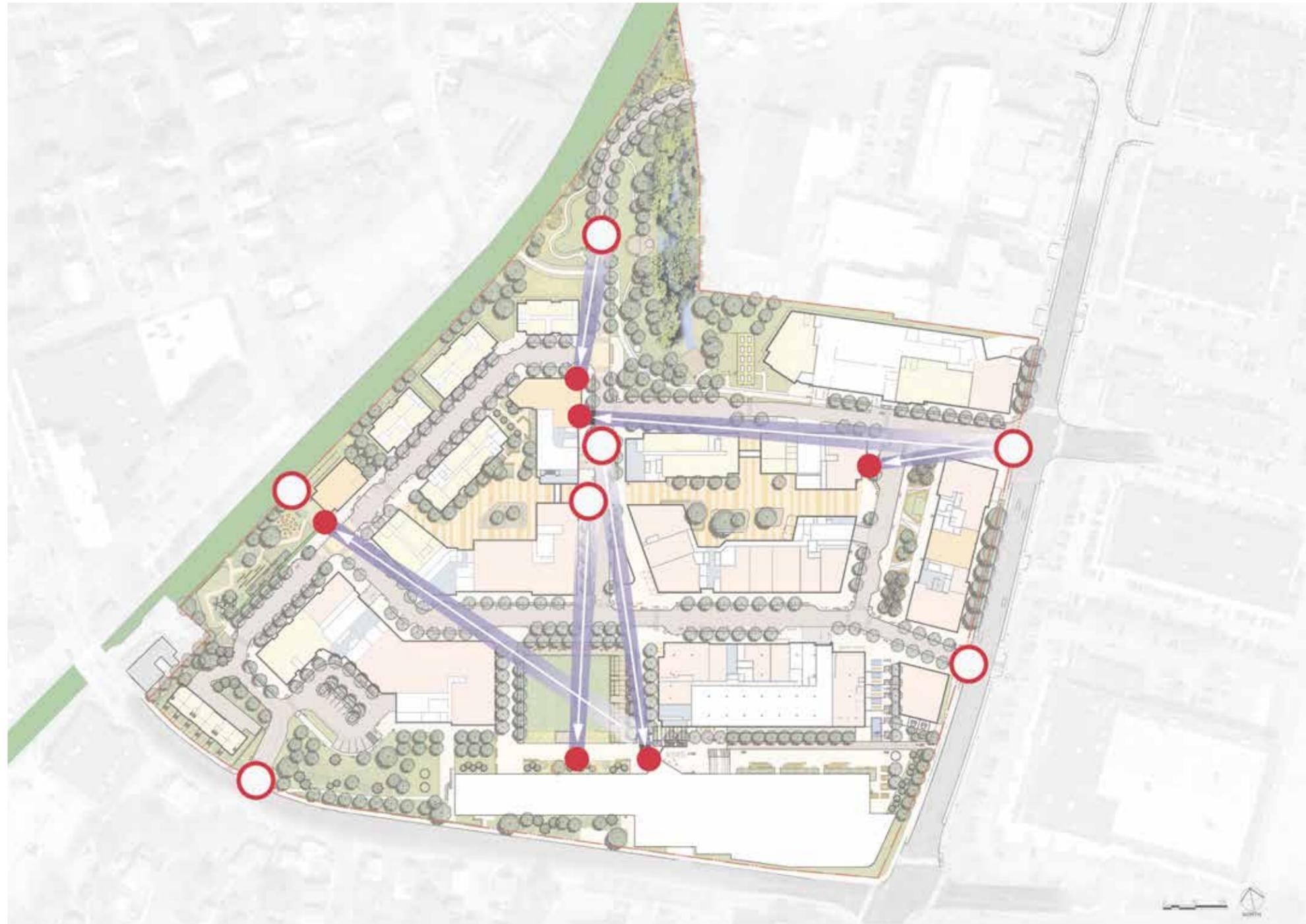
Modulated Height Transitions

As illustrated by section drawings cutting through the project plus adjacent neighborhood context, building heights gradually step up from or down to the surrounding context to avoid dramatic shifts from small to large or vice versa between new buildings and existing neighbors. The site's dipping topography also helps "absorb" height difference between the project's buildings and others nearby.



1.1.1. Sight lines

Provide clear views into/across the site and signal important features and destinations with a logical system of gateways, view corridors, and vista terminations. Incorporate/reinforce important existing sight lines in the surrounding context.



Gateways

Special attention should be given to public realm design and architectural expression at entry points (which are also typically the project's most prominent corners and edges).

Vista termination

Buildings should include special architectural expression at corners and edges punctuating key pedestrian and driver views into and from within the site.

LEGEND

- Gateway
- Vista termination
- ▶ View corridor

1.1.J. Cultural / historic connectivity

Integrate historic urban patterns and references to the site's and neighborhood's heritage.



WORKERS LEAVING SACO-PETTEE CO. PLANT FOR THE DAY. COURTESY OF HISTORIC NEWTON



PROPOSED SALVAGEABLE RELICS AND PRECEDENTS



Connecting community and educating visitors

There are several opportunities for engagement within the development, including the Mill Park, the Village Green, Building 7 Linear Park, South Meadow Brook Park and the Main Street Greenway Connector. A layered interpretive program is planned, utilizing multiple elements to encourage interaction, connection, and education. Elements of the program may include:

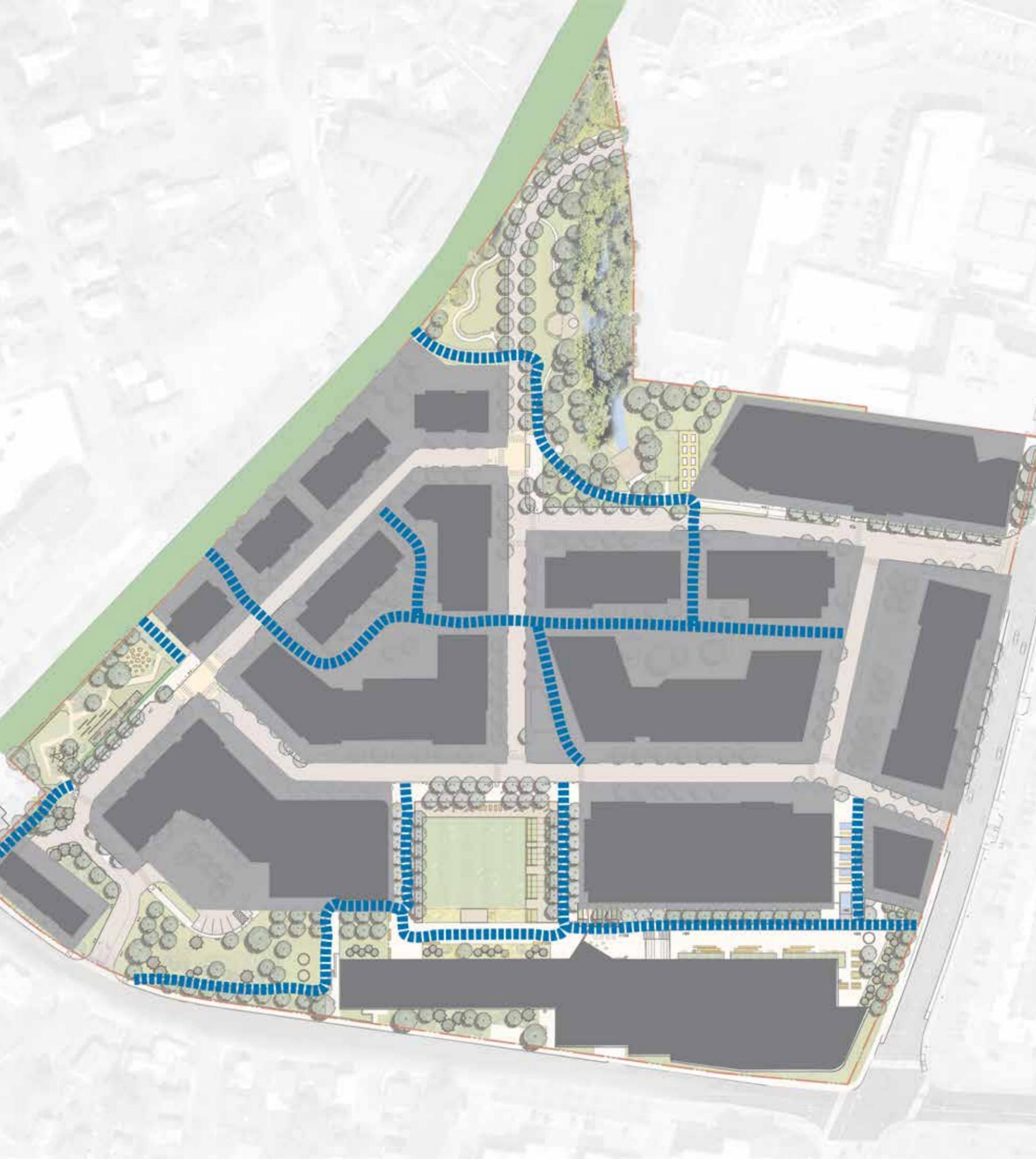
- Signs and markers: Traditional and time-proven methods of education and inquiry
- Integration of architectural industrial remnants into the landscape and streetscapes: Promoting daily interaction with historic features and stimulating attention to often-overlooked architectural details
- Photographs, maps, and historic documents: Telling the human story of the site through images and memories
- Publications and guides: Portable documents for more in-depth experiences with the site
- Technology: Using the evolving array of technological opportunities to enhance the immersive experience

Research conducted to date includes hundreds of pictures and maps showing the site, historic documents issued by the Saco-Pettee company, and information about the evolution of the site, which were collected from local and national repositories. Future research associated with the Heritage Trail is intended to develop narrative themes, such as:

- Daily life at the Saco-Pettee Machine Shops
- The role of the mill complex in the larger development history of the company
- Manufacturing processes and how different buildings were used
- Stories about the surrounding community
- Connections between the industrial environment and the natural environment

Guiding principals for planned Heritage Trail

- Good design incorporates history in a fun and immersive way; good interpretation makes it meaningful and memorable.
- Users should notice something new each time they encounter these spaces, making it an ever-changing experience that people utilize time and again.
- The Heritage Trail should be accessible to all – a fun learning experience is important for all ages and all abilities. Signs, interpretive text, and features should be placed and designed in consideration of the various ways people interact with their environment.
- Utilize interdisciplinary planning in order to implement a holistic interpretive plan for the Northland Newton Development as a whole in order to identify roles for the various interpretive “sites” within the development.
- The trail should exhibit a cohesive visual aesthetic, complementary of the Northland Newton Development’s overall branding, including distinctive uses of color scheme, fonts, feeling, and design.



1.2 | Block structure

City's goal statement

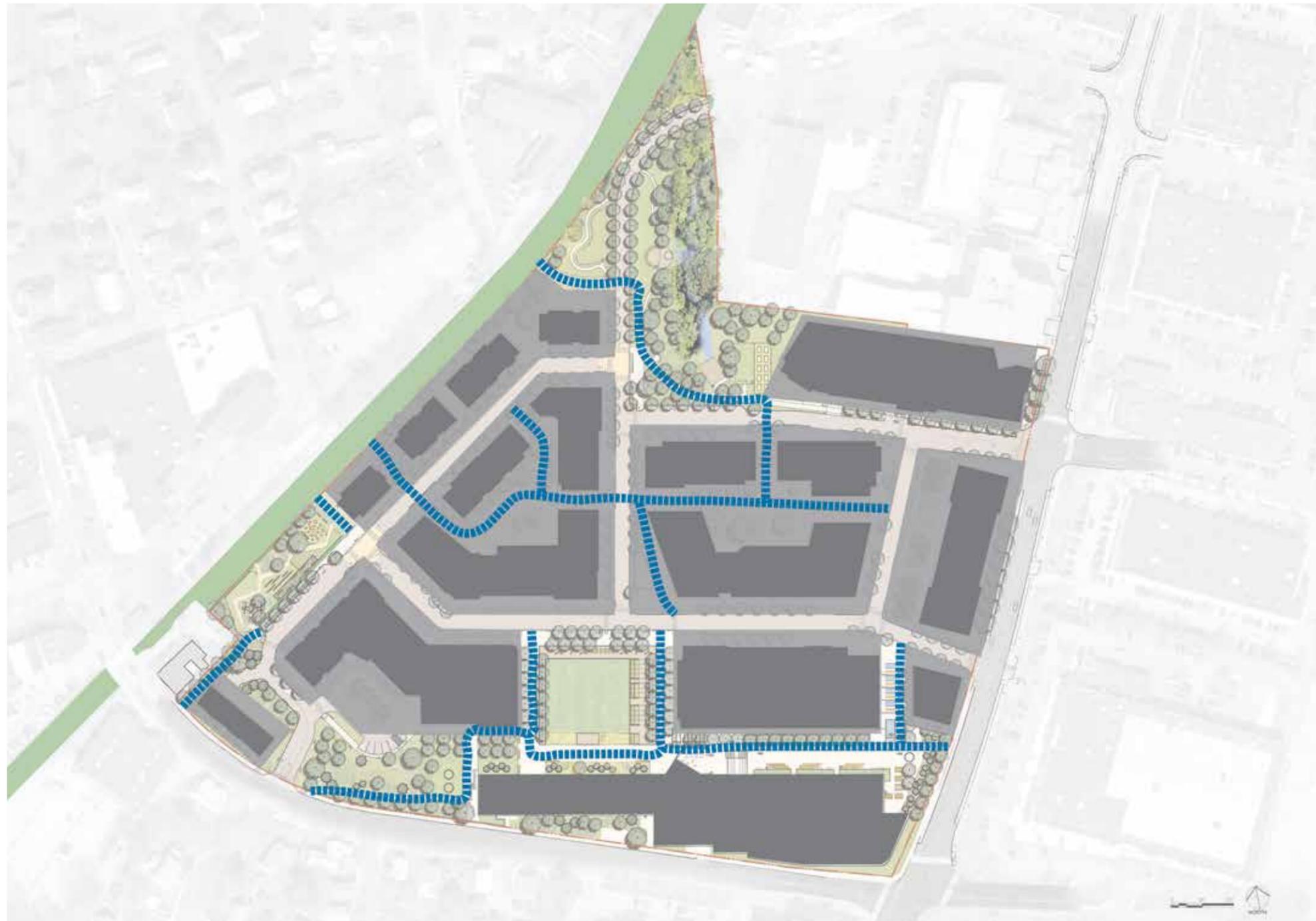
The block structure of a neighborhood development should promote a thoughtfully-scaled, walkable public realm where quality streetscapes and diverse open spaces are reinforced by street patterns, as well as building siting and design.

The following guidelines address block structure:

- A. Walkable blocks and permeability; and
- B. Pedestrian environment continuity.

1.2.A. Walkable blocks and permeability

Blocks should be as compact as reasonably possible and should avoid extensive stretches between breaks or vehicular intersections. Within longer blocks, mid-block pedestrian passages should be incorporated to promote finer-grained pedestrian permeability than the vehicular street network might allow.



Pedestrian-scale block structure

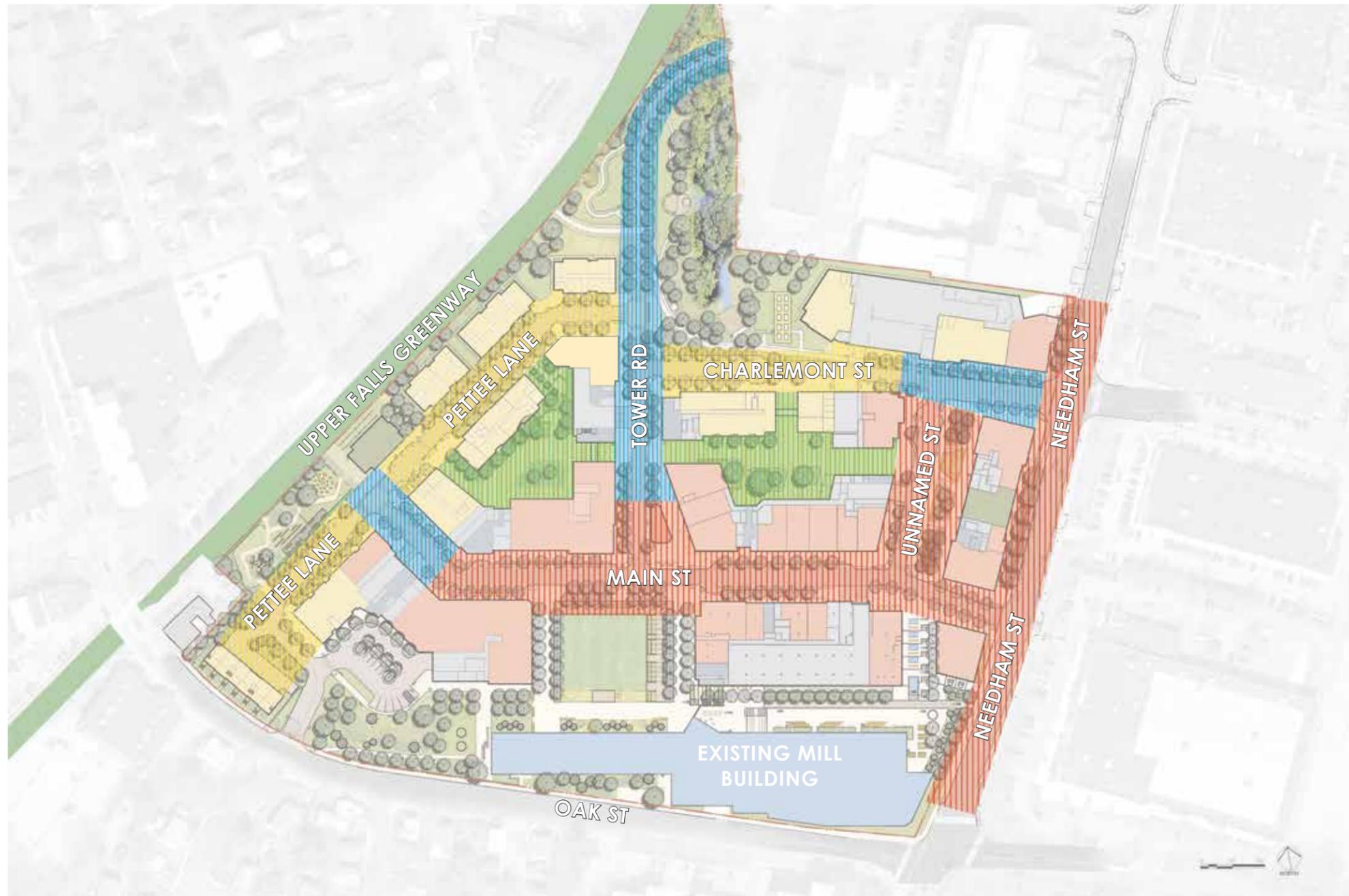
Blocks have generally been scaled to promote walkability with relatively short distances between intersections and across block faces. Additionally, blocks are further subdivided in many places with pedestrian pathways and passages such as across parks, between buildings, and through laneways.

LEGEND

- Buildings
- Blocks
- Pedestrian path

1.2.B. Pedestrian environment continuity

Especially as defined by ground floor land uses, the pedestrian environment should be experientially defined at the district scale, not just building by building. For example, ground floor retail uses along “retail main streets” should run continuously from building to building and on both sides of incorporated public spaces.



Pedestrian environment

The development’s pedestrian sidewalk environment consists of four primary types of environments.

Retail main streets extend from Main Street to Needham Street including a branch along Unnamed Street and are generally characterized by expanded pedestrian environments and slow streets lined by retail and other dynamic destinations.

Residential streets including Pettee Lane and part of Charlemont Street are generally characterized by comfortable sidewalks and slow streets lined with stoops and front doors.

Laneways connecting through blocks 5 and 6 are characterized by an intimate and partially secluded pedestrian environment with opportunities to gather. Certain segments of Main Street, Tower Road, and Charlemont provide transitions between distinct types of pedestrian environment characters.

The development’s pedestrian realm also incorporates several varied parks, each with a different character and all with numerous interconnections to sidewalks and building interfaces.

LEGEND

-  Retail main street environment
-  Residential street environment
-  Laneway environment
-  Transition environment



1.3 | Street design

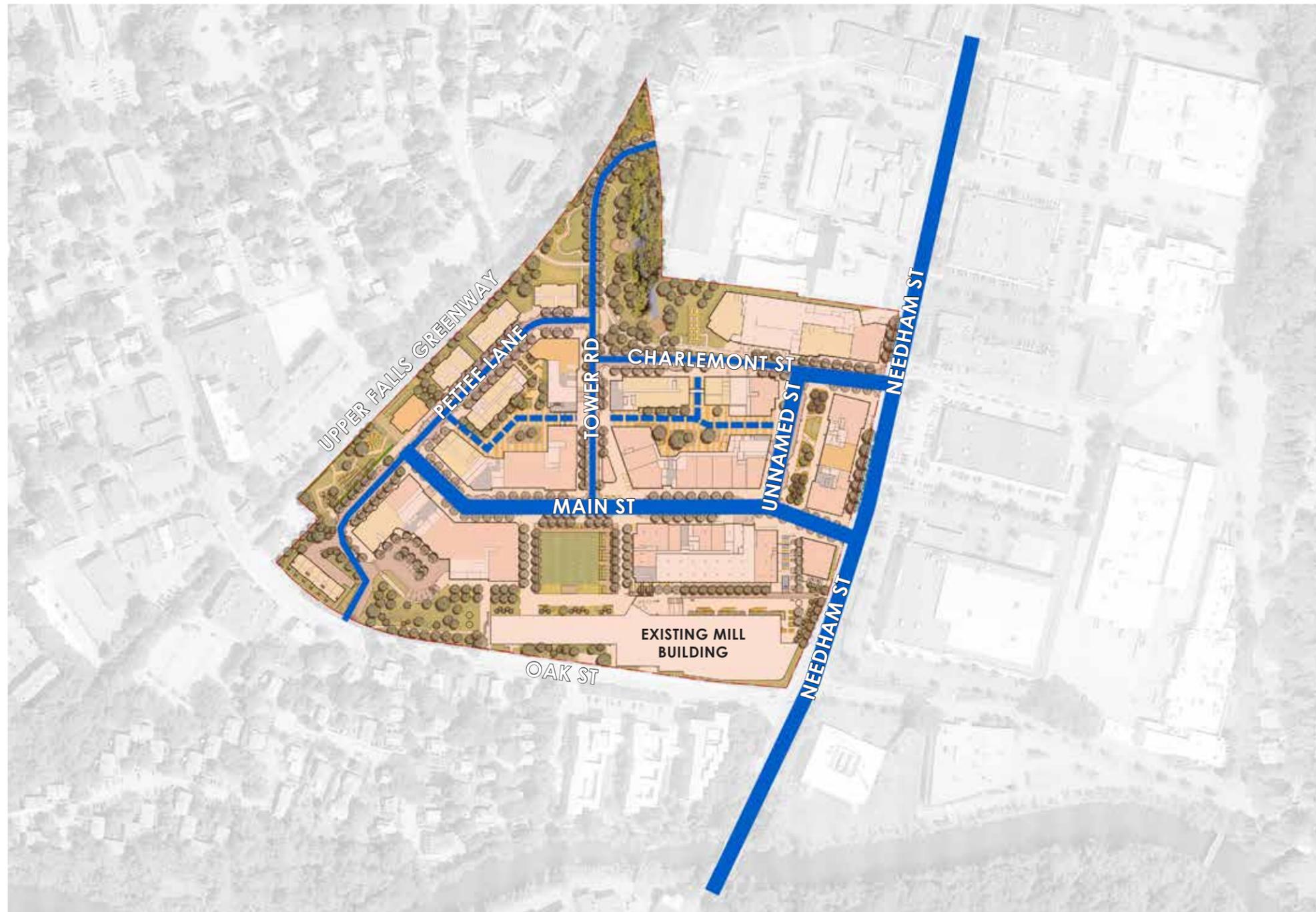
City's goal statement

Incorporating a clear hierarchy of streets into a neighborhood development will inform the design of street sections and, thus, guide the safe accommodation of vehicles, give priority to pedestrians and bikers, and shape the relationship of buildings to streetscapes.

- The following guidelines address block structure:
- A. Street hierarchy; and
 - B. Street sections.

1.3.A. Street hierarchy

Establish a logical street hierarchy that organizes the development's multimodal circulation for efficiency and safety while prioritizing pedestrians and bikes over vehicles. The street hierarchy should also classify streets by relative primacy and/or prevailing land use.



Street Hierarchy for Design and Placemaking

The project's primary and therefore most active and publicly prominent mixed-use and retail streets include Needham Street, Main Street, and Unnamed Street.

Secondary streets that are still publicly significant but less central to district identity or mixed-use activity include Pettee Lane, Charlemont Street, and Tower Road.

The laneways are the project's least publicly prominent, dynamic, or busy thoroughfares.

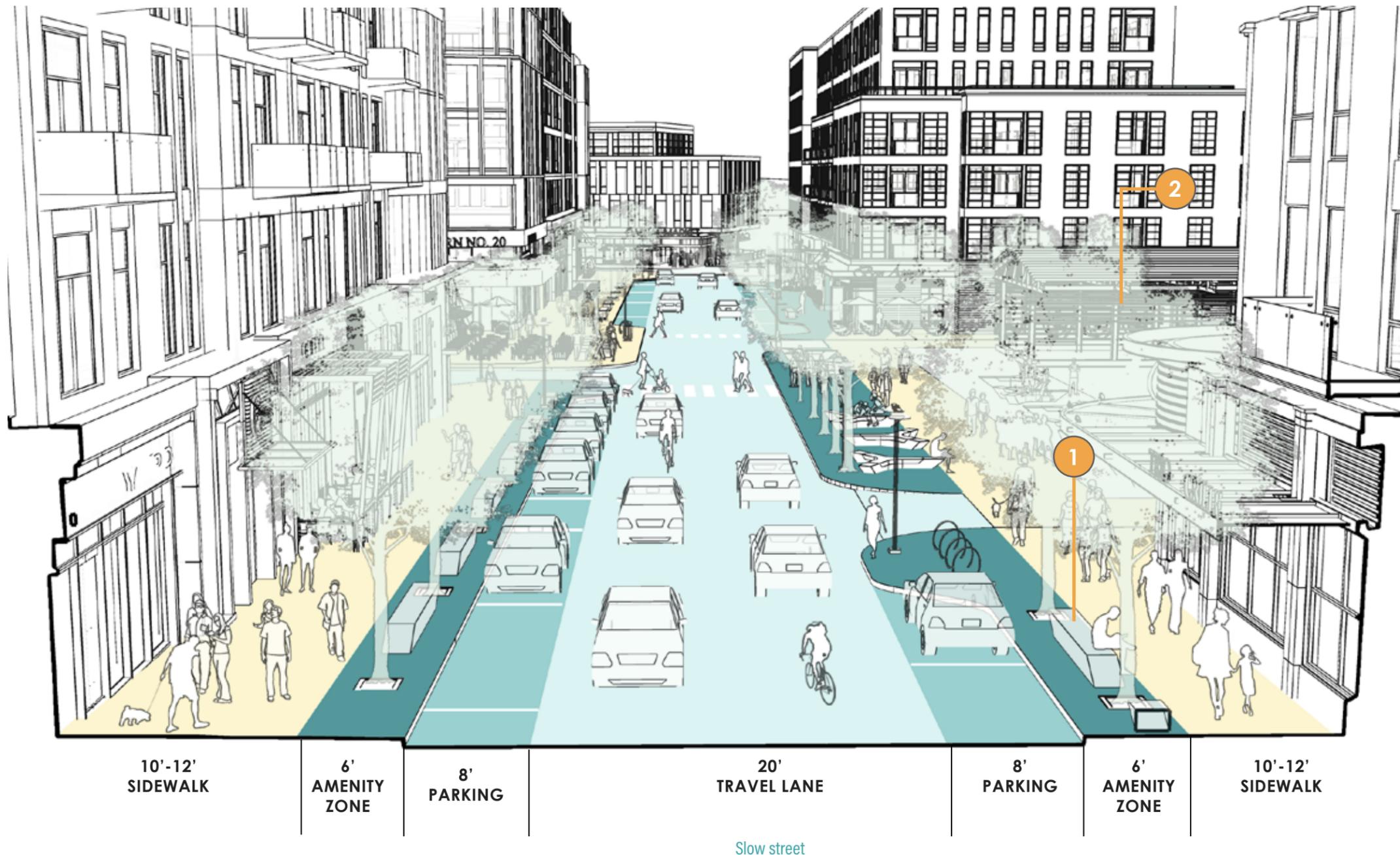
LEGEND

-  Primary Streets
-  Secondary streets
-  Laneway

1.3.B. Street sections

Design “complete” streets that accommodate all forms of mobility (vehicles/transit, bikes, pedestrians) and prioritize convenient, safe, and comfortable bike and pedestrian circulation. Emphasize pedestrian facilities and sidewalk widths along retail and main streets. Buildings lining streets should include pedestrian-scaled ground floor uses, details, and/or articulation that reinforce the street’s functional and placemaking roles as well as the pedestrian’s comfort and engagement.

