

**A Guide to Repair and Maintenance of  
Historic Structures  
Within  
Isle Royale National Park**



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## INTRODUCTION

The following guidelines have been prepared by the National Park Service. The purpose of these guidelines is to assist users of summer homes and fisheries, within the boundaries of Isle Royale National Park with their efforts to perform routine maintenance and repair work on the exteriors of the cabins and related outbuildings while maintaining the historic integrity of the structures.

These guidelines have been derived from the Secretary of the Interior's Standards and Guidelines for the preservation of historic structures (36 CFR Part 68). These guidelines have been designed specifically for the type and style of historic summer home and fishery structures found on Isle Royale. These structures on Isle Royale are, as a group, one of many important elements that contribute to the historic integrity of the island's cultural landscape.

This guide concerns nine individual historic districts, some of which have been designated as Cultural Landscapes. Many of the historic structures in these districts along with some of the districts themselves have been determined eligible for the National Register of Historic Places (NRHP) and are currently awaiting nomination and listing. The districts identified for this guide are:

- Anderson Camp Cultural Landscape
- Barnum Island Cultural Landscape
- Holte Fishery Cultural Landscape
- McGath Compound/Johnson Fishery/Crystal Cove Cultural Landscape
- McPherren Compound/Captain Kidd Island Cultural Landscape
- Rock Harbor Cultural Landscape
- Rude Fishery/Fisherman's Home Cultural Landscape
- Tobin Harbor Cultural Landscape
- Washington Island Cultural Landscape

Each district/landscape features a collection of structures and features associated with the summer homes and fisheries. While the presence of the entire inventory adds to the visual character and ambience of the historic landscapes, not all of the features are considered to be contributing elements. In order for the cabins and features to remain contributing elements of the district, a majority of them must retain their historic integrity.

Historic integrity is the combined effect of seven qualities: location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property will retain most of these aspects. A property's periods of significance become the benchmark for measuring whether subsequent changes contribute to its historic evolution or alter its historic integrity. For the nine districts on Isle Royale, the period of significance is usually 1900-1939. Historic integrity requires that the various characteristics that shaped the landscape or district during the historic period be present today in much the same way they were historically.

Over time the summer homes on Isle Royale have evolved with some additions and renovations made to meet the needs of families and the requirements of the NPS. Every effort should be made to maintain the historic integrity of the cabins and features considered contributing elements of the district. A property's historic integrity is based, in part, on the percentage of original design and material present. In order to make an accurate assessment of historic integrity and to best determine the preservation methods to be used on a property it is important to be able to distinguish between original materials and later work. Visual character is vital to the historic integrity of the tracts. The loss of the historic integrity endangers the eligibility of any historic property.

If there has been repair and reconstruction following damage caused by natural elements or an unexpected catastrophic event resulting in the loss of a structure, every effort should be made to produce a structure that is complimentary to the style of structures present within the historic districts/landscapes as a whole. New additions or reconstructed cabins should not, however, be indistinguishable from the original.

Features that are considered non-contributing elements should also be maintained in the same manner as the others in order to maintain the visual character of the districts as a whole. Some existing structures and features that are currently considered noncontributing elements may in the future be considered for re-classification to contributing status.

Contributing and non-contributing components are listed on the continuing pages.

## **Contributing and Non-Contributing(\*) components by district**

### **Anderson Camp Cultural Landscape (5)**

HS-303	Anderson Cottage
HS-303a	Privy
HS-305*	Fish House Dock
HS-307	Net House (Now used as residence)
HS-306	Net House (Now used as residence)

### **Barnum Island Cultural Landscape (17)**

HS-344	Barnum Cottage
HS-344a	Privy #4
HS-355	Barnum Woodshed
HS-349	Barnum's Small Boat House & Sauna
HS-348	Barnum's Large Boat House
HS-350	Dunwoodle Cottage
HS-350a	Privy #3
HS-354	Ray Cottage
HS-354a	Privy #2
HS-345	Andrew's Small Log Cabin
HS-352	Edward F. Andrew's Cottage
HS-352a	Privy #1
HS-352b	Smoke House
HS-353	Frances Andrew's Cottage
HS-351	John's Hotel
HS-351a	Double Privy
HS-343	John's Log Cabin

### **Holte Family Cultural Landscape (7)**

HS-212	Main Residence
HS-208*	Fish House Ruin
HS-208a*	Dock (N/A: Repaired 1980)
HS-210*	Net House Ruin
HS-211	Mike Johnson Residence (log section removed)
HS-212a*	Crib Dock
HS-212b	Privy

### **McGath Compound/Johnson Fishery/Crystal Cove Cultural Landscape (11)**

HS-563	McGath Residence
HS-563a	Smoke House
HS-564	Residence (Main Lodge)

HS-565	Guest Cabin
HS-566	Guest Cabin
HS-570a	Net Drying Reels (N/A: Reconstruction)
HS-570	Storage Shed (later used as Net House or Blacksmith Shop?)
HS-568*	Boat House Ruin
HS-571	Generator House
HS-564a	Dock and Crib Ruin (N/A: NPS Rehabilitation)
HS-571a	Boardwalk

