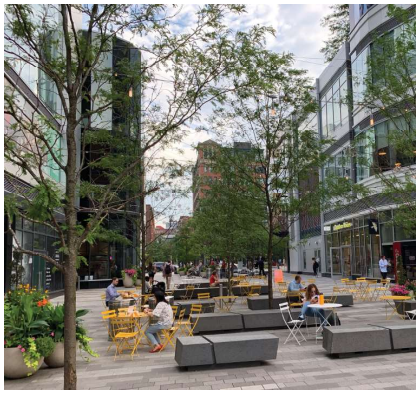
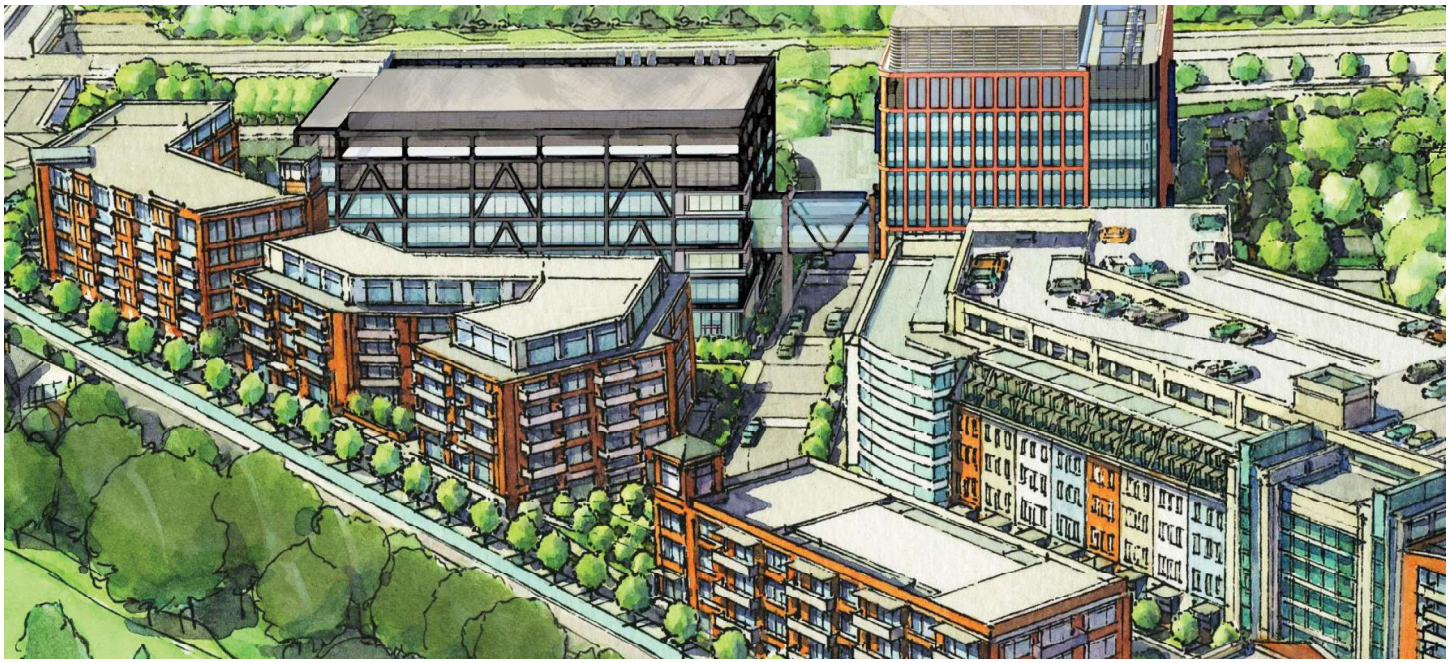


DESIGN GUIDELINES

RIVERSIDE STATION DEVELOPMENT



Prepared by the City of Newton, MA

August 2021

RIVERSIDE STATION DEVELOPMENT
DESIGN GUIDELINES

INTRODUCTION

This Design Guideline document was created by the City of Newton Planning & Development Department to provide a framework for the incremental execution of the Riverside Station development. Crafted in collaboration with the City's Urban Design On-Call consultant, Form + Place, Inc., the proponent Mark Development and the proponent's design team, these guidelines were adopted by the Newton City Council during the Special Permit approvals process. This document is intended to be a tool for both the proponent, providing a degree of design flexibility to respond to evolving development realities, and the City, ensuring that the realized project matches expectations set forth in the master plan.

These Design Guidelines were formulated to embody the goals and objectives of the Riverside Vision Plan, which was adopted in May of 2019. This community-driven Vision Plan provides recommended implementation strategies for future development of the Riverside site along the Grove Street corridor and in surrounding neighborhoods, identifying environmental, transportation, land use and design aspirations.

The guidelines are organized into three distinct categories – Buildings and Urban Design, Buildings and Architectural Design, Building Façade Design and Materials - to allow for careful consideration of the proposed development at a variety of scales. Guidelines at the Urban Design level are intended to evaluate the implementation of the project holistically, taking into consideration the overall quality of the public realm and the projects connectivity to the surrounding context. Architectural design and Facade design criteria are intended to allow the City to take a more detailed look at the architectural qualities of the proposed buildings and their role in reinforcing place-making goals within the development.

PROCESS

Following Special Permit approval, and at each phase of implementation of the master plan, the proponent will be required to file a building permit application. In each instance, prior to the application filing, the proponent will fill out the Design Guideline Evaluation Template, explaining how the proposed development responds to the recommended design criteria and is consistent with the approved Special Permit application. In addition to the written responses to the Design Guidelines, the proponent can reference site and architectural drawings required in the Building Permit application to illustrate the design intent.

The City will then undertake a consistency determination process, which will include reviews and recommendations by Planning & Development Department Staff [Staff] and/or their Peer Review consultants, as well as the Urban Design Commission [UDC]. Since the Special Permit is being granted at an early stage of design and is based on architectural drawings that include site plans, building floor plans and exterior renderings, among other exhibits, the proponent will be required to go though a consistency review to ensure the design is in accordance with the zoning ordinance, the special permit and these design guidelines prior to advancing to contract documents.

Once Staff and UDC consistency determinations have been completed, a recommendation will be forwarded to the Commissioner of the Newton Inspectional Services Department for consideration and final approval.

RIVERSIDE STATION DEVELOPMENT

DESIGN GUIDELINES

ACKNOWLEDGMENTS

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REFERENCED DOCUMENTS

CITY OF NEWTON COMPREHENSIVE PLAN [2007]
http://www.newtonma.gov/civicax/filebank/documents/53304

RIVERSIDE VISION PLAN [2019]
http://www.newtonma.gov/civicax/filebank/documents/96820

NEWTON CITY ORDINANCES, CHAPTER 30: ZONING ORDINANCE [Updated 2019]
http://www.newtonma.gov/civicax/filebank/documents/69436

TABLE OF CONTENTS

BUILDINGS AND URBAN DESIGN

These Building and Urban Design guidelines are intended to support overall place-making goals by promoting the quality design of individual buildings and ensuring that they contribute to a holistic development vision. The Riverside Station area presents a unique set of variables and, as such, new buildings should be designed and detailed to respect the existing context by seeking to relate to and enhance the surrounding streetscapes and open spaces on which they front. The development must also accommodate an existing terminal transit node, and all its associated functional requirements, while tapping into this interface to promote vibrancy. Within the development, buildings should be detailed to reinforce their role in defining open spaces and an engaging pedestrian environment, key to implementing a meaningful place-making strategy. A highly articulated public realm should also incorporate quality design elements, ranging from urban furniture and lighting to landscaping and paving - all in support of a pedestrian-first environment. Sustainable site design practices must support the City of Newton's overall environmental goals.

A. NEIGHBORHOOD EDGE DESIGN

A.01| Relationship to Surrounding Streets

Buildings at the perimeter of Riverside Station - individually and collectively - shall be detailed in a way that reinforces their siting, and that promotes compatibility with the Grove Street corridor and Recreational Road Extension. Most importantly, buildings along these edges shall help define safe and attractive pedestrian environments, in addition to accommodating bike activity and contextual landscaping.

A.02| Visual Permeability

The detailing of buildings, and the open spaces between them, should allow for a high degree of visual permeability, especially along Grove Street. Vehicular and pedestrian gateways, including streets, major open spaces and pocket parks, should incorporate a mix of hard-scape and soft-scape environments that are functionally and aesthetically welcoming.