Main Street—Typical Street Section-Perspective (Looking east)

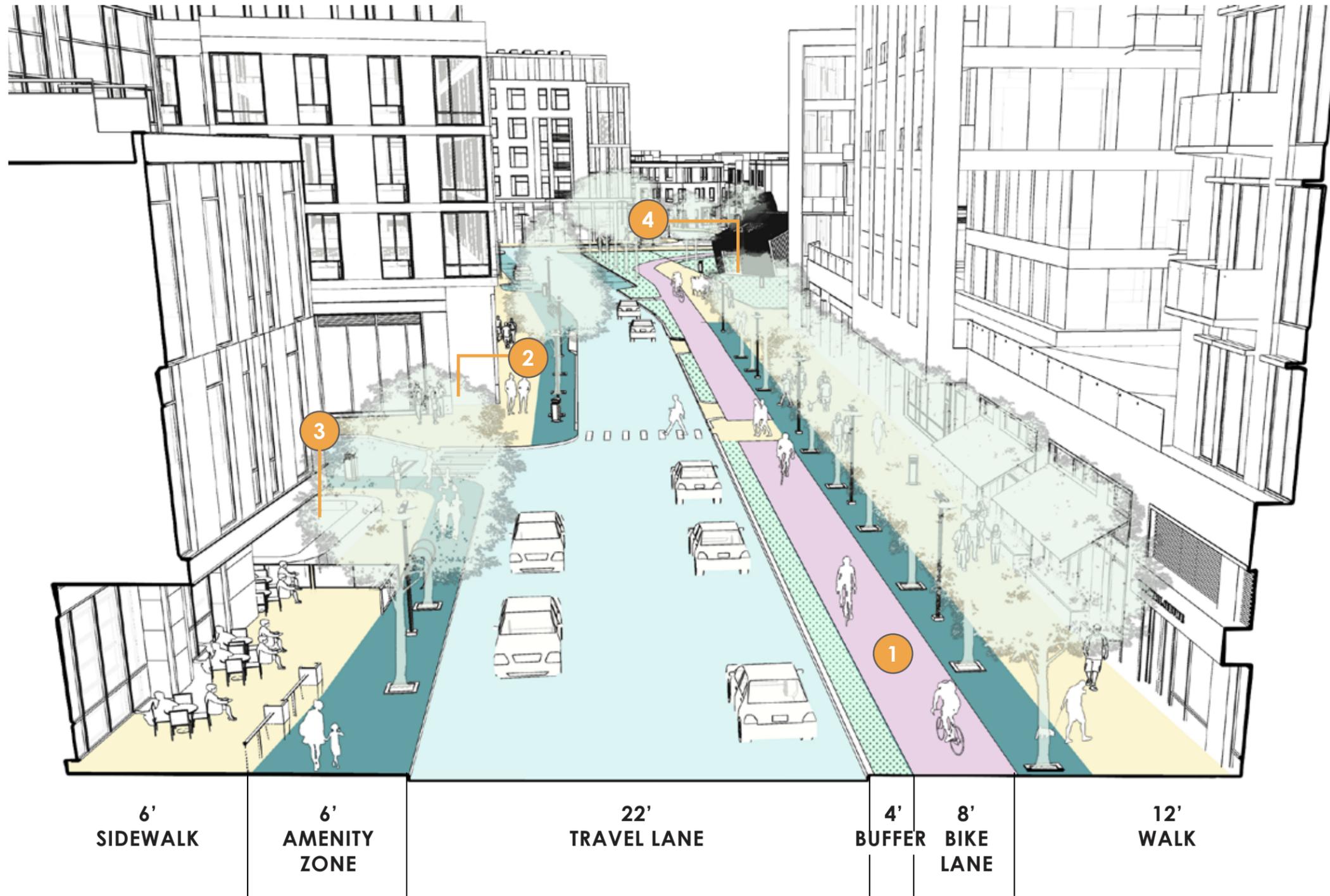


Placemaking character

- ◆ Gateway
- ◆ Tree lined road in bio-planters
- ◆ Bench and cafe seating
- ◆ Bike racks
- ◆ Shared street

- 1 Benches
- 2 Tree-lined street in structural soil

Charlemont Street—Typical Street Section-Perspective (Looking west)

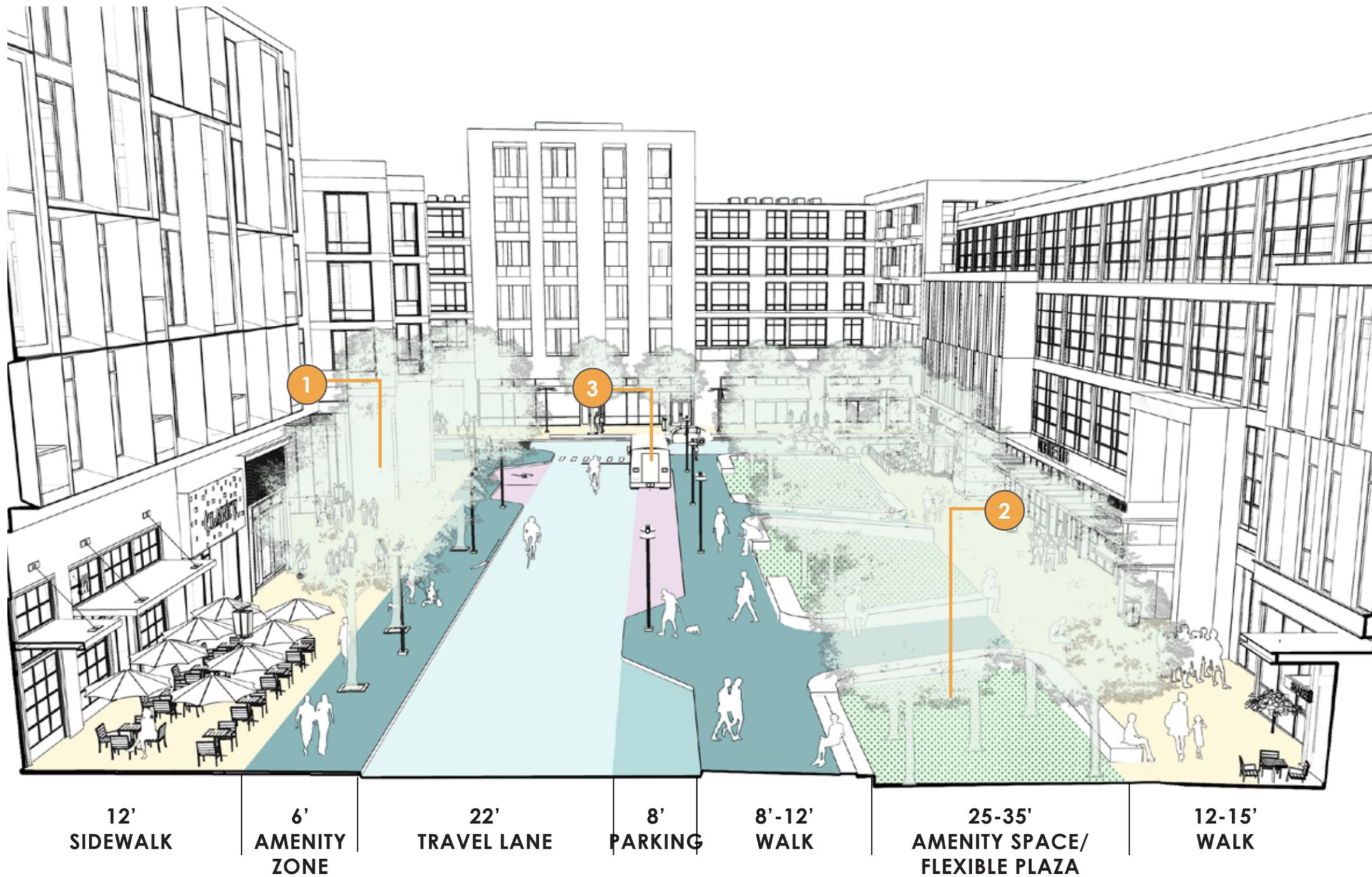


Placemaking character

- ◆ Gateway off Needham St
- ◆ Signage/wayfinding
- ◆ Tree lined road, in grates and structural soil
- ◆ Dedicated bike lane
- ◆ Enhanced South Meadow Brook

- 1 Dedicated bike lane
- 2 Tree-lined street in structural soil
- 3 Pocket parks
- 4 South Meadow Brook Park

(Unnamed) Street—Typical Street Section-Perspective (Looking north)

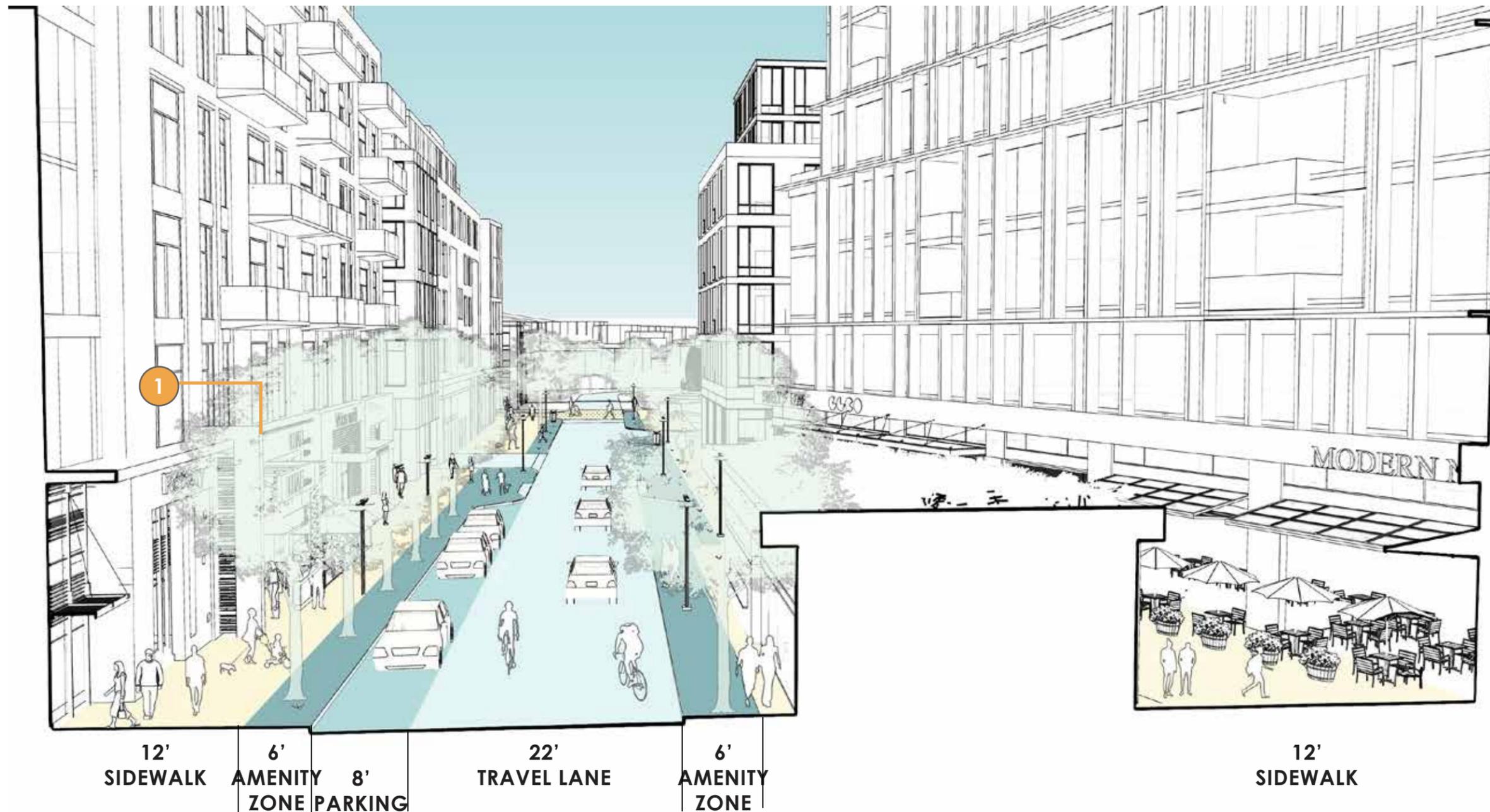


Placemaking character

- ◆ Mobility/ transportation corridor
- ◆ South Meadow Brook surface marker
- ◆ Plaza, flexible gathering space
- ◆ Tree lined road, in grates
- ◆ Drop-off/pick-up
- ◆ Loading zone
- ◆ Shuttle pick-up/drop-off
- ◆ Bike racks

- 1 Tree-lined street in structural soil
- 2 Flexible plaza space
- 3 Shuttle/loading service parking

Tower Road—Typical Street Section-Perspective (Looking north)

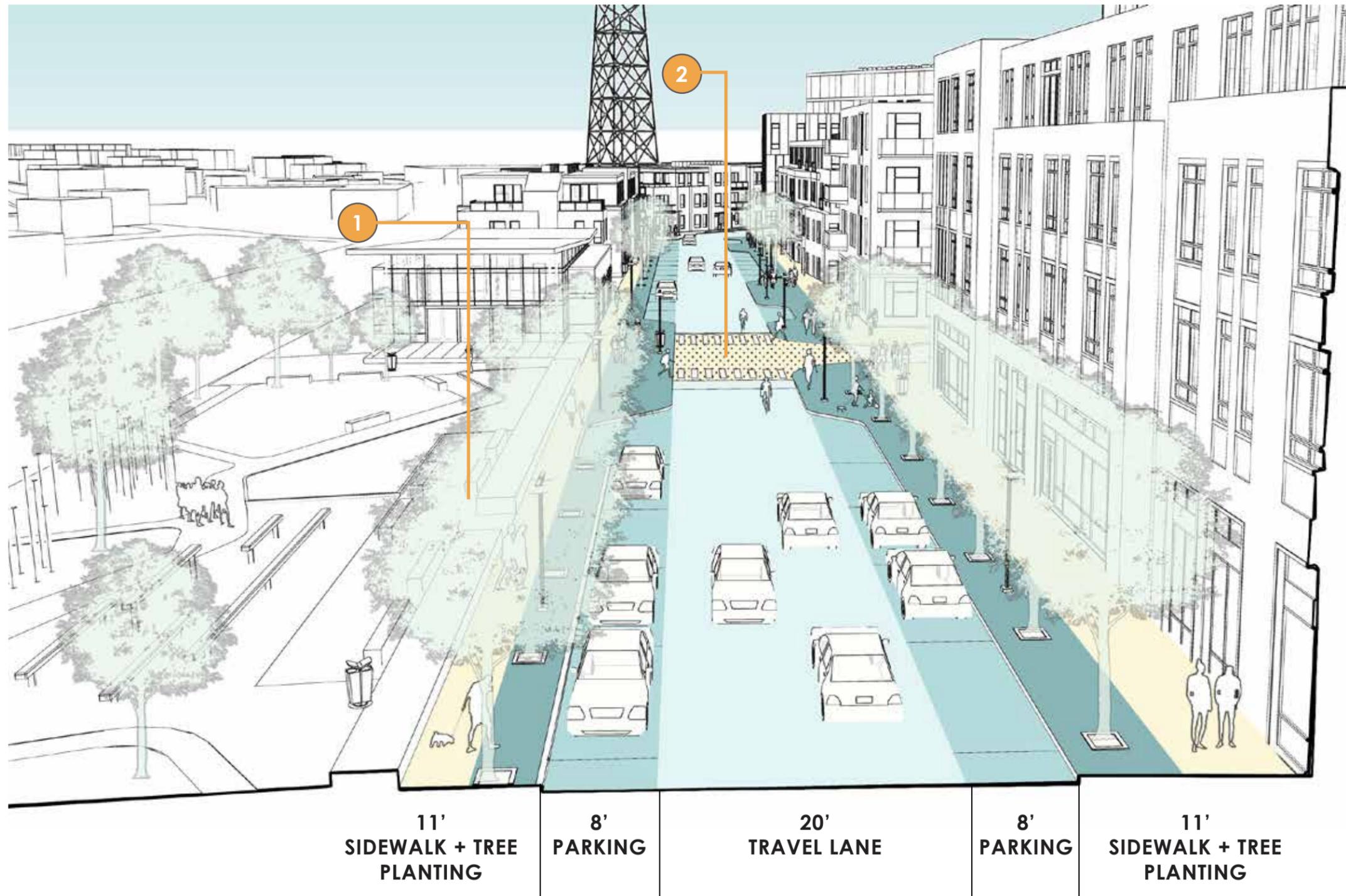


Placemaking character

- ◆ Tree lined road, in grates and structural soil
- ◆ Front yards and garages
- ◆ Connection to Upper Falls Greenway
- ◆ Tabled intersection to slow traffic

1 Tree-lined street in structural soil

Pettee Lane—Typical Street Section-Perspective (Looking North)



Placemaking character

- ◆ Tree lined road, in planting islands
- ◆ Front yards
- ◆ Connection to Upper Falls Greenway
- ◆ Tabled intersection to slow traffic

- 1 Tree-lined street in structural soil
- 2 Tabled intersection to slow traffic



1.4 | Public space network

City's goal statement

Neighborhood developments should strive to incorporate a diverse range of publicly accessible open spaces for active and passive use.

The following guidelines address block structure:

- A. Diverse open space network; and
- B. Public art.

1.4.A. Diverse open space network

Establish a variety of open spaces contributing a broad mix of programmatic and experiential features such as civic/gathering (flexible/programmable), recreation, contemplation (historic/educational), community, and restoration (sustainable, natural). Dovetailing with street and sidewalk networks, interconnect open spaces for fluid pedestrian circulation between different environments (including within the development and transitioning into/out of it).



Parks and open spaces mix and character

The development includes a diverse, networked mix of parks and open spaces that range in size and character to create broad design and programmatic variety.

Key	Open space	Acres	Character
■	Village Green	1.3	Civic; verdant;
■	Mill Park	1.1	Industrial heritage; dramatic grade change
■	Mobility Plaza	0.3	Flexible; active; animated
■	South Meadow Brook Park	2.5	Restorative; ecological; immersive
■	Community Park	0.6	Neighborhood connection; recreation
■	Oak Street Park	1.0	Landscape setting; passive use
■	Laneway	1.1	Access; service; permeability
■	Streetscape	2.5	Active; tree-lined; amenity filled

Total open space area 10.4



1.4.B. Public art

Designate locations for and/or an overall strategy incorporating public art into building design and/or public realm design.

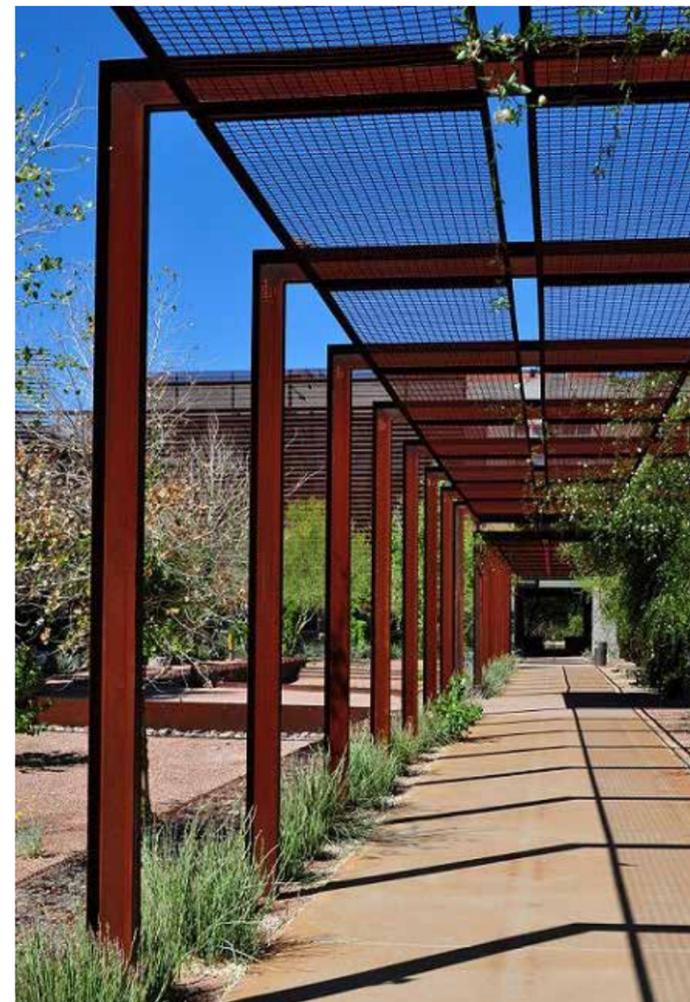
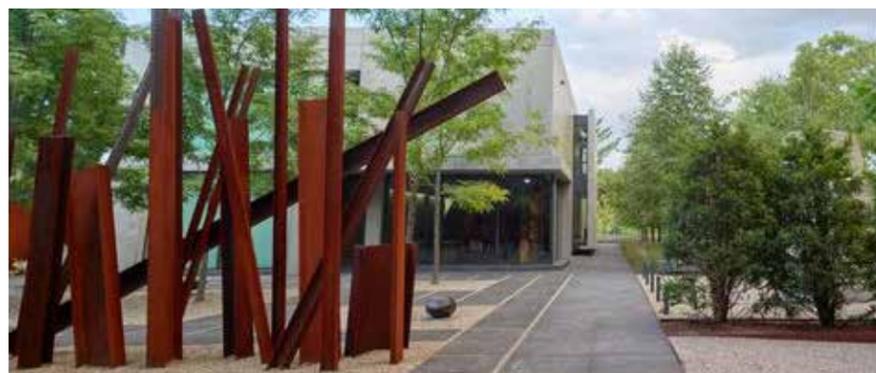


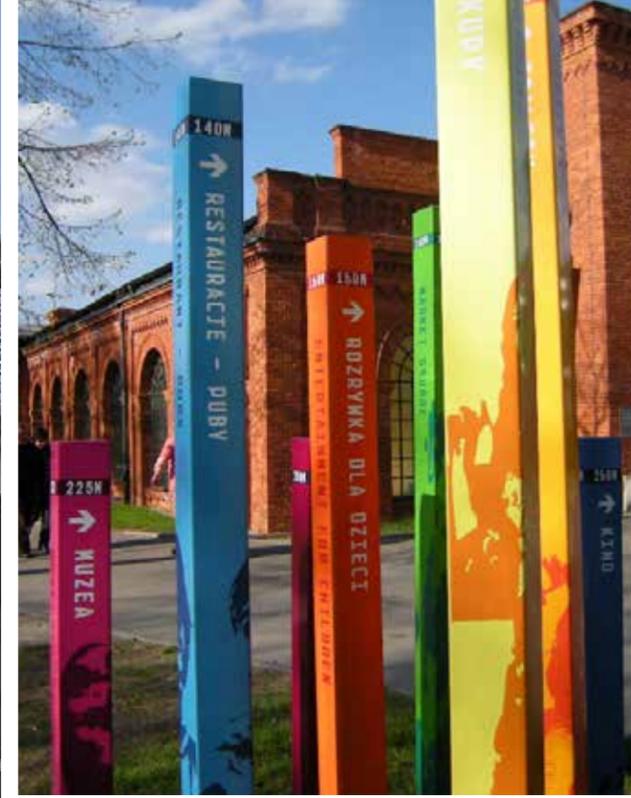
Dynamic public art program

Integrated throughout the development's parks and public spaces, public art installations will provide a platform for local artists to help tell Newton's story and engage locals and visitors with a diverse and dynamic range of temporary and permanent works.

Integrating industrial relics

Architectural and mechanical elements will be carefully removed from pre-existing buildings on the site prior to their demolition. These elements will be integrated into the development's signature parks and open spaces to celebrate the site's industrial heritage and create a unique sense of place.





1.5 | Signage

City's goal statement

Signage is critical for both wayfinding and branding and, as such, should be integrally designed to reinforce the quality of the built environment and the public realm.

The following guidelines address block structure:

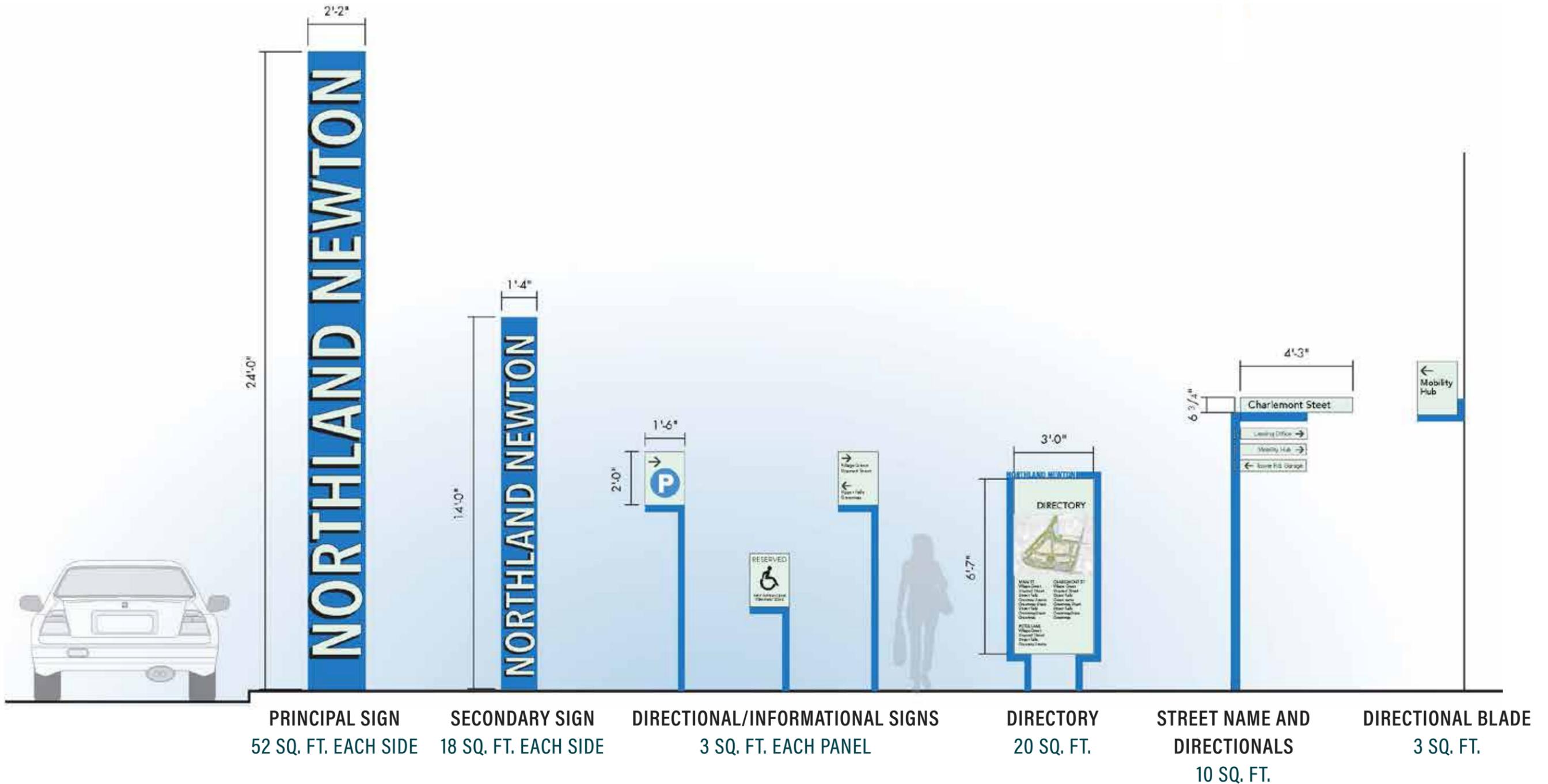
- A. Sign family;
- B. Sign placement; and
- C. Sign distribution and wayfinding systems.



1.5.A. Sign family

Develop a cohesive palette of wayfinding and branding signage with a consistent design and graphics language across sign types and sizes. Ensure comprehensive mix of vehicular and pedestrian, branding and wayfinding signs so all users are accommodated. **For buildings**, the signage palette should comprise a cohesive “family” of signs that relate to one another and are designed for compatibility with its overall architecture.

Representative project sign types family



Sign type overview

a. Representative district identity signage



i. Mixed-use district ID pylon, primary

Primary district ID pylons should be located at the edges of the district near major vehicular entrances, identify the name and branding of the overall project site, create public awareness of the larger district as a combined destination. Primary pylons should be constructed from a material palette which relates to the landscape, character, and architecture of the district, utilize tasteful internal illumination for night-time visibility, and should not advertise individual tenants or businesses contained within.



ii. Mixed-use district ID Pylon, secondary.

Secondary district ID pylons should be located at the edges of the district near minor vehicular entrances or pedestrian-only pathways, identify the name and branding of the overall project site, and create public awareness of the larger district as a combined destination. Secondary pylons should be constructed from a material palette which relates to the landscape, character, and architecture of the district, utilize tasteful internal illumination for night-time visibility, and should not advertise individual tenants or businesses contained within.



iii. Mixed-use district placemaking sign (Roof-mounted)

Roof-mounted placemaking signage should be located near or above the roof line of buildings within the district in order to enhance the sense of place and reinforce the larger district name and branding. This type of placemaking sign should draw from the material and character of the district, and utilize subtle internal illumination where required, and not advertise individual tenants or businesses.



iv. Mixed-use district wall signage and graphics

Wall-mounted and applied placemaking signage should be used on large wall surfaces to reinforce the name and branding of the larger district. Materials such as cut metal, acrylic, and surface paint should relate the landscape, character, and architecture of the building and area where placemaking signage is located.



v. Mixed-use district embedded ground signage

Inset or embossed placemaking signage should be used in ground surfaces of pedestrian ways and commons areas to reinforce the name, branding, history, and context of the larger district and identify public spaces. Materials such as cut metal, stone, and carved masonry finishes should relate the landscape, character, and architecture of the building and area where placemaking signage is located.



vi. Mixed-use district placemaking sculpture

Freestanding objects and sculptures should be used to reinforce the history and context of the larger district and create a sense of place. Objects should range from recycled building elements, machinery, and materials to newly-created art pieces produced from metal, stone, and other exterior finishes that relate to the landscape, character, and architecture of the building and area where placemaking signage is located.

Sign type overview (cont.)

a. Representative district identity signage (cont.)



vii. Vehicular multi-destination wayfinding sign, primary

Freestanding vehicular wayfinding signage should be used throughout the district at major intersections to provide awareness of and direction to multiple destinations, relating to both civic and business interest. Signage should be limited to two sides, and not exceed 45 square feet per sign face or 15 feet in height.



ix. Pedestrian multi-destination wayfinding sign

Freestanding pedestrian wayfinding signage should be used throughout the district at intersections of pedestrian ways to provide awareness of and direction to multiple destinations, relating to both civic and business interest. Signage should be limited to two sides, and not exceed 25 square feet per sign face or 10 feet in height.



vii. Vehicular multi-destination wayfinding sign, secondary

Freestanding vehicular wayfinding signage should be used throughout the district at minor intersections to provide awareness of and direction to multiple destinations, relating to both civic and business interest. Signage should be limited to two sides, and not exceed 35 square feet per sign face or 10 feet in height.



x. Vehicular street signage

Vehicular street signage should be used throughout the district at all intersections to identify all streets and cross-streets and provide general wayfinding information to vehicular and pedestrian traffic.

1.5.B. Signage distribution and wayfinding system

Distribute branding and wayfinding signage logically across the site to promote intuitive access and circulation into/out of and within the project.



Wayfinding circulation and decision points

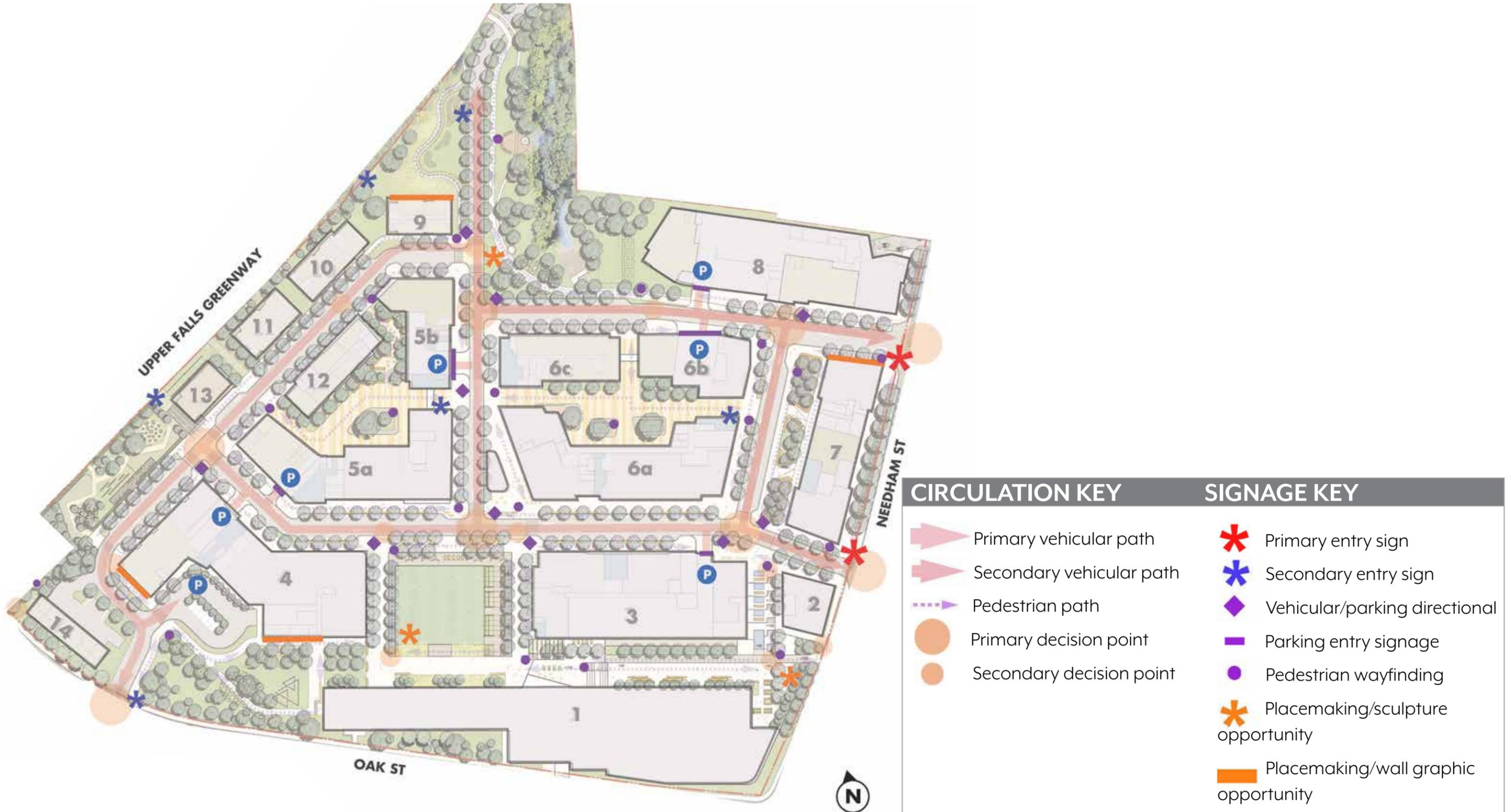
Signage and wayfinding elements will follow methodologies that include:

- Evaluate site pedestrian and vehicular circulation (including bicycles), through the public spaces, buildings, transit connections, surrounding areas, and landmarks.
- Identify key decision points and program sign locations.
- Establish concise, consistent nomenclature/messaging for all signs
- Link all site components including buildings, village green, parking, transit connections, and other amenities through a unified visual language standard. The signs will integrate with the landscape, lighting, and architecture.
- Streamline signage and wayfinding on campus to minimize signage pollution
- Create a phaseable plan that will provide for immediate needs but will also be modular and flexible to allow for future expansion.

LEGEND

-  Primary vehicular path
-  Secondary vehicular path
-  Pedestrian path
-  Primary decision point
-  Secondary decision point

Signage locations





1.6 Sustainability

City's goal statement

Low impact development that includes restored and/or new open space, incorporates green infrastructure and promotes climate resiliency, is desirable.

The following guidelines address:

- A. Sustainability.

1.6.A. Promote sustainable planning and design

Commit to smart growth and sustainability principles as described by LEED ND guidelines in planning and design such as through green building, community livability, alternative transportation, ecological restoration, heat island effect reduction, health and wellness, building material quality, resource efficiency, climate change resiliency, waste management, and/or public education.



District-wide sustainability planning and design strategies

Green and resilient neighborhood development

- ◆ LEED for Neighborhood Development Silver-level Certification to be pursued for entire 22-acre development.
- ◆ Permeable paving to reduce stormwater runoff and prevent flooding

Community livability

- ◆ “Live-work-play” mixed use development creates a vibrant, desirable and sustainable community.
- ◆ New affordable housing units
- ◆ Shading of streets and sidewalks with street trees reduces heat gain
- ◆ New parks, open spaces, a playground and paths for community gathering and recreation—also reduces heat absorption
- ◆ Preservation of historic building, resources and industrial culture

Alternative transportation

- ◆ Integrated pedestrian, bike, bus and shuttle to train connections
- ◆ Vehicle and bike sharing programs
- ◆ Electric car charging

Health and wellness

- ◆ Walkability through compact mixed-use promotes physical activity
- ◆ Recreational paths and trail connections provide easy access for outdoor exercise
- ◆ Selection of green/sustainable building materials create healthy indoor air quality

Public and tenant education programs

- ◆ Site signage of sustainable and resilient strategies for community education
- ◆ Green building education for tenants



Street trees with sand-based structural soil

Sand-based structural soil (SBSS) is a non-proprietary mix of stone and soil that supports the sidewalk while allowing tree roots to grow normally. A SBSS system, located adjacent to a tree wells, will include sidewalk set on a minimum of six inches of open graded crushed stone over a minimum of 30 inches of SBSS. Where appropriate for each site, the tree wells and SBSS will be paired with permeable pavement or diversion of gutter flow into a depressed tree well.

Green infrastructure

Bioretention basins, planters, and curb bump-outs will be distributed throughout the site to divert gutter flow, sidewalk runoff, and parking lot runoff. While facility designs will be tailored for each location, each bioretention facility will feature an inlet directing runoff into a sediment forebay for pretreatment. After passing through the forebay, runoff will infiltrate through layers of mulch, bioretention media, and peastone into a reservoir layer of open-graded crushed stone. Once ponding reaches the desired depth, an outlet or standpipe with beehive grate will drain each bioretention facility to the next downstream catch basin or manhole. Where conditions preclude infiltration, these facilities will be designed with a waterproof liner and perforated underdrain to fully drain the facility within 72 hours.

