

Littleton Station 40R District Design Standards

Prepared by Dodson & Flinker, Inc.

Revised Draft: February 18 2021

1. Introduction

These Design Standards and Guiding Principles are adopted pursuant to the authority of Mass. General Laws Chapter 40R “Smart Growth Zoning.” They complement Articles XXXI and XXXII of the Littleton Zoning Bylaw, and establish the design requirements for development within the Littleton Station Smart Growth Overlay District.

This document is organized according to the subject areas to be addressed during the design review process, including streetscape, access & parking, architecture, landscaping, lighting and signage. It begins with an overview of Guiding Principles that summarize the Town’s goals and aspirations for the Littleton Station 40R District as described in the Littleton Master Plan (2017) and the Littleton Station Village Vision Plan (2020). Diagrams and photographs have been included to illustrate the intent of the standards, and include captions that clarify the design standards included in the text.

2. Purpose

The Design Standards shall be used by the Littleton Planning Board in their review and consideration of development proposals as described in Section 173-235 of the Littleton Zoning Bylaw. This document includes both binding design standards and non-binding guiding principles. Design standards generally include the words “shall” and “must” with regard to a specific standard. Design Principles and guidelines, indicated by the words “should” and “may” are recommended by the town but may be considered advisory in nature.

The Planning Board shall approve a development project upon a finding that it complies with the Littleton Station Smart Growth Overlay District Bylaw and these Design Standards. In the case of an inconsistency between the Bylaw and the Design Standards, the Bylaw shall govern. In the case of inconsistency between applicable state or federal laws – including, without limitation, state building codes or life safety codes – and these Design Standards, the applicable state and federal laws, rules and regulations shall govern.

3. Applicability

These Design Standards and Guiding Principles apply to all proposed development within the Littleton Station Smart Growth Overlay District that is subject to Plan Approval under the provisions of Articles XXXI and XXXII of the Littleton Zoning Bylaw. The Littleton Planning Board, at its discretion, can approve reasonable and justifiable minor deviations from the Design Standards if, in its opinion, such deviations contribute to meeting the goals of the Littleton Station Village Vision Plan and the Guiding Principles set forth below. Applicants should clarify how any proposed deviations from the Design Standards further these goals and principles.

These Design Standards do not exempt applicants from obtaining all required permits and complying with applicable building codes, laws, and regulations.

4. Definition of Terms

The definitions in Section 173-231 of the Little Zoning Bylaw apply to these Design Standards.

5. Guiding Principles

5.1. Reflecting Littleton’s Planning Goals and Objectives

Development projects within the Little Station 40R Overlay District should support and help to implement the goals and objectives of the Littleton Master Plan. Objectives of the Master Plan include promoting Transit Oriented Development to “...encourage development of homes and businesses within a walkable neighborhood, catering to people using transit rather than cars...while limiting impacts on residents and preserving the rural setting” (Littleton Master Plan, p. 37).

Projects should also support implementation of the Littleton Station Vision Plan, itself an outgrowth of the Master Plan. The Vision established a general plan for redevelopment of the Station Area showing the general location of uses and layout of roads and pedestrian circulation which inform the 40R District Zoning Map. It also described a framework for redevelopment of the area where “each node would have a mix of commer-

cial and residential uses organized around attractive, walkable streets and other public spaces. Additional development would extend out from the mixed-use core, taking the form of apartments, townhouses or compact single-family neighborhoods as determined by the real estate market and carrying capacity of the land and available services. Each neighborhood, even if built by a separate developer, should be tied into the overall framework with a coherent network of streets, greenways and pedestrian paths connecting to the mixed-use core" (Littleton Station Village Vision Plan, p.36).

5.2. Connecting to and Enhancing the Train Station and Facilities

New Streets, multiuse paths and pedestrian ways throughout the Station Area should lead directly to the station itself, connecting across lot lines as necessary to provide for a unified circulation system. This system should allow for both vehicles and pedestrians to access the station without having to travel out to Foster Street.

Development projects should also integrate the station and the surrounding parking lot into the overall development plan, both in terms of making efficient physical connections that are easy to use and navigate, as well as for any associated aesthetic scheme for roads, plantings, lighting and other design decisions. When the project is completed it should be difficult to tell where the private development area ends and where the MBTA station property begins – it should all hold together as a unified village design.



Establishing direct vehicular and pedestrian connections to the train station will ease traffic on Foster Street and encourage walking, while supporting a strong sense of place for the new Village.



These design standards are meant to support and encourage development proposals that follow the framework described in the Littleton Station Vision Plan.

5.3. Enhancing Littleton's Visual Character and Quality of Life

The design of buildings, roads, parking, landscaping and other elements should complement local traditions in architecture and landscape design. In addition to preserving any important architectural or site features within the development zone, the project should feature buildings that are compatible in form, scale and proportions to those already found in Littleton, and provide for design of streets, trails and other features that reflect local traditions in form and materials. During the visioning process participants noted the rural character of area surrounding the Station and supported an approach to development that protects and enhances the visual character of Foster Street and the surrounding neighborhood. This doesn't mean hiding the project from view, but rather making sure that major trees, stone walls and existing views are protected to the extent possible and integrated in to the overall design, and that new buildings and other features don't clash with existing buildings along Foster Street.

The visual character of development projects should be enhanced by careful design that keeps parking lots, service areas, dumpsters and utilities to the side or rear of buildings and screens them with fences or vegetation. Electric and cable services and other utilities should be buried. Switch boxes, transformers and other above-ground elements should be located away from the primary façade of buildings and shall be concealed.

Development project should also support Littleton's quality of life, both by providing convenient access to the train and other services used by everyone in town, and by providing amenities that enhance the lifestyle of neighborhood residents. In addition to shops, restaurants or other uses, this could include access to parks, trails and open space that is connected to the surrounding neighborhood and open to the general public.