B. HIERARCHY IN DESIGN: ADDRESSING VARIED FRONTAGES

B.01| Grove Street

Detail buildings along the Grove Street frontage to achieve a human scale that is respectful of the corridor and adjacent open spaces. The architectural treatment on facades, such as stoops, balconies, bays and terraces, [see lower-right image] shall allow buildings to negotiate the changing topography while maintaining visual connectivity into the development.

B.02| Route 128

Design buildings facing Route 128 to address multiple scales, helping to brand the project from distant viewpoints along the highway corridor while providing an appropriate level of architectural detail to enhance the local context. Ensure that adjacent buildings work together to define a frontage that provides visual interest and is appropriately scaled by incorporating variation in height, materials and overall facade design, especially for buildings that are physically connected.

B.03| MBTA Rail Yard

Facades of buildings facing the MBTA rail yard will not have a great deal of visibility from surrounding contexts and, as such, can have a simpler approach to architectural detailing. Durable and quality materials shall be used.

CONNECTIVITY TO SURROUNDING CONTEXT

GOAL | Riverside Station shall focus on transitions to its immediately abutting contexts, knitting into diverse frontages that include Grove Street, Route 128, an existing transit station and adjacent open space networks in ways that are respectful to the surrounding community.

Buildings and streetscapes define neighborhood edges

Open space and gateways encourage connectivity

Changing scale to transition to surrounding context

C. BUILDINGS DEFINING GATEWAYS

C.01| Transition Zones

Design buildings that define gateways into Riverside Station to provide a sense of transition from the surrounding area by utilizing thoughtful massing strategies and incorporating elements, such as matching towers [see adjacent image]. In addition to architectural elements, buildings that are purposefully sited to frame vehicular and pedestrian entry points shall utilize quality materials that provide a higher level of visual interest.

Designing transitions through gateway buildings

A. PLACEMAKING

A.01| Role of Buildings in Defining Public Open Spaces

Design buildings, or sections of buildings, that have an immediate relationship to significant public greens and squares within the development to have features that complement the design qualities and scale of the spaces on which they front. While facades, in general, shall be thought of as a holistic composition, certain sections may be detailed to reflect their role as background buildings while other, more ceremonial locations should incorporate architectural emphasis.

A.02| Role of Buildings in Defining Street Walls

Mass and align buildings in conjunction with the street sections that they help to define, in order to provide appropriately scaled pedestrian environments. Buildings on Riverside Station's main mixed-use street shall contribute to the continuity of the street wall, though some variation in building alignment may be used to facilitate outdoor dining and other activities. Based on the orientation and width of streets [street section], consider stepping back upper floors to allow for more pleasant streetscapes. In mixed-use buildings, the ground floor level shall reinforce a vibrant pedestrian environment by incorporating transparent storefronts and active uses.

BUILDINGS AND URBAN DESIGN **NO. 2**

BUILDING-SITE RELATIONSHIPS

GOAL | Internal to Riverside Station buildings should thoughtfully define streetscapes and enhance the experiential qualities of usable public spaces. At an urban design scale, the detailing of building facades must reinforce their siting and reflect their role, whether contributing to forming city blocks or acting as important focal points.

Buildings defining a significant public open space

Mixed-use building with well-defined street edge

A.03| Secondary Spaces

Activate smaller public spaces, like pocket parks and pedestrian mews, that provide through-block connections, by the careful placement of lighting, landscaping and urban furniture. Include transparent storefronts that turn the corner to contribute to the activation of secondary spaces.

Pocket parks can offer a unique experience

B. BUILDINGS AND VIEWS

B.01| Framing Visual Corridors

Design buildings to delineate significant visual axes. Whether at a gateway location or at a transition point from a significant open space to a streetscape, design adjacent buildings - through the related corners or elements that connect them, such as pedestrian bridges - to complement each other and frame views.

B.02| Terminating Views/ Focal Points

Certain buildings, by the nature of their location at the head of significant streets or their prominent positioning on public spaces, play a role as focal points in the public realm. These buildings, or sections of buildings, shall receive a higher level of architectural articulation consistent with their hierarchically important role in the neighborhood.

Focal points / Terminating visual corridors

C. PARKING AND SERVICE

C.01| Detailing Access Points

Design parking and service areas to be visually unobtrusive, where possible; Articulate access points so as to minimize impacts on key pedestrian environments [avoid excessive curb cuts] and primary building entries, as well as adjacent buildings and public spaces. Heavily utilized loading areas, serving buildings with commercial spaces, that cannot be discreetly sited relative to active public realm areas, must be located internal to buildings Note; small loading zones may be provided curbside]. Access to internal loading areas must be provided through operable doors that are finished with an architectural quality that is compatible with the ground floor facade of the building.

Building corners can be significant transition

C.02| Liners, Screening and Landscaping

For above-grade structured parking, building "liners" [sections of buildings with occupied space, such as single-loaded residential units] or significant architectural façade treatments shall be incorporated to screen them from important pedestrian environments. Additional freestanding visual buffers, including walls that feature materials consistent with adjacent building architecture, or landscaping may be utilized as well. Integrated loading areas for residential buildings that are located outside the building footprint must be designed to minimize impacts on pedestrian environments by visually buffering them from public realm areas by screening and/or landscaping [Note: small loading zones may be provided curbside]. The entire ground floor of buildings must be thoughtfully

Ground floor commercial liner in parking structure

D. BUILDING/ STREET INTERFACE

D.01| Paving

Choose specialty paving to compliment building materials and enhance the building/street interface, especially at key focal points such as primary entries. Use materials to reinforce streetscape and open space zones, such as areas in front of storefronts, areas for outdoor dining and areas featuring urban furniture. Use only durable paving materials that weather well and can withstand seasonal impacts.

D.02| Urban Furniture

Integrate built-in furniture [large benches, terraced seating] to help detail the design of streetscapes and open spaces. Providing movable furniture [tables and chairs, benches, lounge chairs] is also desirable as it allows a degree of flexibility for configuring multi-purpose spaces.

D.03| Accessibility

All places of public accommodation shall be accessible to persons with disabilities and meet the standards set forth in the Americans with Disabilities Act [ADA].

D.04| Wayfinding Signage

Establish a "Sign Family" that promotes consistency in design across the full spectrum of site / development-level signage - whether building-mounted or free-standing - including pylons, monuments, kiosks, etc. Fabricate signs out of high-quality materials that are durable and consistent with both landscaping features and building architecture.

D.05| Site Lighting

Site lighting in the vicinity of the MBTA Station, and on associated roadways, is to be more intense than the balance of the site lighting, as dictated by MBTA standards. Lighting transition zones shall be created between MBTA station lighting areas and non-MBTA site lighting as to minimize stark contrasts in lighting intensity. Utilize graduated step-downs in street lighting or integrated lighting features between these areas to achieve transitions.

Specialty paving in pedestrian environments

Combine movable and fixed furniture for flexibility

Wayfinding signage integrated into the public realm

BUILDINGS AND ARCHITECTURAL DESIGN

These Building and Architectural Design guidelines have been developed to ensure that the architectural character of Riverside Station achieves the community's standard for high-quality building design. In addition to larger scale issues that define how buildings shall relate to their surrounding community context, these guidelines are intended to describe design parameters for how buildings contribute to creating highly articulated, human-scaled environments. At the immediate site context level, it is the ground floor interface that is often most critical for creating vibrant streetscapes. As such, these guidelines offer both recommendations for overall façade organization and articulation as well as specific ground floor design strategies that include transparent storefronts, high quality, durable materials and thoughtfully integrated signage and lighting. Buildings shall utilize best building practices and incorporate the tenets of "green" design - using a life cycle approach to improve performance and promote efficiency - to minimize adverse impacts on the environment.

1 | OVERALL ARCHITECTURAL CHARACTER

- A. Holistic Approach to Large Scale Developments
- B. Building Height
- C. Building Massing
- D. Facade Articulation
- E. Ground Level Design
- F. Roofscape Design
- G. Materials
- H. Building Lighting

2 | SUSTAINABLE DESIGN: GREEN BUILDINGS

- A. Passive House
- B. LEED Building Design and Construction
- C. LEED Neighborhood Development

A. HOLISTIC APPROACH TO LARGE-SCALE DEVELOPMENT

A.01| Context Appropriate

Buildings at Riverside Station shall incorporate design strategies that balance its prominent location, and role as a gateway, with the compact, walkable and human-scaled environments found in village centers throughout Newton. While architectural style is not something that guidelines should mandate, referencing a mix of traditional and more current, innovative vernaculars may be appropriate, especially if detailed in a way that helps achieve an overall consistency in design.

