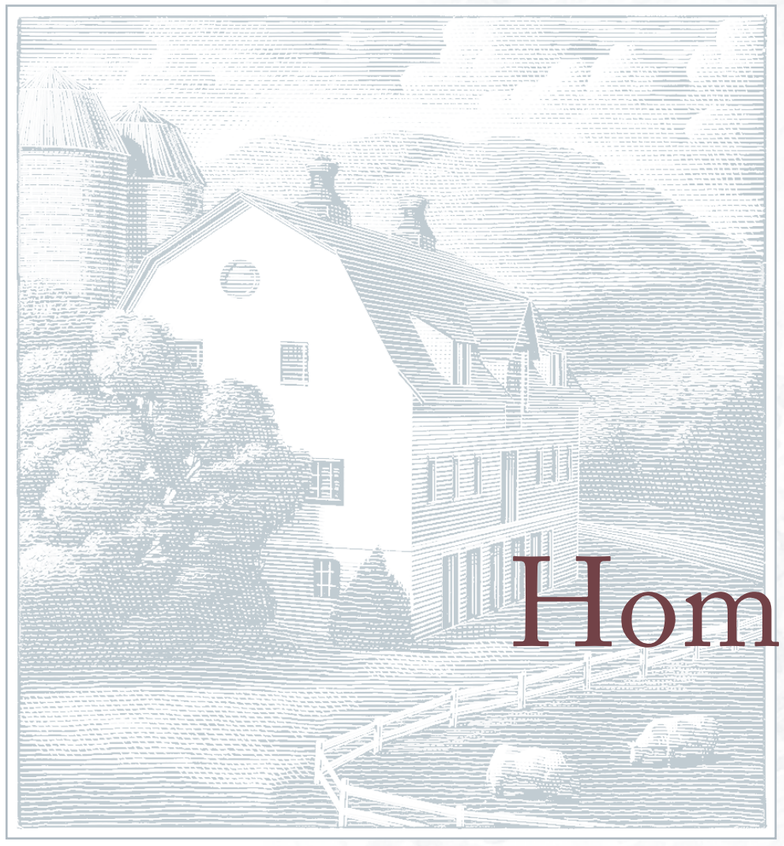
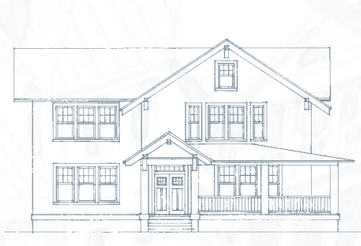


Design Guidelines for a Residential Community

Homestead Preserve Pattern Book



WARM SPRINGS INVESTMENT COMPANY, LLC

NOVEMBER 2004

HOMESTEAD PRESERVE

Hot Springs and Warm Springs, Virginia

Design Guidelines for a Residential Community

Prepared by

URBAN DESIGN ASSOCIATES

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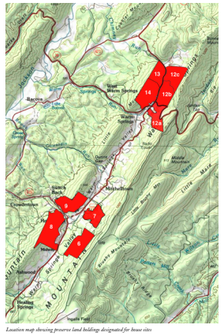
HOMESTEAD PRESERVE PATTERN BOOK



Location map showing preserve land holdings designated for house sites

These sketches illustrate the character of different settings and the diversity of architecture intended for houses within the Preserve.

Preserve sites include beautiful woodland locations accessd by rural roads and private drives.

The barns at Garth Newel, the performing arts center in Warm Springs, frame distinct views towards Dunnit Gap.

Overview

HOMESTEAD PRESERVE represents more than 11,500 acres of pristine mountain and valley landscape between Hot Springs and Warm Springs in Bath County, Virginia. This remarkable landscape is protected and preserved through ownership and management by The Nature Conservancy of 9,250 acres, and through a 935-acre conservation easement donated by Warm Springs Investment Company, LLC to Virginia Outdoor Foundation. Over the next several years, a select group of individuals and families will settle the Homestead Preserve in a continuation of traditional patterns that respects the inherited landscape, cultural legacy and built environment.

The Homestead Preserve effort has identified a portfolio of carefully selected sites which can be settled to complete the ownership and ongoing management of the Preserve. These sites lie within seven primary land parcels stretching eight to nine miles along the valley nestled between Warm Springs Mountain and Little Mountain.

Homestead Preserve

Preservation and Selective Clearing Zones

Potential Development Zone and Driveway Threshold

Building and Grading Envelope

Final Site Development Plan

The following conventions identify site specific development restrictions. (1) A **Preservation Zone** specifies land to be preserved and protected within each site. This zone ensures the safeguarding of the most sensitive areas, including steep slopes, mature tree canopy and drainage patterns. Preservation Zones are configured to buffer views between houses in woodland and meadow lots and reinforce association of community on hamlet sites. No clearing, disturbance or intervention may take place within these areas with the exception of locating the driveway and routing utilities.

The **Selective Clearing Zone** encompasses all land not occupied by the encircling Preservation Zone. This zone establishes a second tier of preservation for the lot at the same time making provisions for building and amenities.

In general all vegetation and topography in this zone should be preserved with the exception of the Building & Grading Envelope and the establishment of views and utility routes. Selective clearing of approved areas within this zone may facilitate staging and storage during construction operations. Additional clearing within this zone is limited to the removal of dead or unhealthy woody material, or vegetation less than 5 inches in caliper. See page B-13 of this *Homestead Preserve Pattern Book* for a detailed description of approved clearing types.

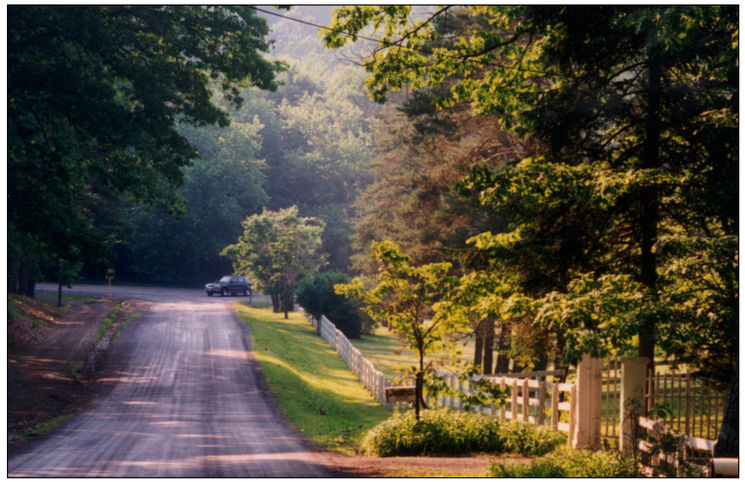
(2) A **Potential Development Zone (PDZ)** has been identified for each site. The PDZ defines the absolute boundary for any potential disturbance on the site, other than selective clearing. The intent of the PDZ is to assure that the most sensitive areas of the site are preserved while allowing flexibility in determining the location of the house.

A 30 foot linear **Driveway Threshold** has been located along the property line adjacent to the collector road. The Driveway threshold identifies the most appropriate location for the placement of the driveway's connection to the road. The driveway must meet the road at a location within this threshold but may advance toward the Building & Grading Envelope in an alignment as desired by the property owner.

(3) For each site, a **Building and Grading Envelope (BGE)** has been established. This area defines the preferred limits of disturbance affected by the placement of the house. All grading attributed to siting the house should be confined within the BGE. All lawn and garden spaces should also be confined to this zone. The Building and Grading Envelope may be located anywhere within the Potential Development Zone and may be disaggregated into two or more separate envelopes. It is assigned as a gross square footage for each site and its size is determined by the unique environmental conditions of the specific site. BGE sizes for specific sites are found in the *Homestead Preserve Lot Portfolio.*

Given the steep terrain of many sites in the Preserve, it is advantageous to orient the massing of the house and grounds parallel to the contours of the slope. Building and Grading Envelopes that exceed eighty-five linear feet in depth may require numerous stacked retaining walls on the uphill or downhill side of the house.

Site Planning



THE HOMESTEAD PRESERVE PATTERN BOOK is designed as a unique resource for owners, architects, landscape architects and builders. The pattern book is intended to give everyone a sense of the elements important to the design of sites and houses in Homestead Preserve. To do this, the book is organized into four primary sections. *The Introduction* provides an overview of the context – the Allegheny Highlands, Bath County, The Homestead and the inherited character to which new houses being built in the Preserve should respond. This Introduction also provides a brief description of the overall plan for the Preserve. The second section, *Rural Settlement Patterns,* describes the primary components of houses designed for the preserve, their placement on house sites as well as site design criteria for the three types within Homestead Preserve: Woodland Preserve, Meadow Preserve and Hamlet sites. Settlement patterns for the key addresses within the Hot Springs and Warm Springs segments of the site are also presented. The *Architectural Patterns* section defines the primary architectural styles that will guide the exterior design of houses and the *Landscape Patterns section* will illustrates appropriate planting and landscape elements related to specific site types.

Early twentieth century Classical house

History & Character

THE HIGHLANDS CLASSICAL HOUSE is based on Georgian, Federal, and Classical Revival houses from the late 18th through mid 19th centuries. The western Virginia region displays significant examples of houses from this period. Few of these houses were designed by architects but rather were commonly derived from illustrated volumes of the work of English architects such as Inigo Jones, James Gibbs and the Adam brothers. Many houses from this period were constructed using Pattern Books such as Asher Benjamin's *American Builder's Companion* from 1806. These houses are typically developed as simple, additive massing types with a dominant center pavilion or Main Body, and additive side wings and pavilions. Palladian composition became a principle organizing and proportioning reference for many houses from this period. As such, many of the houses found in the Allegheny Highland region are vernacular interpretations with simple detailing and massing as well as eclectic materials used in combinations by the date of construction for each wing. The main house may be brick, the wing out of stone, and the telescoping outer wing of wood clapboard. More rural roof treatment such as standing seam roofing enhance the rural quality of the architecture.

Highlands Classical houses will be designed using these compositional elements and massing principles. On steeply sloping sites found within the Homestead Preserve, these houses will use raised terraces or terraces cut into the slope to create formal entry relationships to the road.

Essential Elements of the Highlands Classical

- Simple volumes with one-story side wings and porches added to make more complex shapes
- Symmetrical composition of doors and windows
- Simplified versions of Classical details and columns – Tuscan, Doric, and Ionic orders – commonly used in the porch element or door surround
- Multi-pane windows that are wide in proportion usually with 6-over-6 or 9-over-9 pane patterns

Highlands Classical

Land adjacent to a spring house

Meadow in the valley area

General Principles

THE VEGETATION OF HOMESTEAD PRESERVE is as diverse as the vegetation of the Allegheny area of Virginia. The dominant forest type of the Warm Springs Valley is deciduous hardwood – oaks, hickories and maples – with pockets of hemlock. Oaks and hickories favor comparatively dry, well-drained habitats. These trees appear among pines on the Piedmont uplands and coastal plains from Connecticut to Texas.

Homestead Preserve contains several different forest ecosystems: valley, upland forest and ridge ecosystems. Within these natural communities, different climactic zones, plants, and animal species exist. Respecting these ecosystems will be vital to successfully preserving, enhancing and replacing the vegetation that currently exists within the site.

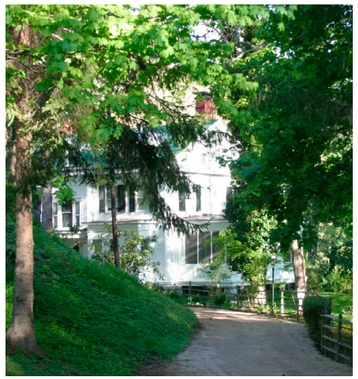
Cross section of vegetation thriving on Homestead Preserve

Illustration from AJ Downing

View of the Allegheny Mountains just south of Healing Springs

The Landscape of Virginia Highlands

Purpose of the Pattern Book



Design Elements for Woodland, Meadow or Hamlet sites respond to the appropriate qualities of the region. Terracing or stepping sites adjacent to the house will be important to the character of the house and the site.

Architectural design will follow one of four traditional styles identified in the Architectural Patterns *section: Highland Classical, Highlands Farmhouse, English Romantic or Highland Arts & Crafts. Houses should be linear in form and should respond to the site location – either a woodland setting or a meadow exposure.*

Key Design Principles

THE GUIDELINES AND illustrative examples presented in this pattern book are intended to provide the foundation for ensuring the character and quality of buildings and landscapes within Homestead Preserve. Each new investment in the Preserve is seen as an enhancement to the inherited qualities of the regional character. Traditional architectural vocabularies that communicate the culture and history of Bath County, as well as trees, plants and flowers that were cultivated and introduced to the settlements; rural lanes and grazing pastures are all patterns that reinforce the sense of this place which is unlike any other.

The patterns and elements described here are key to building and designing new houses and sites in ways that are consistent with the traditions we find here. Houses are designed in response to the site and each site is distinct and different. We have found the following principles helpful in considering design options and approaches.

Site Design

In the mountains, yards and gardens can be treated as stepped terraces to create usable area around the house.

Five primary determinants for siting a house include views, sun exposure slope conditions, vegetation and access.

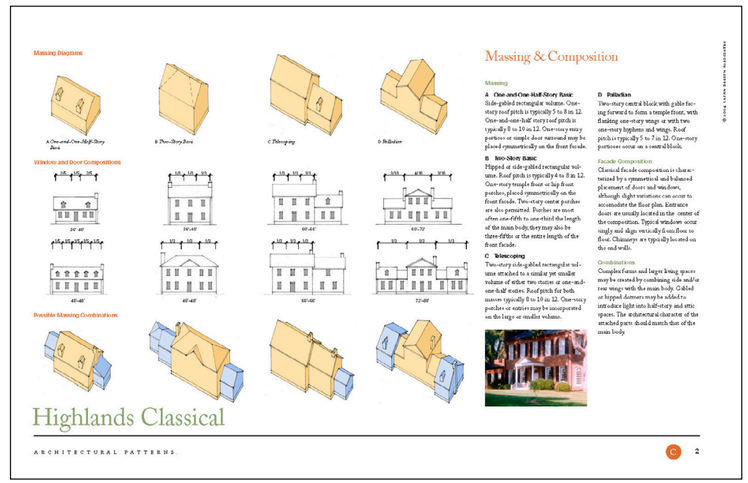
Landscaping should respond to the site type – woodland environments and meadow environments. Meadows follow the traditional farm patterns while woodland sites have historically used native and traditional plants that thrive in the understory habitats.

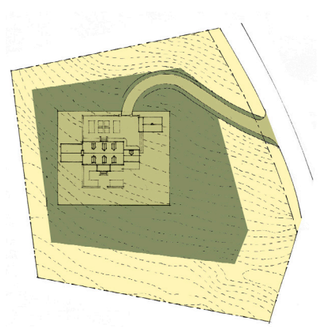
Architecture

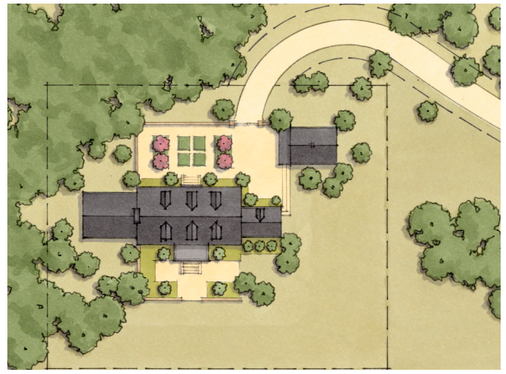
Traditional houses in this region are designed in response to their sites. In sloped terrain such as the Warm Springs valley, houses are typically one room deep and designed as linear plans to run parallel with the contours of the land.

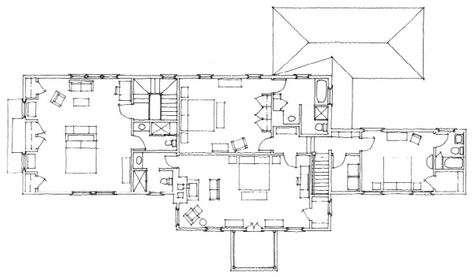
Houses on meadow sites should typically be thought of as farmhouses. Houses on woodland sites are earthbound and should primarily use materials and colors to minimize visual intrusion within the woodland environment.

Houses should be designed following one of the four traditional architectural vocabularies defined in the pattern book. Additional research by the creators of Homestead Preserve may allow for additional architectural vocabularies to be resurrected and introduced in the future.



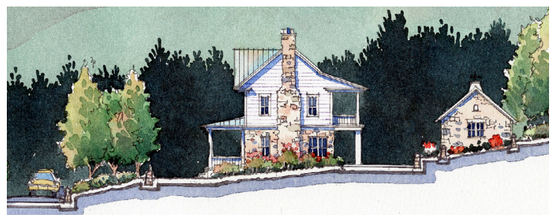






The architectural review staff will work with owners and designers to develop their designs in accordance with the Pattern Book and the site requirements.

The Homestead Preserve Lot Portfolio *provides detailed information on each house site including: permitted development areas; access driveway locations; view orientation; slopes, vegetation and adjacent sites.*



Designing a House

THIS PATTERN BOOK IS A TOOL provided to help owners design their house. While the Pattern Book provides an illustrative guide for house and landscape design elements, additional resources are available to assist owners throughout the process. Homestead Preserve has a design review and approval process centered on collaborative and helpful interaction with the Preserve staff, site planners and architects. The Pattern Book is a reference guidem, not an absolute criteria. Each site is individual and may require special study and approach.In addition to the Pattern Book, the Preserve has developed a detailed inventory of site characteristics and conditions for each individual house site to serve as a resource for owners and their designers.

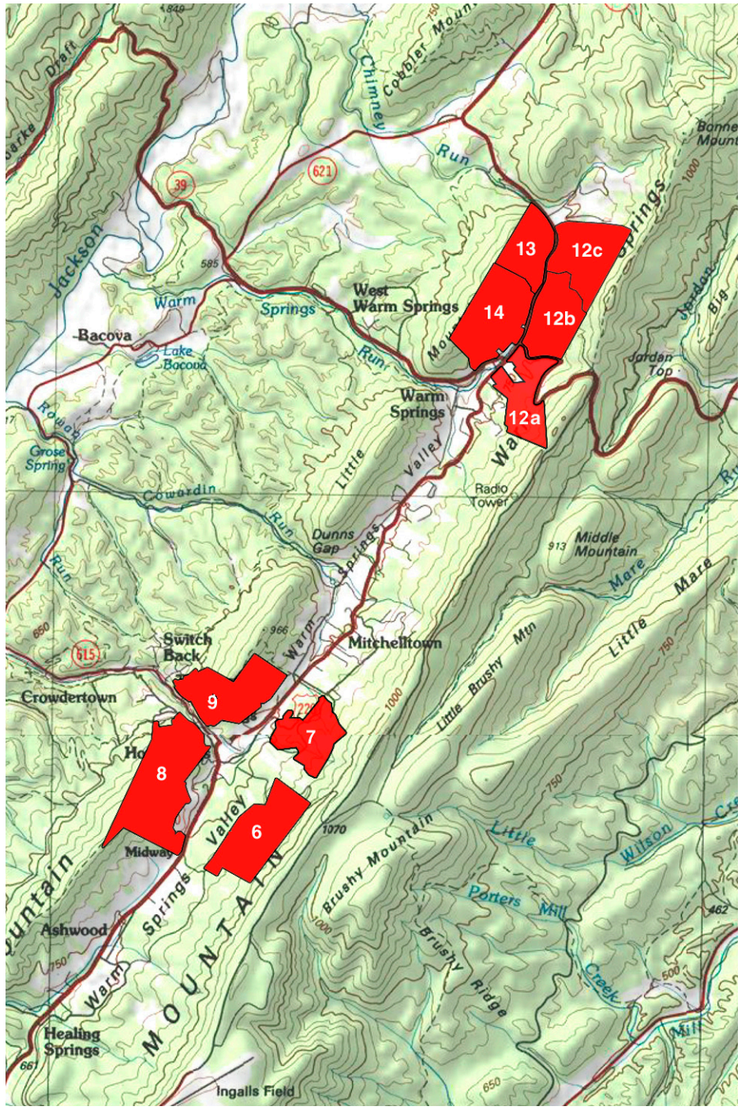
The design review and coordination process for approving house designs incorporates several steps. The first step is a pre-design meeting with the Town Architect to review the site, looking at development areas, view, slopes and vegetation, access options and adjacent sites. This helps to understand the context before design work begins. Concept site plans and house plans are then developed by the owner and reviewed by the Town Architect to guide more detailed planning. As the process moves forward, working sessions are scheduled incrementally at Schematic Design and Construction Documents to ensure good communication and to respond to questions before final plans are submitted. Preserve staff will also review progress in the construction to ensure the implementation is consistent with the approved plans.

The Preserve has created a data base with preferred architects, landscape architects and builders who are available and qualified to provide services to owners. Additionally, we have developed an inventory of pre-approved house designs that can be adapted for various site conditions and the Preserve Building Company can provide construction of houses for owners.

The Design Process

SECTION A

Introduction



Location map showing preserve land holdings designated for house sites

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Preserve sites include beautiful woodland locations accessed by rural roads and private drives.

The barns at Garth Newel, the performing arts center in Warm Springs, frame distinct views towards Dunn's Gap.

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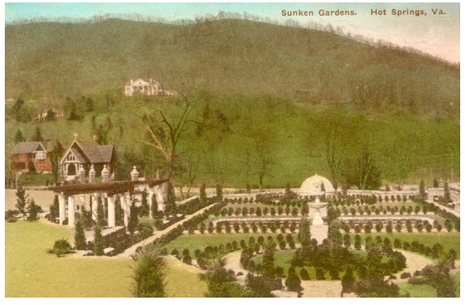
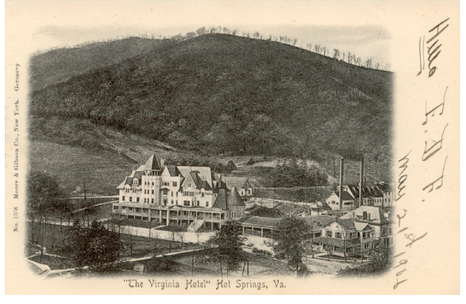
The Homestead Preserve effort has identified a portfolio of carefully selected sites which can be settled to complete the ownership and ongoing management of the Preserve. These sites lie within seven primary land parcels stretching eight to nine miles along the valley nestled between Warm Springs Mountain and Little Mountain.

Homestead Preserve

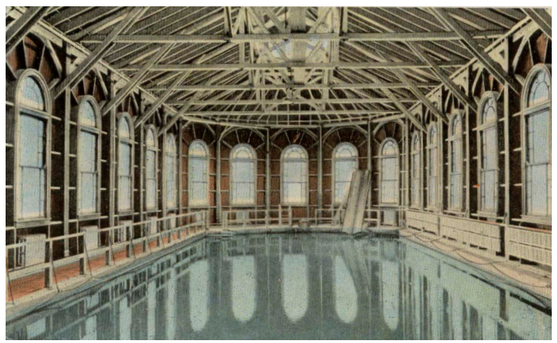
The Homestead porch





Historic postcards with images of the early environs

The Cascades golf course



Historic photo of the spa swimming pool

The Homestead Resort

THE HOMESTEAD, one of America's great resorts, is a national treasure and Virginia's favored place for recreation, rejuvenation and relaxation since 1776. The unparalleled legacy of distinguished guests and patrons includes Thomas Jefferson, George Washington, General Robert E. Lee, many American Presidents, international diplomats and monarchs. Today, The Homestead continues the tradition of outstanding service, exceptional cuisine, championship golf, outdoor recreation and the spa that over the past two centuries has been the hallmark of the resort.

Residents of the Homestead Preserve will enjoy unequaled access to the amenities and great traditions of The Homestead through an exclusive right to purchase a membership for the Homestead Golf and Tennis Club. Fine dining, golf, spa facilities, skiing and outdoor recreation programs offer families and individuals a marvelous complement to the scenic beauty and historic legacy of the region.

The Homestead Legacy

This etching of the original Warm Springs settlement by Edward Beyer shows the original spa hotel and hamlet.

1848 Landscape painting of the Jackson River by Russell Smith

Looking north along the Jackson River towards Meadow Lane Farm and Hidden Valley

History & Character

THE HISTORIC VALLEY PIKE brought travelers into the heart of the Warm Springs Valley to enjoy the soothing mineral baths and the mild climate of the summer months. This narrow valley is marked by a series of spectacular gaps that cross the spine of both the historic pike and the current route: Warm Springs Gap, Dunns Gap, Hot Springs Gap, and Cascades Gorge Gap. This rhythm of crossings became landmarks for the settlements along the valley road and provided a sense of connection over the mountains from the Jackson River westward. The original settlement that grew up around the late 1700s and early 1800s became the primary destination in the region for visitors and patrons of the mineral baths. Nestled in the valley, the hamlet was a backdrop for the spectacular mountains and distant views. Today, the Warm Springs hamlet is tucked into a narrow hollow with the historic Grist Mill at one end and the county courthouse at the other. The setting and the collection of houses and buildings creates a quintessential Bath County settlement. The surrounding mountains are home to many farms and homesteads tucked into the rolling hills.

Historic Jefferson Pools in Warm Springs still provides guests with the restorative experience of "taking the waters," as Jefferson did during his trips to Bath County.

The Warm Springs Valley

Highlands Classical precedent

Highlands Farmhouse precedent

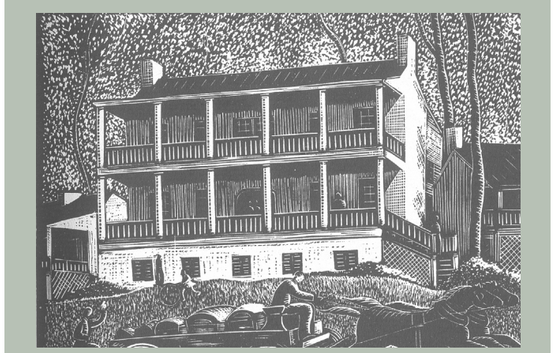
English Romantic precedent

Highlands Arts & Crafts precedent

Highland Houses

ONCE THE RAILROAD CONNECTED the Warm Springs Valley to the rest of the East Coast population centers, the ability to travel to the resorts created opportunities for a limited number of people to construct houses and set up more permanent residence. This trend followed the traditional Highland farm settlements and created an exotic mix of architectural styles and house types unlike anywhere else in this region of Virginia. There is a blend of vernacular, clapboard farmhouses, refined Virginia classical houses and imported Arts & Crafts, NeoClassical, Colonial Revival and European Romantic house styles. This blend sets the context for the design of houses within Homestead Preserve. The influence of English trends, techniques and aesthetic choices influenced the form and character of both the architecture and the setting of the yard and site. Later notions of the rural landscape as a picturesque experience became more important to newly arriving residents in the mid-1800s. Local materials and available craftsmen further refined the detail and character of houses. Local stone, brick, timber, and stucco methods contributed to a sense of place.

Precedent sketches for proposed house types within the Preserve



Woodcut by Charles Smith entitled "Mr. Henderson's House" from the book The Springs of Virginia *by Perceval Reniers*

Architectural Precedents

Images of landscape elements added by settlers that contribute to the unique sense of character and quality within the Allegheny Highlands

Highland Character

THE INHERITED LANDSCAPE in the Warm Springs Valley draws its distinct character from the mix of three very different elements. The natural terrain is marked by dramatic changes in elevation within a sequence of multiple ridgelines running in a northeasterly direction. These ridges frame a series of gaps that run east-west and create narrow valleys which traditionally have been farmed and converted to pastures. Settlers drawn to the resort and scenic quality of the region built houses along the historic Valley Pike or up into the heavily wooded slopes to take advantage of the tree cover and views out to the valleys and the gaps. Many imported more exotic plant species and created picturesque gardens and landscapes influenced by patterns in the English countryside. This combination of natural land form, agricultural landscape patterns, and the picturesque planting create a unique palette within the region.

Landscape and house appear as a unified composition in the Dunn's house along the old Valley Pike. The stone of the house, the terraces, the springs and plantings over the years create a timeless composition.

Landscape Precedents

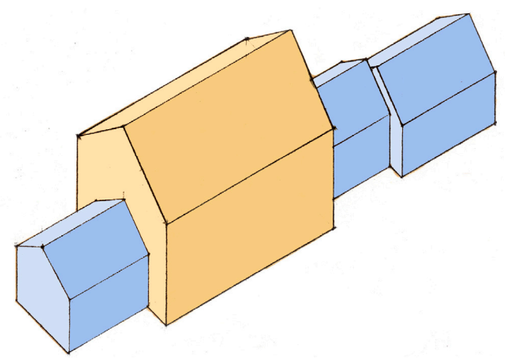
Historic house sites in this region often evolved over time. The original "cabin" was often replaced by a larger, more finished house. Outbuildings were added as needed to form a kind of compound.

Change Over Time

HOMESTEAD PRESERVE HOUSES will be designed to fit into the landscape in much the same way as traditional houses were before them. There is a subtle sense of belonging to mountains and becoming part of the landscape form in these older houses. The care and responsiveness to the slope of the land, the approach of the drive and the definition of the yard are all patterns that grew out of an intuitive understanding of the relationship between the house and the site.

Most houses evolved over time, starting with a rough hewn log structure, then a more refined and larger main house that may have rooms added to the structure as the family grew. Outbuildings that served the utilitarian needs of the rural household created yet another quality recognized as part of the physical and cultural fabric of the Allegheny Highlands.