#### **McPherren Compound/Captain Kidd Island Cultural Landscape (11)**

HS-300	McPherren Cottage
HS-301a	Sleeping Cabin I
HS-301	Sleeping Cabin II
HS-301b	Sleeping Cabin III
HS-301c	McPherren Boat House & Winch
HS-301d	Bath House
HS-302	Tool Shed
HS-302a	Privy
HS-302b	Flagpole
HS-303c	Docks (Crib)
HS-303d	Woodshed

#### **Rock Harbor Cultural Landscape (8)**

##### **Bangsund Fishery / Wolf-Moose Study (5)**

HS-141	Residence
HS-143	Sleeping Cabin
HS-144	Sleeping Cabin
AS-34*	Bangsund Grave (N/A)
HS-143a*	Log Crib

##### **Farmer Camp (3)**

HS-170	Farmer Cottage
HS-35	Farmer House
HS-572*	Farmer/Leavens Cottage

#### **Rude Fishery/Fisherman's Home Cultural Landscape (13)**

HS-223	Rude Residence
HS-223a	Privy
HS-223b	Dry-Laid Stone Wall
HS-225	Help's Quarters
HS-221	Store Room
HS-224	Tool Shed

HS-228	Sauna (N/A: Rebuilt 1950's on historic dock)
HS-222	Help's Quarters
HS-224a	Smoker
HS-227	Help's Quarters #2
HS-226	Rude Net House
HS-220	Fish House
HS-220a	Fish Net Drying Reels (N/A: Reconstruction)

### **Tobin Harbor Cultural Landscape (61)**

#### **Beard Camp /Island #12 (3)**

HS-280	Beard Cottage
HS-281	Beard / Greene Storage Bldg.
HS-208a	Privy (N/A: New Construction)

#### **Connolly Camp (4)**

HS-289	Connolly Cottage
HS-290	Guest House
HS-290b	Crib Dock (N/A: Reconstruction)
HS-290a	Privy

#### **Dassler Camp on Scoville Pt. (4)**

HS-248	Dassler Cottage
HS-285	Guest House
HS-266	Boat House
HS-285a	Privy

#### **Edwards Camp (5)**

HS-282	Edwards Cottage
HS-282a	Edwards Dining Room
HS-282b	Edwards Privy
HS-283	Edwards Store House
HS-575	Edwards "The Gem"

#### **Gale Camp / Island #13 (5)**

HS-276	Gale Cottage
HS-277	Tool Shed / Wash House
HS-277a	Guest Cottage
HS-277b	Privy
HS-277c	Docks (N/A: Modern Construction)

#### **How Camp / Island #14 (2)**

HS-278	How Cabin
HS-279	Guest Cabin

#### **Kemmer Camp (7)**

HS-272	Kemmer Seasonal Residence
HS-273	Guest House

HS-275	Store House
HS-274	Boat House
HS-272a	Privy
HS-272b	Steps
HS-272c*	Dock
Mattson Fishery (13)	
HS-292a*	Boat(?) House
HS-295	Mattson Cottage
HS-294	Storage Bldg.
HS-292	Mattson/Anderson Fishery Cottage
HS-293	Net House
HS-292h*	Pole Railing
HS-292d*	Dock Ruin
HS-292c	Fishing Shed
HS-292b	Fish House
HS-292e*	Shed Ruin
HS-292f	Privy
HS-292g*	Old Privy Ruin
HS-292j*	Fence Ruin
Merritt Camp / Island #16 (6)	
HS-299	Merritt Cottage
HS-299d	"The Parsonage" Guest Cottage
HS-299a	"Deer House" Guest Cottage
HS-271	"Moose Manor" Guest Cottage
HS-299b	Privy
HS-299c	Woodshed
Siefert Camp (4)	
HS-291	Siefert Cottage
HS-291a	Storage Bldg.
HS-291b	Privy
HS-291c*	Crib Dock Ruin
Snell Camp (4)	
HS-296	Snell Cottage
HS-298	Snell Guest House
HS-297	Store House
HS-296a	Writing Shack
Stack / Wolbrink Camp (4)	
HS-287	Stack House
HS-288	Guest House
HS-287a	Privy
HS-287b	Stone Retaining Wall



**Washington Island Cultural Landscape (15)**

Sivertson / Ekmark / Singer Property

HS-186*	Singer's Resort Cabin "A"
HS-186c	Singer's Resort Wireless Radio Antenna
HS-186b*	Dock Ruin
HS-200	Sivertson's Residence
HS-200a	Privy
HS-192	Honeymoon Cottage
HS-192a*	Privy
HS-193	Caretaker's Cottage
HS-199	Sivertson's Net House
HS-195	Carl Ekmark's Net House
HS-195a	Privy
HS-197	Carl Ekmark's Fish House
HS-198	Stan Sivertson's Fish House
HS-194	Sivertson's Laundry
HS-199a	Net Drying Reels (N/A: Reconstruction)

## REPAIR AND MAINTENANCE GUIDELINES

### Walls — Materials

The walls, or siding, of a cabin create more than 50% of the structure's visual appearance. There are seven (7) basic categories of wood cladding (siding) used to form the walls of the summer homes on Isle Royale: 1) board-and-batten, 2) shake/shingle, 3) lapped, 4) clapboard, 5) shiplap, 6) plywood, and 7) logs. Most of these types break down into sub-categories depending on the type of wood used, the design or the direction in which the material is applied to the structure. On Isle Royale, vertical cladding is often covered with tarpaper and/or asphalt shingles.