A.02| Balancing Consistency and Variation

The architectural qualities and relatedness of each building at Riverside Station is key to defining a well-articulated public realm. Purposeful variation in design, such as placing a signature building in a prominent location, can be appropriate, provided that its relationship to adjacent buildings and the public realm is thoughtfully considered, as reinforced by its massing, detailing and material selection. For example, buildings that terminate significant view corridors or front on major squares, should incorporate more elaborate architectural features.

B. BUILDING HEIGHT

B.01| Variation in Height

Where there is variation in height from building to building, utilize unifying architectural elements, such as intermediate cornice lines or other datums, to tie together streetscapes.

B.02| Impact on Open Space and Streetscapes

Detail buildings with architectural elements [i.e. awnings and canopies] that help mitigate impacts on adjacent open spaces and streetscapes due to factors such as building height and orientation.

OVERALL ARCHITECTURAL CHARACTER

GOAL | The architectural character of a building shall be judged holistically for its relatedness to its surrounding context, not purely by its style or vernacular.

Contextual building design that is human-scaled

Contextual building with a modern vernacular

Varying height to transition scale

Height variation with a consistent base reading

C. BUILDING MASSING

C.01| Relation to Human Scale

Break down the facades of buildings with larger footprints to appear as multiple buildings that are more likely to relate to human scale and follow existing development patterns in the community. This can be achieved through architectural treatments such as stepping building volumes, adding secondary elements, changing materials and varying roof forms.

C.02| Major and Minor Volumes

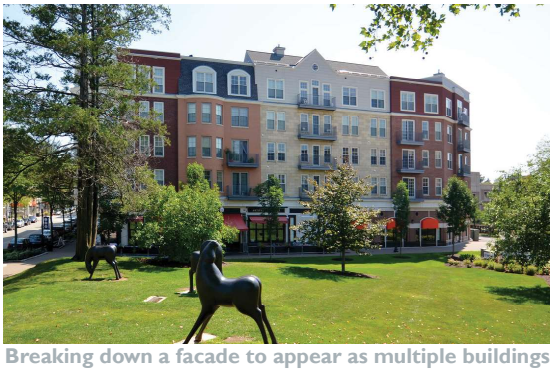
Incorporate secondary volumes to achieve major and minor readings to address overall building scale and avoid large monotonous elevations.

C.03| Step-backs

Step back facades at upper floor levels, where appropriate, to make buildings more compatible with narrower streets and minimize impacts on adjacent buildings.

C.04| Consistency at the Base

Use building alignment and continuity of storefronts to help establish human scale and give a sense of completeness to the pedestrian environment. Utilize a consistent base height, together with high quality materials and detailing, to provide a framework to set off hierarchical moments, such as primary building entries.



Breaking down a facade to appear as multiple buildings

Adding volumes to avoid large monotonous facades

Step backs and multiple volumes address human scale

Continuity of storefronts at the ground level

D. FACADE ARTICULATION

D.01| Creating an Understandable Framework

Regardless of architectural style, establish human scale and proportions through façade design techniques such as the traditional vertical articulation of elevations into a base, middle and top.

D.02| Organizing Rhythms

Utilize an organizing rhythm, such as the regular expression of structure or changes in materials to avoid the appearance of endless, unarticulated lengths of façade.

D.03| Dynamic Qualities

Utilize purposeful massing shifts, plane changes and stepping volumes to create depth, generate a dynamic quality [sense of movement] and provide hierarchy to facades.

D.04| Emphasis/ Focal Points

Incorporate areas of elevated architectural expression at key focal points such as at primary entries, building corners and in response to surrounding urban design conditions, including vistas.

D.05| Architectural Elements

Include architectural elements – both additive and subtractive – that provide visual interest, depth and rhythm, such as bay windows, balconies, porches/ stoops, canopies/awnings, pilasters and cornices. Utilize these components to refine scale and proportions, particularly in areas with a pedestrian focus.

D.06| Fenestration

Incorporate fenestration typologies that are contextual and thoughtfully composed. Use windows to enhance the visual coherence of a building and utilize them in ways that avoid creating large, unarticulated areas of glass or overly repetitive patterns. Use window detailing – trim, mullions, color, materials – to promote depth and a high level of articulation.

Organizing rhythm and an understandable framework

Base, Middle & Top with integrated elements

Composition with varying fenestration typologies

E. GROUND LEVEL DESIGN

E.01| Programming/ Uses

Use architectural design at the ground level of buildings to reinforce the streetscape onto which they front. Promote vibrancy along storefronts by incorporating qualities that invite pedestrian engagement, such as transparency or areas for outdoor dining. For residential areas, incorporate design approaches that offer a degree of privacy by utilizing strategies such as landscape buffer zones or changes in elevation between first floor units and grade.

E.02| Ground Floor Commercial Storefronts

Design commercial storefronts to support the vitality of pedestrian environments by incorporating the following guidelines:

a. Space entrances to commercial storefronts as close together as is practical, especially to enliven more important pedestrian streetscapes. Façade treatments such as pop-out bays and recessed storefront areas are desirable and help create visual interest and an engaging pedestrian environment.

b. Commercial storefronts shall provide a high degree of visual transparency into ground floor spaces, especially between 2 feet and 8 feet in height above the sidewalk level.

c. Use storefront canopies to provide shade and shelter, especially at entry points. Design canopies to enhance the architectural style of the storefront.

d. Design individual tenant storefronts to allow for ample brand expression while being respectful of the architectural style of the base building.

e. Achieve continuity of commercial storefronts to promote an active pedestrian experience, including wrapping building corners to activate secondary frontages. Avoid large stretches of unarticulated frontage [i.e. blank walls].

E.03| On-Site Equipment

Buildings often present multiple "fronts," each of which can play an important role in contributing to defining a unique piece of the public realm. Carefully locate, visually enhance and/or buffer on-grade mechanical equipment, such as transformers. Use adequate landscaping and/or well-designed site walls to screen equipment, particularly in areas adjacent to public open space and at the perimeter of the development [such as along Grove Street].

Outdoor dining enlivens the streetscape


Multiple commercial entries and wrapping storefronts


Active storefronts with visual transparency

Protective canopies at storefront transition zone

E.04| Entries

Design primary building entries to receive a higher level of architectural treatment by utilizing transitional elements such as canopies and awnings and by integrating high quality materials, enhanced lighting, paving and signage. Generally, locate primary entries on hierarchically more important streets and space them to promote active streetscapes.

Added architectural detail at building entries

E.05| Building Signage

Fully integrate building signage into the overall façade architectural design. Locate and scale signage appropriately, relative to the use it is referencing. For mixed-use buildings with ground floor commercial uses and upper level residential uses, generally locate signage below second floor windowsills. Signage for office or hospitality uses can be located higher on buildings and scaled appropriately for more distant viewing but must still be thoughtfully integrated into the building's architectural framework. In no instance shall signage extend up above a roof parapet. Sign materials, illumination and attachment methodology shall be compatible with the overall building design.

Integrating a variety of signage into facade design

F. ROOFSCAPE DESIGN

F.01| Roof Forms

Integrate roof forms – flat or pitched – into the overall building composition and ensure that they are complimentary to the surrounding context. Low roofs shall receive extra design attention to mitigate visual impacts on abutting buildings. This might include incorporating thoughtfully designed penthouses, "green" roofs, roof terraces or other amenities.

Unique roof forms where context appropriate

F.02| Rooftop Equipment

Cluster mechanical equipment near the center of buildings to allow for usable amenity space and to maximize the potential for integrating "green" technologies. Adequately screen mechanical equipment from pedestrian view with quality materials that are consistent with overall building design. On buildings with lower roofs, locate and screen equipment to minimize visual impacts to users on upper floors of adjacent buildings.

Cluster roof equipment to allow for usable space

G. MATERIALS

G.01| High Quality and Supportive of Overall Architectural Goals

Select materials that are both durable and genuine in their appearance, as well as appropriate for the surrounding context and climatic conditions. Materials should reinforce overall architectural goals related to the scale and proportions of buildings.