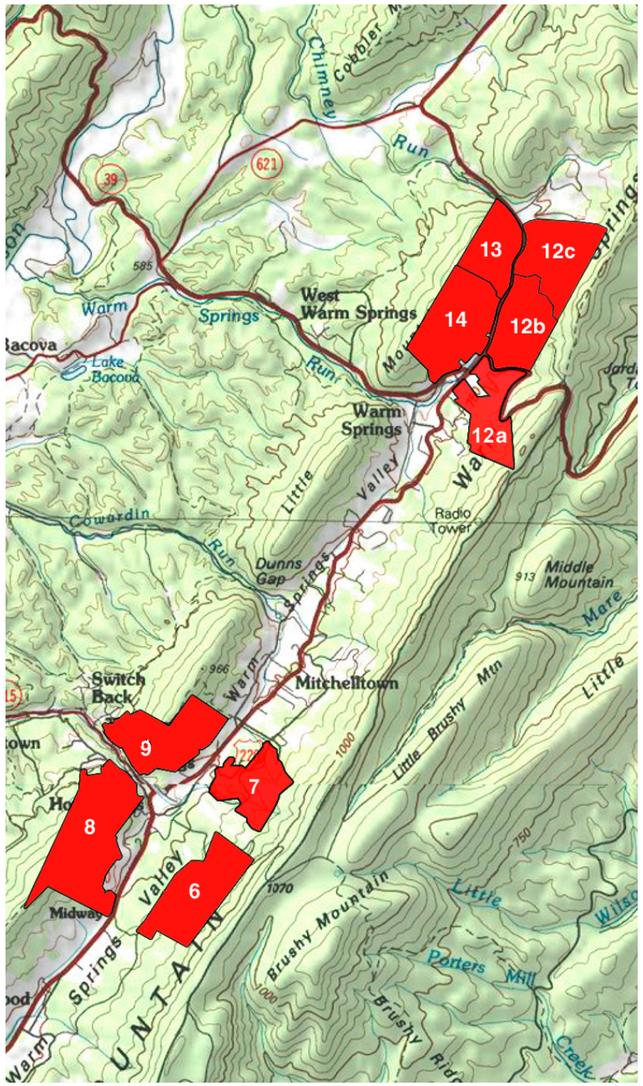
Homeowners and architects at Homestead Preserve are encouraged to build and design in much the same way with the current amenities and needs of today's residents accommodated in the internal layouts and furnishings. Houses in the Preserve will be designed such that they can grow over time; the body of the house is largely linear in form and narrow in depth to minimize grading and level changes. Preserve houses use traditional materials, colors and detailing.



The Preserve House

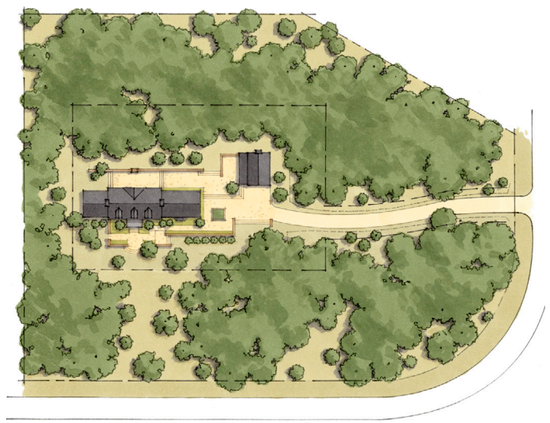
SECTION B

Rural Settlement Patterns



Overall parcel map

A



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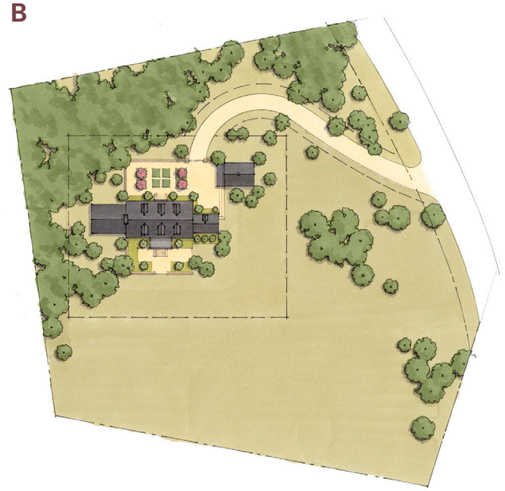


C

Site types include: **A** *Woodland Preserve,* **B** *Meadow Preserve, and* **C** *Hamlet*

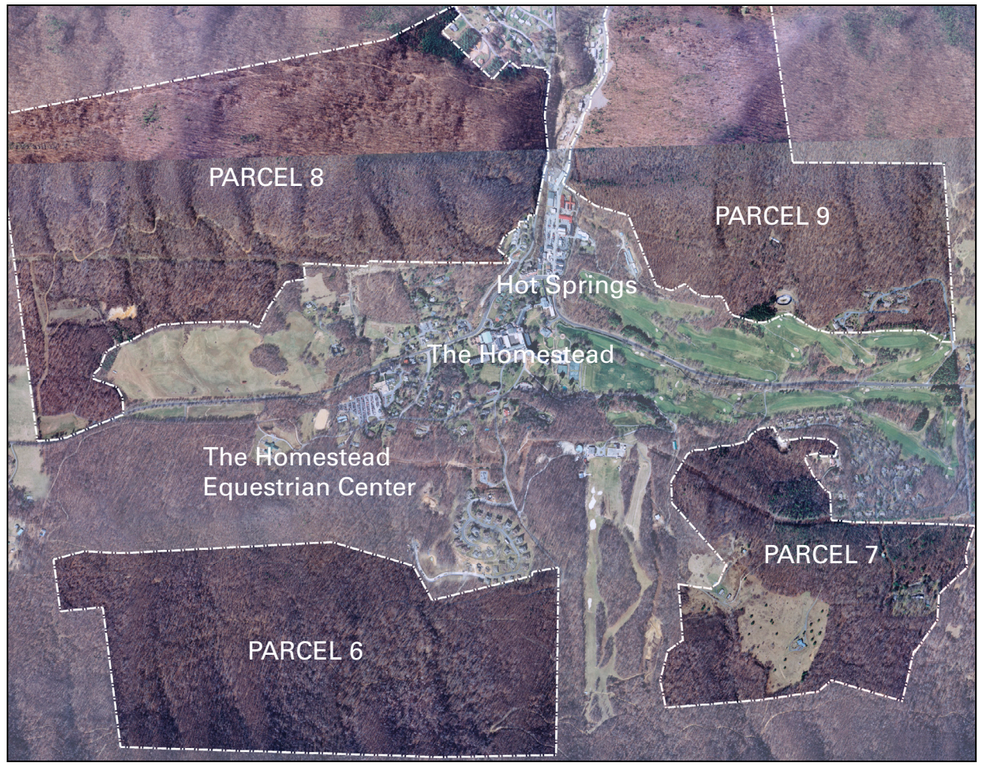
Traditional English romantic houses appear to grow out of the landscape

House Sites in the Preserve

The seven primary land parcels which make up the Homestead Preserve plan are distinguished by their location adjacent to either Hot Springs or Warm Springs. The plan builds upon the unique physical characteristics of each parcel to create distinct addresses for house sites. In Hot Springs, these addresses include Woodland neighborhoods such as Falconry Ridge and Overlook Heath. Three distinct site conditions occur within the Homestead Preserve: Woodland Preserve sites, Meadow Preserve sites and Hamlet sites. Following a description of the key addresses and site types, general guidelines for building on each type of site are presented.

Images of Preserve house and site character

The Preserve Plan



Partial Plan of the Homestead Preserve

A high meadow above the town of Hot Springs

An historic house adjacent to the resort

View of the spa at The Homestead

Hot Springs

Settlement Patterns

Hot Springs was developed as a resort in the late eighteenth and early nineteenth centuries, and was easily reached from eastern cities via railroad and coach by the mid-nineteenth century. Though the landscape and resort are beautiful, it was the waters that made Hot Springs distinctive. Nine separate baths of varied temperatures were said to be "excelled by nothing ever known to the human race." House sites are located in parcels 6, 7, 8 and 9 and are largely in woodland areas surrounding the resort, ski slopes and town. Many have spectacular views. The Homestead Preserve Plan seeks to reinforce the settlement patterns which historically occurred surrounding the Homestead resort. There are mountain hamlets, each with a distinct feel and character and more singular sites that are nestled into the slopes above the valley floor. The following pages illustrate some of these unique addresses in the Hot Springs area of the site.

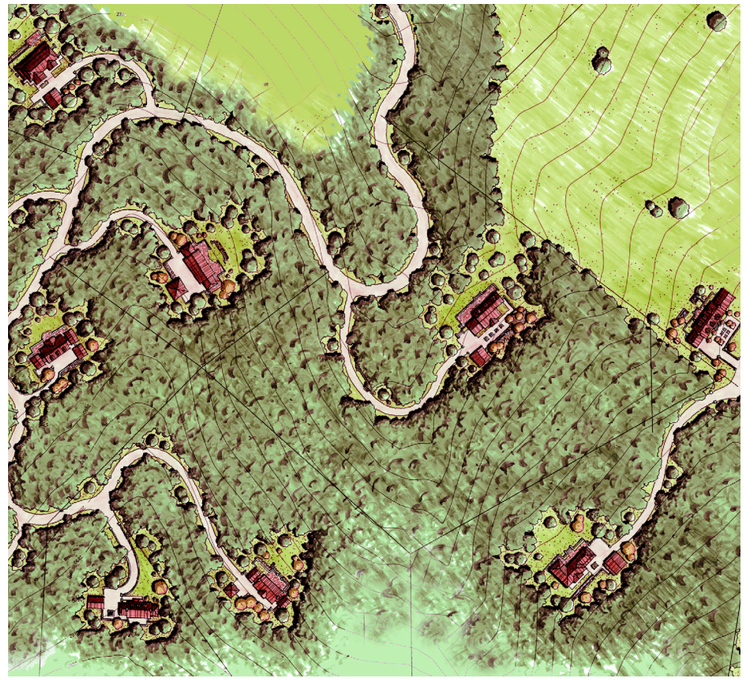
Relaxing on the The Homestead's Porch

Perspective of an Arts & Crafts house on a typical Woodland Preserve site overlooking the valley

View of a Hamlet site in the woodlands looking towards the old course of the Homestead

Woodland Neighborhoods

Country lanes wind their way up the slopes following historic trails to access home sites strategically located to provide views of Warm Springs Mountain and long gap views through the forest. Houses are sited above and below the road to afford private outdoor space and maximize views. Highlands Farmhouse and Arts & Crafts styles work well on the steeper slopes and Highlands Classical style houses appear at the edges of the woodlands. (These and other Architectural Styles selected for Homestead Preserve are described in Section C of this Pattern Book.)



Illustrative plan of The Heights, one of the Woodland Neighborhoods in the Preserve

Hot Springs – Key Addresses

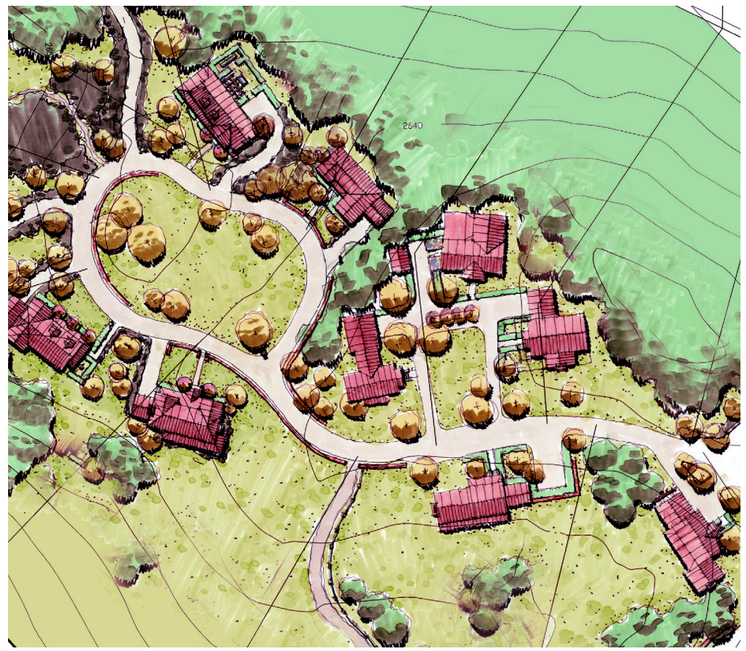
Perspective of a Highlands Farmhouse style house on a typical Hamlet site

View of the Sheep Meadow

An Arts & Crafts house in a woodland setting

Falconry Ridge

One of the most distinctive locations situated in Hot Springs is an area known as the Sheep Meadow. Perched on a ridge at the edge of the woods overlooking the Sheep Meadow and the old falconry barns, Falconry Ridge is a country lane informally lined with houses where many are placed close to the road and open onto the view of the meadow below. Along the meadow's edge, the houses are designed in the Highlands Farmhouse style and clad in white clapboard. As the lane weaves its way into the woods around a knoll at the top of the hill, the houses are suited well for the Highlands Arts & Crafts style. They are painted in rich earth tones and surround a forested public space which includes a natural spring house. A community teahouse pavilion sits atop the knoll. This area includes a variety of choices for house sites including Hamlet, Meadow and Woodland Preserve sites.



Illustrative plan of the Falconry Ridge neighborhood

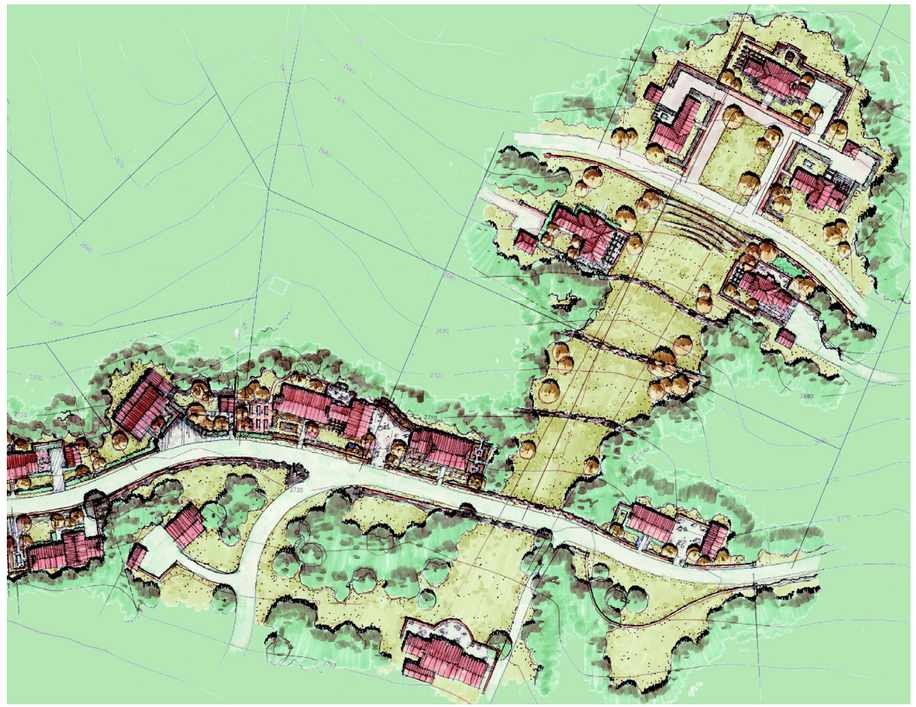
Hot Springs – Key Addresses

Perspective of an English Romantic house on a typical Hamlet site

English Cottage precedents in Yorkshire

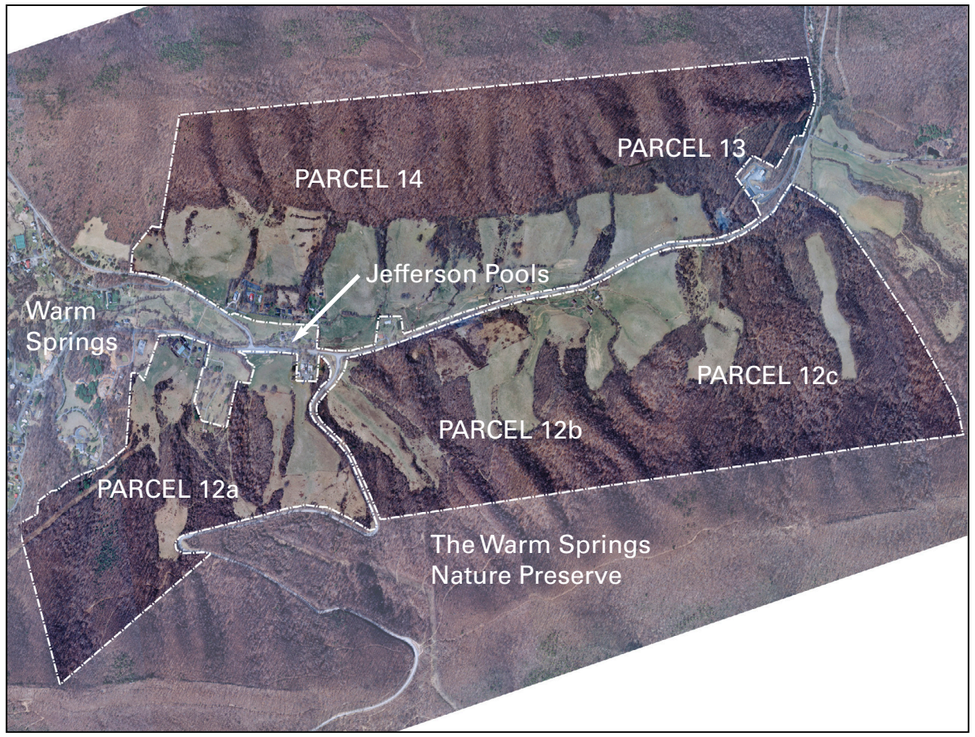
Overlook Heath

Another special place in Hot Springs, laid out in the tradition of English Picturesque landscape design, is an area called Overlook Heath. The Heath is a terraced pastoral green sculpted out of the forest and surrounded by carefully sited, English Romantic style houses. Houses sit at the edge of the heath tucked partially into the woods. Bounded by upper and lower stone walled lanes, this address provides a delightful surprise along the winding journey up from the valley. A grouping of three English Romantic style houses around a more formal green anchors the lower edge of the heath while the restored Overlook Manor commands the view from above.



Illustrative plan of the Overlook Heath

Hot Springs – Key Addresses



Partial Plan of the Homestead Preserve

Views of the landscape in Warm Springs

Settlement Patterns

The historic approach to Warm Springs is via a winding, ascending country road affording wonderful mountain scenery. Upon reaching the summit, an amphitheater of deep glens opens up below, with views of mountain ridges in the distance. The Warm Springs Hotel, once considerable structure, was situated at the intersection of the historic Valley Pike and what is now S.R. 39 before it was demolished at the turn of the last century. It was built to provide accommodations for visitors to the adjacent Jefferson pools. Warm Springs, with its straight roads and clustered houses, more resembles a hamlet than a springs resort. Warm Springs area of the Parcels 12, 13 and 14 contain both woodland and meadow areas surrounding the old Homestead dairy, Jefferson pools and the town. Many of the sites within these parcels have spectacular views. The Homestead Preserve Plan will reinforce the historic settlement pattern of Warm Springs, with larger farmsteads on the meadows overlooking the valley and the town.

Warm Springs

Perspective of a Highlands Farmhouse on a typical Meadow Preserve site overlooking the valley

Warm Springs

The rolling foothills flanking the Warm Springs settlement create a series of large land holdings that mirror the traditional farmstead patterns found throughout the northern leg of the valley. Farm houses, barns and out-buildings dot the landscape in a way that creates a unified image of the agricultural character found in the Allegheny Highlands. Owners within the Preserve parcels around Warm Springs will have an opportunity to enjoy the unmatched views from the hillsides and contribute to the legacy of the agrarian character established by the early settlers. Long meadows, upland pastures, and secluded woodland sites provide a rare opportunity to experience this unique sense of place. Architecture in many of these sites will be designed to follow the character and form of traditional Highland farmhouses.

Illustrative plan of Meadow Preserve sites in Warm Springs

Highlands Farmhouse precedent in Bath County

A traditional farmstead in the valley

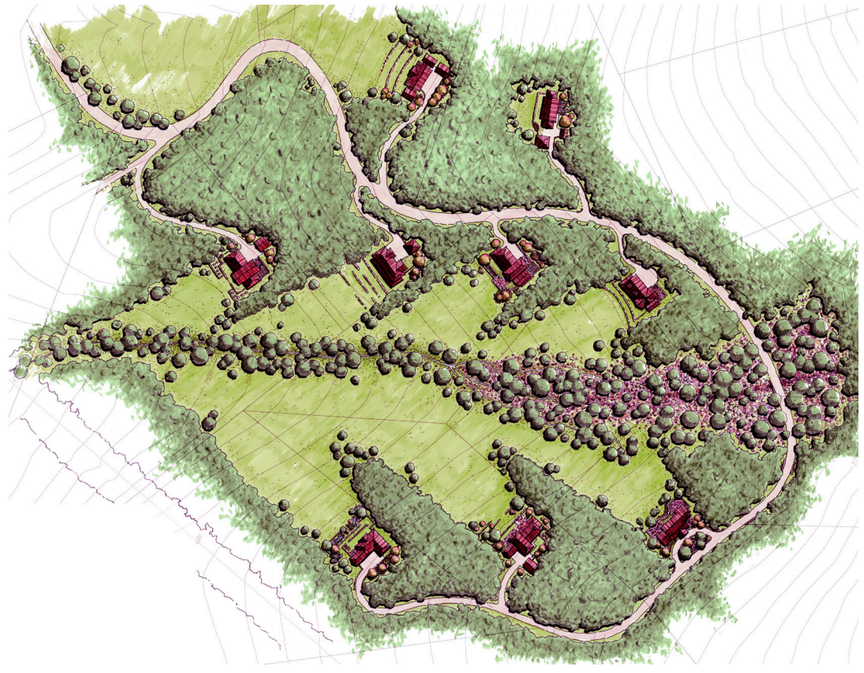
A typical road through an upland pasture

Warm Springs – Key Addresses

Aerial perspective of houses on Meadow Preserve sites in the Upland Glades

Upland Glades

Set high above the historic dairy farm, the Upland Glades is an example of a high meadow clearing formed around a ravine. A seasonal mountain drainage way emerges out of a spectacular natural boulder field to bisect the meadow. Stone walled terraces and hedgerow-lined lawns border each site within the Glades. The architectural palette includes Classical, Arts & Crafts and Highland farmhouses. The houses are clad in stone veneer, stucco, cut shingles and clapboard, painted in rich earth tones, and feature broad porches designed to extend the living space out into the natural setting.



Illustrative plan of the Upland Glades

Warm Springs – Key Addresses

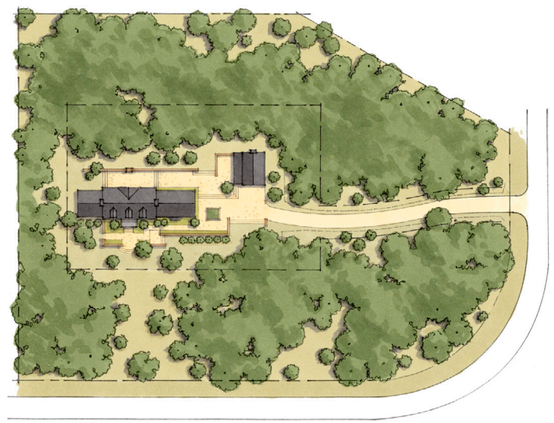
Illustration of a developed Woodland Preserve site

Woodland Preserve Sites

The preservation of the native woodland character found throughout much of the Homestead Preserve is crucial to the sensitive development of the landscape. Since the early development of the region, those with means sought to build homesteads within these heavily wooded slopes taking advantage of tree cover and spectacular views. These same aspirations hold true today. The sustainable development practices ascribed to land designated as Woodland Preserve lots safeguard the natural resources and aesthetic woodland character of the Homestead Preserve.

Development patterns for steeply sloped Woodland Preserve lots must protect as much of the existing tree stands by employing sensitive grading and efficient use of space. A smaller envelope of disturbance may be achieved by organizing the layout of house and grounds in a linear fashion running parallel to the contours of the slope. When necessary, terracing the land will provide additional space. It is preferable to avoid specimen and significant stands of native vegetation when situating the house. The creation of views as well as buffering of neighboring development may be accomplished through the thoughtful placement of the building. The same principles should be exercised in the selective clearing of vegetation within view clearing zones on scenic lots.

Grading and disturbance of tree stands can be kept to a minimum by thoughtfully aligning driveways along the contours of the slope and away from significant native specimen trees. Additionally, drives aligned in a curvilinear fashion may take advantage of the rich woodland landscape character.



Final site development showing cleared areas, tree preservation and the driveway

General Conditions

Illustration of a developed Meadow Preserve site

Meadow Preserve Sites

The developmental approach of the Homestead Preserve serves to protect the heritage and character of open and rolling meadow landscapes within the Preserve. Safeguarding these meadow landscapes not only carries on the bucolic tradition and landscape patterns of the Allegheny Highlands but employs these patterns to create a rich experience of the landscape. Meadow landscapes afford regional views and valuable open space.

Houses on Meadow Preserve lots should be carefully sited to establish the house and grounds along the verge of the existing meadow. By sensitively containing disturbance to the perimeter of the meadow, the massing of the structure is absorbed by adjacent woodlands and/or associated with the roadside landscape.

Driveways on Meadow Preserve lots should lay gently upon the open landscape with gentle cross-sections that transition into the existing grade. A seamless edge may be established between the house and grounds,and the adjacent meadow by limiting the amount of grading. Steep slopes requiring gutters should incorporate the overall width of the drive and associated gutter into the gentle transition back to the existing grade of the meadow.

Final site development showing cleared areas, tree preservation and the driveway

General Conditions

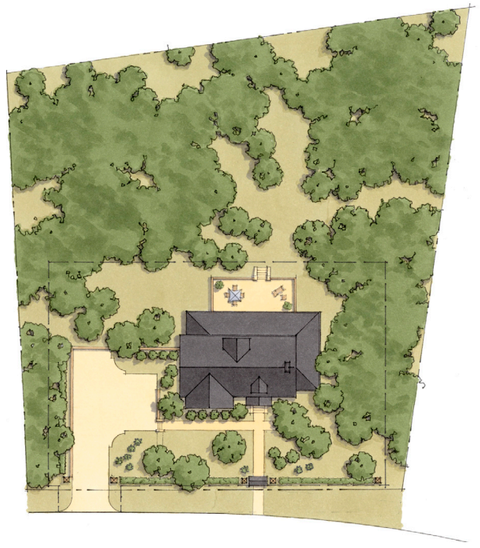
Illustration of a developed Hamlet site

Hamlet Sites

In addition to safeguarding the natural and aesthetic qualities of the landscape, the Homestead Preserve seeks to build upon the historic settlement patterns of the region. These settlement patterns historically included modest assemblies of residences in close proximity to one another tucked within the valleys and hollows creating small roadside communities. Hamlet Sites of the Homestead Preserve carry on this tradition, situating selected lots in relatively close proximity thus establishing a larger community address within the Preserve.

Hamlet Sites are located in specific areas of the Preserve associated with principal landscape features and developable land. Often located nearer to the road, these sites and their attendant houses engender a sense of community reinforced by their spatial proximity and the architectural style of the houses. Locating the structures in this pattern will reduce the amount of grading on steeply sloped sites and limit the loss of vegetation. Other Hamlet Sites locate additional developable areas farther back from the road, creating an intimate assembly of residences tucked into the woodland landscape.

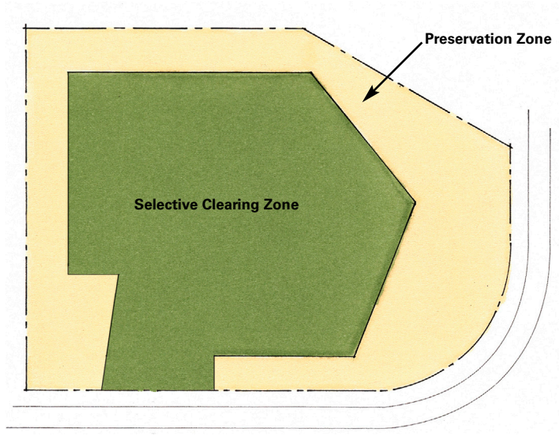
The spatial organization of Hamlet Sites provides opportunities to establish shared common features and amenities. Residences located near the road may share parking courtyards and drives. Likewise, Hamlet Sites set back from the road will limit disturbance to the natural environment by employing a shared driveway between houses. Carriage House garages and dependency wings can be engaged with walls and hedgerows to define courtyards.



Final site development showing cleared areas, tree preservation and the driveway

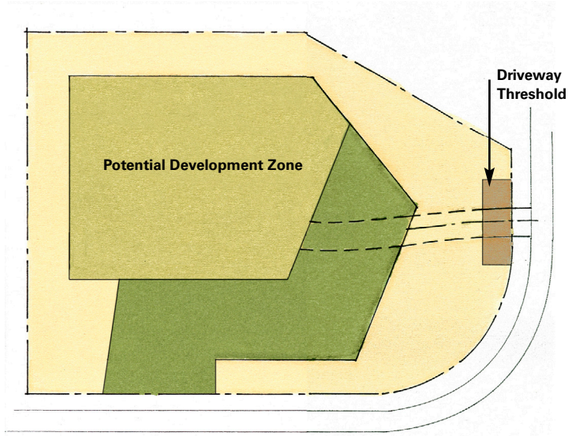
General Conditions

1



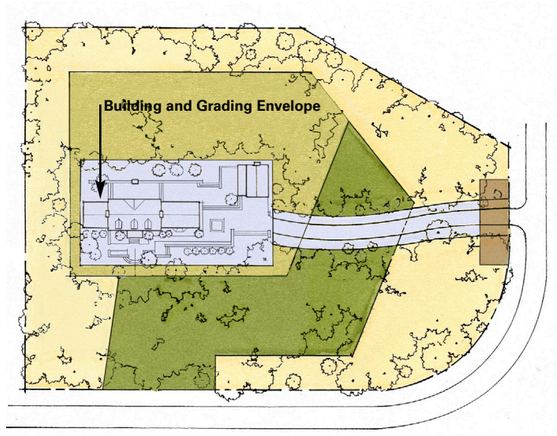
Preservation and Selective Clearing Zones

2



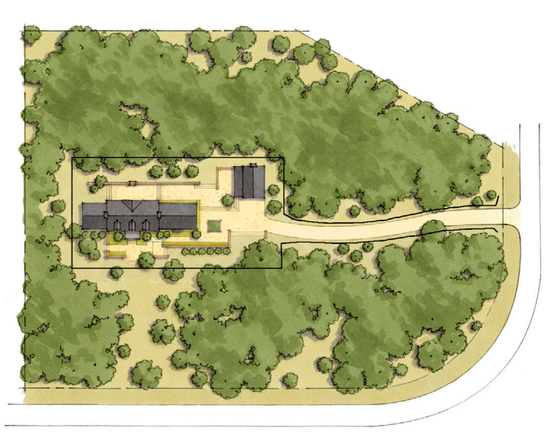
Potential Development Zone and Driveway Threshold

3



Building and Grading Envelope

4



Final Site Development Plan

The following conventions identify site specific development restrictions. **(1)** A **Preservation Zone** specifies land to be preserved and protected within each site. This zone ensures the safeguarding of the most sensitive areas, including steep slopes, mature tree canopy and drainage patterns. Preservation Zones are configured to buffer views between houses in woodland and meadow lots and reinforce association of community on hamlet sites. No clearing, disturbance or intervention may take place within these areas unless otherwise approved by the ARC, with the exception of locating the driveway and routing utilities.