Permeable pavement

The bike path, several on-street parking lanes, and other hardscape plaza areas will feature permeable pavement. Rain falling on the pavement or running into it from adjacent surfaces will infiltrate through the pavement and choker stone into a reservoir layer of open-graded crushed stone. Where conditions preclude infiltration, these facilities will be designed with a sand filter layer (phosphorus reduction), a waterproof liner, and a perforated underdrain to fully drain the facility within 72 hours.

Innovative Stormwater Management

The project proposes to showcase best practices and principles of green infrastructure: restoring the ecological and hydrologic functions of a former industrial site in the heart of Newton. With sustainability, livability, and resilience as guiding principles, the design team has developed a green infrastructure concept design that will exceed stormwater management regulatory requirements while creating public amenities, reducing urban heat island effect, enhancing natural habitat, and reconnecting Newton residents to South Meadow Brook.



SECTION 2 | Site Design

The block: defining the placement, orientation, and role of buildings

2.1. Building/street relationship

- A. Continuity
- B. Interfaces

2.2. Open space design

- A. Open space design features
- B. Open space furnishings

2.3. Streetscape design

- A. Streetscape furnishings and pedestrian amenities
- B. Streetscape furnishing placement

2.4. Parking and service

- A. Structured parking
- B. Surface parking
- C. On-street parking
- D. Service

2.5. Sustainable design

- A. Sustainable design



2.1 Building / street relationship

City's goal statement

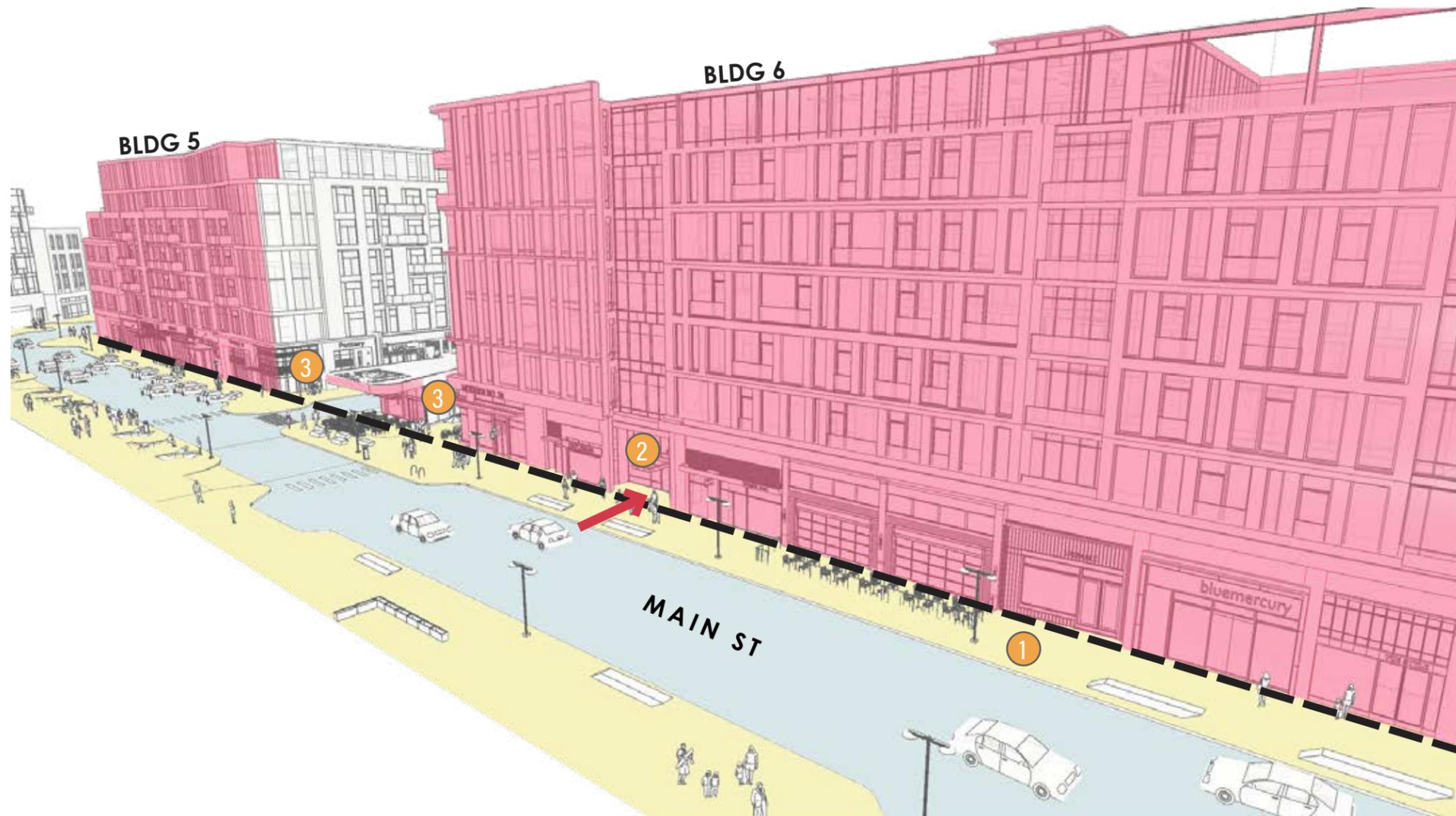
The design quality of individual development parcels is defined by the siting of buildings, their relationship to adjacent buildings, how their ground levels shape the pedestrian experience and by the mix of uses contained within each building.

The following guidelines address block structure:

- A. Continuity; and
- B. Interfaces.

2.1.A. Continuity

Public building frontages should generally create a consistent “street wall” that approximates the “build-to” line and clearly defines the edge of the sidewalk/public realm. Building fronts should orient toward primary streets and public spaces; backs should orient toward block interiors or secondary streets. Breaks in the street wall should appear deliberate and meaningful, such as to provide mid-block pedestrian passage or parking/service access.

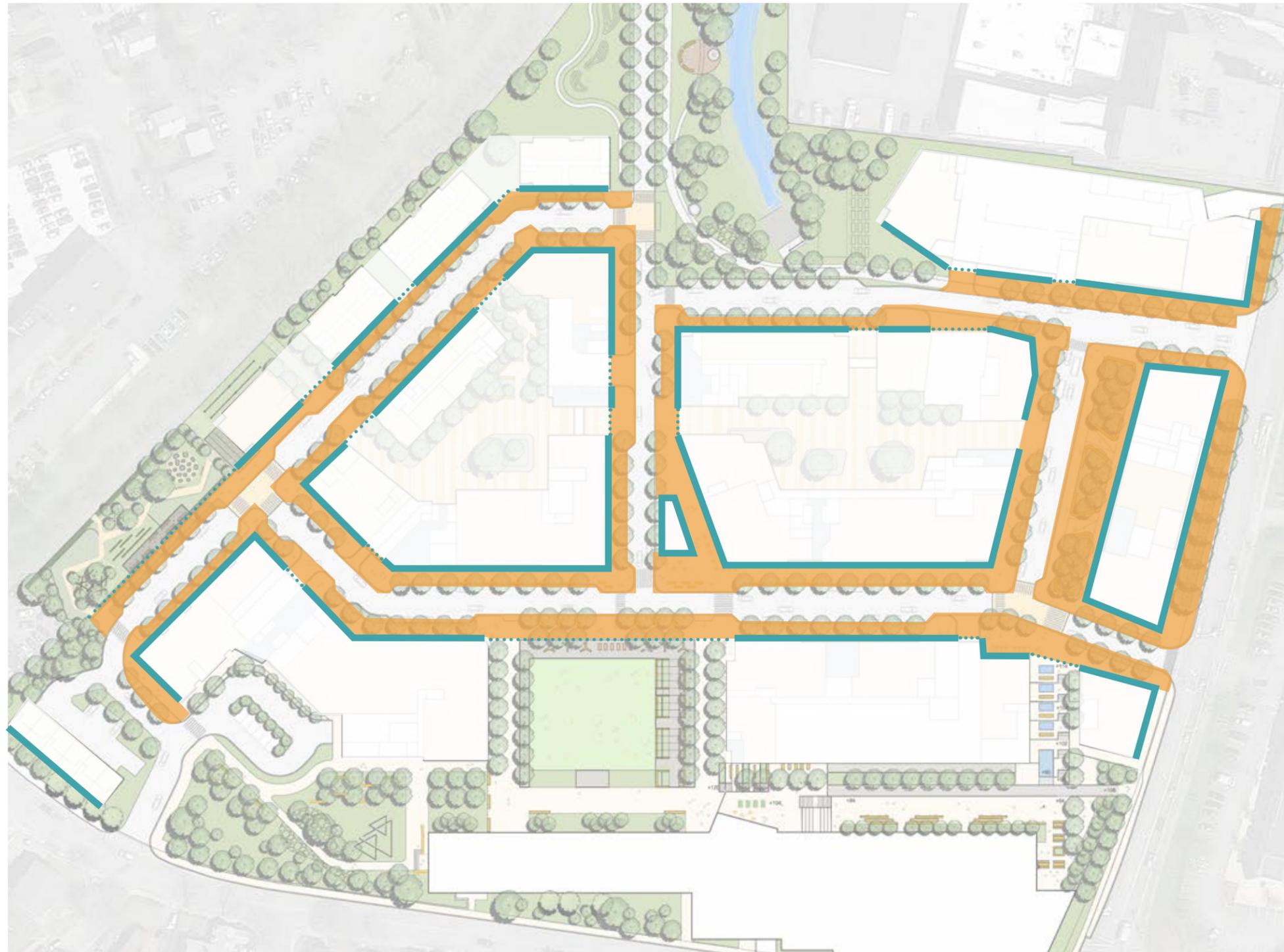


Street wall

As demonstrated along Main Street, the development presents a consistent “street wall” that “holds” the back of the sidewalk to frame the public realm without ambiguity. Breaks in the street wall’s continuity are generally limited to intersections and mid-block pedestrian passages.

Design Goals

- ① Clearly defined pedestrian zone
- ② Pedestrian garage access
- ③ Pedestrian route to and from Tower Road



Build-to line continuity

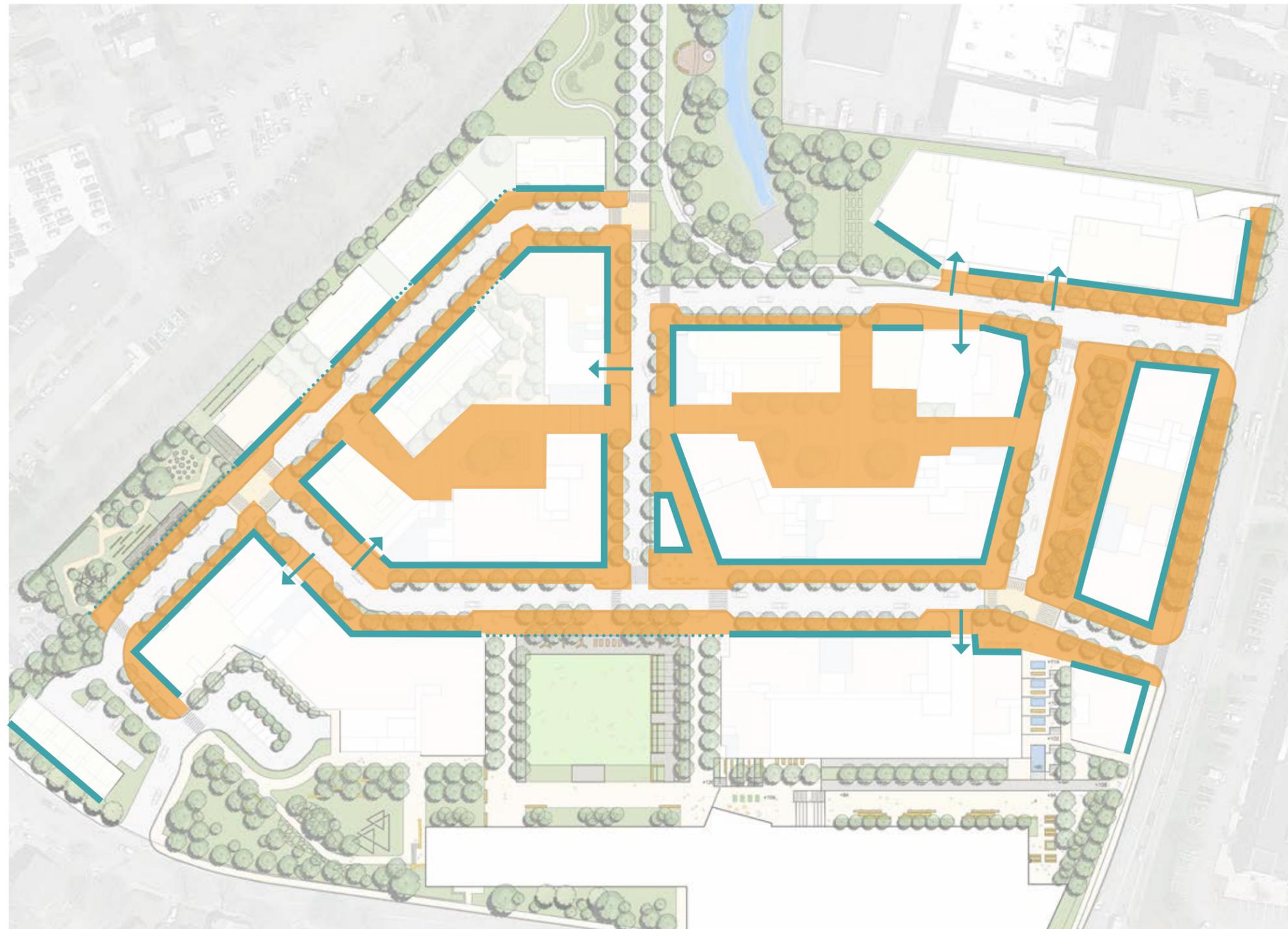
Street-facing building edges generally meet the sidewalk at the build-to line to support a continuous “street wall” and clearly defined public realm. Breaks in the street wall around a blocks perimeter are limited to pedestrian passages and parks and public spaces.

LEGEND

- Build-to lines along street corridor
- ... Visual break in build-to lines
- Pedestrian zone along street corridor

2.1.B. Interfaces

Interior/exterior interfaces with the street or sidewalk such as primary pedestrian and vehicular entrances and portals should be positioned to enhance intuitive navigation around and in/out of the building. Vehicular entrances and their driveways should be designed as secondary to pedestrians and sidewalk continuity.



Interfaces with pedestrians and vehicles

Pedestrian interfaces occur frequently around the public perimeters of most buildings due to their dynamic mixed-use program generating numerous retail, resident, and other tenant and visitor doorways and entrances. Vehicular interfaces are consolidated to reduce their count and located away from or on the fringes of primary pedestrian environments.

LEGEND	
	Build-to lines along street corridor
	Visual break in build-to lines
	Pedestrian zone along street corridor
	Vehicular entrance/ exits



2.2 | Open space design

City's goal statement

An engaging public realm should offer a diverse range of highly-articulated and well-appointed pedestrian environments that are functional in all seasons.

The following guidelines address block structure:

- A. Open space design features; and
- B. Open space furnishings.

2.2.A. Open space design features

Parks and open spaces should include design features that fulfill their planning and programmatic goals and, when combined, provide a project-wide variety of leisure, recreation, play, gathering, and/or other resources serving locals and visitors across ages, interests, and backgrounds.

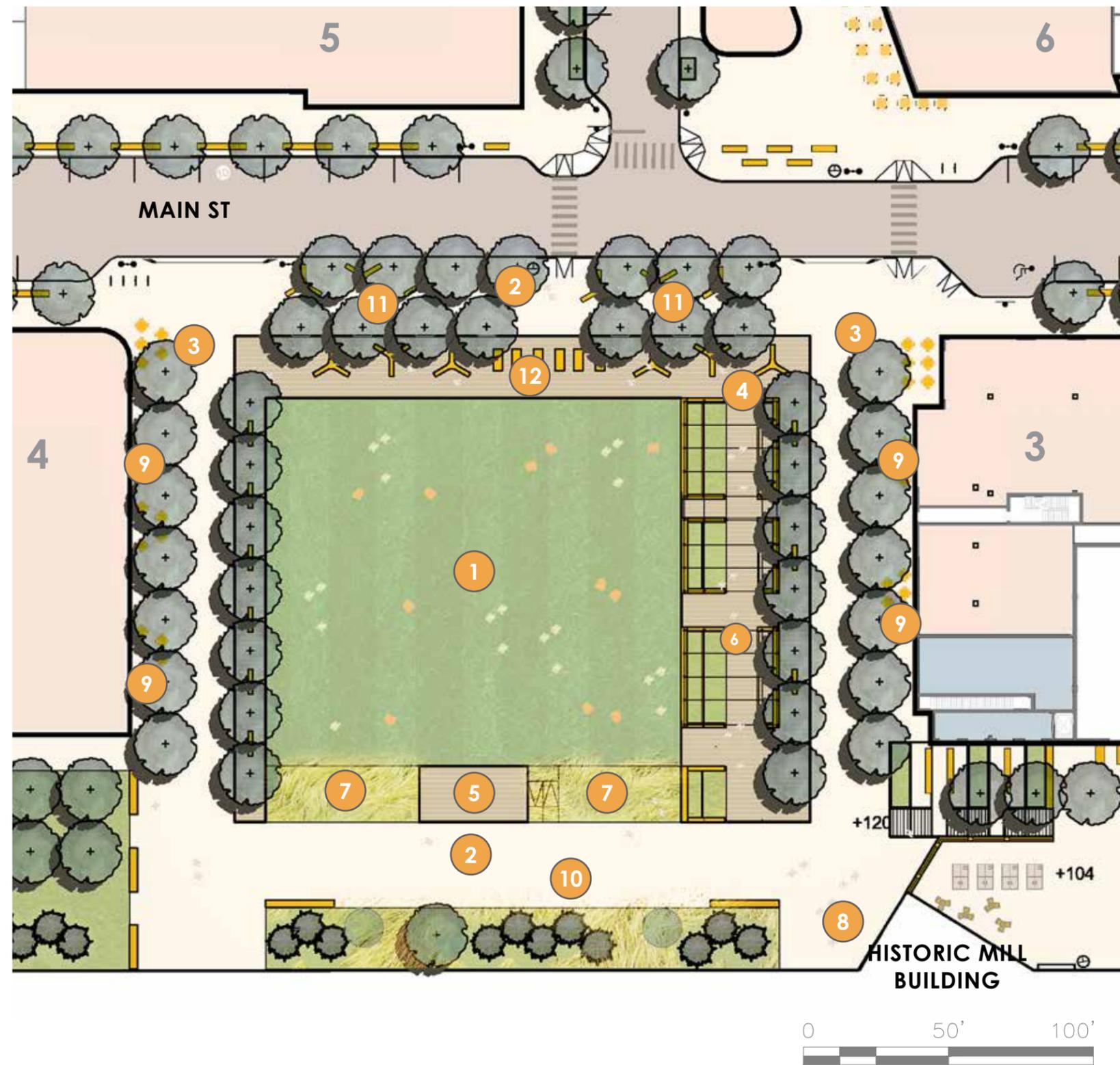


Parks and special features

Historic artifacts, salvaged structural elements, repurposed building materials, backyard "tree houses", a woodland pavilion, and an industrial-scaled pedestrian bridge. Items like these throughout the site will both preserve and express local heritage within the landscape and will serve to ensure connectivity between parks, open spaces, and buildings—and encourage walkable meandering throughout the neighborhood.



KEY PLAN



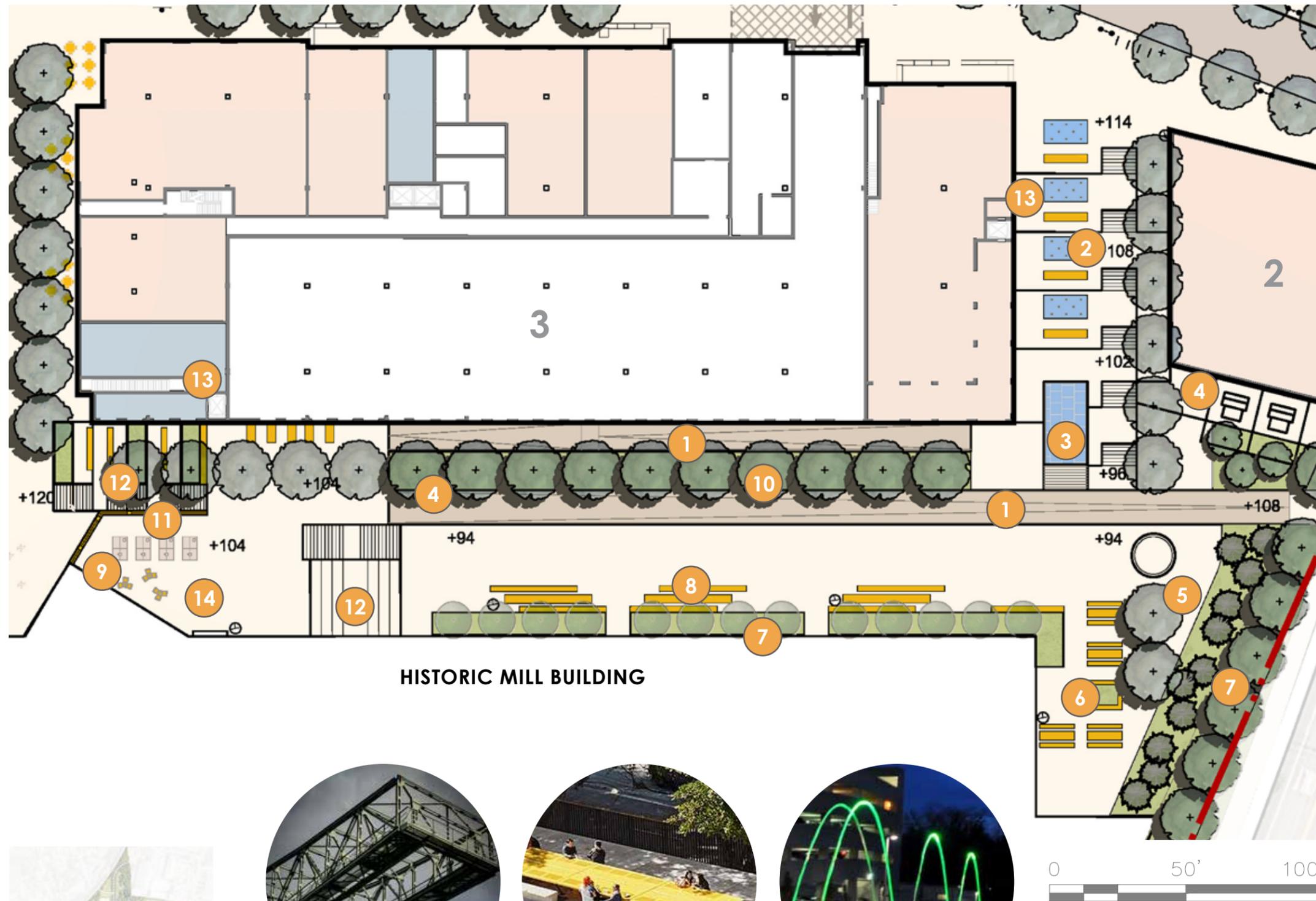
Village Green

At 1.3 acres, the heart of the development is the Village Green — a "civic" space for community gatherings, seasonal celebrations, and special events.

Flexible, open and accessible, the Village Green provides a civic space for community events and casual recreation — throwing a Frisbee, playing catch, or reading a book.

Design Goals

- 1 Central lawn (Green area: 0.4 ac)
- 2 Pedestrian plaza
- 3 Allee
- 4 Boardwalk deck
- 5 Platform / stage
- 6 Artifact edge
- 7 Meadow plantings
- 8 Entry to mill building
- 9 Cafe seating
- 10 Emergency vehicle access
- 11 Custom furnishing
- 12 Lounge seating



HISTORIC MILL BUILDING

Mill Green

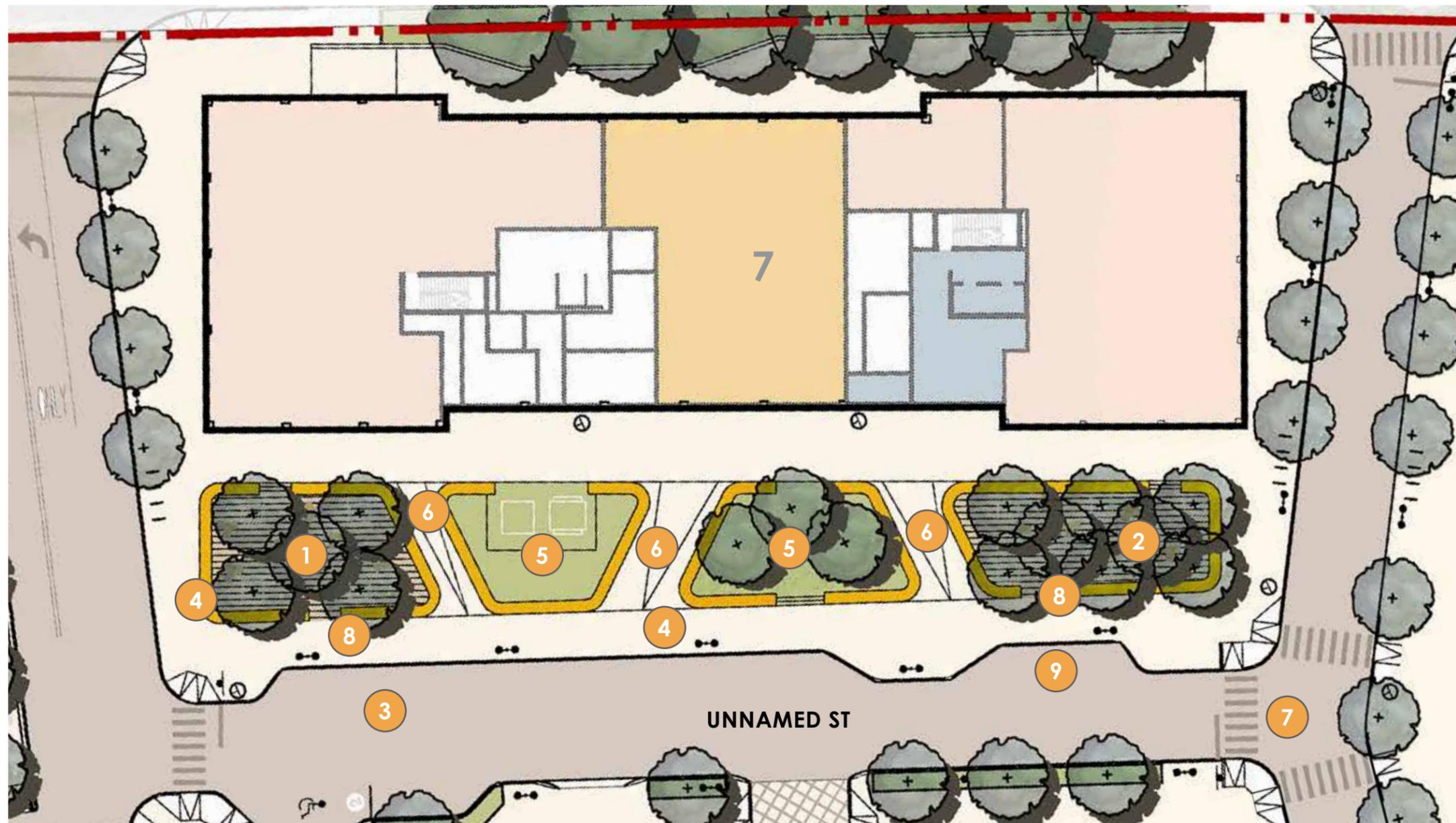
Mill Park is a 1.0 acre linear space, adjacent to the historic Mill building. It reflects the rich history of the site through the integration of industrial artifacts, embrace of significant changes in elevation, and day-lighting of the underground brook.

Terracing down from Main Street, sloping dramatically down from Needham Street, and connected to the Village Green by wide stairs and broad bleacher seating steps, Mill Park is experienced as a series of dramatic changes in grade celebrated by unique landscape features.

Design Goals

- 1 Bridge / ramp connection
- 2 Water terraces
- 3 "Day-lit" brook
- 4 Overlook
- 5 Sunken plaza with historic artifact
- 6 Dining terrace
- 7 Buffer plantings
- 8 Picnic tables
- 9 Feature wall
- 10 Canopy trees
- 11 Monumental stairs
- 12 Seating steps
- 13 Lobby / elevator
- 14 Game terrace





Mobility Plaza

At just over 1/4 of an acre, the Mobility Plaza will serve as an outdoor extension of the Mobility Hub providing a comfortable waiting area for transit connections and an outdoor space for the retail and commercial users and the residents.

Two bosques of trees and landscape plantings will provide shade, greenery, and seasonal interest.

Design Goals

- 1 North bosque
- 2 South bosque
- 3 Shuttle drop-off / pick-up
- 4 Custom bench seating
- 5 Planted garden
- 6 Sloped access
- 7 Crosswalk
- 8 Accessible deck
- 9 Residential drop-off / pick-up





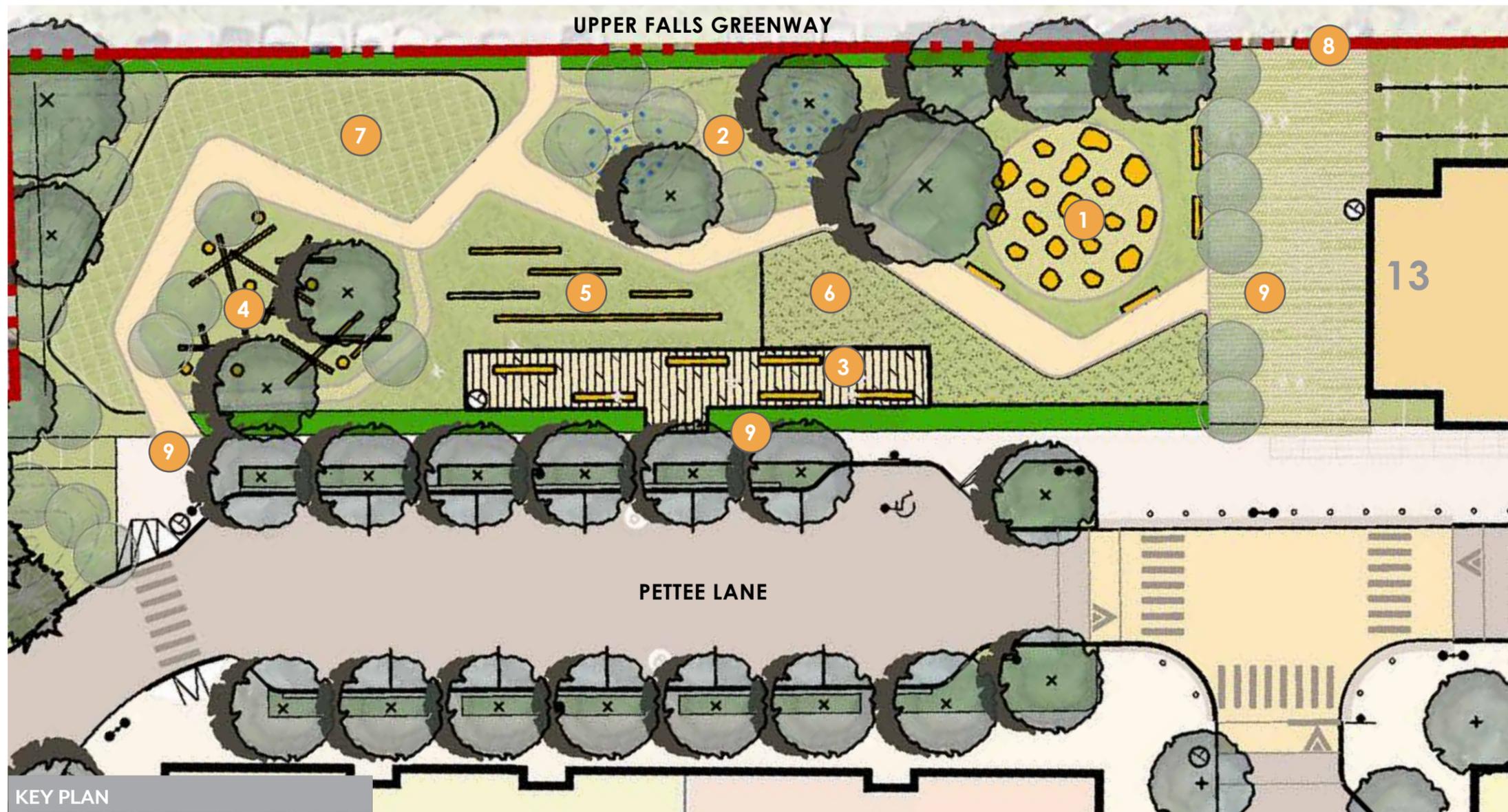
South Meadow Brook Park

At 2.5 acres, South Meadow Brook Park straddles the north entry from Tower Road and provides greenway access for the bike path. This Park is focused on ecology, restoration, and habitat and is intended to be largely preserved with limited improvements and selective maintenance.

An expanded and improved overlook will have generous seating and shade. A "Woodland Pavilion" will provide a sitting area for wildlife viewing and potential use as an outdoor classroom. A series of small "tree houses" will line Tower Road providing a unique spot for kids to play.