G.02| Authentic Application and Detailing

Utilize building materials in a manner that is appropriate to their intrinsic formal properties, including structural capacities. Detail materials in a way that is authentic, promotes longevity and helps maintain a high level of appearance.

G.03| Ground Level and Focal Points

Utilize high quality materials at the ground level that are suitable to meet grade conditions and are capable of withstanding physical impacts while maintaining their appearance, especially in areas that are pedestrian-focused. Elevate the quality of materials and detailing at primary building entry areas and at other architectural focal points, such as at significant corners, gateways, vista terminations or around major public spaces.

G.04| Consistency with Site Design Materials

Select building materials that are compatible with adjacent streetscape and site design materials.

Genuine materials that compliment the context

High quality and well-detailed use of materials

H. BUILDING LIGHTING

H.01| Accentuate Architectural Expression

Position building-mounted lighting to highlight the most important features of facades – parapets, piers, corners, entries – providing a sense of scale and proportion during the nighttime hours.

H.02| Enhance the Public Realm

Coordinate building lighting with site lighting to enhance the quality of the pedestrian environment by focusing on illuminating the ground plane, particularly in active use areas. Increase safety by enhancing wayfinding, marking key building entry points and helping vehicular traffic to see pedestrians.

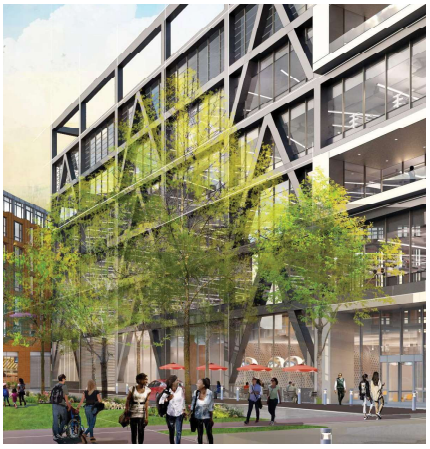
H.03| Minimize Impacts

Follow commonly accepted standards for preventing light trespass – shielding, intensity, orientation – to avoid negative impacts on the night sky and abutting properties. Do not use flashing or irregular lights, except where mandated for safety reasons. Design illuminance levels in accordance with IESNA recommendations. Utilize WELL Building standards regarding maximum lens brightness. Minimize the impacts of internal luminaires on glare through exterior glazing and utilize dimming controls to enable future adjustments of illuminance levels.

Highlighting architectural features of a building

Highlighting architectural features of a building

A range of light sources creating a vibrant environment



A. PASSIVE HOUSE

Employ Passive House standards to achieve the necessary level of building energy efficiency by encompassing stringent energy usage intensity thresholds combined with field performance testing to validate overall building performance. Design principles will include:

A.01| Passive House Building Standards

a. High performing thermal envelope with continuous insulation
b. Airtight construction with low air change rates
c. Balanced mechanical ventilation systems for improved indoor air quality and comfort
d. High performance windows and doors to manage solar energy and minimize leakage

B. LEED BUILDING DESIGN AND CONSTRUCTION

B.01| Location and Transportation

Reinforce the site's transit identity by highlighting the station entrance, and provide adequate facilities to accommodate bicycle, vehicular and pedestrian transitions.

B.02| Sustainable Sites

Utilize sustainable site strategies to provide natural habitat, provide open spaces, manage rainwater and minimize heat islands and light pollution. Managing storm-water runoff, using cool-roof technologies, employing pervious pavers and providing shade are a few approaches to consider.

B.03| Water Efficiency

Employ project-specific water-saving strategies for indoor and outdoor water use, including using high-efficiency fixtures and systems, reducing the use of irrigation water and incorporating water metering.

B.04| Energy and Atmosphere

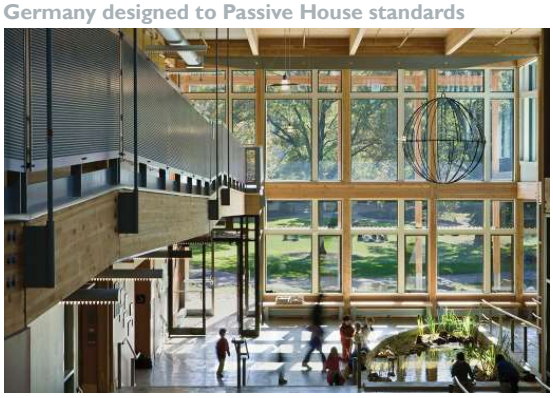
Utilize a holistic approach to energy use reduction including energy-efficient design strategies and renewable energy sources. A thermally efficient building envelope is a key component of reducing energy consumption.

SUSTAINABLE DESIGN: GREEN BUILDINGS

GOAL | All Riverside Station buildings shall utilize best practices and, at a minimum, be designed to be Leadership in Energy & Environmental Design [LEED] certifiable to a gold level standard, as developed and overseen by the United States Green Building Council [USGBC]. The residential portions of buildings 7 and 8, as well as a third building to be determined, are required to be Passive House certified, as administered by the Passive House Institute US, Inc. [PHIUS]. In addition, adherence to LEED Neighborhood Development standards is strongly encouraged.

NOTE: These Design Guidelines are subordinate to the requirement that all buildings be designed and constructed to a minimum level of LEED Gold certifiability, and that the residential portions of certain buildings must be designed and constructed to obtain Passive House certification. Where these Design Guidelines conflict with the above-stated sustainability requirements and commitments, the sustainability goals and commitments shall supersede the Design Guidelines.

Sophienhof, a multi-family development in Frankfurt, Germany designed to Passive House standards



Incorporating renewable materials

B.05| Materials and Resources

Incorporate a life-cycle costing approach to improving performance and promoting resource efficiency that focuses on minimizing the embodied energy and other impacts associated with the extraction, processing, transport, maintenance and disposal of building materials.

B.06| Indoor Environmental Quality

Ensure indoor air quality, as well as thermal, visual and acoustic comfort, through design strategies that enhance air quality, lighting quality, acoustic design and control over one's surroundings.

B.07| Regional Priority

Focus on local environmental priorities that address regional concerns and utilize environmental assets. In the New England region, optimizing energy performance, utilizing renewable energy and reducing building life-cycle impacts are among the key focus areas.

C. LEED NEIGHBORHOOD DEVELOPMENT [LEED ND]

Employ low impact development techniques; Incorporate green infrastructure to promote climate resiliency in restored and new open spaces; Design principles will include:

C.01| Smart Location and Linkage

Minimize environmental impacts by facilitating compact development with access to transit, including providing bicycle networks and storage that promote a healthy lifestyle and reduce automobile dependence.

C.02| Neighborhood Pattern and Design

Achieve compact, walkable, mixed-use development with pedestrian-focused environments that provide access to high-quality, usable public space. This should include providing access to amenities for all ages and abilities.

C.03| Green Infrastructure and Buildings

Reduce the adverse environmental impacts of the construction and operation of buildings and neighborhood infrastructure. Utilize energy efficiency and conservation strategies, as well as clean energy sources, to reduce pollution and green-house gas emissions. Minimize impacts to existing natural resources and mitigate heat island effect.