The **Selective Clearing Zone** encompasses all land not occupied by the encircling Preservation Zone. This zone establishes a second tier of preservation for the lot at the same time making provisions for building and amenities. In general all vegetation and topography in this zone should be preserved unless otherwise approved by the ARC, with the exception of the Building & Grading Envelope and the establishment of views and utility routes. Selective clearing of approved areas within this zone may facilitate staging and storage during construction operations. Additional clearing within this zone is limited to the removal of dead or unhealthy woody material, or vegetation less than 5 inches in caliper. See page B-13 of this *Homestead Preserve Pattern Book* for a detailed description of approved clearing types.

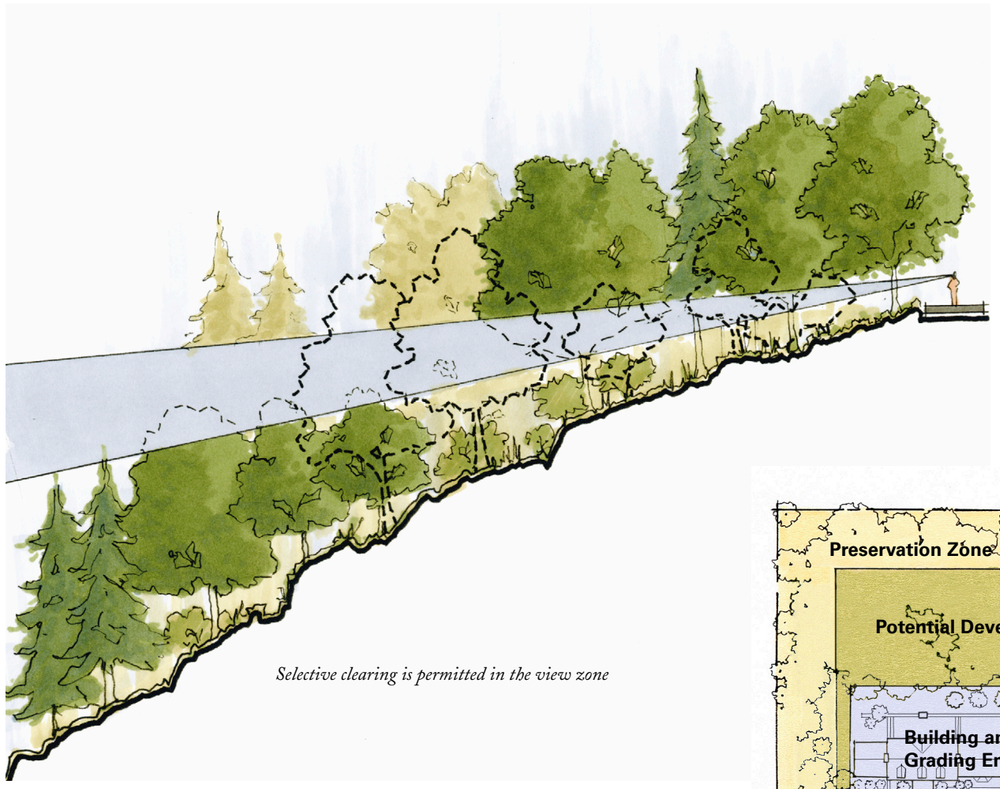
(2) A **Potential Development Zone (PDZ)** has been identified for each site. The PDZ defines the absolute boundary for any potential disturbance on the site unless otherwise approved by the ARC, other than selective clearing. The intent of the PDZ is to assure that the most sensitive areas of the site are preserved while allowing flexibility in determining the location of the house.

A 30-foot linear **Driveway Threshold** has been located along the property line adjacent to the collector road. The Driveway threshold identifies the most appropriate location for the placement of the driveway's connection to the road. The driveway must meet the road at a location within this threshold but may advance toward the Building & Grading Envelope in an alignment as desired by the property owner.

(3) For each site, a **Building and Grading Envelope (BGE)** has been established. This area defines the preferred limits of disturbance affected by the placement of the house. All grading attributed to siting the house should be confined within the BGE unless otherwise approved by the ARC. All lawn and garden spaces should also be confined to this zone. The Building and Grading Envelope may be located anywhere within the Potential Development Zone and may be disaggregated into two or more separate envelopes. It is assigned as a gross square footage for each site and its size is determined by the unique environmental conditions of the specific site. BGE sizes for specific sites are found in the *Homestead Preserve Lot Portfolio.*

Given the steep terrain of many sites in the Preserve, it is advantageous to orient the massing of the house and grounds parallel to the contours of the slope. Special consideration should be given to Building and Grading Envelopes that exceed eighty-five linear feet in depth as they may require stacked retaining walls which detract from the natural character of the surrounding landscape.

Site Planning



Selective clearing is permitted in the view zone

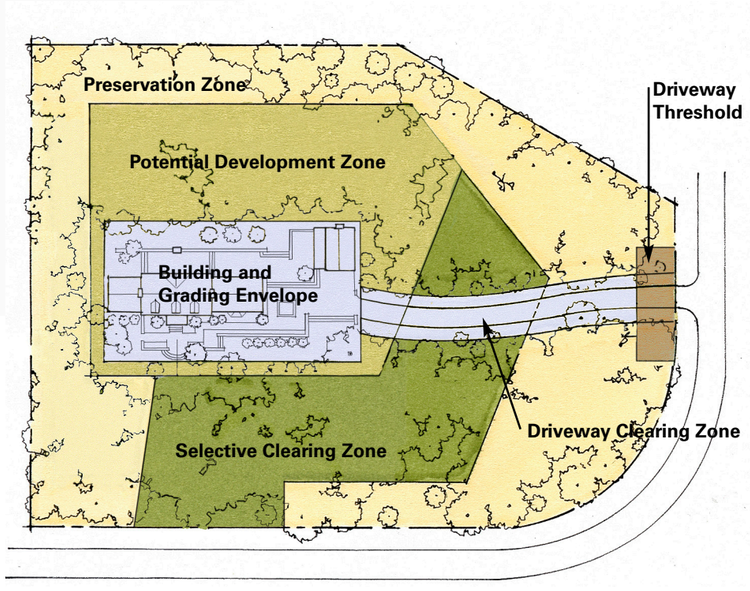


Illustration of a conceptual site development plan

Clearing

Clearing is the initial step in the construction of a house. Maintaining the integrity and health of both the individual sites and the area at large by minimizing disturbance is a paramount objective in the philosophy of the Homestead Preserve. In order to achieve this objective, specific boundaries have been developed to contain all site disturbance. In general, all existing vegetation on individual sites must be preserved with the exception of selective clearing of approved areas within the Selective Clearing Zone. The various types of approved clearing areas are described below.

Building and Grading Envelope

All vegetation within the Building and Grading Envelope may be removed. Healthy, mature vegetation within the envelope should be preserved wherever practical.

Driveway Clearing Zone

All vegetation within the Driveway Clearing Zone may be removed. Healthy, mature vegetation within the zone should be preserved wherever practical. The width of the Driveway Clearing Zone is dependent on the existing slope of the site and is determined in consultation with the Preserve town architect.

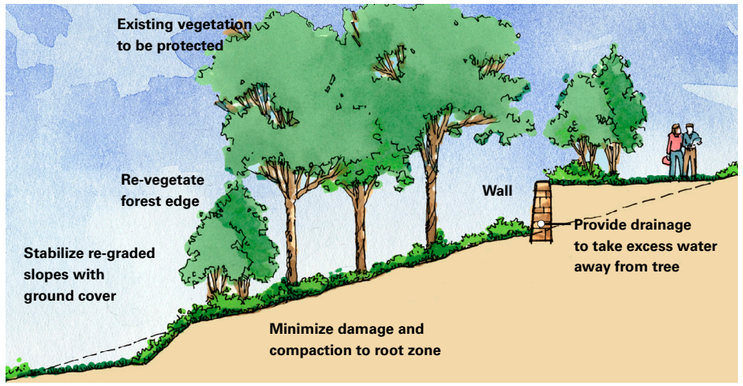
Glimpse Zone

A Glimpse Zone can be located to allow for a view of the house from the road prior to arriving at the driveway. Selective removal of up to one-half of the trees as well as cleaning, topping, raising and thinning of trees within this zone is permitted. The size and location of the Glimpse Zone is determined in consultation with the Preserve town architect.

View Zone

The View zone is centered on a bearing directed toward a desired view. Selective removal of up to one-half of the trees as well as cleaning, topping, raising and thinning of trees within this zone is permitted. The size and location of the View Zone is determined in consultation with the Preserve town architect.

Site Development Principles



Techniques to preserve trees

Grading and Drainage

Grading and drainage within the Homestead Preserve is meant to preserve the natural existing topography and maintain the delicate system of natural drainage. Any proposed improvements must be carefully planned to minimize disruption to the existing ecosystem or alteration of the topography. Once the trees necessary for building and site construction have been cleared, preliminary grading activities can begin.

Trees to be preserved within the Building and Grading Envelope must be carefully protected with proper techniques prior to site disturbance. Grading operations must be limited to only the Building and Grading Envelope and Driveway Zone.

Cuts and fills should be limited to a maximum of 2:1 slopes with a maximum vertical exposure of 6 feet. These slopes should be protected with erosion control measures and then be covered with topsoil and revegetated. Retaining walls are encouraged as a means of reducing disturbance and preserving trees. Walls should generally be no higher than 5 feet. Stacked retaining walls should be avoided where possible.

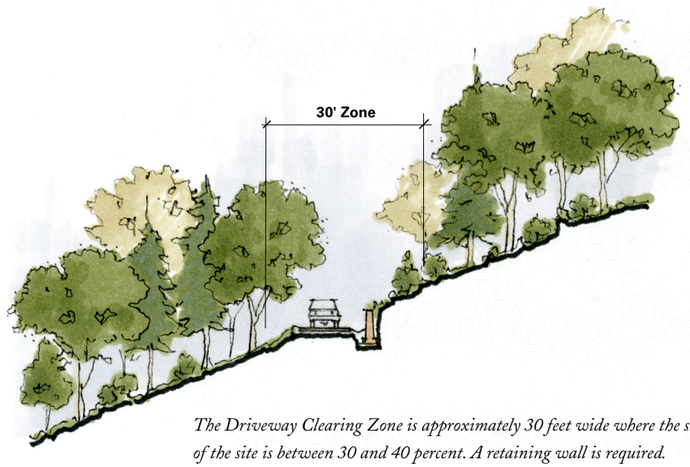
Major natural drainages that traverse the site should be maintained in their original configuration. Drainage swales are required at the cut side of all driveways.

Driveways and Utilities

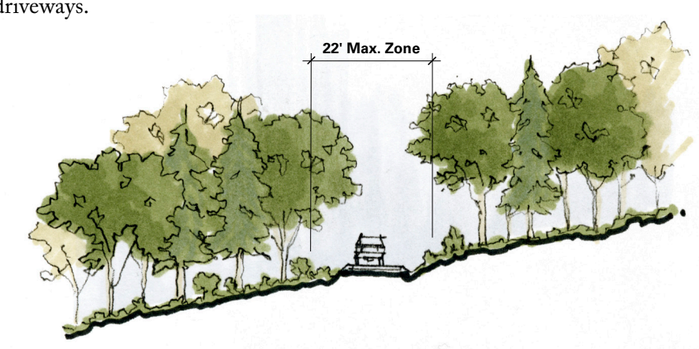
Access drives often have the greatest impact on the site. Consequently, great care should be given to their planning and design. The impact of driveways on the land can be minimized by following the natural contours of the site and meandering around trees and significant landforms. The length of the driveway is also a crucial consideration as shorter alignments will generally create less disturbance than longer ones. All disturbance related to driveway construction must be contained within the Driveway Clearing Zone and BGE. The width of the Driveway Clearing Zone is dependent on the existing slope of the site. Sites with steeper slopes are permitted wider Driveway Clearing Zones to allow for increased cut and fill requirements. Widths of Driveway Clearing Zones for specific sites are determined in consultation with the Preserve town architect.

The maximum recommended grade for driveways is 16%. Finished driveway surfaces on level sites should not generally exceed 12 inches above the immediately adjacent existing grade. The desired width of the driveway surface is 10 feet unless otherwise approved.

Utility lines should be underground and located within the Driveway Clearing Zone unless otherwise approved by the Architectural Review Board. Any approved utility-related disturbance outside of the Driveway Clearing Zone must be revegetated according to standards set forth in the Landscape Patterns section.

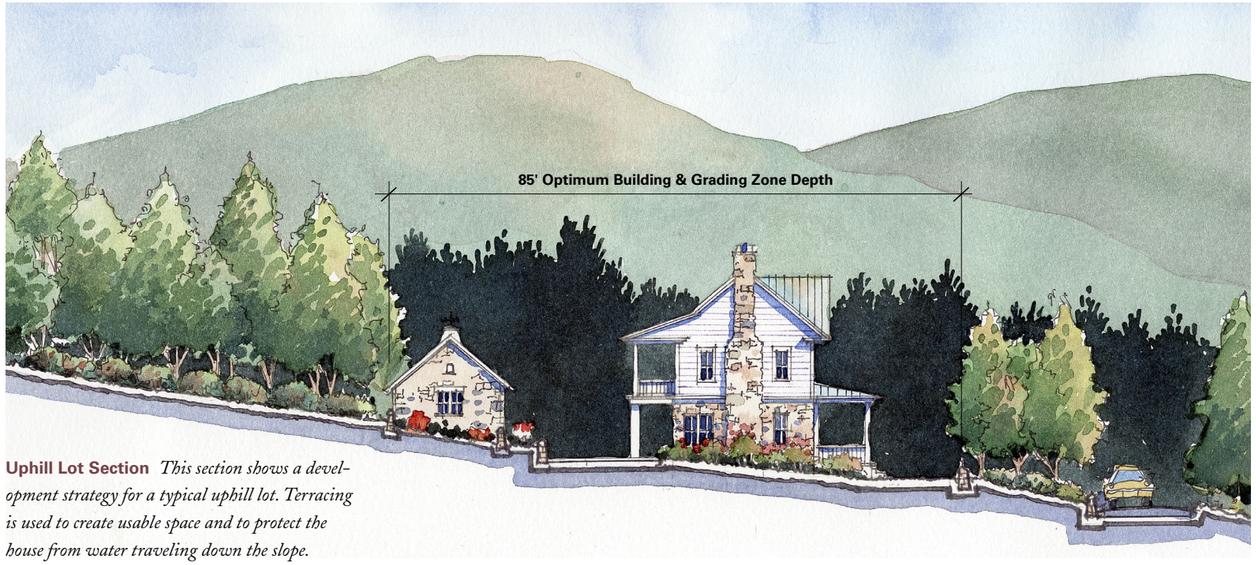


The Driveway Clearing Zone is approximately 30 feet wide where the slope of the site is between 30 and 40 percent. A retaining wall is required.

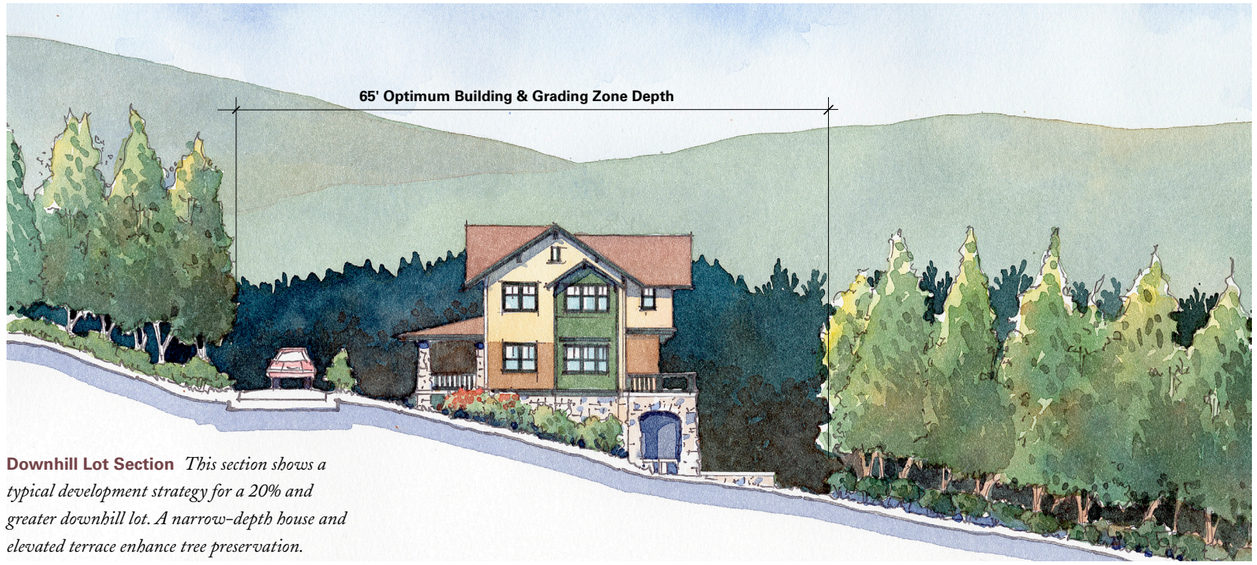


The Driveway Clearing Zone is a maximum of 22 feet wide where the slope of the site is between 10 and 20 percent

Site Development Principles



Uphill Lot Section *This section shows a development strategy for a typical uphill lot. Terracing is used to create usable space and to protect the house from water traveling down the slope.*



Downhill Lot Section *This section shows a typical development strategy for a 20% and greater downhill lot. A narrow-depth house and elevated terrace enhance tree preservation.*

General Site Principles

Structures & Site Amenities

Designing the house and yard to fit the slope is an important aspect to consider in the beginning of the design process. These illustrations show how grade change can be handled using various landscape elements, such as walls, steps and graded slopes. Walls and steps can be used to change grade quickly, and therefore minimize tree clearing. Site walls can also be used to create outdoor terraces and gardens that create highly functional and desirable spaces that serve the house. The use of walls, steps and slopes to preserve stands of trees will give newly constructed houses a timeless, enduring atmosphere.

Driveways are best designed to run parallel with the slope in the same way the house is designed as a narrow depth massing also running with the contours. Houses may step down to the street or may site downhill from an entry drive or court.

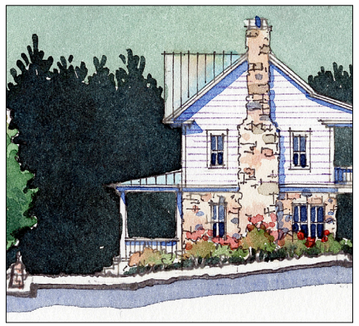
Houses should never step down slopes in ways that create additional wall or pier exposure that is greater than the typical height of a single floor. Terraces should be created with site walls or permitted slopes to create an appropriate base height for the lower story.

Walls should be constructed out of material in keeping with the architecture of the house and landscape setting.

Houses in this region are positioned to take advantage of the sloping terrain. Narrow depth, stepping lawns and terrace walls create beautiful and practical transitions into the house.

A Front House Entry

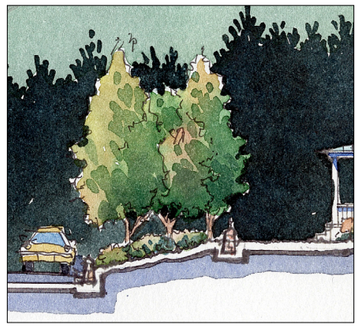
The front of the house should have an entrance that transitions 24 inches above the entry walk or front terrace to give the house additional presence in the landscape. This can be handled with three steps to the front porch or entry terrace, and one additional step into the house. Depending on the lot slope, a retaining wall may be required here. For instance, a typical 15% lot will require a 4'-3" grade change with a wall or slope.



Typical front entry illustrating a 2-foot change in grade at the front yard

B Front Yard Walls

Site walls may be used to create level terraced areas in the front yard. This technique helps to preserve existing trees on the site where grade changes are necessary. These walls can be integrated into the walls used to frame driveway entrances. These walls will also provide separation of the lot from public amenities, such as sidewalks and streets.



Grade changes at the property line will vary depending on the slope of the lot and the right-of-way amenities

C Rear Yard Terrace

At the rear of the house, outdoor living space can be created with a terrace at the lower floor level. Where houses step down slopes, additional wall or pier exposure should not be greater than the typical height of the single floor. Terraces should be created with site walls or permitted slopes to create an appropriate base height for the lower story.

Rear yard terraces help limit grading on a downhill sloping site

D Rear Yard Perimeter

At the perimeter of the rear yard, which is a line that marks the maximum extent of the developed portion of the lot, terrace walls or slopes will be necessary to transition back to existing grade. This should be handled with the maximum 2:1 planted slope, one wall or a series of trellis walls to accommodate the change in grade. Small outbuilding can be used to retain the slope and gain level yard area.

A typical 15% sloped site will have a 3 foot change in grade over 20 feet

House Site Elements

SECTION C

Architectural Patterns

Early twentieth century Classical house

Highlands Classical

Essential Elements of the Highlands Classical

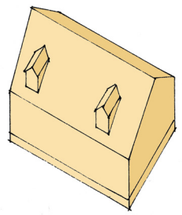
- Simple volumes with one-story side wings and porches added to make more complex shapes
- Symmetrical composition of doors and windows
- Simplified versions of Classical details and columns – Tuscan, Doric, and Ionic orders – commonly used in the porch element or door surround
- Multi-pane windows that are wide in proportion usually with 6-over-6 or 9-over-9 pane patterns

History & Character

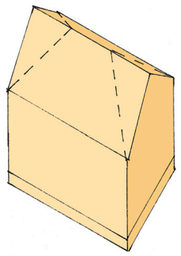
THE HIGHLANDS CLASSICAL HOUSE is based on Georgian, Federal, and Classical Revival houses from the late 18th through mid 19th centuries. The western Virginia region displays significant examples of houses from this period. Few of these houses were designed by architects but rather were commonly derived from illustrated volumes of the work of English architects such as Inigo Jones, James Gibbs and the Adam brothers. Many houses from this period were constructed using Pattern Books such as Asher Benjamin's *American Builder's Companion* from 1806. These houses are typically developed as simple, additive massing types with a dominant center pavilion or Main Body, and additive side wings and pavilions. Palladian composition became a principle organizing and proportioning reference for many houses from this period. As such, many of the houses found in the Allegheny Highland region are vernacular interpretations with simple detailing and massing as well as eclectic materials used in combinations by the date of construction for each wing. The main house may be brick, the wing out of stone, and the telescoping outer wing of wood clapboard. More rural roof treatment such as standing seam roofing enhance the rural quality of the architecture.

Highlands Classical houses will be designed using these compositional elements and massing principles. On steeply sloping sites found within the Homestead Preserve, these houses will use raised terraces or terraces cut into the slope to create formal entry relationships to the road.

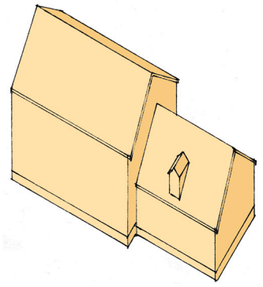
Massing Diagrams



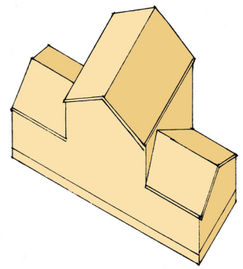
A *One-and-one-half-story basic*



B *Two-story basic*

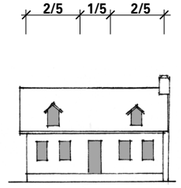


C *Telescoping*

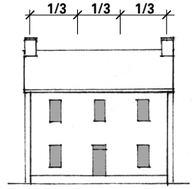


D *Palladian*

Window and Door Compositions



36'–40'



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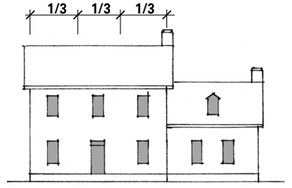
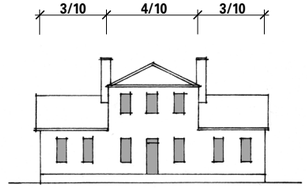


60'–66'



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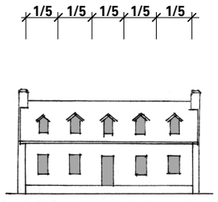
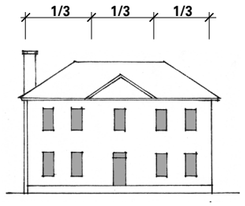


40'–48'



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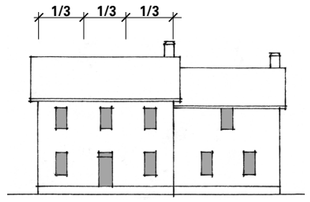
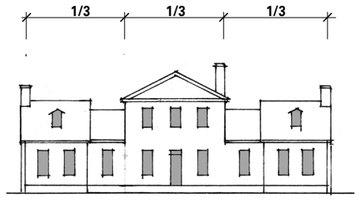
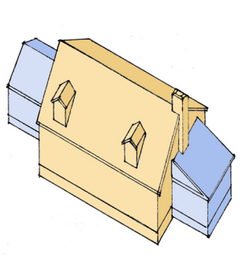


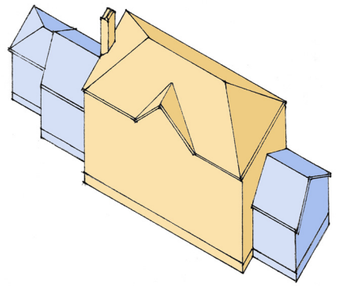
60'–66'

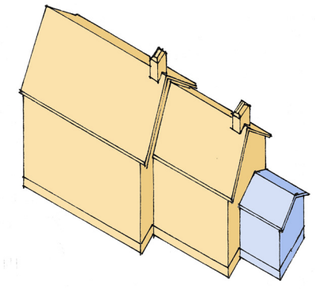


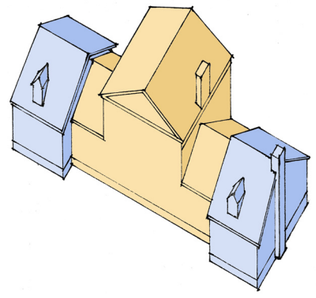
72'–80'

Possible Massing Combinations









Highlands Classical

Massing & Composition

Massing

A One-and-One-Half-Story Basic
Side-gabled rectangular volume. One-story roof pitch is typically 5 to 8 in 12. One-and-one-half story roof pitch is typically 8 to 10 in 12. One-story entry porticos or simple door surround may be placed symmetrically on the front facade.

B Two-Story Basic
Hipped or side-gabled rectangular volume. Roof pitch is typically 4 to 8 in 12. One-story temple front or hip front porches, placed symmetrically on the front facade. Two-story center porches are also permitted. Porches are most often one-fifth to one-third the length of the main body, they may also be three-fifths or the entire length of the front facade.

C Telescoping
Two-story side-gabled rectangular volume attached to a similar yet smaller volume of either two stories or one-and-one-half stories. Roof pitch for both masses typically 8 to 10 in 12. One-story porches or entries may be incorporated on the large or smaller volume.

D Palladian
Two-story central block with gable facing forward to form a temple front, with flanking one-story wings or with two one-story hyphens and wings. Roof pitch is typically 5 to 7 in 12. One-story porticos occur on a central block.

Facade Composition

Classical facade composition is characterized by a symmetrical and balanced placement of doors and windows, although slight variations can occur to accommodate the floor plan. Entrance doors are usually located in the center of the composition. Typical windows occur singly and align vertically from floor to floor. Chimneys are typically located on the end walls.

Combinations

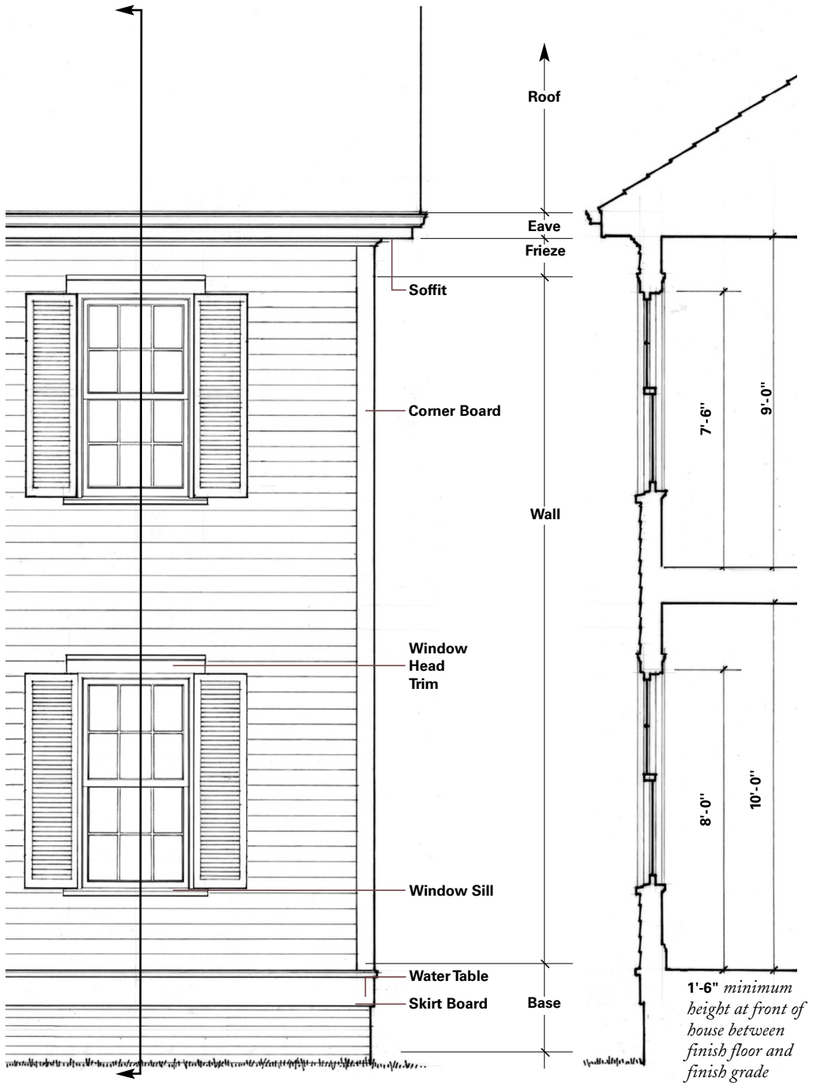
The depth of the main body of the house is recommended to be no more than 26 feet, unless otherwise approved. Complex forms and larger living spaces may be created by combining side and/or rear wings with the main body. Gabled or hipped dormers may be added to introduce light into half-story and attic spaces. The architectural character of the attached parts should match that of the main body.