Design Goals

- 1 Overlook / woodland pavilion
- 2 Treehouse / outdoor classroom
- 3 Pedestrian trail
- 4 Bike path
- 5 Meadow
- 6 Community gardens
- 7 Greenway connection
- 8 Large dog run
- 9 Small dog run
- 10 "Tree houses"
- 11 Bioretention basin
- 12 Shared emergency vehicle access + bike path



KEY PLAN



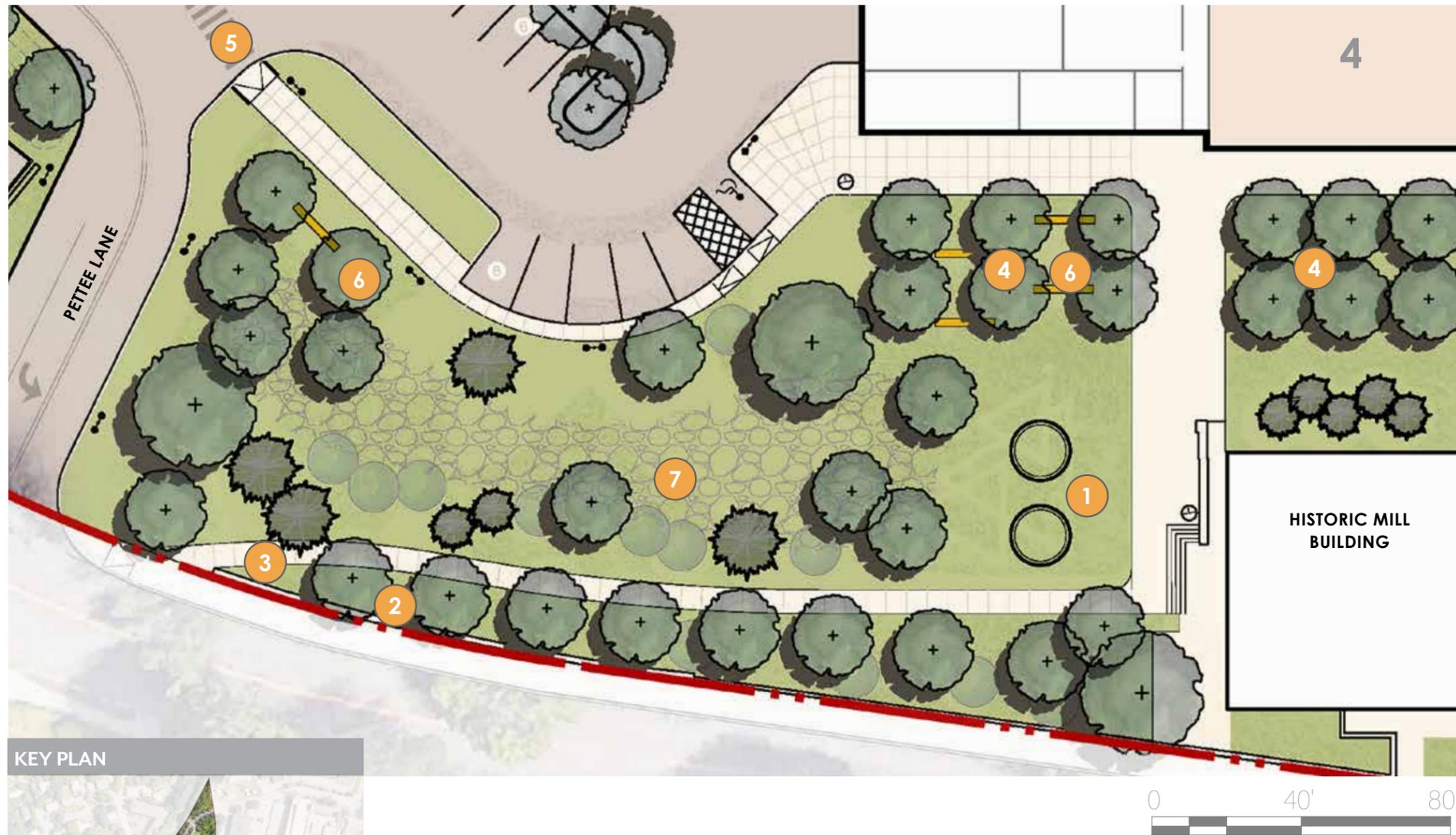
Community Park

At just over a half an acre in size and adjacent to the Greenway, the Community park is closer to the heart of historic Upper Falls village and provides several connections to the Greenway, access to the Community Building, and convenient and plentiful bike parking.

Focused on children's play, there are features for climbing, balancing, and exploring, as well as plenty of seating for parents and grandparents. A landscape buffer includes elevated topography, canopy trees, and understory plantings that create a sense of enclosure.

Design Goals

- 1 Boulders
- 2 Climbing poles
- 3 Wooden deck with seating
- 4 Climbing structure
- 5 Balance beams
- 6 Sand play pod
- 7 Art net play structure
- 8 Greenway connection
- 9 Park access



Oak Street Park

The Oak Street Park will provide a lush landscape buffer along the western portion of the Oak Street frontage.

As the quietest and most contemplative of all the open spaces, the 1 acres Oak Street Park will include a setting for historic silos; simple pathways, canopy trees, a stormwater bioretention basin, and generous seating.

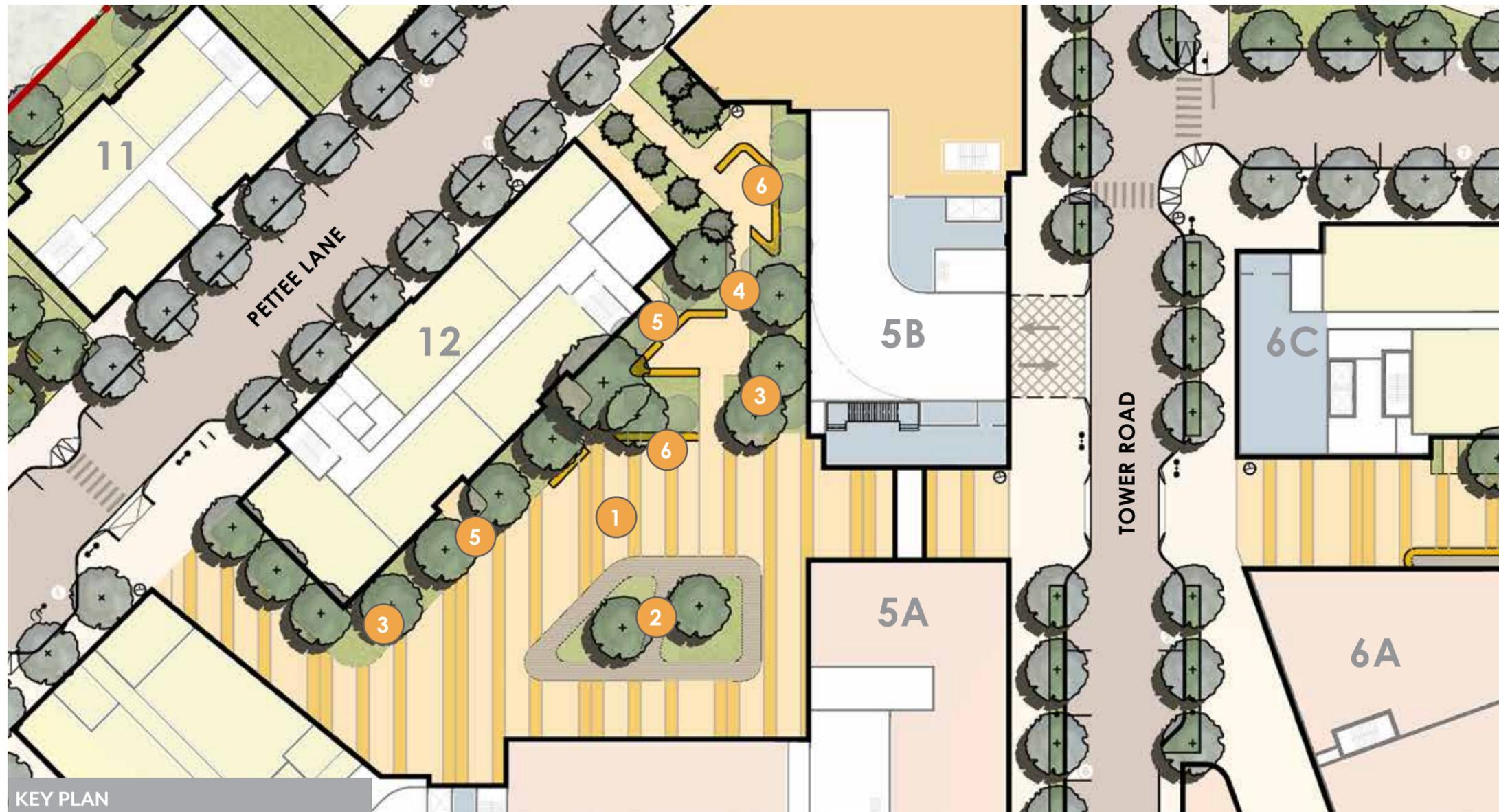
It is designed as a quiet green space and will serve as a primary pedestrian access from Upper Falls.

Design Goals

- 1 Historic silo
- 2 Existing stone wall
- 3 New sidewalk access via Oak Street
- 4 Tree bosque
- 5 Pedestrian crossing
- 6 Furnishings
- 7 Bioretention basin

KEY PLAN





KEY PLAN



Laneway (West)

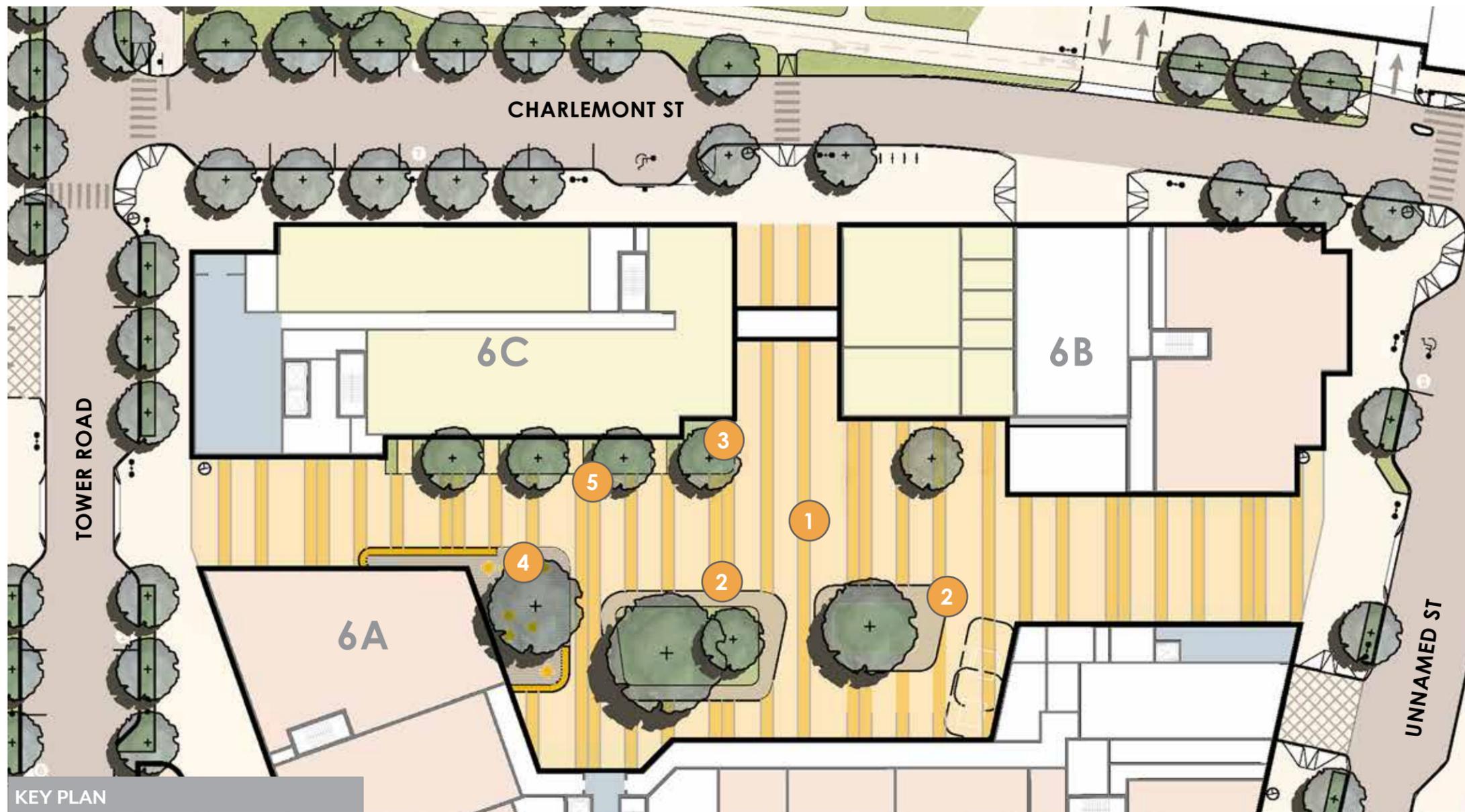
At 1.1 acres, the Laneways are new "flexible" spaces that serve pedestrians, accommodate service vehicles and resident drop-offs, and allow convenient access to some commercial uses and residential units.

They provide an alternative pedestrian circulation route between the Mobility Hub and the Community Building/ Greenway Connection and will include high quality paving, lighting, and landscape features.

Most of the plantings are concentrated on the north and to the west where they will get the most sun and understory plantings will be carefully selected to provide seasonable interests.

Design Goals

- 1 Flexible plaza courtyard
- 2 Wooden deck and plantings
- 3 Plantings
- 4 Garden pathway
- 5 Residential walk-ups
- 6 Furnishings
- 7 Bioretention basin



KEY PLAN



Laneway (East)

At 1.1 acres, the Laneways are new "flexible" spaces that serve pedestrians, accommodate service vehicles and resident drop-offs, and allow convenient access to some commercial uses and residential units.

They provide an alternative pedestrian circulation route between the Mobility Hub and the Community Building/ Greenway Connection and will include high quality paving, lighting, and landscape features.

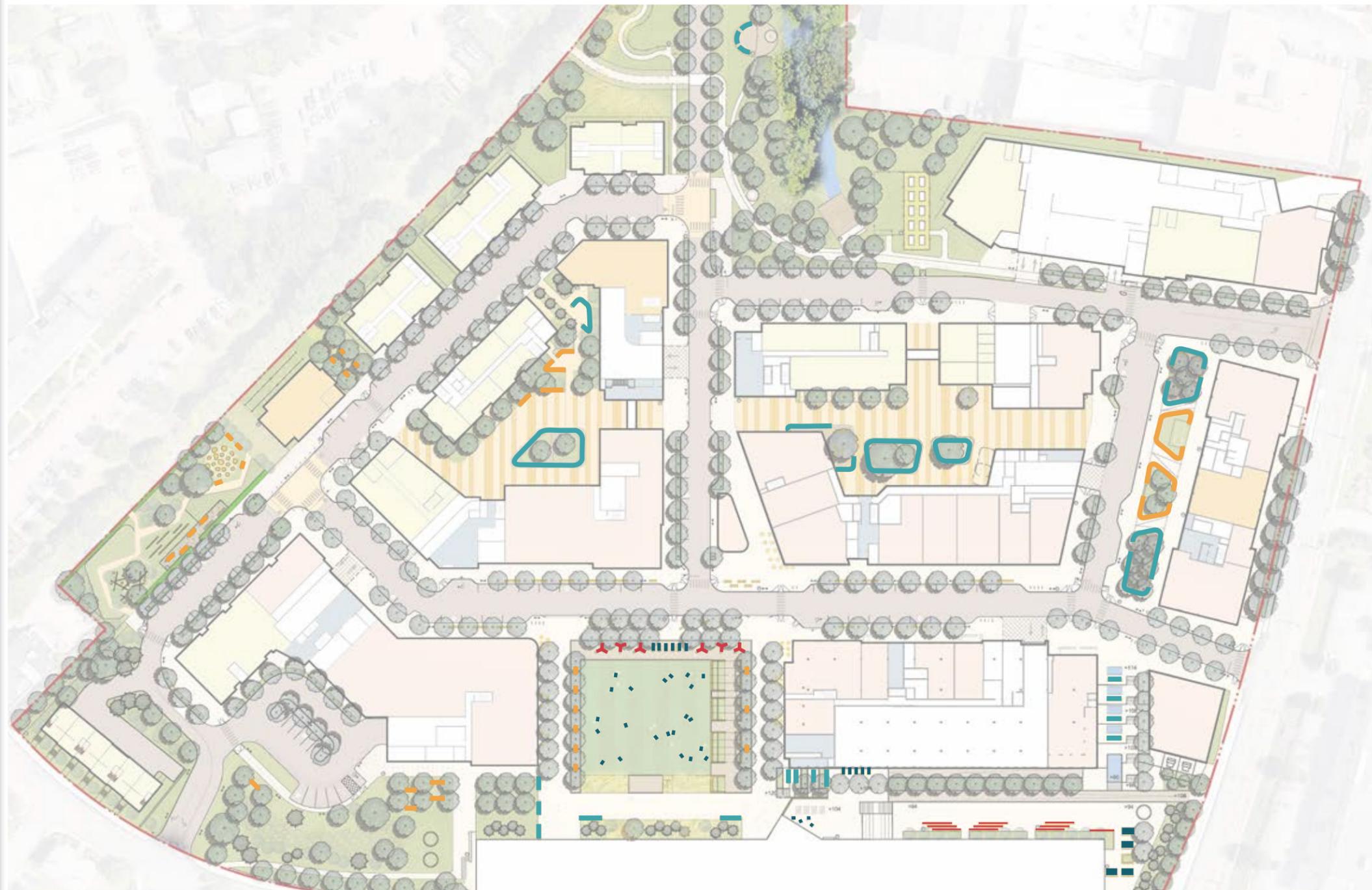
Most of the plantings are concentrated on the north and to the west where they will get the most sun and understory plantings will be carefully selected to provide seasonable interests.

Design Goals

- 1 Flexible plaza courtyard
- 2 Wooden deck and plantings
- 3 Plantings
- 4 Restaurants terrace
- 5 Residential walk-ups

2.2.B. Open space furnishings

Incorporate a cohesive palette of pedestrian and other furnishings throughout the open space network whose design reinforces overall landscape architecture strategies and emphasizes durability, quality, and accessibility.



Parks and open spaces furnishings

The parks and open spaces network includes a cohesive palette of furnishings divided into four “families.” The shape and sizes of each family of furnishings are characterized by its function within in each open space. The back rests suggests a longer more comfortable seating program while movable furnishings are placed in more flexible and active open spaces.

Typologies from the adjacent furnishings plan are detailed on the following pages.

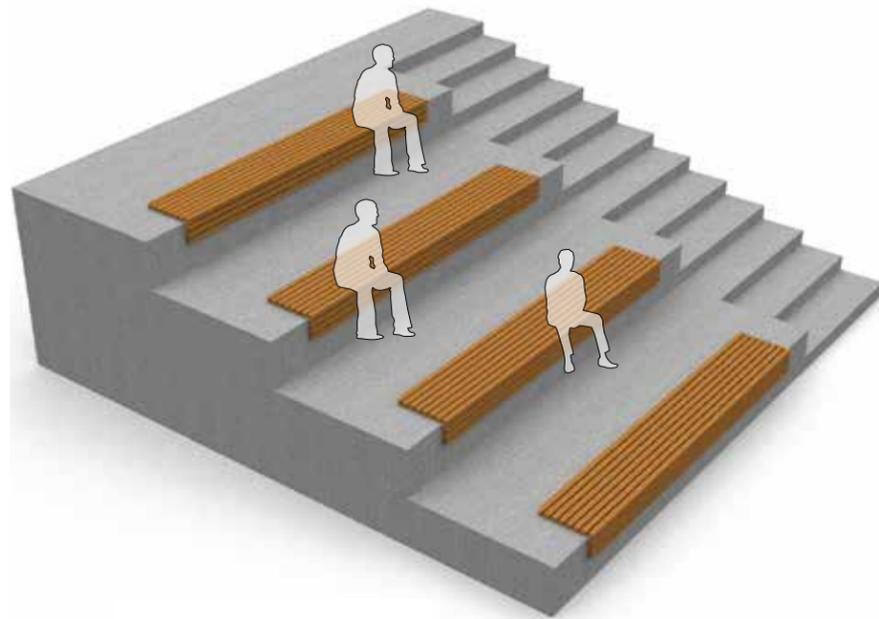
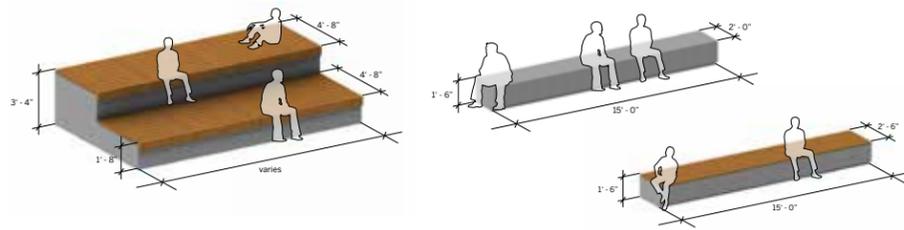
LEGEND

- Rectilinear Typology
- Sheer Typology
- Back Rested Typology
- Movable Typology

Open Space Furnishings Typology

a. Rectilinear typology

MILL PARK TERRACE SEATING



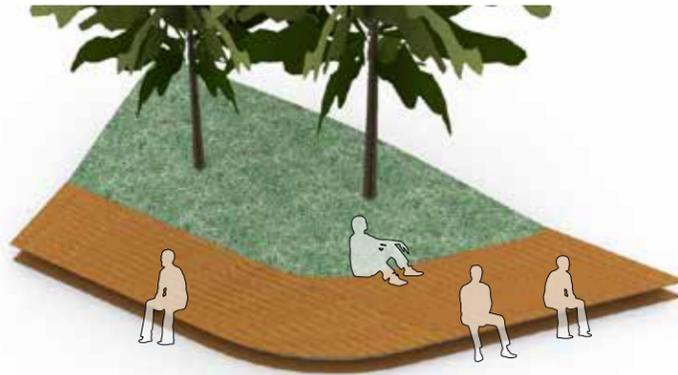
CURVILINEAR BENCH (WOOD)



CURVILINEAR BENCH (CONCRETE AND WOOD)

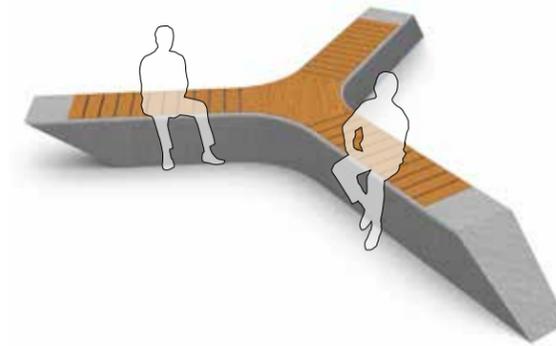


BENCH PLANTER

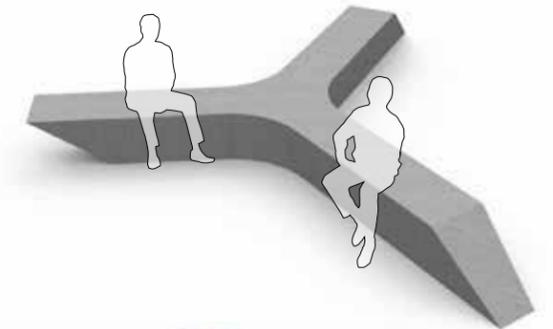


b. Sheer typology

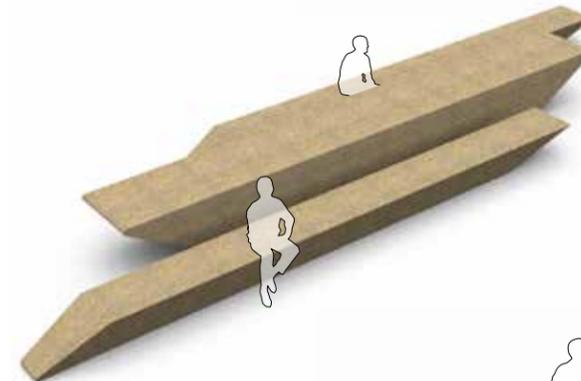
Y BENCH (WOOD AND CONCRETE)



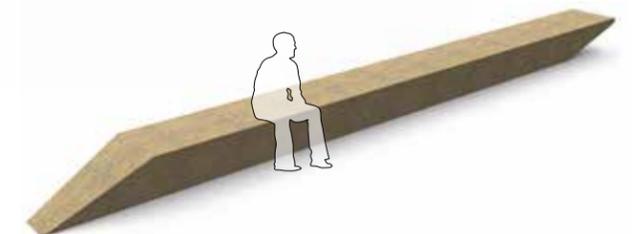
Y BENCH (CONCRETE)



BENCH + TABLE



BENCH



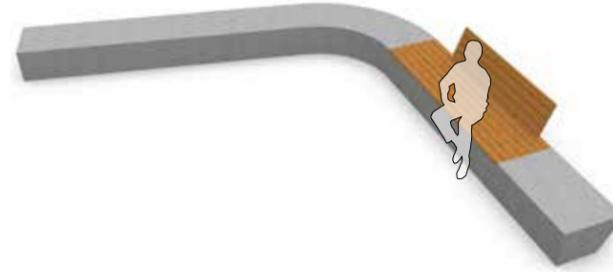
Open Space Furnishings Typology (cont.)

c. Back rested typology

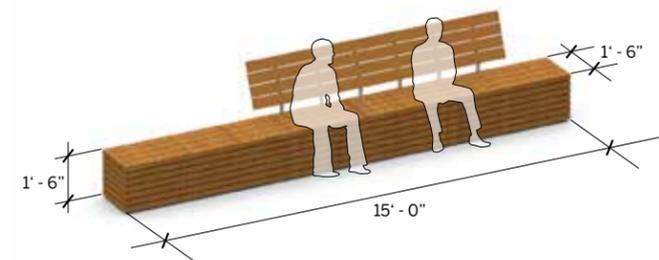
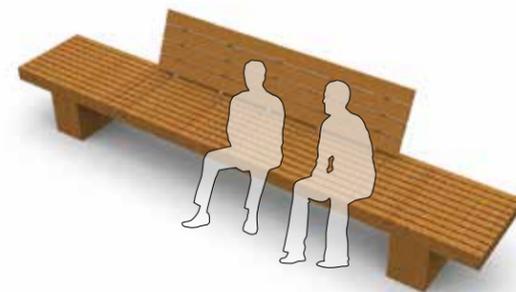
SOUTH BROOK MEADOW PARK SEATING



LANEWAY



COMMUNITY PARK



d. Movable typology

LOUNGE CHAIR
(WOOD AND STEEL FRAME)



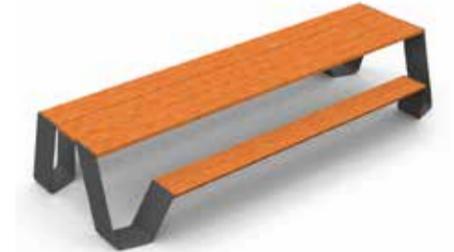
LOUNGE CHAIR
(WOOD AND CONCRETE)



BOLD CHAIR



BENCH + TABLE SET



BAR CHAIR + TABLE SET





2.3 Streetscape design

City's goal statement

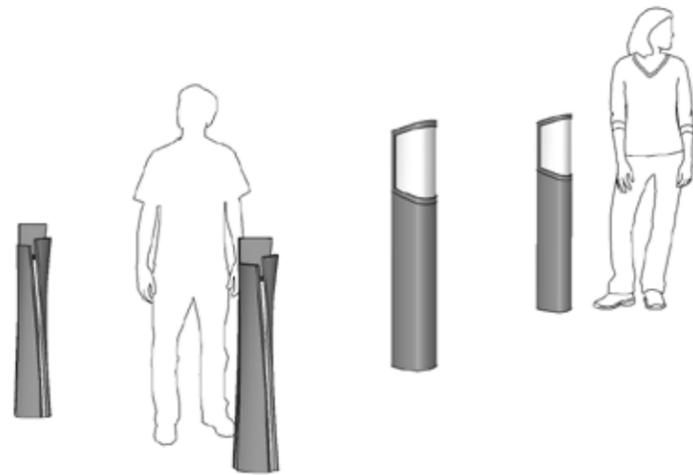
Streetscapes should be provided with a variety of bike and pedestrian amenities to promote walkability, cycling, and an overall vibrant and dynamic sidewalk life. Streetscapes should be designed to accommodate accessibility needs and be functional during all seasons.

The following guidelines address block structure:

- A. Streetscape furnishings and pedestrian amenities; and
- B. Streetscape furnishing placement.

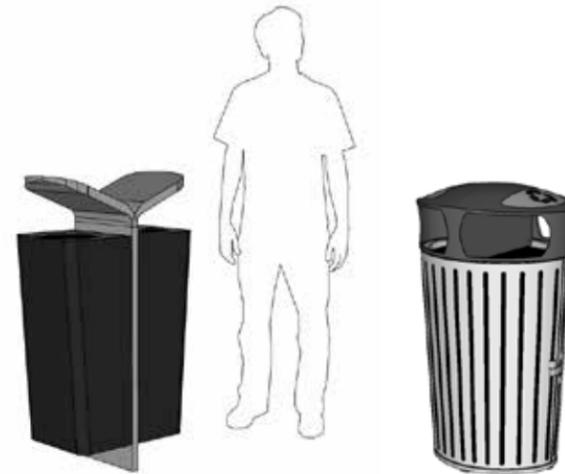
2.3.A. Streetscape furnishings and pedestrian amenities

Incorporate a cohesive palette of pedestrian and bike furnishings such as benches, trash and recycling receptacles, pedestrian lighting, street trees, planters, and bike racks. Emphasize durability, quality, and accessibility.



BOLLARD LIGHTS (Cast Aluminum)

Bollard lights located at raised intersections to visually mark pedestrian and vehicular zones



WASTE + RECYCLING RECEPTACLE (Cast Aluminum)

Split-stream, durable outdoor receptacles with cover for exterior waste and recycling collection



BIKE RACKS (Cast Aluminum)

Durable and elegantly designed bike racks add variety to streetscape furnishings

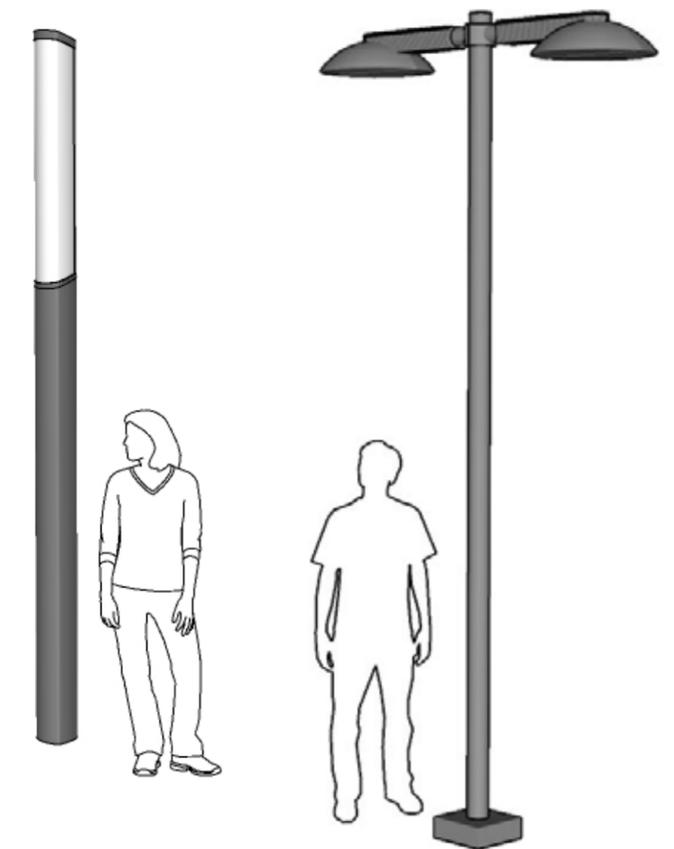


RAISED CURB PLANTER / TREE GRATE

Street trees are planted in raised curb planters or tree grate depending on location.

Streetscape furnishings families

The development's streetscape network includes a cohesive family of streetscape furnishings and pedestrian amenities.



PEDESTRIAN LIGHTS

Pedestrian-scale lighting along street corridors to enhance safety and evening walking experience

2.3.B. Streetscape furnishing placement

Distribute furnishings at appropriate intervals to support significant bike and pedestrian traffic and usage. Lighting should be spaced close enough to provide consistent light coverage; trees should be spaced to foster a canopy as specimens mature; bike racks, benches, and receptacles should occur frequently to encourage walking and biking.

Streetscape furnishings distribution

Streetscape furnishings and pedestrian and bike amenities are positioned in logical configurations and with high frequency to support a consistent streetscape environment and maximize pedestrian and cyclist comfort and convenience.



LEGEND	
	Seating furnishing
	Raised curb planter
	Pedestrian street lighting
	Bike rack
	Waste / recycling receptacle
	Street signage
	Bollard
	Street tree



2.4 | Parking and service

City's goal statement

Parking and service areas should be visually unobtrusive and designed to be accessed from specific locations that minimize impacts on key pedestrian environments and abutters.

The following guidelines address block structure:

- A. Structured parking;
- B. Surface parking;
- C. On-street parking; and
- D. Service.

2.4.A. Structured parking

Minimize visual impacts of parking structures on the public pedestrian environment by locating them underground or behind active/occupied building spaces. Where exposed structured parking edges are unavoidable, clad with high quality finishes and/or plantings.