5.4. Organized around the shared space of the public realm

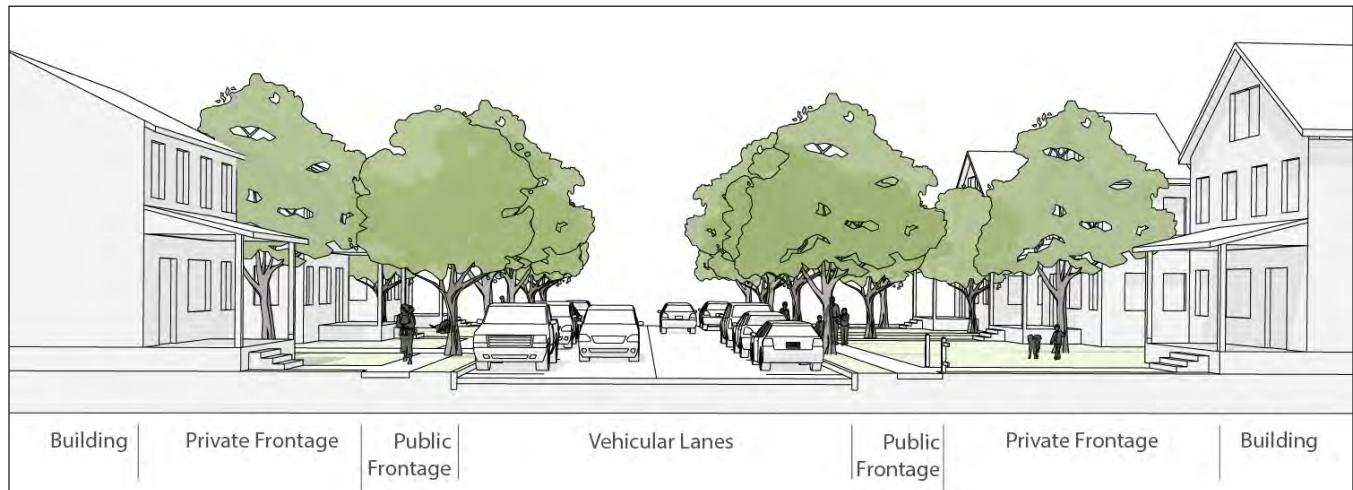
While development projects may be made up of different types of commercial, residential and mixed-use buildings – and may in fact have different developers, designers and builders – the Station Area should feel like a single coherent village. Key to making this work is provision for a unified network of walkable streets, greenways and public spaces that together make up “the public realm.” With a consistent approach to streetscape design and landscaping to provide the setting, building design and use can vary without making the village feel like a hodgepodge of unrelated development areas. This in turn will encourage walking and

simplify the process of navigation and wayfinding.

Projects should also provide convenient pedestrian and vehicular connections to the surrounding neighborhoods, as indicated in the Vision Plan, by connecting the principal street north and south through the entire site. Likewise, a multiuse trail should connect, if possible, from Harwood Avenue south to the train station, and continue along Foster Street to Taylor Street. Secondary sidewalks and paths should connect to each part of the development project to encourage walking and biking and reduce conflicts between pedestrians and vehicles.

There should be a clear hierarchy of street types to organize vehicular circulation and provide for the best fit between the size of the street and projected traffic demand. Dead-end streets should be avoided in favor of a loose grid of connected loops that distribute traffic to multiple intersections and allow alternatives for emergency access should a blockage occur at any point. Through-traffic can be discouraged by keeping streets relatively narrow and providing for on-street parking, if appropriate. Traffic on residential streets can be calmed further though the use of neck-downs, raised crosswalks, plantings and signage.

Each development project should contribute to the success of the public realm with buildings and landscaping that relate to and reinforce the streetscape. To the extent possible streets and pedestrian areas should be lined with a continuous enclosure of buildings and trees rather than parking lots. This provides a clear spatial structure to the village, making for a comfortable pedestrian environment and fostering participation in shared activities. Projects should reinforce natural



The public realm consists of the network of public streets, sidewalks, parks, plazas, trails and natural areas that support the shared life of the community. It is often designed as a series of “outdoor rooms,” enclosed by buildings and trees, that provide comfortable spaces for walking, sitting, and gathering - with clear boundaries between public and private space.

centers of activity at intersections, at the junction of roads and pedestrian paths, and at the end of a long vista down a street. These key locations shall be considered for public parks and squares, and shared uses such as cafes, shops or public services. Visual access and convenient pedestrian connections will reinforce their place in the overall design of the district.



Shared public spaces - framed by attractive buildings and enhanced by landscaping, paving, benches, lighting, etc - should be central to the design of the Station Village - not an afterthought.

5.5. Supporting Social, Economic and Environmental Sustainability

In accordance with the goals of the Littleton Master Plan and the Littleton Station Village Vision, projects should protect and enhance the natural environment. This includes employing best practices for wetland protection, management of trees and other vegetation, and best practices for grading, drainage, and the use of materials. It is also achieved by providing for a compact, walkable village center environment that reduces per capita energy demand and other environmental impacts. Low Impact Development (LID) techniques should be used to reduce the concentration of stormwater runoff and maintain existing stormwater flows. Where feasible, bioswales, rain gardens and other bio-retention techniques should be employed. Green roofs and rain storage systems are encouraged in order to reduce and reuse roof drainage. Pervious paving materials should be used where feasible to reduce runoff from hardscaped areas and integrated into the design of the project.

The town will favor design and planning approaches that adhere to recognized principles of sustainability and offer measurable long-term benefits. This should include investment in efficient heating and cooling systems, extra insulation and other techniques that

offer long-term reduction in energy use. Applicants are encouraged to quantify these benefits through certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ and the LEED for Neighborhoods Development Rating System.



While the marketplace will to large extent determine the mix of uses that can be built on the site in coming years, the town supports provision for a broad mix of residential uses supported by appropriate commercial development. In support of both economic and environmental sustainability, buildings should be designed to be flexible in floor plan and adaptable to different uses over time as market demand changes. The success of parks, plazas and other shared community spaces should be supported, to the extent possible, by filling ground floor spaces in surrounding buildings to active retail, service and community uses.

Social sustainability is encouraged through provision of diverse housing types that accommodate households of a broad range of ages, sizes, incomes and physical abilities. Families and seniors should be supported with provision of playgrounds, small parks, benches and places to walk, run or ride a bike. Gathering places for casual meetings and community events should be provided for each residential cluster within the overall development project. The Station Area Village should accommodate residents at every stage of life, and should embody a level of design quality and functionality such that any citizen of Littleton would be proud to call it home.

6. Design Standards for the Streetscape

6.1. Streetscape Design Principles

Every new project shall be designed as an integrated system of building facades, pedestrian and vehicular circulation, streetscape elements, signage, lighting, planting, and drainage structures. The focus shall be on pedestrian comfort, livability for residents, and encouragement of community life. The design of the public realm shall come first, with private uses subordinated to a larger system organized around public spaces.

The width of the paved roadway, right-of-way, pedestrian walkways, and building setbacks shall be coordinated with the size of proposed buildings to produce a comfortable sense of enclosure along the street. Wherever public access between buildings is appropriate, it shall be designed as public space and accommodate pedestrian connections. Applicants shall submit plans and cross-sections that illustrate the setback, shape and scale of proposed buildings in relation to the street, pedestrian areas, parking, lighting, landscaping, and neighboring buildings.

6.2. Building Location and Orientation

Buildings shall be oriented with their principal façade and entrance doors facing the public way. New buildings should have relatively short setbacks that provide direct and convenient access to front entries. Occasional modest building setbacks that articulate the succession of contiguous facades, as well as niches for public seating, landscaping, and recessed entry ways can add interest to the pedestrian experience, and are therefore encouraged.

While the design of buildings shall reflect local traditions, architectural treatments shall be varied from one building to the next to avoid visual monotony. While a consistent theme is desirable, variations on that theme provide an opportunity to enhance the overall character and interest of the area. Visual richness shall be achieved by adding human-scale details, such as decorative bays or entrances, storefront windows, window boxes, porches, awnings and other elements.