Quality indoor space through daylighting

Walkable transit-oriented environment

Mitigating heat island effect

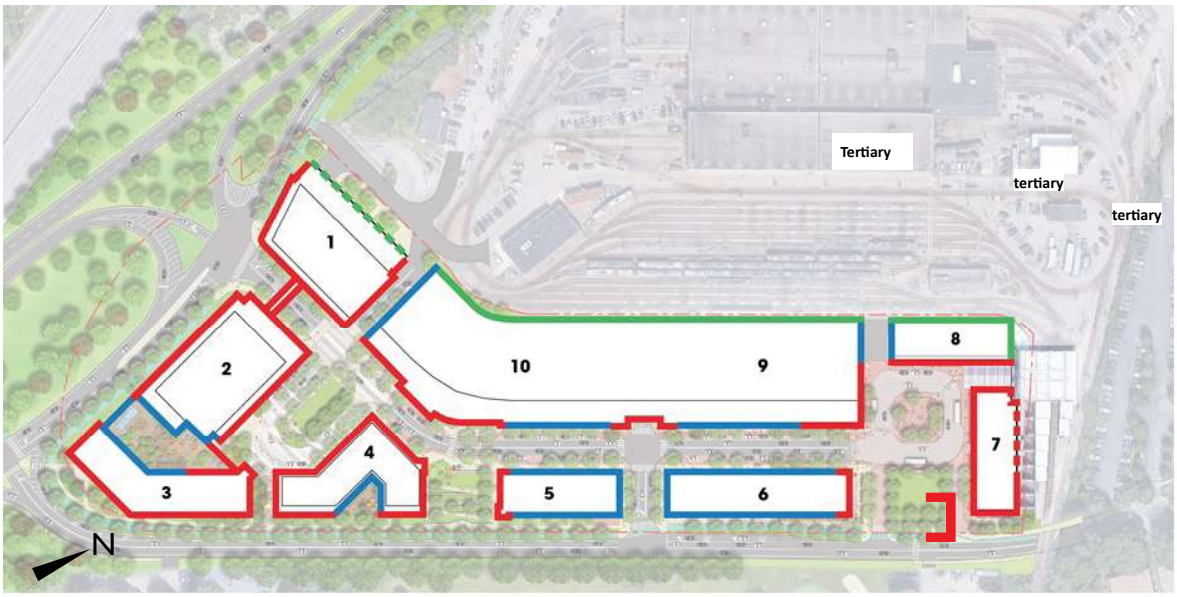
BUILDING FACADE DESIGN AND MATERIALS

These Building Façade Design and Materials guidelines have been developed to ensure that the architectural character of new construction enhances the land use and design goals outlined in the Comprehensive Plan. This section of the guidelines describes the desired level of finishes and façade articulation for buildings in specific areas within the Riverside Station development. Different locations within the project merit different design responses – including types of materials - and these guidelines address this through the delineation of a specific hierarchy of primary, secondary and tertiary façade areas. Facade design and material selection shall reinforce the desired overall architectural character of buildings, as outlined in the Buildings and Architectural Design section.

BUILDING FACADE DESIGN AND MATERIALS NO. I

FACADE HIERARCHY

The materials and configurations of building facades shall respond to the relative importance and visibility of that façade. There will be three essential façade types: Primary, Secondary, and Tertiary. Primary Facades are located at the most important corners, gateways, and public spaces within the project. Secondary Facades are less prominent but are still open to public view. Tertiary Facades directly face the rail yard and are not generally visible from pedestrian environments within the development. These three categories are used to determine which materials, configurations, and building details should be used in different locations.



The above figure lays out the location of the different façade types, with the following general instructions: [Note: additional detail is provided in subsequent sections]

- When a façade type changes around a corner, the higher quality façade type shall wrap the corner, with the transition happening in an way that provides for a reasonable continuity of architectural expression.
- Except for the segment closest to Grove Street, the upper floors of the north facade of Building 7 can be largely considered a Tertiary façade. On the lower level, the wall against the T platform shall be considered a Primary Façade at the passenger level.
- The northwest facade of Building 1 is not generally visible from pedestrian environments within the development and can be considered Tertiary, except for its upper stories which can be seen from Route 128 South and shall be considered a Primary Façade at those levels.
- The base of every Secondary Façade – generally comprised of the first story above grade - shall be built to Primary Façade standards.
- Facades, or portions thereof, designated as Secondary may, at the developer's option, be constructed to meet some or all requirements of Primary facades. Facades, or portions thereof, designated as Tertiary may, at the developer's option, be constructed to meet some or all requirements of Secondary or Primary facades.

FACADE MATERIALS

A. PRIMARY FACADE MATERIALS

- Brick
- Thin brick (detailed to resemble dimensional brick)
- Stone
- Cast stone
- Pre-cast concrete
- GFRC (glass fiber reinforced concrete)
- Tile (ceramic, porcelain, terra cotta)
- Stucco
- Metal panels with a high quality, durable coating (zinc, Kynar or equal)
- Metal trim
- Aluminum curtain wall
- Structurally reinforced windows (not including vinyl windows, except where needed to meet Passive House standards)
- Metal storefront
- Wood storefront
- FRP (fiber reinforced plastic) – trim elements only

B. SECONDARY FACADE MATERIALS

- Any Primary façade material listed above
- Cementitious siding or panels (e.g. "Hardieboard")
- Fiber cement
- Fiberglass windows
- Vinyl windows (where needed to meet Passive House standards)
- High density polyurethane – trim elements only

C. TERTIARY FACADE MATERIALS

- Any material acceptable under Massachusetts codes and City of Newton ordinances, provided it is durable and maintains a quality finish over time.

BUILDING FACADE DESIGN NO. 3 AND MATERIALS

FACADE DESIGN

A. PRIMARY FACADES

Primary Facades are exterior building elevations that front onto and give shape to key public spaces and street edges. Primary facades shall receive the highest level of architectural facade treatments and detailing commensurate with their prominent locations. See the preceding diagram for the location of Primary Facades.

A.01| Materials & Finishes

Primary Facades shall utilize exterior finish materials acceptable for Primary Facades, as listed separately under Façade Materials [See list in section 2A]. Primary Facades shall utilize a single primary wall material, except at the ground level or uppermost stories, where a second primary material may be utilized. In addition, for large lab/office buildings, where there may be a desire to break down the overall scale, a second primary wall material may be incorporated. Also note that for this rule, facades on either side of demise lines are effectively distinct facades, each to be considered independently.

A.02| Incorporating Secondary and Tertiary Facade Materials

Secondary and Tertiary Façade materials may be incorporated into primary facades with the following two limitations. For the second floor and above, but not including the upper-most floor, no more than 20% of the total façade may utilize secondary materials and all secondary materials utilized shall convincingly resemble primary materials. The upper-most floor of a Primary Façade may incorporate Secondary or Tertiary Facade materials at any ratio but in all cases these materials shall convincingly resemble primary materials when viewed from the ground.

A.03| Upper Facade Zone

The upper-most zone of the façade, located between the top of the upper floor windows and top of parapet shall be articulated to create visual interest and provide a cap to the building façade. This can be accomplished with changes in plane, recesses or reveals, accent materials or variation in parapet profile. Such treatments shall be consistent with the façade's architectural style or aesthetic. Avoid the application of materials and elements that appear thin, under or over-scaled, or inappropriate to the building's architectural expression.

A.04| Punched Window Openings

For facades, or portions of facades with punched window openings, provide enhanced details, such as lintels or opening surrounds in a contrasting material, color or bond pattern (e.g. jack arch), as well as a projecting sill. In lieu of this, or in addition, set the window back from the leading face of the window unit.

A.05| Larger Fenestration

For facades or portions of facades fenestrated with larger expanses of windows (e.g. curtain wall, window wall, ribbon windows), including larger punched openings, subdivide glazed areas with a hierarchy of window framing members (e.g. frames, sashes, mullions, muntins) of varying widths and depths to create rhythm and depth within the openings.

A.06| Storefronts

At commercial storefronts, window and door assemblies shall setback from the finished face of the adjacent wall plane to the leading edge of the window or door system.

A.07| Building Base

At the ground level, use a masonry base material where the facade meets a paved surface. Utilize a durable, masonry material, different from the primary siding material in order to create a visual accent that demarcates where the building meets the ground plane (e.g. cast stone base on a brick façade, brick base on a metal façade). At facades that employ stone, or stone-like material (precast, cast stone, stucco scored to appear as stone) as the primary material, the base may be the same as primary material, provided the base extends beyond the plane of the facade above and the material is durable enough to maintain a high quality finish over time.

A.08| Building Vent Terminations

Through-façade building vent terminations should be located to minimize visual impact. Where feasible, vent terminations should be located near an inside corner (e.g. next to a balcony or bay projection). Where visible, vent terminations shall be integrated architecturally [e.g. aligned and centered vertically and horizontally within a façade area] to the greatest extent possible. Avoid fixtures with domed or sloped profiles in favor of fixtures with shallower profiles.

A.09| Above-Grade Connections

Above-grade connecting pedestrian bridges, if utilized, shall incorporate exterior finish materials of a quality equal to that of the facades that they connect. The character of these connections shall be such that they enhance the public realm by framing visual corridors, helping to define gateways and/or providing general visual interest to streetscapes.