**Board-and-batten:** This style is typically made from rough-sawn wood planks applied vertically to form the wall with matching narrow battens applied over the joints between the planks.

**Shake/shingle:** This style of wall cladding is applied over a variety of surfaces and is not generally a structural element of the building, such as board-and-batten or log siding. The shake/shingle was commonly made of whatever type of tree was available near the building site or from a mainland shake mill. A number of decorative patterns have been used in shake/shingle clad homes over the years but the rustic structures on Isle Royale exhibit the more practical straight split shake with squared ends.

**Lapped:** This type utilizes simple planks attached to the framing horizontally in an overlapping pattern.

**Clapboard:** Like lapped siding, these boards are attached to the framing horizontally in an overlapping pattern. The difference is that the boards are tapered from top to bottom to form a thinner, lightweight barrier.

**Shiplap:** This type of wall cladding utilizes a simple L-shaped joint to seal the edges of two narrow planks together. Shiplap can be applied to wall framing in either a horizontal or vertical pattern. A common variation to this style of cladding is false-bevel shiplap.

**Log:** Logs have been used as wall material since the earliest humans figured out how to cut and stack them together. Log walls come in many different forms and a few of the summer homes and resort buildings of Isle Royale provide some excellent examples. Logs are generally laid horizontally to form the entire wall structure of a building. This method requires filling (or chinking) the gaps between the logs with different types of materials. One variation is the log "kit" house where logs are processed to a uniform size and joined on the edges and at the corners to form a tight seal. The original Crystal Cove structures (McGath era) may have been constructed from a kit assemblage; however, the possibility remains conjectural and requires further research. Another form of log cladding is the use of half logs applied over a wood frame to simulate the appearance of a rustic log structure.

## **Walls – Repair and Maintenance**

### **Recommended**

Whenever repair or maintenance is required the original wall cladding (siding) should be repaired and retained. When replacement of wall cladding is unavoidable every effort should be made to replace original fabric with identical material. Photographs of the original siding or shingles before removal can provide guidance for the historically accurate reinstallation.

If a structure is clad with rough-sawn board-and-batten siding, replace with rough-sawn materials. If rough-sawn material is not available the use of common lumber of the same dimensions is acceptable.

If shake/shingle material is to be replaced utilize shakes of the same size and type of wood as the original material. When the same species of wood is not available replace shakes with shakes of the same dimensions. Replace hand split-shake with hand-split shake. Replace sawn shingle with sawn shingle. The replacement shingles should match the original in size, coursing, thickness, lap exposure and all other visual qualities.

Replace clapboard planks with milled boards of the same dimensions. The same should be done with lapped siding.

Replace simple shiplap with shiplap of the same dimensions.

If plywood is to be replaced every effort should be made to determine if there was a different material used in construction, If possible, replace the plywood with a material that approximates the appearance of the original fabric. If plywood was original replace with a compatible style.

Log wall cladding should be replaced with logs of similar species and dimensions.

Walls clad with tarpaper and asphalt siding should be replaced/restored with similar materials.

### **Not recommended**

It is not recommended to replace an original style or type of wall cladding with another style, i.e., do not replace board-and-batten with plywood, log, shake, etc.

It is not recommended to mix styles or materials if not used in the original design of the structure.

Finished walls that feature tarpaper and/or asphalt siding should not be left bare following restoration.

## **Roofs — Materials**

A cabin roof is a major visual element of the structure and can constitute up to 50% of what an individual sees of the structure. When repairing the roof of an historic structure it is critical to not damage the historic visual appearance. Roofing materials in the Isle Royale districts fall into two (2) basic categories: 1)Asphalt, and 2) shake/shingle.

**Asphalt:** Most of the structures on Isle Royale are capped with asphalt shingles or rolled asphalt. Colors vary but usually feature earth tones such as greens and browns. Rolled roofing is the most prevalent material and comes in 3-4' lengths. It is rolled across a roof span and trimmed to fit. Most often the roofing is applied horizontally, although vertical applications do exist. Asphalt shingles are less common.

**Shake/shingle:** As with shake/shingle clad walls, the roofs that utilize wood shakes and shingles are commonly found to be covered in wood from nearby sources during the original time of cabin construction. The source may have been a local shake mill or the tract of the cabin builders themselves. White pine and cedar are among the wood types more commonly used for this purpose. The rustic structures on Isle Royale exhibit straight split shake and shingles with squared ends.

## **Roofs — Repair and Maintenance**

### **Recommended**

It is recommended that as much of the original roof fabric be retained as possible. When replacement of the entire roof is unavoidable, the original roof pitch and eave over-hang must be retained. Every effort should be made to retain as much of the original roof framing as possible.

If shake/shingle material is to be replaced utilize shakes of the same thickness, size and type of wood as the original material. When the same species of wood is not available replace shakes with shakes of the same dimensions. Replace hand split-shake with hand-split shake. Replace sawn shingle with sawn shingle. Photos of the original shingle coursing and lap exposure should be taken prior to the removal and used as guidance for the historically accurate installation.

With regard to rolled roofing, the replacement material should be applied in the same manner. Horizontal rolled roofing should be replaced with a similar material that follows a similar alignment.