6.3. On-Street Parking

On street parking shall be encouraged in order to slow traffic, provide for convenient visitor parking, and may be included in calculations of required parking to reduce the size of parking lots. Location and design of



Streetscape design should integrate buildings, sidewalks, curbs, parking, lighting and landscaping into a balanced composition organized around pedestrian comfort.

parking spaces shall be coordinated with the overall design of the streetscape, especially by providing appropriate setbacks at cross walks and street corners to ensure visibility for cars and pedestrians.

6.4. Design & Materials for Sidewalks and Pedestrian Areas

Sidewalks and other walkways shall be designed and located to encourage use by pedestrians. They shall function as a continuous pedestrian system that encourages people to walk throughout the Station Area Village. Sidewalks shall be no less than five feet wide, and as appropriate shall widen to allow enough space for benches, café seating, landscaping – in every case maintaining a minimum clear aisle 5 feet wide for through passage.

Materials: The use of masonry pavers or bricks is encouraged, and at a minimum, poured-in-place concrete walks and plazas shall be provided. Asphalt paving is not acceptable. Pedestrian pavement shall be a minimum of 4" of reinforced concrete on an appropriate subbase, with a minimum of 6" for any areas that will bear vehicular traffic. All curbs shall be vertical granite. Permeable pavement, iron gratings, and other devices that reduce stormwater runoff and support healthy tree growth are encouraged.

Crosswalks: In order to facilitate pedestrian circulation and slow traffic, the use of texture changes or raised crosswalks is encouraged wherever pedestrian ways intersect roads or high-traffic corridors within parking lots. Curb bump-outs or similar devices shall be used at intersections and crosswalks to narrow the width of pedestrian crossings.



Crosswalks should feature a change of materials and texture to enhance visibility. Durable stone, brick or concrete help to tie crosswalks into the larger pedestrian system, and hold up better than paint.

6.5. Accessibility Standards

All design standards and materials shall follow the requirements of the Americans with Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) in providing universal access. These elements shall be reinforced where possible with benches, covered sitting areas, and shading of walkways to provide for pedestrian comfort. Grading and building design decisions shall be coordinated to reduce the need for accessible ramps and railings that take up otherwise usable space along the street frontage. Provision should be made to plan for snow removal and storage in order

to minimize the disruption to pedestrian movement.

6.6. Street Furnishings

Site elements and street furnishings, including bollards, light posts, signage, benches, trash barrels, planters and bike racks shall reflect traditional design and materials, though variations that fit the architecture of specific buildings are acceptable. Location of these elements shall be coordinated with pedestrian circulation and building entrances to enhance the functioning of the entire district.

6.7. Screening Elements: Walls, Fences and Hedges

Fences, walls, and hedges shall be designed to create a clear and logical separation of public and private spaces while complementing the design of the streetscape. Fences located at the front property line shall be designed so that pedestrians can look through or over them. Taller screens shall be kept behind the front wall of the structures. Traditional materials like wood, stone, wrought iron, and plants are preferred. Chain link, plastic and vinyl are not acceptable, though the use of high-quality cellular PVC composites may be considered.



In this traditional streetscape design at Mashpee Commons on Cape Cod, buildings front on wide sidewalks, roads are relatively narrow, and every space and surface has been carefully designed and detailed for a particular use (image courtesy Congress for the New Urbanism).

7. Vehicular Access and Parking Standards

7.1. Roadways and Access Driveways

Roadways shall provide adequate capacity for the demand of projected homes and other uses, with a hierarchy of width appropriate to each area of the village. All roadways shall provide suitable access for emergency vehicles, to be determined in consultation with Littleton public safety officials. Stubs or other assurance for future access to adjoining parcels shall be provided.

Shared driveways and alleys serving multiple uses shall be used whenever possible to simplify vehicular circulation patterns and reduce conflicts between cars and pedestrians. Driveways and alleys shall be located to provide easy access to rear parking areas from the street while minimizing disruption of pedestrian flow.

7.2. Alley Connections Between Parking Areas

Short interior roadways shall be provided to allow continuous access from one parking area to the next. Provision shall be made for connecting parking lots and alleys across property boundaries. This will limit the number of curb cuts needed along the principal street through the village, while providing convenient rear access to each building.

7.3. Location of Surface Lots and entrances to garages

All parking areas shall be located to the side or rear of structures, which if unclear shall be considered the area least visible from the public way. Parking lots shall be no closer to any street line than 50 feet, unless approved by the Planning Board because of site conditions or other design considerations. Entrances to parking garages shall be to the side or rear of structures



Building entrances facing parking lots should be designed to promote pedestrian comfort and as attractive as facades facing a village street or other public space.



A neotraditional approach to access and parking is preferred. In Emerson Green at Devens, homes line a village street with parking on one side (above). Access to individual garages is off alleys in the rear - getting most parked cars out of view and allowing sidewalks and front yards to be reserved for pedestrians (below).



relative to the public way. On-street parking is encouraged for streets with a traditional village character. To encourage pedestrian activity along the street, lighted pathways shall be provided to encourage people who park in the rear of structures to walk to the street frontage and enter buildings from the street side.

7.4. Shared Parking Provisions

Shared parking for mixed use areas, such as lots which are used by commuters and employees during the day and by residents at night, is encouraged as a way of reducing the overall area of pavement. Where demand is unsure, parking lots may be built in phases, as needed to meet demand.

7.5. Parking Lot Lighting and Landscaping

Parking lots shall conform to the parking lot landscape and lighting requirements of the Littleton Zoning By-law. To the extent possible, parking lot lighting should be reduced or turned off after 10 PM.

8. Architectural Standards

8.1. Architectural Design Principles

The architecture of the Village need not attempt to reproduce historic Littleton buildings, but it must be authentic. Authenticity is not about how old something is. It is about how well it is made and whether it is created with a genuine understanding of its form and function. Authentic new buildings employ building elements and materials creatively, but also in controlled and rational manner. The end result is a new form, which respects Littleton's historic character rather than merely copying it. Buildings should express a sense of permanence and belonging. Each building should be designed as part of the overall composition, and contribute to the overall good. Design approaches and decisions should be intentional, and the use of materials should be honest and logical in its application. Where buildings are visible from Foster Street, proposed structures should not seem visually obtrusive or out of place with their neighbors.

8.2. Siting of Structures

Structures shall be sited and positioned to define and dignify public spaces, such as streets, squares or parks. New and renovated buildings shall consider the use and privacy needs of existing neighbors along Foster Street and provide screening to minimize detrimental impacts.



Structures should be placed to enclose the streetscape and define public squares and parks - as in this example of townhouses and apartments in Middlebury, VT. (Courtesy Union Studio Architects)



Structures should use traditional building forms and proportions as the building blocks to assemble larger connected structures, rather than creating a single large building, as shown by new mixed-use structures at Red Brook Village, Plymouth (Top), Summer Street, Manchester (middle) and West Acton VillageWorks (bottom).