B. SECONDARY FACADES

Secondary Facades are exterior building elevations that front onto, and give shape to, public spaces and street edges but are less prominent and not required to have Primary Façade materials [though they can be utilized]. While not key focal points, secondary facades play an important role in defining streetscapes and, as such, should have a high level of architectural facade treatments and detailing. See the preceding diagram for the location of Secondary Facades.

B.01| Materials & Finishes

Secondary Facades shall utilize exterior finish materials acceptable for Secondary Facades listed separately under Façade Materials [See list in section 2A]

B.02| Incorporating Tertiary Facade Materials

The upper-most floor of a Secondary Façade may incorporate Tertiary Facade materials at any ratio but in all cases these materials shall be durable and convincingly resemble primary materials when viewed from the ground.

B.03| Upper Facade Zone

Though not as pronounced as on Primary Facades, Secondary Façades shall incorporate an accent material, plane change or other type of minor articulation at the façade's upper-most portion (e.g. upper spandrel zone, parapet, eave). These accents shall provide an architectural transition that caps the building facade.

B.04| Punched Window Openings

Provide a projecting sill detail at window openings that utilizes the primary façade material, or a secondary material. In lieu of this detail, or in addition, set the window unit back from the leading face of the window opening.

B.05| Larger Fenestration

For facades or portions of facades fenestrated with larger expanses of windows (e.g. curtain wall, window wall, ribbon windows), including larger punched openings, subdivide glazed areas with a hierarchy of window framing members (e.g. frames, sashes, mullions, muntins) of varying widths and depths to create rhythm and depth within the openings.

B.06| Building Vent Terminations

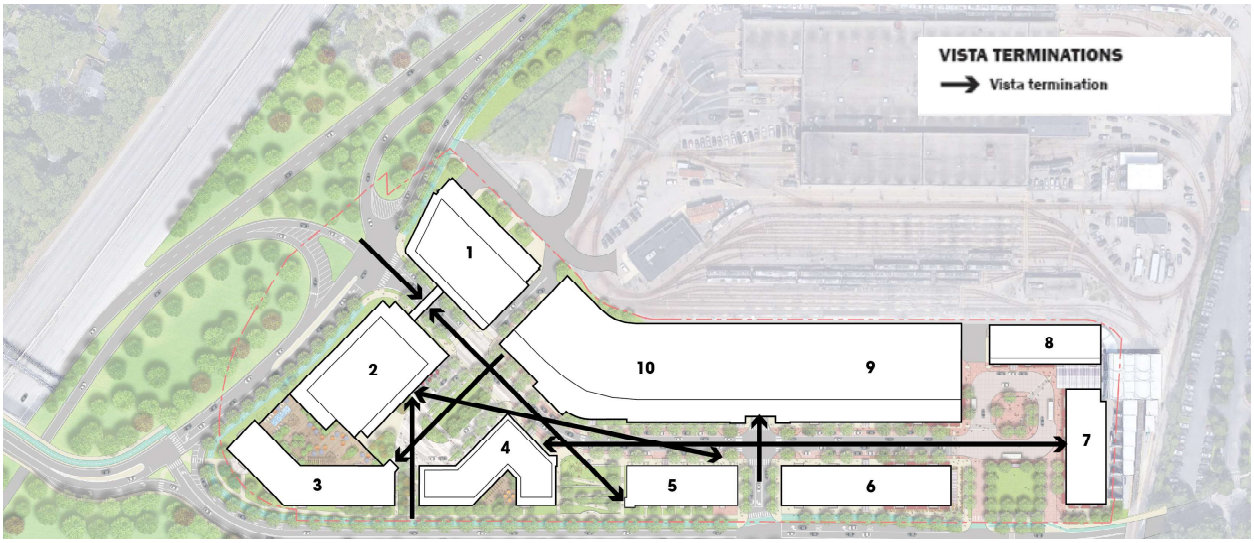
Through-façade building vent terminations should be located to minimize visual impact. Where feasible, vent terminations should be located near an inside corner (e.g. next to a balcony or bay projection). Where visible, vent terminations shall be integrated architecturally [e.g. aligned and centered vertically and horizontally within a façade area] to the greatest extent possible. Avoid fixtures with domed or sloped profiles in favor of fixtures with shallower profiles.

C. TERTIARY FACADES

Tertiary facades may consist of any material acceptable under Massachusetts codes and City of Newton ordinances provided it is durable and maintains a quality finish over time.

D. VISTA TERMINATIONS

Portions of building elevations that are framed by long perspective views down a Street shall be known as Vista Terminations. Vista Termination areas shall respond with a building element of appropriate size and architectural impact to terminate the vista meaningfully. These shall be aligned properly to be framed in the vista.



For example: The vista termination aiming at Building 3 shall aim at its tower.
The vista termination aiming at Building 5 shall aim at its tower.

D.01| Special Architectural Treatments

Utilize architectural treatments such as raised roof lines, stacks of balconies, grouped window compositions, towers and cupolas to properly frame and terminate vistas.

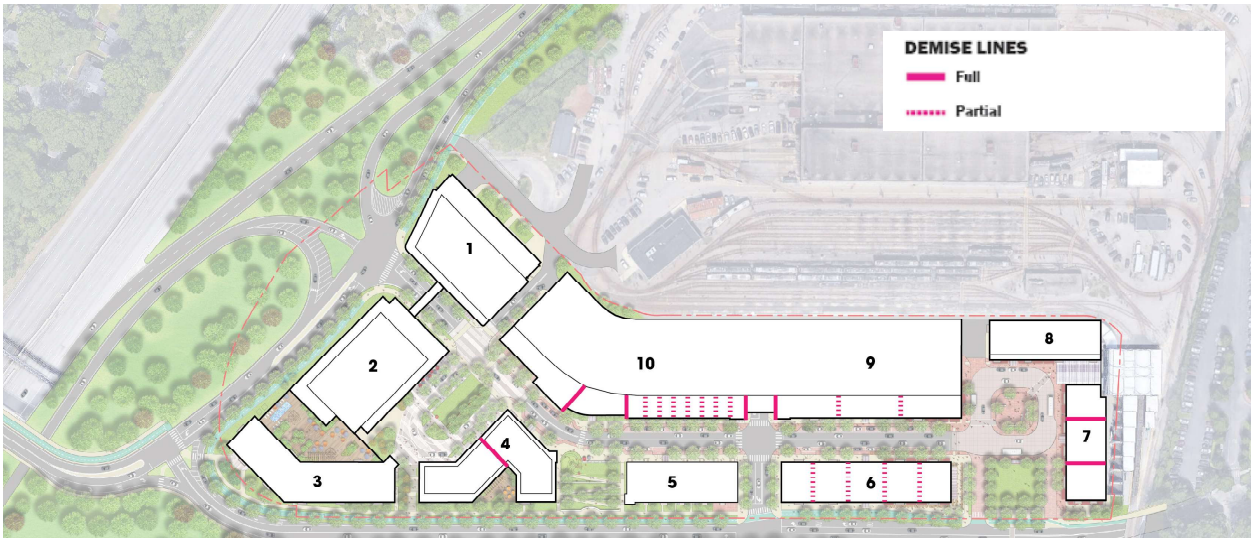
E. DEMISE LINES

Full Demise Lines indicate where building facades are subdivided such that a single building appears as multiple buildings. Partial Demise Lines indicate where buildings are broken into repetitive segments such as row houses.

E.01| Full Demise Lines

A Full Demise Line is a mid-block division on a frontage where the design of a large building "breaks" to give the appearance of a different structure on each side of the line. The intention of a Full Demise Line is to give the impression of adjacent party-wall buildings designed by multiple architects; this impression can be achieved by providing distinctly different wall materials and/or colors, different window types and patterns, changes in façade plane and different attachments like balconies and cornices. Importantly, each segment of a demised building should look like an independent composition if viewed on its own.

Full Demise Lines shall be located within 15 feet of the lines indicated on the drawing.

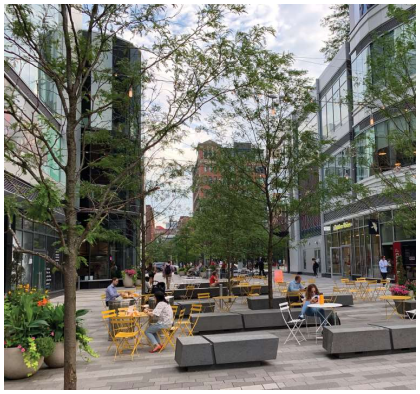


E.02| Partial Demise Lines

A Partial Demise Line is a mid-block division on a frontage around which the design of a large building breaks to give the appearance of repetitive segments on each side of the line, such as row houses or pavilions. Among these segments, the basic architecture remains largely unchanged, but each segment may, for example, be a different color, use different materials, or have different [or differently arranged] attachments.