When replacing a roof it is recommended that the replacement be of a material type already in use on the Isle Royale structures.

## **Not Recommended**

It is not recommended to change the shape, structure or pitch of an original roof.

The replacement of wood shake/shingle with composition shingle is not recommended.

It is not recommended to change the original colors or alignment of roofing materials.

## **Fenestration**

Windows, doors and other intentional openings in a building's walls are known as fenestration. They are considered to be the "eyes of a building" and contribute substantially to the character of a structure and the feeling that it imparts to the viewer. The fenestration is a critical component to the historic integrity of a building.

### **Windows — Materials**

Most of the windows in the Isle Royale structures and cabins have wood frames and sashes. There are a variety of styles in use: double hung, single hung, fixed, and wood casement. Within these styles there are a variety of different forms. Some windows have simple single panes in fixed frames, while others have multiple panes. A common type of window is the double hung window, which allows the top half to be drawn down or the lower half to be raised. A single hung window has a fixed upper portion and a lower section that can be raised for ventilation. These two types of windows can have a single pane in each half or multiple panes in the top and bottom halves. Wood casement windows are hinged on the top, bottom or one side and can have one or more panes in each frame. Windows are either massed together to provide enlarged viewing areas for the building's occupants or they can be placed individually to provide daylight to interior spaces.

### **Windows — Repair and Maintenance**

Before there is consideration of replacement of original windows, every effort should be made to retain the historic window fabric. Good maintenance of windows will prevent deterioration. Deteriorated wood can be retained by repair using wood consolidants that are commercially available. Regular painting and caulking will retard decay. Maintenance includes regular inspection of all windows to detect signs of problems, particularly windows facing south or west. Windows should be weather stripped and kept in good working order. Energy efficient glass films and coatings are available and storm windows on either the exterior or interior should be considered before replacement in order to achieve energy efficiency.

## **Recommended**

It is recommended that when re-glazing windows that all old glazing, or putty be removed and a new bead of the same size be applied then finished in a color that matches the original.

It is recommended that the original windowpanes and framing be retained and restored.

If aluminum or vinyl framed replacement windows are present it is recommended to paint the frames in a color that matches the rest of the cabin's trim.

It is recommended that windows of the same appearance and operating style be used as the original window that is being replaced.

If replacing damaged windows always replace an original window with one of the same material, dimensions, number of panes and pane configuration.

When replacing historic windows with modern, energy efficient replacements it is recommended to use styles that duplicate the appearance of the original window. Manufacturers will custom size and mill windows to match the original in all visual aspects, if they are instructed to do so. Aluminum-clad wood windows are not the same as a wood window.

## **Not recommended**

It is not recommended to enlarge the opening of any window that is replaced. Conversely, it is not recommended to use a replacement window that is smaller than the original.

It is not recommended to replace wood framed casement, double hung, or single hung windows with aluminum or vinyl framed sliding windows.

## **Doors — Styles and Materials**

Doors on summer cabin and fishery structures appear in a variety of styles from rough handmade wood slabs to more ornate store-bought designs. Isle Royale door styles are often 4 or 5-panel wood door with 4 or 5 horizontal raised panels in a heavy frame. Other door styles have wood-framed glass panes in the upper half of the door and a solid or raised wood panel in the lower half. Some doors are constructed of simple board-and-batten siding designed to match the exterior siding on the cabin while others are simple slabs or planks joined and hung vertically.

## **Doors — Repair and Maintenance**

### **Recommended**

It is recommended to retain and repair the original doors.

It is recommended to refinish doors in the same color and finish type as that of the original. When replacing a door it is recommended to use doors that are constructed of the same material and of the same dimensions and paneling pattern as the original.

### **Not Recommended**

It is not recommended to refinish an original, historic door in a different color or treatment that is not in keeping with the original finish.

It is not recommended to replace an original door with a door of a different style. For example, do not replace a raised panel door with a modern solid surface door.

It is not recommended to replace a wood door with a door of different material such as steel or fiberglass.

Changing the dimensions of the opening, or the door, is not recommended.

## **Shutters — Materials**

Shutters are most commonly made of wood and are designed to protect the windows and doors of a cabin when unoccupied. The styles range from simple plywood sheets to board-and-batten coverings that give the appearance of a solid wall when closed. The three most common types of mountings are; side hinged, top hinged and simple hung types that are taken down when not in use. Shutters are generally painted or stained in colors that match either the trim or walls of a cabin.

Good maintenance of shutters will prevent deterioration. Deteriorated wood can be retained by repair using wood consolidants that are commercially available. Regular painting will retard deterioration.

Maintenance includes regular inspection of all shutters to detect signs of problems, such as the collection of moisture or natural debris (leaves, pine needles, etc.) behind the shutters, rusting of the hinges or attachments, or loose attachments.

## **Shutters — Repair and Maintenance**

### **Recommended**

It is recommended to retain and repair the original shutters.

It is recommended to refinish shutters in the same color and finish type as that of the original. If shutters have deteriorated beyond repair it is recommended to use shutters that are constructed of the same material, dimensions and paneling pattern as the original.

### **Not Recommended**

It is not recommended to refinish original historic shutters in a different color or treatment that is not in keeping with the original finish.

It is not recommended to replace original shutters with shutters of a different style. For example, do not replace board-and-batten style shutters with sheets of plywood.