8.3. Overall Building Shape, Massing and Proportions

Building shape, massing and proportions should be compatible with Littleton's architectural traditions. Building facades more than 50 feet wide shall be broken down in to a series of smaller elements or bays, and articulated as assemblies of smaller building masses with traditional proportions. This shall be accomplished by incorporating projections of the building

mass, not merely changes to surface materials or color. In general:

- Simple forms that are clearly discernible are favored over unnecessary complexity.
- Massing of each building should relate to its context, not just programmatic goals, and work with neighboring buildings and public spaces to create a unified composition.
- “Traditional” architecture should be used with an understanding of historic design principles and use of materials.
- Decorative elements should be used sparingly to lend scale, visual interest, and detail; too many “add-ons” can be awkward and diminish the overall sense of order.
- Building forms should be used to define usable outdoor spaces for daily activities, and unusable residual spaces should be avoided.

8.4. Building Height and Scale

The height of structures within the development is set to a maximum of 4 stories and 50 feet by the zoning bylaw. As the project develops, any new structure or proposed alteration should be compatible with the surrounding buildings and homes in the surrounding neighborhood. Human scale should be the basis for determining the overall scale of new structures as well as their component features. In general:

- Overall building scale should relate to individual elements.
- The scale of the entire façade must relate to the human-scaled streetscape.



- Floor to floor heights should be governed by exterior proportions rather than building systems, and not be elongated or exaggerated to cover up functional elements.
- Avoid uniformity of height along the streetscape. Consider how the part relates to the whole.
- Three- and four-story building should employ techniques to reduce the perception of the building scale, such as stepping back the top floor, incorporating top floor units into the roof structure and providing direct entry to ground level homes.

8.5. Roofs

Roof design is critical to the overall character of a building. Building facades should not just terminate, but should be integrated into the design of the roof as part of the overall expression and character of the structure. Creativity in design of roofs is encouraged, supported by authenticity in the expression of form and use of materials.

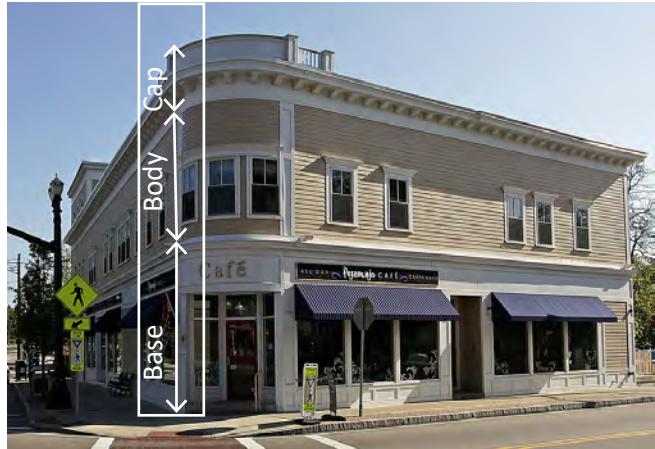
- Pitched roofs are not mandatory, but where used shall have a minimum pitch of at least 6:12 and incorporate traditional forms.
- Visible roofs shall incorporate traditional materials, including architectural asphalt shingles, wood shingles, standing-seam metal, slate, synthetic slate or metal shingles.
- The design of strong eaves, cornices, parapets where appropriate is encouraged.
- Any necessary components such as mechanical equipment, gutters, leaders, etc. should be an intentional part of roof and façade, not an after-thought.



West Concord (left) and Avalon, Acton (right). By breaking up building masses into intersecting wings with bump outs and dormers, it's possible to give an apartment building more of the character of a traditional neighborhood.



Tall peaked roofs reduce the apparent scale of these mixed-use blocks while accommodating a full third floor. Highly transparent windows and doors on the ground floor are critical to maintaining a lively pedestrian environment (Courtesy Union Studio, Architects)



A time-tested design for a "Main Street" block in Holliston, MA, with shops on the ground floor and apartments or offices above. Awnings control glare and heat while allowing for large, transparent windows on the ground floor. The traditional design of "base, middle and cap" provides for attractive proportions.

- "Green roofs," photovoltaics, terraces, etc. must be carefully integrated into the overall design of the building.
- Rooftop mechanical equipment shall be integrated into the overall design or screened from view.

8.6. Design and Orientation of Facades and Entrances

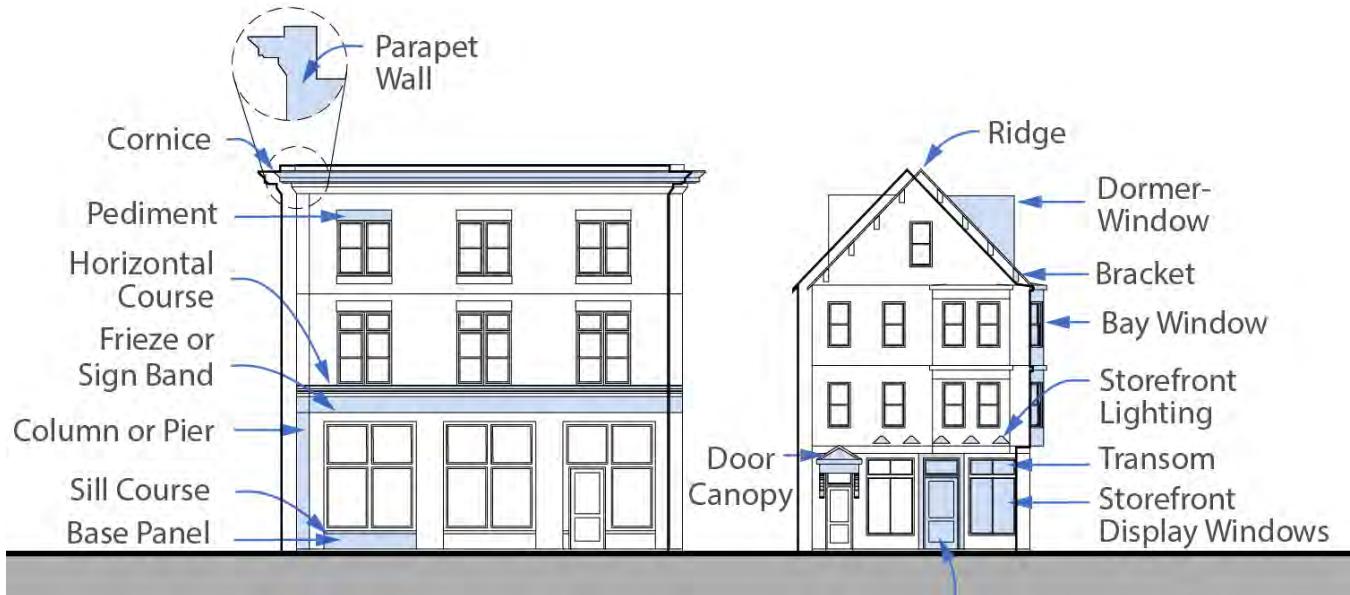
Every building should have a clearly identifiable front, a formal side facing the street or other public space. The principal entrance should be clearly visible, set apart by its location and detailing to mark it as the front door. Pedestrian entrances should be logically and conveniently located. The overall proportions of the façade and the relationships between doors and windows should be compatible with the architectural style and character of neighboring buildings and the district as a whole.