Wall Section & Eave Details

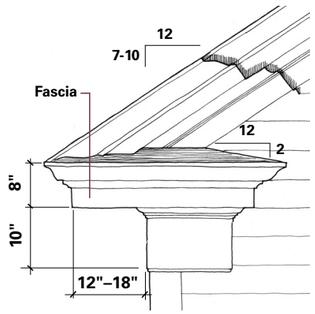
The first floor of the main body is typically set 2 to 3 feet above the finished grade. The floor-to-ceiling height on the first floor is typically 10 feet. For two-story houses, the second-story floor-to-ceiling height is a minimum of 9 feet.

The Highlands Classical is characterized by the vertical proportion of the window and door elements and well detailed classical eaves and cornices. The frieze below the soffit is typically small with profiled mouldings and dentils.

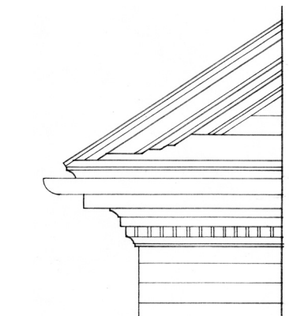
Partial Elevation and Section



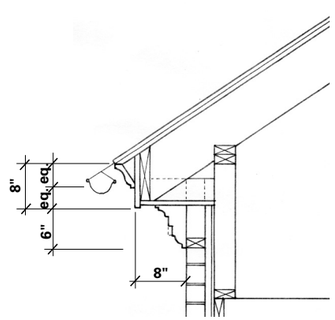
Eaves



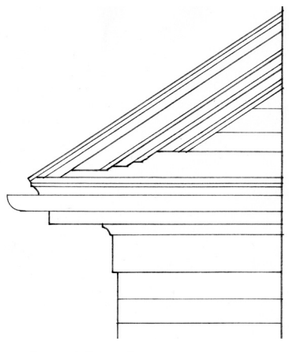
Boxed Eave Detail



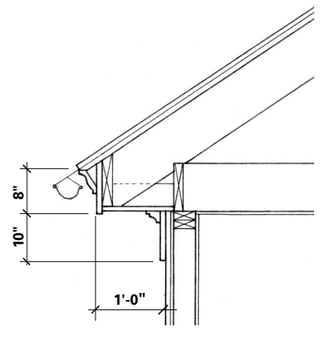
Boxed Eave Return



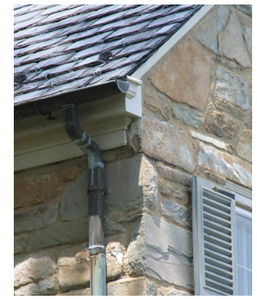
Boxed Eave Section



Boxed Eave Return

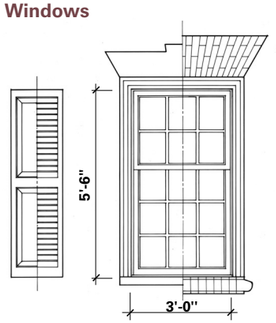


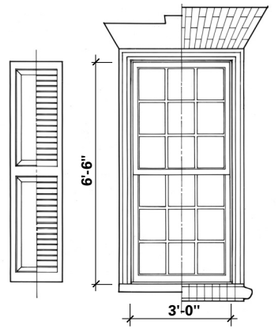
Boxed Eave Section

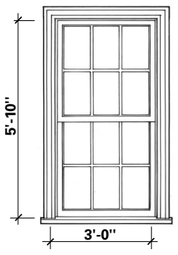


Highlands Classical

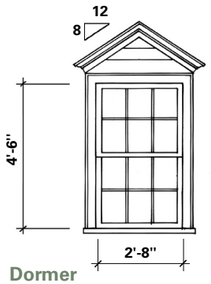
Windows



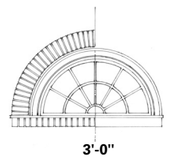




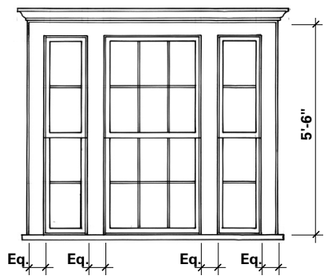
Special Windows



Dormer

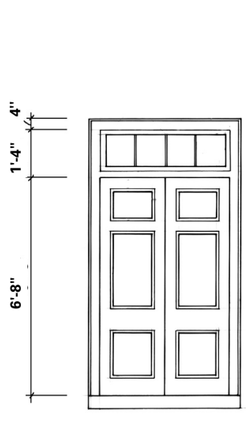


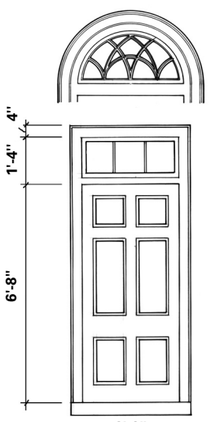
Accent Window

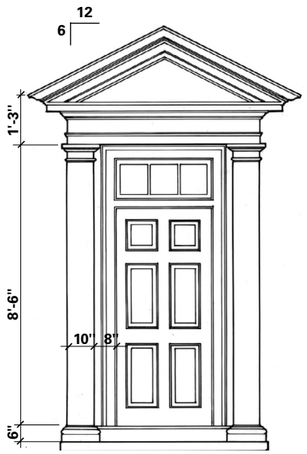


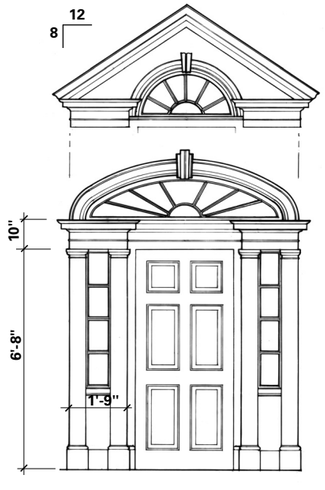
Triple Window

Doors

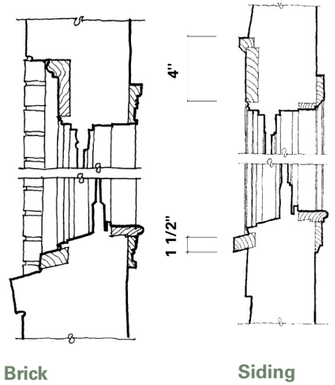








Typical Window Details



Brick

Siding

Windows & Doors

Windows

Windows are typically vertical in proportion. Two basic window muntin patterns are 9 over 9 or 6 over 6 on the first floor, 9 over 9, 6 over 9 or 6 over 6 on the second floor, double hung with wide trim. Stone or brick lintels are typical.

Special Windows

Special windows include arched accent windows in gabled ends, dormers with gable or hipped roof, and the triple window with broad center sash.

Shutters

Painted, operable shutters are common. Shutter styles can either be paneled or louvered.

Doors

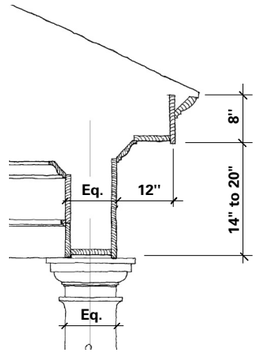
Doors include six- and eight-panel patterns, typically with sidelights and/or transom surrounds. Overhead garage doors are typically single width for each parking bay and designed to appear as traditional carriage house doors.

Trim

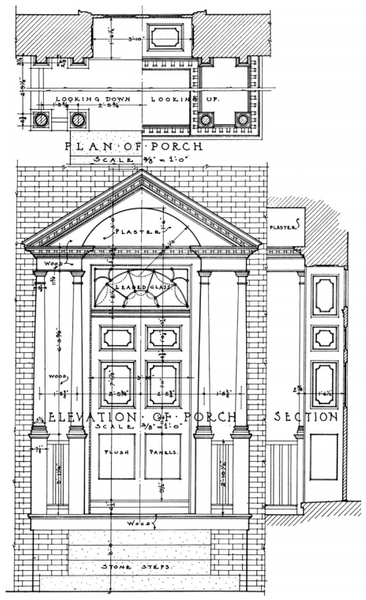
Windows and doors typically have 4-inch-wide profiled trim.

Highlands Classical

Partial Elevation and Section



Section A-A



Drawing and photograph of porch in New Bern, North Carolina from The White Pine Series of Architectural Monographs

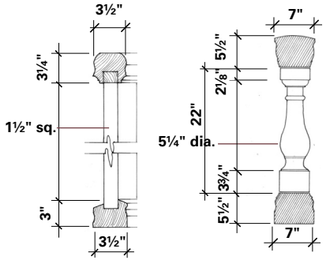
Porches & Terraces

Porches are typically 8 to 12 feet deep and one or two stories in height with either flat, shallow, gabled or hipped roofs. Column types include 8- to 12-inch-diameter Doric and Ionic order columns and 8- to 12-inch-square box columns. Balusters are typically square, often in a Chippendale pattern.

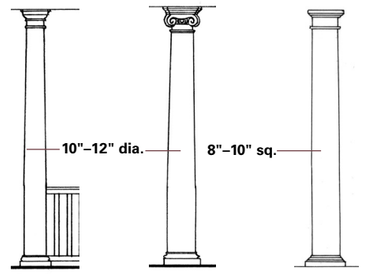
Column heights are typically 8 feet to 9 feet for a single-story porch. Temple front porches typically have classically proportioned entablatures and a 5 in 12 or 6 in 12 roof pitch. Shed or hip porches are typically 3 to 4 in 12 pitch.

Entry porticos and three-bay front porches are common on Highlands Classical houses. Entry porticos are typically 5 to 8 feet deep.

Rail Details



Column Types



Highlands Classical

Highlands Classical

Materials, Colors & Possibilities

Materials

Cladding: Smooth stucco, hand molded brick, random stone, bevel wood siding, fiber-cement siding; 6" exposure typical.

Roofing: Standing seam metal (or *5-V crimp* profile), sawn cedar shakes, or slate (including manufactured slate products), or approved composition shingles with a slate profile.

Windows: Wood or cellular PVC with traditional wood window profile, or aluminum-clad wood with brick or stone veneer facades only; true divided light or simulated divided light (SDL) sashes with traditional exterior muntin profiles (⅞ inches wide).

Trim: Stucco, stone, cast stone, wood, or composite millwork for built-up sections.

Columns: Architecturally correct Classical proportions; wood, fiberglass or composite material.

Railings: Milled wood or approved composite material; square balusters.

Porch Ceiling: Plaster, beaded-profile plywood or T&G wood boards.

Soffits: Smooth surface composition board, T&G wood boards, or fiber-cement.

Gutters: Half-round in primed or prefinished metal or copper.

Downspouts: Round in primed or prefinished metal or copper.

Shutters: Wood or composite; mounted with hardware.

Foundations: Brick or stone veneer, or stucco.

Chimneys: Stucco, brick or stone.

Note: Refer to the Homestead Preserve pre-approved inventory of appropriate components and materials for recommendations and suggestions.

Colors

Siding, Windows and Trim: White; other colors to be selected from the Homestead Preserve Color Palette.

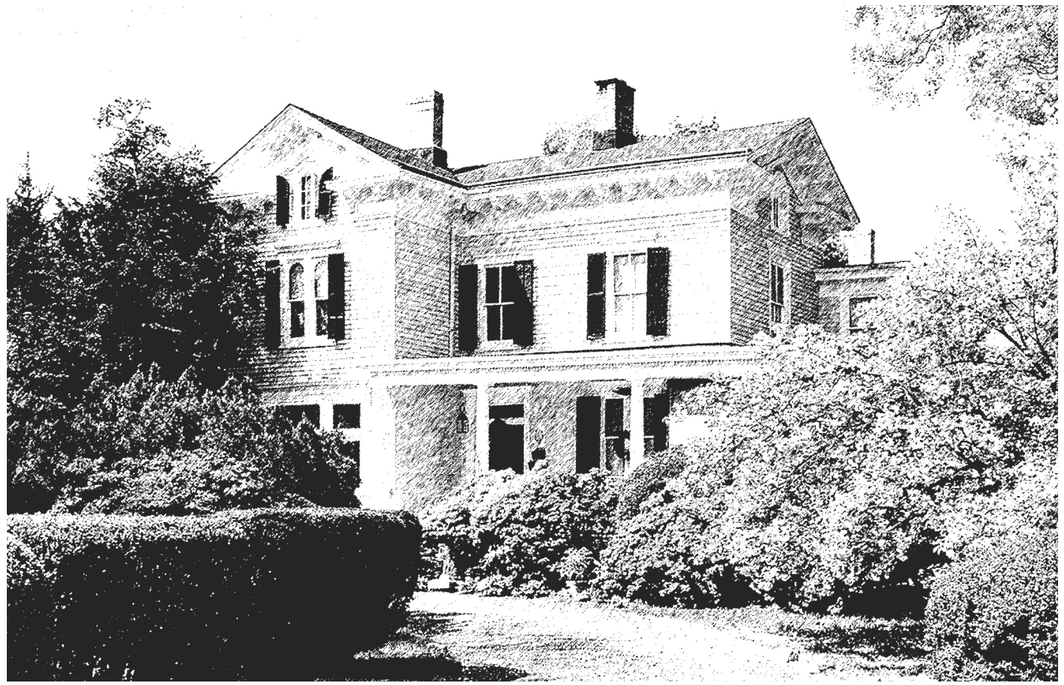
Roof Materials: Black, red or natural galvanized for metal; natural for cedar shakes; black, dark gray or a mixed gray/green palette for slate.

Gutters and Downspouts: Match trim color, or copper.

Shutters: Black, dark green or a color selected from the Homestead Preserve Color Palette.

Fencing: Wood or stucco; white or match the house body color; metal to be black or dark green.

Bracketed American farmhouse from The Architecture of Country Houses *by A.J.Downing*



Essential Elements of Highlands Farmhouses

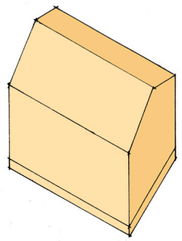
- Steeply pitched, front-facing gable roofs.
- Cut wood ornament on eaves and porches
- Clapboard, stone, brick or clapboard siding
- Vertical proportions for windows and doors
- Box bay and cutaway bay windows

History & Character

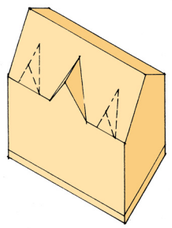
THE HIGHLANDS FARMHOUSE IS BASED on the traditional farmstead settlements found throughout western Virginia valleys and mountains. The building type evolved over time from utilitarian houses with simple, colonial house forms and symmetrical door and window compositions typically in three and five bay compositions. The Highlands Farmhouse emphasizes Carpenter Gothic detailing found in the eave detailing, porch types and vertical door and window proportions. Many of these houses were originally log construction that were reclad and renovated in the mid and late 19th century using Victorian era detailing found in pattern books and catalogs by Andrew Jackson Downing and others. This style is characterized by simple rectangular massing types with moderately pitched roofs often with accent gables featuring steeply pitched roofs. Queen Anne variations add a turreted corner. Another variation is the somewhat more stately Italianate detailing and massing which features simple volumes with shallow pitched roofs and more elaborately detailed cornices and eaves in the Classical tradition. Porch columns are often square with more robust proportions in the Italianate versions.

Highlands Farmhouse

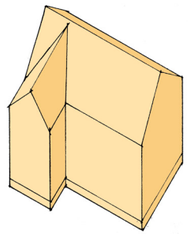
Massing Diagrams



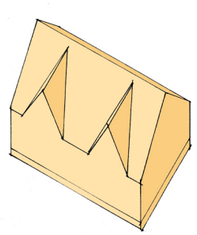
A *Two-story basic*



B *Two-story basic with front gable*

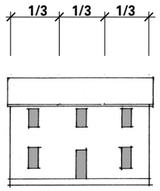


C *Two-story L-shaped*

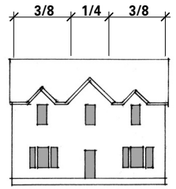


D *One-and-one-half-story side gable*

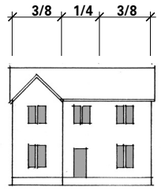
Window & Door Compositions



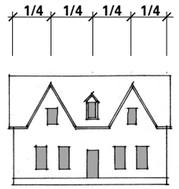
36'–40'



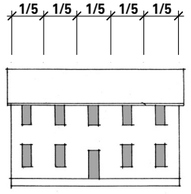
36'–44'



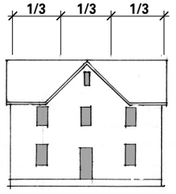
36'–40'



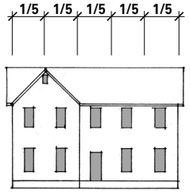
36'–44'



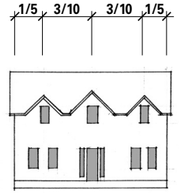
40'–50'



36'–44'

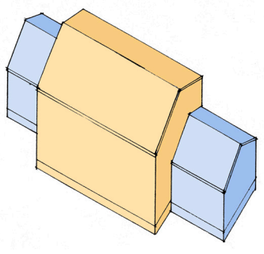


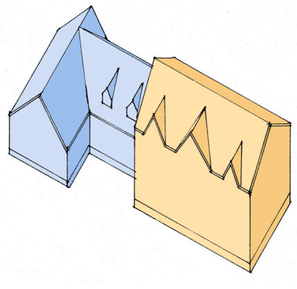
36'–40'

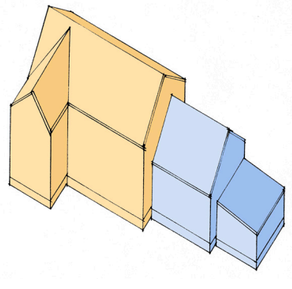


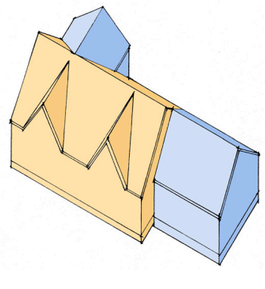
36'–44'

Possible Massing Combinations









Highlands Farmhouse

Massing & Composition

Massing

A Two-Story Basic
Side-gabled rectangular volume, often with a medium-pitched gable centered on the front. Italianate versions may be hipped and often have a square tower form centered on the front. Main gable roof pitch is typically 5 to 7 in 12. Italianate versions may be as shallow as 3 in 12. Front gable roof pitch is 7 to 10 in 12. Partial, full or wrapping one-story porches are common. Two-story side and rear porches are also permitted.

B Two-Story Basic with Front Gable
Side-gabled rectangular volume, often with a steep-pitched gable facing centered on the front. Main gable roof pitch is typically 8 to 12 in 12 and front gable roof pitch is 10 to 14 in 12. Partial, full or wrapping one-story porches are common. Two-story side and rear porches are also permitted.

C Two-Story L-Shaped
Two-story rectangular volume with pitched roof and a front gable which can extend beyond the front facade. Front gables are generally limited to 18 feet in width. The roof pitch is typically 8 to 10 in 12 for the side gable and 10 to 14 in 12 for the front facing gable. Hipped roof Queen Anne versions may have an octagonal or round turret engaged at the front corner opposite the front gable. A one-story full front or wraparound porch with shed or hip roof is most common.

D One-and-One-Half-Story Side Gable
One and one half-story rectangular volume with steeply-pitched dormers facing the front. Main gable roof pitch is typically 8 to 10 in 12 and front dormers are 14 to 20 in 12. Partial or full porches are common.

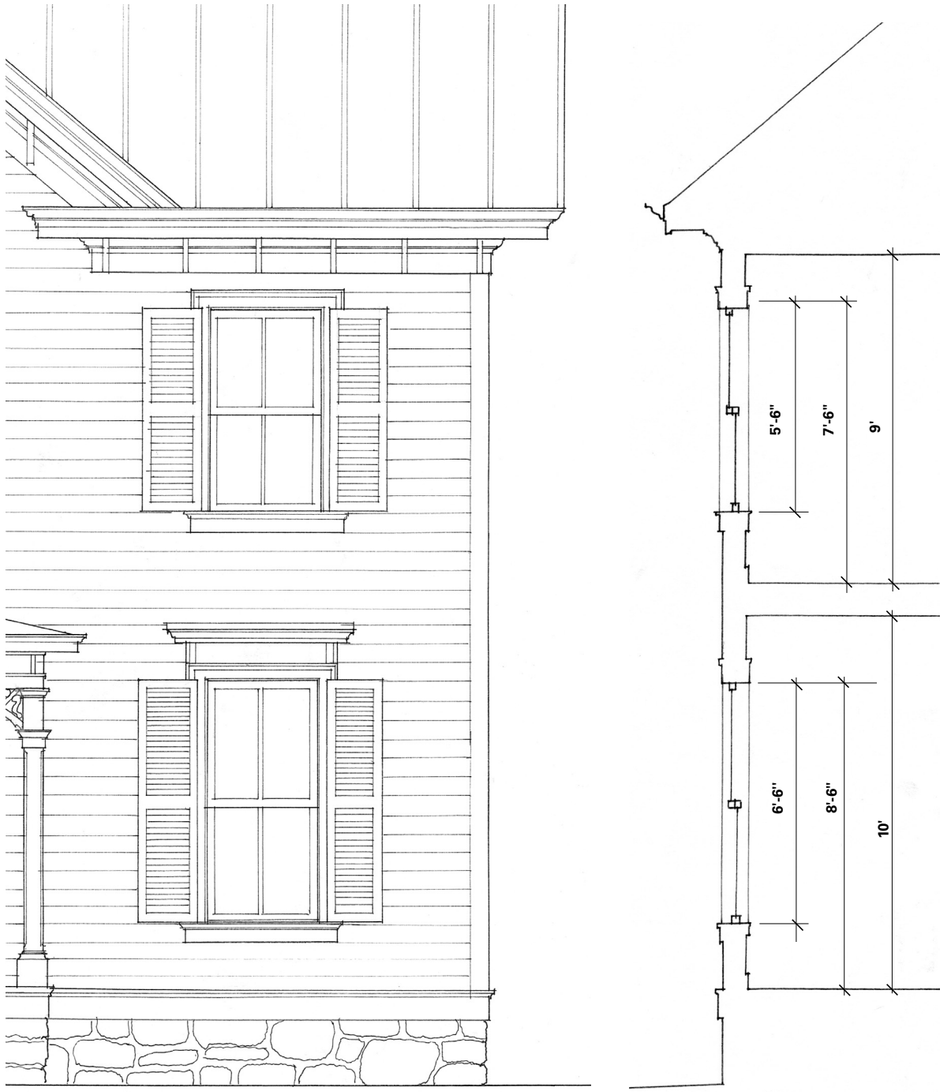
Facade Composition

Highland Farmhouse facade composition is characterized by a somewhat symmetrical and balanced placement of doors and windows. Windows and groupings of windows align vertically between floors, sometimes changing from singles to pairs or groups from one floor to the next. Entrance doors are generally located in the corner of narrow houses and the center of wide houses.

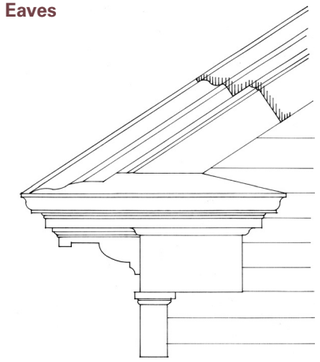
Combinations

The depth of the main body of the house is recommended to be no more than 26 feet, unless otherwise approved. Complex forms and larger living spaces may be created by combining side and/or rear wings with the main body. Gabled dormers may be added to introduce light into half-story and attic spaces. The architectural character of the attached parts should match that of the main body.

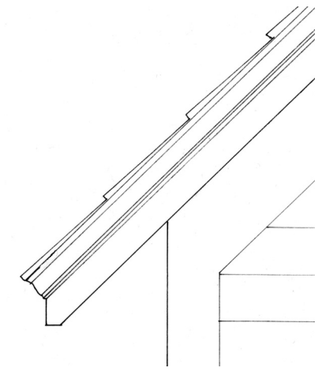
Partial Elevation and Section



Eaves



A Boxed Eave Return



Raked Soffit

Overhanging Eave at Bay Window

Wall Section & Eave Details

Roof

The roof pitch on most Highland Farmhouse houses vary from 8 to 14 in 12. Slate, shingles and metal are appropriate roofing materials.

Eaves

Two eave types define the Highland Farmhouse, one more formal than the other.

A Boxed eave, with frieze, the more formal option; with or without brackets which are either horizontal or vertical in proportion.

B Boxed eave with sloped soffit, often hipped; at gables, the rake features an overhang with simple vergeboard.

Eave profiles have a 12- to 16-inch frieze board either touching/co-planar with, or at least 8-inches above the window head trim. Eave returns should have metal flashing back to the wall at a maximum slope of 2 in 12.

Wall

For one-story buildings, the minimum floor to ceiling height is 10 feet. For buildings greater than one story, the minimum floor-to-ceiling height is 10 feet for the first floor and 9 feet for the second floor. Windows head heights should be 8 feet 6 inches for the first floor and 8 feet for the second floor. Corner boards should be no less than nominal ¾ by 6 inches.

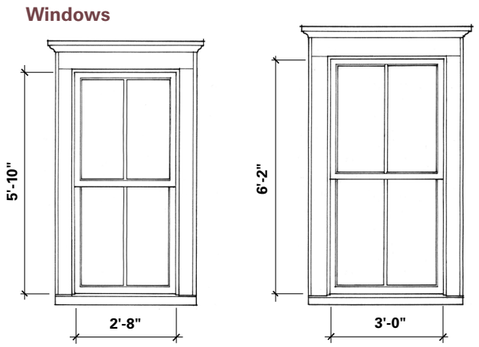
Base

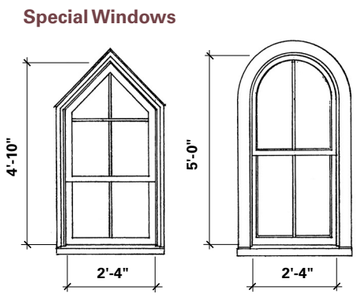
The first floor of the Highlands Farmhouse is set one-and-one-half feet above the finished grade. Highland Farmhouses occasionally have an 8-inch skirt board. When foundation vents are used, they should be centered under windows.

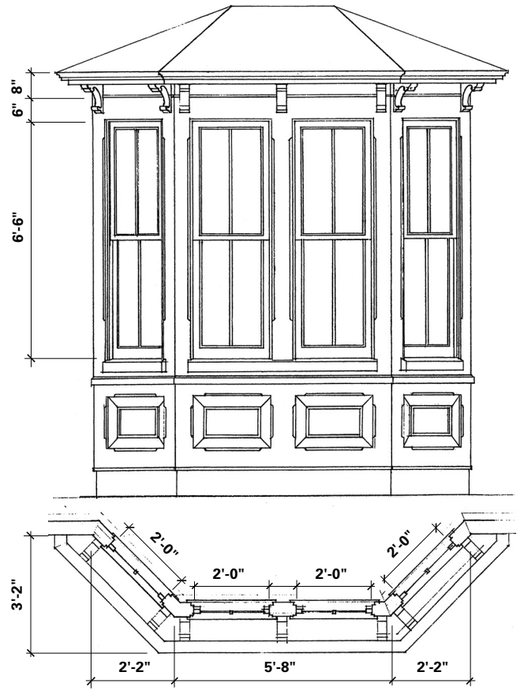
Traditional Victorian gable on a clapboard house

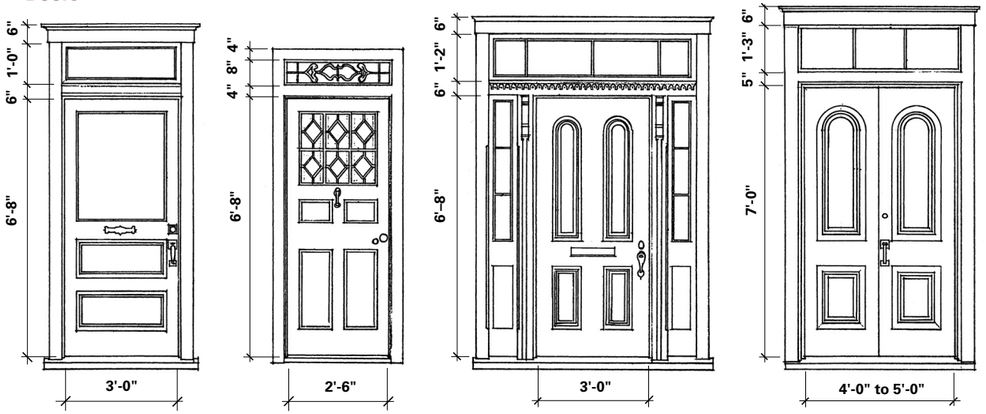
Victorian gable on a stone house

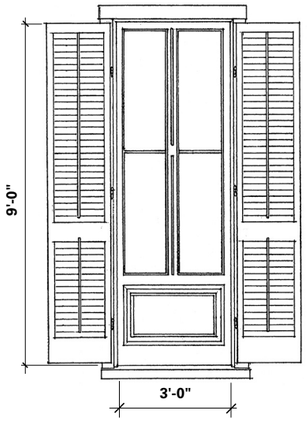
Highlands Farmhouse

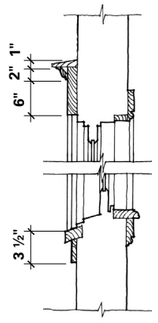












Windows & Doors

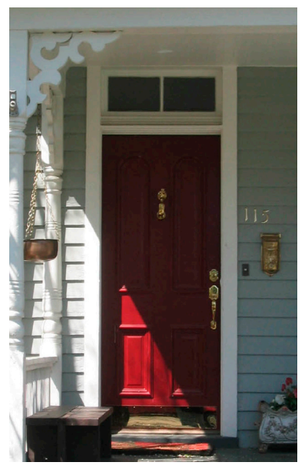
Windows
Windows are typically vertical in proportion and have a 2 over 2 muntin pattern. Panes are always taller than they are wide. Some houses may have windows with rounded upper sashes. Standard windows are double hung.