It is not recommended to replace wood shutters with shutters of different material such as steel or fiberglass.

Changing the dimensions of shutters is not recommended.

## **Decks, Patios and Porches— Materials**

Decks and patios are generally designed for outdoor socializing activities whether for a simple family activity like a meal or a larger gathering of friends and neighbors. These structures tend to dominate the immediate area or side of the building where they are located and are often, though not always, later additions to the original structure.

Porches are generally designed to serve one of two functions: they are designed to allow access to the inside of a structure or they provide additional sleeping and sitting space in warm weather conditions. Most porches that were designed as points of entry to a cabin were included in the original design and construction. Through modification porches have often become part of the structure as space needs changed over time. A sleeping or sitting porch is just as likely to have been part of an original design as it is to have been a later adaptation.



## **Decks, Patios and Porches — Repair and Maintenance**

### **Recommended**

It is recommended that any repairs to a deck, patio or porch retain as much of the original material as possible. If replacement of materials is necessary then the replaced material should be of like material and dimensions. For example, replace 2"x 6" pine decking with 2"x 6" pine.

Repair and rebuild stone paved patios with stones of similar size and appearance.

Enclosed or screened porches should be repaired with the same type of screen material.

### **Not Recommended**

It is not recommended to replace or cover a stone patio with a deck of any kind.

It is not recommended to replace decking material with a material of a different dimension or type. For example, do not replace 2" X 6" pine deck or rail material with cedar or any different type of material, of any dimension.

It is not recommended to replace screened porch panels with different sized screened areas. For example, do not replace a full screen panel with a half-screen, half-wood panel.

## **Chimneys and Stovepipes — Materials**

Where present, the original chimneys on the Isle Royale cabins were usually made of mortared, native cobblestone. The stones and the patterns used vary with individual builders. Some used flat stones in layers while others used larger chunks of stone with small pieces to fill in gaps. Bricks are often part of a chimney construction. The harsh winters on Isle Royale have damaged the chimneys on an almost regular basis. A number of cabins do not have external chimneys but rely on metal stovepipes that pass through the roof or a wall from inside the structure. This is most common when a wood stove or heater is present instead of a fireplace.

## **Chimneys and Stovepipes — Repair and Maintenance**

### **Recommended**

Retain as much of the original chimney as possible.

Whenever possible restore a damaged chimney to the design and appearance of the original. For example, when rebuilding a stone chimney that has a later, non-historic red brick section, replace the brick with stone or face the brick with stone that resembles the original chimney materials.

When replacing an older metal stovepipe with modern fire-safe styles it is recommended to cover the entire visible length of new pipe with an outer casing that resembles the more rustic (rough and rusted) iron style of the original stovepipe.

When rebuilding a damaged chimney it is recommended the original appearance be maintained or restored. For example, rebuild a stone fireplace with as much of the original stone as possible and use only similar stone to replace missing materials and portions of the chimney.

When replacing damaged stovepipe use pipe material that closely resembles the original in length and diameter.

When repairing either a stone or brick chimney the new mortar should match the original mortar in lime composition, joint size, color, and all other visual qualities. Hard Portland cement mortar expands and contracts at a different rate than stone or brick and can cause these softer materials to crack and deteriorate rapidly. Hard Portland cement mortar does not weather as bricks do and over time will protrude from the original wall surface.

#### **Not recommended**

It is not recommended to replace any or all of an original stone chimney with brick or any other material.

It is not recommended to mix brick types or color when repairing or replacing a brick chimney. It is not recommended to use a different type, size or color of stone than that used in the original design of the chimney.

It is not recommended to change the size or shape of a chimney unless it is necessary for fire safety. For example, a stovepipe may be extended if necessary to protect a roof or wall from heat or fire.

#### **Foundations — Materials**

The foundation is the base on which a structure is erected. Historic building foundations generally fail for either of two reasons: the original foundation was insufficient or under-built for long-term use and has weakened with age, or the underlying soil is subject to drastic temperature cycles (freeze/thaw) throughout the year.

There are many types of foundations in use on Isle Royale, which include: native stone, post- and-pier, concrete, brick, log and bedrock. The first of these types, stone foundations, can be either dry-laid (with no mortar to bind the stones together) or mortared stone. Another type, post-and-pier, utilize either a stone or a formed block of concrete to support a wood beam or post. Brick foundations are usually laid on concrete pads. Log foundations are often situated on prepared surfaces of earth and/or stone. Because topsoil is sometimes absent on Isle Royale, foundations can be laid directly on bedrock.

Boat houses feature different foundations altogether. They are usually constructed atop cribbed foundations, where stone is used as fill. Pilings are often used for additional support.

## **Foundations — Repair and Maintenance**

### **Recommended**

It is always recommended to retain as much of the original foundation as is possible while preserving the safety of the structure.

If it is necessary to replace a failing foundation, replace a post-and-pier type foundation with a post-and-pier system.

Retain as much of the original enclosure material as possible and paint or stain the material in a color as close to the original color as possible.

If necessary, replace a foundation enclosure with the same type and style of material as the original.

Replace a stone foundation with like-appearing stones.

If necessary for structural stability and safety replace a stone foundation with a concrete block- type foundation and apply a veneer of stone in order to simulate the appearance of the original foundation.