Structured parking

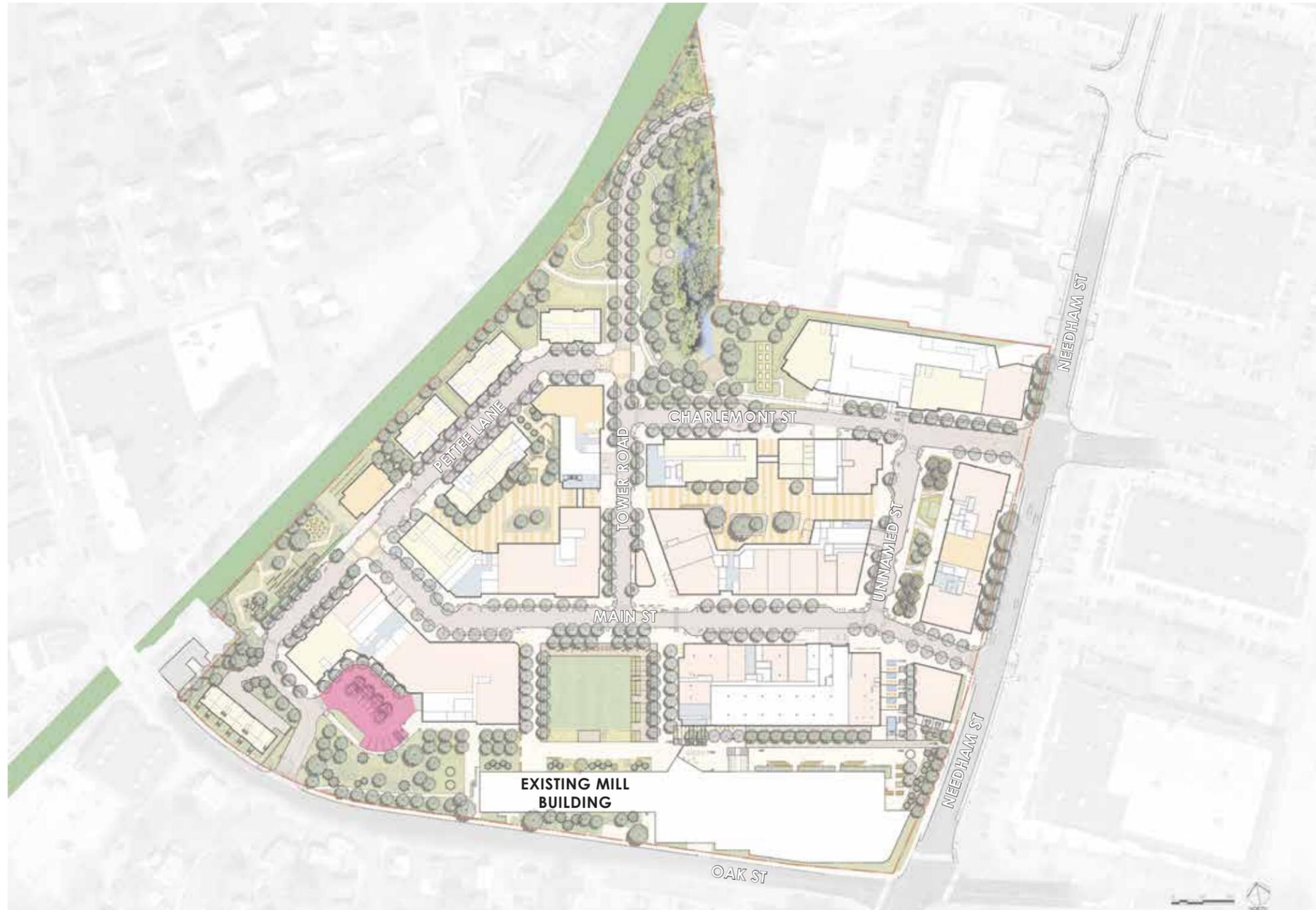
Most parking is contained within structured garages largely or completely hidden from view from the public realm. With the exception of building 7, each housing building meets the majority of its housing demand within its footprint. Retail, office, and additional housing parking is consolidated in the building 6 garage.

LEGEND

- Structured Garage Parking

2.4.B. Surface parking

Minimize visual impacts of surface parking lots on the public pedestrian environment by locating lots behind buildings and/or screening them from public view and/or minimizing their size and utilizing high quality design and planting strategies.



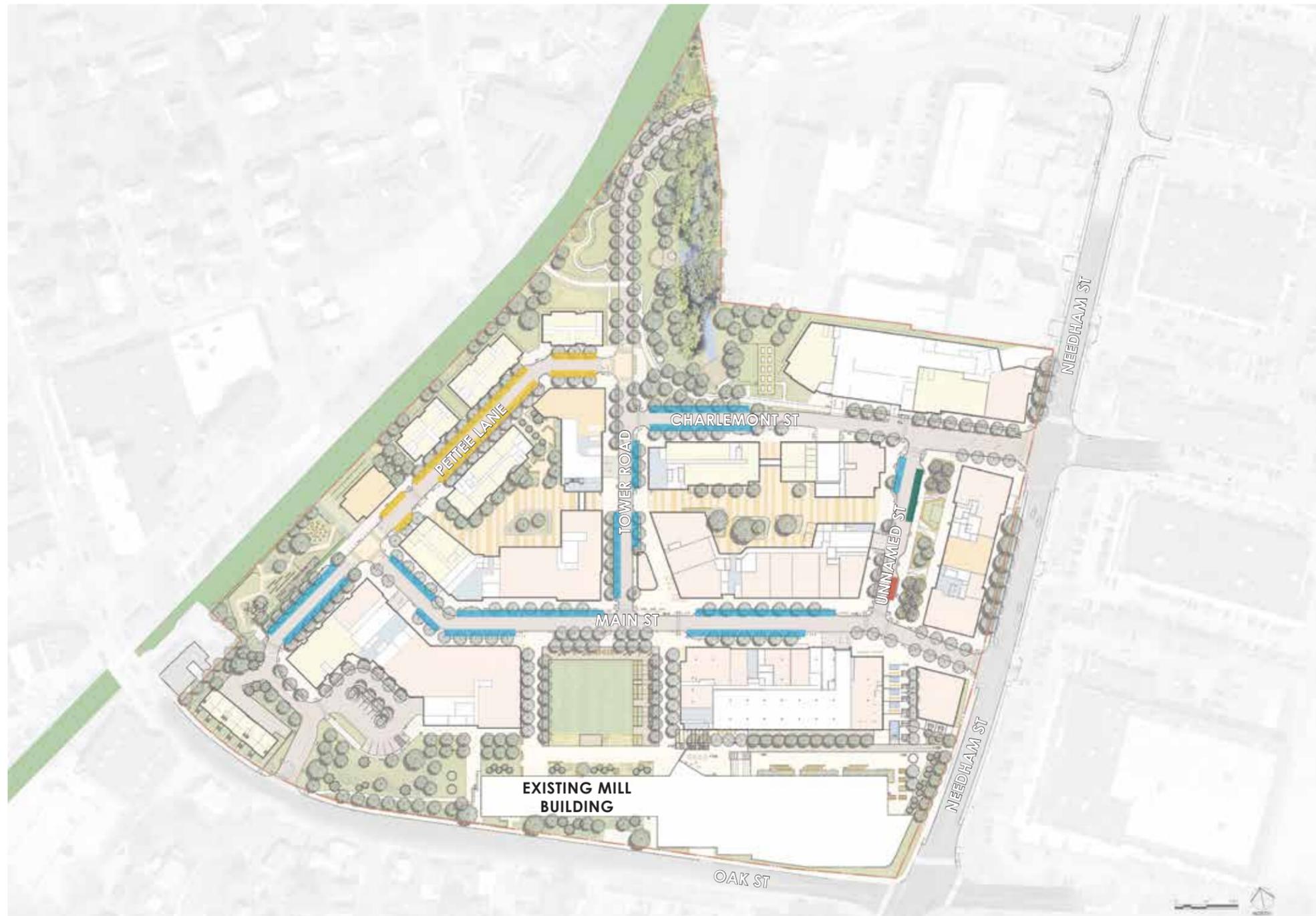
Surface parking

The only surface parking lot is tucked behind building 4 and screened from public view by buildings, landscaping, and a significant grade change from Oak Street. Otherwise, surface parking lots have generally been avoided in favor of underground and on-street parking.

LEGEND	
	Surface Parking

2.4.C. On-street parking

Locate on-street parking wherever street dimensions and traffic movements reasonably allow to maximize supply and take advantage of its protective benefits to sidewalk activity.



On-street parking

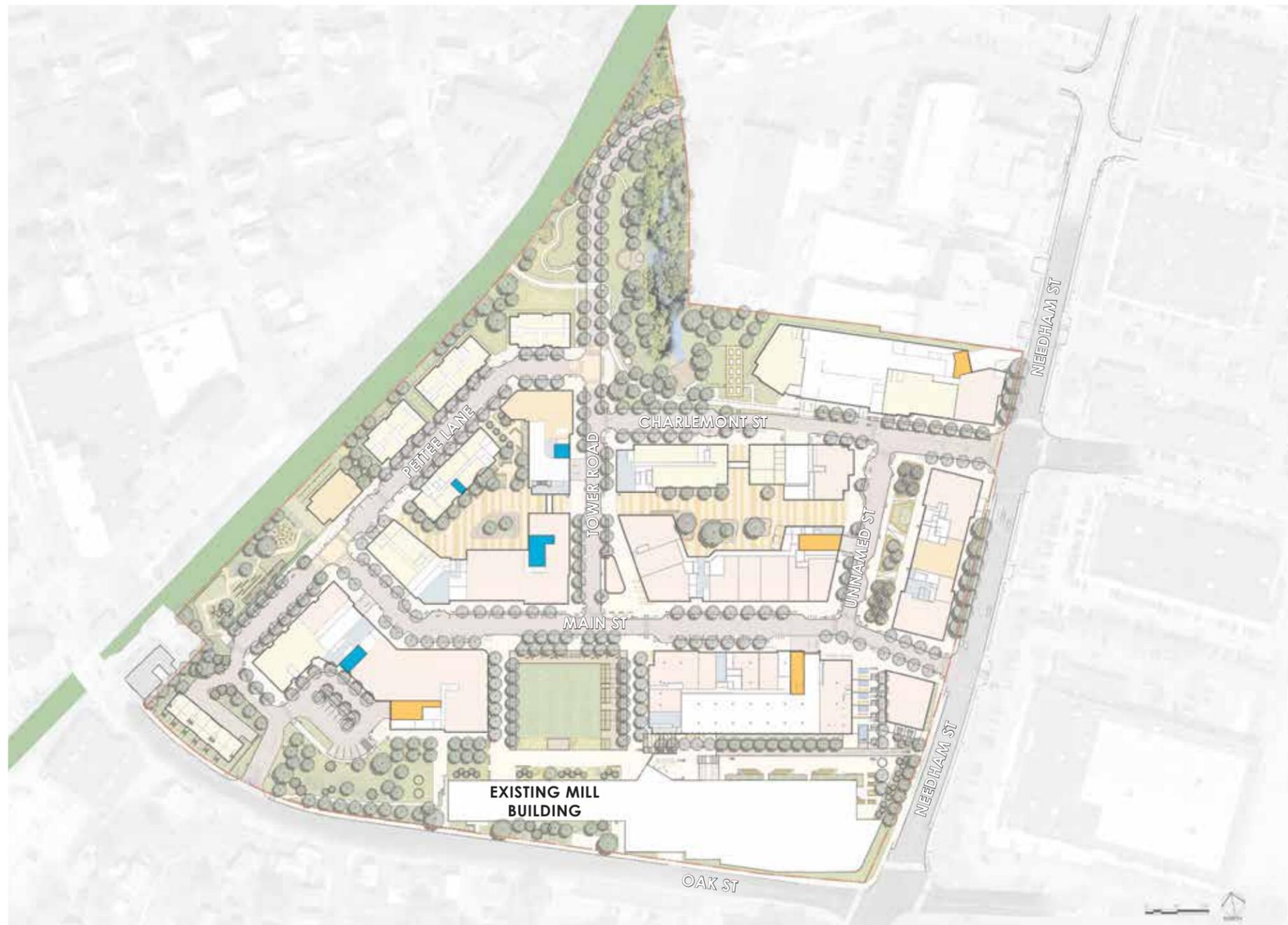
Most streets include convenient, on-street parking wherever feasible to supplement retail and other visitor and resident parking demands. Unnamed street also includes curb space dedicated to shuttle and other pick-up/drop-off and transfers.

LEGEND

- On-Street Parking (residents only)
- On-Street Parking
- Shuttle Stop
- Passenger Drop off/ Pick Up

2.4.D. Service

Minimize visual impacts of service facilities on the public pedestrian environment with strategies such as clustering/shifting to building interiors or lower-priority streets and frontages, minimizing curb cuts and service bay widths, and screening equipment behind attractive walls, plantings, or retractable partitions.



Building service areas

Service areas such as loading access and trash rooms generally have been relegated to less prominent or active public realm locations such as parking lots, laneways, and secondary streets. When located on a primary street, services areas are sized as small as possible and designed to minimize impacts on pedestrian safety, comfort, convenience, and enjoyment.

LEGEND

Primary Land Use

- Loading / Delivery Service
- Trash Compactor



2.5 Sustainable design

City's goal statement

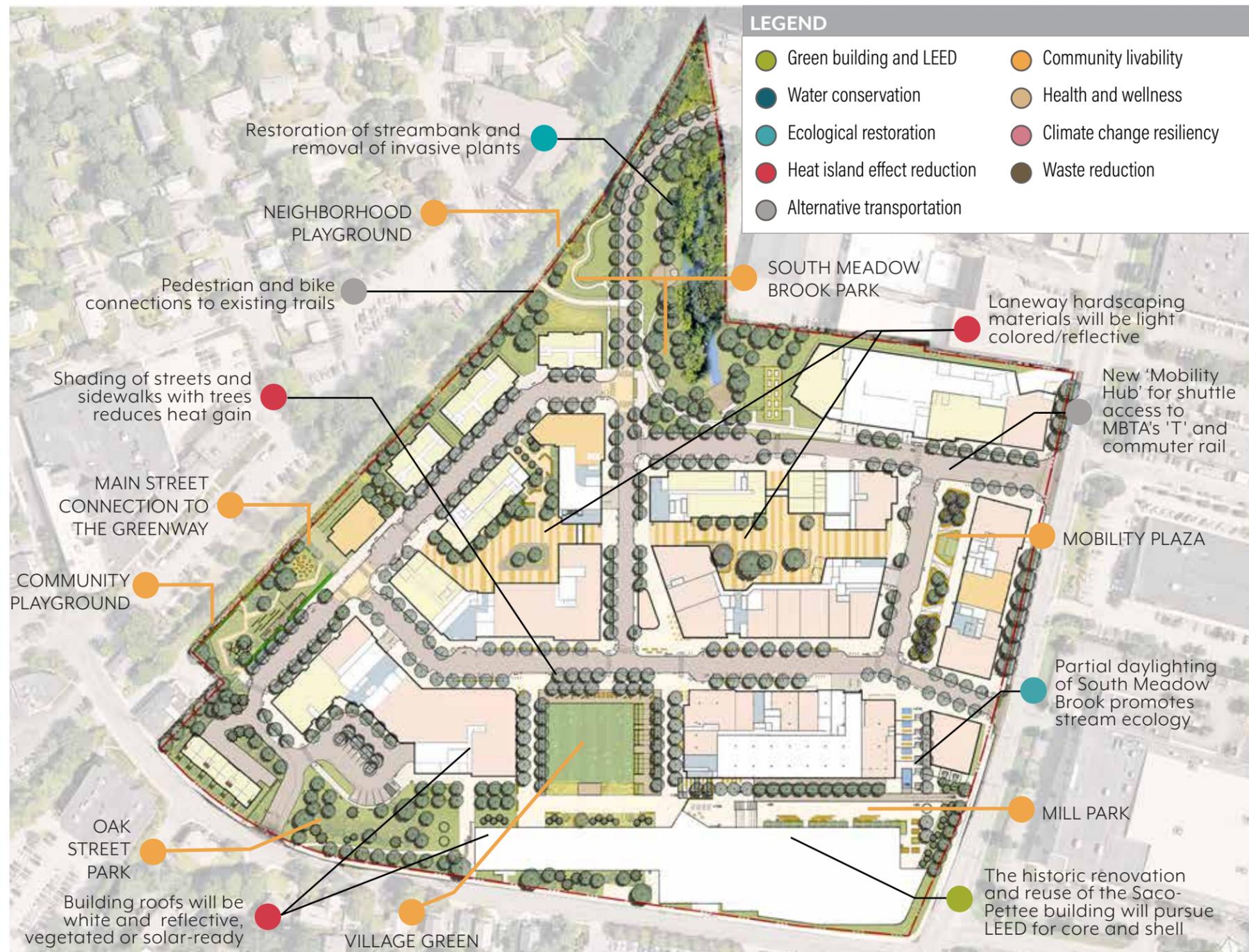
Site design should employ accepted sustainable practices consistent with achieving a LEED certifiable status.

The following guidelines address connectivity to the surrounding context:

- A. Sustainable design.

2.5.A. Sustainable design

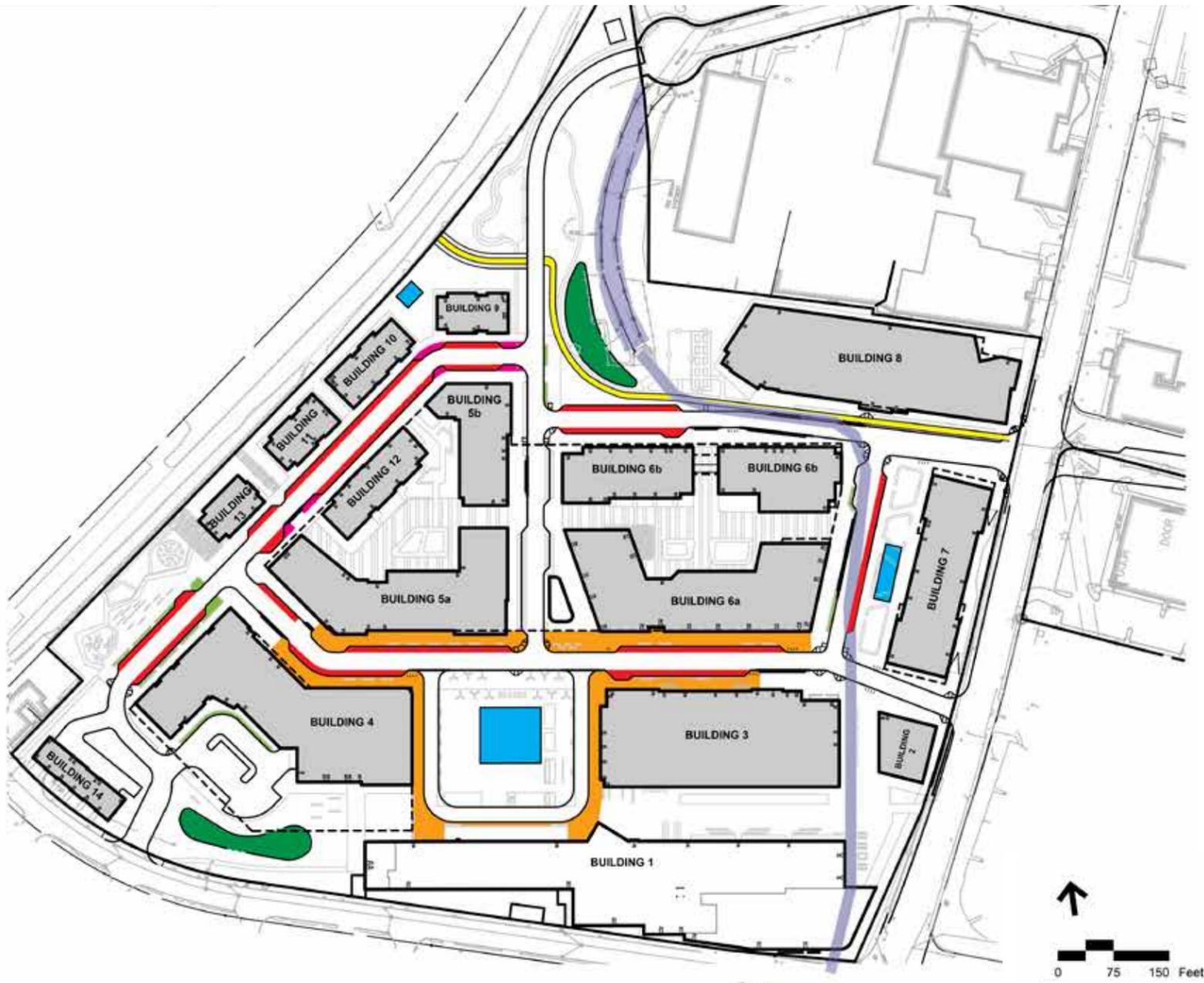
Comprehensively deploy sustainable design features, systems, and strategies throughout the project to achieve LEED certifiable status at neighborhood and building scales.



Development-wide sustainable strategies

The following strategies address sustainability at the district scale or otherwise occur in many places across or entirely throughout the development. Colors shown correlate with our Special Permit application's broader areas of sustainability, as detailed in the legend at left.

- Entire site will pursue LEED for Neighborhood Development (LEED ND)
- Use of drought tolerant and native plants reduce irrigation needs
- Low Impact Design (LID) strategies will be employed in the design of stormwater management systems across the site to reduce runoff and improve stream water quality
- Permeable paving to reduce stormwater runoff
- Live-work-play" mixed use development creates a vibrant, desirable, and sustainable community
- New affordable housing units provide economic access
- New parks and open spaces create community gathering spaces
- Neighborhood walkability promotes physical activity
- Green/Sustainable building materials create healthy indoor air quality
- Energy efficient buildings reduce carbon footprint of development
- Material waste recycling during construction and recycling programs for building tenants



Green infrastructure

The development's stormwater management system includes numerous green infrastructure strategies and design features to increase on-site infiltration, improve water quality, and generally reduce impacts on area waterways and infrastructure.



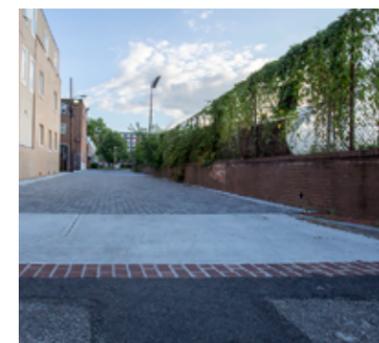
Bioretention bump-out



Subsurface infiltration structure



Bioretention planters



Permeable pavers



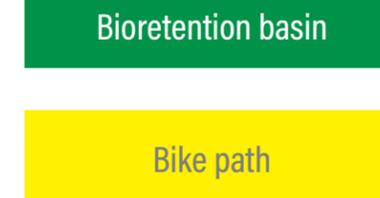
Bioretention basin



Porous asphalt parking lane



South Meadow Brook easement



Bike path



SECTION 3 | Building Design

Defining the architectural quality of built form

- 3.1. Overall architectural character**
 - A. External/contextual relationship
 - B. Internal/project relationship
- 3.2. Building height / massing**
 - A. Height
 - B. Massing
 - C. Base consistency
- 3.3. Façade articulation**
 - A. Diversity and human scale
 - B. Hierarchy of articulation
 - C. Emphasis
 - D. Fenestration
- 3.4. Ground level design**
 - A. Storefronts
 - B. Residential front doors
- 3.5. Rooftop design**
 - A. Roof design
 - B. Materials and mechanical equipment
 - C. Sustainable rooftop features
- 3.6. Materials**
 - A. Quality
 - B. Compatibility with surrounding built environment
- 3.7. Building signage**
 - A. Sign placement
- 3.8. Lighting**
 - A. Accentuate architectural expression
- 3.9. Sustainable design**
 - A. Enhance the public realm
 - B. Managing impacts



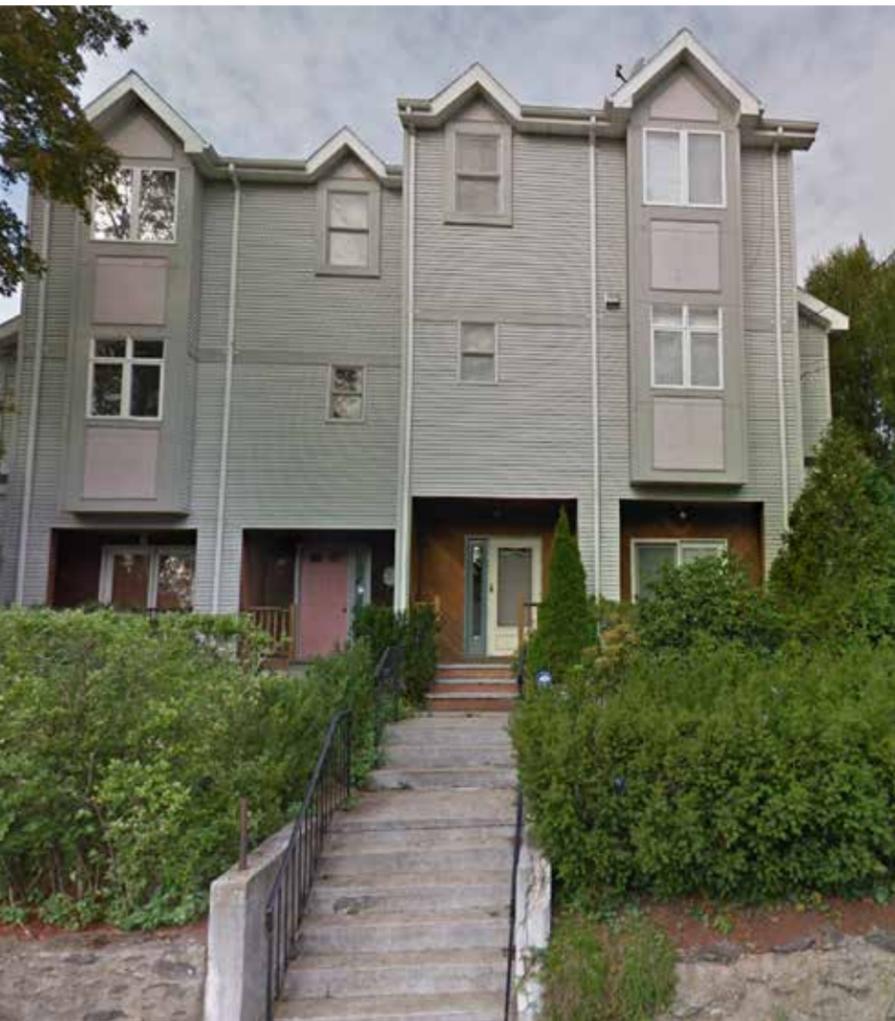
3.1 | Overall architectural character

City's goal statement

The architectural character of a building should combine reference to existing context and local vernacular with contemporary expression and consistency/compatibility with the rest of the development.

The following guidelines address block structure:

- A. External/contextual relationship; and
- B. Internal/project relationship.



3.1.A. External / contextual relationship

Integrate architectural elements and expressions that reflect historic and/or existing neighborhood structures and stylistic traditions.

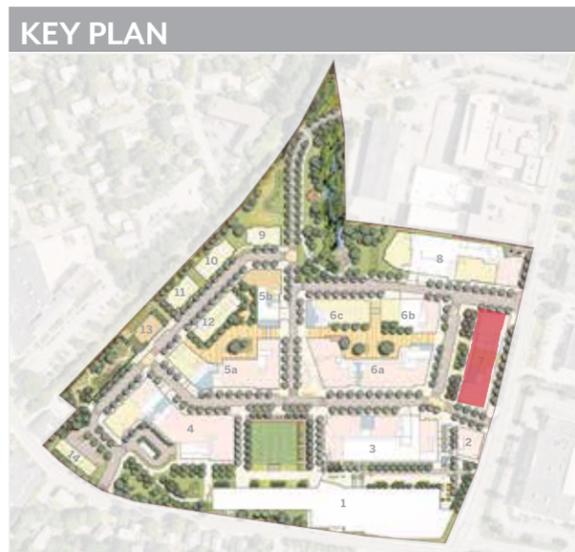


Building 3 – South

Mill Park elevation

Representative example of the project's incorporation of the guideline in architectural design.

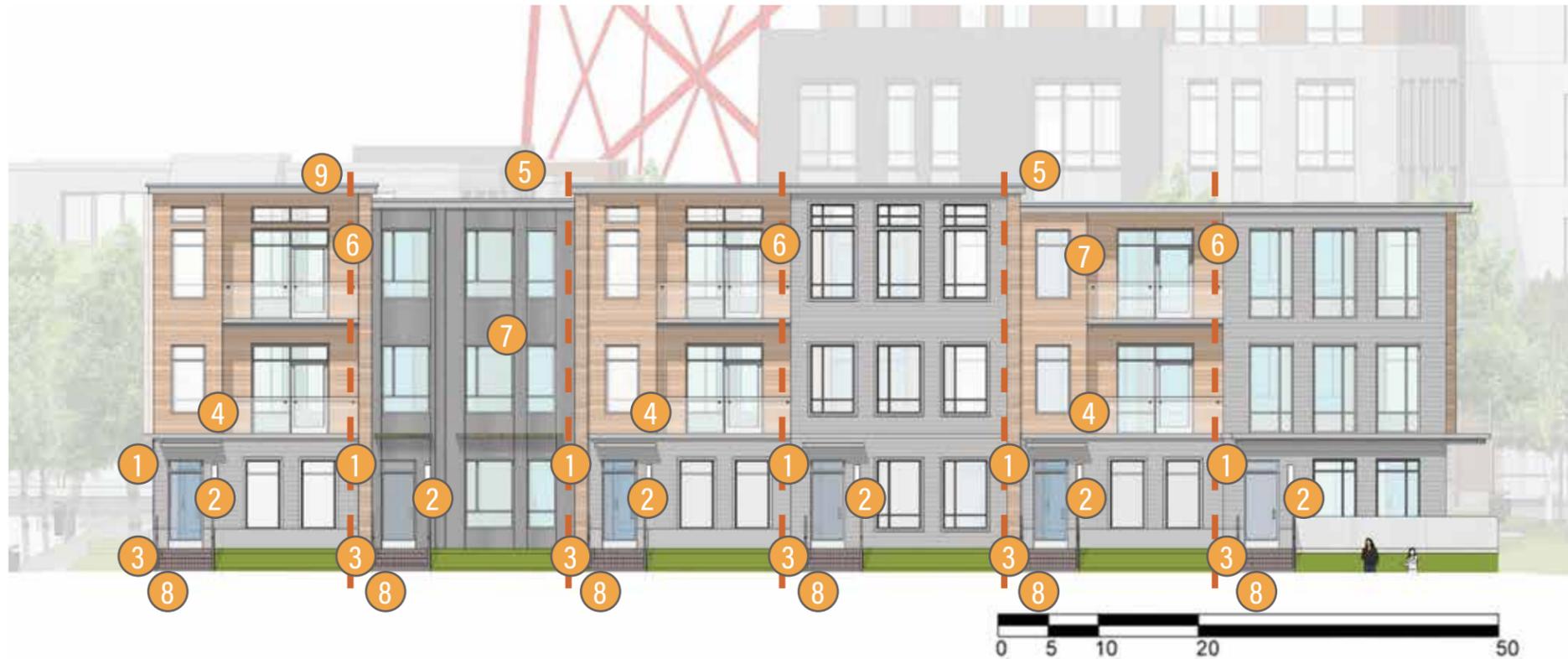
- 1 Base material (brick masonry) chosen to directly reflect adjacent mill building
- 2 Regular façade rhythm and traditional window opening details utilized to blend with mill building precedent
- 3 Clearly defined building massing setbacks
- 4 Some contemporary cladding materials (cementitious panels) at upper levels, chosen to blend with historic precedent materials



Building 7 — East Needham Street elevation

Representative example of the project's incorporation of the guideline in architectural design.

- 1 Wide-format residential windows reference commercial scale found on Needham Street
- 2 Glassy, open retail base connects to Needham Street commercial character
- 3 Massing setbacks open up base to facilitate ease of pedestrian circulation into site
- 4 Addition of scaled-down rhythm to break down facade length



Building 14 – North
Oak Street elevations

Representative example of the project’s incorporation of the guideline in architectural design.

- ① Covered entries
- ② Entry lighting
- ③ Stoop / raised entry
- ④ Balconies
- ⑤ Varied roofs planes
- ⑥ Varied Facade Planes
- ⑦ Varied Window Sizes
- ⑧ Individual Front Doors
- ⑨ Vertical Expression



21 Mechanic Street



24 Mechanic Street



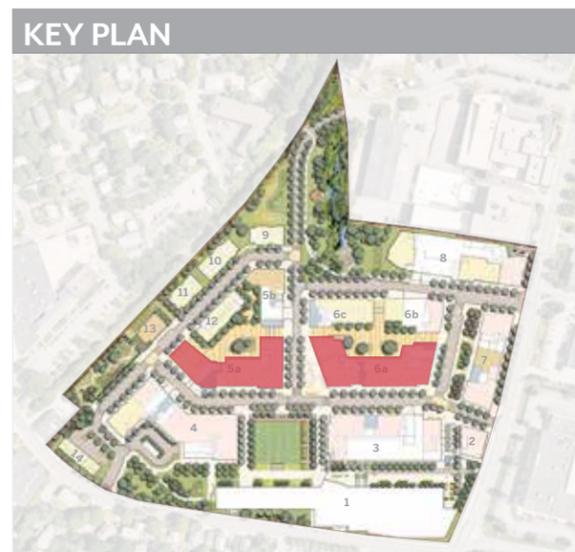
1195 Chestnut Street



260 Elliot Street

3.1.B. Internal / project relationship

Integrate contemporary architectural elements and expressions as informed by today's trends and best practices (in balance with above contextual relationships); create visual cohesiveness with other buildings in the development (while allowing for architectural diversity among building).



Buildings 5 + 6A — South

Main Street elevations

Representative example of the project's incorporation of the guideline in architectural design.

- ① Across site building façades are broken up along demise lines to mitigate visual impact of blocks
- ② Vertical elements employed to counteract horizontal read of blocks
- ③ Articulated feature façades placed at corners, relating to major public space
- ④ Massing heights that translate across streets to create defined street section
- ⑤ Contrast façades at retail bases with articulation and materials that emphasize the human scale



Buildings 5B, 12, 5A, + 4 (Left to right) – West
 Pettee Lane elevations

Representative example of the project's incorporation of the guideline in architectural design.