Special Windows
Highlands Farmhouses feature round top windows, dormers, box and angled bay windows. Bay windows must project a minimum of 8 inches from the main structure. Bay windows have a continuous base to the ground, and two story bays are common. Paired or bay windows are also used in front of both massing types.

Doors
Doors on Highlands Farmhouses are vertical in proportion, such as two- and four-panel doors. The maximum width of a pair of double doors is 5 feet for doors at least 8 feet tall, and 4 feet for shorter pairs of double doors, unless otherwise approved. Overhead garage doors are typically single width for each parking bay and designed to appear as traditional carriage house doors.

Trim
Windows and doors have 6-inch trim with a simple backband profile. Victorian window and door trim carries a decorative crown and cap above; windows may feature an ornate hood. As an Italianate option, trim surround may be treated as a segmental arch.

Shutters
The use of paneled or louvered shutters adjacent to single windows and fully glazed doors is encouraged. If shutters are installed, they must be operable (or appear to be operable), and sized and mounted to cover the adjacent window or door when closed.

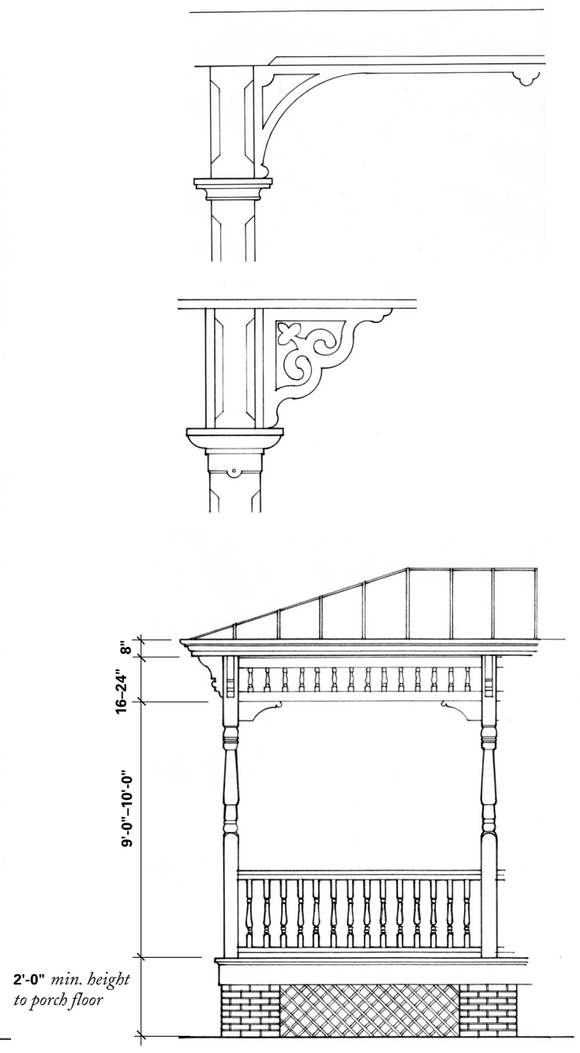


Highlands Farmhouse

Portico and Porch Elevations

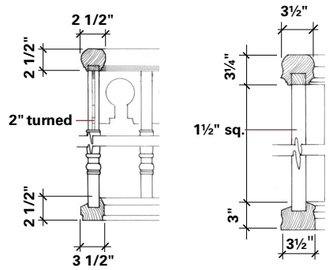
Partial Porch Elevation

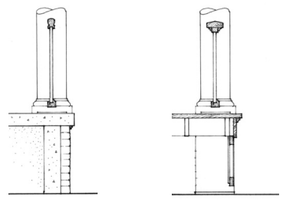
Typical Wood-Cut Details



Porch with Side Steps

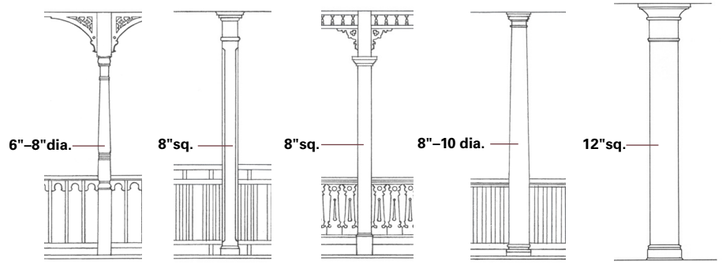
Rail Details





Masonry | Frame

Column Types



Turned | Chamfered Square | Square | Slender Doric | Italianate Boxed

Porches

Porch Roofs & Eaves

Porches are typically 8 to 12 feet deep and one or two stories tall with flat, shed, or shallow hipped roofs. Shed or hip porches have a 2 in 12 to 4 in 12 pitch. Exposed rafter tails are typically 2 x 8 and occur 14 to 16 inches on center. Entablatures are generally classically proportioned and detailed.

Columns & Railings

Column types include turned columns from 6 to 8-inch-square stock, 8-inch-square or chamfered posts, and 8- to 10-inch-diameter Doric columns. Some Italianate porches have 12-inch square box columns. First floor columns are 9- to 10-feet tall, while second floor columns are 8- to 9- feet tall. Turned or square balusters are spaced no more than 4 inches apart. Porch bays should be vertically proportioned. Flat cut ornamental balusters are also encouraged, with square or turned columns. Square pattern lattice is used as infill between piers at the foundation.

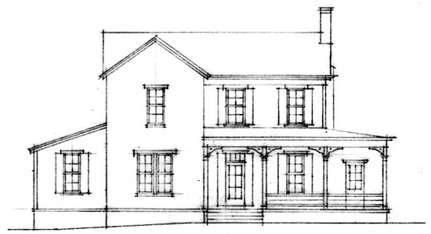
Brackets

Brackets range from simple designs cut from boards, to more elaborate turned wood or jigsaw-cut openwork. Brackets are a minimum of 2 inches thick.

Porch Location

Full front porches are encouraged on Highlands Farmhouses. Porches can be used to wrap the corner of a house, or fill in the void created by an **L**-shaped plan. The minimum porch depth is 8 feet.

Highlands Farmhouse



Highlands Farmhouse

Materials, Colors & Possibilities

Materials

Cladding: Stucco, brick, cut stone, wood or fiber-cement siding.

Roofing: Standing seam metal (or '5-V crimp' profile), slate (including manufactured slate products), or approved composition shingles with a slate profile.

Windows: Wood or cellular PVC with traditional wood window profile, or aluminum-clad wood with brick or stone veneer facades only; true divided light or simulated divided light (SDL) sashes with traditional exterior muntin profiles (⅞ inches wide).

Trim: Stucco, stone, cast stone, wood, or composite millwork for built-up sections.

Columns: Turned or square, or tapered round with architecturally correct Classical proportions, in wood, fiberglass or composite material.

Railings: Milled wood or approved composite material. Straight or turned balusters.

Porch Ceiling: Plaster, beaded-profile plywood or T&G wood boards.

Soffits: Smooth surface composition board, T&G wood boards, or fiber-cement.

Gutters: Half-round in primed or pre-finished metal or copper.

Downspouts: Round in primed or pre-finished metal or copper.

Shutters: Wood or composite; mounted with hardware to appear operable.

Foundations: Brick or stone veneer.

Chimneys: Stucco, brick or stone.

Note: Refer to the Homestead Preserve pre-approved inventory of appropriate components and materials for recommendations and suggestions.

Colors

Siding, Windows and Trim: White; other colors to be selected from the Homestead Preserve Color Palette.

Roof Shingles: Typically black or dark gray.

Gutters and Downspouts: Match trim color or copper.

Shutters: Black, dark green, or a color selected from the Homestead Preserve Color Palette.

Fencing: Wood is to be white; metal is to be black or dark green.

Cottage from Downing's The Architecture of Country Houses

Essential Elements of the English Romantic

- Rectangular massing with simple roof planes
- Broad expanses of wall with few door and window penetrations
- Low eaves with modest overhang
- Apparently random window and door locations
- Simple detailing

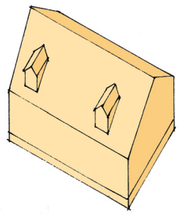
English Romantic

History & Character

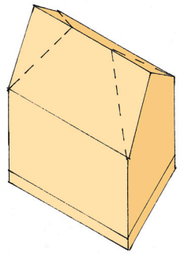
ENGLISH COUNTRY HOUSES ARE BASED on the rural cottages found throughout the English countryside. This architecture developed in response to the needs of the small farm or manor. The simple forms of these houses respond to the natural environment and the availability of local building materials, principally stone, brick and heavy timber framing. Massing is characterized by steeply pitched roofs which were originally thatch and over time were reclad with slate shingles. Many houses will have simple rectangular massing forms with gable or hipped roofs. Many houses have a cross gable and many have slightly projecting second floors either continuous across the front facade or as gable end bays. Originally, the rural houses included spaces for animals. This type evolved over time expanding living spaces with animals housed in a series of out buildings. The evolution of this house type features additions that 'telescope' from the main body. Many of the early houses had large open hearths and multiple chimneys. The heavy masonry walls are punctuated with broad proportioned windows in a somewhat freeform pattern. Sash windows are combined in the same facade with casement windows that are paired or in triple combinations.

The roots of the English Cottage and Country House can be found in Bath County. The simple forms of rural cottages or the later country houses have a direct link to this original form.

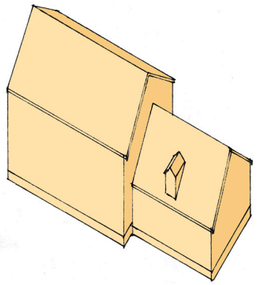
Massing Diagrams



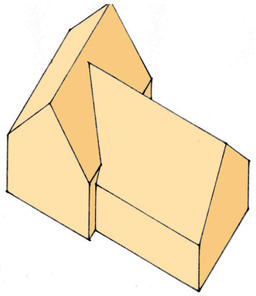
A *One- or one-and-one-half-story basic*



B *Two-story basic*

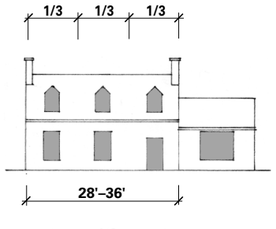


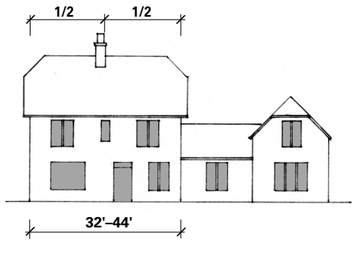
C *Two-story telescoping*

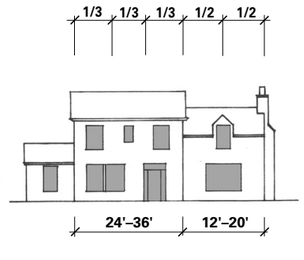


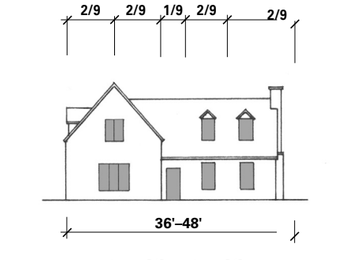
D *One-and-one-half- or two-story cross gable*

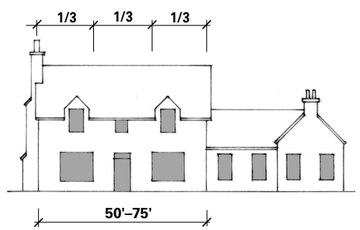
Window and Door Compositions

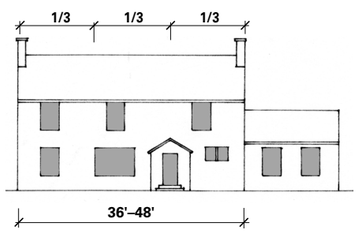


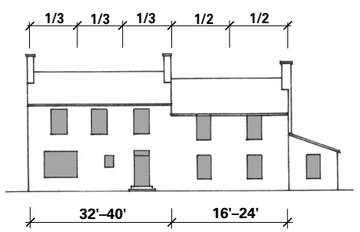


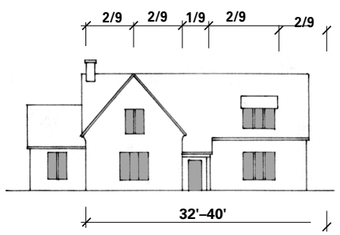




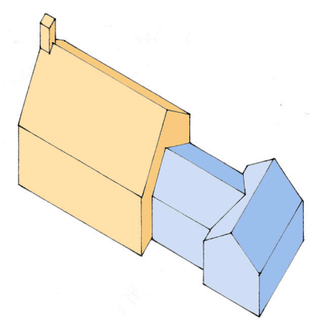


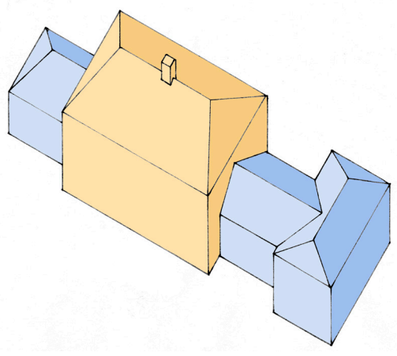


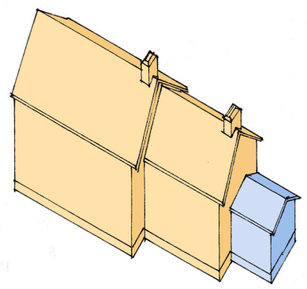


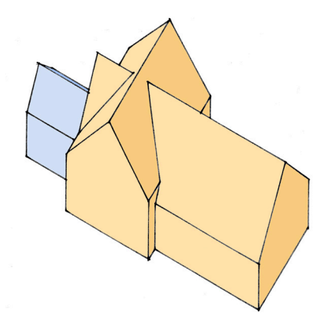


Possible Massing Combinations









English Romantic

Massing & Composition

Massing

The English Romantic style consists of multiple volumes combined with varying eave heights, deeply pitched roof lines, and simple, unadorned chimneys.

A One- or One-and-One-Half-Story Basic

Two-story rectangular box with gable or hipped-roof form. Dormer accents can be gable, hip, or shed-roofed. A two- or three-bay facade composition is typical.

B Two-Story Basic

Two-story main body, gable or hipped roof, ridge parallel to street. Roof pitch does not usually exceed 6 to 12. The main body is typically "book ended" by chimneys.

C Two-Story Telescoping

Two-story main body, gable or hipped roof volume paired with either a two-story mass having a lower eave height or a one-and-one-half-story mass. Often the larger mass has a higher floor level than the other volumes.

D One-and-One-Half- or Two-Story Cross Gable

One-and-one-half-story main body with roof ridge parallel to the street, and a one-and-one-half- or two-story front-facing gable element anchoring one end to form a **T**. Both massings can be in the same plane to form a gable-**L**. Small porches are often nestled at the intersection of the two forms.

Facade Composition

English Romantic facade composition is characterized by a balanced placement of doors and windows, although slight variations usually occur to accommodate the floor plan. Entrance doors can be located in the center of the composition, off center, or at the end. Windows are typically arranged in a combination of single openings, pairs and/or strips of three or more, and often do not align vertically from floor to floor. Chimneys are typically located on the end walls.

Combinations

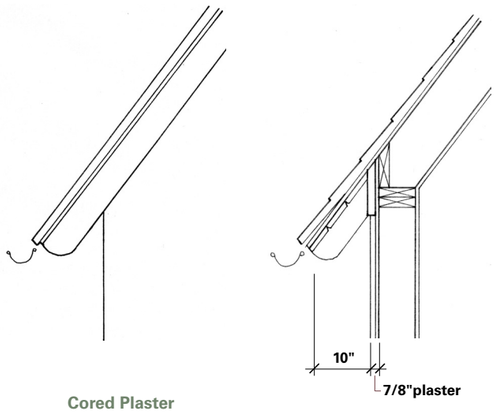
The character of these houses is enhanced by the addition of wings that, through massing or detailing, appear to have been added over time. Often, the ultimate assembly of pieces is informal and asymmetrical. The architectural character of the attached parts should be in keeping with the character of the main body but can vary in material. The depth of the main body of the house is recommended to be no more than 26 feet, unless otherwise approved. Most wings and bodies are one room deep; wings are from 12 to 18 feet in width.

There is a wide variety of roof forms: gable, hip, 'clipped' gable, and shed. In selective locations, the roof forms may be intermixed.

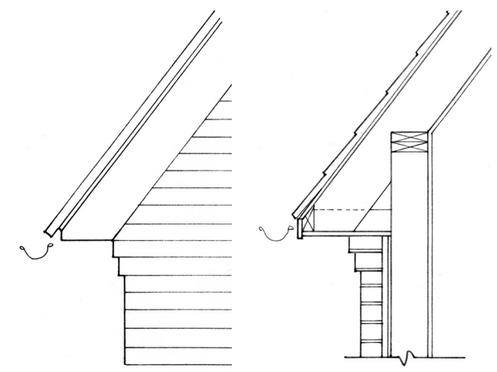
In gable-ended massing types, roof planes are primarily interrupted by gables (same pitch as roof) and accented with small dormers. Gable ends generally have no eave/overhang.

Partial Elevation and Section

Eaves



Cored Plaster



Brick

Wall Section & Eave Details

Vertical Section

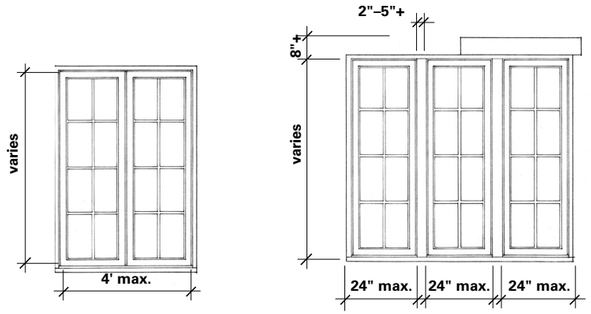
The first floor of the main body is generally on grade – elevated just enough to keep rainwater out. The floor-to-ceiling height on the principal floor is typically 9 feet. The secondary floor-to-ceiling height is 8 feet.

Eave Details

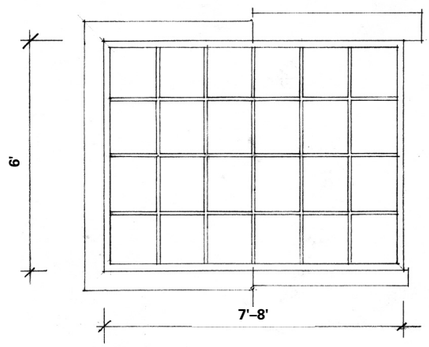
Overhang/eaves are generally shallow (0 to 10 inches). Eaves may be constructed of either building wall material (plaster, brick, stone) or wood.

English Romantic

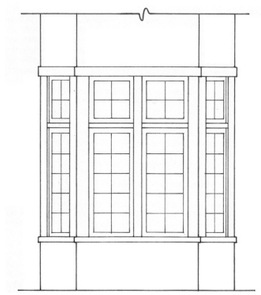
Windows



Special Windows

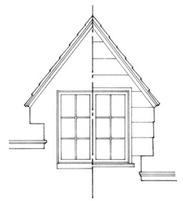


Picture Window



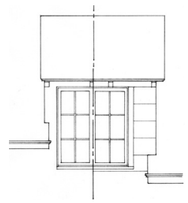
Bay Window

Dormer Types



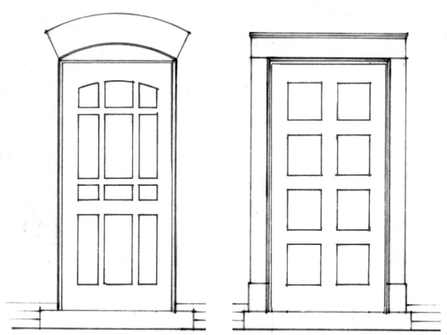
Gable

Hip



Shed

Doors



English Romantic

Windows & Doors

Windows

Tall, relatively narrow casement windows in groups of two, three, four, or five separated by posts or mullions. Double-hung windows also occur in singles or groups of two or three, separated by posts. Double-hung windows typically have a 6 over 6 muntin pattern. The size of windows should diminish with each succeeding story. All windows shall have a divided-light appearance.

Special Windows

Special windows include bay windows, oriel windows, dormer windows, and small accents. Bays are constructed of a light material such as wood, supported by corbeling or brackets, and composed of casement windows with a divided-light appearance. Dormers should be the shed or gabled type, typically with paired or tripled casement windows. Small decorative accent windows are encouraged, especially in service rooms, powder rooms, closets, and halls.

Shutters

Plank/board or panel style shutters are encouraged as an accent. Wrought iron lift-off hinges, shutter dogs, and latches are also encouraged. Shutters are not permitted at half-timbered areas.

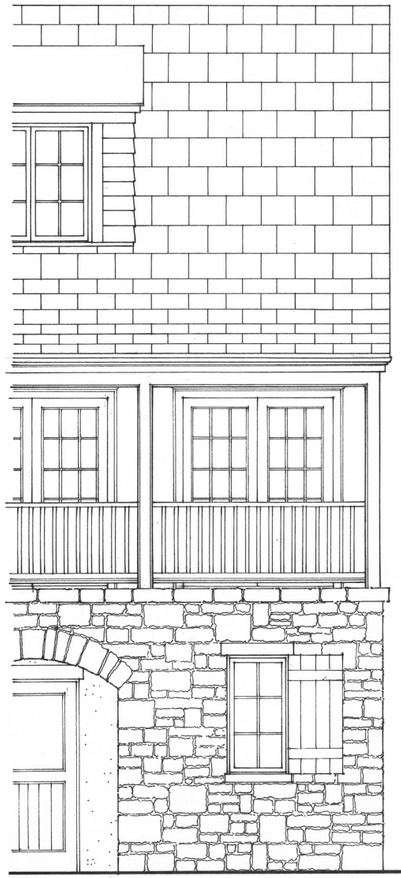
Doors

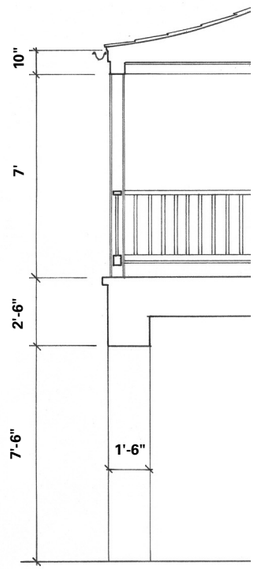
Plank/board or panel style single door, often with a round or arched top and wrought iron accents. As with windows, doors should be recessed as deeply as possible. Cast stone detailing around doors is encouraged. Plaster surrounds are acceptable. Overhead garage doors are typically single width for each parking bay and designed to appear as traditional carriage house doors.

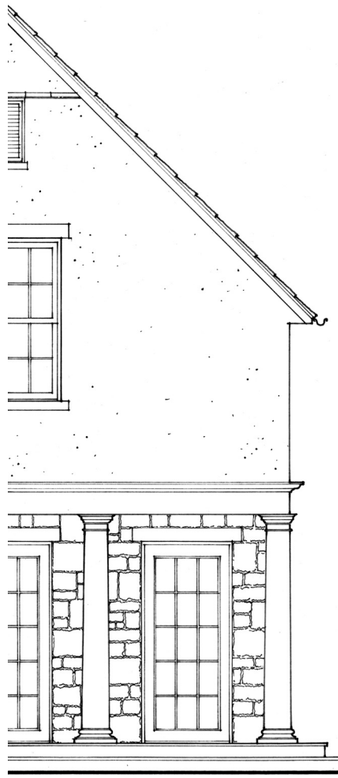
Trim

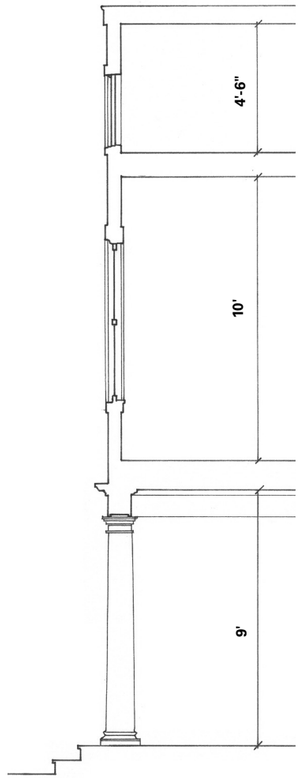
Ornamental cast stone or wood lintels and sills are encouraged at both masonry window and door openings. Stucco should typically return to the window – eliminating the need for most trim.

Partial Elevations and Porch Sections









Porches & Chimneys

Porches

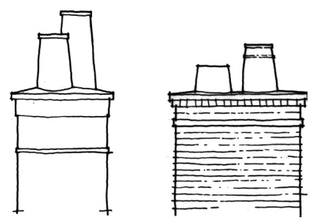
Although not a featured element of the English Romantic style, porches and portes cochère were common on larger houses. Porches should be understated and integrated with building mass, and focused at entrances and side wings. They are typically 6 to 10 feet deep. and feature post-and-beam construction, shed roofs, and rough-sawn clapboard siding in gables. Arched braces between posts and beams are encouraged. Covered patios and loggias may be constructed of either post-and-beam or masonry.

Chimneys

Chimneys are a key element in the composition of the elevation. They should appear large and asymmetrically massed. A wide variety of profiles at the top is encouraged.

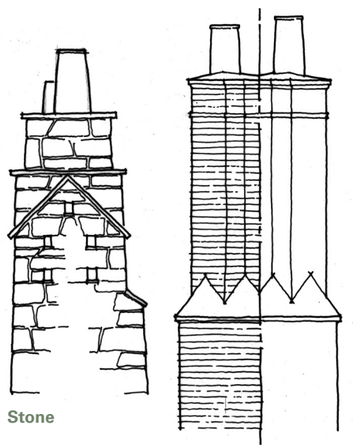
Entrance and porch

Chimney Caps



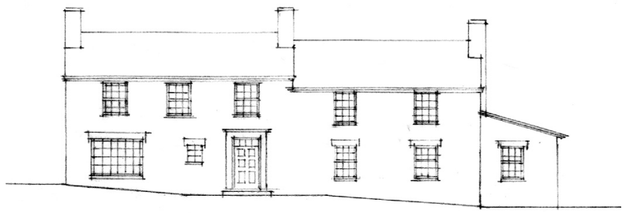
Stucco Brick

Chimney Configurations



Stone Brick / Stone Plaster

English Romantic



English Romantic

Materials, Colors & Possibilities

Materials

Cladding: Stucco with handmade/formed appearance (no skip-trowel or similar and no plaster beads), pebble-dash stucco, brick, or stone.

Roofing: Flat clay tile, cedar shakes, slate (including manufactured slate products), or standing seam metal.

Windows: Wood or cellular PVC with traditional wood window profile, or aluminum-clad wood with brick or stone veneer facades only; true divided-light or simulated divided-light (SDL) sashes with traditional exterior muntin profiles (7/8" wide).

Columns: Square posts or tapered round Doric with architecturally correct proportions; wood, fiberglass or composite material.

Trim: Stucco, stone, cast stone, brick, wood, or composite millwork for built-up sections.

Porch Ceiling: Plaster or plank-and-beam.

Eaves: Wood sheathing with 2x, 3x, or 4x rafter tails; plaster molded and corbelled brick eaves are also permitted.

Gutters: Half-round in primed or pre-finished metal or copper.

Downspouts: Round in primed or pre-finished metal or copper.

Shutters: Plank/board or panel type; wood or composite; mounted with hardware.

Foundations: Stucco, brick, or stone veneer.

Chimneys: Stucco, brick, or stone.

Note: Refer to the Homestead Preserve pre-approved inventory of appropriate components and materials for recommendations and suggestions.

Colors

Stucco: White or color as selected from the Homestead Preserve Color Palette.

Roof Materials: Red, red/brown or green for clay tile; natural for cedar shakes; green/gray, green/brown, or black for slate; black for standing seam metal.

Windows: White or butter yellow.

Trim / Shutters: Dark stain or color as selected from the Homestead Preserve Color Palette.

Gutters and downspouts: Match color of eave, stucco or trim.

Arts & Crafts house on a sloping site as illustrated in Comstock's Cottages, *1890*

Mountain Arts & Crafts house

Essential Elements of the Highlands Arts & Crafts

- Continuity of roof and wall surfaces
- Deep, broad porch elements with expressive structural components
- Strong horizontal lines such as eaves, water tables and window heads
- A mixture of materials such as stone, shingles and siding in horizontal bands
- Asymmetrical window and door compositions

History & Character

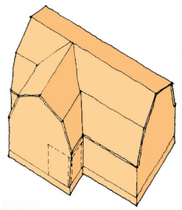
HIGHLANDS ARTS & CRAFTS HOUSES are derived from the uniquely American expression of architectural design for country houses termed *Shingle Style,* that originated in the northeastern region – Massachusetts, Rhode Island, Connecticut, New York, and Maine – from about 1878–1916. Architects began to look to early American Colonial houses that were simple, wood-shingled forms added onto in an organic way over time. The intention was to develop a uniquely American style for country houses and cottages that reinforced the notion of a more informal, leisure use. Notable practitioners included McKim, Mead and White, Henry Hobson Richardson, and the Boston firms of Peabody & Stearns, Arthur Little, and Bruce Price. Early cottage settlements, such as Tuxedo Park in New York, serve as a good example of *Shingle Style* architecture.

In the Allegheny Highlands, dependence on the local sawmill for building materials, use of locally available stone and hand sawn shingles, and the widespread application of post and beam construction led to a distinct Appalachian variant of the *Shingle Style* which reflected the hand craft base of the builders.

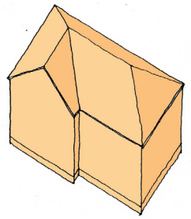
A second source of influence for this style is the Arts & Crafts movement that began in England around 1860. With its use of natural materials, expressive structural elements and craft or artisan materials and furnishings, it influenced the American architecture community in the late 1800s and early 1900s.