### **Not Recommended**

It is not recommended to replace a post-and-pier system with a stone or brick continuous foundation. The reverse is also not recommended.

It is not recommended to replace open lattice foundation enclosures with solid sheathing.

It is not recommended to significantly alter the color of a foundation enclosure.

## **Landscaping — Materials**

Landscaping around most of the cabins on Isle Royale consists of native and non-native plants offset by retaining walls, bordered pathways and short stairs. These features, whether indigenous or introduced, contribute to the historic integrity of a cultural landscape and help define lot boundaries within the Park.

## **Landscaping — Repair and Maintenance**

### **Recommended**

It is recommended that any native or non-native vegetation dating from the historic period (pre 1942) be replaced only after receiving a permit from the park resource staff to do so for the purpose of meeting historic preservation guidelines. This will allow both natural and cultural resource divisions within the park to determine case by case whether the vegetation is significant enough that it should be replaced, or whether native vegetation should be allowed to take over.

Always retain or restore the original, historic (pre-1942), design and dimensions of any retaining wall, path border or stairway.

It is recommended to retain as much original building material as possible when making repairs to retaining walls, steps and pathway borders.

### **Not Recommended**

It is not recommended to replace existing, historic, vegetation types with non-native species of plants unless it is done in order to restore an original landscape design.

It is not recommended to significantly alter historic landscape features (pre-1942) by extending, reducing or enlarging retaining walls, steps or pathways.

It is not recommended to exchange types of materials in the reconstruction or repair of retaining walls, steps or pathway borders. Some examples are; do not replace rock retaining walls with wood railroad ties. Do not replace stone steps with wood stairs. Do not replace stone pathway borders with wood stakes or fencing.

## **Paints and Stains — Materials**

Traditionally, users of summer homes and fisheries were required to paint their leased structures in colors that blended with or complimented the surrounding environment. These colors were generally browns and greens with some reddish hues used occasionally. The cabins on Isle Royale remain true to this general plan with light and dark shades of brown or green paint predominating. Among other finishes found on the cabins there are also some reddish stains and many structures maintain a natural wood or oiled/varnished appearance.

## **Paints and Stains — Repair and Maintenance**

### **Recommended**

It is recommended that all historic structures be repainted or stained in an identical color and hue as the original. In some cases there may be many different layers of color on a structure. When determining the original color of a structure the last color encountered, beginning with the current surface, before reaching bare wood is generally considered to be the oldest. The oldest layer of color is considered the original unless documentation is available that the cabin was originally left untreated or bare. Scraping with natural bristle brushes or sanding is recommended. Metal brushes can leave metal chips which will stain or bleed through the paint. Testing for lead-based paint should be undertaken before any scraping or sanding and proper safety precautions should be taken.

It is recommended to return any structure to its original historic color.

### **Not recommended**

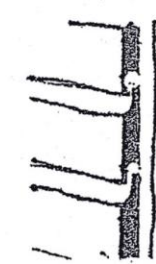
It is not recommended that a structure be painted a color other than the earliest identifiable color available.

It is not recommended to replace an existing historic shade or hue of paint with a lighter or darker hue. For example, do not replace dark green or brown with light green or brown.

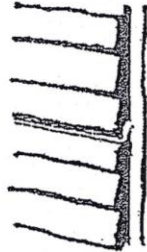
It is not recommended that when preparing an historic structure for refinishing that the old finish be removed by any method that will harm the original fabric of the structure. For example, sandblasting, or high-power water blasting or washing is not recommended because the process can deteriorate the wood surfaces of wall materials.