- Buildings should have a hierarchy of entrances which is expressed in the design of the facade
- Buildings with multiple storefronts should be designed to enhance the richness and texture of the pedestrian experience.
- Entrances shall be physically and visually accessible, welcoming, and inviting.
- Side and rear facades may be less detailed than the primary façade but shall be generally consistent with the primary façade's architectural style.
- Exposed foundation walls should be minimized.

8.7. Windows and Doors

The composition of windows across a building's façade (and other elevations) shall be deliberate and pleasing. The proportions, detailing and distribution of windows are especially prominent elements of the building's character and vocabulary. Windows should generally be vertically proportioned. Windows should be designed to reduce energy costs through good seals and insulation, low- emissivity glass, etc. Design for solar gain in winter, opening windows in summer, and natural lighting are encouraged.

- Windows in buildings with a traditional design shall be vertical in proportions and divided by mullions into multiple panes of glass, as appropriate to the overall design of the building.
- Facades should express an overall ordering scheme that organizes multiple windows according to clear vertical and horizontal lines coordinated with the design of the entire building.
- Windows shall be transparent, and the view into the building shall not be obscured by tinted glass or reflective surface treatments.
- Storefront windows should not be backlit or covered with signage.
- Interior window coverings should complement the architecture of the building.
- Windows should be operable, if appropriate to the use and location.



Traditional facade and building elements such as shopfronts, dormers, bay windows and porches evolved over centuries to serve the functional needs of shopkeepers and homeowners. New buildings need not follow traditional styles, but should provide a similarly coherent design approach where form relates to function, human scale is maintained, and facades are organized by an overall ordering scheme.

- Storefronts and other non-residential uses facing public spaces shall have a minimum transparency of 60%, with 40% minimum transparency for upper floors.

8.8. Materials & Surface Appearance

Building façade materials including but not limited to brick, wood, cementitious fiber board, veneer stone, masonry, glass and terra cotta, are permitted. Plastic and vinyl products are not permitted, with the exception of high-quality cellular PVC materials. Exterior materials shall express their inherent material qualities, and not seek to express qualities of other materials.

- Materials should be chosen that enhance the overall appearance of the building.
- Changes in plane, texture, shadowing, etc. are encouraged, if integrated into the overall design of the building.
- Trim and detailing should fit the architectural style of the building and be integrated with other elements.
- Trim details based on traditional architectural features such as eaves, porches, window bays, and balconies, shall not be simulated with flat trim on an otherwise flat façade or flush eave line.



The use of traditional materials like wood, stone and brick is encouraged - and should be supported by traditional detailing for windows, doorways, eaves and trim.





Covered entrances and porches serve a functional purpose while adding an element of human scale and individuality to what otherwise could be a faceless apartment or townhouse.

8.9. Porches, Arcades and Canopies

The use of porches and arcades to shelter building entrances and connect buildings is encouraged as a way to provide for pedestrian use and comfort and add interest to the streetscape. They should be designed along with the façade of the building, with authentic materials and sturdy construction. Gutters, downspouts and other stormwater management features should be carefully planned and integrated into the design.

Awnings and Canopies should be designed with simple shapes, integrated with the façade of the building, and consistent in character across multiple storefronts. Round or bullnose shapes are not acceptable. Fixed or retractable awnings should be no lower than 8 feet above the sidewalk. Backlit awnings are not allowed.



Adjustable awnings support sustainable building design by allowing users to adapt to changing weather and light conditions over the course of a day (or change of seasons) with minimal energy use.

8.10. Secondary Elements: Towers, Cupolas, Chimneys

Decorative elements should be appropriate to the architecture of the building and the neighborhood. They should be used sparingly, in order to highlight important buildings and provide for landmarks and focal points within the village. They should have a clear purpose that is evident in their design and location, rather than just decorative appliquéd. Historically-based elements should be scaled and detailed to fit the building.



Towers and other decorative elements should be used sparingly, and with a clear purpose, such as creating a focal point at the end of a street. These elements should be integrated in the design of the building, rather than appearing like a random appendage.



Service areas and mechanical equipment should be screened and screening elements incorporated into the architecture.

8.11. Service Areas, Mechanical Systems, HVAC Equipment

Building service areas, dumpsters, generators, transformers, etc. shall be carefully placed and screened with fences, walls or landscaping that complement the architecture of the building. Mechanical systems and HVAC equipment should be located to reduce noise pollution and screened from view. All service areas, equipment and utilities, including electrical transformers, dumpster enclosures, shall be shown on building and site plans during design development.

9. Landscape Standards

9.1. Landscape Design Principles

Landscape materials and design application should reflect the character, history and ecology of the region and focus on the use of native species adapted to local conditions. The following are important overall goals:

- *Spatial definition:* Trees and other landscape plantings shall be used to reinforce the pattern of private and public spaces -- not just for decoration. The landscape shall enhance the sense of place, creating a human-scale and pedestrian-oriented environment.
- *Screening and framing:* Plantings and site features shall promote and increase design compatibility between different land uses, while ensuring attractive views from streets and adjacent properties. These site features should shield adjacent properties from potentially adverse impacts of development.
- *High quality materials* are encouraged, providing an expression of concern for the quality of the pedestrian experience and the perception of timelessness. Planted areas shall include a variety of durable ground covers, perennials, grasses and shrubs - planted in masses and appropriate to the architectural context. Plantings shall be designed to provide year-round visual interest in foliage, bark, branching and bloom.
- *Stormwater plantings* shall be designed to support and complement the function of vegetated swales, rain-gardens and other Low Impact Development techniques. These areas should be seamlessly integrated into the overall landscape design and planting plan.

9.2. Plant materials

The reliance on one species is discouraged to reduce the risks and prevent spread of blights and pests -- although massed plantings of the same variety may be allowed for design purposes. All plan proposals shall emphasize the use of native and/or drought tolerant plants. Lawn areas shall be minimized to the extent possible, in favor of the use of hardy ground covers, massed perennials and native grasses. Selection of plant materials shall be coordinated with plans for snow removal and storage.



Trees and other landscaping should reinforce the spatial structure established by buildings, site structures and furnishings while providing shade and visual relief.

Projects shall minimize the clearing of existing vegetation, and work to protect existing trees. No invasive species will be permitted to be planted. Plans shall include mitigation of existing invasive species in wetlands and other areas that will remain undisturbed. Where appropriate, plant food-producing vegetation to support wildlife, and allow dead trees to remain in undisturbed areas to provide roosting and nesting sites.