Highlands Arts & Crafts

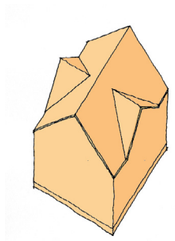
Massing Diagrams



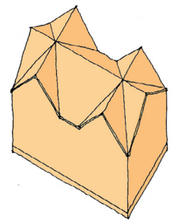
A *Cross-gambrel*



B *Gable L*

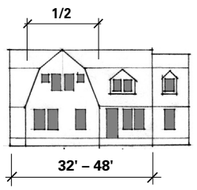


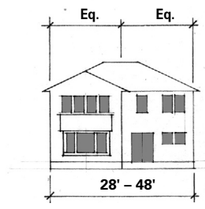
C *Front gable*

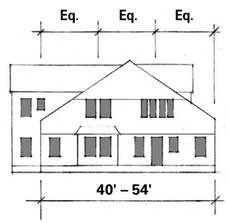


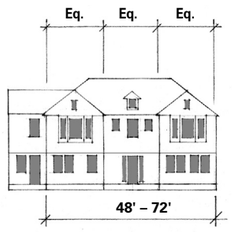
D *Double gable*

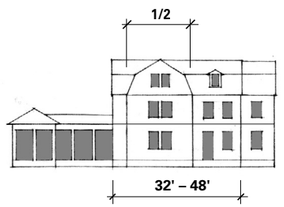
Window and Door Compositions

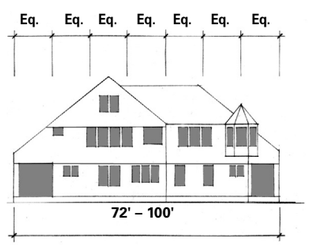


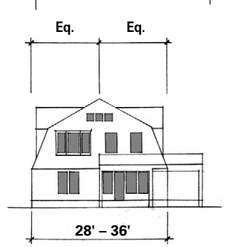


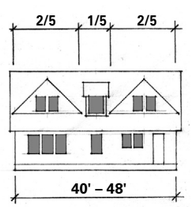




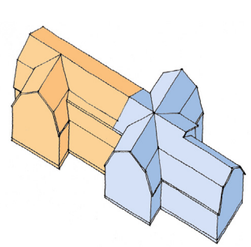


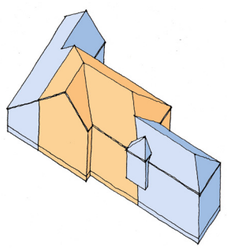


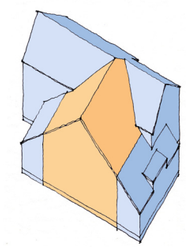


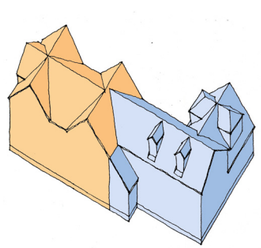


Possible Massing Combinations









Massing & Composition

Massing

A Cross-Gambrel
L- or T-shaped volume with a deep gambrel roof containing a second or third story. Front-facing gambrel end acts as the defining element. Integral porches are commonly cut into the front-facing gambrel volume.

B Gable L
L-shape volume with a front-facing gable end. Often an in-line gabled porch or wing added to the front leg of the L to create an asymmetrical form. Porches may also be located between the wings of the L.

C Front Gable
Rectangular volume with a broad triangular gable or gambrel facing forward. Integral front porch that ranges from half to the full length of the front facade is typical.

D Double Gable
Rectangular volume with a central bay flanked by two front-facing gable ends. Full-facade porches nearly always accompany this massing type.

Facade Composition

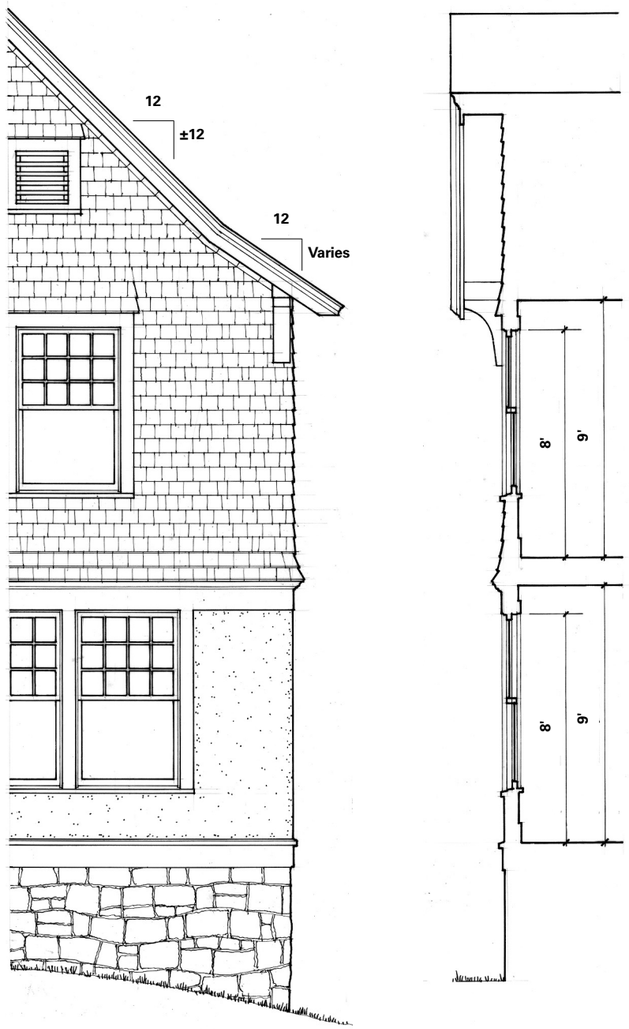
The Highlands Arts & Crafts style is characterized by an orderly yet asymmetrical facade composition. Windows are typically arranged in a combination of single openings, pairs and/or strips of three or more, and often do not align vertically from floor to floor. Horizontal regulating lines typically occur at the floor levels. Porches typically penetrate the house volume and are sheltered by the gable or gambrel roof.

Combinations

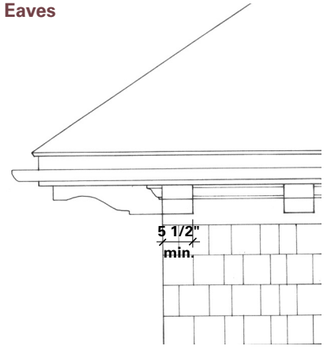
The depth of the main body of the house is recommended to be no more than 26 feet, unless otherwise approved.Complex forms and larger living spaces may be created by combining side and/or rear wings with the main body. Gabled or shed dormers may be added to introduce light into half-story and attic spaces. The architectural character of the attached parts should match that of the main body.

Highlands Arts & Crafts

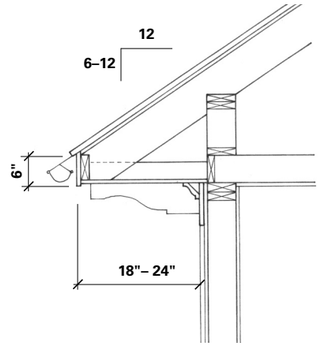
Partial Elevation and Section



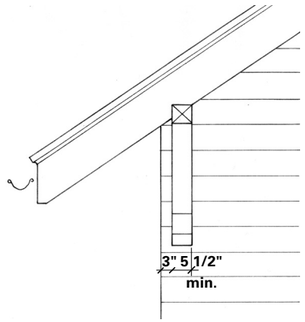
Eaves



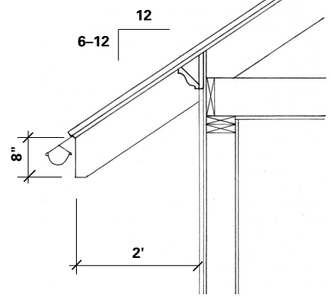
Boxed Eave Return Detail



Boxed Eave Section

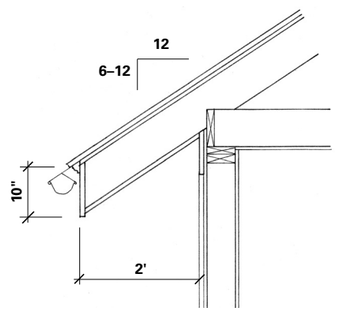


Open Eave Rake Detail



Open Eave Section

Sloped Boxed Eave Rake Detail



Sloped Boxed Eave Section

Wall Section & Eave Details

The first floor of the main body is typically set between two and three feet above the finished grade. The floor-to-ceiling height on both the first and second floor is 9 feet.

Two eaves are characteristic of the Highlands Arts & Crafts style: a shallow boxed eave with a narrow profiled fascia, and a deep overhanging eave with exposed rafter tails or sloped soffit. These types of eaves are pictured here. The Highlands Arts & Crafts may also have a simplified Colonial Revival-era character. This is achieved by using a broad, flat eave with shallow brackets on the house and the porch in concert with Classical Doric or Tuscan order columns.

Two-story main bodies are often characterized by either a change of material, trim application, or change of color between the first and second floor, near the sill line of the second-floor windows or the head of the first-floor windows. Stone, brick or stucco veneered foundation walls are sometimes exposed a full story above grade on steeply sloping sites.

Boxed eave

Open eave

Highlands Arts & Crafts

Windows & Doors

Windows

Windows on the first floor are usually arranged in combinations of single openings, pairs and/or strips of three or more, sometimes including large picture windows. Windows on the second floor may be single, paired or triples. Often special accent windows are incorporated into the composition. Window pane patterns include 6 over 1, 12 over 1 and diamond patterned top sash. Dormer windows are commonly ganged together.

Special Windows

Special windows include angled bay windows, picture windows and small, square and rectangular accent windows. Picture windows are typically paired with sidelights and transoms with a special pane pattern or stained glass upper sash.

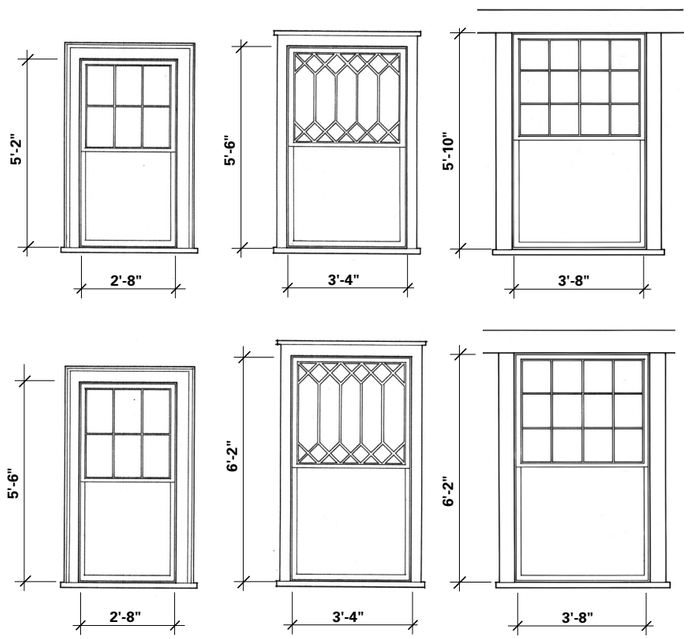
Doors

Highlands Arts & Crafts doors are often stained wood with either wood plank design or panel doors with integrated transoms. Doors may have decorative, beveled glass sidelights and transoms in Arts & Crafts patterns. Overhead garage doors are typically single width for each parking bay and designed to appear as traditional carriage house doors.

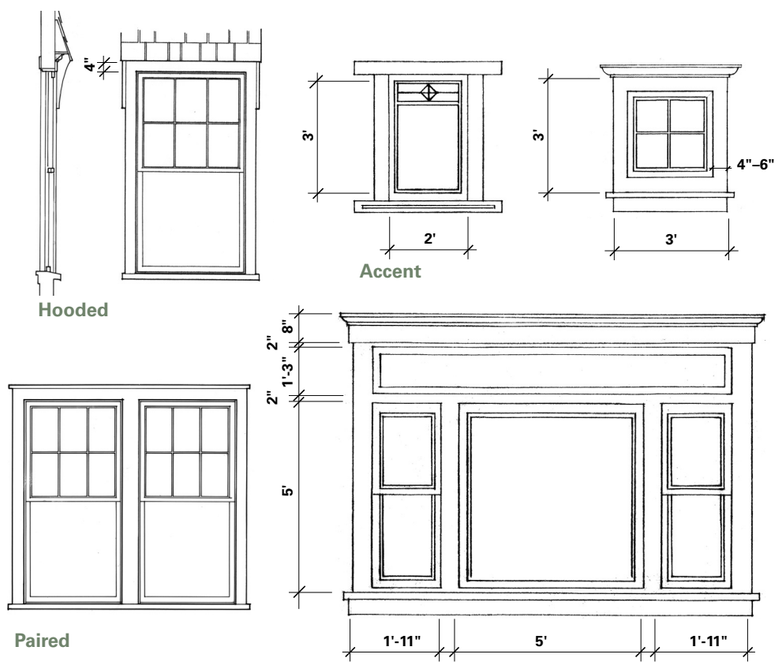
Trim

Standard trim is a flat board, typically 5¼ inches wide, with a 2x head that extends 1 inch beyond the jamb trim to the sides, and a 2x sill that extends ½ inch. A more formal casing with a backband can also be used.

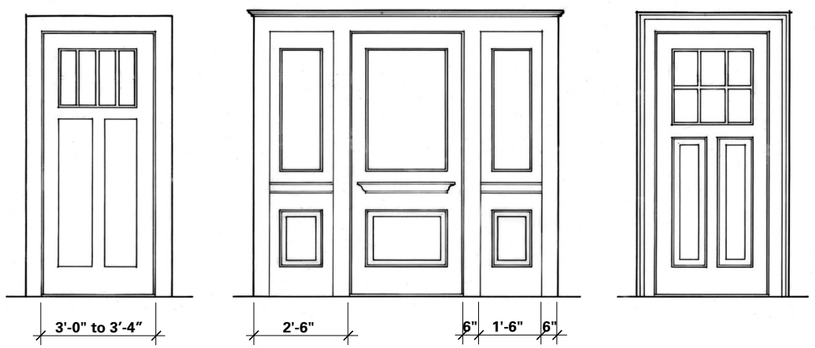
Windows



Special Windows

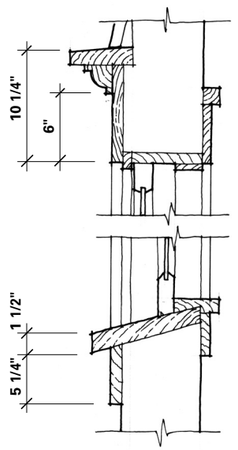


Doors



Dormers

Typical Window Detail

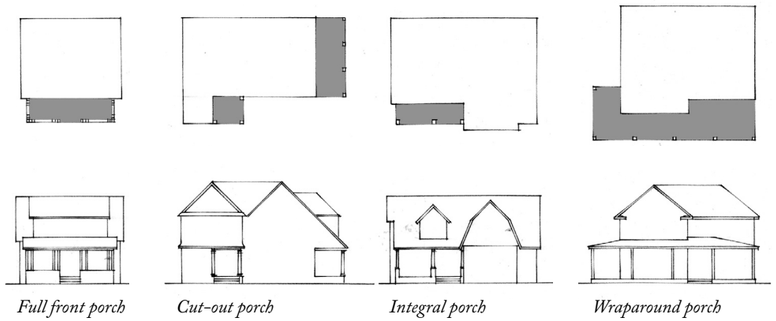


Highlands Arts & Crafts

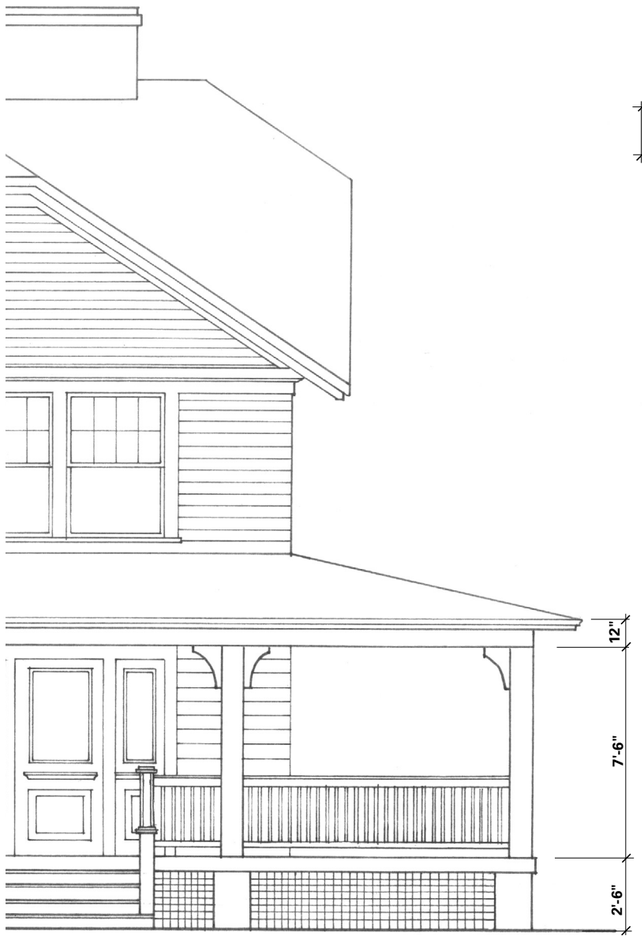
Porches

Porches are typically 8 to 12 feet deep and can be either gable-end, hipped or shed-roofed; cut out of the house volume; or combinations of the two forms. Typically the porches have deep eaves often repeating the same rafter treatment or cornice treatment as the main body of the house. Gable-end porches are designed to express the structural elements. Column types include square posts with brackets (sometimes in pairs or multiple groupings), tapered square box columns, and round Tuscan columns. Open railings are most commonly composed of a thick profiled top rail and closely spaced square pickets.

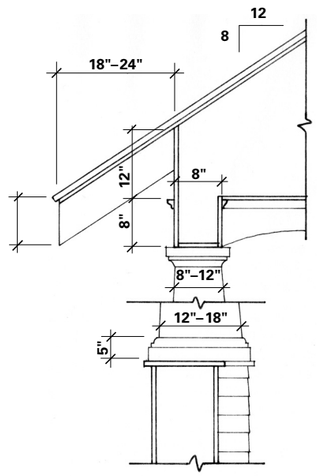
Typical Porch Locations



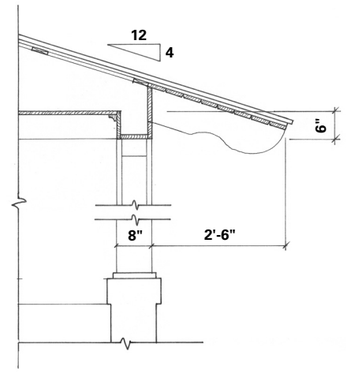
Partial Porch Elevation



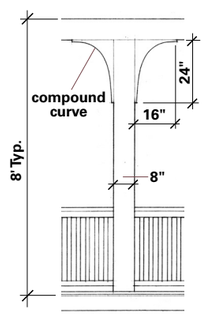
Porch Details



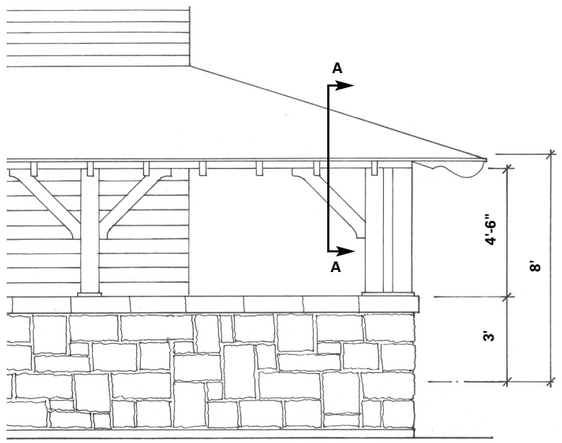
Porch Eave Section



Porch Eave Section A-A



Post and Bracket



Alternate Porch Elevation

Highlands Arts & Crafts

Highlands Arts & Crafts

Materials, Colors & Possibilities

Materials

Siding: Pebble-dash stucco, stone, brick, wood or fiber-cement lap siding, or sawn wood shingles.

Roofing: Cedar shakes, slate, or approved composition shingles.

Windows: Wood or cellular PVC with traditional wood window profile, or aluminum-clad wood with brick or stone veneer facades only; true divided light or simulated divided light (SDL) sashes with traditional exterior muntin profiles (7/8" wide).

Trim: Stucco, stone, cast stone, wood, or composite millwork for built-up sections.

Columns: Wood, fiberglass or composite material.

Railings: Milled wood or approved composite material; square balusters, or solid railings of wood, sawn shingle, siding, stone, or brick.

Porch Ceiling: Plaster, beaded or V-groove plywood or T&G wood boards.

Eaves: Boxed eaves have smooth wood, T&G wood boards, or fiber-cement soffits; open eaves have V-groove or beaded wood sheathing with 2x or 3x rafter tails.

Gutters: Half-round in primed or pre-finished metal, copper or zinc.

Downspouts: Round in primed or pre-finished metal, copper or zinc.

Brackets: Wood, 6x or 8x stock.

Foundations: Stucco, brick or stone veneer.

Chimneys: Stucco, brick or stone.

Note: Refer to the Homestead Preserve pre-approved inventory of appropriate components and materials for recommendations and suggestions.

Colors

Siding and Trim: Colors to be selected from the Homestead Preserve Color Palette.

Windows: Sashes and trim to be painted in complementary colors (see the Homestead Preserve Color Palette).

Roof Shingles: Natural shake color or stain color selected from the Homestead Preserve Color Palette.

Gutters and Downspouts: Match trim color.

Fencing: Wood in earth tones from the Homestead Preserve Color Palette; metal is to be black or dark green.

SECTION D

Landscape Patterns

Traditional farm settlement in the valley

Meadow in the valley area

General Principles

THE VEGETATION OF HOMESTEAD PRESERVE is as diverse as the vegetation of the Allegheny area of Virginia. The dominant forest type of the Warm Springs Valley is deciduous hardwood – oaks, hickories and maples – with pockets of hemlock. Oaks and hickories favor comparatively dry, well-drained habitats. These trees appear among pines on the Piedmont uplands and coastal plains from Connecticut to Texas.

Homestead Preserve contains several different forest ecosystems: valley, upland forest and ridge ecosystems. Within these natural communities, different climactic zones, plants, and animal species exist. Respecting these ecosystems will be vital to successfully preserving, enhancing and replacing the vegetation that currently exists within the site.

Cross section of vegetation thriving on Homestead Preserve

Illustration from A.J.Downing

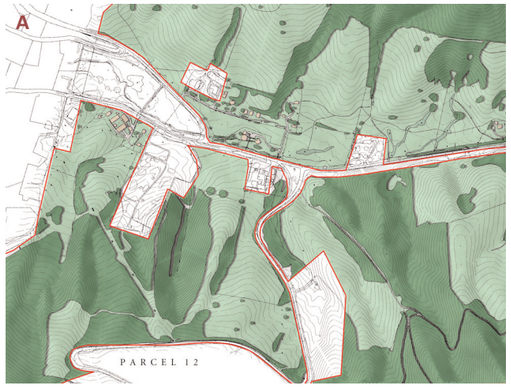
View of the Allegheny Mountains just south of Healing Springs

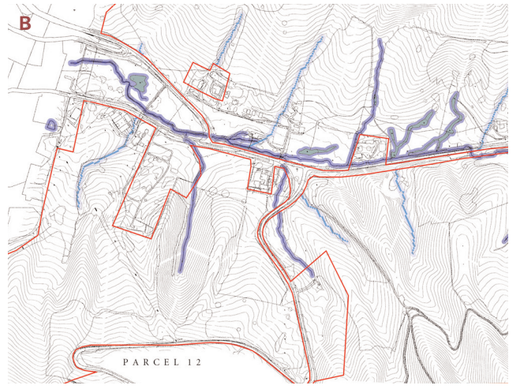
The Landscape of Virginia Highlands

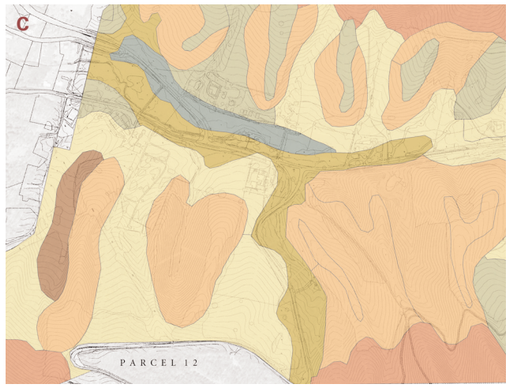
Stream corridor

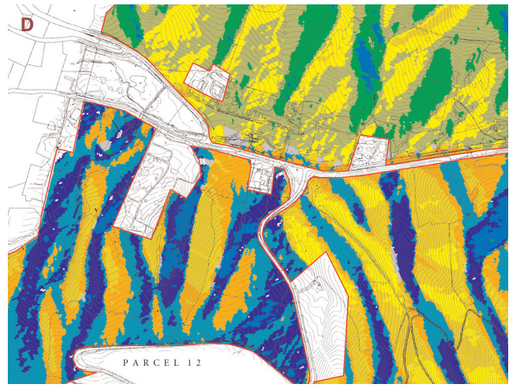
High meadow on the Homestead Preserve

Typical ridge vegetation









Examples of analysis drawings for a section of Warm Springs representing a) meadows and woodlands, b) hydrology, c) soils, and d) sun exposure.

Specific Principles

The forests of the Southern Appalachians contain considerable diversity in vegetative communities. These present unique opportunities to balance development with aesthetics and sustainability. Understanding the ecosystems and adopting a philosophy of development that minimizes disturbance due to grading will enable the Homestead Preserve to create unique addresses specific to each site type.

The protection of existing vegetation and improvement of existing conditions will preserve the character inherent to different areas of the Preserve. Site specific evaluations of soil type, elevation, aspect, history, and plant material will be used to determine appropriate plant species for regeneration.

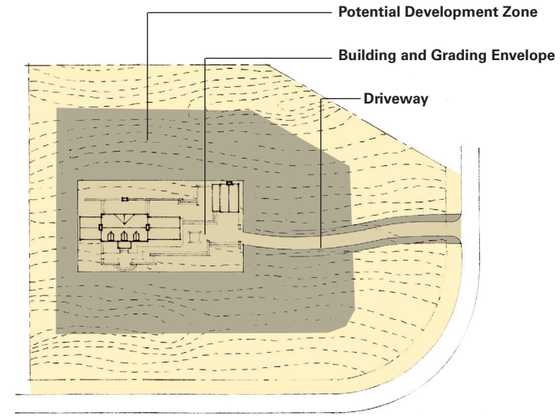
The deciduous hardwood forests of the Warm Springs Valley are classified by their relationship to natural landscape features and create specific environments within the Homestead Preserve. For example, homesites adjacent to streams are characterized by mixed deciduous stands. Woodlands are characterized by stands of oak/hickory, whereas Woodlands along the ridges tend to be dominated by stands of pine/spruce and fir. Forest edge addresses are composed primarily of meadow plant communities found in the Southern Appalachians. The change in vegetation from one site to another will serve as a visual marker, or address that enriches the visitor's experience.

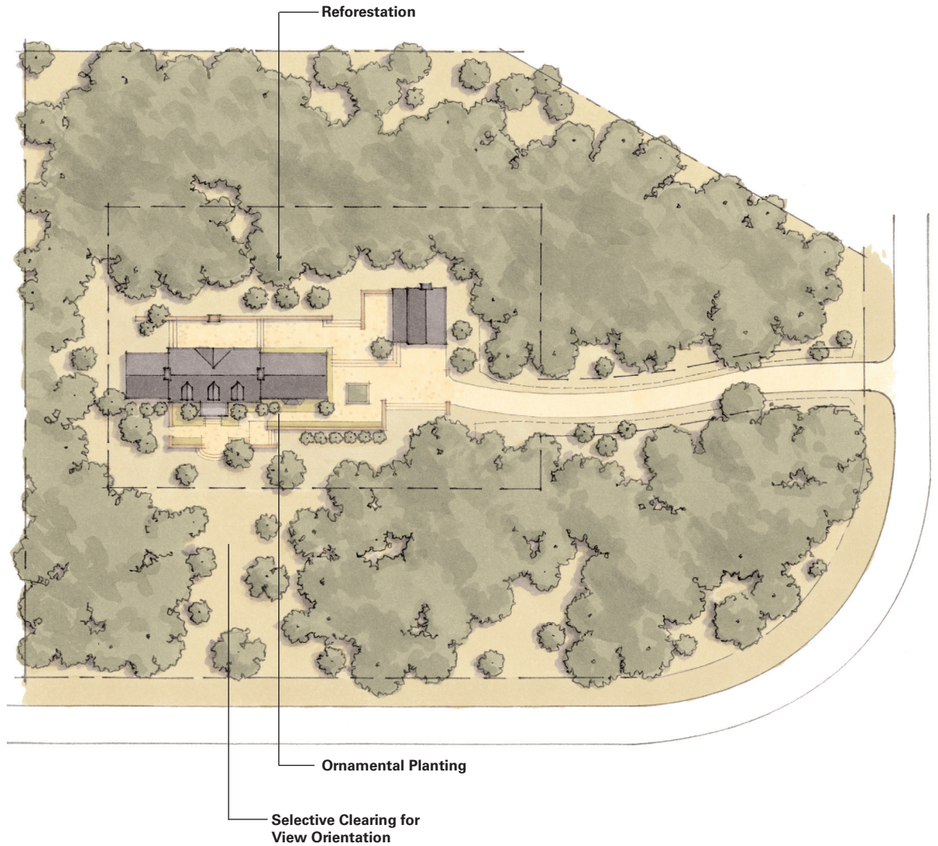
The key principles for landscape development may be summarized as follows:

- Preserve the existing landscape character by limiting the area of disturbance, developing the site in response to and respecting the ecosystems of the preserve,
- Build using indigenous materials, primarily stone and wood, in a style and manner that carries on the traditional craftsmanship of the Virginia Highlands,
- Plant a predominantly native plant palette,
- Use exotic species for select areas near the house.

Together, minimal impact and site-specific actions are key to sustaining the existing vegetation communities and the health of the ecosystems throughout the Preserve.