## SIDING

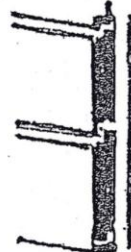
### HORIZONTAL BOARD



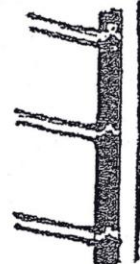
Simple



False Bevel



Shiplap



Tongue-and-groove



Lapped



Clapboard



Rabbeted

### VERTICAL BOARD

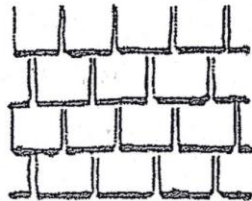


Board-on-board

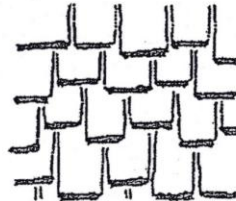


Board-and-Batten

### SHINGLE

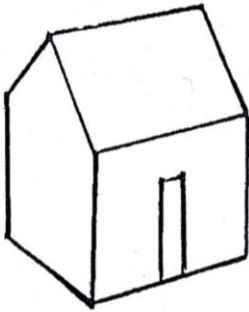


Coursed

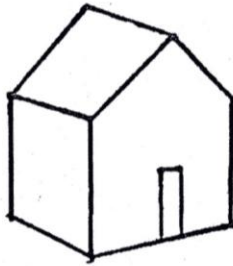


Staggered

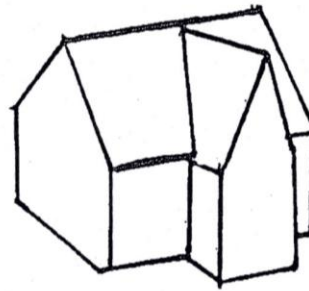
## ROOF SHAPES



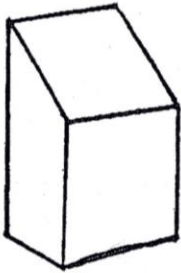
Side-gabled



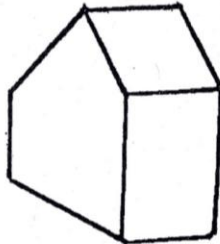
Front-gabled



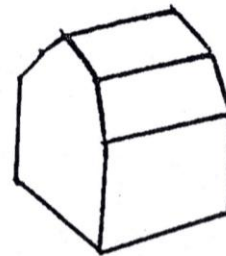
Cross-gabled



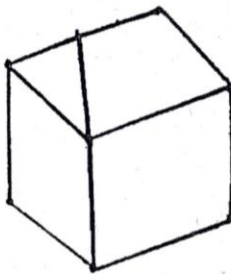
Shed



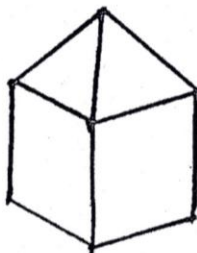
Saltbox



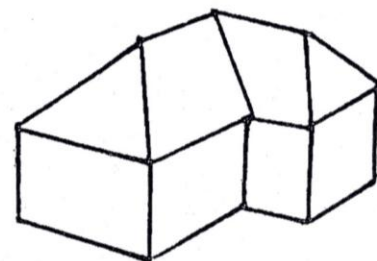
Gambrel



Simple hipped



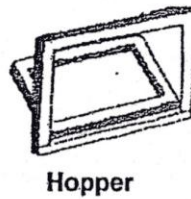
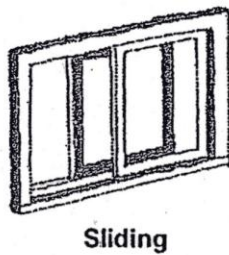
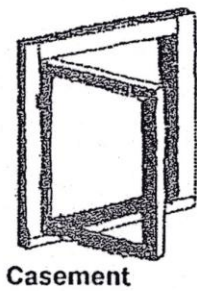
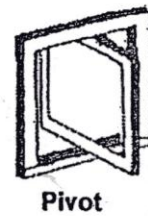
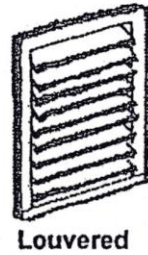
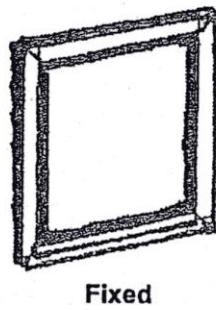
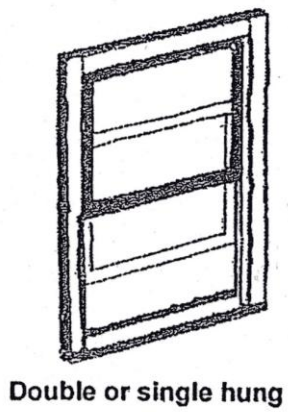
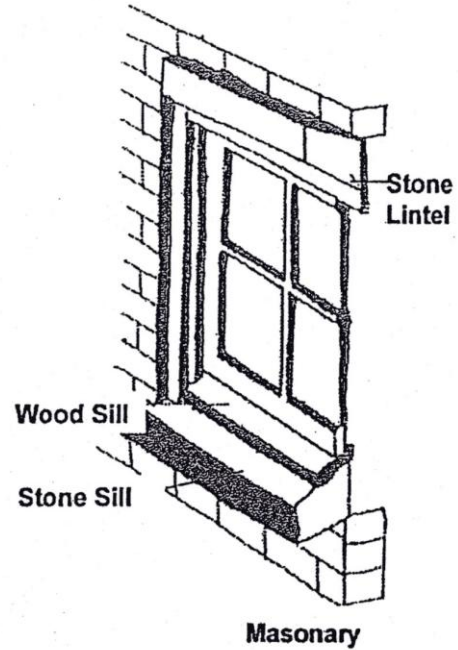
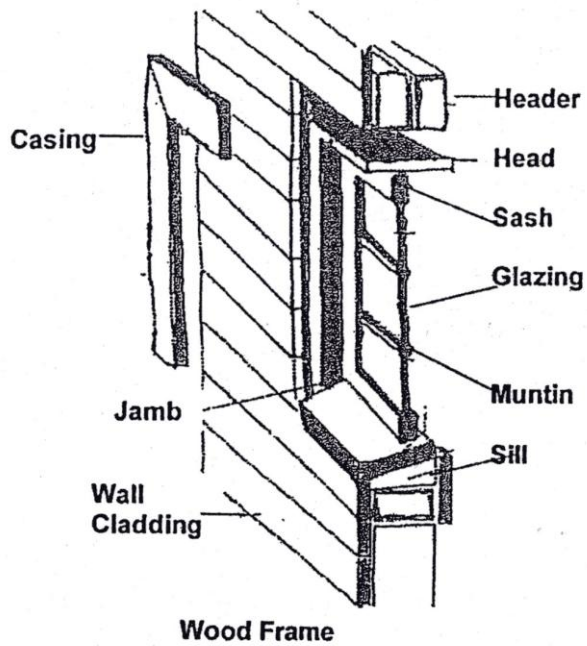
Pyramidal



