



**GROWING
SMARTER**

*in Plymouth's
Fifth Century*

Site Plan Review Guidelines for the Town of Plymouth, MA



Plymouth Planning Board

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Preamble

The Town of Plymouth through its Planning Board, and with the assistance of the Board of Selectmen, the Design Review Board, Village Steering Committees, the Regional Economic Foundation, Chamber of Commerce, Town Counsel, Consultants and the development community at large; has prepared these advisory Site Design Guidelines for mixed-use and non-residential development.

The purpose of these Policies and Guidelines is to ensure that flexible but organized design and style will be used in mixed use and non-residential developments, while maintaining a community image that speaks to Plymouth's historical traditions and progressive view. In the ever-changing marketplace, styles come and go and "National Branding" by the private sector has become the trend. However, Plymouth is one of several communities nationwide, which by their historical, cultural and/or geographical positions are iconic places possessing a "Local Brand" or image. When one thinks of places like Lexington, MA; Williamsburg, VA; St. Augustine, FL; New Orleans, LA; or San Antonio, TX; one conjures a vision or image of what these places look like. It is their lore. It is their attractiveness. Plymouth is one of those places. In addition, Plymouth's "Local Brand" is related to the unique identities of its villages. Each village has its own distinct character and building styles. The purpose of these Guidelines is to help protect that image as new development occurs. While protecting that image, we must also provide the development community with flexibility to build to meet their needs and project their corporate image. Plymouth supports creativity and encourages proponents to submit ideas and designs that do not necessarily comply with Plymouth's traditional design concepts, but that meet the spirit of the Guidelines.

To date we have been fortunate and have had several non-residential developers work with the community in developing project specific and attractive designs and design standards on specific projects; however, with each passing moment, generic development is becoming more the norm. With our 400th anniversary fast approaching, Plymouth should strive to present an image consistent with our identity and not settle for someone else's image of what Plymouth should be.

In an effort to ensure that Plymouth evolves with the times while maintaining its historic and iconic image, the endorsement of these advisory Policies and Guidelines will give mixed-use and non-residential developers and property owners an understanding of the Town's expectations for development.

The Planning Board



I. Introduction

The Town of Plymouth has established these advisory Site Plan Review Guidelines (the Guidelines) to facilitate the review process. They are intended for consultation by developers, building owners, and other interested parties to understand the character that the Town of Plymouth seeks to protect and improve. They describe important design elements for developers to consider and demonstrate how the Town's goals might be met, but also allow for and encourage developers to suggest alternate design approaches that meet the spirit of these Guidelines.

A. Goals of the Guidelines

The Town intends to share its vision for the character of development in Plymouth through these Guidelines. Among the Town's goals are to:

- ensure a well-defined relationship between the site, the public realm, and neighboring buildings with an emphasis on the edges of the site;
- maintain or improve the pedestrian environment and connections to buildings;
- locate parking in non-obtrusive areas; and
- encourage building design that is compatible with a village character and scale.

In this context, the 'public realm' refers to the streets, sidewalks, and open spaces in which civic interaction takes place. The Town believes that buildings play a primary role in creating a functional and attractive public realm that embodies the character of Plymouth.

These Guidelines encourage development in the traditional village centers (Plymouth Center and North Plymouth) to complement the existing village pattern and the project context. In the aspiring village centers (Manomet and Cedarville), these Guidelines encourage infill and redevelopment that contribute to a more pedestrian-friendly, village-type environment than the predominantly suburban existing development patterns in those areas. In areas outside the traditional and aspiring village centers (West Plymouth and other regional retail and industrial areas), these Guidelines encourage a more visually pleasing and, where appropriate, pedestrian-friendly environment to add value to these developments and better integrate them into the Town's character and image. All new development should support the conservation of natural resources and a safe, attractive pedestrian and cycling environment.

PLYMOUTH CENTER

- Development on infill sites
- Housing above shops
- Parking

NORTH PLYMOUTH

- Development on infill sites
- Transit-oriented housing in a mixed use Cordage Park redevelopment project

MANOMET

- Pedestrian-friendly village center
- Village-scale development
- Development on infill sites

CEDARVILLE

- Development of a compact village center near Route 3, Exit 2
- Village-scale development
- Development on infill sites

WEST PLYMOUTH

- Sidewalks, trails, and bicycle lanes
- Incentives for redevelopment of the commercial corridor with multifamily housing and shops

The Guidelines are intended to advance the above Village Center goals from "A Strategic Action Plan for the Town of Plymouth."

B. How to Use the Guidelines

The Guidelines are advisory and apply to non-residential development only. They are divided into three sections:

1. General Guidelines that apply to all new development and substantial renovation
2. Traditional Village Guidelines for development in the traditional and aspiring village centers: Plymouth Center, North Plymouth, Cedarville, and Manomet
3. Regional Retail and Industrial Guidelines for development in areas outside the traditional and aspiring village centers: West Plymouth and in other regional retail and industrial locations.

Developers and interested parties should first read the General Guidelines and then consult the particular section that applies to their site based on its location. The list below of other resources should also be consulted for regulatory instruction and for additional guidance from the Town and its residents.

C. Other Resources

The Guidelines are intended to complement other pre-existing documents. The following provides a partial list of other important documents or programs that should be consulted for regulations and guidance.

1. Town of Plymouth Zoning Bylaw
2. Plymouth Master Plan Update
3. A Strategic Action Plan for the Town of Plymouth
4. Village Master Plans (as updated)
5. A Guide for the Design of Storm Drainage Facilities in the Town of Plymouth, Massachusetts
6. Plymouth Historic District Commission Handbook
7. *The Secretary of the Interior's Standards for Treatment of Historic Properties* (only applies to Plymouth Historic District)
8. Massachusetts Partnership for Healthy Communities (masspartnership.org) and Mass in Motion's Healthy Plymouth (www.healthyplymouth.org)

The Town recognize the unique nature of Plymouth's "planned communities" such as Pinehills (zoned OSMUD: Open Space Mixed-Use Development), Cordage Park (a state 40R Smart Growth District), and River Run (zoned TRVD: Traditional Rural Village Development). These Guidelines are intended to complement the standards outlined in the Overlay Districts and Special Regulations section of the Zoning Bylaw.

FOR MORE INFORMATION: "TOWN OF PLYMOUTH ZONING BYLAW"

II. Understanding Plymouth

As the landing place of the Pilgrims, the Town of Plymouth is known as “America’s Hometown”. Plymouth for most of its nearly 400 year existence was an isolated seacoast community whose economic fortunes were closely linked to the sea and shipping. The site of the original 1620 settlement is now a portion of today’s Downtown/Harbor District. During the seventeenth and eighteenth centuries the Town was tied closely to the land and the ocean. Fishing, shellfishing, shipbuilding and agriculture were the predominant economic activities and have shaped the character of Plymouth as we find it in the early twenty-first century.



FIGURE 1 Plymouth Cordage Company today

In the nineteenth century, numerous mills were in operation in Plymouth. These mills created a wide range of employment opportunities for Plymouth’s growing population. This growing population included many immigrants, creating an ethnically diverse community which is still evident today. The Plymouth Cordage Company, which began operations in North Plymouth in 1824, was of particular importance for employment and architecture. North Plymouth eventually became a sub-center of the shipbuilding industry on the East Coast. The Cordage Company continued to prosper into the early 1900s, and much of the housing in North Plymouth is mill housing originally constructed for the Cordage workers.

Throughout the 1800s and 1900s commercial agriculture emerged as a significant source of employment for Plymouth with the development of the cranberry industry as an active and lucrative sector of the economy. Cranberry bogs, farms and associated structures remain as important components of Plymouth’s visual fabric.

In 1980 the Town of Plymouth adopted the Village Centers Plan which established five village areas: Plymouth Center, North Plymouth, Manomet, Cedarville, and West Plymouth (Figure 3 on following page). The Village Centers Plan initiated Plymouth’s efforts to encourage growth within the villages and restrict development in outlying areas. Today, Plymouth Center and North Plymouth retain their village qualities while Cedarville and Manomet are making progress toward creating compact walkable centers from their existing suburban development patterns. West Plymouth was also intended to have a



FIGURE 2 This aerial view illustrates Plymouth’s diverse natural landscapes.

village-like character but zoning allowed more conventional, suburban-type development. Today it is primarily a regional retail and light industrial area that serves as an important economic generator for the Town but has a generic character that does not reflect the traditional image of the Town.

In addition to the built environment, Plymouth contains many diverse natural landscapes that add to its character. This diversity is due in part to the sheer size of the Town (103 square miles), its farmland, coastline, woodlands, cranberry bogs, and undulating terrain. As with many New England towns, Plymouth's current landscape is also the result of the land clearing and farming activities of the 17th, 18th and 19th centuries. Landscape choices, native plant species, and open spaces that are consistent with Plymouth's natural character are as important to a successful site plan as development patterns and buildings that complement Plymouth's built environment.

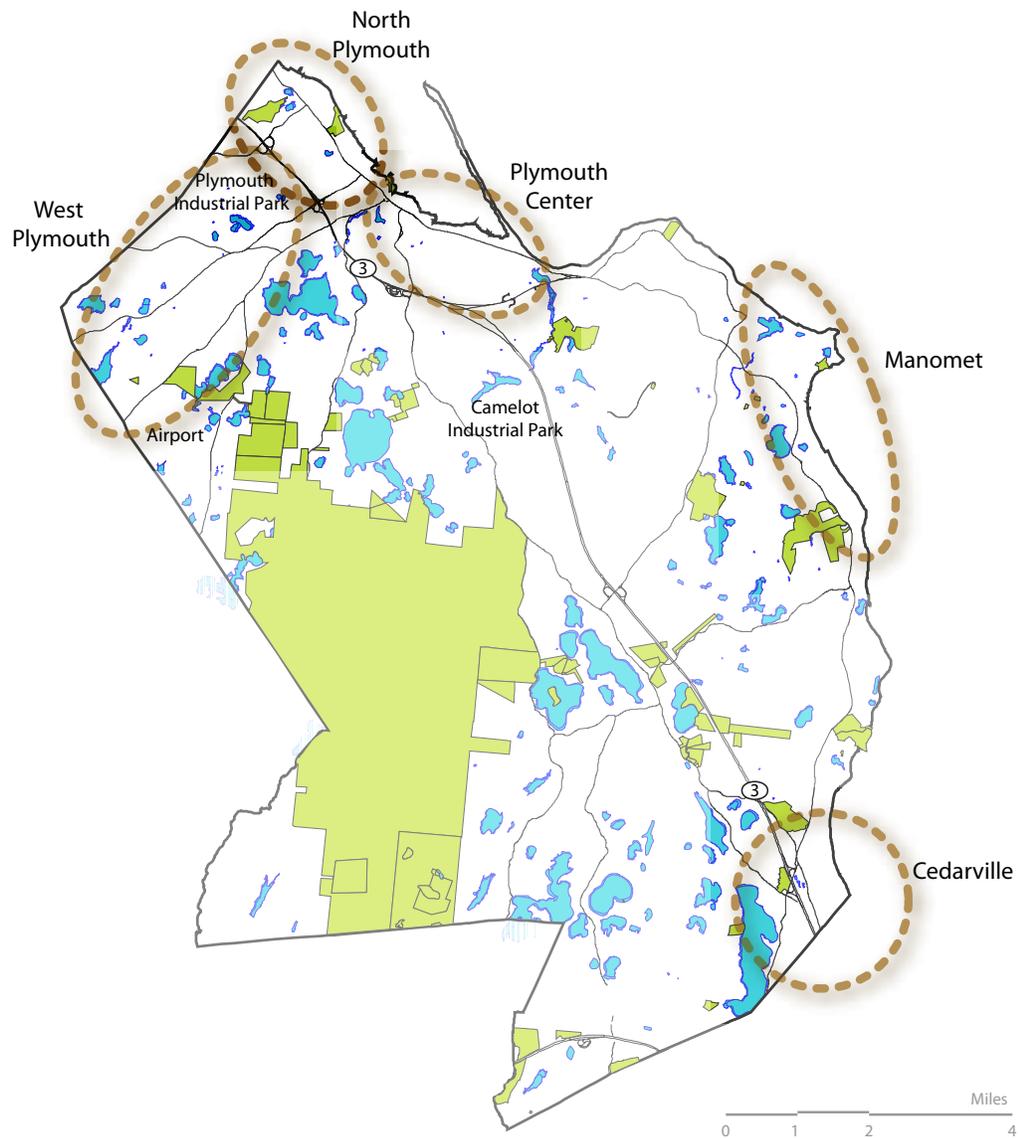


FIGURE 3 This map shows the location of the five village centers and the primary light industrial concentrations

III. General Design Guidelines

A. Overview

The following Guidelines apply to all new, non-residential development in Plymouth including mixed-use projects.

B. Site Design

The intent of these General Site Design Guidelines is to ensure a well-defined relationship between the site, the public realm, and neighboring buildings; to maintain or improve pedestrian connections; to locate parking in non-obtrusive areas; and to emphasize native plants and local character in landscape design.

IN THIS SECTION

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND PUBLIC SPACES
2. PEDESTRIAN CONNECTIONS AND BICYCLE AMENITIES
3. VEHICLE PARKING AREAS
4. LANDSCAPE DESIGN
5. STORMWATER MANAGEMENT AND GREEN INFRASTRUCTURE

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND THE PUBLIC REALM



FIGURE 4 Zero setback buildings and active ground floor uses like retail define the street edge in Plymouth Center.

Place buildings to relate to their context

Infill projects should complement or improve the public realm by relating carefully to the street and adjacent buildings. Consideration should be given to the edges of the site and how new buildings blend into the context, mindful that in some areas a more pedestrian-friendly, village-like environment is desired than what currently exists. Appropriate building setbacks along the sidewalk, the landscape character, and parking and service locations are important design elements that are addressed in the Guidelines.

Create attractive street edges

The edge of the site along the sidewalk or street should be visually appealing to passersby. Parking areas should not be placed along the street edge but when unavoidable due to site constraints or project economics, their length should be minimized and their visual impact softened through the use of decorative fences, low walls, and/or densely planted landscaping.

Use fences and walls according to the context

The use of fences or walls for a particular project should be dependent on the presence of similar features elsewhere along the same block face or the need to create a visible edge. Site elements used to define the street edge should reflect the character of the area and can include wooden picket fences, low walls, or hedgerows. Chain link should be avoided, particularly along the front lot line and where visible from the public way (within 50' of the front lot line and along side lot lines with street frontage).



FIGURE 5 A picket fence in North Plymouth holds the street edge.

2. PEDESTRIAN CONNECTIONS AND BICYCLE AMENITIES

Development in Plymouth should support a safe, convenient pedestrian environment and bicycle network. Pedestrian connections from the sidewalk to the front door, pedestrian circulation within the site, and the provision of bicycle amenities to support active transportation are critical elements to consider. These facilities should contribute to an interconnected network of paths between different sites and uses to encourage regular use.

Support functional, safe sidewalks

Sidewalks and other paths should be at least five feet wide where feasible and free of obstacles such as light poles, utility boxes, and other barriers. A buffer such as on-street parking or a landscape strip should provide separation between pedestrians and traffic. In village areas the primary entrance should be located along the sidewalk and not from a rear or side parking lot. In areas where buildings have front setbacks, a clear path should be provided from the sidewalk to the primary entrance.



FIGURE 6 Sidewalks in commercial areas like this one in Plymouth Center should provide a clear path for pedestrians and be lined with active storefronts and building entrances.

Provide bicycle facilities

Secure bicycle parking locations should be provided in easily visible locations near the main entrance to buildings or in vehicle parking lots, where they should be placed near the building. Publicly supplied bicycle racks along commercial sidewalks can also provide this parking. Bicycle racks can be creatively designed to serve a dual purpose as public art.



FIGURE 7 Artistic bike racks add character to a street.

3. PARKING LOTS

Parking should be shared among multiple parcels where feasible or provided in public parking areas. When parking is provided on individual sites, it should be located and designed to minimize its negative impact on the visual and environmental character of the area. Parking supply should be kept to the minimum number of spaces required by zoning, or less if possible.

Locate parking behind or to the side of buildings

Parking areas should be located behind buildings whenever possible. Parking located to the side of buildings is acceptable if it is adequately screened and kept to a minimum street frontage (60' or less).

Parking lots in front of buildings are discouraged because they reduce walkability and create an auto-dominated streetscape that is inconsistent with traditional village forms. Where up-front parking is unavoidable, one 40' bay (one row of spaces adjacent to the building plus a drive lane) parallel to the front lot line is preferred over a full 60' bay of parking (two rows of spaces with a central drive lane) to minimize the distance between the sidewalk and the building. A ten-foot landscaped buffer should be provided between the sidewalk and the parking. In no instance should historic structures be removed to create new parking.

Provide parking access from rear or side streets

Parking areas should be accessed from a rear alley or a side street whenever possible rather than a driveway on the primary street. A single shared driveway providing access to two or more parcels is encouraged to consolidate curb cuts, minimize pedestrian-vehicle conflicts along the sidewalk, and prevent inefficient traffic flow associated with multiple driveways along a short stretch of roadway. The width of curb cuts should be kept to the minimum required by zoning to reduce gaps in the active street frontage.



FIGURE 8 A shared rear parking lot accessed from a side street in Plymouth Center.

Design parking areas with pedestrians and the environment in mind

Attention should be paid to the fact that drivers become pedestrians once they park their car. Parking areas should be designed to include clear pedestrian routes to the primary entrance, spaced a maximum of 300' apart in large parking lots. These routes should be located to take advantage of landscaped planter islands to create a more hospitable pedestrian environment and include high-visibility pavement markings, signage directing people to the front door, and adequate lighting at night.

Any parking area with frontage along a primary street should be set back at least ten feet from the sidewalk and adequately screened with a decorative fence, low wall, berm, and/or densely planted landscaping. These elements should have a maximum height of 42" to allow for passive surveillance of parking areas from the sidewalk. Shade trees should be limbed to a minimum of 8' and planted no more than 30' on center.

The paving material and landscaping should minimize stormwater runoff and provide shade to mitigate the heat island effect. Planting areas located in parking lots and the downhill parts of the site can absorb stormwater runoff and improve water quality with the appropriate plant and groundcover choices. These rain gardens and bioswales should be designed with adequate depth to prevent flooding of the surrounding area during heavy rainfalls.

Design low-impact overflow parking areas

Parking overflow areas that accommodate occasional, atypical demand should be designed as lawns or constructed with grass pavers to improve the visual character of the area and to reduce the heat island effect and stormwater runoff issues caused by large areas of impervious pavement.



FIGURE 9 Clearly marked crosswalks and bicycle racks within parking areas support a pedestrian-friendly environment in North Plymouth.



FIGURE 10 High visibility crosswalks like this one should identify pedestrian routes through parking lots to entrances.



FIGURE 11 Planting areas in parking lots can naturally detain stormwater to reduce runoff and create separation between pedestrians and parked cars.

4. LANDSCAPE ELEMENTS

Plants should include a predominance of native and non-invasive, drought-resistant varieties to reflect the local natural environment (see the plant list in the Appendix) and minimize the need for irrigation. Ornamental plants are allowed in formal landscape areas such as site entrances, especially in combination with native species. Site design for smaller sites in village areas should emphasize decorative landscape elements to create visual interest in the public realm while larger sites have opportunities to reflect the native conditions typical in Plymouth.

Plant trees to optimize passive heating and cooling

Deciduous trees planted on the south, west, and east sides of buildings can help shade structures during the summer and allow sunlight through during the winter to minimize heating and cooling costs. Evergreen shrubs and trees planted on the north side of buildings can help create a wind break that helps minimize heating costs during the winter.

Ensure usable, comfortable outdoor spaces when present

Developers of mixed-use, retail and office projects should include plaza or patio areas to serve the general public and/or employees if feasible. When provided, these outdoor spaces should include features such as decorative pavers (brick, stone, or concrete), a choice of seating options, and adequate shade provided by trees, trellises, or table umbrellas. They should be located to take advantage of changing sun, shade, and wind patterns during different seasons to optimize comfort based on the weather.



FIGURE 12 This outdoor space is shaped by the surrounding buildings to form a gathering and seating area for the general public to enjoy. Source: www.pinehills.com

Screen mechanicals and loading areas from public view

Utility boxes, air conditioner compressors, dumpsters, loading areas, and other mechanical or service areas should be adequately screened from public view using plants and other landscape elements such as walls and fences. An opaque wall or fence at least six feet tall should screen dumpsters and small loading areas. All walls and fences should use materials and colors that match or complement the primary building materials. Plants should be closely spaced and retain their leaves year-round to provide adequate screening. Landscape designed to screen views of parking areas is described in the 'Parking Lots' section of these Guidelines.



FIGURE 13 An opaque fence and landscaping should adequately screen dumpsters and service areas.

Installation and maintenance

All plants should be irrigated as needed after installation to support healthy growth during the initial growing season. Irrigation should be reduced or discontinued after the establishment period to minimize the use of potable water. All landscaped areas should be properly maintained for their visual appearance, including the removal of weeds and trash and the replacement of dead plants. Plant selection and maintenance strategies to minimize the use of herbicides and other substances that may have adverse effects on the environment and users are encouraged.

5. STORMWATER MANAGEMENT AND GREEN INFRASTRUCTURE

Stormwater runoff should be controlled where it is generated using natural methods rather than relying on traditional engineered 'end of pipe' solutions. Site design should use low impact development (LID) strategies as described in "A Guide for the Design of Storm Drainage Facilities in the Town of Plymouth, Massachusetts" to minimize runoff and protect water quality. That document recommends low impact development strategies for site management, runoff management, and conveyance practices; describes best management practices for the LID design process; and sets performance metrics for their use.

C. Building Design

The intent of these General Building Design Guidelines is to encourage new development that complements Plymouth's local character; to successfully design key façade elements that help buildings relate to the pedestrian and provide visual interest; and to recommend strategies that help new buildings act as good neighbors and stewards of natural resources.

IN THIS SECTION

1. FAÇADE ARTICULATION
2. STOREFRONT DESIGN
3. LIGHTING
4. SERVICE AREAS AND MECHANICAL EQUIPMENT
5. SUSTAINABLE DESIGN

1. FAÇADE ARTICULATION

Differentiate primary and secondary façades

The primary façade typically faces the front property line and street, although in some developments such as regional retail it may face another direction. It should be detailed with pedestrian interest and the human scale in mind, including the use of high-quality materials, details appropriate to the architectural style, and expanses of clear glass at sidewalk-level to allow views into active uses inside. Flat, monotonous surfaces should be avoided on the primary façade. Secondary façades should be integral to the overall design but may be more simply detailed and have lower levels of transparency. Buildings on corner lots have two primary façades, one along each street, which should be designed to ensure a pedestrian-friendly building along all public frontages.

Organize the facade with hierarchy in mind

Façade design should define a clear base, middle, and top to organize and give hierarchy to the building. These divisions help give a human scale to buildings and provide natural breaks for changes in materials or level of detailing. Buildings that combine uses such as street-level retail and upper-floor office or residential can use this organization to articulate the uses differently. Mixed-use, retail or office buildings may incorporate string courses, different materials or levels of architecture detailing, and/or changes in fenestration patterns to accomplish this; industrial buildings may do so simply with a change in color or material.

Ensure a pedestrian scale to large buildings

Buildings with façades greater than 50' long should vary the articulation of the façade at least every 30' to maintain a pedestrian scale along the sidewalk and create a visual rhythm. This can be accomplished by creating vertical bays with façade setbacks or projections, using a change in color or material, or varying the building height. Primary façades of non-industrial buildings should not have blank areas longer than 15' without an entrance or window.



FIGURE 14 Secondary façades should be integral to the overall design but may have a change in material, color or amount of transparency from the primary façade.



FIGURE 15 A traditional village building (top) and office/industrial building (bottom) demonstrate facade hierarchy and pedestrian scale.

Use materials that are compatible with the context

Materials should be selected that are high-quality, durable, and low maintenance and should blend into the local character. High-quality contemporary and synthetic materials such as precast concrete and hardie-plank can be used when applied in ways that reflect the existing context. A complementary combination of materials should be used on the primary facade to create visual interest for pedestrians. Materials such as corrugated metal siding, CMU, and tinted or reflective glass should not be used on primary façades and should only be used as accent elements on secondary façades.

Design roofs that are compatible with the context

Rooflines should reflect the character of adjacent structures. Buildings in the traditional village cores exhibit a mix of flat roofs and pitched gable roofs with decorative cornices or parapets. Pitched roofs should maintain a simple profile and roofline. Rooflines should screen any rooftop mechanical equipment from public view.



FIGURE 16 Buildings should continue the pattern of a mix of pitched and flat roofs to add visual interest to the street.

2. STOREFRONT DESIGN

Use traditional storefront elements accordingly

Storefronts should be designed to include traditional elements such as bulkheads, large display windows, vertical piers and pilasters, recessed entryways, a signage band above the windows, and a cornice element. Awnings should be provided to shade the sidewalk and provide additional color.

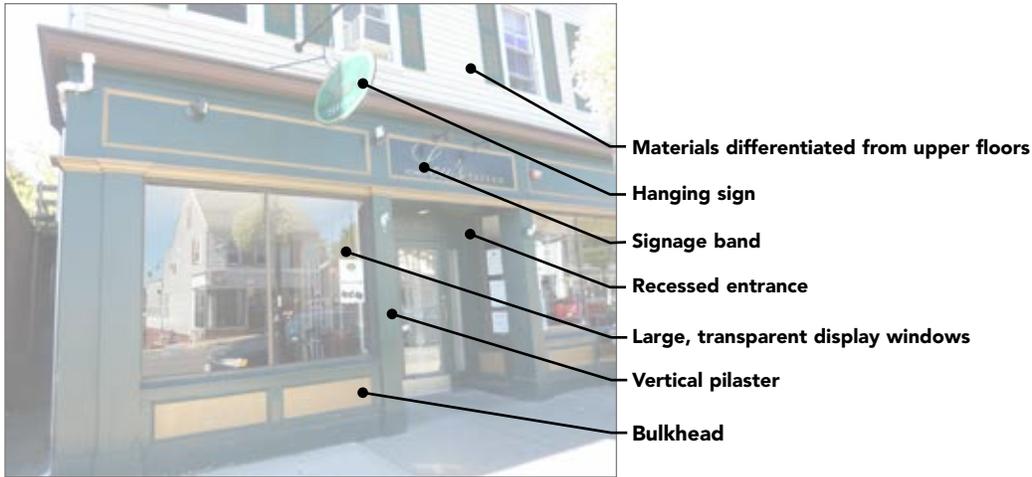


FIGURE 17 Traditional storefront elements articulated in Plymouth Center contribute to an active public realm.

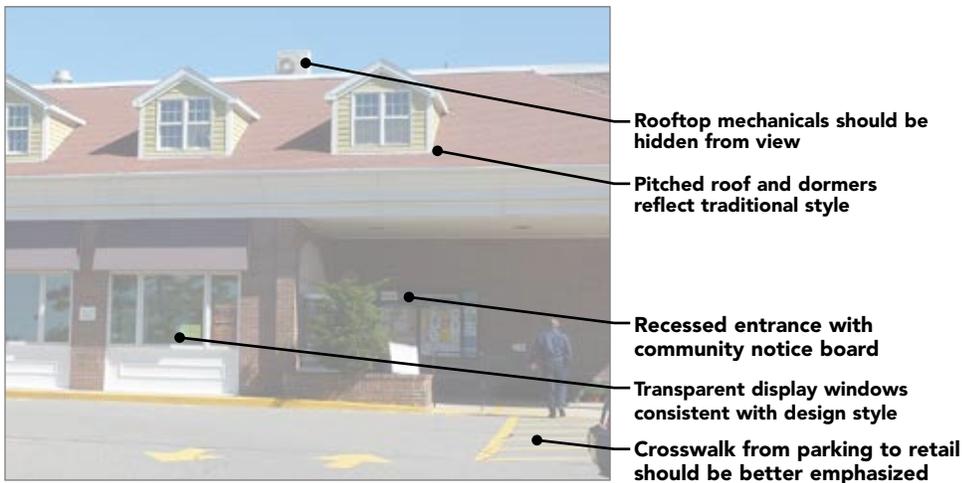


FIGURE 18 A contemporary storefront design in Cedarville includes a complementary selection of materials and colors.

Design signage integral to the building

Signage should be designed as an integral element of the building and site and should be in harmony with nearby development. Refer to the Zoning Bylaw (§ 205-19) for sign requirements including the number, size, and permanence of signage.

Modify corporate standards to reflect local character

Projects that include chain corporations should be designed to reflect Plymouth's unique local character and not their typical branded corporate building forms and color palette. Design modifications to those prototypes should help these projects blend into the local context to enhance the visual character.



FIGURE 19 A hanging sign and a sign band in a renovated storefront. Corporate standards like these should be sized to reflect the existing village scale.



FIGURE 20 This chain restaurant in West Plymouth adapted to local character by using traditional design elements and materials.

3. LIGHTING

Lighting should be designed to minimize glare, spillover onto adjacent parcels, and nighttime light pollution. Full cut-off light fixtures should be used to prevent light pollution and closely spaced low-level lighting should be used to minimize shadows. Building lighting should highlight key building features, signage, and entrances, while site lighting should promote safety and surveillance and highlight landscape elements. Refer to the Zoning Bylaw (§ 205-65), "Prevention of Light Pollution," for regulations pertaining to lighting.



FIGURE 21 Gooseneck lighting highlights facade elements and minimizes spillover.

4. SERVICE AREAS AND MECHANICAL EQUIPMENT

Utilitarian building features should be located and designed to minimize their appearance from the public right-of-way. This can be accomplished by placing them to the side or rear of buildings and/or screening them with landscaping, walls, or fences. When placed on the side of buildings, these features should be set back at least 30' from the front façade to minimize their visual impact on the sidewalk. Roof-mounted equipment should be screened with a parapet wall or placed so that it cannot be seen from the ground.



FIGURE 22 A parapet wall on the front façade should be used to screen rooftop mechanical equipment.

5. SUSTAINABLE DESIGN

New buildings should be designed to maximize passive heating and cooling potential, to minimize energy and water use, to use local and recycled materials where possible, and to protect indoor air quality for users. New construction is encouraged to comply with the Stretch Energy Code (780 CMR Appendix 120 AA), an appendix to the Massachusetts Building Code intended to provide cost savings and environmental benefits through improved building energy efficiency. Existing buildings should be prioritized for reuse and/or historically sensitive rehabilitation to maintain tangible connections to Plymouth's history.

The Town encourages consideration of green or reflective roofs in all new construction but recognizes the need for owners and developers to balance the initial cost with the projected returns and environmental benefits. Green roofs provide several benefits to owners including lower life cycle costs and reduced heating and cooling costs, while providing environmental benefits such as reduced stormwater runoff and greater habitat protection. Drought-tolerant, low maintenance hardy plants should be selected to minimize irrigation and long-term upkeep costs. Roofs with reflective colors minimize urban heat island effects. Retail, mixed-use, or industrial buildings with flat roofs are good potential candidates for either type of roof. Buildings in historic villages should orient and design green roofs so they are not visible from the street in order to maintain the character of the area.

Roof-mounted solar arrays, small-scale wind turbines, and geothermal installations should also be considered as potential alternative energy sources. When used and if feasible, solar and wind arrays should be located to minimize their visibility from public view, most importantly in village areas.



FIGURE 23 Extensive green roofs can be an appropriate choice for large flat roof areas.



FIGURE 24 A rooftop solar array on an industrial building in West Plymouth.

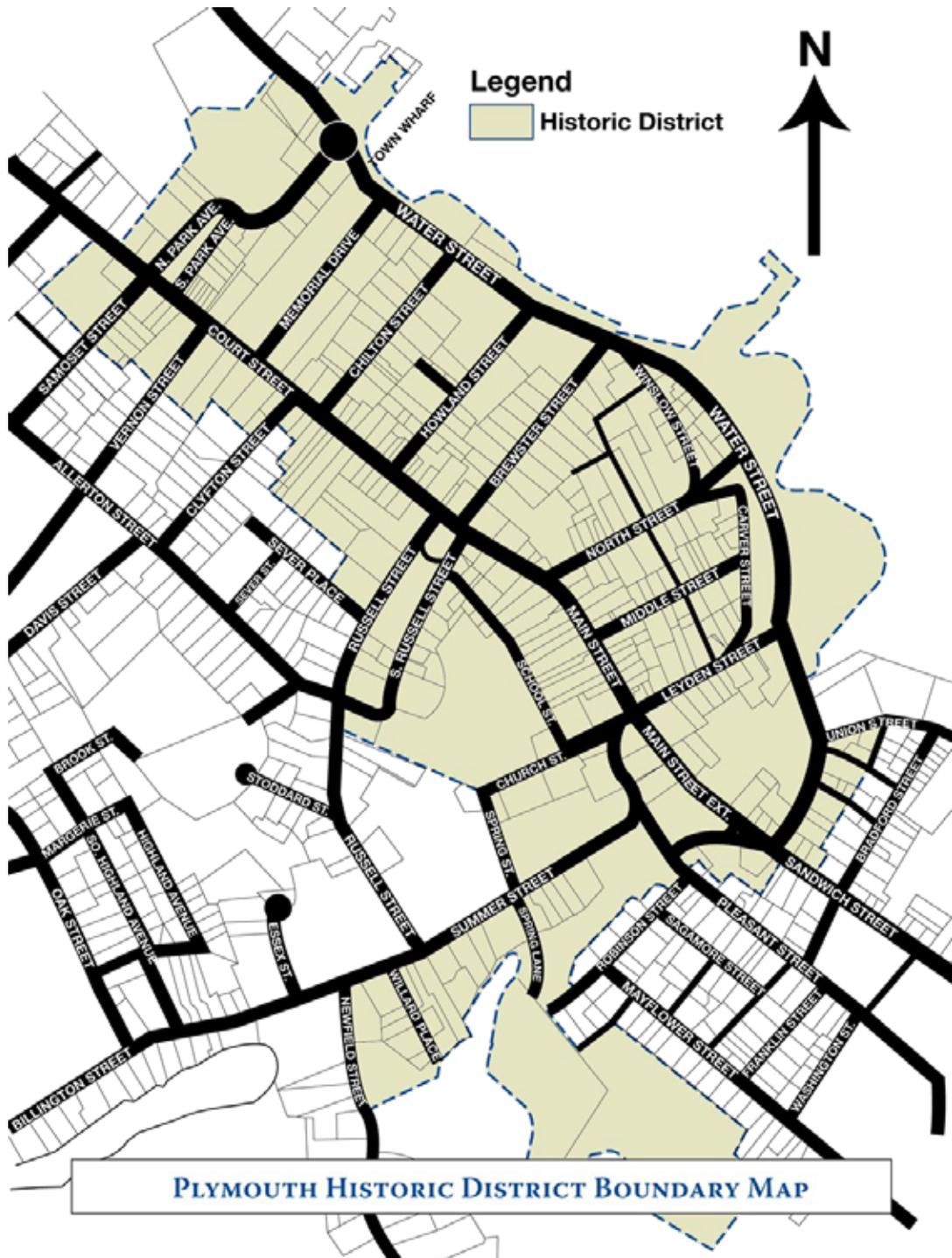


FIGURE 25 Development in Plymouth Center is regulated by the Historic District Commission to preserve the traditional village character that shapes the Town's identity. Source: Plymouth Historic District Commission Handbook.

III. Traditional Village Guidelines

A. Overview

These Guidelines build on the General Guidelines by recognizing the need for design compatible with traditional New England architecture and landscape to protect Plymouth's local image and brand. The rehabilitation of existing buildings and redevelopment of infill sites should be promoted to concentrate growth in village areas while preserving the semi-rural character of most of the rest of the town. While each village is unique, all development should exhibit high-quality design and contribute to a vibrant pedestrian experience that supports walking and bicycling as part of a healthy lifestyle. Direct relationships with surrounding neighborhood streets and buildings should be created to the extent practical. Creative architectural design should make new development compatible with existing village development without copying or mimicking historic forms.

Development in much of Plymouth Center is reviewed and approved by the Plymouth Historic District Commission whose handbook supersedes these Guidelines. The accompanying map (Figure 25) shows the boundaries of the historic district, which roughly correspond to the Downtown/Harbor zoning district.

Village Centers

- Growth through infill, redevelopment, and compact development at Village edges
- High design standards and quality of life
- Mixed-use development

SOURCE: "A STRATEGIC ACTION PLAN FOR THE TOWN OF PLYMOUTH"

Traditional Village Guidelines apply in the following zones:

- Downtown/Harbor (D/H)
- Waterfront (WF)
- General Commercial (GC)
- Transitional Commercial (TC)
- Neighborhood Commercial (NC)

FOR MORE INFORMATION: "TOWN OF PLYMOUTH MASSACHUSETTS OFFICIAL ZONING MAP"



FIGURE 26 Today, the traditional and aspiring village areas exhibit a range of character. On the left, Plymouth Center (top) and North Plymouth have buildings set close to the sidewalk with large storefront windows creating an attractive pedestrian environment. On the right, Manomet (top) and Cedarville have isolated buildings set away from the street and lack an active public realm.



FIGURE 27 Potential character of new mixed-use commercial centers in Cedarville and Manomet better reflect the traditional Plymouth feel.

B. Site Design

These Traditional Village Site Design Guidelines encourage infill and redevelopment that supports a pedestrian-friendly, visually engaging village environment. Development in Plymouth Center and North Plymouth, which have the most intact village character, should largely reflect existing historic patterns. Development in Cedarville and Manomet, which have a more suburban existing character, should continue to progress toward more walkable, village-like patterns of development that better express the Town's identity.

IN THIS SECTION

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND PUBLIC SPACES
2. PEDESTRIAN CONNECTIONS AND BICYCLE AMENITIES
3. LANDSCAPE DESIGN

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND PUBLIC SPACES

Activate the public realm

Active ground floor uses such as retail, restaurants, community space, or offices should be provided to create a pedestrian-friendly interface along the sidewalk. Typically this includes direct access from the sidewalk and little or no front setbacks. In commercial cores, buildings can be slightly set back to create wider sidewalks that accommodate outdoor café seating or retail displays to bring activity into the public realm without interfering with pedestrian circulation.

Buildings with vacant ground floor space should consider other ways to provide visual interest, such as artwork, community information, or other displays.

Define the street edge

A defined street edge should be created or maintained using zero-setback building frontages or pedestrian plazas with seating and landscaping depending on the context and desired character for the area. Parking lots should be minimized along the street edge. In Plymouth Center and North Plymouth, the prevailing front yard setback on the block must be maintained per the Zoning Bylaw.

Ensure development in Transitional Commercial districts continues the pattern of development

Lots in the Transitional Commercial districts near Plymouth Center and North Plymouth typically have front yards due to the residential nature of the area, so new construction should match this setting. For these sites, attractive landscaping should be used to help a new project blend into its context.



FIGURE 28 Transitional commercial areas are often characterized by shallow setbacks and a street edge formed by hedgerows or fences.

2. PEDESTRIAN CONNECTIONS AND BICYCLE AMENITIES

The traditional village areas are characterized by high levels of pedestrian activity that enliven the public realm. Pedestrian connections from the sidewalk to the front door and circulation within the site are critical elements to consider, as well as the provision of bicycle amenities such as secure racks, storage lockers, and bike lanes to support other active transportation modes.

Support functional, active sidewalks

Direct, clear access should be provided from the sidewalk to the primary entrance of all buildings. In commercial areas the primary entrance should be located along the sidewalk and not from a rear or side parking lot. In areas where buildings have small front setbacks, a clear path should be provided from the sidewalk to the primary entrance.



FIGURE 29 Wide sidewalks with spaces to gather support activities that bring people together. *Source: www.pinehills.com*

C. Incremental Improvements to Existing Sites

These Guidelines promote the improvement of existing sites to help create a more pedestrian-friendly and visually pleasing environment outside the traditional village areas. Existing clusters of retail, commercial, and office development should be targeted for improvements that support or help create a more walkable village-like environment.

1. STREET EDGES

Street edges define the public realm and their treatment indicates the character of the area. The suburban development patterns in Cedarville, Manomet, and some parts of Plymouth Center and North Plymouth, prioritize the automobile and often discourage or prevent pedestrian activity and detract from the aesthetic character. Strategies to enhance street edges can make incremental improvements that help redefine these areas.

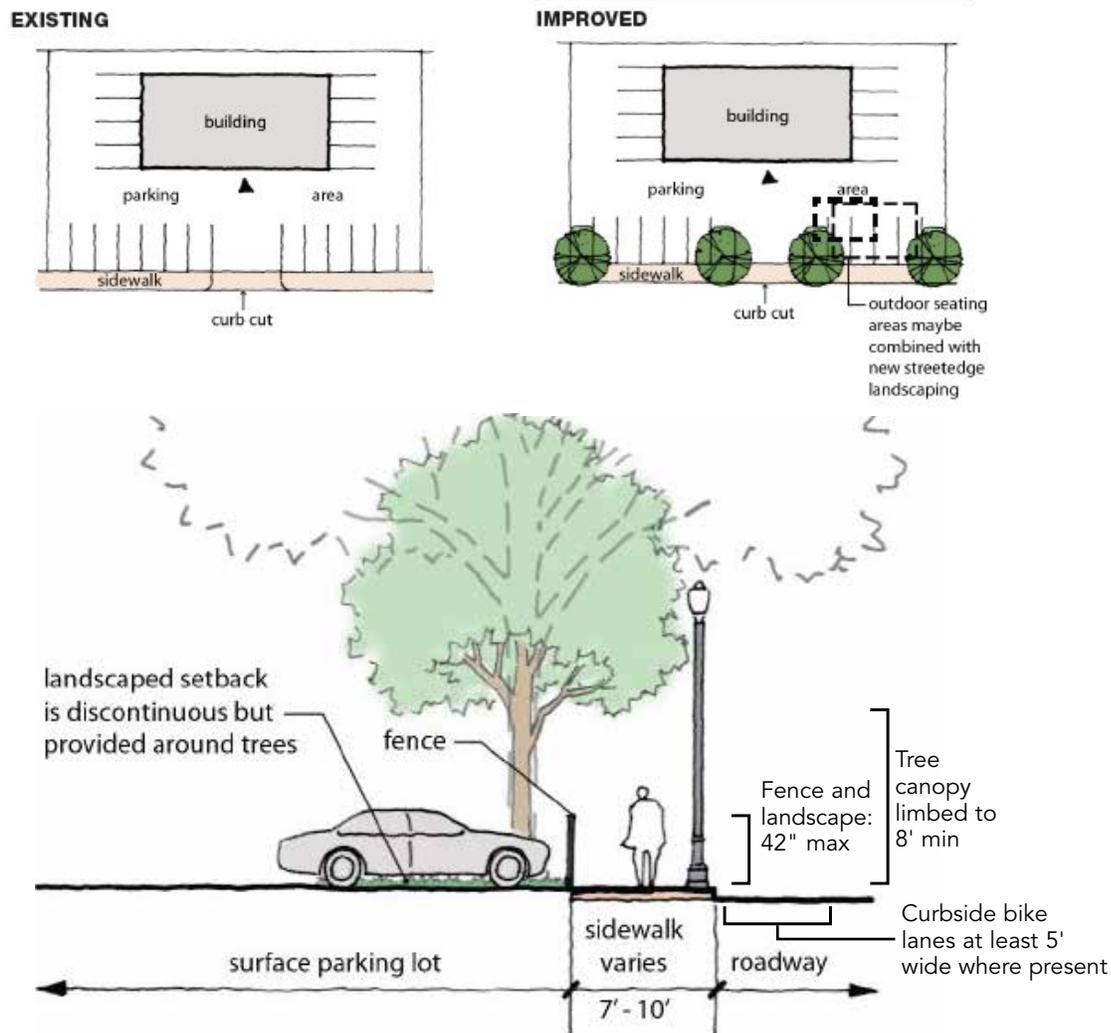


FIGURE 30 This diagram shows how a site with existing parking to the sidewalk can soften its edge with a decorative fence and landscaped islands that can accommodate street trees.

Sites with parking along the street edge

These sites should consider reducing the amount of parking provided along the street edge to create a continuous landscape strip. This strip should be at least ten feet wide where feasible to provide adequate visual relief from the parking area. It should be designed to include plants and landscape elements such as fences, walls, and paved areas where appropriate. Decorative fences or walls and hedgerows along the sidewalk can create a defined street edge. Shade trees should be planted in naturalistic clusters. Berming can also help screen the parking area from public view.

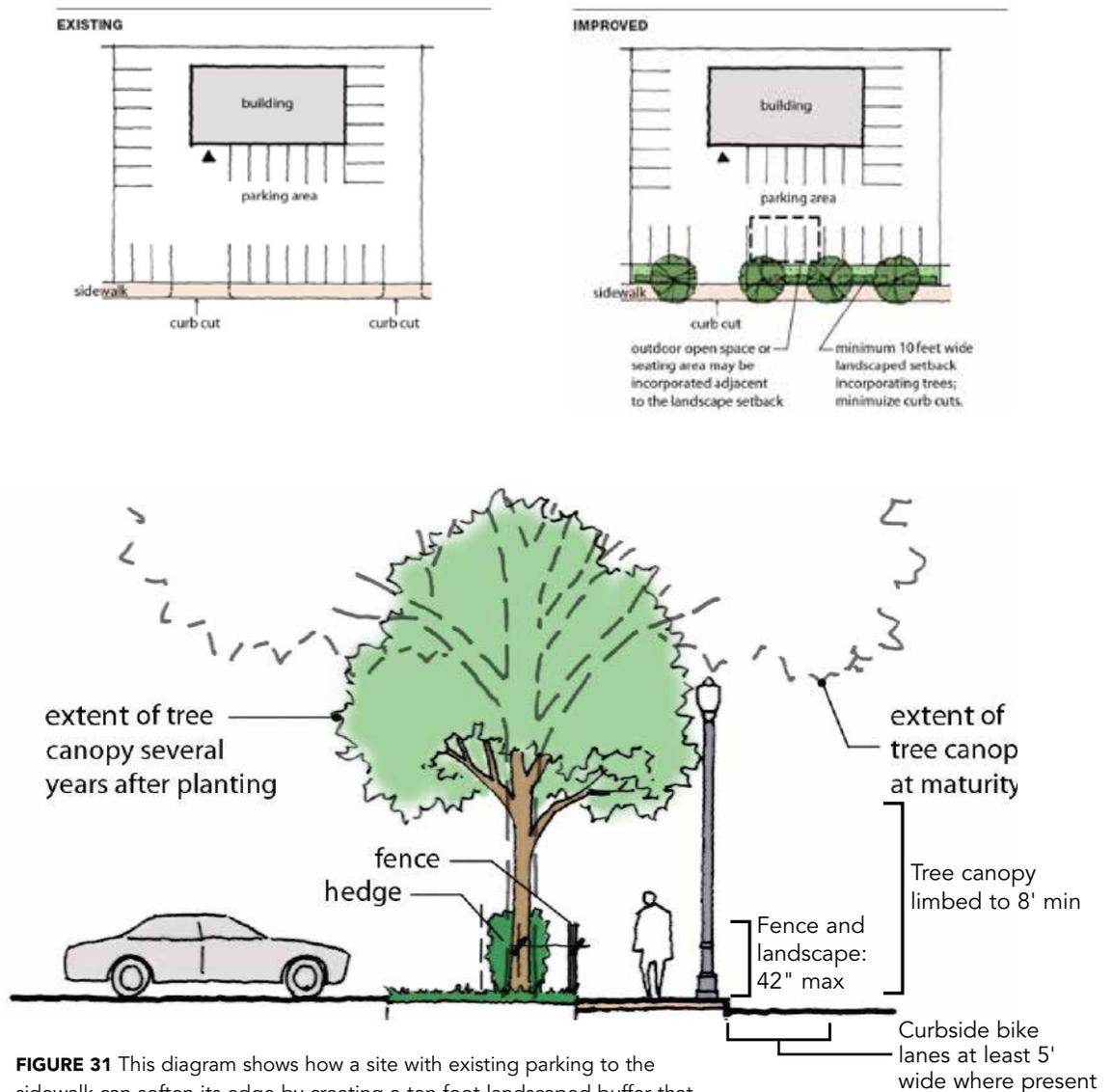


FIGURE 31 This diagram shows how a site with existing parking to the sidewalk can soften its edge by creating a ten foot landscaped buffer that separates pedestrians from parked cars.

Sites with a shallow building setback (5'-25') along the street edge

These sites should consider enhancing the existing setback with additional landscaping, paved plaza areas that can serve as pedestrian amenities, bicycle parking facilities, public art, or decorative fencing or walls.

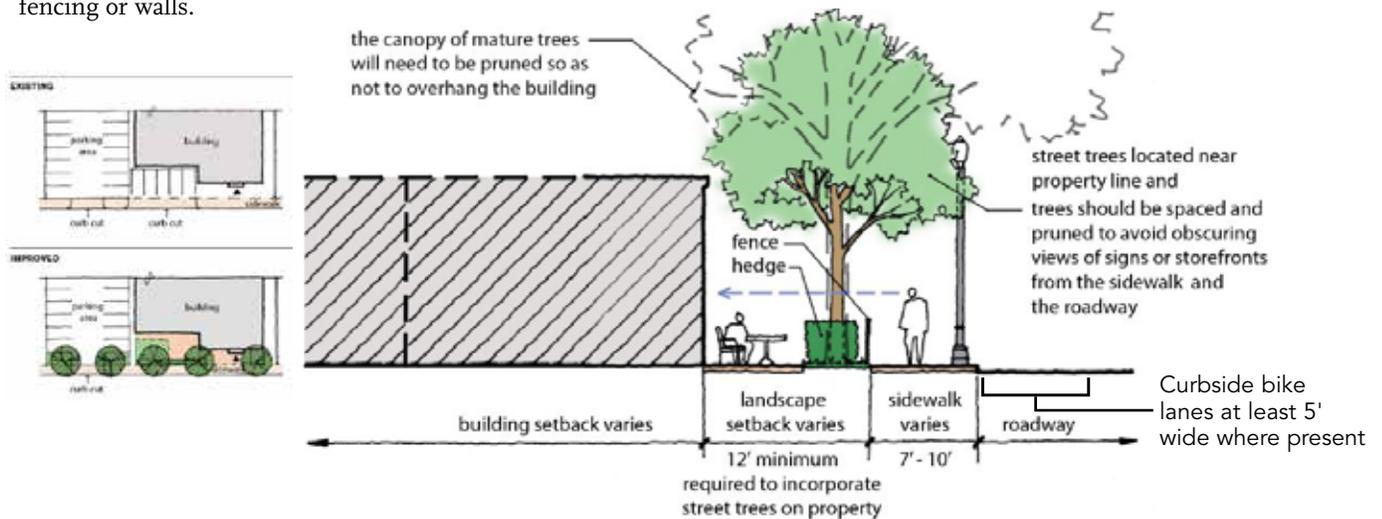


FIGURE 32 This diagram shows how a site with a shallow existing setback can enhance it with additional landscape or outdoor seating to add visual interest to the sidewalk.

2. PARKING LOT RETROFIT

Removing a row of parking along the sidewalk can produce a more dramatic improvement to the streetscape. By creating a larger green buffer and moving parked cars further from the sidewalk, pedestrians have a more visually interesting environment to enjoy. Creating connections from the sidewalk across the buffer and parking to the primary entrance supports a more pedestrian-friendly environment while still accommodating cars.

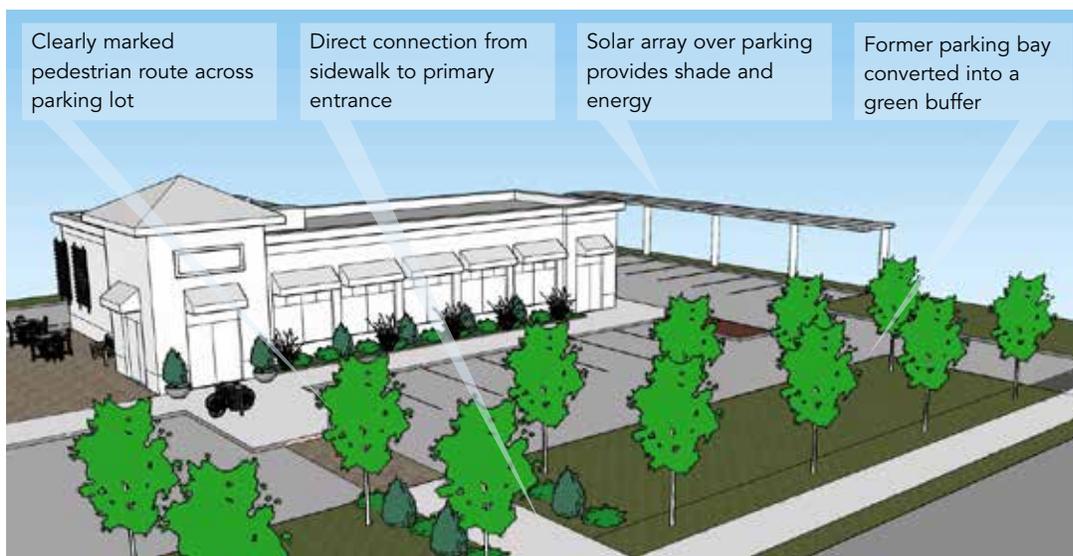


FIGURE 33 By reducing the front parking lot from two bays to one and providing direct access from the sidewalk across the new landscape buffer to the entrance, this retrofitted retail site has dramatically improved the pedestrian environment.

D. Building Design

The intent of these Traditional Village Building Design Guidelines is to promote the compatible design of new projects to enhance Plymouth's local character; to successfully design key façade elements that help buildings reflect a human scale and provide visual interest; and to use new development to support or help create a more village-like environment.

IN THIS SECTION

1. CONTEXTUAL DESIGN
2. BUILDING ORIENTATION AND ACCESS
3. FAÇADE ARTICULATION
5. IMPROVEMENTS TO BACKS OF BUILDINGS

1. CONTEXTUAL DESIGN

New buildings should respond to the built and natural environments in which they are located. Consideration should be given to the setbacks, height, massing, proportions, façade composition, and materials of adjacent buildings when designing infill buildings in traditional village locations. For projects in aspiring village areas that today have more suburban characteristics, the model of development in Plymouth Center should be an important precedent. The variety of building scales, entrance placements, facade compositions, storefront designs, and materials used there should influence design but should not result in exact duplication of historic New England examples. Developers are encouraged to suggest contemporary approaches to design that embody those principles.



FIGURE 34 Traditional village context in Plymouth Center includes buildings set along the sidewalk to define a street edge, active ground-floor uses, and a compatible mix of building forms and materials.

2. BUILDING ORIENTATION AND ACCESS

Orient buildings to the street

Buildings should typically be oriented with their short axis parallel to the street to maintain the traditional village scale of narrow building fronts. The primary pedestrian entrance should be located on this façade. Buildings on corner lots should be oriented to the primary street but provide a similar level of articulation on both streets, which may include secondary entrances.

Place entrances along the sidewalk

A primary entrance to ground-floor uses should face the street and be directly accessible from the sidewalk. When parking is provided on site, a clear pedestrian route from the parking lot to this entrance should be provided. Public entrances from rear or side parking lots are discouraged in order to bring people to the sidewalk and support more pedestrian activity in the public realm.

Buildings that combine uses such as street-level retail and upper-floor office or residential should also locate the primary entrance to the upper floors on the front façade to encourage sidewalk activity. This entrance should be articulated differently than the entrance to the ground floor.

Primary entrances should provide cover from the weather, either by being recessed into the façade or by being sheltered with a canopy or awning.



FIGURE 35 This aerial view of Plymouth Center shows that most buildings are oriented with their narrow side to the street. Also note the shared parking located behind buildings.



FIGURE 36 The upper-level entrance on the left is more simply detailed than the retail entrance to the right.

3. FACADE ARTICULATION

Provide high levels of transparency at ground level

The primary façade of commercial or mixed-use buildings should provide a high level of transparency at ground level using clear glass in storefronts. Secondary façades and upper levels should have a lower level of transparency, and upper level windows should generally be smaller, vertically-proportioned openings that align with the bays of the façade. Storefront windows should generally be undivided glass; upper level windows should be divided with muntins and mullions in patterns similar to those in adjacent buildings.

4. IMPROVEMENTS TO BACKS OF BUILDINGS

For existing buildings with parking located in the rear, blank façades should be enhanced by adding planters with tall shrubs or trellises to “green” the façade and/or additional signage and lighting for visual interest. New display windows should be considered as part of more extensive renovations to the rear of buildings.



FIGURE 37 These back façades in Plymouth Center include landscape and lighting, windows, and high-quality materials that wrap around the building.

IV. Regional Retail and Industrial Guidelines

A. Overview

These Guidelines build on the General Guidelines to address areas that have regional retail and light industrial development. These areas are important economic drivers for Plymouth but have largely developed in typical suburban patterns that lack the traditional character of Plymouth. These Guidelines are intended to improve the quality and character of these projects while recognizing the importance of project economics in these situations. Principles of village development are distilled into simple recommendations that can make a significant improvement in the visual character and pedestrian friendliness of these individual sites and larger development areas. Topography, landscape, and basic design principles can be employed to aesthetically and functionally enhance these important areas while improving their economic competitiveness.

Regional Retail and Industrial Guidelines apply in the following zones:

- Arterial Commercial (AC)
- Highway Commercial (HC)
- Mixed Commerce (MC)
- Airport (AP)
- Light Industrial (LI)
- General Commercial (GC) in West Plymouth only

FOR MORE INFORMATION: "TOWN OF PLYMOUTH MASSACHUSETTS OFFICIAL ZONING MAP"



FIGURE 38 Large retail and light industrial buildings in Plymouth are important economic generators but often generically designed and do not convey the Town's identity.

B. Site Design

The intent of these Regional Retail and Industrial Site Design Guidelines is to encourage infill development and the redevelopment of outdated sites near the existing regional retail and industrial areas in order to limit sprawl and preserve the semi-rural character of the rest of the town. The Town encourages a Complete Streets approach to private drives within large retail and industrial park developments to balance the needs of all users and promote active transportation options for public health benefits. The Town also supports interconnecting related parcels and joining new site walkways and paths to existing pedestrian and bicycle systems to facilitate travel within these areas and strengthen their pedestrian character.

IN THIS SECTION

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND LANDSCAPE
2. COMPLETE STREETS
3. LANDSCAPE DESIGN

1. RELATIONSHIP TO SURROUNDING STRUCTURES AND LANDSCAPE

Careful consideration should be given to the edges of the site and how the new building(s) blends into the context and supports a more visually appealing environment. Every effort should be made to minimize disturbances to a site's natural topography, and attractive landscaping should be used to help a new project blend into its context.

Design naturalistic retaining walls and berms

Site design and building placement should take advantage of the existing natural site characteristics to minimize the amount of re-grading and eliminate cut-and-fill practices. Areas with steep slopes that require stabilization should be designed as a naturalistic transition using large rocks, shrubs, and trees to stabilize the slope rather than relying on stacked retaining wall blocks to create an abrupt elevation change.

Sites adjacent to existing residential areas should consider using natural topography or manmade berms to buffer retail, office, and industrial uses from housing (in addition to maintaining the required setbacks dictated by the Zoning Bylaw). Mature vegetation should be preserved along these edges to mitigate any visual impact on neighborhoods.



FIGURE 39 A steep slope should be naturally stabilized (top) rather than rely on stacked retaining wall blocks and chain link (above).

Uses that have a minimal need for street visibility or that are particularly challenging to maintaining a pedestrian environment (such as buildings with long blank façades or car sales lots) should use landscaped berms or setbacks with extensive landscaping to help screen large building volumes and parking areas from public view. Berms should create a naturalized landscaped edge and should provide an opening or break to allow a direct connection from the sidewalk to the primary entrance. Sales lots that need to maintain visibility should use extensive landscaping to reduce the visual impact. The site design should include a landscaped setback with a combination of groundcover, shrubs, and trees that are limbed high enough to permit views to the cars.

Create shared interparcel access

Vehicular and pedestrian access between parcels is encouraged to prevent unnecessary short car trips on roadways to travel from one parking lot to another nearby. This shared access should especially be considered in multi-phase projects or between parcels with complementary uses (retail destinations, restaurants, etc).



FIGURE 40 This berm conceals the parking and is interrupted to provide direct pedestrian access to the entrance.

2. COMPLETE STREETS

“Complete Streets” are roadways designed to safely and comfortably provide for the needs of all users, including but not limited to motorists, pedestrians, cyclists, transit and school bus riders, movers of commercial goods, persons with disabilities, seniors, and emergency responders. The Town encourages multifunctional roadway design to provide a variety of mobility options to benefit all residents and users (drivers and non-drivers alike) and to provide active forms of transportation that encourage healthy lifestyles and improve public health.

Large retail developments and office/industrial park sites often have internal private drives that look like and function as public roads. These facilities should be designed as “Complete Streets” by incorporating pedestrian sidewalks with street trees and streetscape appropriate to the setting, secure bicycle facilities, and narrower street widths that still safely accommodate vehicles and bicycles. The roadway network should provide for the ease of transfer between transportation modes, provide connections to bike and pedestrian facilities at destination points, and minimize interference between modes of transit (for example, bike racks should not block sidewalks).

Extend the sidewalk network

Private drives within regional retail and office/industrial sites should include sidewalks at least five feet wide on one or both sides of the road. Sidewalks should be constructed of asphalt or concrete and should be separated from the street by a landscaped strip at least four feet wide.



FIGURE 41 Stairs connect this asphalt sidewalk to the main entrance in an industrial setting.

Use entrance medians to enliven site entries

Entrances to large sites should include a landscaped median to provide visual interest and seasonal color. Medians should be planted with a seasonal variety of hardy, drought-resistant plants including native species. Signage can be incorporated into the median provided it meets all sight-line requirements for traffic flow.



FIGURE 42 A landscaped median at Colony Place in West Plymouth combines ornamental and native plants to create a visually interesting site entrance to this retail development.

3. LANDSCAPE ELEMENTS

Landscape design should reflect the native conditions in Plymouth, complement the architecture, and contribute to the aesthetic quality of the area. The preservation of on-site natural vegetation, especially healthy mature specimen trees, is encouraged and site design should locate building and parking areas to incorporate these prominent features to the greatest extent possible without transplanting or removing them.

Emphasize native and non-invasive plants

Large open spaces should reflect native conditions to the extent possible and include a variety of plant species with minimal watering requirements rather than being converted to traditional lawn areas. Decorative grasses, hardy shrubs and groundcover, or other water-conserving plants should be used in parking areas rather than traditional lawn grasses or large mulched areas to improve the visual appearance and minimize the need for irrigation.



FIGURE 43 A well-composed plant palette is visually interesting and features a variety of native and non-invasive species.

Provide for connected walkways and paths

The Town encourages a system of interconnected loop walkways through the undeveloped portions of large sites. These walkways and paths should be at least six feet wide and use a natural surface. To the extent possible, these systems should interconnect between parcels to create a larger network of trails and open space that encourages healthy behavior and allows public access to the semi-rural areas of the Town.

Soften long facades with landscaping

Buildings with long façades should have enhanced landscaped areas along the perimeter with plants of varying heights to soften the edge and create visual interest. Landscape designed to screen views of parking areas is described in the 'Parking Lots' section of the General Site Design Guidelines.



FIGURE 44 A variety of plant types and heights creates a softer edge to this long industrial facade.

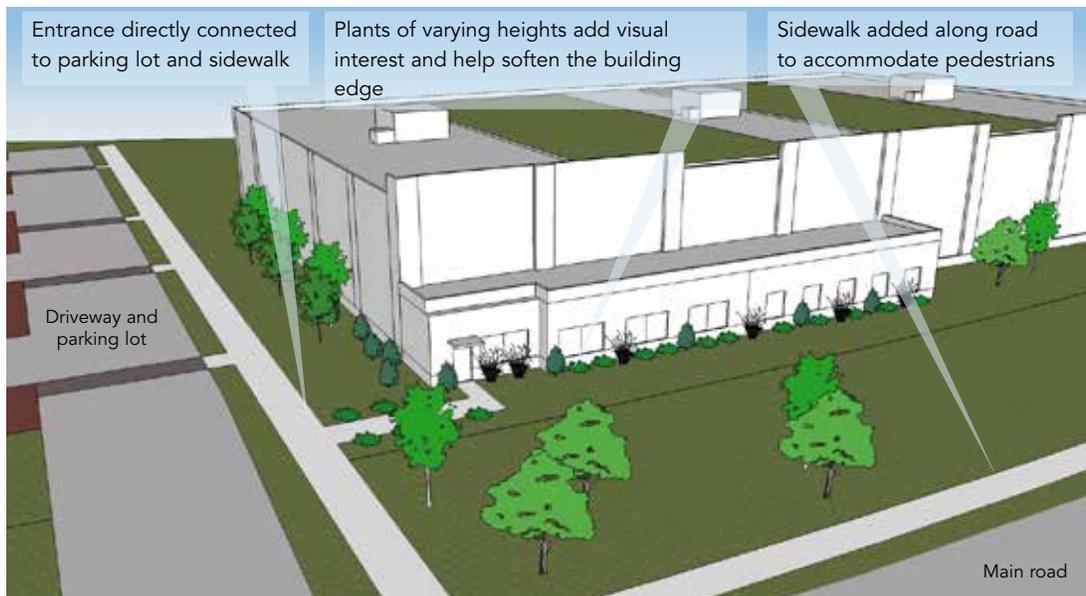


FIGURE 45 An example of how an industrial building can embody the Site Design Guidelines, including the combination of both a green and reflective roof.

C. Building Design

The intent of these Regional Retail and Industrial Building Design Guidelines is to promote the design of new projects that better embody core principles of Plymouth's local character; to successfully design key façade elements that help buildings maintain a human scale and provide visual interest; and to help large buildings relate better to local scale and character.

IN THIS SECTION

1. BUILDING PLACEMENT AND ACCESS
2. FAÇADE ARTICULATION
3. LARGE BUILDINGS

1. BUILDING PLACEMENT AND ACCESS



FIGURE 46 New stand-alone retail development should locate the building near the sidewalk and place parking to the side and rear to enliven the sidewalk and provide convenient pedestrian and bicycle access while still accommodating cars.

Incorporate existing topography

On sites with significant topography changes, buildings should be built into grade changes and provide entrances on multiple levels to accommodate these natural slopes whenever possible. This can help reduce the apparent mass of large buildings and reduce energy costs by moderating internal temperatures. The creative treatment of these grade changes using landscaping, stairs, or naturalized retaining walls can improve their appearance and create a visual amenity.



FIGURE 47 This office building in West Plymouth masks a change in grade with extensive landscaping.

Orient entrances to the primary arrival sequence

The primary entrance to the main building on the site should face the direction from which most visitors will arrive. It is preferred that this be from the sidewalk to support an active public realm, but regional retail and industrial sites may require an alternative orientation. Where a sidewalk exists, a path should connect it to this entrance. Where parking exists on site, a clear well-marked pedestrian route through the lot should connect it to this entrance.

The primary entrance should be given visual prominence on the facade. This should include additional design features appropriate to the overall aesthetic such as a change in material and/or color, increased transparent glazing, and enhanced landscaping. It should also provide cover from the weather, either by being recessed into the façade or by being sheltered with a canopy or awning.



FIGURE 48 A change in material and additional glazing mark this industrial building entrance, which could be enhanced with an awning or canopy for weather protection.

2. FAÇADE ARTICULATION

Ensure any street-facing facade provides visual interest

The primary façade of retail and office buildings should be detailed to create visual interest and maintain a human scale. Any street-facing facade should be designed to provide visual interest and avoid a 'back-of-house' or utilitarian appearance. This includes locating loading docks, utility meters, and trash locations away from public view.



FIGURE 49 This office building is located on a corner lot and has two detailed facades that address both streets.

Use transparency to highlight active, pedestrian-oriented areas

The primary façade of retail, office, and mixed-use buildings should provide a high level of transparency at ground level using clear glass in storefronts. Secondary façades and upper levels should have a lower level of transparency, and upper level windows should generally be smaller, vertically-proportioned openings that align with the bays of the façade. Storefront windows should generally be undivided glass; upper level windows should be divided with muntins and mullions in patterns similar to those in adjacent buildings.

Big box retailers should have high levels of transparency surrounding the primary entrance and industrial buildings should provide transparency around the primary entrance and for office and showroom areas. Otherwise these building types may have very low levels of transparency according to their function and use.

Vary rooflines of large buildings

Large buildings should incorporate changes in rooflines or types that relate to the interior spaces or uses to add visual interest and break down the mass of the structure. See the 'sustainable design' section for information about green and reflective roofs.

3. LARGE BUILDINGS

Regional retail and light industrial buildings in Plymouth often require large floor areas in excess of 15,000 square feet. Such floor areas are not typical to Plymouth's local character and should be treated in a way that masks long façade and helps them relate better to their surroundings.

Use frontage buildings to reduce the scale of large buildings

Some large industrial uses can place a smaller frontage building, such as office or showroom space, near the street to reduce the scale of the larger volume behind it. A frontage building should provide a more pedestrian-friendly street edge and have a higher level of design and detail than the main large volume that can reflect elements of Plymouth's local character.



FIGURE 50 A more articulated front building with a pedestrian entrance shields the bulk of this industrial building but could be designed to better reflect Plymouth's character.

Use multiple smaller footprints to break down large building volumes

The Zoning Bylaw allows more than one principal nonresidential structure on a single lot (see § 205-17 D-1). This approach allows the same amount of building area to better adapt to site topography and to be expressed in a form more compatible with Plymouth's scale and local character. Some uses such as retail and office can be effectively subdivided into a series of smaller buildings and arranged as a group around a central common space or in a line with varying setbacks to create a varied edge.



FIGURE 51 This office development in West Plymouth uses two smaller buildings that better reflect the desired village scale than a single large building, but the site design should include more landscaped pervious surfaces to reduce stormwater runoff and the heat island effect..

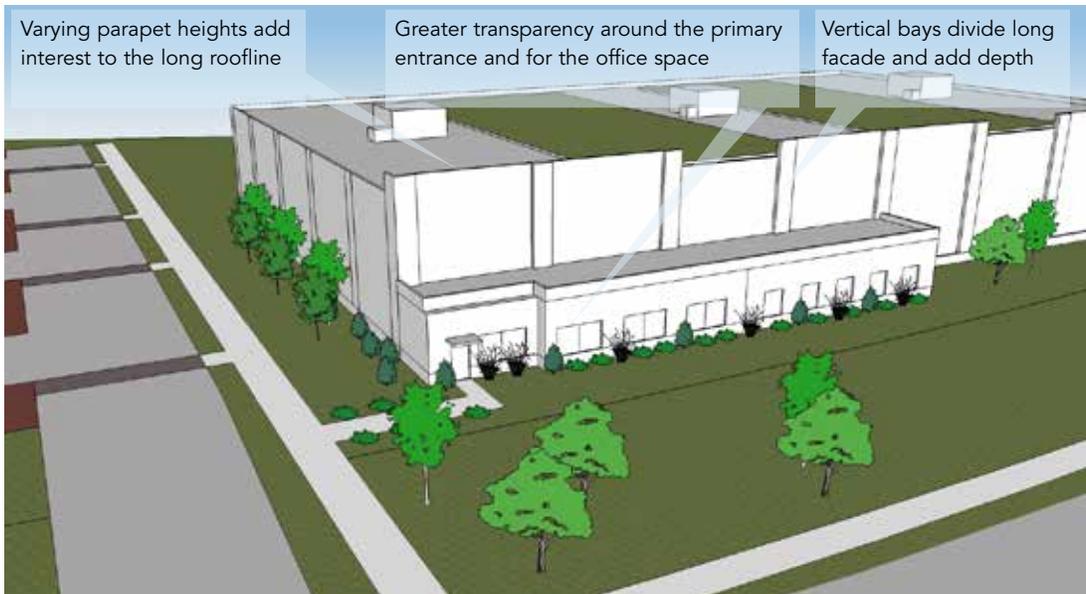


FIGURE 52 An example of how a large industrial building can embody the Building Design Guidelines, including a more human-scaled frontage building.

Appendix

Local Native Plant List

	BOTANICAL NAME	COMMON NAME
TREES	<i>Acer rubrum</i>	Red Maple
	<i>Pinus rigida</i>	Pitch Pine
	<i>Pinus strobus</i>	White Pine
	<i>Quercus velutina</i>	Black Oak
	<i>Quercus palustris</i>	Pin Oak
	<i>Quercus alba</i>	White Oak
	<i>Quercus coccinea</i>	Scarlet Oak
	<i>Quercus ilicifolia</i>	Scrub Oak
SHRUBS/ GROUNDCOVERS/ PERENNIALS	<i>Agastache foeniculum</i>	Blue giant hyssop
	<i>Arctostaphylos uva-ursi</i>	Bearberry
	<i>Aronia arbutifolia</i>	Chokeberry
	<i>Asclepia incarnata</i>	Swamp Milkweed
	<i>Cephalantus occidentalis</i>	Buttonbush
	<i>Clethra alnifolia</i>	Sweet Pepperbush
	<i>Comptonia peregrina</i>	Sweet Fern
	<i>Corylus americana</i>	American Hazelnut
	<i>Fothergilla gardenii</i>	Fothergilla
	<i>Gaultheria procumbens</i>	Wintergreen
	<i>Gaylussacia baccata</i>	Black Huckleberry
	<i>Hamamelis virginiana</i>	Witch Hazel
	<i>Hemerocallis varieties</i>	Daylily
	<i>Heuchera varieties</i>	Coral Bells
	<i>Ilex glabra</i>	Inkberry
	<i>Ilex opaca</i>	American Holly
	<i>Ilex verticillata</i>	Winterberry
	<i>Juniperus communis</i>	Pasture Juniper
	<i>Juniperus virginiana</i>	Eastern Red Cedar
	<i>Kalmia angustifolia</i>	Sheep Laurel
	<i>Kalmia latifolia</i>	Mountain Laurel
	<i>Lindera benzoin</i>	Spicebush
<i>Lyonia ligustrina</i>	Maleberry	
<i>Maianthemum canadense</i>	Canada Mayflower	
<i>Myrica pensylvanica</i>	Bayberry	

	BOTANICAL NAME	COMMON NAME
	<i>Myrtus communis</i>	Myrtle
	<i>Osmunda cinnamomea</i>	Cinnamon fern
	<i>Potentilla fruticosa</i>	Cinquefoil
	<i>Prunus maritima</i>	Beach Plum
	<i>Prunus serotina</i>	Black Cherry
	<i>Pteridium aquilinum</i>	Brackern Fern
	<i>Rhododendron viscosum</i>	Swamp Azalea
	<i>Rosa palustris</i>	Swamp Rose
	<i>Rosa virginiana</i>	Virginia Rose
	<i>Sambucus canadensis</i>	Elderberry
	<i>Spiraea tomentosa</i>	Steeplebush
	<i>Thelypteris noveboracensis</i>	New York Fern
	<i>Vaccinium angustifolium</i>	Low Bush Blueberry
	<i>Vaccinium corymbosum</i>	High Bush Blueberry
	<i>Viburnum acerifolium</i>	Maple Leaf Viburnum
GRASSES	<i>Carex pensylvanica</i>	Pennsylvania Sedge
	<i>Danthonia spicata</i>	Poverty Grass
	<i>Elymus riparius</i>	Wild Rye
	<i>Panicum virgatum</i>	Switchgrass
	<i>Schizachyrium scoparium</i>	Blue Stem Grass
	<i>Sorghastrum nutans</i>	Indiangrass
	<i>Schizachyrium scoparium</i>	Little Bluestem
REGIONAL NATIVE PLANTS TREES	<i>Acer saccharum</i>	Sugar Maple
	<i>Alnus incan var. rugosa</i>	Speckled Alder
	<i>Amelanchier arborea</i>	Serviceberry
	<i>Amelanchier canadensis</i>	Shadbush
	<i>Betula nigra</i>	River Birch
	<i>Betula populifolia</i>	Gray Birch
	<i>Carpinus caroliniana</i>	American Hornbeam
	<i>Chamaecyparis thyoides</i>	Atlantic white cedar
	<i>Cornus varieties</i>	Dogwood
	<i>Fagus grandifolia</i>	American Beech
	<i>Fraxinus americana</i>	White Ash
	<i>Liriodendron tulipifera</i>	Tulip Poplar
	<i>Nyssa sylvatica</i>	Tupelo
	<i>Rhus typhina</i>	Sumac

	BOTANICAL NAME	COMMON NAME
REGIONAL NATIVE GRASSES	<i>Calamagrostis canadensis</i>	Bluejoint Grass
	<i>Panicum virgatum</i>	Switch Grass
	<i>Schizachyrium scoparium</i>	Little Bluestem
VINES	<i>Clematis virginiana</i>	Virgin Bower
	<i>Parthenocissus quinquefolia</i>	Virginia Creeper
	<i>Vitis riparia</i>	Riverbank Grape
NON-NATIVE PLANTS (NON-INVASIVE) TREES	<i>Catalpa bignonioides</i>	Catalpa
	<i>Cercis varieties</i>	Redbud
	<i>Chionanthus virginicus</i>	Fringe Tree
	<i>Cunninghamia lanceolata 'gluaca'</i>	Blue China Fir
	<i>Ginkgo biloba</i>	Maidenhair Tree
	<i>Gleditsia triacanthos</i>	Honey Locust
	<i>Magnolia soulangiana</i>	Saucer Magnolia
	<i>Platanus x acerifolia</i>	London Plane Tree
	<i>Prunus varieties</i>	Flowering Cherry
	<i>Pyrus varieties</i>	Ornamental Pear
	<i>Salix babylonica</i>	Weeping Willow
	<i>Zelkova serrata</i>	Japanese Zelkova
NON-NATIVE PLANTS (NON-INVASIVE) SHRUBS/ GROUNDCOVERS/ PERENNIALS	<i>Achillea varieties</i>	Yarrow
	<i>Artemisia varieties</i>	Artemisia
	<i>Asclepia incarnata</i>	Swamp Milkweed
	<i>Buddleia davidii</i>	Butterfly Bush
	<i>Buxus japonica</i>	Japanese Boxwood
	<i>Cotinus coggygria</i>	Smokebush
	<i>Echinacea purpurea</i>	Purple coneflower
	<i>Elaeagnus pungens</i>	Silverberry
	<i>Hemerocallis varieties</i>	Daylily
	<i>Heuchera varieties</i>	Coral Bells
	<i>Hydrangea quercifolia</i>	Oak Leaf Hydrangea
	<i>Hypericum densiflorum</i>	St. John's Wort
	<i>Iris varieties</i>	Iris
	<i>Juniperus species</i>	Juniper species
	<i>Laurus nobilis</i>	Sweet Bay
	<i>Myrtus communis</i>	Myrtle
	<i>Osmanthus heterophyllus</i>	Holly Olive
	<i>Rhododendron varieties</i>	Rhododendron
	<i>Sedum spectabile</i>	Autum Joy
	<i>Taxus varieties</i>	Yew
<i>Viburnum varieties</i>	Maple Leaf Viburnum	

	BOTANICAL NAME	COMMON NAME
GRASSES	<i>Calamagrostis</i> variety	Feather Reed Grass
	<i>Carex buchananii</i>	Leather Leaf Sedge
	<i>Helictotrichon sempervirens</i>	Blue Oat Grass
	<i>Miscanthus</i> varieties	Miscanthus
	<i>Muhlenbergia capillaris</i>	Pink Muhly Grass
VINES	<i>Clematis</i> varieties	Clematis
	<i>Jasmine</i> varieties	Jasmine
	<i>Wisteria floribunda</i>	Japanese Wisteria

Salt Tolerant Species

The following is a list of recommended **salt tolerant species**. Road salt is extremely tough on plants, both from its build-up in the soil near treated surfaces and its physical contact with foliage and branches from salt-laden spray generated by fast-moving traffic. Substitutions are acceptable. The Landscape Architect or approved designer must be able to demonstrate suitability of alternatives to the satisfaction of the Town Tree Warden.

	BOTANICAL NAME	COMMON NAME
DECIDUOUS TREES	<i>Acer rubrum</i>	Red Maple
	<i>Gleditsia triacanthos</i>	Common Honeylocust
	<i>Platanus occidentalis</i>	American Planetree
	<i>Platanus x acerifolia</i>	London Planetree
	<i>Quercus alba</i>	White Oak
	<i>Quercus coccinea</i>	Scarlet Oak
	<i>Salix</i> species	Willows
EVERGREEN TREES AND SHRUBS	<i>Juniperus</i> , various species	Junipers
	<i>Juniperus virginiana</i>	Eastern Red Cedar
	<i>Pinus montana</i> var. <i>mughus</i>	Mugho Pine
	<i>Pinus nigra</i>	Austrian Pine
	<i>Ilex opaca</i>	American Holly
DECIDUOUS SHRUBS AND SMALL TREES	<i>Amelanchier canadensis</i>	Downy Shadblow
	<i>Cornus florida</i>	Flowering Dogwood
	<i>Cornus racemosa</i>	Gray Dogwood
	<i>Cornus stolonifera</i>	Redosier Dogwood
	<i>Myrica pensylvanica</i>	Northern Bayberry
	<i>Rhus copallina</i>	Flameleaf sumac
	<i>Rosa rugosa</i>	Rugosa rose
	<i>Spiraea</i> species	Spireas, all kinds

Drought Tolerant Species

The following is a list of recommended **drought tolerant species**. Any species, regardless of how drought tolerant it may be, will require supplemental watering during its period of establishment in the landscape. Substitutions are acceptable. The Landscape Architect or approved designer must be able to demonstrate suitability of alternatives to the satisfaction of the Town Tree Warden.

	BOTANICAL NAME	COMMON NAME
DECIDUOUS TREES	<i>Acer griseum</i>	Paperbark maple
	<i>Carpinus caroliniana</i>	American hornbeam
	<i>Cornus kousa</i>	Kousa dogwood
	<i>Crataegus phaenopyrum</i>	Washington hawthorn
	<i>Ginkgo biloba</i>	Ginkgo
	<i>Halesia tetraptera</i>	Carolina silverbells
	<i>Koelreuteria paniculata</i>	Goldenraintree
	<i>Malus spp.</i>	Crabapple
	<i>Platanus x acerifolia</i>	London planetree
	<i>Quercus spp.</i>	Oak, many species
	<i>Tilia spp.</i>	Linden
	<i>Zelkova serrata</i>	Japanese Zelkova
DECIDUOUS SHRUBS	<i>Aronia spp.</i>	Chokeberry
	<i>Buddleia davidii</i>	Butterfly bush
	<i>Calluna spp.</i>	Heather
	<i>Chaenomeles x superba</i>	Japanese flowering quince
	<i>Comptonia peregrina</i>	Sweetfern
	<i>Cornus mas</i>	Corneliancherry dogwood
	<i>Cotinus coggygria</i>	Smokebush
	<i>Cotoneaster spp.</i>	Cotoneaster
	<i>Forsythia sp.</i>	Forsythia
	<i>Itea virginica</i>	Virginia sweetspire
	<i>Myrica pensylvanica</i>	Bayberry
	<i>Potentilla fruticosa</i>	Bush cinquefoil
	<i>Rhus spp. (aromatica, copallina, typhus)</i>	Sumac
	<i>Rosa rugosa</i>	Saltspray rose
	<i>Spiraea spp.</i>	Spirea, many species
	<i>Syringa spp.</i>	Lilac
	<i>Vaccinium angustifolium</i>	Lowbush blueberry
	<i>Viburnum dentatum</i>	Arrowwood

	BOTANICAL NAME	COMMON NAME
NEEDED EVERGREENS	<i>Cedrus atlantica</i>	Atlas cedar
	<i>Chamaecyparis pisifera</i>	Sawara false cypress
	<i>Juniperus spp.</i>	Junipers, most species
	<i>Picea spp.</i>	Spruce, most species
	<i>Pinus spp.</i>	Pine, most species
	<i>Taxus spp.</i>	Yew, most species
	<i>Ilex crenata</i>	Japanese holly
	<i>Ilex glabra</i>	Inkberry
	<i>Ilex opaca</i>	American holly