Ecosystems of Homestead Preserve



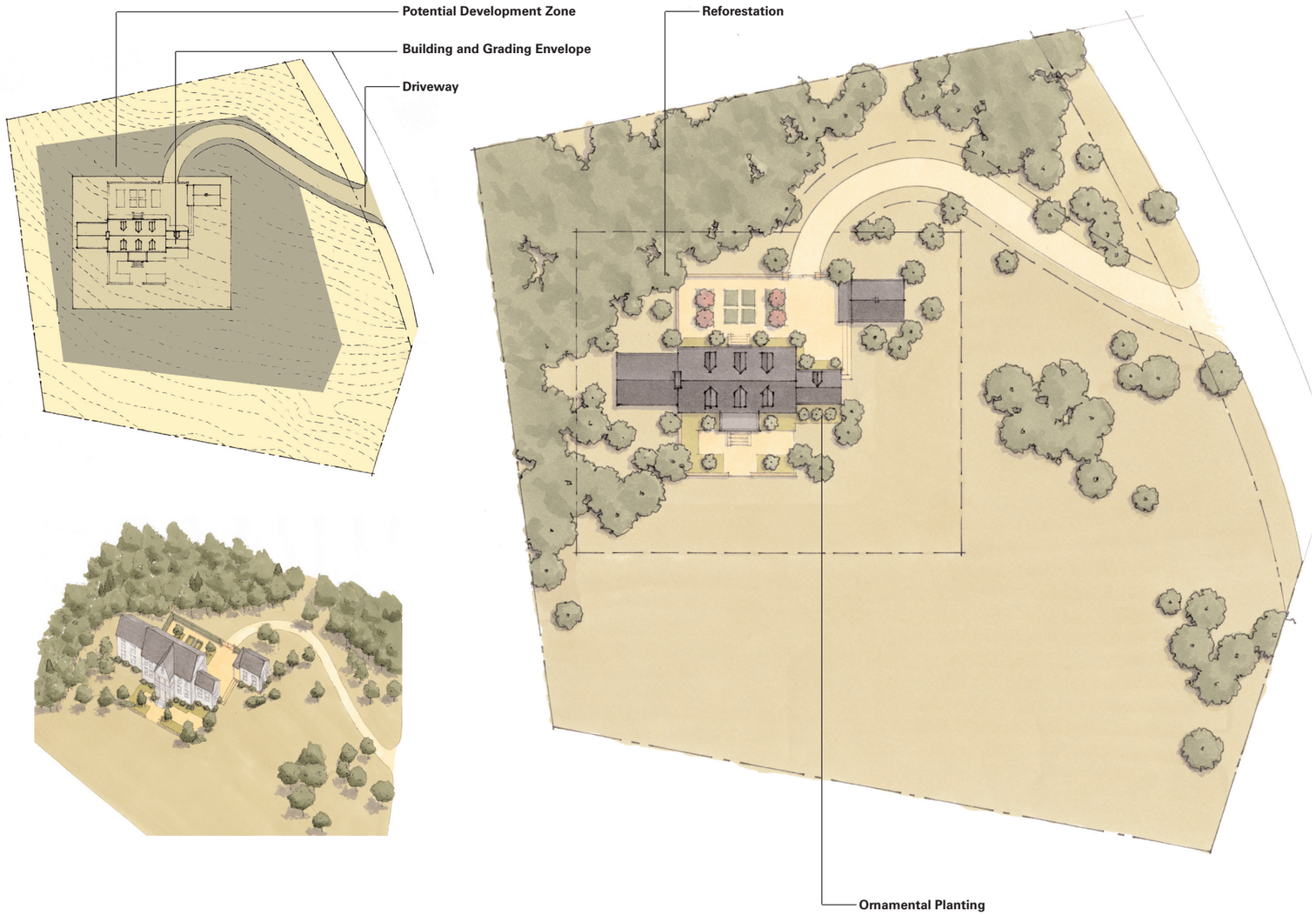


Woodland Preserve Sites

Landscape principles for Woodland Preserve sites emphasize preservation of the existing native tree stands which characterize much of the Homestead Preserve landscape by limiting disturbance of these landscapes in the Building and Grading Envelope and Driveway Zone. Vegetation outside of these areas is to be preserved, with the exception of selective clearing to enhance views, or provide for septic fields. However, establishing a Transition Zone by selectively thinning vegetation outside of the Building and Grading Envelope may improve the transition of vegetative character between house lot and the surrounding woodlands. Refer to the *Homestead Preserve Lot Portfolio* for sites that have specific clearing guidelines for view orientation or septic requirements.

When installing additional plantings within Woodland Preserve sites, homeowners must adhere to the following principles. Plant native vegetation exclusively along Driveway Clearing Zones and Transition Zones, blending the disturbed landscape with the surrounding native hardwood forest. Both native and approved ornamental plantings are allowed within the Building and Grading Envelope establishing gardens and outdoor recreational spaces. Refer to the appendices for the approved Native Plant Palette and Approved Ornamental Plant Palette for Homestead Preserve.

Landscape Principles

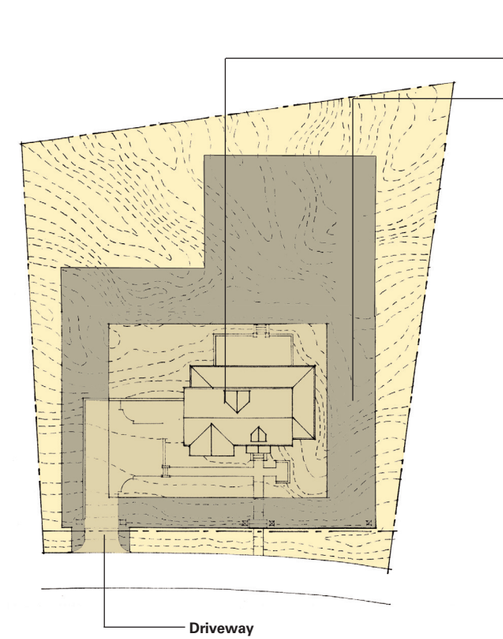


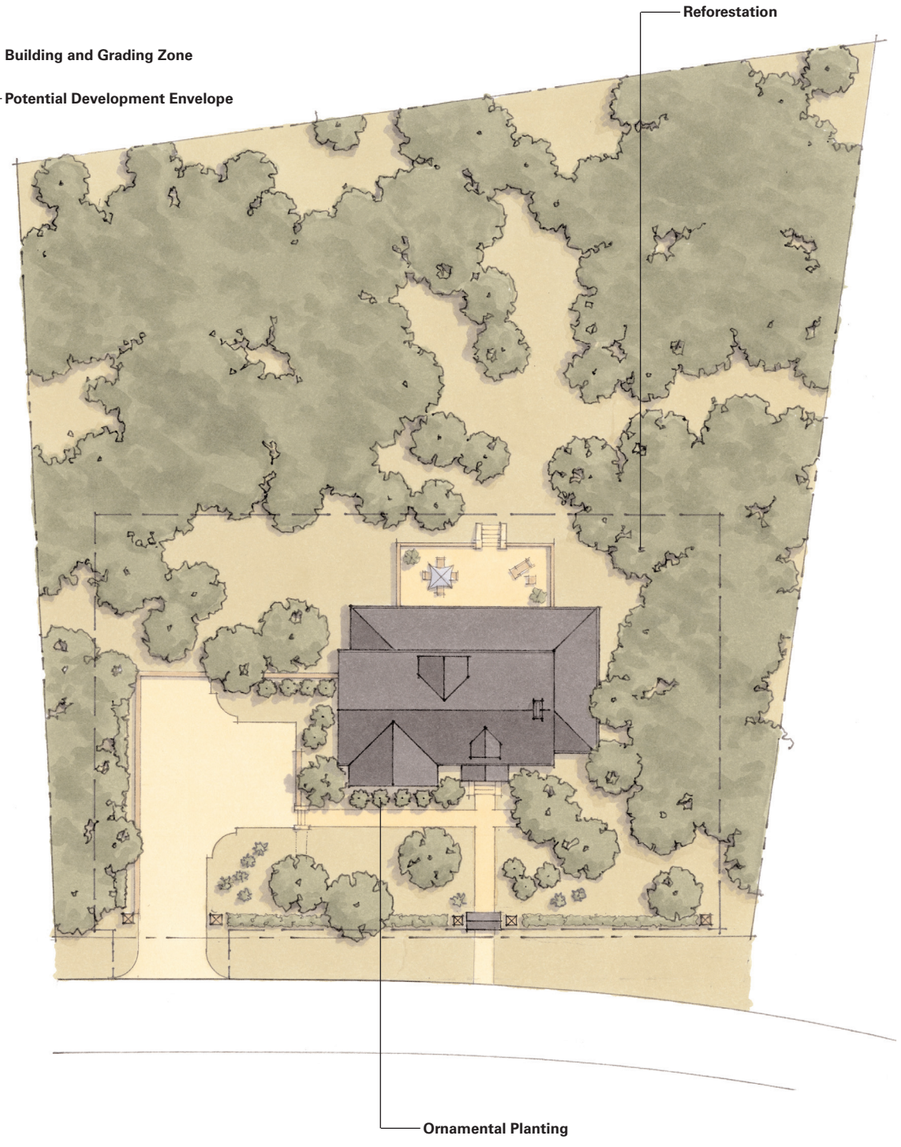
Meadow Preserve Sites

The open rolling character of Meadow Preserve sites is preserved through the sensitive placement of house and grounds along the verge of the meadow landscape, limiting disturbance to the Building and Grading Zone and the Driveway Zone. Preserving vegetation outside of the Building and Grading Envelope helps to ameliorate development along the adjacent woodland edge. A Transition Zone established by the selective removal of a small percentage of existing vegetation helps to integrate the house into the border landscape.

Landscape Principles for Meadow Preserve sites incorporate installation of predominantly native species that reflect the character of the adjacent landscape. Plantings may be used to frame off site vistas and shape the entry drive experience. See the appendices for Native Plant Palette. Exclusively plant native species within Driveway Clearing Zones and Transition Zones. Approved ornamental plantings may be planted within the Building and Grading Envelope. (See appendices for approved native and ornamental plant palettes.

Landscape Principles





Hamlet Sites

Landscape principles for Hamlet sites recommend a combination of sensitive development and planting guidelines that strengthen the relationship among residences within these micro-communities in the Homestead Preserve. Landscaping for Hamlet sites is limited to the Building and Grading Envelope and Driveway Zone of each site. Woodland vegetation outside of these zones should be preserved except where tree clearing is permitted to enhance views on select sites or to make provisions for septic fields. Preserving existing trees and minimizing earth disturbance are essential. Tree preservation includes minimizing root damage and compaction, maintaining positive drainage away from trees and allowing adequate light. On wooded areas, Transition Zones may be established by the selective thinning of adjacent vegetation to provide a seamless meeting of yard and woodland. Refer to the *Homestead Preserve Lot Portfolio* for sites that have specific clearing guidelines for view orientation or septic requirements.

Native and approved ornamental specimens may be planted within the Building and Grading Envelope. Ornamental plants outside of the Building and Grading Envelope are typically not allowed on Hamlet sites unless approved by the architectural review board. Continuity and association may be applied to selecting native and approved ornamental vegetation within each hamlet. Refer to the appendices for the Native Plant and Approved Ornamental Plant Palette.

Landscape Principles

History & Character

The Highlands Classical Landscape pattern is derived from precedent landscapes that support Georgian, Federal and Classical Revival houses from the late eighteenth through the mid-nineteenth centuries. This landscape pattern emphasizes the formal symmetry and clean lines of the well-proportioned houses they frame. Manicured massings of evergreens and hedgerows should align symmetrically to afford and define prominent views to and from the front of the house as well as to define garden geometries in the more private side and rear yards.

Colorful garden displays are best reserved for the side and rear yards to avoid competing with the refined architectural detailing of the house. Pleasure and cutting gardens should also follow formal geometries to further accentuate the classic lines and symmetry of the house. Geometric boxwood gardens, aligned axially and proportionately with the massing of the building, may be used to bring order to the rear and side yards. Perennial and annual displays should be accompanied and framed by well-trimmed evergreen shrubbery. Where included, kitchen gardens are to be located near a service entrance closest to the kitchen pantry. Hardscape materials should support the architectural detailing of the house.

Essential Elements of the Highlands Classical Landscape

1. Symmetrical composition of vegetative massing
2. Formal arrangement of evergreen foundation plantings
3. Hardscape materials supports the architecture.
4. Garden spaces reserved for side and rear yards

Landscape Elements

Walls: Dimension stone, laid in ranged or coursed ashlar construction. Clay-mould brick with brick coping. Densely propagated hedgerows may supplement hardscape walls. End columns or piers may be accented with ball or pineapple style finial.

Fencing: Wood picket or pre-finished metal. Wood is to be painted white or to match the house body color.

Gates: Wood, picket or Chippendale design; decorative metal.

Paving: Brick herringbone, brick rubble, share-pack gravel, exposed aggregate.

Outbuildings: Formally dressed out-buildings, matching architectural style of dwelling.

Vegetation: Abundance of evergreens, foundation and spatial defining plants (Southern Magnolias, Box, Yew), shade trees, large planters.

Highlands Classical Landscape

History & Character

The Highlands Farmhouse Landscape builds upon eighteenth and nineteenth century precedents found in the settlement patterns of Bath County. The character of these precedent landscapes is decidedly utilitarian in nature with their spatial organization ordered by loose clusters of outbuildings that support the day-to-day management of the property.

Highlands Farmhouse landscapes should reflect the traditional timeless beauty of the architecture. Loose geometric planting beds bring definition to the ground plane. Landscapes associated with Italianate or Gothic style residences may reference the ornate character detailing of the architecture with organic and trefoil-shaped beds giving order to the ground plane. Typically, the entry sequence unfolds along a curvilinear drive with informal groupings of shrubs. Feature gardens are best reserved for the rear and side yards and may be contained by evergreen plantings. Side and rear yards may include cutting, flower and/or kitchen gardens. Typically, rear and side yard pleasure gardens consist of native species with the occasional display of ornamental specimen plantings. Stands of fruit trees or fruitless trees of similar character may be established along the residential verge, referencing the historic cultivation of orchards.

Essential Elements of the Highlands Farm House Landscape

1. Informal front yard with dense plantings along perimeter
2. Kitchen and cutting flower gardens at the rear and side yards
3. Fruit trees or fruitless trees of comparable form
4. Outbuildings of differing materials referencing earlier periods of construction

Landscape Elements

Walls: Dry-laid stone walls, CMU walls with stucco to match building exterior.

Fencing: Wood, four-board, Virginia split rail, snake-rail, white picket.

Gates: Wood, pre-finished metal color black, dark green.

Paving: Brick, stone, exposed aggregate, share-pack.

Outbuildings: Materials may reference house or be more rustic to suggest earlier period of development, utility sheds, storehouses, pergolas, detached garage/coach house.

Vegetation: Predominant native species throughout with specimen exotic plantings. Evergreens used in foundation plantings.

Highlands Farmhouse Landscape

History & Character

Full of color and rich in texture, the English Romantic landscape pattern for Homestead Preserve honors the lushly planted gardens that enveloped the courtyard and grounds of rural estates throughout the English countryside in the nineteenth century. The landscape progression of these precedents moved from formal display and cutting gardens around the house to more service-oriented gardens and outbuildings, often culminating in dense naturalistic vegetation along the perimeter of the property. The arrival sequence was often resolved by an interior courtyard defined by perimeter stone walls, fences or hedge rows.

The spatial character of the English Romantic landscape at Homestead Preserve should contain a high percentage of colorful display and cultivatable gardens enveloping the residence. Inspired by the gardenesque style made popular by Gertrude Jekyll in the late nineteenth and early twentieth century, English Romantic gardens at Homestead Preserve may contain a liberal mixture of perennials and woody plants and an abundance of flower borders. These gardens may include cutting and kitchen gardens. Fruit trees for display and cultivation can be planted in the side yards to reference similar species cultivated outside of the immediate house and grounds landscape. An exclusively native plant palette of shade trees and evergreens at the perimeter of the property should be used to provide contrast to the display gardens around the residence.

Entrance into the house proper may be established via a vertical wall or hedgerow enclosing the interior courtyard of the property. The drive should penetrate the encircling wall or hedge to arrive at the main arrival terrace or side yard. Hardscape materials should reflect the refined yet rustic character of the architecture including stone, brick and wood.

Essential Elements of the English Romantic Landscape

1. Lush garden courtyard enveloping the immediate house and grounds
2. Spatially defining wall or hedge placed near the house to delineate arrival
3. Progression towards naturalistic landscape pallet as you move outward from the house
4. Composition of rustic hardscape materials.
5. Use of shade and shadow around perimeter to contrast colorful interior gardens

Landscape Character Elements

Walls: Stone walls of regular coursed ashlar construction, wood-mould brick walls, stucco, stone capstone rounded or flat. Climbing vines may be trained to walls.

Fencing: Wood picket, rustic two or three split rail, wattle.

Gates: Wood picket, wrought iron, or pre-finished metal.

Paving: Stone dry laid, brick rubble, exposed aggregate, gravel & fines

Outbuildings: Rustic in character complementary to building architecture. Arbor may be attributed to gated pedestrian entrance, wooden pergolas.

Vegetation: Generous display of perennial borders intermingled with woody plants. Annual beds may be showcased in feature beds. Dense plantings of native species may be planted in massings around the perimeter of the landscape to create contrasts in form, color, and shade representative of the character landscape.

English Romantic Landscape

History & Character

The Highlands Arts & Crafts style is influenced by rural estates of the Virginia Highlands region from the late nineteenth century to the present which combine the formality of interior garden rooms with outlying naturalistic landscapes. Gardens in the Arts & Crafts period often embodied a series of enclosed outdoor rooms – theme gardens and recreational green spaces – and garden materials often included planters and urns along with rustic, indigenous stone and wood. Designers drew inspiration from the fine arts and local craftsmanship, embellishing fences, gates and garden structures. The arrival sequence was informal and typically curvilinear in form, culminating at a side yard or porte cochère.

The Highlands Arts & Crafts landscape draws on this tradition, emphasizing the use of native plantings and hardscape materials balanced by the refinement of local artistry in woodworking, stone masonry and other building crafts. Garden spaces within this landscape are composed of formal outdoor garden rooms, or theme gardens, with more natural plantings of indigenous species enveloping the edges of the property.

A curvilinear alignment of lushly planted entry drives in the Highlands Arts & Crafts landscapes will provide intermittent views of the residence, arriving at the entrance or side yard. Drives located on slopes greater than 10% should include random rubble stone-cladding.

Essential Elements of the Highlands Arts & Crafts Landscape

- Use of natural hardscape materials
- Formal, enclosed theme gardens
- Naturalistic landscape at edges
- Embellishment with urns and planters.

Landscape Character Elements

Walls: Stone walls both random rubble and dry-laid broken ashlar coursing. Piers should define the ends of walls and be adorned with planter urns or statuary.

Fencing: Predominantly wood picket fencing, level across the top with decorative pickets and posts referencing architecture of the house.

Gates: Wood with decorative pickets referencing architecture of the house.

Paving: Stone laid in random and ashlar coursing. Mortar joints and grass joints acceptable.

Outbuildings: Predominantly wood with some stone exhibiting artistic detailing of house, rustic wooden summerhouses.

Vegetation: Hedge rows of yew, box, ilex enclosing garden rooms, theme gardens of annuals and perennials; native naturalistic plants around perimeter.

Highlands Arts & Crafts Landscape

Landscape Precedents

The following pages illustrate how Preserve sites can be designed in keeping with the architectural style of the house to enhance the character of site. Suggestions are given for organizing the landscape with plantings and outbuildings, where best to locate private gardens, and ways to set up the approach to the house from the road.

Garden design can range from naturalistic landscape plantings, with stone pavers and wooden bridges leading into the landscape, to more formal, traditional gardens that reflect the owner's taste and desires. The use of landscape furnishings, such as benches, fountains, planters, and trellises, should be consistent with the architectural character of the house. These gardens are typically limited to the private zones of the site.

History & Character

The Highlands Classical Landscape pattern is derived from precedent landscapes that support Georgian, Federal and Classical Revival houses from the late eighteenth through the mid-nineteenth centuries. This landscape pattern emphasizes the formal symmetry and clean lines of the well-proportioned houses they frame. Manicured massings of evergreens and hedgerows should align symmetrically to afford and define prominent views to and from the front of the house as well as to define garden geometries in the more private side and rear yards.

Colorful garden displays are best reserved for the side and rear yards to avoid competing with the refined architectural detailing of the house. Pleasure and cutting gardens should also follow formal geometries to further accentuate the classic lines and symmetry of the house. Geometric boxwood gardens, aligned axially and proportionately with the massing of the building, may be used to bring order to the rear and side yards. Perennial and annual displays should be accompanied and framed by well-trimmed evergreen shrubbery. Where included, kitchen gardens are to be located near a service entrance closest to the kitchen pantry. Hardscape materials should support the architectural detailing of the house.

Essential Elements of the Highlands Classical Landscape

- Symmetrical composition of vegetative massing
- Formal arrangement of evergreen foundation plantings
- Hardscape materials supports the architecture.
- Garden spaces reserved for side and rear yards

Landscape Elements

Walls: Dimension stone, laid in ranged or coursed ashlar construction. Clay-mold brick with brick coping. Densely propagated hedgerows may supplement hardscape walls. End columns or piers may be accented with ball or pineapple style finial.

Fencing: Wood picket or pre-finished metal. Wood is to be painted white or to match the house body color.

Gates: Wood, picket or Chippendale design; decorative metal.

Paving: Brick, brick rubble, shure-pack gravel, exposed aggregate.

Outbuildings: Formally dressed out-buildings, matching architectural style of dwelling.

Vegetation: Abundance of evergreens, foundation and spatial defining plants (Southern Magnolias, Box, Yew), shade trees, large planters.

Highlands Classical Landscape

History & Character

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Essential Elements of the Highlands Farm House Landscape

- Informal front yard with dense plantings along perimeter
- Kitchen and cutting flower gardens at the rear and side yards
- Fruit trees or fruitless trees of comparable form
- Outbuildings of differing materials referencing earlier periods of construction

Landscape Elements

Walls: Dry-laid stone walls, CMU walls with stucco to match building exterior.

Fencing: Wood, four-board, Virginia split rail, snake-rail, white picket.

Gates: Wood, pre-finished metal color black, dark green.

Paving: Brick, stone, exposed aggregate, shure-pack.

Outbuildings: Materials may reference house or be more rustic to suggest earlier period of development, utility sheds, storehouses, pergolas, detached garage/coach house.

Vegetation: Predominant native species throughout with specimen exotic plantings. Evergreens used in foundation plantings.

Highlands Farmhouse Landscape

History & Character

Full of color and rich in texture, the English Romantic landscape pattern for Homestead Preserve honors the lushly planted gardens that enveloped the courtyard and grounds of rural estates throughout the English countryside in the nineteenth century. The landscape progression of these precedents moved from formal display and cutting gardens around the house to more service-oriented gardens and outbuildings, often culminating in dense naturalistic vegetation along the perimeter of the property. The arrival sequence was often resolved by an interior courtyard defined by perimeter stone walls, fences or hedge rows.

The spatial character of the English Romantic landscape at Homestead Preserve should contain a high percentage of colorful display and cultivatable gardens enveloping the residence. English Romantic gardens at Homestead Preserve may contain a liberal mixture of perennials and woody plants and an abundance of flower borders. These gardens may include cutting and kitchen gardens. Fruit trees for display and cultivation can be planted in the side yards to reference similar species cultivated outside of the immediate house and grounds landscape. An exclusively native plant palette of shade trees and evergreens at the perimeter of the property should be used to provide contrast to the display gardens around the residence.

Entrance into the house proper may be established via a vertical wall or hedgerow enclosing the interior courtyard of the property. The drive should penetrate the encircling wall or hedge to arrive at the main arrival terrace or side yard. Hardscape materials should reflect the refined yet rustic character of the architecture including stone, brick and wood.

Essential Elements of the English Romantic Landscape

- Lush garden courtyard enveloping the immediate house and grounds
- Spatially defining wall or hedge placed near the house to delineate arrival
- Progression towards naturalistic landscape pallet as you move outward from the house
- Composition of rustic hardscape materials.
- Use of shade and shadow around perimeter to contrast colorful interior gardens

Landscape Character Elements

Walls: Stone walls of regular coursed ashlar construction, wood-mold brick walls, stucco, stone capstone rounded or flat. Climbing vines may be trained to walls.

Fencing: Wood picket, rustic two or three split rail, wattle.

Gates: Wood picket, wrought iron, or pre-finished metal.

Paving: Stone dry laid, brick rubble, exposed aggregate, gravel & fines

Outbuildings: Rustic in character complementary to building architecture. Arbor may be attributed to gated pedestrian entrance, wooden pergolas.

Vegetation: Generous display of perennial borders intermingled with woody plants. Annual beds may be showcased in feature beds. Dense plantings of native species may be planted in massings around the perimeter of the landscape to create contrasts in form, color, and shade representative of the character landscape.

English Romantic Landscape

History & Character

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The Highlands Arts & Crafts landscape draws on this tradition, emphasizing the use of native plantings and hardscape materials balanced by the refinement of local artistry in woodworking, stone masonry and other building crafts. Garden spaces within this landscape are composed of formal outdoor garden rooms, or theme gardens, with more natural plantings of indigenous species enveloping the edges of the property.

A curvilinear alignment of lushly planted entry drives in the Highlands Arts & Crafts landscapes will provide intermittent views of the residence, arriving at the entrance or side yard. Drives located on slopes greater than 10% should include random rubble stone-cladding.

Essential Elements of the Highlands Arts & Crafts Landscape

- Use of natural hardscape materials
- Formal, enclosed theme gardens
- Naturalistic landscape at edges
- Embellishment with urns and planters.

Landscape Character Elements

Walls: Stone walls both random rubble and dry-laid broken ashlar coursing. Piers should define the ends of walls and be adorned with planter urns or statuary.

Fencing: Predominantly wood picket fencing, level across the top with decorative pickets and posts referencing architecture of the house.

Gates: Wood with decorative pickets referencing architecture of the house.

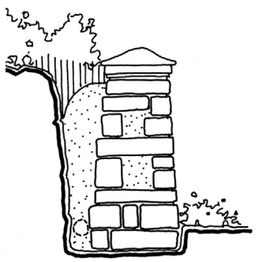
Paving: Stone laid in random and ashlar coursing. Mortar joints and grass joints acceptable.

Outbuildings: Predominantly wood with some stone exhibiting artistic detailing of house, rustic wooden summerhouses.

Vegetation: Hedge rows of yew, box, ilex enclosing garden rooms, theme gardens of annuals and perennials; native naturalistic plants around perimeter.

Highlands Arts & Crafts Landscape

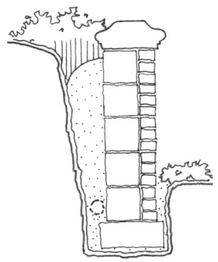
Stone Wall Options



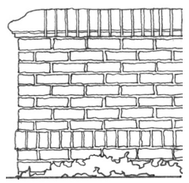
Section

Random Stack

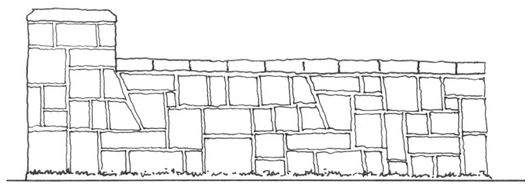
Brick Wall Options



Section



Running Bond with Shaped Brick Cap

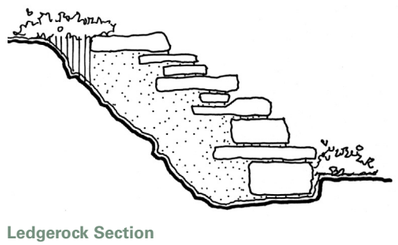


Typical Wall and Pier Combination

Random rubble stone wall

Driveway with walls to minimize disturbance to the site

Stone piers and ornamental iron gate



Ledgerock Section

Dry-laid coursed ashlar wall and pier

Walls, Walkways & Drives

Driveway Pavement Surfaces

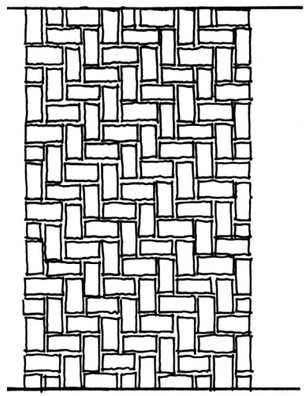
Driveways will be aligned with the contours and minimize site disturbance by the use of walls or planted slopes. All paving surfaces shall generally be limited to 10 feet in width and use materials that will soften their visual impact. The materials will be gravel, bituminous paving or exposed aggregate concrete. Pavement aprons between the street and driveways can be block stone or stone.

Walls, Piers and Steps

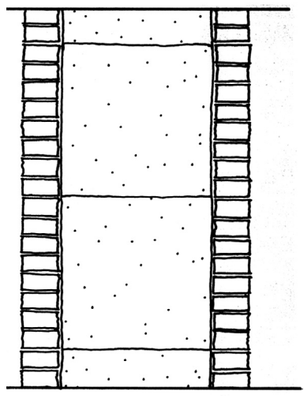
Walls, piers and steps outside the Building Zone may be constructed of brick or stone. Walls, piers and steps within the building pad can be stone or match the material used to construct the house.

Sidewalk and Terrace Paving

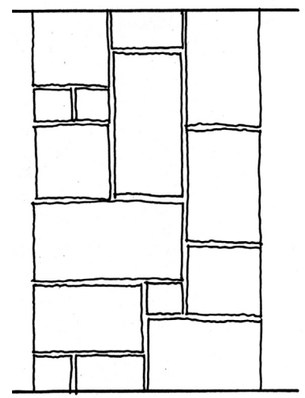
Sidewalks, entry terraces and rear patios should be constructed of brick, stone or concrete with decorative edges.