Partial Demise Lines shown in the diagram above are representative and shall be further regulated as follows:

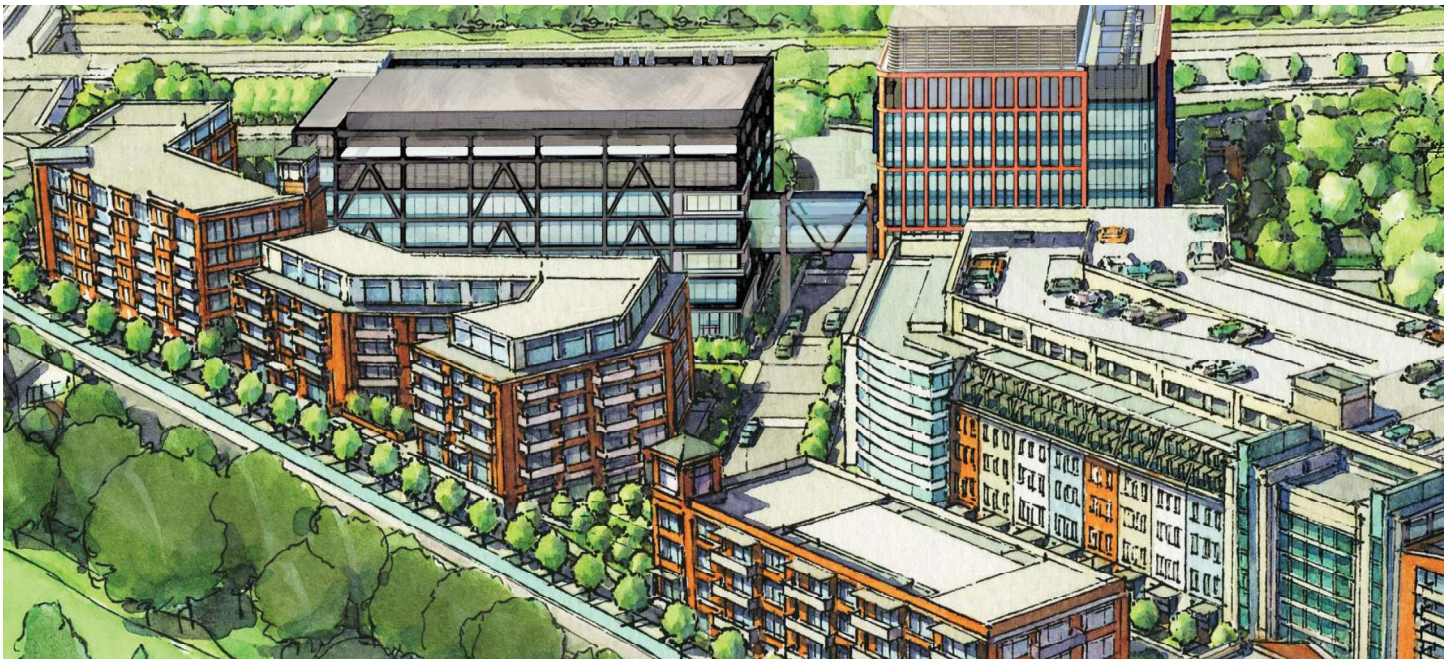
- Building 6: As viewed from both Grove Street and the Main Street, this building shall appear to be composed of between 4 and 6 repetitive segments of approximately equal size and shape.
- Building 9: As viewed from the Main Street, the upper floors of this building shall appear to be composed of between 2 and 4 repetitive segments of approximately equal size and shape.
- Building 10: The portion of Building 10 that sits opposite building 5 shall be made to appear as no less than 6 and no more than 10 row houses, each with its own front door."



DESIGN GUIDELINES

EVALUATION TEMPLATE

RIVERSIDE STATION DEVELOPMENT



Prepared by the City of Newton, MA

BUILDINGS AND URBAN DESIGN

Applicant general comments for building design: (250 word max.)

General city comments: Consistent ☐ Not Consistent ☐

CONNECTIVITY TO SURROUNDING CONTEXT

GOAL | Large-scale developments shall 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.

A. NEIGHBORHOOD EDGE DESIGN

A.01| Relationship to Surrounding Streets

Applicant response: (100 word max.)

City Response:

Document references:

A.02| Visual Permeability

Applicant response: (100 word max.)

City Response:

Document references:

B. HIERARCHY IN DESIGN: ADDRESSING VARIED FRONTAGES

B.01| Grove Street

Applicant response: (100 word max.)

City Response:

Document references:

B.02| Route 128

Applicant response: (100 word max.)

City Response:

Document references:

B.03| MBTA Rail Yard

Applicant response: (100 word max.)

City Response:

Document references:

C. BUILDINGS DEFINING GATEWAYS

C.01| Transition Zones

Applicant response: (100 word max.)

City Response:

Document references:

BUILDINGS AND URBAN DESIGN NO. 2

BUILDING-SITE RELATIONSHIPS

GOAL | Internal to the development, buildings should thoughtfully define streetscapes and enhance the experiential qualities of usable public spaces. At an urban design scale, the siting of buildings and the detailing of their facades must reflect their roles as both fabric and focal points.

A. PLACEMAKING

A.01| Role of Buildings in Defining Public Open Spaces

Applicant response: (100 word max.)

City Response:

Document references:

A.02| Role of Buildings in Defining Street Walls

Applicant response: (100 word max.)

City Response:

Document references:

A.03| Secondary Spaces

Applicant response: (100 word max.)

City Response:

Document references:

B. BUILDINGS AND VIEWS

B.01| Framing Visual Corridors

Applicant response: (100 word max.)

City Response:

Document references:

B.02| Terminating Views/ Focal Points

Applicant response: (100 word max.)

City Response:

Document references:

C. PARKING AND SERVICE

C.01| Detailing Access Points

Applicant response: (100 word max.)

City Response:

Document references:

C.02| Liners, Screening and Landscaping

Applicant response: (100 word max.)

City Response:

Document references:

D. BUILDING/STREET INTERFACE

D.01| Paving

Applicant response: (100 word max.)

City Response:

Document references:

D.02| Urban Furniture

Applicant response: (100 word max.)

City Response:

Document references:

D.03| Accessibility

Applicant response: (100 word max.)

City Response:

Document references:

D.04| Wayfinding Signage

Applicant response: (100 word max.)

City Response:

Document references:

D.05| Site Lighting

Applicant response: (100 word max.)

City Response:

Document references:

BUILDINGS AND ARCHITECTURAL DESIGN

Applicant general comments for building design: (250 word max.)

General city comments: Consistent ☐ Not Consistent ☐

OVERALL ARCHITECTURAL CHARACTER

GOAL | The architectural character of a building shall be judged holistically for its relatedness to its surrounding context, not purely by its style or vernacular.

A. HOLISTIC APPROACH TO LARGE-SCALE DEVELOPMENT

A.01| Context Appropriate

Applicant response: (100 word max.)

City Response:

Document references:

A.02| Balancing Consistency and Variation

Applicant response: (100 word max.)

City Response:

Document references:

B. BUILDING HEIGHT

B.01| Variation in Height

Applicant response: (100 word max.)

City Response:

Document references:

B.02| Impact on Open Space and Streetscapes

Applicant response: (100 word max.)

City Response:

Document references:

C. BUILDING MASSING

C.01| Relation to Human Scale

Applicant response: (100 word max.)

City Response:

Document references:

C.02| Major and Minor Volumes

Applicant response: (100 word max.)

City Response:

Document references:

C.03| Step-Backs

Applicant response: (100 word max.)

City Response:

Document references:

C.04| Consistency at the Base

Applicant response: (100 word max.)

City Response:

Document references:

D. FACADE ARTICULATION

D.01| Creating an Understandable Framework

Applicant response: (100 word max.)

City Response:

Document references:

D.02| Organizing Rhythms

Applicant response: (100 word max.)

City Response:

Document references:

D.03| Dynamic Qualities

Applicant response: (100 word max.)

City Response:

Document references:

D.04| Emphasis/ Focal Points

Applicant response: (100 word max.)