- ① Base / middle / top conditions
- ② Activated base
- ③ Comparable window / wall ratios
- ④ Vertically grouped windows
- ⑤ Varied floor-to-floor heights offer depth and scale
- ⑥ Balconies of varied detail



3.2 Building height / massing

City's goal statement

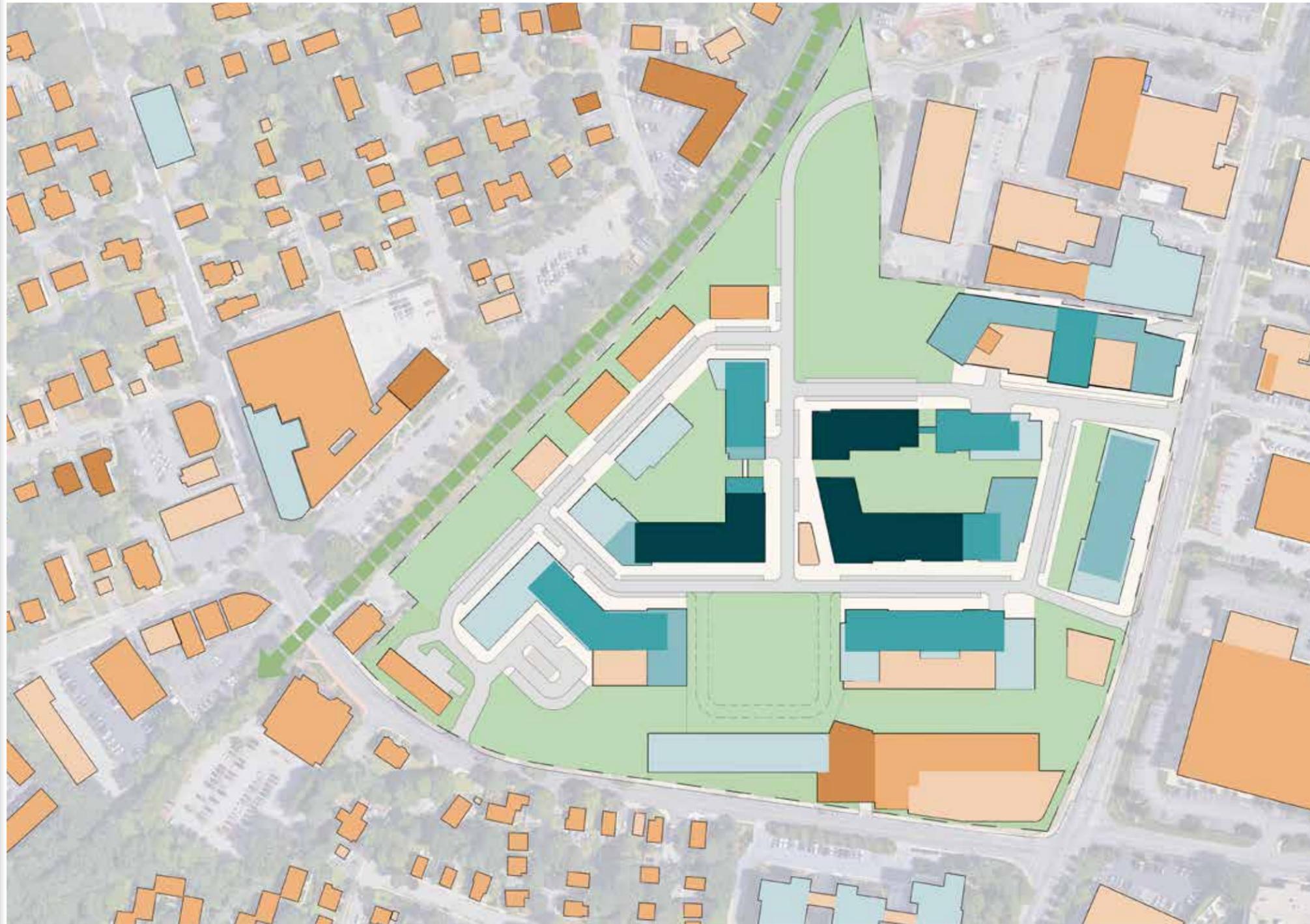
Building height/massing and façade organization should meaningfully frame and help animate the public realm.

The following guidelines address block structure:

- A. Height;
- B. Massing; and
- C. Base consistency.

3.2.A. Height

Building height should relate to the street section and/or public spaces fronted; use step-downs to transition to secondary streets and public spaces and/or surrounding context.

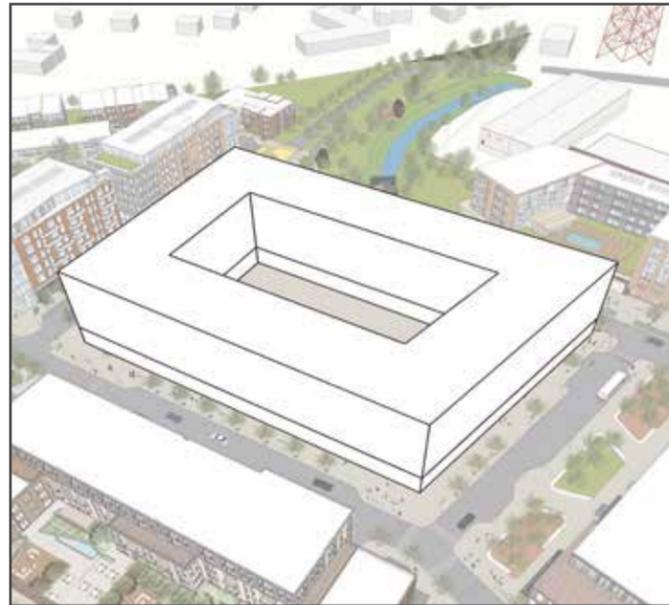


Building heights and setbacks

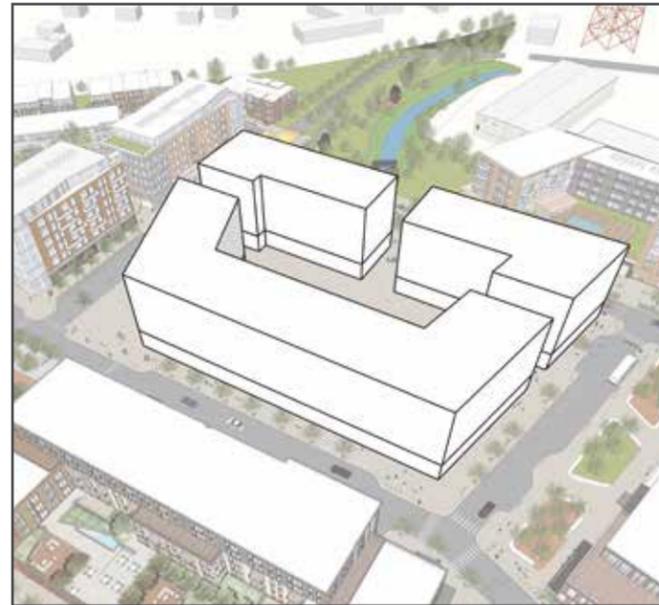
In general, the development's tallest building heights are concentrated in the core of the site. However, periphery heights trend taller along certain edges where existing buildings establish a taller context such as the north end of the Needham Street frontage. Stepping down in height from the core to the edges helps smoothly blend the overall project's massing with its lower surrounding context.

LEGEND

- Up to 96'
- Up to 84'
- Up to 72'
- Up to 60'
- Up to 48'
- Up to 36'
- 1 Floor



01 STARTING BLOCK



02 CHAMFER AND CUTS



03 STEP DOWN HEIGHTS



04 PUSH / PULL FAÇADES



05 FAÇADE ARTICULATION



06 FINAL RESULT

Block 6 example

Massing and façade breakdown diagram

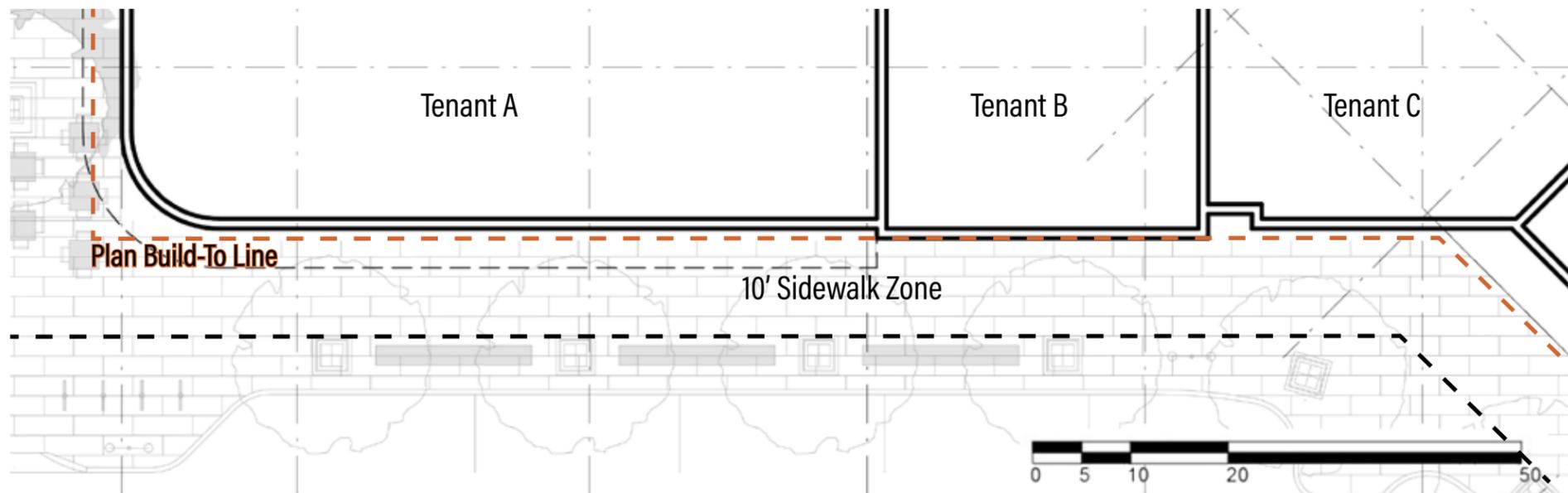
Diagram showing progress from initial massing block to fully articulated design with high level of variation in façade volumes, heights, composition, and individual façades.

3.2.C. Base consistency

Promote an intuitive, cohesive, and continuous sidewalk environment by maintaining massing consistency along building bases with strategies such as “holding” the build-to line at the sidewalk edge around a high percentage of a building’s public perimeter and providing a taller floor-to-floor height at the ground floor than upper floors. Limited and purposeful deviation from an otherwise consistently held build-to line to provide relief, hierarchical moments, or wayfinding focus are desirable.



Building 4 — North
Main Street elevation



Building 4 — North
Main street plan





3.3 | Façade articulation

City's goal statement

Façade articulation strategies should reinforce the qualities of a human-scaled environment by providing visual interest in ways that create both harmony as well as moments of hierarchical importance.

The following guidelines address block structure:

- A. Diversity and human scale;
- B. Hierarchy of articulation;
- C. Emphasis;; and
- D. Fenestration.

3.3.A. Diversity and human scale

Use a variety of compositional techniques and architectural elements to establish an organized façade rhythm which also promotes visual diversity and a human-scaled environment.



KEY PLAN



Building 3 — North

Representative elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Cladding groups are clearly defined at base and include more natural, tactile textures
- ② Façade rhythm clearly denotes living and bedrooms, easier to perceive individual units
- ③ Human scale accents, such as Juliette balconies and canopies
- ④ Façade step backs and roof decks to allow for activation of façade above street level



Building 12 – West Pettee Lane elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Residential entry with projecting canopy
- ② Inset balcony to establish human scale above grade
- ③ Major massing move to imply unit demise on exterior
- ④ Minor massing move to break up long façade sections
- ⑤ Setback at top floor to reduce perceived height

3.3.B Hierarchy of articulation

Establish a hierarchy of articulation that corresponds to the relative importance of streets and public spaces. Façades along primary streets should present a higher level of articulation. While the highest level of articulation is expected on the hierarchically most important frontages and pedestrian environments such as streets and parks, this should not translate to poorer quality facades for secondary and tertiary streets in terms of overall design, ground level materials, articulation, or detailing.



Building 4 – North Main Street elevation

Representative example of the project’s incorporation of the guideline in architectural design.

- 1 Height: Six (6) stories
- 2 Primary material: Curtain wall with accent panels
- 3 Articulation: Five (5) floors of regularly spaced inset balconies
- 4 Base condition: Highly diversified

Building 4 – West Petee Lane elevation

Representative example of the project’s incorporation of the guideline in architectural design.

- 1 Height: Four (4) stories
- 2 Primary material: Masonry and punched windows
- 3 Articulation: Infrequent insets up to a set-back fourth floor
- 4 Base condition: Continuous



Building 6A — South Main Street elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Façades along Main Street are highly articulated with several 'demise line' breaks and cladding group changes
- ② Retail base is at its most articulated
- ③ Window size, type, and format changes often along face of street
- ④ Clearly defined vertical elements help direct pedestrian to main features like building entries

Building 6B — North Charlemont Road elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Cladding is still varied, but more 'in kind' variations (For example, different brick types instead of new cladding group)
- ② Building base is still defined through contrast material, but less variation when compared to main street base
- ③ Window size, type, and format may be more common across façade, but still have some differentiation with type
- ④ Large scale massing and cladding group breakdowns still occur but are more broadly defined.

3.3.C. Emphasis

Signal important design and programmatic elements in overall façade design (primary entries, corners, vista terminations, etc.)



Building 7 – West Representative elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Clear material changes between residential levels and retail base
- ② Multi-height façade elements at primary building entries
- ③ Contrast or unique façade treatment at special use elements such as mobility hub
- ④ Massing projections to bring emphasis down to street level and create sense of enclosure at outdoor spaces
- ⑤ Clearly defined façade rhythm to denote residential unit scale



Building 8 – South Charlemont Road elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Primary elevations
- ② Secondary elevations
- ③ Residential entry
- ④ Inset balconies
- ⑤ Projecting balconies

3.3.D Fenestration

Organize windows in patterns coordinated with overall façade design; detail windows with a level of quality that correspond to the prominence of the street or public space fronted; increase transparency and level of finish on particularly public façades and especially at sidewalk-facing ground floors.



KEY PLAN



Building 6B –South Representative elevation

Representative example of the project's incorporation of the guideline in architectural design.

- ① Punched windows widths vary between bedrooms to create rhythm across façade
- ② Larger window openings at feature areas like projecting bays and amenity areas
- ③ Extra height format window and storefront openings at base; use of panels to increase perceived size of openings
- ④ Window openings to sometimes include adjacent accent panels and projecting surroundings



Building 8 — South
Charlemont Street elevation

Representative example of the project's incorporation of the guideline in architectural design.

- 1 Irregular pattern of floor-to-ceiling glazing
- 2 Contemporary punched windows grouped vertically
- 3 Traditional punched windows organized in a regular pattern set back from street
- 4 Storefront



Building 8 — East
Needham Street elevation

Representative example of the project's incorporation of the guideline in architectural design.

- 1 Absence of irregular window patterns
- 2 Contemporary punched windows grouped vertically
- 3 Traditional punched windows meet the street
- 4 Storefront



Building 5 — East Tower Road elevation

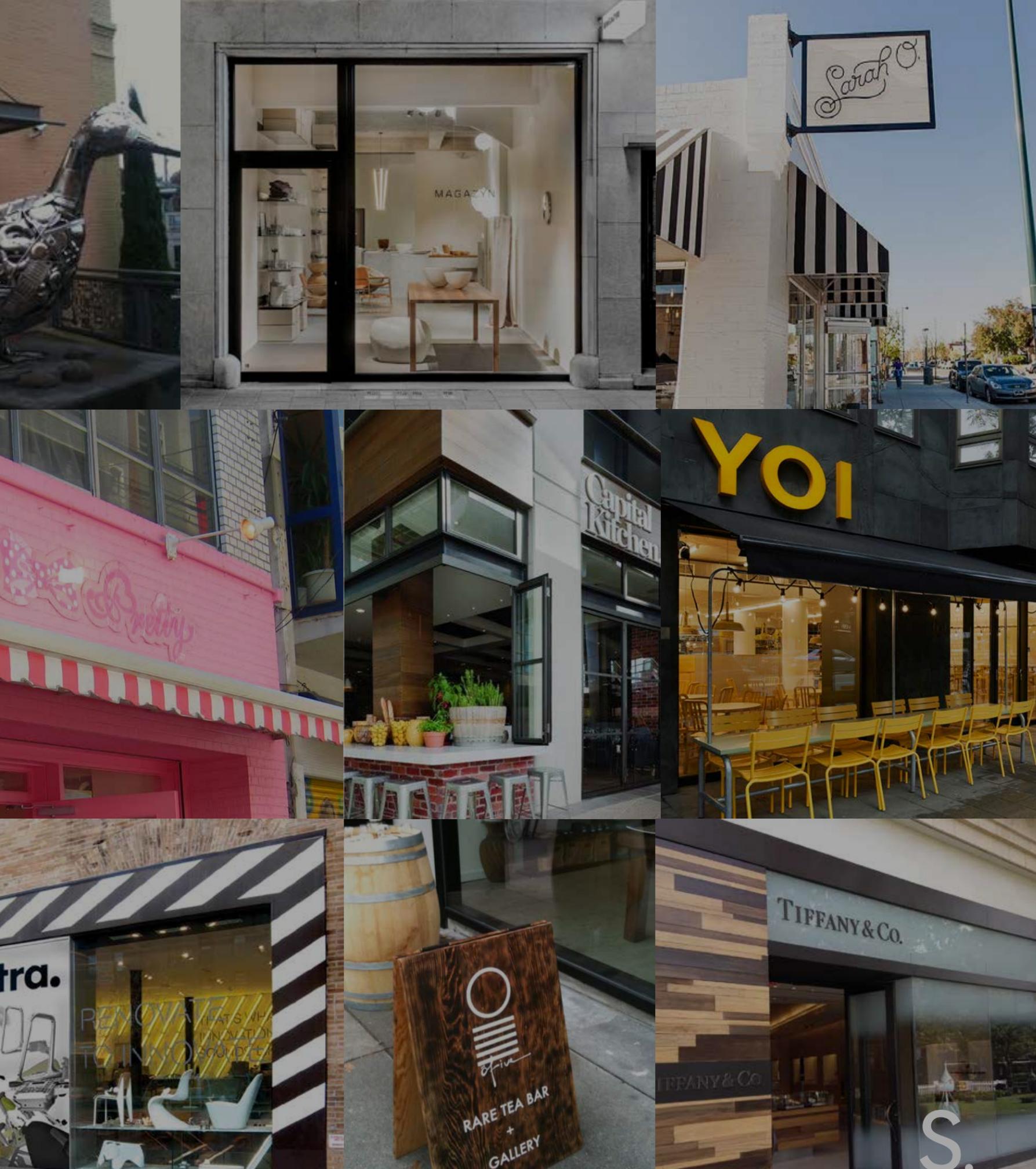
Representative example of the project's incorporation of the guideline in architectural design.

- ① Curtain wall
- ② Contemporary punched windows of various sizes
- ③ 3-floor inset grouping of contemporary windows
- ④ Storefront

Building 5 — North

Representative example of the project's incorporation of the guideline in architectural design.

- ① Curtain wall
- ② Contemporary punched windows of consistent size
- ③ **Absence of multi-floor window grouping*
- ④ Storefront



3.4 | Ground level design

City's goal statement

In mixed-use environments, an active and engaging ground level is essential for defining a lively pedestrian streetscape.

The following guidelines address block structure:

A. Storefronts;

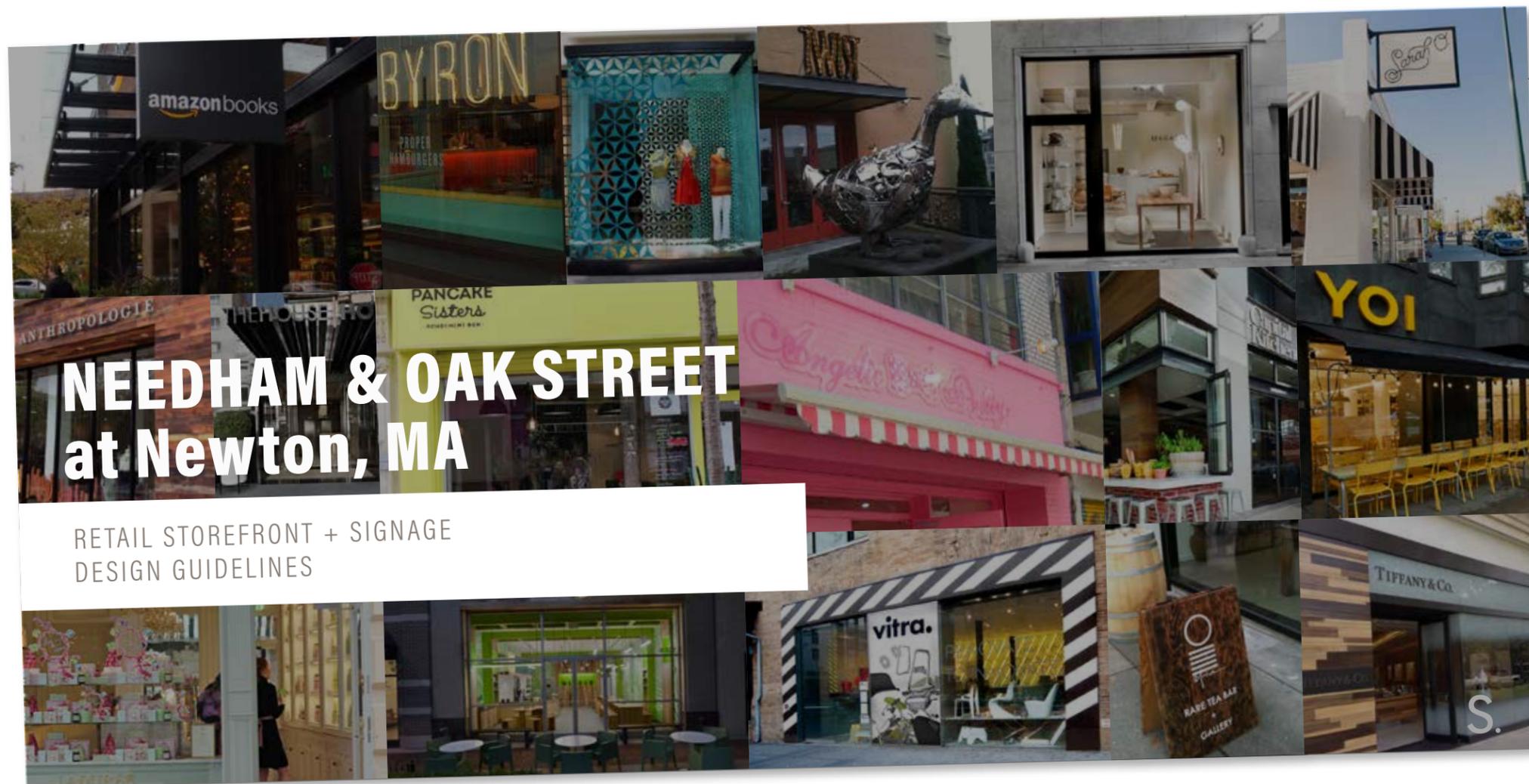
- i. Overview
- ii. Storefront design criteria (general)
- iii. Display and cafe zones
- iv. Storefront zone definitions
- v. Materials and colors (general)
- vi. Storefront components - criteria
- vii. Retail signage and lighting (general)
- viii. Retail signage components - criteria
- ix. Retail canopies and awnings - criteria;

B. Residential front doors.

3.4.A. Storefronts

Retail and other active use façades should engage pedestrians and promote walkability by, for example, emphasizing transparency and visual/physical access, creating design variety from one storefront to the next, and promoting creative and dynamic approaches to outdoor seating, interior/exterior merchandising, and exterior pedestrian-scale signage.

The Northland development has elaborated on the city's storefronts guideline text with the following "Retail storefront + signage design guidelines" insert which includes highly detailed regulating guidance to govern tenants during the project's initial lease-up as well as ongoing re-leasing



OVERVIEW

The essence of any successful place is that people enjoy being there and want to come back again and again. This experience is based on a combination of physical and emotional elements that they encounter. Needham and Oak Street is intended to attract a noteworthy mix of local and national retailers & eateries. As business is attracted and the area will continue to bring in noteworthy local and appealing retailers. The commercial environment will contribute to vibrancy for the entire district through an engaging blend of storefront and retail identity expression, along with a highly engaging streetscape. This guide provides standards for high-quality and diverse tenant work — especially that interfacing with the public realm.

RETAIL STOREFRONT CRITERIA

OVERVIEW

Retail storefronts have evolved from their utilitarian beginnings to become a personification and extension of the retailer's brand. To this end, storefronts and signage should instantly project the nature of the retailer and its store to the streetscape and to passersby. The development of a comprehensive storefront design is an excellent opportunity for shop owners to use their creative license to echo their brand and style to draw customers in from the street. Regardless of whether a retailer is opening their first or hundred-and-first store, each location should be unique and offer something back to the neighborhood in which it is located.

Individual retail expression at Needham and Oak Street will vary by Tenant, in accordance with this Tenant Design Criteria. Tenants are encouraged to express their storefronts creatively by using these guidelines to propose custom storefront designs and identity graphics. Since the intent is to allow each Tenant to have the flexibility to design a strategy that communicates its brand effectively, these guidelines (outlining Retail Storefront and Signage Criteria) have been developed to provide that standards through various flexible parameters.

Each storefront may feature a primary element that drives the overall design. Primary elements may include interesting signage, unique materials, or even a distinguishable door. The primary element should be reinforced with secondary storefront elements that support the overall design and Tenant brand. These secondary elements include interesting, thoughtful, and unique details; dynamic window displays; and a welcoming entry.

VISION

The retail storefront should respond to the unique context of the architecture it inhabits (either by harmony or contrast.) A well-executed storefront is designed to keep the overall composition in mind at all times. This means an integrated approach to storefront & signage design to creatively express the brand in its unique urban context.

TENANT STOREFRONT CONTEXT

Retail storefronts should respond to the architectural style of the base building (though not necessarily emulate it. Ample opportunity for brand expression - (and some of the interior palette presented externally) are to be encouraged. All storefronts are to be contained within the envelopes identified in this document, which vary from building to building, formed by fixed elements of the base building.

ILLUMINATION

Storefronts design should take both day and nighttime visibility into account to enhance recognition. Storefronts may incorporate external lighting as design elements in addition to illumination from within the store. Tenants are encouraged to create well-lit interiors and window displays that enhance visibility from the street and sidewalk. All methods of attachment for exterior lighting must either be concealed from view or designed as an integrated detail. Electrical hardware, wiring, or equipment such as transformers, cabinets, etc., shall be concealed inside Tenant spaces.

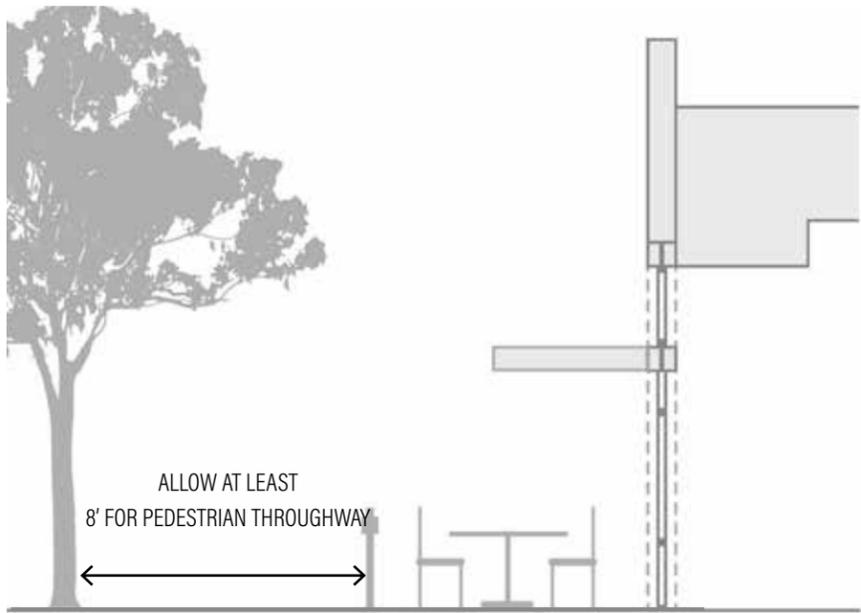
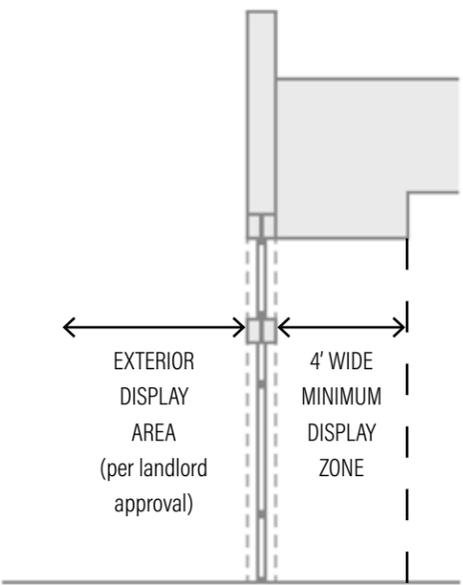
MATERIALS, METHODS, AND DESIGN

Quality materials that are durable and natural are encouraged for all Tenant storefronts. These include high-quality metal finishes, wood, stone, and masonry, although other materials such as metal panels, plaster or stucco, terra cotta, tile, and high-quality acrylics may be permitted. All methods of attachment to the base building must either be concealed from view or designed as an integrated detail of the storefront design. The storefronts must be structurally sound and electrically supported from within the Tenant space and shall not penetrate the building shell except in areas designated by the landlord. Signage letters and graphics should incorporate texture, depth, sculptural, and dimensional qualities. Creating a consistency in unique, high-quality graphics that complement the overall storefront design and Tenant brand is favorable.

NOTE: All storefronts, signs, and Tenant graphics are subject to the approval of the landlord prior to construction. Drawings and specifications for all aspects of the storefront design, including lighting and signage, are to be reviewed and approved by the landlord prior to application for jurisdictional approvals and building permits. Tenants are responsible for all necessary approvals and permits.



DISPLAY & CAFE ZONES



DISPLAY ZONE

The merchandising zone is the area at the front of the store immediately behind the storefront windows. It extends a minimum of four feet (4'-0") into the store.

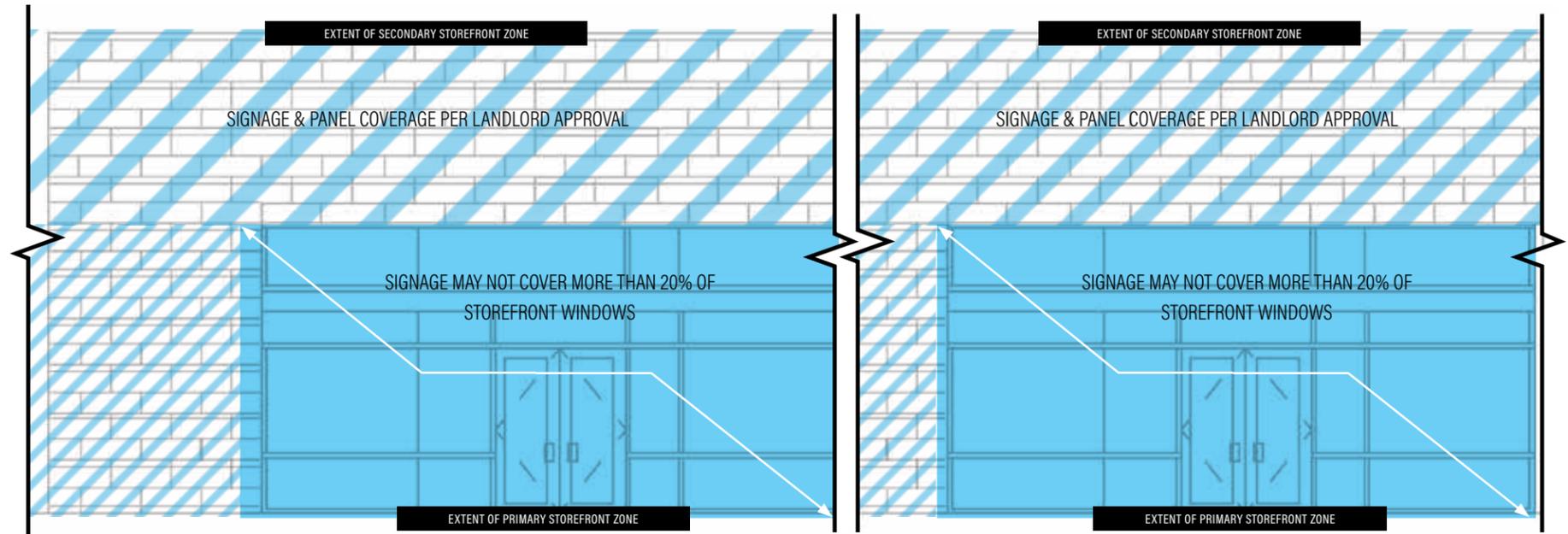
- Storefront displays should well lit at all times and should be made of high-quality materials that are appropriate and relevant to the store's best merchandise.
- The use of movable sidewalk displays is permitted per landlord approval provided that at least eight feet (8'-0") of clear pedestrian throughway is allowed.
- Banners hung behind the glass should be well lit and should not cover more than twenty percent (30%) of the storefront windows.

CAFE ZONE

- The cafe zone is the area on the sidewalk directly in front of the building face. It extends a minimum of three feet (3'-0") to a maximum of ten feet (10'-0"), depending on sidewalk width.
- Cafe zones must allow at least eight feet (8'-0") of clear pedestrian throughway between the cafe zone and the planting zone.
- Fencing no taller than three feet (3'-0") can be used to separate the cafe zone from the pedestrian throughway. Fencing may be a municipal requirement, in the case of serving of alcoholic beverages in some locations. Generally, creative barriers (in lieu of fencing) are preferred - such as continuous movable planters.