Brick Walk

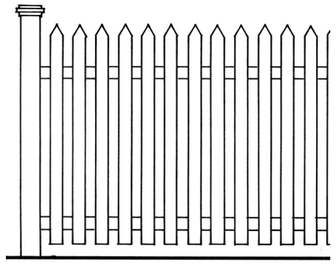


Concrete or Gravel Walk with Brick Edge

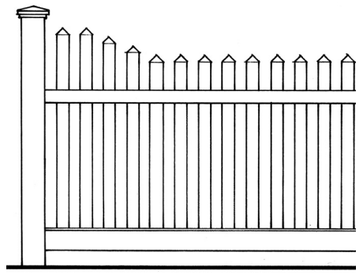


Stone Walk

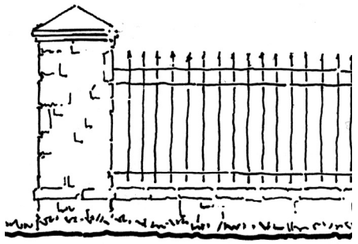
Landscape Elements



Flat Picket Fence

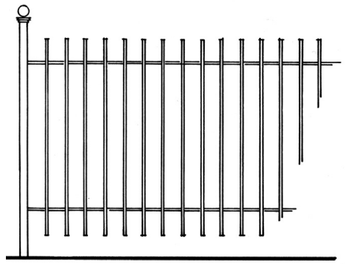


Square Picket Fence

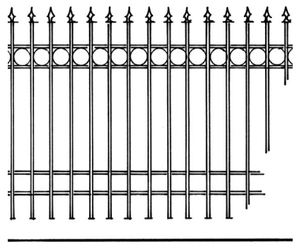


Wall and Fence Combinations

Wood gate detail



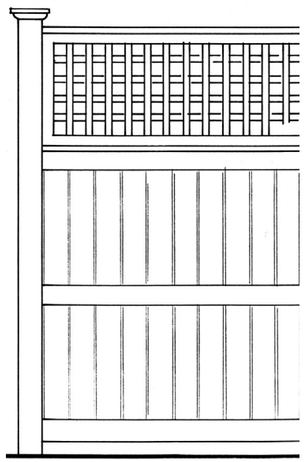
Simple Iron Fence



Ornate Iron Fence

Chippendale style gate

Wood picket and rail gate



Privacy Fence

Privacy Fencing

Fencing for privacy may be desired in the private zones. Here fences may be built to a height of 6 feet. Often, privacy fences are opaque to a height of 4 feet with 2 feet of transparent fencing (lattice) above. These privacy fences can be constructed only within the private zone of the site unless otherwise approved.

4-board fence at pasture/meadow edge

Rustic split rail fence

Highland Fences

Fences, hedges and walls are part of an inherited pattern in the Highlands landscape. There are three basic types used in the Preserve landscape palette: Front yard fencing which consists of painted wood or approved composite picket fencing based on historic patterns and types as well as decorative, painted metal fencing often used in Victorian era houses or Classical houses. These may be standalone or used in combination with stone and brick walls. A second type of fencing, privacy fencing, may sometimes occur in the backyards of houses within settlements. Meadow or pasture fencing is used at the edge of long driveways and occasionally to separate yards from pasture land. This type of fence is painted wood, white or creasote color, and consists of four horizontal boards. More primitive, split rail fence types are appropriate alternatives to the standard pasture fence in some areas.

A snake rail fence defining the pasture edge

Landscape Elements

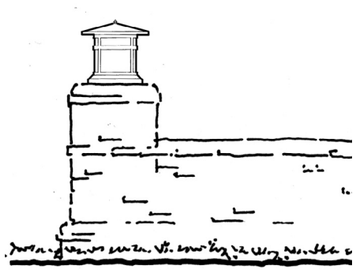
Outbuildings

Outbuildings are an important part of the Preserve homestead. There is a strong tradition of nicely detailed smaller buildings whose purpose and use changes over time. As the Preserve houses grow, the outbuildings would serve an important role. These buildings will be used as garages, guest houses, or even the initial house on the site.

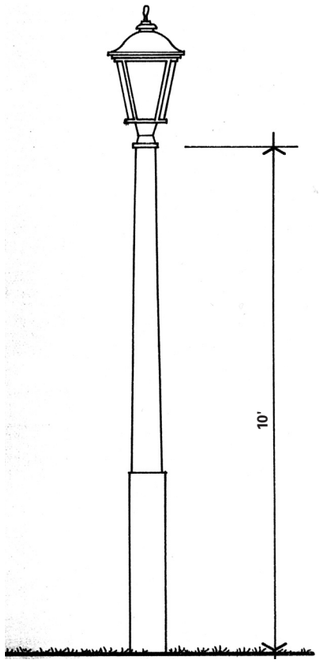
Common materials for outbuildings may include reconstructed log structures, stone, and clapboard on board and batten siding with shake, slate (or approved composite slate), and standing seam roofing. Most outbuildings are set on stone or pier foundations.

Landscape Elements

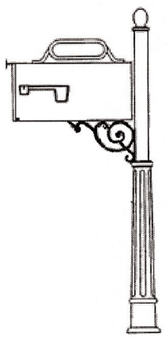
Garden Trellis



Light Integrated into Stone Pier



Typical Post Light



Typical Mailbox

Accessory Elements

Lighting

Lighting of private lots shall be the minimum required to provide an adequate level of safety. Size, scale and materials for lighting fixtures shall be compatible with the architecture of the house. These include post lights, indirect lighting for landscape materials, or wall and pier lights. Full-cutoff light fixtures should be used to focus the light projection downward and reduce light spill into the atmosphere. Site lighting is limited to areas within the Building and Grading Envelope with the exception of downlights at the driveway entry.

Mailboxes

Refer to the mailbox options approved by the Homestead Preserve town architect.

House Numbers & Signs

Post-mounted signs with house number and house name, or pier mounted signs in bronze or cast stone. House numbers should be individual characters in black metal, brass or bronze, or cast metal, painted. Cast panels should be no larger than 8 inches by 20 inches.

Screening

All air conditioning units and other mechanical equipment shall be screened from public view with shrubs, hedges, walls, fences, or a combination of these.

Ancillary structures, such as trash enclosures, are to be integrated into the landscape as much as possible and screened from public view using similar methods.

Pools should be inground. Pools should be screened from view unless otherwise approved. Approval may be given for pool enclosures designed to resemble a conservatory or an orangerie.

Satellite dishes should not be visible on the front of the house or from shared lanes.

Propane tanks should be placed underground unless otherwise approved.

Irrigation

Irrigation is recommended for all landscaped areas in the private garden zones.

Landscape Elements

Appendix

Native Trees															
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Small trees													
Amelanchier arborea	downy serviceberry	x	x	x				x	x			x	
Amelanchier canadensis	Canada serviceberry	x	x	x					x			x	x
Amelanchier laevis	smooth serviceberry	x	x	x				x	x		x	x	
Asimina triloba	paw paw	x	x	x			x	x				x	
Cercis canadensis	redbud (Eastern)		x	x			x	x				x	
Chionanthus virginicus	fringetree		x					x	x			x	
Cornus alternifolia	alternate-leaf dogwood	x	x	x			x	x			x	x	
Cornus amomum	silky dogwood	x		x			x	x				x	x
Cornus florida	flowering dogwood	x	x	x			x	x			x	x	
Crateagus crus-galli	cockspur hawthorne	x	x	x				x	x		x	x	
Crateagus flava	October haw	x	x					x	x			x	
Euonymous atropurpureus	wahoo		x	x			x	x				x	
Halesia tetraptera (H. carolina)	common silverbell		x					x	x			x	
Ilex opaca	American holly	x	x	x			x					x	
Morus rubra	red mulberry	x	x	x			x	x				x	
Ostrya virginiana	Eastern hop-hornbeam		x				x	x				x	
Prunus americana	American wild plum		x	x				x				x	
Prunus virginiana	choke cherry	x	x	x				x				x	
Rhus glabra	smooth sumac	x	x	x					x		x	x	
Rhus hirta (R. typhina)	staghorn sumac	x	x	x					x		x		
Salix nigra	black willow			x				x	x			x	x
Medium to Large Trees													
Acer rubrum	red maple		x	x					x			x	x
Acer saccharum	sugar maple		x	x				x	x			x	
Aesculus flava (A. octandra)	yellow buckeye		x					x				x	
Betula alleghaniensis	yellow birch	x	x	x				x	x			x	
Betula lenta	sweet birch, black birch	x	x	x				x	x			x	
Betula nigra	river birch	x	x	x					x			x	x
Carya alba (C. tomentosa)	mockernut hickory			x			x	x			x	x	
Carya glabra	pignut hickory	x	x	x			x	x			x		
Carya ovata	shagbark hickory			x				x	x			x	
Diospyros virginiana	persimmon	x	x	x			x	x	x		x	x	
Fagus grandifolia	American beech	x	x				x	x	x			x	
Fraxinus americana	white ash	x	x					x	x			x	
Fraxinus pensylvanica	green ash	x	x	x				x	x			x	
Juglans nigra	black walnut	x		x				x	x			x	
Juniperus virginiana	red cedar (Eastern)	x	x					x	x		x	x	

continued															
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Liquidambar styraciflua	sweetgum		x	x			x	x	x			x	x
Liriodendron tulipifera	tulip-tree, tulip poplar	x	x	x					x			x	
Magnolia acuminata	cucumber magnolia		x						x			x	
Nyssa sylvatica	black gum	x	x	x				x	x			x	
Oxydendrum arboreum	sourwood		x					x				x	
Pinus echinata	shortleaf pine		x					x	x		x		
Pinus serotina	pond pine	x	x	x					x			x	x
Pinus strobus	white pine		x	x					x		x	x	
Pinus virginiana	Virginia pine			x					x		x		
Platanus occidentalis	sycamore			x				x	x			x	x
Prunus pennsylvanica	pin cherry, fire cherry	x		x				x	x		x		
Prunus serotina	wild black cherry	x		x				x	x		x		
Quercus alba	white oak	x	x	x				x	x		x		
Quercus bicolor	swamp white oak	x		x			x	x					x
Quercus coccinea	scarlet oak	x	x					x	x		x		
Quercus falcata	Southern red oak	x	x	x			x	x			x	x	
Quercus ilicifolia	bear oak	x		x					x		x		
Quercus montana (Q. prinus)	chestnut oak	x		x			x	x			x		
Quercus palustris	pin oak	x	x	x			x	x				x	x
Quercus rubra	Northern red oak	x	x	x				x	x		x	x	
Quercus stellata	post oak	x	x	x					x		x		
Quercus velutina	black oak	x		x			x	x			x		
Robinia pseudoacacia	black locust			x				x	x			x	
Sassafras albidum	sassafras			x				x	x		x	x	
Thuja occidentalis	white cedar	x	x	x					x			x	x
Tilia americana	American basswood			x				x				x	
Tsuga canadensis	Eastern hemlock	x	x	x				x	x			x	
Tsuga caroliniana	Carolina hemlock	x	x	x				x	x		x	x	
+ May be aggressive in garden setting.													
* Due to the rarity and sensitivity of habitat in Virginia, these species are recommended for horticultural use only.													

Recommended Uses
W = Wildlife
H = Horticulture and Landscaping
C = Conservation and Restoration
D = Domestic Livestock Forage

Minimum Light Requirements
S = Full Shade
P = Partial Sun
F = Full Sun

Minimum Moisture Requirements
L = Low Moisture
M = Moderate Moisture
H = High Moisture

Native Trees

Native Ferns, Grasses and Vines														
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Ferns and Fern Allies													
Adiantum pedatum	maidenhair fern		x	x			x					x	
Asplenium platyneuron	ebony spleenwort		x				x	x				x	
Athyrium asplenioides (*A. filix-femina*)	Southern ladyfern		x	x			x					x	x
Botrychium virginianum	Rattlesnake fern		x				x	x			x	x	
Dennstaedtia punctilobula+	hay-scented fern			x				x	x		x	x	
Dryopteris intermedia	evergreen wood-fern		x	x			x	x			x	x	x
Dryopteris marginalis	marginal shield-fern		x	x			x	x				x	
Onoclea sensibilis +	sensitive fern		x	x				x	x			x	x
Osmunda cinnamomea	cinnamon fern		x	x			x	x				x	x
Osmunda regalis	royal fern		x	x				x				x	x
Polystichium acrostichoides	Christmas fern		x	x			x					x	
Thelypteris palustris	marsh fern		x					x	x			x	x
Grasses, Sedges, and Reeds													
Agrostis perennans	autumn bentgrass			x			x	x	x		x	x	x
Andropogon gerardii	big bluestem	x	x	x	x			x	x		x	x	
Andropogon glomeratus	bushy bluestem		x	x				x	x			x	x
Andropogon virginicus	broomsedge		x	x				x	x		x	x	x
Arundinaria gigantea	wild cane, river cane	x		x			x	x	x		x	x	x
Calamagrostis canadensis	bluejoint reedgrass	x		x				x	x			x	x
Carex crinita var. crinita	long hair sedge	x	x	x				x	x			x	x
Carex lurida	sallow sedge	x		x				x	x			x	x
Carex pensylvanica	Pennsylvania sedge	x		x			x	x	x		x	x	
Carex plantaginea	plantain-leaved sedge		x	x			x					x	
Carex stricta	tussock sedge	x		x				x	x			x	x
Chasmanthium latifolium (*Uniola l.*)	river oats, spanglegrass		x	x			x	x	x			x	
Danthonia sericea	silky oatgrass	x		x				x	x		x	x	
Danthonia spicata	poverty oatgrass	x		x			x	x	x		x	x	
Dichanthelium clandestinum	deer-tongue	x		x	x			x	x		x	x	x
Dichanthelium commutatum	variable panicgrass	x	x	x	x		x	x			x	x	
Dulichium arundinaceum	dwarf bamboo	x		x	x			x	x				x
Elymus hystrix (*Hystrix patula*)	bottlebrush grass	x	x				x	x	x		x	x	
Elymus virginicus	Virginia wild rye	x		x			x	x			x	x	

continued													
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Festuca rubra	red fescue	x		x	x			x	x		x	x	
Juncus effusus	soft rush	x		x				x	x			x	x
Leersia oryzoides	rice cutgrass	x		x				x	x			x	x
Panicum amarum	coastal panic grass	x	x	x					x		x		
Panicum virgatum	switch grass	x	x	x				x	x		x	x	x
scoparium	little bluestem	x	x	x	x			x	x		x	x	
Scirpus cyperinus	woolgrass bulrush	x	x	x				x	x			x	x
Sorghastrum nutans	Indian grass	x	x	x	x			x	x		x	x	
Sparganium	American bur-reed	x		x				x	x				x
Tridens flavus	redtop	x	x	x	x			x	x		x	x	
Tripsacum dactyloides	gama grass	x	x	x	x			x	x			x	x
Typha latifolia	broad-leaved cattail	x		x					x			x	x
Vines													
Bignonia capreolata	crossvine	x	x				x	x				x	x
Celastrus scandens	climbing bittersweet	x	x				x	x	x			x	
Clematis virginiana	virgin's bower		x					x	x			x	
Lonicera sempervirens	trumpet honeysuckle		x	x				x				x	
Parthenocissus quinquefolia	Virginia creeper	x	x	x				x	x			x	
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Native Ferns, Grasses & Vines

Native Shrubs														
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Shrubs													
Alnus serrulata	common alder	x	x	x			x	x	x				x
Aronia arbutifolia	red chokeberry		x	x			x	x				x	x
Aronia melanocarpa	black chokeberry		x	x				x	x		x	x	x
Castanea pumila	Allegheny chinkapin	x	x	x			x	x	x		x		
Ceanothus americanus	New Jersey tea	x	x	x				x	x		x		
Cephalanthus occidentalis	buttonbush		x	x				x	x				x
Clethra alnifolia	sweet pepper-bush	x	x	x			x	x				x	x
Cornus amomum	silky dogwood	x		x			x	x				x	x
Crataegus crus-galli	cockspur hawthorn	x	x	x				x	x		x	x	
Gaultheria procumbens	wintergreen	x	x				x	x			x	x	
Gaylussacia baccata	black huckleberry	x	x	x			x	x			x	x	
Gaylussacia frondosa	dangleberry	x	x	x			x	x	x		x		
Hamamelis virginiana	witch hazel		x	x			x	x			x	x	
Hydrangea arborescens	wild hydrangea		x				x	x				x	
Ilex glabra	inkberry	x	x	x			x	x			x	x	
Ilex verticillata	winterberry	x	x	x				x	x			x	x
Kalmia latifolia	mountain laurel	x	x	x			x	x				x	
Leucothoe racemosa	fetterbush, sweetbells		x	x				x	x			x	
Lindera benzoin	spicebush	x	x	x			x					x	
Pieris floribunda	evergreen mountain fetterbush		x	x			x					x	
Rhododendron calendulaceum	flame azalea		x					x				x	
Rhododendron catawbiense	Catawba rhododendron		x	x				x	x			x	
Rhododendron cumberlandense	Cumberland flame azalea		x					x				x	
Rhododendron maximum	great rhododendron, rose bay	x	x	x			x	x				x	x
Rhododendron periclymenoides	pinxter flower		x	x			x	x				x	x
Rhododendron prinophyllum	rose azalea	x	x				x	x	x		x	x	
Rhododendron viscosum (*R. serrulata*)	swamp azalea		x	x				x	x			x	x
Rhus aromatica	fragrant sumac		x					x	x		x		
Rhus copallinum	winged sumac, flameleaf sumac	x	x	x			x	x			x		

continued													
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Rosa carolina	pasture rose	x		x				x	x		x	x	
allegheniensis	Alleghany blackberry	x	x	x					x		x		
Rubus odoratus	purple flowering raspberry			x				x				x	
Salix humilis	prairie willow		x	x					x		x		
Salix sericea	silky willow		x	x				x	x			x	
canadensis	common elderberry	x	x	x					x			x	x
Spiraea alba	narrow-leaved	x	x	x					x			x	
Spiraea latifolia	broad-leaved meadowsweet	x	x	x					x			x	
Stewartia	silky camelia		x				x	x				x	
Vaccinium angustifolium	Northern lowbush blueberry	x	x	x					x		x		
Vaccinium corymbosum (*V. virgata, formosa*)	highbush blueberry	x	x	x			x	x	x		x	x	x
Viburnum dentatum	Southern arrow-wood viburnum	x	x	x				x	x		x	x	
Viburnum nudum	possum-haw viburnum		x	x			x	x					x
Viburnum prunifolium	black-haw viburnum	x	x	x				x	x			x	

+ May be aggressive in garden setting.

* Due to the rarity and sensitivity of habitat in Virginia, these species are recommended for horticultural use only.

Recommended Uses

W = Wildlife
H = Horticulture and Landscaping
C = Conservation and Restoration
D = Domestic Livestock Forage

Minimum Light Requirements

S = Full Shade
P = Partial Sun
F = Full Sun

Minimum Moisture Requirements

L = Low Moisture
M = Moderate Moisture
H = High Moisture

Native Shrubs

Native Herbs															
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**				
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**		
Herbs															
Aster cordifolius	heart-leaved aster		x	x				x	x			x			
Aster divaricatus	white wood aster	x	x	x				x	x		x	x			
Aster laevis	smooth blue aster	x	x	x					x		x				
Aster novae-angliae	New England aster		x	x				x	x		x	x			
Aster pilosus	white heath aster	x	x	x					x		x				
Aster umbellatus	flat-top white aster		x	x				x	x			x	x		
*Baptisia australis**	blue wild indigo	x	x					x	x			x			
Baptisia tinctoria	yellow wild-indigo	x	x					x	x		x				
Bidens cernua+	nodding beggar-ticks	x	x	x				x	x		x	x	x		
Caltha palustris	marsh marigold		x	x				x	x				x		
Chamaecrista fasciculata+	partridge pea			x					x		x	x			
Chelone glabra	white turtlehead		x	x			x	x					x		
Chrysogonum virginianum	green and gold		x	x			x					x			
Chrysopsis mariana (Heterotheca m.)	Maryland golden aster	x	x	x				x	x		x				
Cimicifuga racemosa	black cohosh		x				x	x				x			
Clitoria mariana	Maryland butterfly pea		x	x			x	x			x				
Convallaria majuscula (C. montana)	American lily-of-the-valley			x			x	x				x			
Coreopsis tripteris	tall coreopsis		x	x				x	x			x			
Coreopsis verticillata	threadleaf coreopsis		x	x				x	x		x				
Delphinium tricorne	dwarf larkspur		x				x	x				x			
Desmodium paniculatum	narrow-leaf tick trefoil	x		x			x				x				
Dicentra cucullaria	Dutchman's breeches		x				x					x			
Dicentra eximia	wild bleeding heart		x					x	x		x				
Dodecatheon meadia	shooting star		x					x	x			x			
Equisetum hyemale	horsetail, scouring rush			x			x	x	x			x	x		
Eupatorium coelestinum	mistflower	x	x	x			x	x	x			x			
Eupatorium fistulosum	Joe Pye weed	x	x	x				x	x			x			
Eupatorium perfoliatum	common boneset			x				x	x			x	x		
Geranium maculatum	wild geranium		x				x	x	x			x			
Helenium autumnale	sneezeweed	x	x	x				x	x			x			
Helianthus decapetalus	ten-petaled sunflower	x	x	x				x	x			x			
Helianthus divaricatus	woodland sunflower	x	x	x				x			x				
Heliopsis helianthoides	oxeye sunflower	x	x	x				x	x		x	x			
Hepatica acutiloba	sharp-lobed hepatica		x				x				x	x			
Hepatica americana	round-lobed hepatica		x				x				x	x			

continued															
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**				
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**		
Heuchera americana	alumroot		x				x				x				
Hibiscus moscheutos	Eastern rosemallow	x	x	x					x				x		
Iris cristata	dwarf crested iris		x				x	x				x			
Lespedeza capitata	round-head bush clover	x		x					x		x				
Liatris graminifolia	grass-leaf blazing star	x	x	x				x	x		x	x			
Liatris spicata	spiked blazing star	x	x	x				x	x			x			
Lilium canadense	Canada lily		x					x	x			x	x		
Lilium philadelphicum	wood lily		x					x	x		x				
Lilium superbum	Turk's cap lily		x					x	x			x	x		
Lobelia cardinalis	cardinal flower	x	x	x				x	x				x		
Lobelia siphilitica	great blue lobelia	x	x	x			x	x					x		
Lupinus perennis	lupine, sundial lupine		x					x	x		x				
Maianthemum racemosa (Smilacina r.)	false Solomon's seal		x	x			x	x				x			
Mertensia virginica	Virginia bluebells		x	x			x	x				x	x		
Mimulus ringens	monkeyflower		x	x					x				x		
Monarda didyma	bee balm	x	x	x			x	x				x			
Monarda fistulosa	wild bergamot	x	x	x				x	x		x	x			
Nymphaea odorata	American water lily	x	x	x					x				x		
Oenothera fruticosa	sundrops	x	x	x					x			x	x		
Opuntia humifusa (O. compressa)	Eastern prickly-pear	x	x	x					x		x				
Penstemon laevigatus	smooth beardtongue		x				x	x	x			x			
Phlox divaricata	woodland phlox, wild blue phlox		x	x				x			x	x			
Phlox paniculata	summer phlox, garden phlox		x	x				x	x			x			
Phlox stolonifera	creeping phlox		x	x			x	x				x			
Phlox subulata	moss phlox		x	x					x		x				
Physostegia virginiana	obedient plant		x	x				x	x			x			
Podophyllum peltatum+	mayapple	x	x	x				x	x			x			
Polemonium reptans	Jacob's ladder		x				x	x				x			
Polygonatum biflorum	Solomon's seal		x				x	x			x	x			
Porteranthus trifoliatus (Gillenia t.)	bowman's root		x				x	x				x			
Pycnanthemum incanum	hoary mountain mint	x		x			x				x				
Pycnanthemum tenuifolium	narrow-leaved mountain mint	x	x	x				x	x		x	x			
Rhexia virginica	Virginia meadow-beauty	x		x					x				x		
Rudbeckia hirta	black eyed Susan		x	x				x	x		x	x			
Rudbeckia laciniata	cut-leaved coneflower	x	x	x				x	x			x			
Rudbeckia triloba	three-lobed coneflower	x	x	x				x	x			x			
Sagittaria latifolia	broadleaf arrowhead	x	x	x					x				x		

Native Herbs

continued													
Scientific Name	**Common Name**	**Uses**					**Light**				**Moisture**		
		W	**H**	**C**	**D**		**S**	**P**	**F**		**L**	**M**	**H**
Salvia lyrata +	lyre-leaf sage			x				x	x		x		
Sanguinaria canadensis	bloodroot		x				x					x	
Saururus cernuus	lizard's tail		x	x				x	x				x
Saxifraga virginiensis	early saxifrage		x				x	x	x		x	x	
Sedum ternatum	wild stonecrop		x				x	x				x	
Senecio aureus +	golden ragwort	x		x			x	x				x	x
Senna marilandica	Maryland wild		x	x				x			x	x	
Silene virginica	fire pink		x					x	x		x	x	
Silphium perfoliatum	cup plant	x		x			x	x	x			x	
Solidago caesia	bluestem goldenrod	x	x	x			x	x				x	
Solidago odora	sweet goldenrod	x	x	x				x	x		x		
Solidago puberula	downy goldenrod	x	x	x					x		x		
Solidago rugosa +	rough-stemmed goldenrod	x		x				x	x			x	
Thalictrum dioicum	early meadowrue		x				x					x	
Tiarella cordifolia var. collina	clumping foamflower		x				x					x	
Tiarella cordifolia var. cordifolia	spreading foamflower		x				x					x	
Tradescantia virginiana	Virginia spiderwort		x	x			x	x	x			x	
Trillium erectum	wakerobin		x				x					x	
Trillium grandiflorum	white trillium		x				x					x	
Uvularia grandiflora	bellwort		x				x					x	
Verbena hastata	blue vervain	x		x				x	x			x	x
Vernonia noveboracensis	New York ironweed	x	x	x				x	x				x
Veronicastrum virginicum	Culver's root		x	x				x	x		x	x	x
Viola cucullata	marsh blue violet	x	x	x				x	x				x
Viola pedata	bird's foot violet	x	x					x	x		x		
Viola pubescens (*V. pennsylvanica*)	yellow violet	x	x	x			x	x				x	
Yucca filamentosa	common yucca	x	x						x		x		
+ May be aggressive in garden setting.													
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Native Herbs

Highly Invasive Species

Ailanthus altissima	Tree-of-heaven
Alliaria petiolata	Garlic mustard
Alternanthera philoxeroides	Alligator weed
Ampelopsis brevipedunculata	Porcelain-berry
Carex kobomugi	Asiatic sand sedge
Celastrus orbiculata	Oriental bittersweet
Centaurea dubia	Short-fringed knapweed
Centaurea biebersteinii	Spotted knapweed
Cirsium arvense	Canada thistle
Dioscorea oppositifolia	Chinese yam
Elaeagnus umbellate	Autumn olive
Euonymus alata	Winged burning bush
Hydrilla verticillata	Hydrilla
Imperata cylindrica	Cogon grass
Lespedeza cuneata	Chinese lespedeza
Ligustrum sinense	Chinese privet
Lonicera japonica	Japanese honeysuckle
Lonicera morrowii	Morrow's honeysuckle
Lonicera standishii	Standish's honeysuckle
Lythrum salicaria	Purple loosestrife
Microstegium vimineum	Japanese stilt grass
Murdannia keisak	Aneilema
Myriophyllum aquaticum	Parrot feather
Myriophyllum spicatum	European water-milfoil
Phragmites australis	Common reed
Polygonum cuspidatum	Japanese knotweed
Polygonum perfoliatum	Mile-a-minute
Pueraria montana	Kudzu vine
Ranunculus ficaria	Lesser celandine
Rosa multiflora	Multiflora rose
Rubus phoenicolasius	Wineberry
Sorghum halepense	Johnson-grass

Moderately Invasive Species

Acer platanoides	Norway maple
Agropyron repens	Quack grass
Agrostis tenuis	Rhode Island bent-grass
Akebia quinata	Five-leaf akebia
Albizia julibrissin	Mimosa
Allium vineale	Wild onion
Artemisia vulgaris	Mugwort
Arthraxon hispidus	Jointed grass
Arundo donax	Giant reed
Berberis thunbergii	Japanese barberry
Carduus nutans	Musk thistle
Cassia obtusifolia	Sickle pod
Centaurea jacea	Brown knapweed
Cirsium vulgare	Bull-thistle
Convolvulus arvensis	Field-bindweed
Dipsacus laciniatus	Cut-leaf teasel
Dipsacus sylvestris	Common teasel
Egeria densa	Brazilian water-weed
Euonymus fortunei	Wintercreeper
Festuca elatior (F. pratensis)	Tall fescue
Foeniculum vulgare	Fennel
Glechoma hederacea	Gill-over-the-ground
Hedera helix	English ivy
Holcus lanatus	Velvet-grass
Humulus japonicus	Japanese hops
Ipomoea hederacea	Ivy-leaved morning-glory
Ipomoea purpurea	Common morning-glory
Iris pseudacorus	Yellow flag
Ligustrum obtusifolium	Blunt-leaved privet
Lonicera maackii	Amur honeysuckle
Lonicera tatarica	Tartarian honeysuckle
Lysimachia nummularia	Moneywort
Melia azedarach	China-berry
Paulownia tomentosa	Princess tree
Phleum pratense	Timothy
Phyllostachys aurea	Golden bamboo
Poa compressa	Canada bluegrass
Poa trivialis	Rough bluegrass
Polygonum cespitosum	Bristled knotweed
Populus alba	White poplar
Rumex acetosella	Red sorrel
Rumex crispus	Curled dock
Setaria faberi	Giant foxtail
Spiraea japonica	Japanese spiraea
Stellaria media	Common chickweed
Veronica hederifolia	Ivy-leaved speedwell
Wisteria sinensis	Chinese wisteria
Xanthium strumarium	Common cocklebur

Occasionally Invasive Species

Agrostis gigantea	Redtop
Ajuga reptans	Bugleweed
Arrhenatherum elatius	Oatgrass
Commelina communis	Common dayflower
Conium maculatum	Poison hemlock
Coronilla varia	Crown-vetch
Dactylis glomerata	Orchard grass
Elaeagnus angustifolia	Russian olive
Elaeagnus pungens	Thorny elaeagnus
Eragrostis curvula	Weeping lovegrass
Euphorbia esula	Leafy spurge
Ipomoea coccinea	Red morning-glory
Lapsana communis	Nipplewort
Lespedeza bicolor	Shrubby bushclover
Lonicera fragrantissima	Sweet breath of spring
Lonicera x bella	Bell's honeysuckle
Lotus corniculatus	Birdsfoot trefoil
Melilotus alba	White sweet clover
Melilotus officinalis	Yellow sweet clover
Miscanthus sinensis	Silver grass
Morus alba	White mulberry
Pastinaca sativa	Wild parsnip
Perilla frutescens	Beefsteak plant
Trapa natans	Water chestnut
Ulmus pumila	Siberian elm
Viburnum dilatatum	Linden viburnum
Vinca minor & V. major	Periwinkle
Wisteria floribunda	Japanese wisteria

List provided by the Department of Conservation and Recreation

Invasive Alien Plant Species of Virginia