All plants shall be A-Grade or No. 1 Grade and free of defects. All plants shall be normal health, height, leaf density, and spread as defined by the American Standard for Nursery Stock, ANSI Z60.1 (latest available

edition), or the American Association of Nurserymen. Plants shall have full, even, well-developed branching and a dense, fibrous, and vigorous root system.

9.3. Parking Lots and Driveways

Parking lots should be planted with large shade trees and landscaped to provide shade and visual relief, minimize the amount of glare, noise, and heat, block wind, and support safe patterns of circulation. This requires canopy trees growing in enough permeable soil to thrive.

- Minimum placement: At least 5% of the interior of any parking lot shall be maintained with landscaping (trees and shrubs) in islands and/or medians at least ten feet wide. All parking spaces shall be located within 60 feet of the trunk of a canopy tree, or 30 ft. of an ornamental tree.
- Where plans for covered parking, solar canopies or other features won't allow for interior planting, the required number of trees and minimum area of other landscaping shall be used to supplement plantings in adjacent areas.
- Minimum size: Canopy trees shall be at least 3 inches in caliper when installed, measured at 12-18" from the ground. Evergreen shrubs shall be at least 24" in height and minimum three-gallon container size at the time of installation.
- Screening: Parking lots visible from streets or public pedestrian ways should be screened with attractive fences and plantings. Opaque screening is required between the parking area and adjacent streets or public pedestrian ways. Shrubs, plantings, hedges or walls shall provide an opaque screen or barrier for the first three feet of height within three years of planting.
- Preserve existing vegetation and specimen trees, unless specifically approved otherwise.



Trees can have an enormous positive impact on the design of parking lots, while taking up relatively little space on the ground. The key is to provide enough room to keep trees from being damaged and enough soil volume for healthy root growth, so that the tree can grow to its full potential.



Trees can be planted within paved islands (above) as long as the growing medium extends beneath the pavement. A preferred approach is to provide wide beds with mulch or ground cover that allows for free flow of water and oxygen to the roots (below).



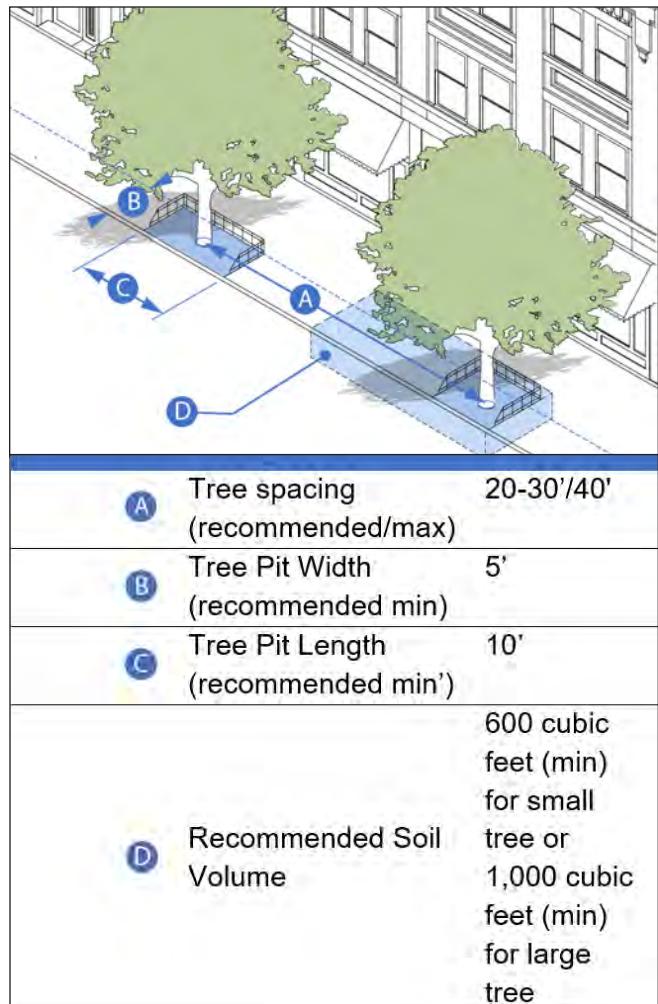
9.4. Streetscapes

The planting of trees along public streets or the retention of existing natural vegetation shall enhance the appearance of the district, shall enclose and define the streetscape, and reinforce the pattern of public spaces. Special plantings may highlight significant sites, gateways and entrances. The streetscape shall be designed to minimize conflict between trees, roadways, sidewalks, sight distance, and streetlights.

- Street trees should be planted in sufficient numbers and close enough together to form a continuous canopy at maturity. Trees should be spaced as follows:
 - **Large Deciduous street trees: 30'-0" on center**
 - **Small Deciduous trees: 20'-0" on center**
- Street Trees must be planted at least five (5) feet from fire hydrants, six (6) feet from street signs, seven (7) feet from curb cuts, and thirty (30) feet from stop signs. The edges of tree planting beds must be at least two (2) feet from gas, electric, water, and sewer lines, and at least four (4) feet from oil fill pipes.
- Trees shall be planted with sufficient soil volume to support growth through maturity, recommended at 600 cubic feet for small trees and 1,000 cubic feet for large trees. This may be accomplished by connecting tree pits to adjacent landscaped areas either directly or through the use of a modular suspended pavement system. Structural soil may be used if other methods prove infeasible.
- Tree pits shall have minimum dimension of 5 feet wide and 10 feet long; any pavement or surfacing shall be permeable to air and water and design and constructed to prevent soil compaction.



Street trees make a huge difference to the quality and character of the streetscape. Relatively inexpensive in themselves, the key to long-term success lies in careful design of the planting area to ensure the right amount of water and nutrients.



9.5. Multi-Family Residential & Commercial Landscapes

Landscape plantings should be used to bring a human-scale to larger buildings while enhancing the character of each site. Whether placed against the building wall in a traditional manner, or between the building wall and the vehicular use area, vegetation should be used to soften and make more human scaled spaces.

Perimeter plantings shall visually break up the mass of buildings and pavement, between sidewalks and buildings or between parking areas and sidewalks.

- Minimum planting strip width: 4'-0".
- Where there will be a bumper overhang at parking spaces, expand the minimum width of planting strip to 6'-0".
- The total length of plantings along a building façade should be at least 50% of the length of that side of the building.

- Where sidewalks extend from the street to the building façade, planter boxes may be used in lieu of foundation plantings.

9.6. Buffer Plantings

Semi opaque Buffers can serve a purpose in establishing and retaining the character of the district. Buffer plantings shall be provided, as appropriate, to shield adjacent properties along Foster Street and shield parking areas from view from public ways. Screening is required at dumpsters, service areas and necessary utility components.

- Existing trees are preferred over new planting if they achieve the same purpose.
- Fences are not considered to be an adequate screen unless combined with plantings.