City Response:

Document references:

D.05| Architectural Elements

Applicant response: (100 word max.)

City Response:

Document references:

D.06| Fenestration

Applicant response: (100 word max.)

City Response:

Document references:

E. GROUND LEVEL DESIGN

E.01| Programming/ Uses

Applicant response: (100 word max.)

City Response:

Document references:

E.02| Ground Floor Commercial Storefronts

Applicant response: (100 word max.)

City Response:

Document references:

E.03| On-Site Equipment

Applicant response: (100 word max.)

City Response:

Document references:

E.04| Entries

Applicant response: (100 word max.)

City Response:

Document references:

E.05| Building Signage

Applicant response: (100 word max.)

City Response:

Document references:

F. ROOFSCAPE DESIGN

F.01| Roof Forms

Applicant response: (100 word max.)

City Response:

Document references:

F.02| Rooftop Equipment

Applicant response: (100 word max.)

City Response:

Document references:

G. MATERIALS

G.01| High Quality and Supportive of Overall Architectural Goals

Applicant response: (100 word max.)

City Response:

Document references:

G.02| Authentic Application and Detailing

Applicant response: (100 word max.)

City Response:

Document references:

G.03| Ground Level and Focal Points

Applicant response: (100 word max.)

City Response:

Document references:

G.04| Consistency with Site Design Materials

Applicant response: (100 word max.)

City Response:

Document references:

H. BUILDING LIGHTING

H.01| Accentuate Architectural Expression

Applicant response: (100 word max.)

City Response:

Document references:

H.02| Enhance the Public Realm

Applicant response: (100 word max.)

City Response:

Document references:

H.03| Minimize Impacts

Applicant response: (100 word max.)

City Response:

Document references:

SUSTAINABLE DESIGN: GREEN BUILDINGS

GOAL | All new construction shall utilize best practices and, at a minimum, be designed to be Leadership in Energy & Environmental Design [LEED] certifiable to a gold level standard, as developed and overseen by the United States Green Building Council [USGBC]. The residential portions of buildings 7 and 8, as well as a third building to be determined, are required to be Passive House certified, as administered by the Passive House Institute US, Inc. [PHIUS]. In addition, adherence to LEED Neighborhood Development standards is strongly encouraged.

NOTE: These Design Guidelines are subordinate to the requirement that all buildings be designed and constructed to a minimum level of LEED Gold certifiability, and that the residential portions of certain buildings must be designed and constructed to obtain Passive House certification. Where these Design Guidelines conflict with the above-stated sustainability requirements and commitments, the sustainability goals and commitments shall supersede the Design Guidelines.

A. PASSIVE HOUSE

A.01| Passive House Building Standards

Applicant response: (100 word max.)

City Response:

Document references:

B. LEED BUILDING DESIGN AND CONSTRUCTION

B.01| Location and Transportation

Applicant response: (100 word max.)

City Response:

Document references:

B.02| Sustainable Sites

Applicant response: (100 word max.)

City Response:

Document references:

B.03| Water Efficiency

Applicant response: (100 word max.)

City Response:

Document references:

B.04| Energy and Atmosphere

Applicant response: (100 word max.)

City Response:

Document references:

B.05| Materials and Resources

Applicant response: (100 word max.)

City Response:

Document references:

B.06| Indoor Environmental Quality

Applicant response: (100 word max.)

City Response:

Document references:

B.07| Regional Priority

Applicant response: (100 word max.)

City Response:

Document references:

C. LEED NEIGHBORHOOD DEVELOPMENT [LEED ND]

C.01| Smart Location and Linkage

Applicant response: (100 word max.)

City Response:

Document references:

C.02| Neighborhood Pattern and Design

Applicant response: (100 word max.)

City Response:

Document references:

C.03| Green Infrastructure and Buildings

Applicant response: (100 word max.)

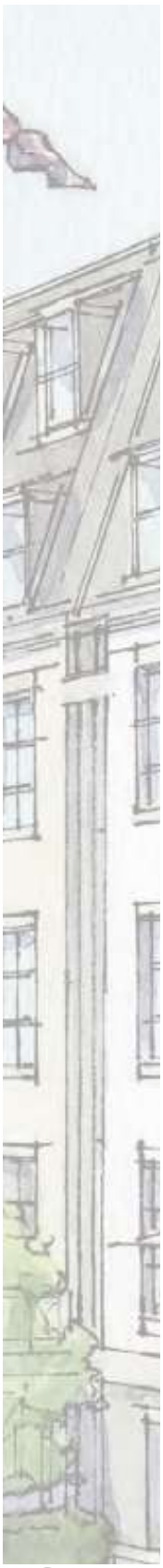
City Response:

Document references:

BUILDINGS FACADE DESIGN AND MATERIALS

Applicant general comments for building facade design and materials: (250 word max.)

General city comments: Consistent ☐ Not Consistent ☐



BUILDING FACADE DESIGN AND MATERIALS NO. 1

FACADE HIERARCHY

The materials and configurations of building facades shall respond to the relative importance and visibility of that façade. There will be three essential façade types: Primary, Secondary, and Tertiary. Primary Facades are located at the most important corners, gateways, and public spaces within the project. Secondary Facades are less prominent but are still open to public view. Tertiary Facades directly face the rail yard and are not generally visible from pedestrian environments within the development. These three categories are used to determine which materials, configurations, and building details should be used in different locations.

Applicant general comments on facade hierarchy: (100 word max.)

City Response:

Document references:

BUILDING FACADE DESIGN AND MATERIALS NO. 2

FACADE MATERIALS

Portions of building elevations that are framed by long perspective views down a Street shall be known as Vista Terminations. Vista Termination areas shall respond with a building element of appropriate size and architectural impact to terminate the vista meaningfully. These shall be aligned properly to be framed in the vista. Proper Vista Terminations include architectural treatments such as raised rooflines, stacks of balconies, grouped window compositions, towers, and cupolas.

Applicant response: (100 word max.)

City Response:

Document references:

FACADE DESIGN

The materials and configurations of building facades shall respond to the relative importance and visibility of that façade. There will be three essential façade types: Primary, Secondary, and Tertiary. Primary Facades are located at the most important corners, gateways, and public spaces within the project. Secondary Facades are less prominent but are still open to public view. Tertiary Facades directly face the rail yard and are not generally visible from pedestrian environments within the development. These three categories are used to determine which materials, configurations, and building details should be used in different locations.

A. PRIMARY FACADES

A.01| Materials & Finishes

Applicant response: (100 word max.)

City Response:

Document references:

A.02| Incorporating Secondary and Tertiary Facade Materials

Applicant response: (100 word max.)

City Response:

Document references:

A.03| Upper Facade Zone

Applicant response: (100 word max.)

City Response:

Document references:

A.04| Punched Window Openings

Applicant response: (100 word max.)

City Response:

Document references:

A.05| Larger Fenestration

Applicant response: (100 word max.)

City Response:

Document references:

A.06| Storefronts

Applicant response: (100 word max.)

City Response:

Document references:

A.07| Building Base

Applicant response: (100 word max.)

City Response:

Document references:

A.08| Building Vent Terminations

Applicant response: (100 word max.)

City Response:

Document references:

A.09| Above-Grade Connections

Applicant response: (100 word max.)

City Response:

Document references:

B. SECONDARY FACADES

B.01| Materials & Finishes

Applicant response: (100 word max.)

City Response:

Document references:

B.02| Incorporating Tertiary Facade Materials

Applicant response: (100 word max.)

City Response:

Document references:

B.03| Upper Facade Zone

Applicant response: (100 word max.)

City Response:

Document references:

B.04| Punched Window Openings

Applicant response: (100 word max.)

City Response:

Document references:

B.05| Larger Fenestration

Applicant response: (100 word max.)

City Response:

Document references:

B.06| Building Vent Terminations

Applicant response: (100 word max.)

City Response:

Document references:

C. TERTIARY FACADES

Applicant response: (100 word max.)

City Response:

Document references:

D. VISTA TERMINATIONS

D.01| Specialized Architectural Treatments

Applicant response: (100 word max.)

City Response:

Document references:

E DEMISE LINES

D.01| Full Demise Lines

Applicant response: (100 word max.)

City Response:

Document references:

D.02| Partial Demise Lines

Applicant response: (100 word max.)

City Response:

Document references: