

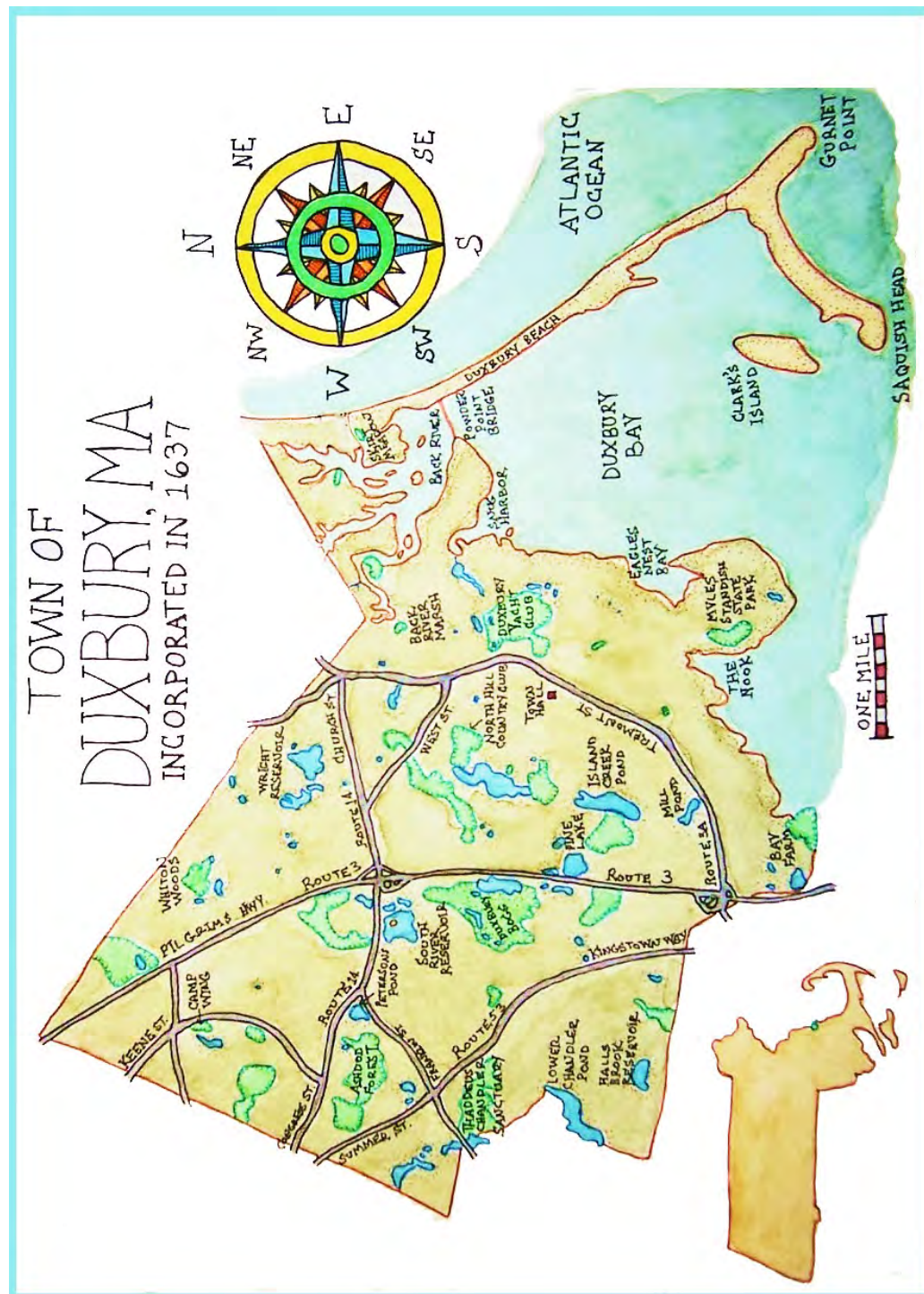
DRAFT 5.2

RESIDENTIAL DESIGN GUIDELINES

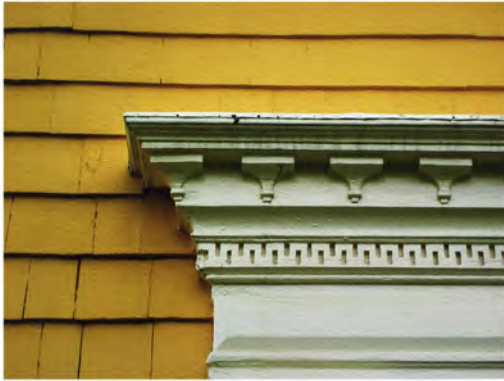
TABLE OF CONTENTS

1. INTRODUCTION.....	11
2. PRINCIPLES.....	19
3. STYLES.....	21
4. ADDITIONS AND RENOVATIONS.....	31
5. SITE PLANNING.....	37
6. MASSING.....	45
7. MATERIALS AND FINISHES.....	49
8. FAÇADES.....	55
9. ROOFS.....	71
10. WINDOWS AND DOORS.....	81
11. ACCESSORIES.....	89
12. LANDSCAPE DESIGN.....	91
13. CONCLUSION.....	97
APPENDIX: RESOURCES.....	99
PHOTO CREDITS.....	103

DRAFT 5.2



DRAFT 5.2



DETAILS



DRAFT 5.2

PURPOSE AND INTENT

What makes Duxbury beautiful? Its bucolic seaside setting, abundance of lush landscapes, and wealth of traditional and diverse architecture define its unique character.

These Residential Design Guidelines, compiled and written over many months by the members of Duxbury's Design Review Board, 2014-18, are intended as a resource for designers, property owners, builders and town officials in seeking to preserve our town character when planning a residential building or renovation project.

We have included sketches and photos we hope will be helpful, along with accepted principles of good design. Please note that in showing various options, we are not necessarily recommending one treatment over another, as different situations call for different solutions. We do, however, stress the importance of considering the site as well as the neighborhood before beginning any project.

Please take a moment to look at our very short history of Duxbury because it has a direct bearing on the character of our town-- and its character is one of our town's chief attractions.

We stand ready to assist any residents who either want to start or who are in the midst of the building or renovating process. As members of the Design Review Board, we are simply here to be a sounding board and to offer suggestions. We can be reached through the Building Department at Town Hall.

THE LANGUAGE OF DESIGN

In these Guidelines, we use several terms that are commonly used by architects and design professionals in their work. These are some of the most frequently used terms:

At least since the ancient Greeks, people have philosophized about beauty—what, exactly, makes something appeal to the senses; what makes one thing beautiful, and something else, not? This is “*aesthetics*,” a system of principles for the appreciation of the beautiful.

“*Style*” refers to any particular type or form of architecture, often characteristic of an era or place, such as Federal or Cape Cod.

“*Taste*” is one’s individual perception of quality. Taste is subjective, transitory and as changeable as the wind. Taste can be manipulated by advertising, or fads, or social media. Taste is individual and personal, but good design is universal; for this reason, good design principles are more likely to add value to your home than individual preferences.

In these Guidelines, and in architecture, a “*design principle*” is a basic, fundamental element of planning. These principles are “tried and true,” and (scientists are now discovering) are rooted in brain science and psychology. Design principles are essential in making decisions about every building or renovation project.

“*Proportion*” has to do with the relative sizes of the parts of a building. It may refer to the relationship between the various parts of a building or structure, or to the relationship between a part and the entire building or structure – for example, the proportions of a window as compared to the wall in which it is placed.

“*Scale*” is the proportional relationship of a building or a space to an individual person. “*Neighborhood scale*” refers to the proportionate relationship of buildings and surrounding spaces to those in the neighborhood. For example, many older residences in Duxbury are one or two stories in height, and were built close together in a “*village*.” In such a neighborhood, a very large house will not share the “*neighborhood scale*.”

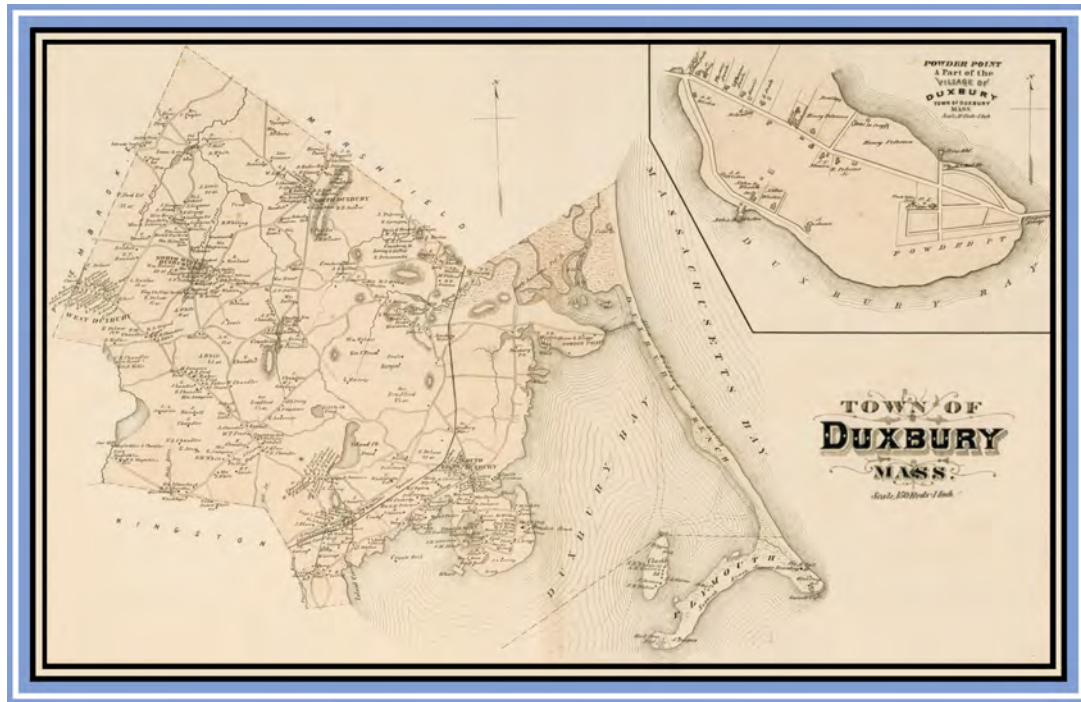
“*Mass*” refers to the volume of a structure, considered in all three dimensions from the exterior of the structure. The main part of a structure is often the “*primary mass*”, with porches, ells, and wings constituting “*secondary masses*.”

Architectural compositions should be in “*balance*.” That is, when all the elements on one side of the of the building’s perceived mid-point are equal in visual impact or ‘weight’ to those on the other side, then the building’s composition is balanced.

Satisfactory balance is most often achieved with a “*symmetrical*” composition – one in which each side of the composition is identical to the other in terms of massing, volume, roofline, and all the other important elements of the building. It is more difficult to achieve a satisfying balance in an “*asymmetrical*” composition.

“*Unity*” happens when nothing can be added or removed from a design without adversely affecting the composition.

For designers, “*order*” means the arrangement of the elements of a composition in relation to each other, according to a particular sequence or pattern. Usually, this sequence or pattern is based on the proportion or function of an element, or on the physical properties of a building material.



CHAPTER 1: INTRODUCTION

1

A. History

Duxbury was founded in 1637 by Captain Miles Standish of the Plymouth Colony. The town's early settlers lived a Spartan life and engaged in fishing, farming, and associated trades.

By the latter part of the eighteenth century, Duxbury's citizens had become heavily engaged in the shipbuilding industry. The newfound wealth created by shipbuilders and sea captains was reflected in the building of over 212 homes and structures between 1780 and 1850 in what is now The Old Shipbuilders Historic District, created in 1986, consisting of 287 acres on Washington Street from Hall's Corner in South Duxbury to Powder Point Avenue, (also including several side streets off Washington, as well as a portion of St. George Street and Powder Point). Many of these were stately Federal and Greek Revival Style homes, while others were simpler Capes and Saltboxes. The homes in this area define the character of the Duxbury we are fortunate enough to cherish today.

The shipbuilding era came to an end in the 1840s when Yankee Clipper ships began to be built in Boston and Salem, towns with far deeper waters than Duxbury's. From this point the town went into a gradual decline, which lasted well beyond the end of the Civil War. As a result, the buildings established for the once thriving industries associated with the shipbuilding industry became dilapidated and worn down. Derelict shipyards, wharves and

mills lined Duxbury's shores, especially in the region of the Bluefish River which had been a commercial area.

It took the concerted efforts of many dedicated citizens, starting in the late 1800's and continuing well into the twentieth century, to clean up the shoreline around the Bluefish River and its marshes and to acquire and deed these marshes to the Duxbury Rural and Historical Society so that their natural beauty would be preserved in perpetuity.

Surrounding farmland and wooded territory became attractive developments and cul-de-sacs, guided by these forward-thinking citizens of the 1970s when the first master plan was developed. Since then many commissions and ad-hoc groups have sought to protect and preserve our unique character, our open spaces and vistas.

B. Character

Residents and visitors alike agree that Duxbury's unique town character is probably its most valuable asset. The town's natural beauty, its architectural heritage, its human scale, and visible evidence of its rich cultural legacy all contribute to the town's highly distinctive character. Much of the town is located around the bay, and Duxbury Beach on Massachusetts Bay is one of the busiest in the Commonwealth. There are beautiful views of Plymouth and Manomet along with vistas of tidal creeks, small sailboats, and waterfront homes. In addition, Duxbury has scenic outlying wooded areas and open spaces, formerly farmland, which from the mid-sixties onward were gradually developed into residential areas.

Old Shipbuilders' District

The streets of the Old Shipbuilders' District, mentioned above, together with those on Powder Point and Standish Shore, form the historic nucleus of Duxbury. The buildings on these streets are close-knit and sheltered by mature trees, creating a strong sense of human scale and community, as shown in the following photos:



Four corners at the Nathaniel Winsor House



Snug Harbor



First Parish Church



The Cable House on Washington St



One of Duxbury's many handsome antique homes



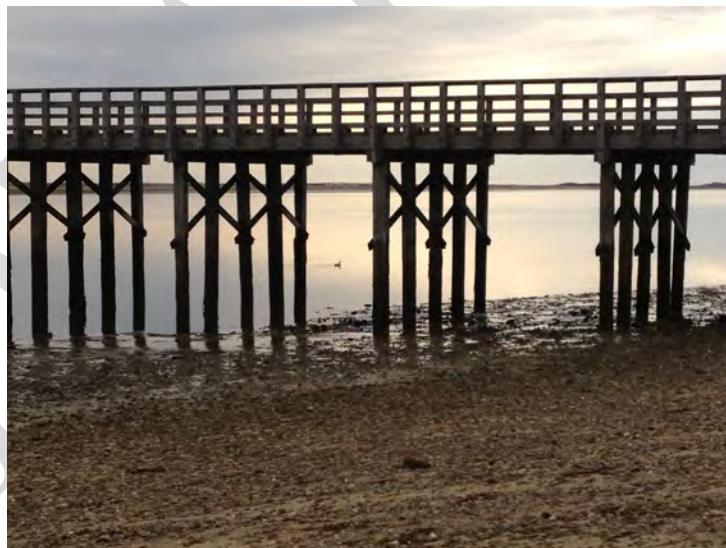
Duxbury Town Hall

The Water's Edge

Life in Duxbury has always been centered on the waters of Duxbury Bay and the Ocean beyond it. The margin between land and the water is visible from many vantage points. This feature is perhaps the one that most clearly defines Duxbury's distinctive character.



Boating and shellfishing along Duxbury Bay



Duxbury's iconic wooden Powder Point Bridge



Duxbury Beach

Woods and Open Spaces

Open space in Duxbury is plentiful, ecologically diverse, and easily accessible. Once principally farmland, it now offers valuable habitat for wildlife and attractive views and recreational opportunities for residents and others.



One of many cranberry bogs in Duxbury



A pond on Temple Street



Bluefish River Marsh

CHAPTER 2: PRINCIPLES 2

Duxbury residences display a wide range of architectural styles and characteristics. Homes and other buildings in our town reflect a variety of development conditions, including prevailing architectural styles of different eras, individual characteristics of particular sites, builders' values and design sensibilities. This chapter lists four overarching principles that homeowners and their architects should consider no matter what design style is considered, which particular neighborhood the project is in, or what site constraints may exist.

A. Consistency of Style

Many building elements and details contribute to the authenticity of an architectural style. These include—but are not limited to—building mass, roof form, proportion, façade symmetry and detail, window and door proportion and design, building materials, and ornamentation. **The designation of an architectural style requires total commitment to that style in the design of all components of the residence.** Even in the case in which a designer develops a unique style or a composite of established styles, a consistent application of the rules and logic for the building design should always be expressed clearly.

B. Historical Accuracy

Duxbury cherishes its unique architectural heritage. Most residents and designers wish to create new buildings or additions to antique structures that are historically and stylistically in keeping with the Town's architectural traditions. In addition to a sustained consistency in the design, this requires an accurate understanding and depiction of the style's heritage. **The undertaking of an historical style requires knowledge of the appropriate building elements that contribute to the properties of that style.** The building's design and construction should seek the optimum and most appropriate balance of the realities of contemporary building practices and the full manifestation of an historic style.

C. Quality

The design and construction of Duxbury homes and other structures should utilize the best possible craftsmanship and building materials. By setting and achieving high standards for design and construction, new homes will augment the existing Duxbury building stock and assure a continued stability in the representation of the town's identity.

D. Honesty of Materials

Building materials have differing physical characteristics and uses. **The use of a building material should be consistent with the physical properties of that material.** The use of natural materials is encouraged. If synthetic materials are to be used, they should be of a quality that will replicate the appearance of natural materials as much as possible. The manner in which a material is applied should also be consistent with its physical idiosyncrasies.

CHAPTER 3: STYLES 3

Duxbury's first homes were constructed nearly four hundred years ago. Since then, the Town has developed and maintained a number of architectural styles. Excellent examples of these styles have been preserved throughout the Town and continue to be used and enjoyed by residents today. This chapter acknowledges the successful history of Duxbury's architectural heritage and discusses some key points for homeowners and their architects to consider at the outset of their projects.

Architectural Styles

An architecture style based on traditional New England forms works well for new residences in Duxbury, although more modern architecture may also be appropriate in a particular setting, sensitively blending the old and the new.

Additions to existing residences and other structures should be entirely consistent with the style of the existing building, and should also conform to its surroundings in terms of all other important components, such as massing, rooflines, materials, windows and doors, and so on.

In choosing a style to emulate, residents and their designers should thoroughly understand and appreciate the intricacies and properties of the chosen style. Style guides should be consulted to ascertain the defining characteristics of a style, such as roof form, façade composition and other important components. A number of resources are listed in the Appendix, including guidebooks of representative styles of American residential architecture.

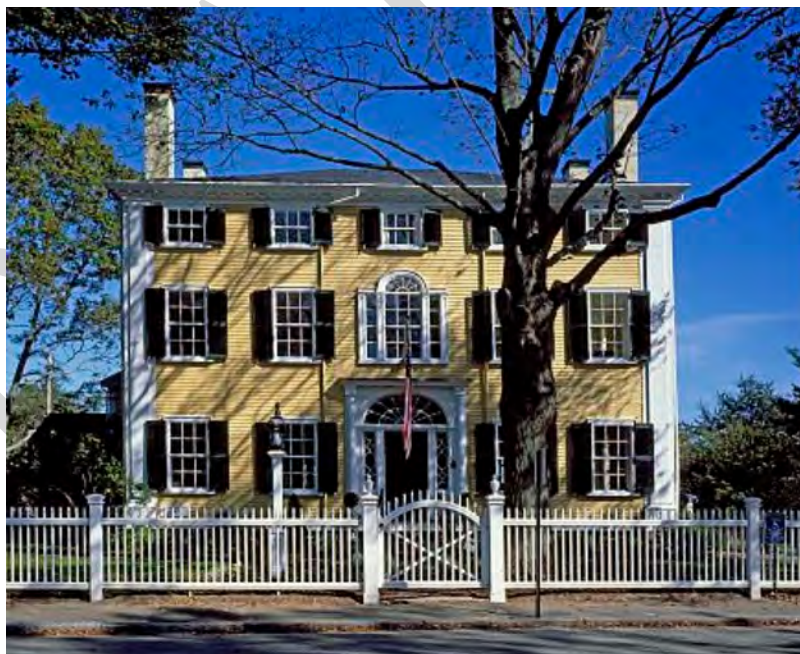
The overall goal in selecting an appropriate architectural style is to preserve and enhance Duxbury's town character, neighborhood scale, and quality of life for all residents.

The remaining chapters in these Guidelines contain guidance on some of the components of residential building.

The following images show examples of some Duxbury architectural styles:



Cape Style



Federal - Nathaniel Winsor House



Federal - King Caesar House



Federal



Victorian (Mansard Roof style)



Greek Revival



Georgian



Saltbox



Arts and Crafts Style



Garrison Colonial



Shingle Style



Contemporary



New construction combining forms that are compatible with existing neighborhood styles.



Beach Style Contemporary



Beach Style Contemporary



Beach Style Contemporary



Beach Style Lighthouse

CHAPTER 4: ADDITIONS AND RENOVATIONS 4

Additions and renovations are an integral part of the historic tradition in Duxbury. Additional space is frequently required for a growing family or to add contemporary amenities and meet modern standards of living. Traditional building change use as required over time. Additions and renovations should be compatible with the original building.

A. Additions

New additions, exterior alterations or related new construction should maintain the historic materials, features, and special relationships that characterize the property. New work should be compatible with the historic materials, size, scale, proportion, and massing to protect the integrity of the property and its environment.

Additions should be subordinate to the original structure so that the original building is discernable, and should employ compatible materials, forms, and styles as the original structure.



The rear addition to this antique house maintains the look and authenticity of the original structure.



An example of a successful addition done many years ago.

Avoid:



Additions that are incompatible with the existing structure destroy the character of the building.

Avoid:



Many additions over time may result in an awkward and unbalanced composition as on this beachfront home (since demolished and rebuilt).

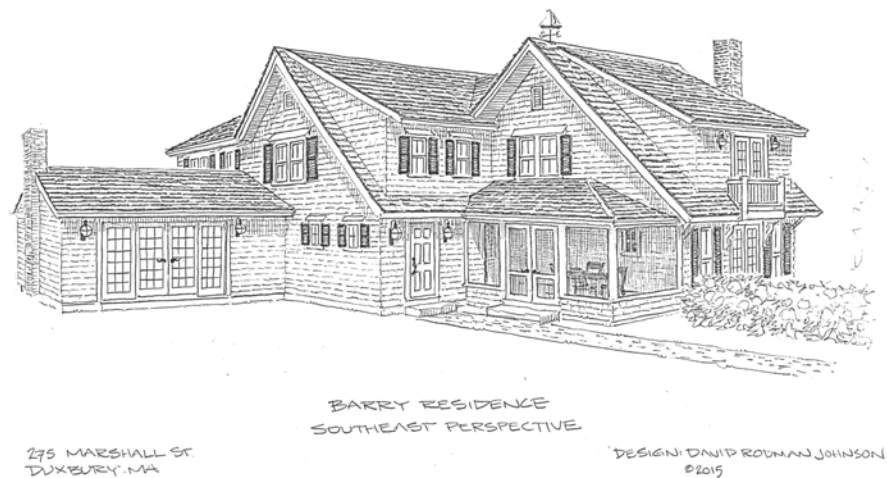
B. Renovations

The historic character of a property should be retained and preserved where feasible, although the upgrade of mechanical, electrical, plumbing and structural systems is encouraged. The removal of distinctive materials or alteration of features, spaces and special relationships that characterize a property should be avoided is possible. Traditional building materials should be used when available. When not available or advisable, materials that maintain the overall appearance may be used. New features on the exterior of historic buildings should harmonize with the historic character of the building.

The following shows the process of designing a successful renovation, keeping the simple feeling of the original, and maintaining a modest scale.



This is the original house.



This is the architect's sketch of the proposed renovation.



This is the completed renovation, which remains in keeping with the original.

The following photos show a successful preservation of an older house:



Before renovation



After renovation

CHAPTER 5: SITE PLANNING 5

This chapter includes guidelines for the treatment of the natural environment and its relationship to the placement and design of new and remodeled homes.

“A house is in delicate balance with its surroundings and they with it.”

The Place of Houses

A. Natural Site Features

The siting and design of structures should integrate mature and native trees and existing vegetation into the site plan and building design.

B. Topography

Siting and design of structures should conform to the natural contours of the site and mitigate the need for extensive cutting, filling, or terracing.

Grading should be minimized to reflect the natural site conditions and existing slope. Where grading is necessary, contour grading that emulates the topography of the existing slope should be utilized. Grading should always relate to the existing contours of the land. The site should not be shaped into terraced building pads, nor should a flat site be created on a parcel that has existing topography.

A building's mass, roof form, and projecting elements should be designed with the aim of minimizing the visual impact of the building on a slope. Rooflines should be designed in ways that minimize interference with views from neighboring properties.

Ideally, retaining walls should not be higher than five feet. Terraced retaining walls should be horizontally separated by a minimum distance of five feet and that area should be landscaped. The exposed face of a retaining wall should be constructed of natural materials, such as stone or wood, in order to be in harmony with the predominant color and character of the adjacent landscape.



The renovation of this house respects the existing conditions of the topography without changing the natural slope of the site.

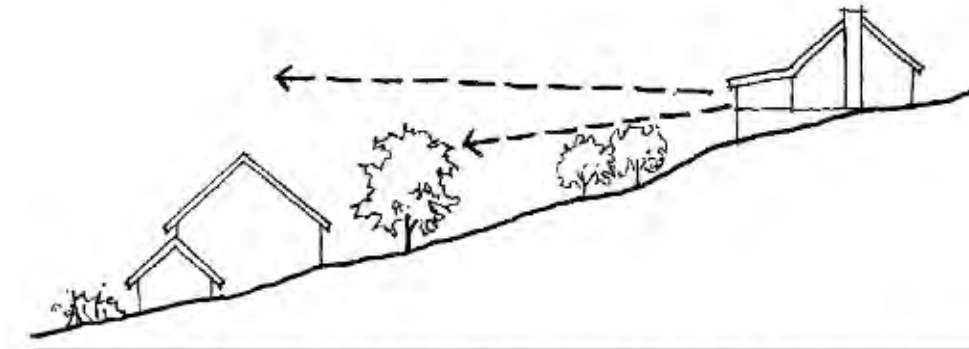
C. Neighborhood Context

Buildings should conform to setback standards and should generally reflect the context of neighboring properties, including building setbacks and landscape treatments.

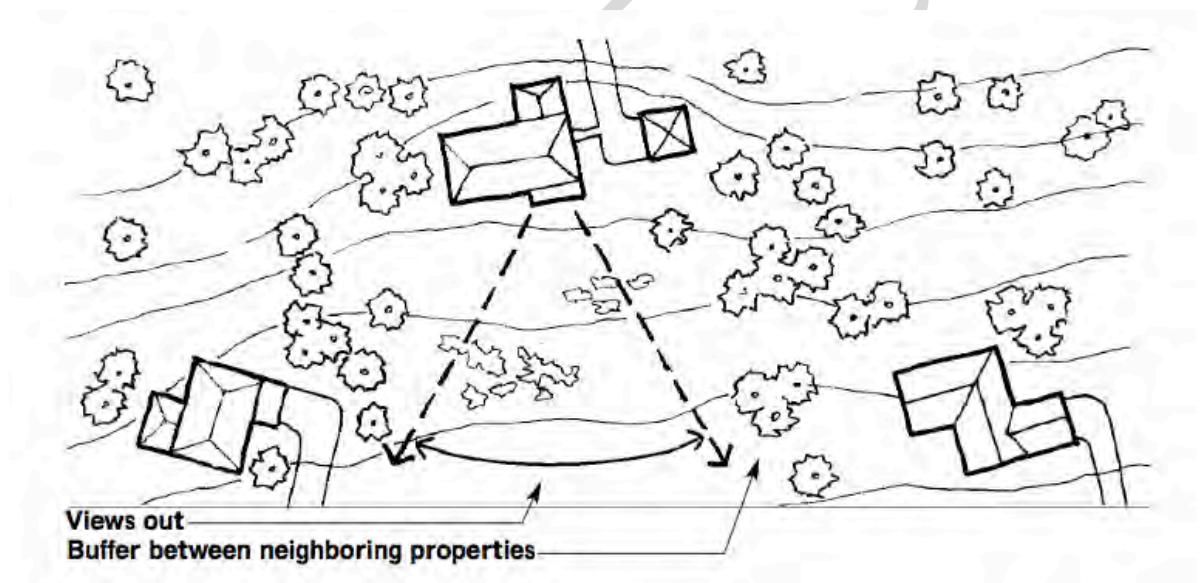
D. Views

Duxbury Bay, as well as the various coastal marshes, ponds, bogs, and tree cover conditions that exist in our Town create unique view opportunities that often require sensitive site planning.

Buildings and landscaping treatments should be sited so as to maximize the view potential from the site and to preserve views from neighboring and nearby properties.

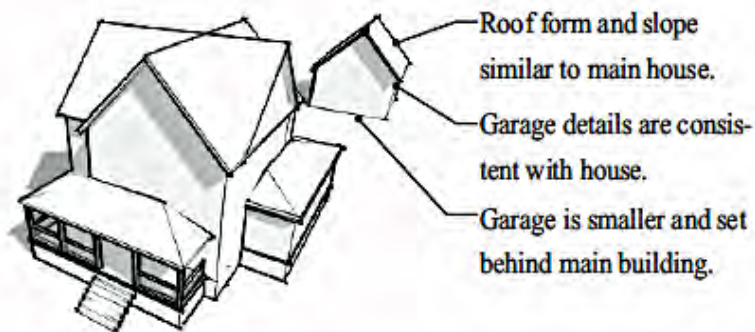


Landscaping should be placed to screen views to nearby properties while allowing views out.



E. Garages and Outbuildings/Barns

Garages replace traditional barns and carriage houses. Where feasible, entries to garages should be on the sides of buildings to avoid placing them in direct view from a public street. Scale and design of an outbuilding is a function of its use and its cost. Outbuildings are typically smaller and simpler than the main building they support. Outbuildings and detached garages may serve as focal pieces in their own right.



Garages may be attached to the main house via a connecting wing or breezeway.

The siting, massing and detail of the outbuilding or garage should defer to and be subordinate to the main house, if possible.

Outbuildings and detached garages should take design cues from the main house, including style, proportions, and materials. It is also common for outbuildings, such as barns, to diverge from the architectural language of the main house.



Garages, such as the one shown above left may take design features from the main house (above right) to form a balanced composition, with the outbuilding remaining secondary to the main building.



The design of an outbuilding should respect that of the main house, and should incorporate the same or similar trim, color and accent details. However, detailing on outbuildings is intentionally simpler and more economical than on the main structure.



Detached garages should be placed in the rear of the lot where possible. This is accessed by a narrow driveway beside the home.



In the above photo, the garage is subordinate to the main house by having a lower roof spring line than that of the main house. However, the two structures share similar materials and proportions, creating an aesthetic harmony among all parts.



Barns and outbuildings often take on a more rustic appearance. This charming barn is newly constructed but is faithful to an older style.

Avoid:



In today's building patterns, asphalt and vehicles often dominate the areas of the traditional front yard. Instead, the zone between the street and the front facade should be reserved for landscaping, front porches and a designated pedestrian pathway to the house. (Duxbury's protective by-law allows only 3 bays.)

DRAFT 5.2

CHAPTER 6: MASSING 6

The mass of a building is its three-dimensional form. The massing of houses with larger footprints can appear oppressive or overly bulky if care is not taken to articulate the mass. Massing that is “broken up” to reduce bulkiness is usually more successful. Appropriate massing ensures that new homes and building additions do not overwhelm their sites or their neighborhoods.

A. Neighborhood Context

Building massing should generally conform to the buildings in the surrounding vicinity.

Builders and homeowners considering upper-story additions and new homes higher than others should be sensitive to their neighborhood context, especially as they affect views, sightlines, and streetscape. This is especially true in flood-prone waterfront communities, such as Duxbury, where it is often necessary to raise the house above the projected high water level. These changes to the structure in response to new federal flood zoning maps should be carefully evaluated in relation to surrounding homes.

Design strategies that should be considered include:

- Modulating building mass to minimize boxiness
- Partial second story addition
- Setbacks for second story volumes

Additions should utilize exterior building materials that are the same as those on the existing building or of a color and textural quality that is similar to or blends with those materials.

Building massing should respond to the topographical conditions and landscape features that are specific to the site and avoid the loss of significant trees. The building mass on sites in close proximity to other buildings or narrow streets should be appropriately scaled.

B. Relationship of Building Elements

The architectural style will determine the characteristics of a building and the relationships among the various building elements.

A change in the wall plane of a façade should be in keeping with the architectural style of the building and should be significant enough to relieve the bulkiness of the building mass.

Repeating elements, such as dormers, can be more effective when they are equally sized and the spaces between them are of an equal proportion within a given plane. All such elements should also relate to the other elements of the façade and roof. (See Dormers. Chapter 9D.)

C. Primary Massing

Almost all of Duxbury's traditional buildings are composed of simple shapes and volumes. Simple massing was traditionally necessitated by the limited time, skill and resources available to early residents. Simple forms translated into buildings that were economical to build and easy to maintain. Complexity and interest occur with the grouping of structures along a street or within a neighborhood, rather than within a single building.

Simple rectangular volumes are functional and economical. Good proportion and proper detailing can make even a simple form elegant.

D. Secondary Massing

Additional forms can add interest and space to a simple building. Traditional buildings change over time to accommodate the needs of a new generation. Additions could provide for an expanding family, but always deferred to the mass of the original structure. The secondary mass should always remain subordinate to the main mass or form.



The transformation of a simple primary volume with a succession of secondary elements

Avoid:



The unnecessarily complex massing in the above example increases the bulk and results in an overly elongated and disproportionate appearance.

Avoid:



Some buildings attempt to stand out by recreating an entire skyline rather than contributing to the fabric of the street or neighborhood. The additional corners, gables, and valleys are expensive to construct and create additional maintenance for the homeowner.

DRAFT 5.2

CHAPTER 7: MATERIALS AND FINISHES 7

Building materials are important components in the delineation of an architectural style. This chapter offers guidelines for a number of issues to consider in the selection and application of building materials.

A. Residential Character

Building materials should be consistent with the architectural design style of the residence. They should also be in keeping with the character of the neighborhood and of the town of Duxbury.

The choice of materials should be properly scaled to the residence.

Building materials should not be individual components of a building but should instead fit into the larger design palette consistent with the style. Physical properties of the materials, such as texture, color and weight, should maintain an aesthetic and stylistic relationship to each other and the architectural design style of the building.

Avoid:



There should be consistency of materials on a single façade of a house (see B following), and “glued on” stonework should be avoided.

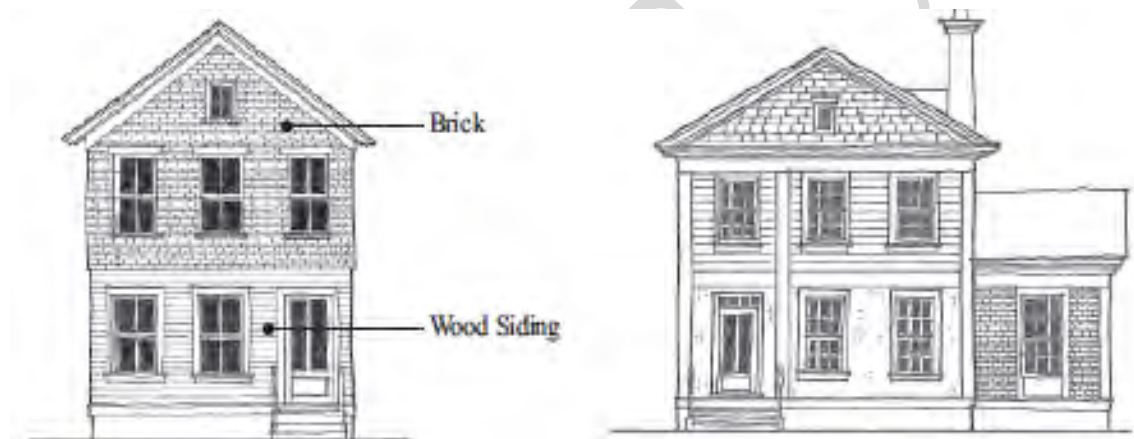
B. Materials

Typical wall materials include stone, brick, clapboard, board and batten, and shingles.

Exterior walls should be consistent in material throughout a major building form or volume. Where changes in material do occur, they should occur only between major building volumes – either vertically or horizontally.

Materials should always be placed so that “heavier” materials are below visually “lighter” ones.

Use transition elements or trim at vertical changes in material. While brick end walls may occur traditionally on Federal style homes, applied stone veneer is not a typical Duxbury treatment.



Avoid using heavier material, i.e. brick or stone, above lighter materials, i.e. clapboards or shingles. Avoid using too many materials on one façade.

Building materials and architectural finishes should possess physical properties and allow for appropriate maintenance procedures that ensure a long lifespan for the selected material, and should provide a consistently favorable appearance. The specified building materials or architectural finishes should also be appropriate to the architectural style of the residence.

Materials, if not natural, should have the *appearance* of the natural product. As an example, modern polymer and composite materials (Azek and similar products) have a very close appearance to natural wood, and are a good choice for trim when considering the maintenance required as a result of the harshness of New England weather. Many other synthetic building materials have an un-natural appearance, not at all similar to wood. However, as the quality and appearance of these synthetic materials improve, their use might be considered appropriate if well executed.

1. Siding

Wood is often the most appropriate primary façade material for a number of architectural styles. Typical Duxbury homes, both antique and more contemporary, make use of various species of wood as a façade material in applications that include shingles, clapboard or horizontal siding, as well as decorative applications and trim. Although stone and plaster are not typical exterior materials in Duxbury, there are appropriate ways to use them.



Wood clapboards on historic homes are smooth sawn with small exposure. The overlap and reveal help to shed water from the exterior wall.



Traditional cedar shingles are arranged in horizontal courses with the bottom edges aligned. Shingles may be painted or left to weather naturally.



Although less common in Duxbury, traditional board and batten employs wide boards of a single or varied widths laid vertically with narrow batten strips to cover the joints.

Clapboard siding should be wood or cementitious boards with smooth finish. Faux grain finishes are not accurate representations of historic wood clapboards, which were traditionally smooth sawn.

Avoid:



Faux wood grains on synthetic products add a texture that is not found in traditional wood clapboards.

Avoid:



Jagged edges caused by alternating shingle exposures. Traditional shingle siding is aligned in horizontal courses.

Shingles or clapboards may be painted or stained. Cedar siding may also be left to weather naturally. Shingles are recommended to be machine cut with bottom edges aligned.

2. Detailing

Building material details, including special trim or molding, outdoor lanterns, inlaid tile or wall niches should be consistent with the scale of the residence, the architectural style, and if appropriate, the historical character of the town of Duxbury.

The use of large material components on small architectural elements should be avoided.

The fastening of façade components and the connections of adjacent materials should be appropriately scaled and of a proportionate strength to the materials being attached.

Avoid the use of veneers, if possible.

3. Color

The appropriate use of color can make a strong contribution to the quality and richness of a building.

The use of primary colors should be avoided. In addition to natural weathered wood, some typical home colors in Duxbury include white, gray, colonial yellow, barn red, Duxbury blue, and various shades from a neutral palette.

The selected colors should be authentic and representative of the architectural style of the building.

Traditionally, many Duxbury homes have been clad in natural wood shingles. White cedar is commonly used for the facades and red cedar for roofs.

The exterior colors used in a shoreline/seaside setting will often differ from the colors used in a wooded setting. Seaside colors are more typically cooler grays and white (with cedar shingles), while colors in a sylvan setting are warmer and darker, often with darker trim colors (red cedar with dark green or dark red trim, for example).

Changes in building colors should not occur at the corners of walls or at changes in a façade plane, where there is no change of materials.

Architectural details, such as eaves, window and door trim and the building base, are appropriate features for the use of accent colors. Accent colors should be harmonious with the principal color or colors, and part of an appropriate palette.

Generally, flat sheen paint is preferred for wall surfaces while higher sheen or glossy paint can be appropriate for trim features.

DRAFT 5.2

CHAPTER 8: FAÇADES 8

The face of a building is the countenance that a home offers to the outside world, demarcating the transition between the public and the private. In addition to being a crucial component in the delineation of an architectural style, a building's façade offers clues to the functions of the rooms behind it. This chapter offers guidelines for some important components of building façades.

A. Composition

"Composition is the ability to join the parts of a building in order to produce a harmonious whole. It means that the work of art must have a beginning, a middle, and an end."

The Golden City

The composition of all façades of a building should follow the principles of an architectural style.

The balance and placement of openings on a façade should communicate the building floor plan and the structural logic of the building.

The height of a façade and its proportional relationship to the roof are principal components of an architectural style. The façade and roof form should communicate the style of the building.

1. Arrangement

The composition and scale of openings create balance. Scale and arrangement of openings in a traditional building occur for practical reasons. Open areas were limited to maintain wall structure between and repetition allowed for economy.

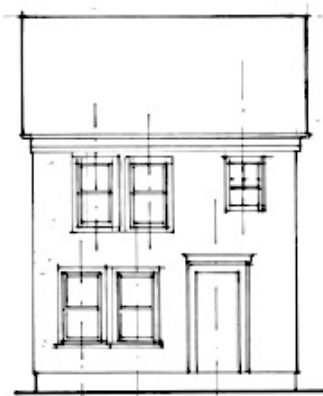
Windows and doors are generally organized in an ordered fashion dividing the primary façade into thirds, fourths, or fifths.

Windows are typically ordered to reinforce the symmetry of primary volumes and are organized to harmonize with the pattern of porch columns.

The windows on upper and lower floors are typically ordered vertically on the main façade. Door locations typically respond to the overall order of the elevation and are generally arranged relative to a window or windows above.

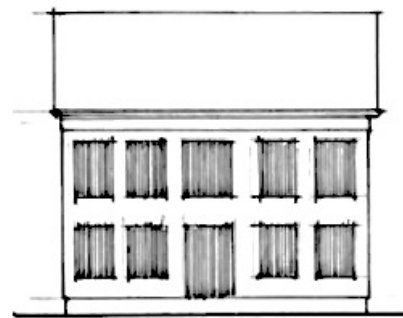
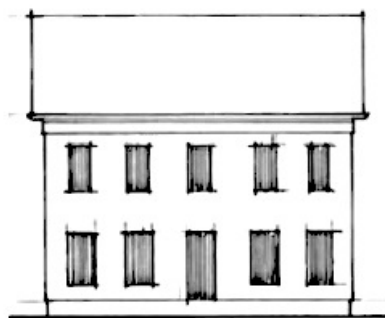


Openings are arranged in rhythmic patterns in traditional buildings.



AVOID

Windows usually stack to maintain the structural integrity of the load-bearing walls, which transfer structural loads down between the openings.



AVOID

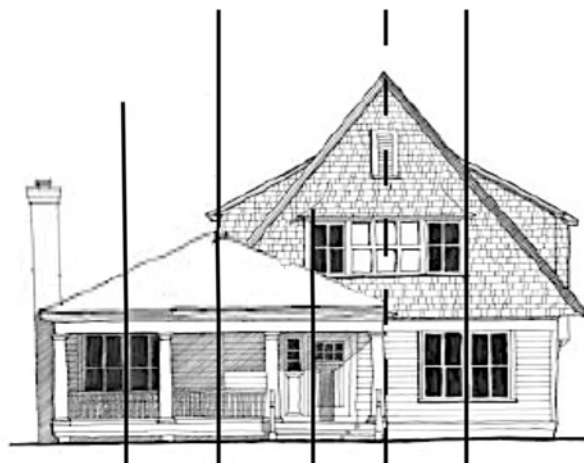
Attention should be paid to the percentage of solid to void. Enough wall should remain to suggest strength and enclosure, but not so much as to dwarf the window openings.



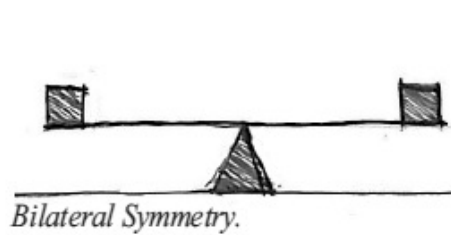
Use vertical proportions generally. Avoid horizontal windows unless they are composed of groups of square vertical windows on traditional styles.

2. Balance

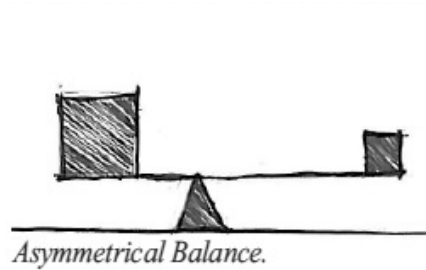
Composition of the front façade in traditional architecture was carefully arranged. Balance may be achieved by bilateral symmetry, where one side is the mirror image of the other, or by an asymmetrical composition, where larger elements are countered with smaller ones. The center of balance was typically at the front entry, which was the focal point of a home.



A composition is balanced when all its parts are designed with respect to one another and to the whole. This example shows that balance does not necessarily equate with symmetry.

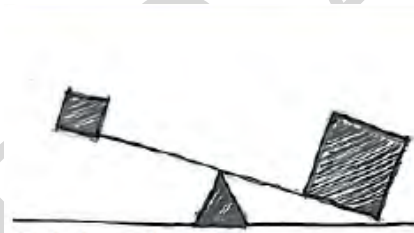


An elevation can have a bilateral symmetry about a central axis with windows and doors ordered to reinforce the symmetry of the primary volume.



An elevation may also have an asymmetrical composition, but the openings, massing elements and roof forms maintain a proper sense of balance.

Avoid:



Avoid an unbalanced composition and design that does not show care in balancing the massing and openings.

B. Columns

The handsome columns found near the entryways of many traditional Duxbury houses derive ultimately from classical Greek and Roman architecture. These classical forms were admired and adopted by English architects of the 17th and 18th centuries, and by their American counterparts as well. These architects were careful to follow well-established principles of design and detailing for these columns – principles that originated thousands of years ago, and

endured unchanged over centuries, across various cultures, and despite ever-changing stylistic preferences. Today, we should understand these well-established principles and take care to use them appropriately in our Town. Among the most important design considerations are:

1. *Relate the location and spacing of columns to the structure of the building.* After all, the basic function of a column is to support a portion of the building. The columns should be -- and should also *appear* to be -- of the appropriate size and strength to support the part of the building above them. At the same time, columns should be spaced apart evenly, and should not block doors or the views from windows.

2. *Columns should have correct proportions.* First, all of the component parts of the column (the base, shaft, and capital, as well as the entablature or frieze above the capital) should be correctly proportioned to each other and to the column as a whole. Secondly, each column and each group of columns should be correctly proportioned to the building as a whole.

3. *Columns should be appropriate to the architectural style of the building.* In Duxbury, some early houses built by affluent people sported elaborately detailed, fluted, circular columns with generous dimensions. Other smaller and simpler houses employed square piers or posts, rather than columns. Although less formal than columns, these elements often bore careful detailing, and the best of them are proportioned as correctly as their more formal circular counterpart.



Hand carved columns on an old house



Fluted columns outside the historic Winsor House Inn

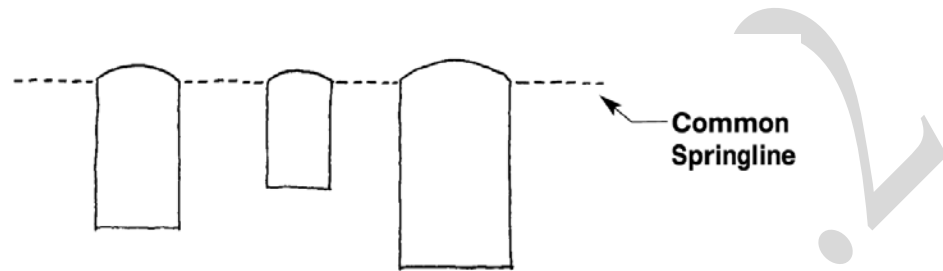


Column Detail

C. Arches

Arches are not a common feature in Duxbury architecture, but when used should follow proper and appropriate principles of design and placement.

There are a number of techniques that should be followed to ensure the proper placement of arched openings on a façade, including a common springline for the arches and identical ratios for arched openings of differing sizes.



Careful study of an architectural style will facilitate the appropriate use and arrangement of arched openings on a building's façade. The use of arches should not be overdone.

D. Porches

A porch is a transitional space on the building façade between the external and internal environments of the home. It is a semi-private space that is essentially outdoors yet offers shelter from the elements. Front porches and porticos add to residential street life. When located with small setbacks from the street, front porches enliven the street by creating a place to sit and watch passers-by.

Front porches/entry porticos are traditionally arranged to address the most public face of the house and where called for, to address more than one public face.

Porches are primarily of two forms. They are either inset into the primary mass of a building or built outside the main building as a separate volume that helps 'break down' the building mass, consistent with the building's architectural style.

Porches should be a natural or organic part of the building and should never appear to have been merely "stuck on" to the façade.

Porches should follow basic principles of an architectural style, which will determine:

- whether the porch should be an inset porch or external to primary massing,
- the horizontal percentage of façade covered,
- and the roof form over the porch.

Some examples of good porches:



A well-ordered enclosed porch addition



Interesting wrap-around porch design



Both enclosed porch and inset porch in harmony with the house design.

Avoid:



Enclosing front porches in glass, screen, or other material creates a private room that does not function as a traditional front porch, but doing so may obscure the front door and could result in awkward massing. Enclosed porches and conservatories are more appropriate in the rear or side of a home.



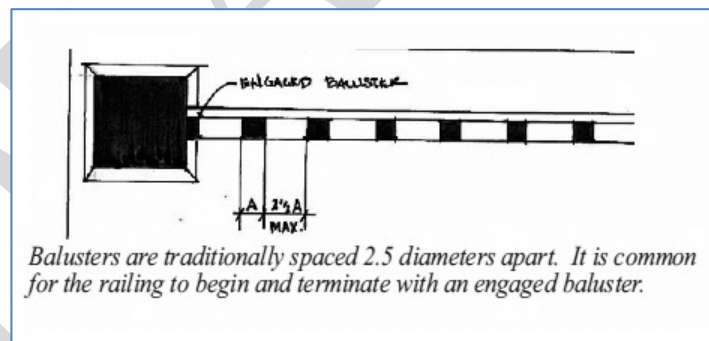
Open decks are usually not appropriate for the front of a home. Informal decks or porches may be constructed at the rear or side of a house.



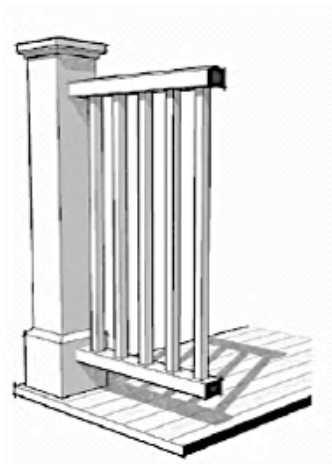
Corner Porch

E. Railings, widows' walks, and cupolas

The use of railings on porches, balconies and upper level windows or door openings should be carefully considered as a component of an architectural style. Porch railings add safety, comfort and character to a porch.

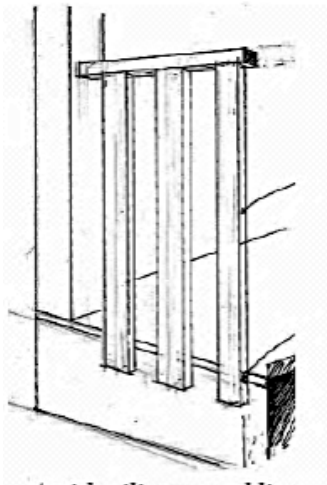


When properly applied, well-designed and properly detailed railings are an opportunity to reinforce specific characteristics of the selected architectural style. The materials used for railings should be part of a consistent palette of materials for the architectural style of the building. Porch railings and balusters should be painted wood or azek/fiberglass with square or turned balusters set between top and bottom rail.

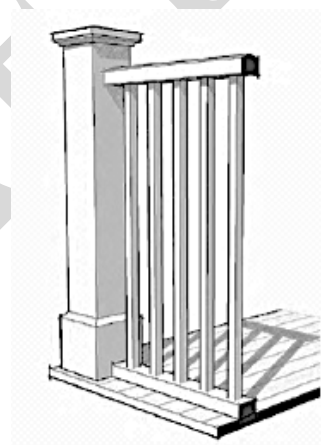


Traditional railing assemblies are constructed of balusters set between a top and a bottom rail

Avoid



Avoid railing assemblies that lack a bottom rail and are composed of framing stock nailed directly to the rim joist.



Avoid bottom rails that are set on the porch deck. The condition illustrated above will quickly rot.

Cupolas are another form of detail or adornment that embellish the roof of a building.

When designing a cupola, carefully consider its overall proportions in relation to the rest of the building so it does not appear overly tall and thin nor overly squat. The height of the cupola should be included for purposes of the overall height restriction.

Some examples of well-proportioned cupolas:





The above cupola is appropriate in size and scale for the building.

F. Decorative Elements

There are a number of elements that can be used to communicate design style. These elements should be used as appropriate to a specific style.

Pilasters are vertical components of a façade that can be structural or applied to the façade. They can help to communicate a specific design style and can break a façade into smaller components. Pilasters should be used to correspond with columns on porticos. Pilasters do not belong on many styles and should not be artificially applied.

A belt course, or horizontal band, may delineate the first floor of a building from the upper floor(s). It can be the transition line between differing façade materials. The presence of a belt course, as well as its detailing, is specific to certain architectural styles, and can be used to visually “break up” the appearance of a large, solid expanse on one or more exterior sides of a home.



Quoins accentuate the corners of buildings or the protruding elements of buildings and are specific to a number of architectural styles, though not commonly in use today.



Decorative peak window (and fascia boards).

Shutters are an important element of several New England building styles.

As with other design elements, shutters should be chosen to be appropriate for the particular dwelling in terms of scale, color, material, shape, and design details, such as cutouts and trim.

(For more information on shutters, see chapter 10, windows.)

DRAFT 5.2

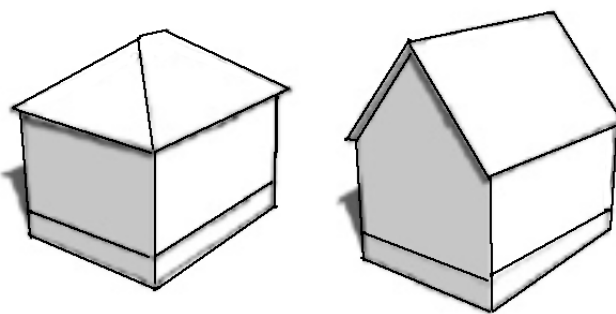
CHAPTER 9: ROOFS 9

Roofs are a significant structural component of a building, tying the walls together and providing shelter from the elements. The principal features of roofs are their shape, their pitch, and their materials, all of which are determinants in a building's style or subset of a style. The eave details are also important considerations in the design of roofs.

A. Shape/Roof Forms

The basic form or shape of the roof and its proportional relationship to the building façades are principal components of an architectural style and greatly impact the overall appearance of a building

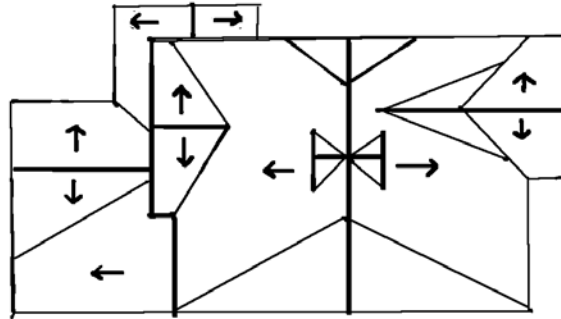
Roofs on most houses in Duxbury have only a few principal shapes – simple gables, hipped roofs, gambrels, saltbox, and some mansard roofs.



Many roofs in Duxbury are typically simple pitched roofs designed to efficiently protect the building and shed water. The economy of the simple forms made roofs easy to construct and maintain.

- While traditional roof forms can span a great range of pitches and shapes, it is typical for a single dominant roof form to cover the primary volume of the home.
- It is most economical to roof simple building masses with simple roofs.
- Roofs can help express the hierarchy of building volumes. Generally, a single dominant roof form is clearly legible, with the roofs of secondary volumes deferring in scale to the main body of the building.
- Depending upon the prevailing style, pitches may vary from 4:12 to 12:12. It is generally inappropriate for a single structure to incorporate a wide range of roof forms and pitches in a traditional setting.

Avoid:



Avoid multiple changes in slope that are expensive to build and create a visually frenetic composition.

Avoid:



This building has been overly complicated by many roof forms. Also, the additional ridges, valleys, and eaves may present a maintenance liability.

B. Pitch

Historically, New England structures had steeply pitched roofs, in order to shed heavy snow. In Duxbury, too, most homes and other structures have roofs that are pitched at about 45 degrees. More modern styles, such as the 1950's Ranch Style, have roofs with shallower pitches.

C. Material

The specified roofing material should be appropriate for the architectural style of the building

and of a quality that is typical of Duxbury buildings. Roofing should be appropriate and complementary to the architectural style of the residence. Muted or flat rather than shiny surfaces should be used.

Traditional weathered wood shingle or shake roofs are characteristic of many historic New England architectural styles and are commonly used in Duxbury.

Slate roofs are compatible with many architectural styles and, with proper maintenance, are capable of a long lifespan. Both subtle multi-colored and single colored palettes are appropriate for slate roofs.

When specifying composition or asphalt shingles, the product selected should be thick enough and of an appropriate color to create shadow lines when installed to avoid the appearance of a flat field on top of the house.

Non-reflective metal roofing, such as standing seam, copper and even certain types of metal shake and slate may be acceptable with a compatible architectural style. Pre-finished, factory painted metal roofs in muted and neutral/earth tones are appropriate.

Roofing materials used on an addition should match the material on the existing portion of the house as closely as possible. Comprehensive re-roofing of the entire residence is encouraged unless an addition has limited visibility.

D. Dormers

Traditionally, dormer windows were used to allow light into an attic or to create useful space at less cost than adding a complete story to a house. Moreover, a well-designed dormer can break up the mass of a large roof, improving the overall appearance. Dormers are integral to the building composition and must be designed using principles that apply to the whole building.

However, dormers that are poorly proportioned, incorrectly detailed or otherwise badly designed can dramatically change the appearance of home for the worse. Dormers are among the most conspicuous elements of any house. An unattractive dormer will be visible for all to see and, even worse, very expensive to correct.

For those reasons, we recommend that these guidelines be kept in mind:

- Dormers should be modest in scale. Traditionally, the attic story was never allowed to visually overwhelm the space below it.
- Dormer windows should relate to the size of the windows below them, and should not cover the entire roof. Scale the dormer windows down befitting their lesser role and accounting for the added mass of the dormer. Together the dormer window and roof should have an equal “visual height” as the main windows.

- Dormers should be spaced comfortably on the roof in relation to the pattern of windows on the body of the house.
- Scale the dormer eave and overhand detail up or down as required to approximate the proportion of the main eave in relation to the overall roof.
- Dormer window details and trim are important; keep them simple and consistent.

Shed dormers are found in many Duxbury houses (particularly Cape Cod, Shingle, and Craftsman style structures). They optimize the amount of light and space added to the attic story, but if shed dormers are not properly designed they can overwhelm the rest of the house in scale, making it appear oddly top-heavy.



Visually balanced shed dormer

The placement, scale, proportion and massing of shed dormers are critical. Shed dormers should not extend beyond the face of the wall below, nor should they be wider than the windows below them. The roof of the shed dormer should slope at least 4:12. Walls of shed dormers should be set back from the façade as well as from the gable end walls.

Successful dormer placement:



Dormers are arranged to create a balanced composition.



Dormer placement is based on the window pattern below, but does not repeat it. The distance between eaves is at least twice the width of the window. Note that on the second diagram, a smaller window is required for the dormer to look proportionate to the main windows.

Avoid:



Avoid spacing dormers too closely with uncomfortably tight clearance at the eaves, as in the first diagram. Avoid using the same size window in the dormer as in the body of the house. The visual weight of the window and its dormer will create a top-heavy feel, as in the diagram on the right.

E. Chimneys

Many architectural styles place an emphasis on the chimney, either through scale, height, ornamentation, or careful articulation of the top. Where it appropriately fits with the rules of an architectural style, the chimney should be emphasized as a positive architectural component of the house.

F. Eaves

Eaves are a critical component of the junction between the wall plane and the roof plane. Detailing of the eave should be consistent with the architectural style of the building. Some of the building elements to consider in the detailing of the eave of a house include:

- Overhang dimension
- Correct scale of overhang dimension to building
- Exposed rafter
- Fascia treatment
- Rain gutter placement and shape
- Correct scale of decorative elements

Successful eave treatment:



Classical eave return



Poor Man's Returns: This is a simpler, but attractive detail (referred to by architects and builders as “Poor Man’s Return”) that wraps the horizontal eave crown around the return and lets the raking crown simply resolve into the return roof.



An eave with exposed rafter tails or sloping soffit needs no return.

Eave Returns – Examples to Avoid:

Some contemporary versions of eave returns do not look authentic. Here are some examples that are not preferred:



Avoid creating a triangular box on the gable end: This is called the “pork chop”.



Avoid steep return caps. Ideally, the cap should not be visible from the ground. Instead of matching the main roof slope, a maximum slope of 3/12 is recommended.

Avoid:



Lack of Balance: The soffit depth on both sides of the eave return should be balanced. Do not cut off the return abruptly. If the soffit is deep, the return can be reduced by up to 50 %.

F. Gambrels

The gambrel roof is another style that has appeared with increasing frequency in Duxbury in recent years. The proportions — if not very carefully considered — often look top-heavy and unbalanced. It is often used to gain more head room in an upper floor to achieve additional living space. Even Wikipedia cites the North American origins of the gambrel as being used for "practical reasons such as a way to allow wider buildings, the use of shorter rafters, or to avoid taxes."

DRAFT 5.2

CHAPTER 10: WINDOWS AND DOORS 10

Doors and windows are important building features. They are closely related to the delineation of an architectural style and are dominant features on a building's façade.

A. Types of Fenestration

The size, shape, proportion, and placement of window openings should be in keeping with the architectural style of the building and should be consistent on all facades of the house. Although a variety of window types and shapes may be used, there should be harmony within that variety.

Windows and window panes should be generally vertical in proportion. In addition, each window unit within the assembly of a bank of windows should be vertically proportioned.



Each window in this horizontal band is individually proportioned vertically as a unit and in its panes.

Avoid:



Windows or individual panes proportioned horizontally are not found in traditional architecture and should be avoided when using traditional styles.

Windows in an addition or renovation should be consistent stylistically with the style of the rest of the house.

B. Material

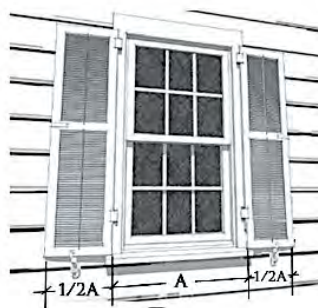
Windows should be in keeping with the specific architectural style of the building and constructed of high-quality materials that provide a long lifespan. Window sashes and frames should be made of wood (painted), fiberglass, painted aluminum, or an appropriate synthetic material. Windows should be clear glazed. Exceptions include decorative stained glass, where appropriate. Low-e and energy efficient coatings are encouraged.

C. Trim and Sill

Trim molding, lintels, and window sills should be used to express a level of detail on the façade, consistent with the façade design.

D. Shutters

Traditional Duxbury houses had shutters for reasons of necessity -- security and protection from New England weather. Even though modern shutters are not needed for these purposes, they should *look* as if they are. Even modern decorative shutters should look as if they are working shutters. Hinge and closure hardware is recommended to add authenticity to the shutters. Old wooden shutters should be carefully preserved and repaired if necessary. (Plastic shutters do not look the same.)



Shutters should be sized so that they would cover your windows correctly, if they were closed.

The shutter should be shaped to fit the shape of the window being protected, and may be of either paneled or louvered type. They should be installed adjacent to the window, (not several inches away from it), and all shutter hardware should add to the appearance of authenticity. Shutters should not be made of any material whose appearance detracts from their authenticity



Shutters may be fixed so long as they appear operable. An operable shutter can be closed when the room is not in use.

Avoid:



The above shutters would not cover the windows if closed.



Inappropriately sized or poorly located shutters would not cover the window if they could be closed. Shutters screwed to the wall do not appear authentic.

E. Doors and Entries

Entry doors make a first impression to a guest entering a home. The front door is traditionally the focal point of the front façade so that it is obvious and welcoming. Since the entryway is approached, and perhaps even touched, the most detail and quality materials are incorporated for close inspection.

Entry features should be scaled to the façade and appropriate in the context of Duxbury's architecture. The size and material of the entry door, sidelights, columns, pediments and similar features, as well as the quality of door hardware, should be appropriate to the scale and architectural style of the house. Porches, porticos and canopies are recommended to provide shelter and announce entry.

Doors should be constructed of vertical stiles and horizontal rails with solid glazed panels.

Successful front entries in Duxbury welcome guests and visitors.



F. Garage Doors

Garages are the modern version of a traditional barn. They can take design cues from traditional barn and carriage house doors to integrate with the historic town character.

- Wherever possible, visually break a double bay garage door into two separate doors.
- Transom lites in the topmost bay of the door can be used effectively to increase the “verticality” of the composition.
- A small canopy or trellis can be used to create a shadow line over the doors and improve the scale of the elevation.
- Overhead doors should have hardware that indicates a traditional swing or sliding function.
- Garages should always be designed in harmony with the architectural style of the primary building or buildings.



Garage doors deserve design attention. Aim for vertical proportions among all components. Vertical proportions can be achieved by using two separate doors and including transom windows along the top of the door.

Avoid:



Avoid double-wide garage doors that do not have traditional proportions.

DRAFT 5.2

CHAPTER 11: ACCESSORIES 11

Some contemporary appliances and technical equipment, such as solar panels, large antennae and other exterior technological devices are not generally a part of traditional architectural styles. Installation of these devices impacts the site as well as the neighboring homes and can detract from Duxbury's town character. Therefore, the placement of these accessory items should be carefully considered.

A. Antennae

Ideally, satellite antennae or dishes should be installed in such a way as to not be visible from streets or neighboring properties. If the installation of the device is on the front façade, appropriate screening should be installed.

B. Solar Panels

Although solar collectors have important environmental benefits, they may also present aesthetic challenges and cause unintended adverse impacts on neighboring properties. For example, glare reflecting off a solar panel may cause annoyance or injury to neighbors.

Consequently, the Board offers the following guidelines to residents considering the installation of solar collectors and similar devices.

If possible, solar collectors should not be installed on a roof surface that faces the street.

A solar energy system should not extend beyond the ridge or other edges of the roof.

Any tree trimming and/or removal that is performed to make the system more efficient should be kept to a minimum.

Exposed pipes and other material for the system should be of a color that is consistent with the color of the adjacent roof or wall surface.

Ground mounted solar arrays present special safety and aesthetic concerns.

Before finalizing plans, applicants should consult with neighbors regarding the planned location, size and appearance of the solar panels, especially if the panels will be visible.

DRAFT 5.2

CHAPTER 12: LANDSCAPE DESIGN 12

Well-designed landscaped areas around buildings enhance the property, blend into the neighborhood, and mitigate the impacts of new construction. Landscape improvements can heighten the aesthetic impacts of a well-designed residence, as well as the entire neighborhood, and can work in concert with the design style chosen for the building as well as the entire neighborhood.

A. Relationship to the Building

Landscape elements should enhance the relationship between the building and its site. Landscaping should be designed to define private outdoor space connected to the residence. The landscaping should help define the boundaries between the private outdoor space and the more public, or street-facing, outdoor space.

Nothing is more appealing than a living hedge of green. Privet affords privacy yet allows light and a glimpse of what lies beyond. There are also pierced and slatted fences which might have judiciously placed shrubs and trees planted either in front or behind. In most places it is important to strive for a look that is not solid or fortress-like. Those are fine in the rear or side of the home as long as they slope down as they descend from the front plane of a house to the street.

Trees and lower planting materials should be utilized to help “ground” the building and mitigate its mass. Always consider the ultimate height and spread of a plant when choosing its location.

A landscape plan should help implement site planning goals, such as maximizing views or creating visual buffer zones between the property and neighboring parcels.

Buffer plantings may be used to screen parking areas, utility equipment, and the like. Such plantings should not disturb views from nearby properties.

B. Water Conservation

The Town historically has been concerned with water conservation. Duxbury relies on an aquifer for almost all of its water supply. Duxbury’s Bylaws provide limitations on the extent to which a property may be covered by impervious materials. Trees and shrubs should be selected that are suitable for this climatic zone, and the use of native species is highly encouraged. Drought tolerant plants should be employed as much as possible, especially as our changing climate makes water conservation more important. Similarly, many plant species seem to be naturally resistant to deer, destructive insects, and various plant diseases; use them when possible.

C. Fencing and Walls

Yards are defined and made private by the use of fences and walls.

Designs of fences and walls along streets should be compatible with the neighborhood and the architectural style of the building.

Natural materials such as stone and wood are encouraged – especially in the Town's Old Shipbuilders' Historic District and contiguous neighborhoods.

For a look at fencing which simply marks a boundary, drive down Washington Street and see the picket fences which are decorative while allowing a view of the house or water. These are not for privacy but this open feeling is a key part of the Duxbury look.

Ideally, highly reflective plastic surfaces should be avoided, especially in front of a house. If for economic reasons, reflective materials must be used, they should be confined to areas not visible from the street. Chain link fences should not be employed, unless coated with a green or black vinyl coating, and should not be visible from the street.



Avoid shiny fence materials that reflect light.



PVC, plastic and other synthetic fences have been shown to lower property values in historic neighborhoods. Chain-link fencing should be confined to the least visible locations. Front yard fences over four feet tall are typically not found in a village setting.

Fences should be located in a way that does not block desirable views from the street or neighboring sites.



The above fence tapers gracefully toward the street and successfully preserves views.

Fences placed in front of a home, near the street, should be kept low (about waist high), in order to enhance the streetscape and maintain a neighborhood ‘feel’, and fencing should taper toward the street.

For similar reasons, tall privacy fences located along the side boundaries of a property should end at or near the plane of the front of the house. If it is necessary to extend the fence beyond this point, then it should be low enough for average-sized people to see and talk over. Landscaping should be installed along fences to soften the appearance of the fence material and provide a layering of vegetation in front of the fence.



The above wall is one of Duxbury’s most beautiful. It exemplifies the classic New England stone wall – weathered stones from local sources, thoughtfully fitted together, larger stones on the bottom, smaller ones above, and laid “two-over one, one-over-two.” This wall contains no mortar or cement, but will endure for generations.

Avoid:



Above are pieces of broken granite applied like bathroom tile to the face of a concrete wall. The mortar joints are conspicuous. The relatively flat pieces of rock are arranged haphazardly and, to the observer, impart no sense of stability or permanence. Moreover, as moisture finds its way through the joints between mortar and rock, freezing and thawing will likely dislodge some of these stones.

D. Lighting

Exterior lighting should be designed to subtly highlight key features of the landscape design, such as walkways or paths, and augment architectural features of the residence. Exterior lighting should not be directed toward the street, the sky, neighboring homes, or open space. Lighting may be appropriate to accent structures of historical or architectural interest, but excessive flood lighting should be avoided.

DRAFT 5.2

CHAPTER 13: IN CONCLUSION 13

Some Final Thoughts About Residential Design

Design matters.

There is no more important part of your project than creating the design – the best design – the one unique plan that, of all the millions of conceivable alternatives, best suits your needs and your tastes.

Design (according to dictionaries) is the act of planning and creating something that meets appropriate functional and aesthetic criteria. This means that, before you begin your residential project, you must have a clear idea of exactly what you need, and how it should look. After all, if you never take the time to do this, then you will probably never succeed in creating the best design for your project.

A good design will add value to your home, make you and your family happier, enrich our community, and help to sustain our environment. A design that incorporates the values and principles found in these guidelines will draw the “right” kind of attention from all who visit you or see your home. Many people seem to know, through some innate sense, when a building “just looks right.” We sometimes have the same feeling when we enter a room, or even an outdoor space. When this happens it’s usually because someone thoughtfully and intentionally designed the building in keeping with the ideas and principles we have included in this guide.

And just as people know when something “looks right,” it’s just as easy to see when something doesn’t “look right,” perhaps because it is too tall, or too wide for its site, or its front façade isn’t balanced, or it sports an addition that has nothing in common with the original house. And in most Duxbury neighborhoods, a house that seems to want to draw attention to itself because of its mass, or its closeness to the street or its neighbors will always seem out of place.

Of course, this doesn't mean that there is no place for your own tastes and preferences in the design process. There is no one single "best" design in Duxbury, or anywhere else. Obviously, it's your home, and it should reflect your own personal touch, not to mention the unique way that you and your family actually use your home as you come and go, eat and sleep, socialize and entertain friends, and live your lives. A well-designed house will work better for you, please your neighbors, enhance the community, and create lasting value for years to come.

*Finally, we have learned that one of the most useful secrets of residential design is also one of the simplest: **Know When to Stop!***

The End.

CHAPTER 14: APPENDIX - REFERENCES 14

Special thanks to the towns of Shannock Village, Rhode Island, and Hillsborough, California for allowing us use of their design manuals for reference.

Shannock, Historic Mill Village Design Guidelines
Shannock Village, Rhode Island, 2010

Residential Guidelines, Town of Hillsborough
Hillsborough California, 2006

Hand Painted Map of Duxbury, courtesy of David Paccia

Duxbury Past and Present
Duxbury Rural and Historical Society, 2009

Town of Duxbury Open Space Plan, 2002, III A

Field Guide to New England Barns and Farm Buildings
Thomas Durant Visser (University Press of New England, 1997)

American Barns
Stanley Schuler (Schiffer Publishing, Ltd., 1984)

American homes: An Illustrated Encyclopedia of Domestic American Architecture
Lester Walker (The Overlook Press, 1996)

Patterns of Home: The Ten Essentials of Enduring Design
Max Jacobsen, Murray Silverstein, and Barbara Winslow (The Taunton Press, 2002)

Big House, Little House, Back House, Barn: The Connected Farm Buildings of New England
Thomas C. Hubka (University Press of New England, 1984)

Get Your House Right: Architectural Elements To Use & Avoid
Marianne Cusato and Ben Pentreath, (Sterling Publishing, 2007)

The Cape Cod House: America's Most Popular Home

Stanley Schuler (Schiffer Publishing, Ltd., 1982)

Old New England Homes

Stanley Schuler (Schiffer Publishing, Ltd., 1984, rev. 2000)

Renovating Old Houses: Bring New Life to Vintage Homes

George Nash (The Taunton Press, 2003)

Saltbox and Cape Cod Houses

Stanley Schuler (Schiffer Publishing, Ltd., 1988, rev. 2000)

A Walk Down Main Street

Nantucket Preservation Trust, (2006)

Restoring Your Historic Nantucket House: A Resource Guide

Nantucket Preservation Trust, (2010)

The Not So Big House

Sarah Susanka, (The Taunton Press, Rev. 2008)

Creating The Not So Big House

Sarah Susanka (The Taunton Press, 2001)

A Building History of Northern New England

James L. Garvin (University Press of New England, 2001)

A Field Guide to American Houses

Virginia & Lee McAlester, (Alfred A. Knopf, 2003, rev. 2013)

Caring For Your Old House: A Guide For Owners And Residents

Judith L. Kitchen National Trust for Historic Preservation, (Preservation Press, John Wiley & Sons, Inc., 1991)

Paint in America: The Colors of Historic Buildings

Roger W. Moss, Ed., (John Wiley & Sons, Inc., 1994)

Lighting For Historic Buildings

Roger W. Moss, (Preservation Press, John Wiley & Sons, Inc., 1988)

Repairing Old And Historic Windows

New York Landmarks Conservancy, (John Wiley & Sons, Inc., 1992)

Fabrics & Wallpapers For Historic Buildings

Jane C. Nylander and Richard C. Nylander, (John Wiley & Sons, 2005)

America's Forgotten Architecture

National Trust for Historic Preservation, Tony P. Wrenn and Elizabeth D. Molloy (Pantheon Books, New York, 1976)

Shingle Styles: Innovation and Tradition in American Architecture, 1874 to 1982

Leland Roth and Bret Morgan (Norfleet Press, Harry N. Abrams, Inc. Publishers, 1999)

The Shingle Style and The Stick Style: Architectural Theory and Design from Downing to the Origins of Wright

Vincent J. Scully (Yale University Press, 1955; rev. 1971)

Good House Parts: Creating A Great Home Piece By Piece

Dennis Wedlick (The Taunton Press, 2003)

The Face of Home: A New Way To Look At The Outside Of Your House

Jeremiah Eck (The Taunton Press, 2006)

The Distinctive Home: A Vision Of Timeless Design

Jeremiah Eck (The Taunton Press, 2003)

Celebrating The American Home: 50 Great Houses from 50 American Architects

Joanne Kellar Booknight (The Taunton Press, 2005)

The Farmhouse: New Inspiration For The Classic American Home

Jean Rehkamp Larson (The Taunton Press, 2004)

Exploring Stone Walls: A Field Guide To New England Stone Walls

Robert M. Thorson (Walker Publishing Company, 2005)

The New Traditional Garden: A Practical Guide To Creating And Restoring Authentic American Gardens for Homes Of All Ages

Michael Weishan (Ballantine Publishing Group, Random House, 1999)

Eave Returns: Interpreting GYHR Details:

<http://www.thisiscarpentry.com/2013/12/13/eave-returns-interpreting-gyhr-details>

DRAFT 5.2

CHAPTER 15: PHOTO CREDITS 15

Cover photo: Susan Bourget
p. 3: hand-painted map: David Paccia
p. 13 top & bottom: Heidi Laird
p. 14 bottom: Nancy Johnson
p. 15 top & bottom: Nancy Johnson
p. 16 top & bottom: Susan Bourget
p. 17 top: Susan Bourget
p. 17 bottom: Nancy Johnson
p. 18 top: Stephen Williams
p. 18 bottom: Nancy Johnson
p. 22 top: Stephen Williams
P. 22 bottom: Heidi Laird
P. 23 top & bottom: Heidi Laird
p. 24 top: Heidi Laird
p. 24 bottom: Stephen Williams
p. 25 top & bottom: Stephen Williams
p. 26 top & bottom: Heidi Laird
p. 27 top & bottom: Stephen Williams
p. 28 top: Nancy Johnson
p. 28 bottom: Susan Bourget
p. 29 top & bottom: Susan Bourget
p. 30: Susan Bourget
p. 31: Stephen Williams
p. 32 top: Stephen Williams
p. 33: Susan Bourget
p. 35: Heidi Laird
p. 36 bottom: Sarah McCormick
p. 38: Heidi Laird
p. 40 (2): Stephen Williams
p. 41 top: Susan Bourget
p. 41 bottom: Stephen Williams
p. 42 bottom: Stephen Williams
p. 59: Heidi Laird
p. 60 top & bottom: Heidi Laird
p. 62 top: Stephen Williams
p. 62 bottom: Heidi Laird
p. 63 top: Heidi Laird
P. 64: Heidi Laird
p. 66 top: Heidi Laird
p. 66 bottom: Susan Bourget
p. 67: Stephen Williams
p. 68 top: Stephen Williams

p. 68 bottom: Heidi Laird
p. 85 all: Heidi Laird
p. 86: Stephen Williams
p. 92: Stephen Williams
p. 93 bottom: Heidi Laird
p. 94: Stephen Williams
p. 95: Stephen Williams