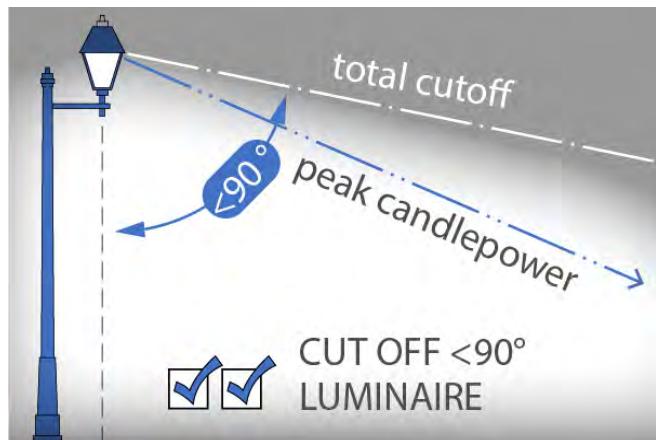
10. Lighting Standards

10.1. Lighting Design Principles

Outdoor lighting should be designed to ensure safety, functionality and convenience through illumination of streets, sidewalks, pedestrian paths and building entrances. Lighting should be designed to conserve energy and limit the visibility of lighting outside of the district – including the reflected glow from pavement and building walls. Light fixtures should be chosen for size, style and performance characteristics appropriate to the design of individual buildings and the entire district. Lighting for sidewalks, paths and gathering areas shall be scaled to the pedestrian and designed to create an attractive nighttime environment. Indirect lighting of facades, vegetation and signage is encouraged.



Night lighting should be designed as an integrated system that combines lighting of commercial windows, entrances, signs and facade elements with street lights, bollards and decorative elements.



10.2. Light Intensity and Control of Glare

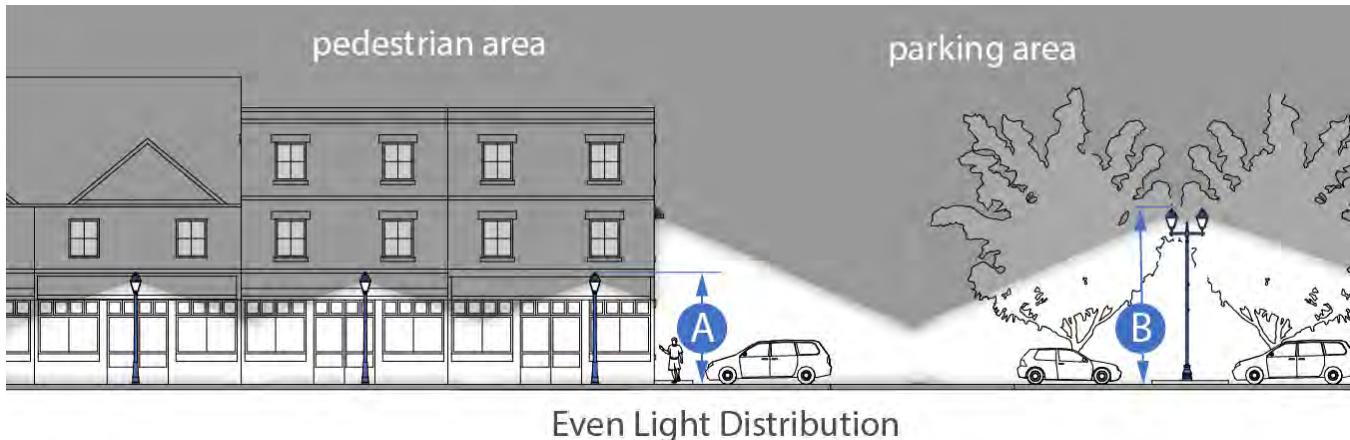
Lighting shall be provided at minimal levels that will allow for reasonable comfort and security, with an average illumination of 1-2 foot-candles (FC) and a maximum of 5 FC to reduce “hot spots.” All lighting shall employ full cut-off fixtures with color-corrected lamps to minimize glare, reduce light trespass and avoid polluting the night sky. The reflectivity of building surfaces and pavement shall be considered when designing lighting in order to reduce reflection of light into the night sky. All lighting shall wherever possible incorporate timers or other devices to turn off lights when not needed. Flood or area lighting is not acceptable.

Light levels shall meet the minimum design requirements of the Illuminating Engineer Society of North America (IESNA). Light levels shall be kept within a designated range as follows, with no more than the minimum level at the boundaries of the district at any time:

- When commercial or community facilities are closed: Minimum of 0.2 Foot-candles (FC); Maximum to minimum ratio of FC in the district of 20:1.
- When commercial or community facilities are open: Minimum of 0.5 FC; Maximum to minimum ratio of 15:1 FC in the district.

10.3. Street Lights

Except in the case of decorative fixtures designed to complement the streetscape, all lighting shall employ cut off elements to project light downward. A larger number of medium-wattage streetlights is preferable to generalized illumination by bright lamps located high above street level. Area floodlights that use high-glare lamps are not permitted. Cobra head light fixtures are not permitted. The luminaire shall be LED, with a color temperature between 4000K and 4700K.



10.4. Height of Fixtures

Fixtures should be mounted at a height appropriate to the scale of the buildings and to support a pedestrian-scale streetscape. Wall Mounted fixtures shall be mounted no higher than 12-15 feet above grade, depending on the size of the building (A, above). Pole mounted fixtures shall be no higher than 15 feet above grade (B, Above).

10.5. Parking Lot Lighting

Lighting shall be provided at minimal levels that will allow for reasonable comfort and security, and shall wherever possible incorporate timers or other devices to turn off lights when not needed. All lighting shall employ full cut-off fixtures with color-corrected lamps. Flood or area lighting is not acceptable.

10.6. Building Lighting

Indirect lighting of facades and decorative elements is encouraged. Lighting of entrances, sidewalks, and parking areas shall be accomplished with recessed fixtures under eaves and porches to minimize glare. Light levels on porches and storefront entrances shall not exceed 10 maintained foot-candles at the horizontal ground surface. Window displays shall be illuminated with shielded accent lights. Interior lights shall not create glare that shines out windows and doors. Transformers, if required, shall be remote and screened from view.

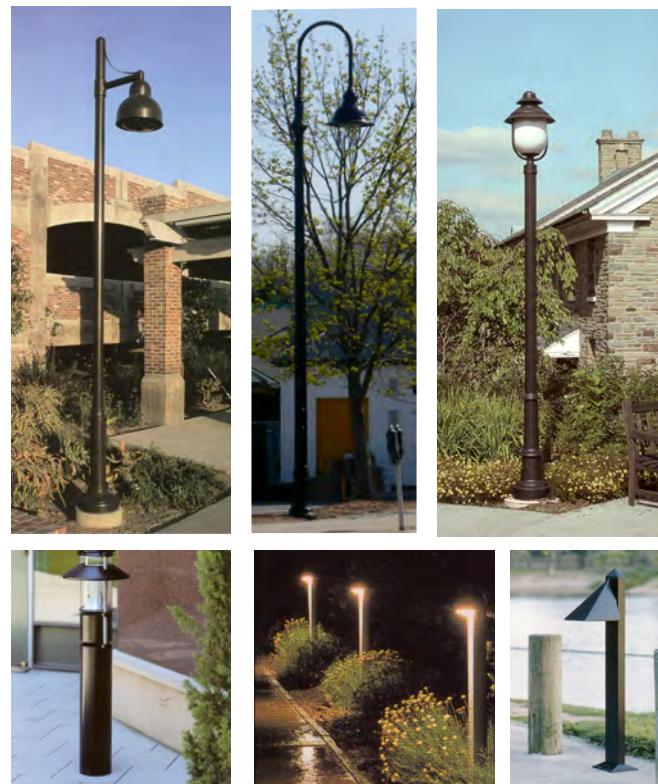
10.7. Hours of Operation

Except as needed for site safety or security, all external lighting, including lighting accessory to authorized signs, shall be extinguished one half hour after the facility is closed for the business day. Such lighting may

be timed to resume one half hour prior to the arrival of the first employee on the premises.