STOREFRONT ZONE DEFINITIONS



IN GENERAL

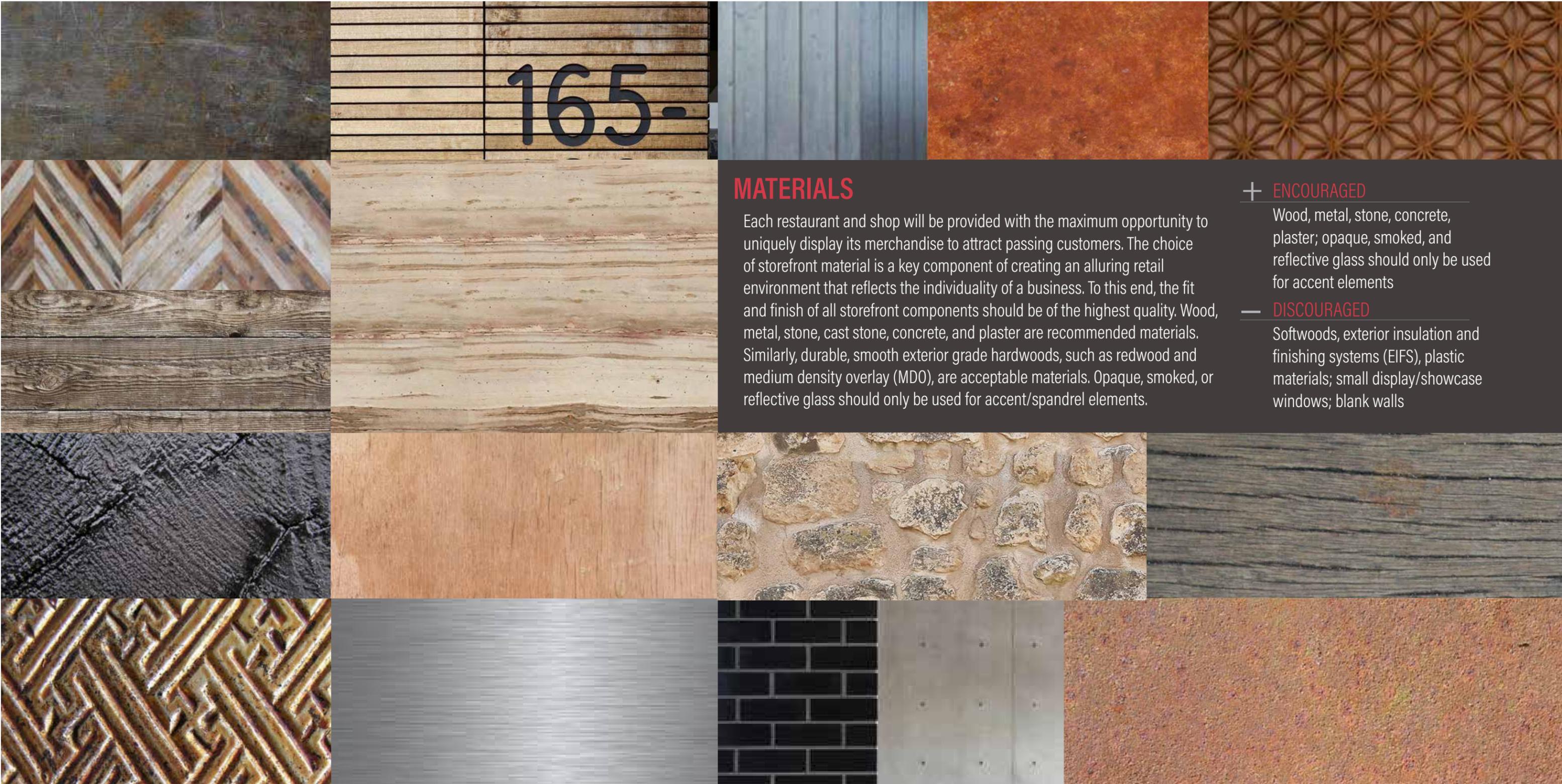
- With the exception of certain types of signage and overhead shading options, all storefront elements must be contained within the envelope shown in the diagrams above.
- Tenants are encouraged to enhance the public space at their storefronts with benches, planters, flower boxes, artwork, bay windows, creative signage, awnings, banners, and merchandising displays.
- Stores that have secondary frontage facing parking or side streets should include primary identity signage and window graphics on that frontage. Blank walls or opaque or fully covered windows are not encouraged.
- The diagrams above and on following pages are intended to show the extent and character of retail storefronts and are not intended to be representative of any specific Tenants or retail categories. All images are for illustrative purposes only.

PRIMARY STOREFRONT ZONE

- Contains primary design elements, such as windows, doors, bases, canopies, and awnings with graphics and signage as outlined in this document. Signage may not cover more than twenty percent (20%) of the storefront windows.

SECONDARY STOREFRONT ZONE

- Can contain secondary design elements, such as primary identity signage, wall signage, projecting signage, wall graphics, panels, and spandrels as outlined in this document. Amount of coverage by signage and panels in this zone depends on landlord approval.
- NOTE: All secondary design elements that attach to landlord's structure may need additional engineering review and landlord approval.



MATERIALS

Each restaurant and shop will be provided with the maximum opportunity to uniquely display its merchandise to attract passing customers. The choice of storefront material is a key component of creating an alluring retail environment that reflects the individuality of a business. To this end, the fit and finish of all storefront components should be of the highest quality. Wood, metal, stone, cast stone, concrete, and plaster are recommended materials. Similarly, durable, smooth exterior grade hardwoods, such as redwood and medium density overlay (MDO), are acceptable materials. Opaque, smoked, or reflective glass should only be used for accent/spandrel elements.

- + **ENCOURAGED**
Wood, metal, stone, concrete, plaster; opaque, smoked, and reflective glass should only be used for accent elements
- **DISCOURAGED**
Softwoods, exterior insulation and finishing systems (EIFS), plastic materials; small display/showcase windows; blank walls



COLORS

Flexibility and variety in storefront colors help create exciting streetscapes, which in turn make great retail environments. Therefore, the choice of colorful materials or paint is very important. Colors should be complementary and reflect the store's unique personality. When choosing storefront colors it is important to keep the following guidelines in mind:

- Colors shall be used to tie all parts of the storefront's architecture together.
- The color scheme of the storefront should take into consideration and complement adjacent storefronts.
- The landlord will be responsible for approving all color palettes.

+ **ENCOURAGED**
Unique and cohesive color palettes

- **DISCOURAGED**
Use of too many colors on an individual storefront, conflicting color schemes on adjacent storefronts, same color on adjacent storefronts





+ ENCOURAGED

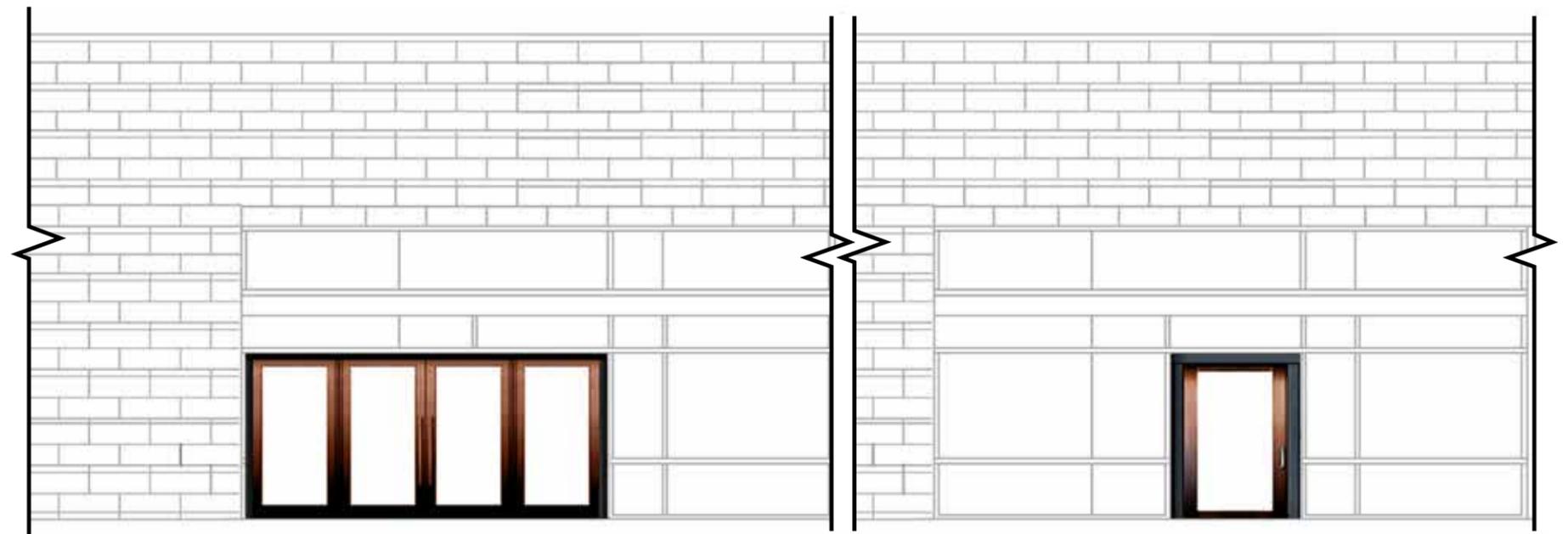
large windows, clear glass, maximum visibility, recessed doorways; opaque doors in natural materials permitted if surrounded by glazing

- DISCOURAGED

tinted glass, plexiglas



STOREFRONT DOORS



- The storefront should be designed to allow for maximum flexibility wherever possible. In ideal circumstances, a door may be located anywhere within the retail storefront zone.
- Tenant doors may be either double doors or a single door with a sidelight.
- The primary entrance should be clearly marked and side entrances should be as close as possible to the primary shopping street. Tenants with entrances facing parking or a side street are required to keep both entrances open and accessible.
- Restaurants using their door to connect with outdoor seating areas should consider double doors or a second door to ensure adequate capacity. NanaWall or glass overhead folding/rolling systems are encouraged for restaurant tenants.
- Doors with a large area of glass are preferable because they increase visibility into the store's interior, but are not required. A solid door may be used as a contrasting element.
- All doors should be compatible with, and complementary to, the overall storefront design.



+ ENCOURAGED

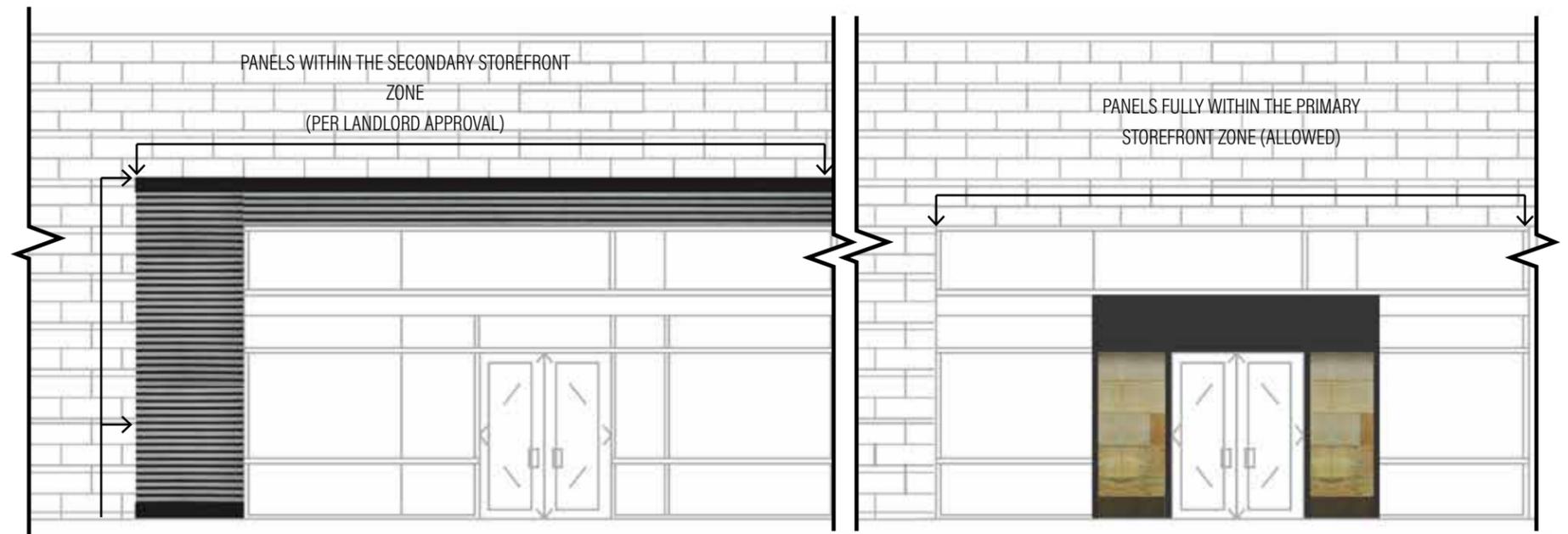
wood, metal, stone, cast stone, concrete, plaster; opaque, smoked, and reflective glass should be used only for accent elements

- DISCOURAGED

softwoods, EIFS, pressure treated lumber



STOREFRONT PANELS



- Because the retail demising varies block to block, the storefront glazing may be replaced in certain areas with a solid material or materials to accentuate entries or conceal Tenant demising walls. Vertical elements may also break up large areas of storefront glazing. Vertical storefront panels may occur at the edges of a storefront to frame the windows, or may provide a complementary material within a group of windows.
- Panels within the primary storefront zone may not cover more than twenty percent (30%) of storefront windows.
- Amount of coverage by panels within the secondary storefront zone depends on landlord approval.
- Storefront panels may be a vertical continuation of the storefront base, or may introduce contrasting or complementary materials.
- Vertical storefront panels may provide opportunities for the location of secondary storefront signage.
- All vertical storefront materials should be compatible with, and complementary to, the overall storefront design.



+ ENCOURAGED

wood, metal, glass, high-quality UV-resistant acrylics or resins

- DISCOURAGED

non-UV-resistant plexiglass and acrylics, vinyl, softwoods, EIFS, pressure treated lumber

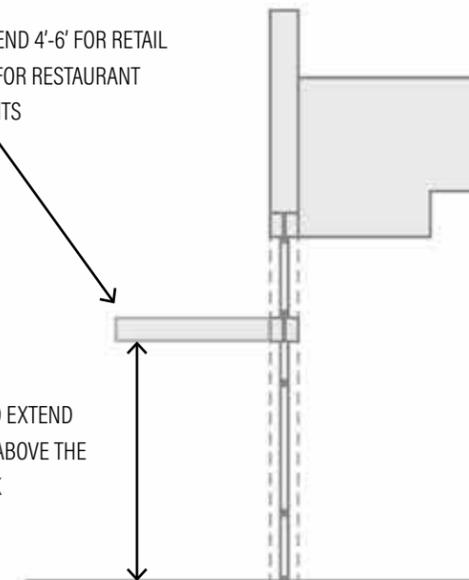


STOREFRONT CANOPIES



CANOPIES SHOULD EXTEND 4'-6' FOR RETAIL TENANTS AND 4'-10' FOR RESTAURANT TENANTS

CANOPIES SHOULD EXTEND NO LOWER THAN 9' ABOVE THE SIDEWALK



- The use of storefront canopies is encouraged; as it indicates primary retail entrances and provides shade and shelter from the elements.
- Canopies should be designed to enhance the architectural style of the storefront.
- Canopies should extend above the adjacent sidewalk to a minimum depth of four feet (4'-0") and a maximum depth of six feet (6'-0") for retail tenants and a maximum depth of ten feet (10'-0") for restaurant tenants. Canopies should be made of high-quality materials; and must be self-supported within the tenant storefront construction.
- Canopies should be mounted just above storefront or entrance opening. Canopies may extend over neutral piers but must be structurally supported and attached only within the primary storefront zone with steel cable support where applicable.
- Canopy roof materials should be lightweight, and may be transparent or translucent.
- Canopies shall be designed to accommodate water drainage away from the base-building.
- Canopies shall be designed with down-lighting in restaurant locations.



+ ENCOURAGED

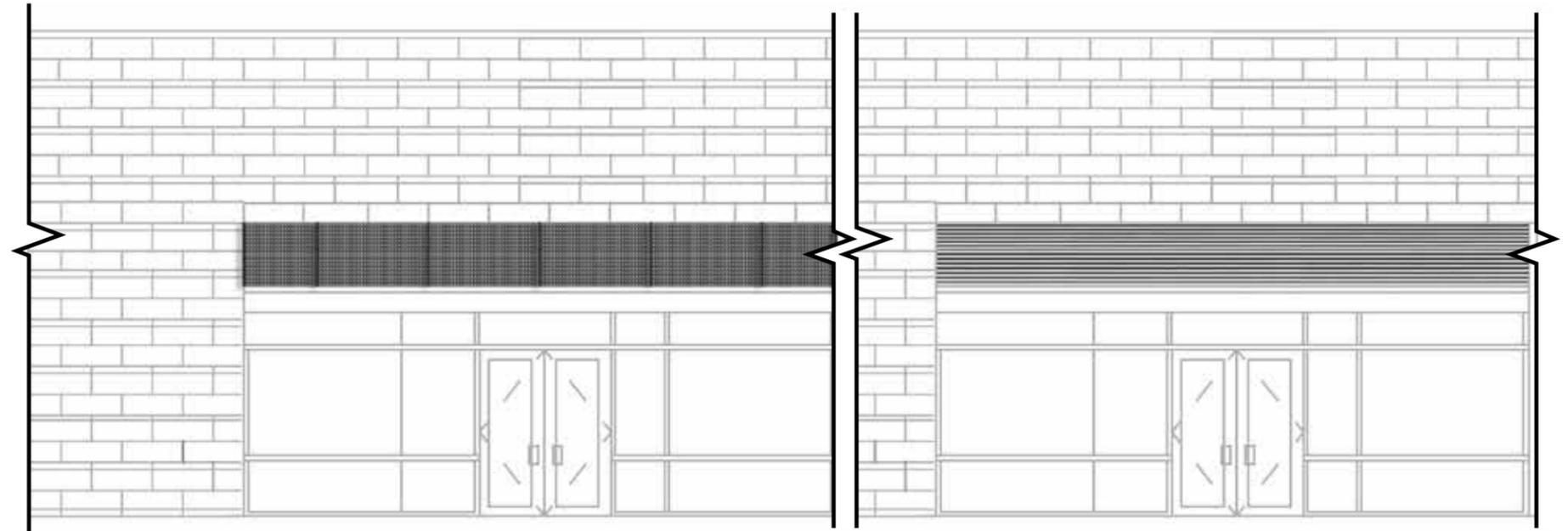
wood, metal, stone, cast stone, concrete, plaster; opaque, smoked, and reflective glass should only be used for accent elements

- DISCOURAGED

softwoods, EIFS, pressure treated lumber, heavy horizontal banding, especially between tenants



STOREFRONT SPANDRELS



- Storefront spandrels may be a solid material or materials to accentuate certain elements of the storefront or to provide a backdrop against which those elements may occur. The Tenant may choose to provide a canopy in conjunction with the design of a storefront spandrel.
- The storefront spandrel is considered to be the entirety of the storefront above the horizontal mullion at the height of the door, approximately ten feet (10'-0") to fifteen feet (15'-0") above the finished floor.
- Storefront spandrels may be a horizontal continuation of the vertical storefront panels, or may introduce contrasting or complementary materials. The application of a decorative grille or additional mullions to the existing spandrel glazing is permissible.
- Storefront spandrels may provide the background for the location of primary storefront signage and help provide color contrast therein. A Tenant may also choose to provide a blade sign projecting from a spandrel as a component of their overall signage.
- All storefront spandrel materials should be compatible with, and complementary to, the overall storefront design.
- An additional application for a storefront spandrel is to conceal an MEP exhaust/ intake for the space in some instances. Generally, untreated exhaust air from grease hoods will not be permitted to exhaust along public sidewalk areas.



+ ENCOURAGED

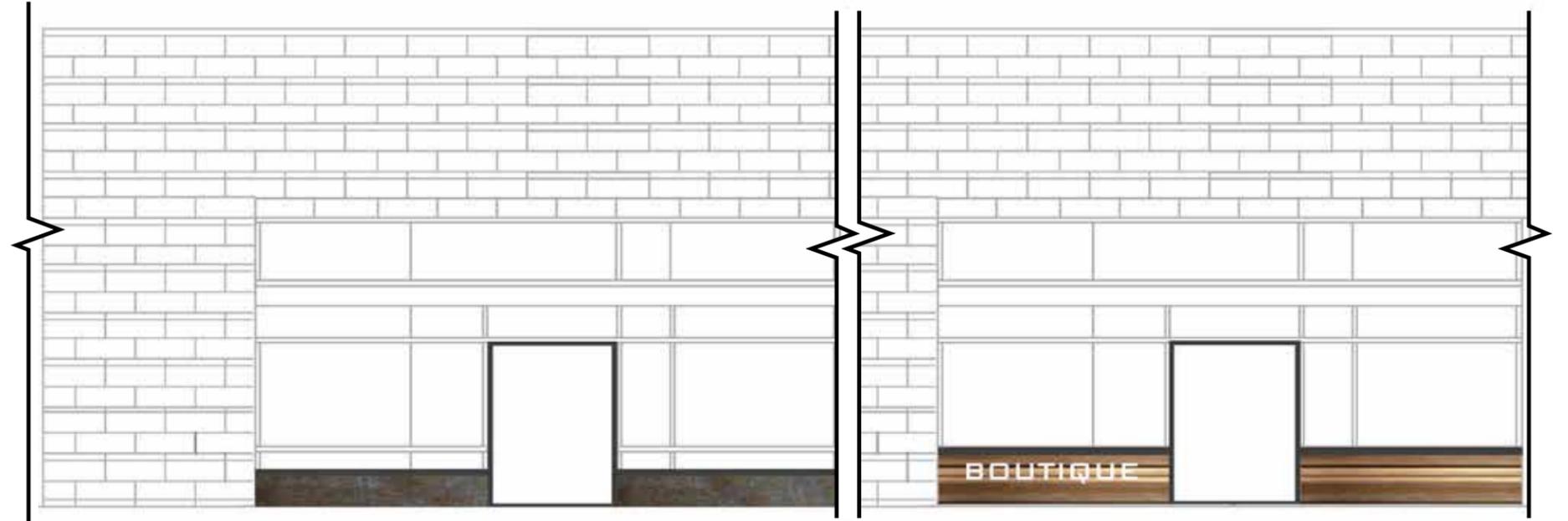
wood, metal, stone, cast stone, glazed tile, concrete, plaster; opaque, smoked, and reflective glass should only be used for accents

- DISCOURAGED

softwoods, EIFS, pressure treated lumber



STOREFRONT BASES



- Because large expanses of window glazing (i.e. floor-to-ceiling glass) are not ideal for all types of retail, Tenants may choose to design their storefront with another type of material or materials.
- The storefront base is considered to be the entirety of the storefront below the lowest horizontal mullion, to a maximum of thirty-six inches (36") above the finished floor.
- The storefront base may either continue storefront materials below the windows or introduce a complementary material or materials.
- The storefront base may introduce a small change in plane from the window glazing. Both projections and reveals are acceptable, but plane changes should be consistent within the same storefront.
- All storefront base materials should be compatible with, and complementary to, the overall storefront design.

RETAIL SIGNAGE CRITERIA

Individual retail Tenant signs will vary in size and color to add diversity and visual interest at the pedestrian scale. Signage should be legible and clearly communicate a retailer's brand; while coordinating with the surrounding storefront and architectural elements. Lighting should clearly illuminate signage during evening hours, but be mindful of glare and reflection off of adjacent surfaces.

Tenant signage guidelines

Retail Tenant signs will be evaluated by the landlord on how well the signage integrates into the architectural storefront to form an appealing configuration.

Illumination

Signage is intended to capture the customer's attention; therefore it is recommended that the design of the signs take daytime and nighttime visibility considerations into account to enhance recognition. Signs may incorporate external lighting as design elements in addition to illumination from within the store. All types of electrical hardware, wiring, or equipment such as transformers, cabinets, etc., shall be concealed inside Tenant spaces.

Materials, methods, and design

Quality materials that are durable are encouraged for all Tenant signs. These include wood, metal panels, tile, plaster or stucco, and high-quality acrylics. All methods of attachment must be concealed from view or designed as an integrated detail to the signs. The signs must be structurally and electrically supported through the Tenant storefront and shall not penetrate the building shell, except in areas designated by the landlord.

Letters and graphics should incorporate texture, depth, sculptural, and dimensional qualities. Tenants are encouraged to be creative and design an overall signage package that is of high-quality and unique to this location. Hours of operation and intensity of illumination for all signage will be determined by the landlord.

NOTE: All signs, graphics, and lettering are subject to the approval of the landlord prior to seeking sign permits in accordance with local zoning ordinances. Drawings and specifications for all applications of lighting and signage are to be submitted in writing to the landlord.

General signage criteria

Recommendations

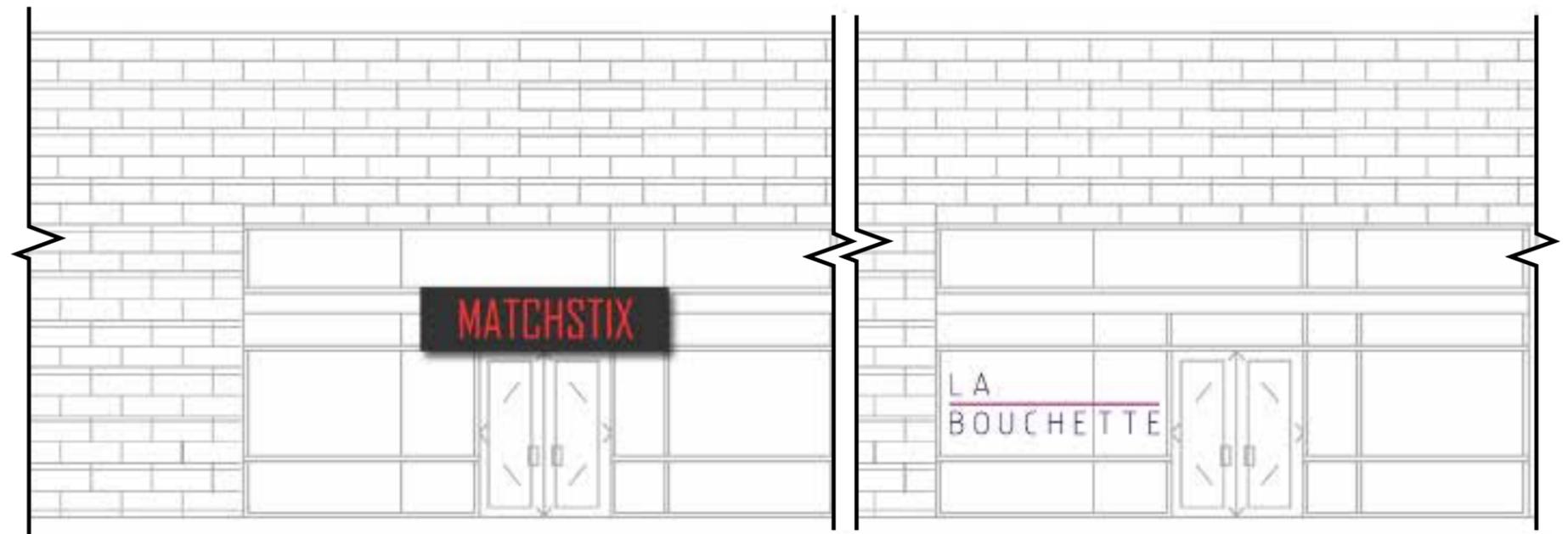
- Storefronts should be designed to allow for maximum flexibility in the location and number of tenant signs. In ideal circumstances, a sign may be located anywhere within the retail storefront zone or other areas designated by the landlord.
- Retail Tenants may use their allowed signage on one sign or a combination of signs the total area of which is less than or equal to their allowed signage area. Signage may not cover more than twenty percent (20%) of the storefront windows in the primary storefront zone. But, additional allowances for signage in the secondary storefront zone will be provided.
- To maximize visibility, primary Tenant identity signs should be located within the upper portion of the Tenant storefront and near the primary Tenant entrance. Secondary Tenant signage may be located anywhere within the Tenant storefront.
- All Tenant signage should be compatible with, and complementary to, the overall storefront design.

Restrictions on tenant signage

- Signs may be attached only to storefronts and areas of the base building approved by the landlord.
- Signs utilizing paper or cardboard behind storefront glazing will not be permitted.
- A sign must not be shaped like a traffic sign or traffic signal, be illuminated in a pattern or lighting combination that resembles a traffic signal, use wording similar to traffic signals, or otherwise interfere with traffic safety.
- A sign must not contain or be illuminated by flashing, revolving, or intermittent lights, or lights of changing intensity.
- A sign must not be wind activated or have moving parts.
- Signs that have characters which are changed manually or electronically must not be changed more than once each day. This includes a sign that gives the appearance or illusion of movement for a written or printed message.



PRIMARY IDENTITY SIGNAGE



PRIMARY STOREFRONT ZONE

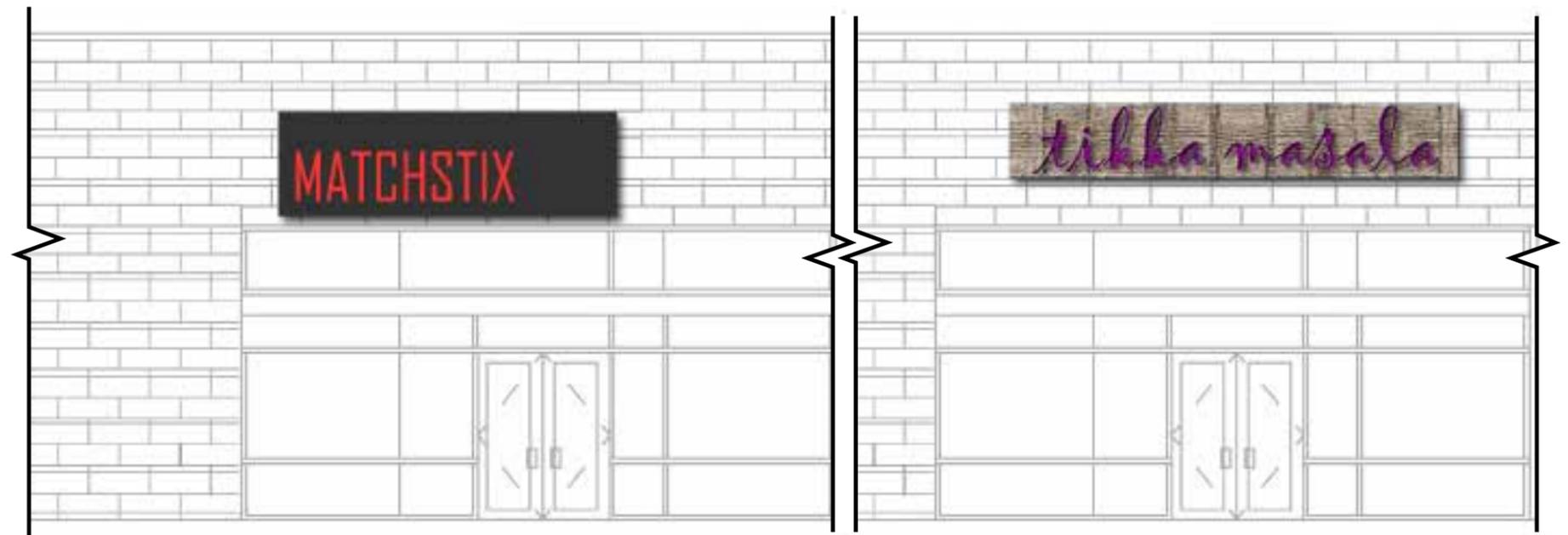
Primary identity signage may consist of individual letters or a panel with graphics and letters. These signs will typically be the primary identification for retail Tenants; and should be mounted on the upper portion of the storefront within the primary or secondary (see next page) storefront zones or behind the glass. They should be easily read, of appropriate size and typeface, and include the store's name and/or logo. They should be made of high-quality materials that can withstand all weather conditions.

- Identity signs may consist of the Tenant name, logo, tagline, and other retail-related graphics and/or information.

- Signs in the primary storefront zone shall not project more than twelve inches (12") from the face of the building or storefront.
- Text should be at least ten inches (10") high to insure legibility, but no more than twenty-four to thirty inches (24"-30") tall based on lighting criteria (see Signage Lighting section).
- Signs may extend beyond the storefront bay to which they are attached over cornices or neutral piers, but shall not extend into an adjoining retail Tenant frontage.
- Signs may include hooded or goose-necked lights, provided they illuminate only the intended sign.
- Installation of signs is permitted only within the storefront zone or areas otherwise designated by the landlord.



PRIMARY IDENTITY SIGNAGE



SECONDARY STOREFRONT ZONE

Primary identity signage may consist of individual letters or a panel with graphics and letters. These signs will typically be the primary identification for retail Tenants at Stonebridge and should be mounted on the upper portion of the storefront within the primary (see previous page) or secondary storefront zones. They should be easily read, of appropriate size and typeface, and include the store's name and/or logo. They should be made of high-quality materials that can withstand all weather conditions.

- Identity signs may consist of the Tenant name, logo, tagline, and other retail-related graphics and/or information.
- Signs within the secondary storefront zone shall not project more than twelve inches (12") from the face of the building or storefront.

- Text should be at least ten inches (10") high to insure legibility, but no more than twenty-four to thirty inches (24"-30") tall based on lighting criteria (see Signage Lighting section).
- Sign width shall not extend beyond seventy-five percent (75%) of the primary storefront width.
- Signs may extend beyond the storefront bay to which they are attached over cornices or neutral piers, but shall not extend into an adjoining retail Tenant frontage.
- Signs may include hooded or goose-necked lights, provided they illuminate only the intended sign.
- Installation of signs within the secondary storefront requires special review and permission by the landlord.