10.8. Light Source

No outdoor light fixtures using high pressure sodium vapor or mercury vapor lamps shall be allowed. The use of LED and fluorescent lighting is encouraged as long as the intensity, coverage and color of the light matches traditional light sources.



Lighting and light fixtures should be designed as an integral part of the design of the district. Poles and fixtures for street, parking and pedestrian lighting should be consistent within each area, but need not be identical throughout the district.

11. Signage Standards

11.1. Signage Design Principles

Signs should make a positive contribution to the general appearance of the district, and should be compatible with the building and its neighbors. They should not compete with each other for attention, but focus attention on each business or other use in turn, allowing for visitors to easily find their desired destination. In most cases light letters on a dark background are preferred. Lettering should incorporate legible font types designed for signage and meant to be clearly-legible from a distance, not fonts designed for contemporary print or digital media.

The number of signs on a façade should be kept to the minimum necessary to effectively communicate the



Wall signs should be scaled to fit the overall facade of the building. Most should be confined to a continuous horizontal sign band.

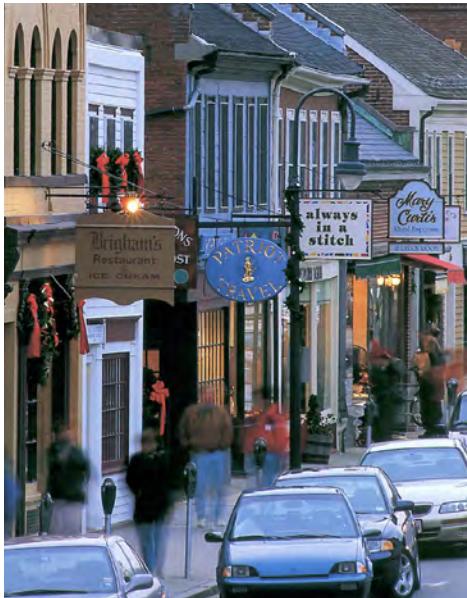
messages being conveyed. "Less is More": too many signs not only compete with each other, they also detract from the appearance of the district and can cause customers to block out the messages entirely. Where multiple signs are needed in order to list tenants or uses in a building, they should be consolidated within a single area with a clear, understandable hierarchy. Signage above the sills of second story windows should be confined to painted letters on window glass, provided that these signs advertise the organizations therein and are compatible with the architecture of the building.

11.2. Size

Signs should only be big enough to serve the needed purpose and scaled appropriate to the building façade and/or use they describe – generally lettering from 8" – 14" is large enough to be seen from across the street. The total sign area for the primary tenant of a commercial or mixed-use building shall not contain more than one square foot of sign area for each linear foot of storefront, and in any case shall not exceed 100 s.f.

11.3. Materials

All signs shall be made of durable, high quality architectural materials, with forms and colors that are compatible with the associated structure. Traditional wood, metal, or glass signs are preferred, while composites which look like wood and can be carved are also acceptable. Color should be compatible with the color of the building and its neighbors. Signage should focus



Wall signs, projecting signs, window signs and other forms are appropriate in the Station Village. All must communicate clearly while harmonizing with each other, complementing the design of buildings, and blending with the overall character of the District.



Projecting signs provide an opportunity for creating a work of art that conveys both the identity and spirit of the business within. Coordinated with other elements of the facade, they have a comfortable human scale and enrich the character of the streetscape.

on advertising local businesses, not national product brand names or logos. Text should be kept as short as possible and organized hierarchically.

11.4. Lighting

Signs shall not be internally illuminated, backlit, or use channel lettering. There shall be no neon signs. Illumination shall be projected onto signs, preferably from above, and directed away from pedestrians or vehicles. There shall be no flashing or moving lights, including search lights. Electrical services to signs shall be concealed – no conduits, transformers, wires or boxes should be visible. Design shall take into account the light source:

- *Incandescent light:* To save energy, incandescent fixtures should be used sparingly, and only when the light source itself must be visible to achieve a particular historic look or design intent. Fixtures that contribute the design of the façade, such as gooseneck lamps or other decorative elements, are preferred.
- *Fluorescent light:* fluorescent light shall be shielded to hide the light source, and shall be color balanced to retain the color of the sign and building façade if necessary.
- *LED light:* use of light-emitting diode fixtures is encouraged as long as the intensity, coverage and color of the light matches traditional light sources. The light source should be shielded to hide the light source.

11.5. Wall Signs

Signs which dominate the façade of any building or compromise architectural details such as arches, moldings, cornices or windows are discouraged. Where appropriate, signs should be organized within a signboard or frieze integrated into the overall façade.

11.6. Window Signs

Window signs, meant to be seen by pedestrians from a few feet away, should complement and not obscure window displays. Signs painted on the glass are acceptable if carefully planned and executed. Signs that look temporary and cover large areas of storefront windows are not allowed.

11.7. Projecting Signs

One projecting sign or “blade sign” shall be allowed for each commercial tenant along each side of the building that has an entrance to that business. The storefront blade sign shall be attached in such a way as to leave a minimum of 7'-6" clear below the lowest part of the sign. Signs should convey information in creative ways, using images that visually represent the goods or services provided at the premises. They should be centered on a vertical pier or column, not centered on a wall opening such as a door, window or storefront.

11.8. Awnings, Canopies and Marquees

Awnings shall be made of fire resistant, water repellent marine fabric (i.e., canvas), metal or glass. Vinyl or vinyl-coated awning fabric are not permitted. Awnings should delineate separate storefronts and fit within each individual bay. A tenant name or logo may be screen-printed on the valence of the awning. Signs should not be used under awnings or canopies unless there is at least 8 feet of clearance for the sign from the sidewalk.

11.9. Community/Neighborhood Signs

One general community sign shall be allowed at the entrance to the development, and secondary community or neighborhood signs shall be allowed if needed to identify individual neighborhoods within the village. Such signs shall be incorporated into landscaped area and coordinated with the design of walls, fences and building architecture. They should incorporate substantial materials such as brick, stone and timber, as appropriate to the design of the village.