SIGNAGE LIGHTING



INTERNALLY ILLUMINATED CHANNEL LETTERS

- Generally discouraged but can be used with landlord approval
- Maximum letter height is twenty-four inches (24")
- Letter depth is four to six inches (4"-6")



OPEN CHANNEL LETTERS WITH LINEAR LIGHTING

- Maximum letter height is twenty-four inches (24")
- Letter depth is four to six inches (4"-6")



FRONT ILLUMINATED LETTERS OR PLACARDS

- Dimensional channel letters are preferred if a placard is used
- Maximum letter height is twenty-four inches (24")
- Letter depth is four to six inches (4"-6")



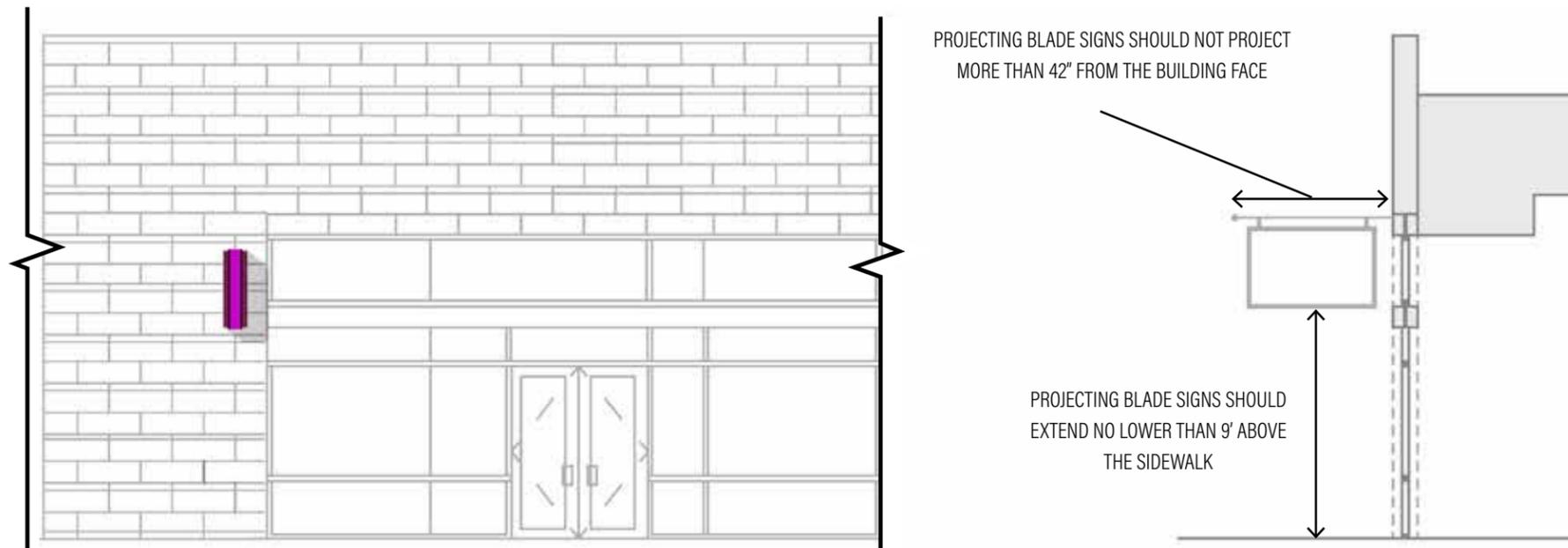
REVERSE CHANNEL LETTERS (HALO)

- Maximum letter height is thirty inches (30")
- Letter depth is four to six inches (4"-6")

NOTE: Large retail stores over ten-thousand square feet (10,000 sf) may be permitted larger lettering heights for all of these signage types per landlord approval.



PROJECTING BLADE SIGNAGE



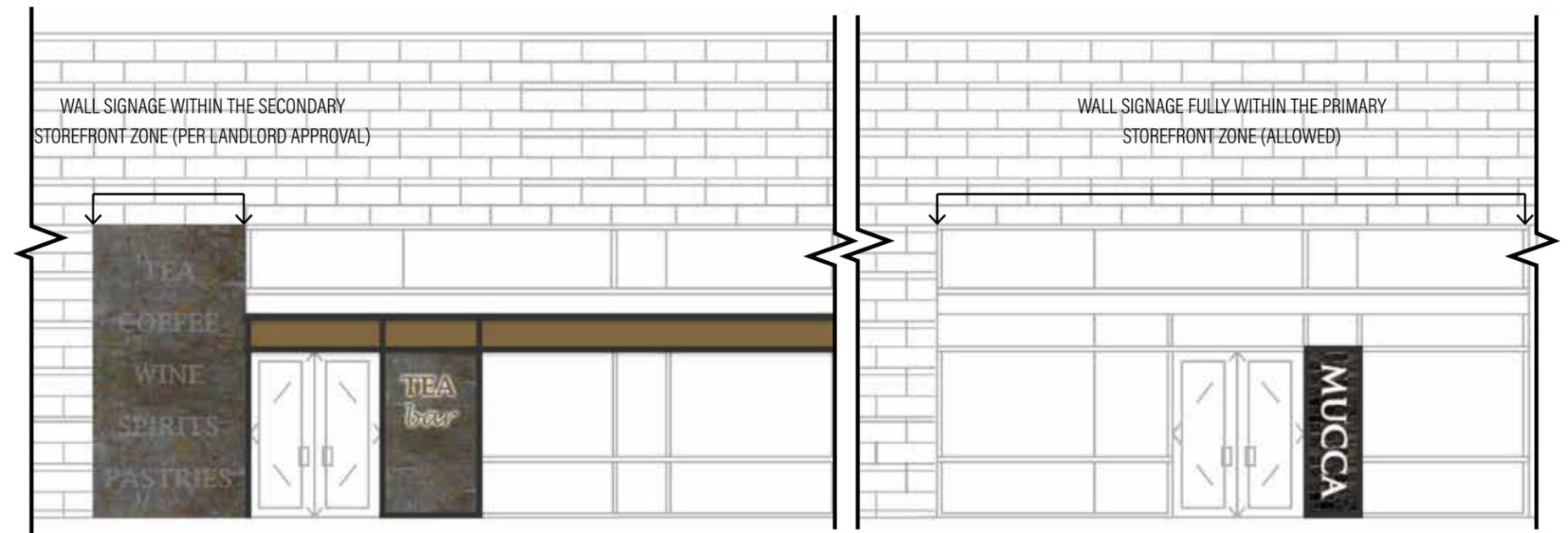
Projecting blade signs are affixed perpendicularly to the storefront and are highly visible to pedestrians. These signs are typically a secondary form of identification for a retail Tenant, but in some cases they may be the primary identity sign. They should be easily read, of appropriate size, and can be either text or graphically focused. They should be made of high-quality materials that can withstand all weather conditions.

- Projecting signs may consist of the Tenant name, logo, tagline, and other retail-related graphics and/or information.
- The maximum allowable size for any blade sign is twenty-five square feet (25 sf) with exceptions for restaurants and retailers with over ten thousand square feet (10,000 sf) in leasable area.

- Blade signs shall not project more than forty-two inches (42") from the face of the building or storefront and must maintain a minimum distance of nine feet (9') above the sidewalk.
- Text should be large enough to insure legibility, but no more than thirty inches (18") tall.
- Blade signs may include hooded lights, provided they illuminate only the intended sign and do not project more than an additional six inches (6").
- Installation of blade signs is permitted within the primary storefront zone or the secondary storefront zone with landlord approval.



WALL SIGNAGE

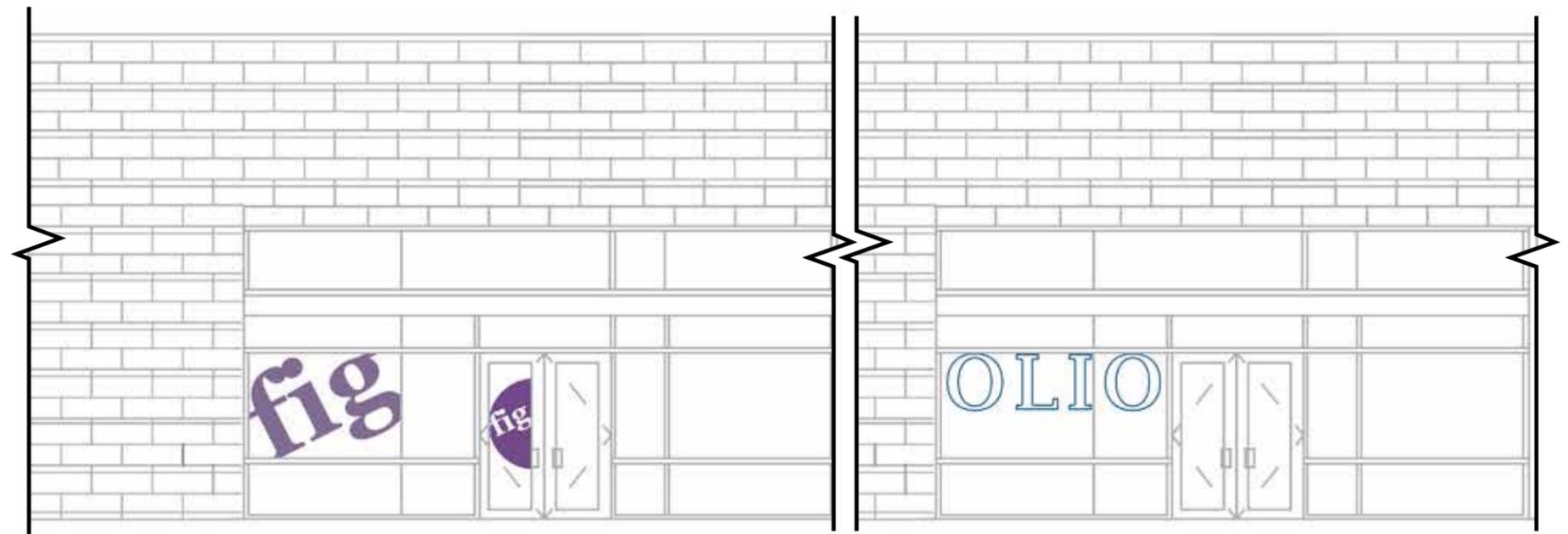


Wall signage may consist of individual letters or a panel with graphics and letters. These signs will typically be a secondary means of identification for retail Tenants. They should be easily read, of appropriate size and typeface, and include the store's name and/or logo. They should be made of high-quality materials that can withstand all weather conditions.

- Installation of wall signs is permitted only within the primary storefront zone or the secondary storefront zone with landlord approval.
- Wall signs may consist of the Tenant name, logo, tagline, and other retail-related graphics and/or information. Menu boards will not count as signage.
- The maximum allowable size for any wall-mounted sign panel is one hundred square feet (100 sf).
- Wall signs shall not project more than twelve inches (12") from the face of the building or storefront.
- Text should be at least six inches (6") high to insure legibility, but no more than thirty inches (30") tall.



WINDOW GRAPHICS/ SIGNAGE



Window signs are graphics that are painted or professionally adhered directly to the interior of the storefront glazing. The use of these signs is effective in conveying basic information about the store's operation. Suggested fabrication materials include vinyl cut by computer, silk screening, painted graphics, and gold or silver leaf. Storefront graphics should complement the overall storefront design and not overtake it.

- Window signs may consist of Tenant information such as the Tenant name and/or the Tenant logo or creative messaging for the offering/ experience within the space.
- Most window signs are applied directly to the interior of the glass. If they are not, they should be made of high-quality materials and hung on the inside of the window. Hand-painted signage must be approved and professionally applied.
- Signs should complement the merchandise display without obscuring it. Signage may not cover more than twenty percent (20%) of a shop's windows.
- Temporary signage within Tenant storefront windows is permitted, provided that it is of high design and production quality. No paper or cardboard signs are allowed.

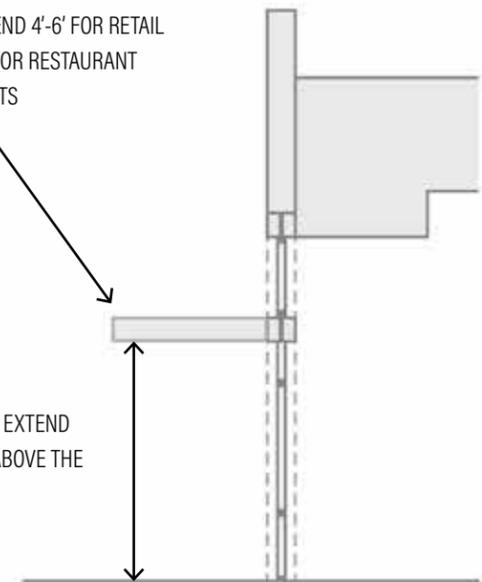


CANOPY SIGNAGE



CANOPIES SHOULD EXTEND 4'-6" FOR RETAIL TENANTS AND 4'-10" FOR RESTAURANT TENANTS

CANOPIES SHOULD EXTEND NO LOWER THAN 9' ABOVE THE SIDEWALK



If canopy signs are used, they should be made of the highest quality materials and be designed to withstand all weather conditions. Text must be of a size and color that provides sufficient contrast with other storefront design elements to ensure readability. These signs must be permanently affixed to the canopy and be architecturally designed and fastened. All methods of attachment must be concealed from view or designed as an integrated detail to the signs.

- The length of a canopy sign shall not exceed seventy-five percent (75%) of the overall length of the canopy. The sign may be any height provided it is structurally supported and its area is within the overall signage allowance.
- Graphic striping, patterns, or color bands on the face of a building, canopy, marquee, or architectural projection is not included when computing sign copy area.
- Text should be at least ten inches (10") high to insure legibility, but no more than twenty-four to thirty inches (24") tall.



AWNING SIGNAGE



Awnings emphasize entrances and may include part of a Tenant's image. They add interest and texture to a building facade, while simultaneously providing shade to patrons and protecting storefront displays from sun exposure. They require high-quality UV-resistant materials that do not fade quickly and require replacement.

- The copy area of awning signs must not exceed an area equal to twenty-five percent (25%) of the background area of the awning. A graphic element may exceed twenty-five percent (25%) of the awning area.
- The background colors of an awning, graphic treatment, and embellishment (e.g. striping, patterns, or valances) are not included when computing the sign area.
- Awnings of solid colors, stripes, patterns, or graphics but featuring no signage are permitted.
- Text should be at least ten inches (10") high to insure legibility, but no more than twenty-four to thirty inches (24") tall.
- Awnings must be installed within the storefront zone.
- Awnings must be made of high-quality, durable materials. Backlit vinyl awnings are prohibited.

3.4.B. Residential front doors

Where reasonably possible, ground floor units with public sidewalk frontage should include “front door” access such as via a stoop or shared porch to encourage a more active, personalized, and human scale sidewalk frontage, especially along residential streets.



KEY PLAN



Building 14 – South Oak Street elevation

Representative example of the project’s incorporation of the guideline in architectural design.

- 1 Individual front door
- 2 Entry canopy
- 3 Entry lighting
- 4 House number
- 5 Mailbox
- 6 Stoop



3.5 | Roofscape design

City's goal statement

The design of roofs should consider the visual impact on abutters, while looking for opportunities to incorporate sustainable design features and amenities.

The following guidelines address block structure:

- A. Roof design;
- B. Materials and mechanical equipment; and
- C. Sustainable rooftop features.

3.5.A. Roof design

Roof forms (ex. Flat or pitched) should relate to overall building composition and correspond to surrounding new and/or existing built context.



Roof forms

With few exceptions, the project's roofs are all flat which is in keeping with prevailing orthogonal contemporary and historic-referencing architectural compositions. Flat roofs also reflect those of adjacent commercial and mixed-use buildings along Needham Street and the historic Upper Falls village center.

Building 14

Varied Roof Heights



Building 13

Pitched Roof



Building 5b

Example of a high parapet as a guardrail at certain roof decks



3.5.B. Materials and mechanical equipment

Especially for roofs low enough to be visible by abutters, limit visual impacts with quality roofing material and by clustering and screening mechanical equipment.



Mechanical equipment organization

Mechanical equipment is generally clustered to minimize its overall footprint and positioned near the center of roofs and away from edges to reduce visibility from the public realm.

3.5.C. Sustainable rooftop features

Incorporate sustainable design features such as green roofs and solar arrays (or solar-ready design) as space and structure reasonably allow.



Preliminary / conceptual roof mapping

1. Final roof layouts subject to change during final design process;
2. All exposed roof membranes will be highly reflective;
3. Majority of all HVAC equipment will be located on high-roofs and screened; and
4. A minimum of 10' is to be maintained as a safety buffer between the parapet edge and any service area or equipment requiring regular maintenance.

LEGEND

	Potential sedum green roof
	Potential activegreen roof amenity
	Potential amenity roof deck / private terrace
	Anticipated rooftop equipment zones
	Potential skylights
	Potential solar-ready roof areas



3.6 | Materials

City's goal statement

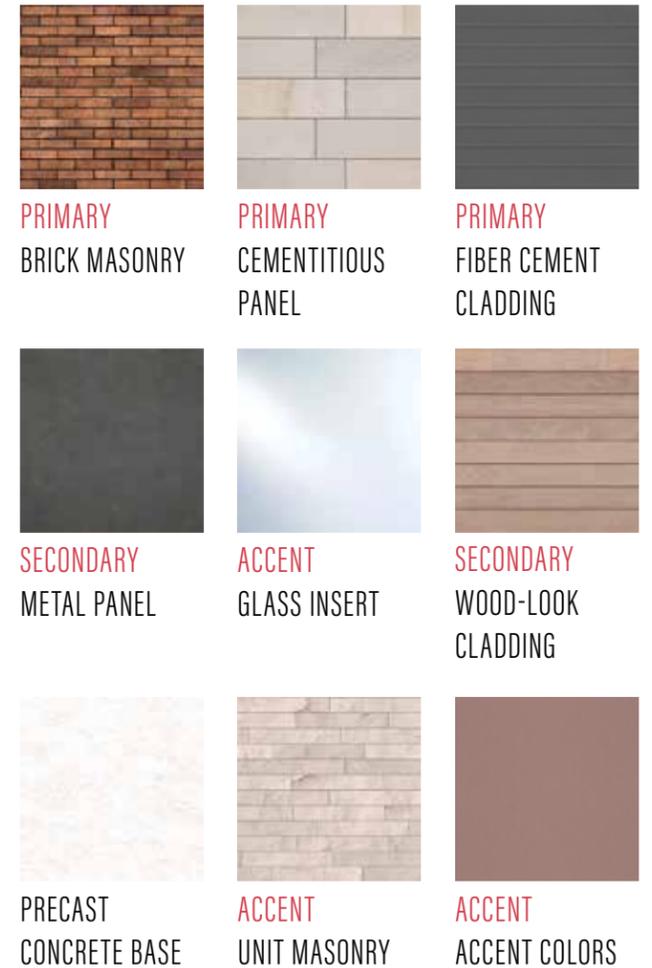
Material palette should be both contextual and forward-thinking in terms of design and sustainability.

The following guidelines address block structure:

- A. Quality; and
- B. Compatibility with surrounding built environment.

3.6.A. Quality

Materials should achieve a high standard of quality, durability, and sustainable sourcing. In general, materials used on façades facing primary streets and public spaces should be held to a higher standard; façades facing secondary streets and spaces held to a lower standard.



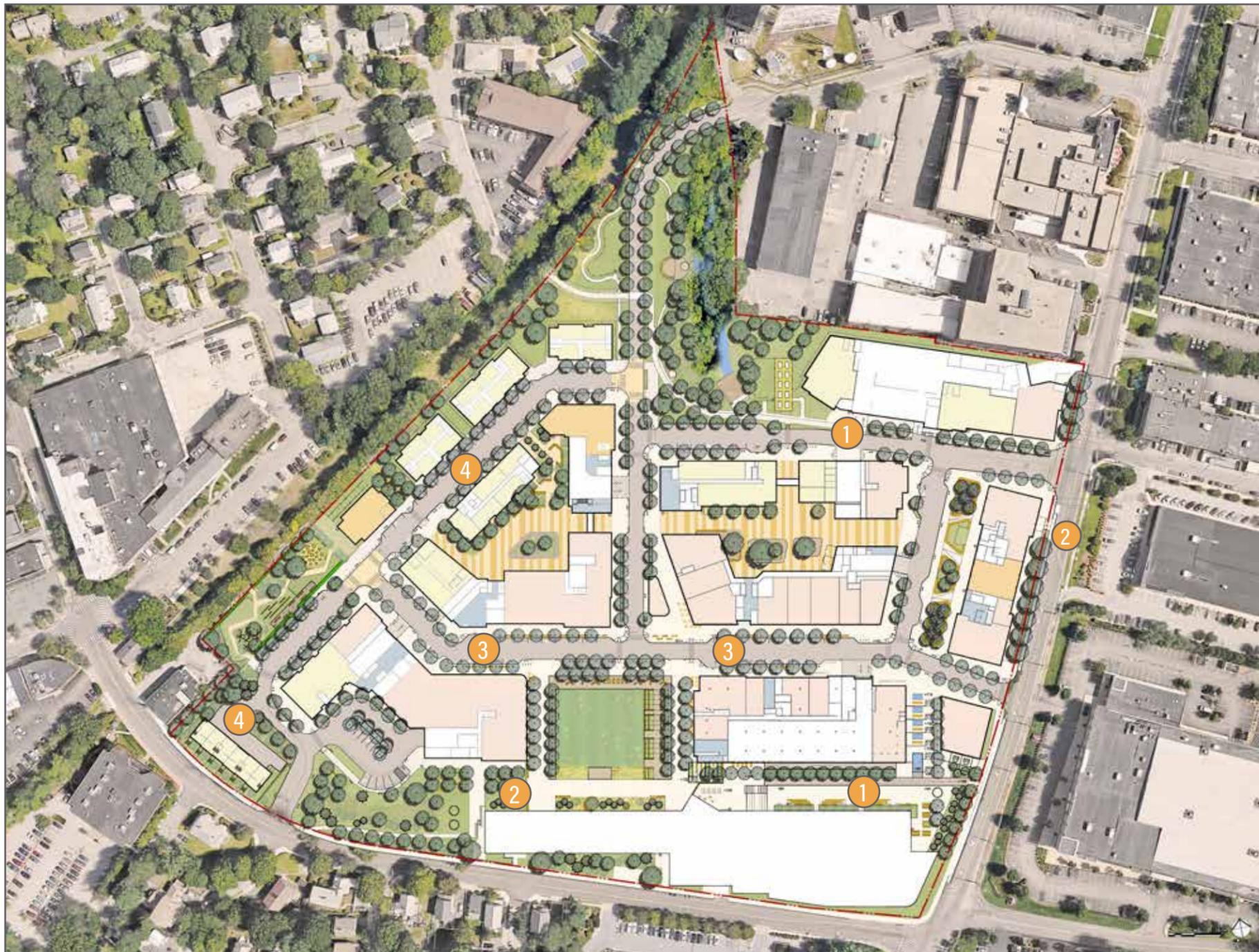
Building 3 – North Main Street elevation

Representative example of the project’s incorporation of the guideline in architectural design.

- ① Brick masonry façade with range in brick tone and masonry reveals at openings
- ② Cementitious cladding with textured finish and defined joint patterns
- ③ Fiber cement cladding includes façade relief trim and window accent elements
- ④ Metal panel with varying panel depths to accentuate shadow lines
- ⑤ Retail storefront designs to have eclectic mix of cladding with a focus on natural materials and premium textured finishes like stone and wood

3.6.B. Compatibility with surrounding built environment

A portion of the material palette should correspond to or be compatible with the surrounding built environment (especially historic and landmark structures).



1 Closer to mill building, predominant use of brick masonry, metal accents and regular façade openings



BRICK MASONRY METAL ACCENTS FIBER CEMENT SECONDARY UNIT MASONRY BASE

2 Needham Street façades to reflect commercial corridor character. Large glassy openings, metal, and cementitious claddings



METAL PANEL CEMENTITIOUS PANEL LARGER SPAN GLAZING PRECAST ACCENT

3 Main Street to incorporate varied, urban mix of cladding groups, including glass wall, metal panel, and stone masonry accents



GLASS WALLS PRECAST CLADDING STONE MASONRY ACCENTS METAL PANEL CLADDING

4 Residential cladding palette towards Oak Street and Greenway. Fiber cement cladding, punched windows, and warm tone accents



FIBER CEMENT CLADDING FIBER CEMENT PANEL BRICK MASONRY SECONDARY WARM WOOD TONE ACCENT



3.7 Building signage

City's goal statement

Signage should be thoughtfully integrated into building and public space design.

The following guidelines address block structure:

A. Sign placement.

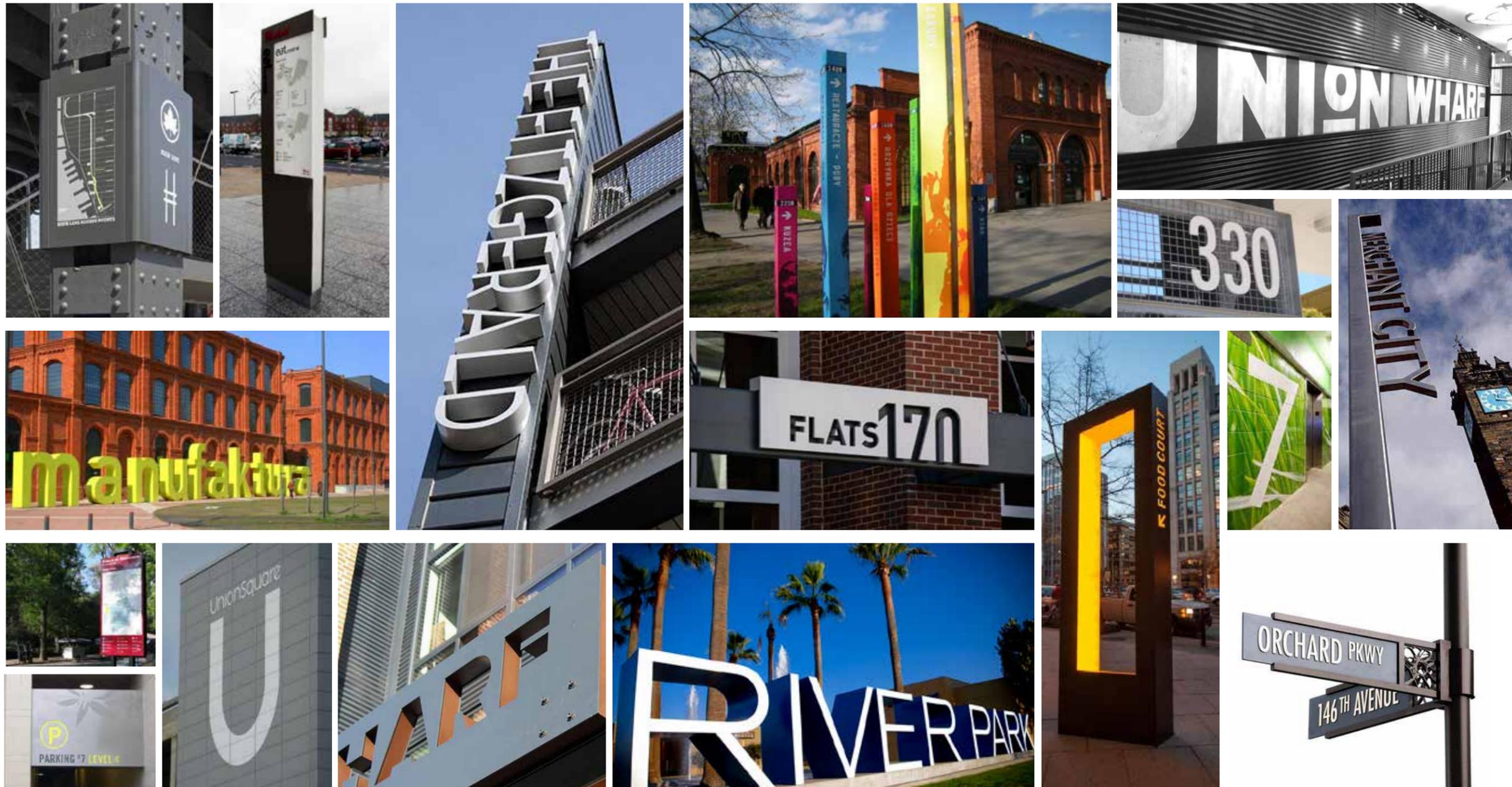


3.7.A. Sign placement

Signs should be integrated thoughtfully into architectural façade composition and in the public realm.

Sign placement overview

Pedestrian and vehicular signage precedents





3.8 | Lighting

City's goal statement

Lighting should accentuate architectural expression and enhance the quality and safety of pedestrian environments.

The following guidelines address block structure:

- A. Accentuate architectural expression;
- B. Enhance the public realm; and
- C. Managing impacts.



3.8.A. Accentuate architectural expression

Architectural lighting should be positioned and oriented to highlight important architectural motifs and details to ensure design quality and character is legible and celebrated in evening/night hours.



Representative lighting

Maximize building hierarchy

Building mounted lighting will be organized to maintain hierarchy of primary building elements and key areas of the project in the evening and nighttime hours. Examples can include parapet lighting, feature element lighting, rhythm enforcing lighting, as well as focused lighting at ground level activity centers and entries.

3.8.B. Enhance the public realm

Building and public realm lighting should help illuminate the pedestrian environment (as accent/supplement to street lighting) and reinforce a sense of sidewalk safety.



Representative lighting



Ground level activation

Lighting at various elevations may include recessed ground lighting, bench lighting, bollard lighting, and building mounted pendants to emphasize the zone of the public realm. Ground floor activity centers will be provided glazing and interior lighting elements that spill onto sidewalks to maintain activated and safe streets.

3.8.C. Managing impacts

Lighting spread and intensity should be shielded and/or attenuated to limit impacts on abutters, especially when abutting uses vary from building/development uses. Skyward light pollution should also be limited.



Representative lighting



Focused Lighting

Lighting elements will be focused primarily toward the ground plane, to provide usable lighting and minimize lighting beyond the active use areas. Canopies and projections may be used above entries to screen light spill vertically. Fixtures mounted on the buildings for the lighting of the public way will be limited in height above the walking surface. Low elevation elements such as bollards will provide primarily horizontal light to minimize upward glare. Any lighting elements utilized to accentuate building features will be designed to minimize wasted light.



3.9 | Sustainable design

City's goal statement

Building materials, systems, and technologies should embody current standards of sustainable design practice.

The following guidelines address block structure:

A. Sustainable design.



3.9.A. Sustainable design

Buildings should utilize best practices and strive to achieve LEED certifiability by adherence to guidelines for water efficiency, energy and atmosphere, materials and resources indoor environmental quality, innovation, etc.



Strategic building design goals

The Northland Newton Development will achieve success in all three areas that comprise the definition of sustainable development—development that benefits people, the planet and generates prosperity. With its holistic approach and fully integrated design and development team, The Northland Newton Development seeks to create a sustainable new neighborhood that will enhance the lives of people, protect the planet’s resources, and generate long-term prosperity to ensure the enduring success of the project.

The goals of the Northland Newton Development directly align with many of the goals set forth in the Needham Street Area Vision Plan 2018 which was recently adopted by the City of Newton. This ambitious plan provides the desired vision for future developments in the Needham Street corridor in order to create a diverse, thriving mixed-use district.

Green building and LEED

- LEED for Neighborhood Development Silver-level Certification to be pursued for entire 22-acre development
- Historic Saco-Pettee Mill Building renovation will pursue LEED Core and Shell (CS) Certification at the Silver level
- All new buildings designed to be LEED ‘Certifiable’ and will achieve significant energy and water use savings
- Selection of green/sustainable building materials create healthy indoor air quality

Climate change resiliency

- Energy efficient buildings reduce the ongoing carbon footprint of the development
- Renewable energy sources such as photovoltaics will be investigated

Building energy efficiency

- All new buildings designed to exceed LEED v3 energy use baseline by at least 15% greater efficiency

Building water efficiency

- All new buildings designed to exceed LEED v3 water use baseline by at least 30% greater water efficiency

Site design and ecological restoration

- For green roofs, native and drought-tolerant plantings reduce irrigation and save water

Heat island effect reduction

- Building roofs will be white, highly reflective and reduce air conditioning needs
- Green roofs and solar-ready design opportunities will be recommended where feasible to add more green spaces and landscaping—reducing heat absorption

Waste management

- Recycling programs will be implemented for all building tenants

Public and tenant education programs

- Site signage of sustainable and resilient strategies for community education
- Green building education for tenants



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In partnership with:

City of Newton Planning Department

City's peer reviewer

Form + Place

Developer's consultant team:

Master planning, urban design, architecture, and landscape architecture

Stantec's Urban Places

Architectural master planning, architecture

CUBE3 Studios

Landscape architecture

SOM

Saco Pettee Mill Building Repositioning

Spagnolo Gisness & Associates, Inc.

Civil/site design, traffic/transportation planning,

and historical/cultural services

Vanasse Hangen Brustlin, Inc.

Transportation planning

128 Building Council

Sustainability and wellness

Lambert Sustainability LLC

Environmental graphics and wayfinding

Selbert Perkins Design

Master utility planning and LEED consulting/ administration

AHA Consulting Engineers

Retail placemaking

Graffito SP

Retail placemaking

Streetsense

An architectural sketch of a city street scene. The drawing is done in black ink on a white background. It shows a perspective view of a street lined with multi-story buildings. The buildings have many windows and some balconies. In the foreground, there are several trees with detailed foliage. People are walking on the sidewalks, and a car is visible on the street. The overall style is a loose but detailed line drawing.

Northland Newton Design Guidelines

The Northland Newton Development