Cross-hipped

## WINDOWS

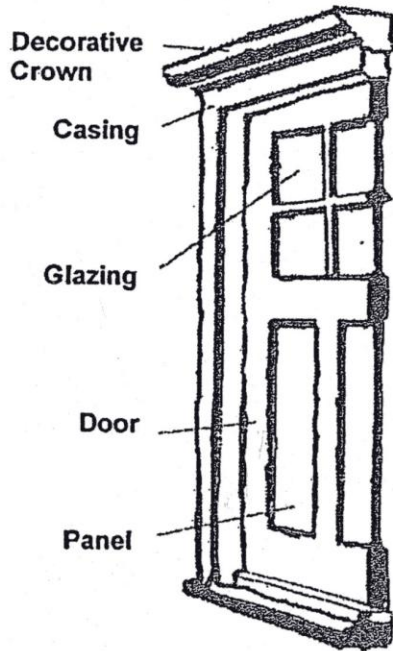
### WINDOW ELEMENTS



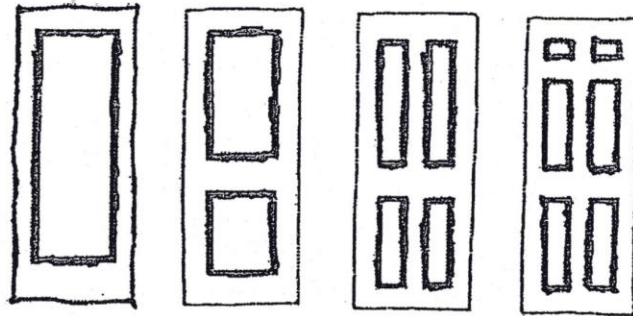


## DOORS

### DOOR ELEMENTS

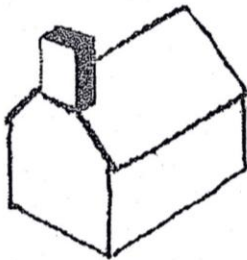


### TYPICAL PANEL DOOR STYLES

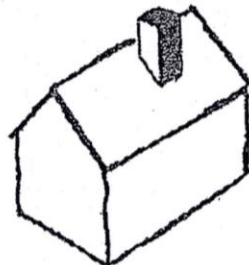


## CHIMNEYS

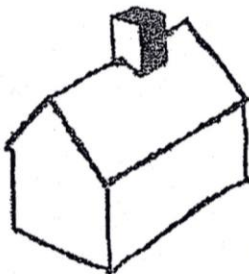
### PLACEMENT



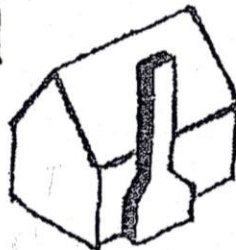
End



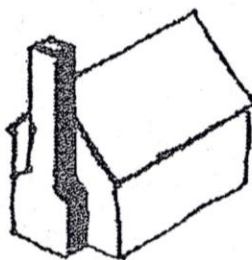
slope



Ridge



Eave Wall

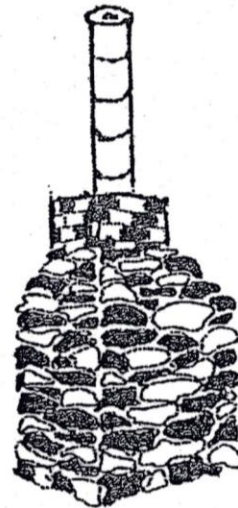


Gable Wall

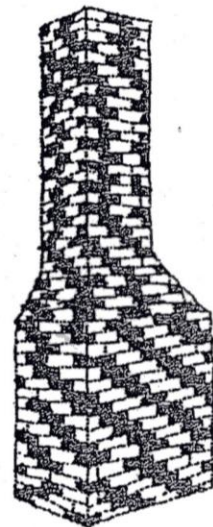
### CONSTRUCTION TYPES



Stone



Composite Masonary

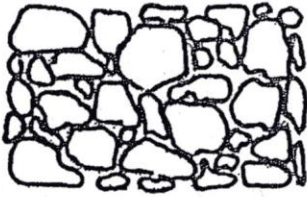


Brick

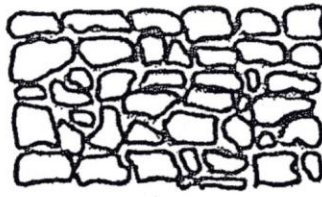
## MASONRY

### STONE

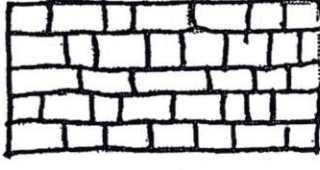
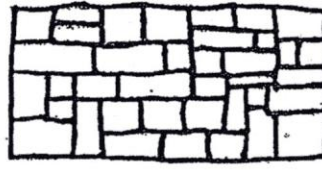
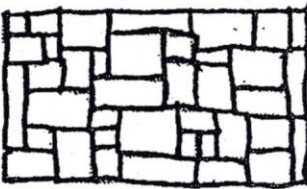
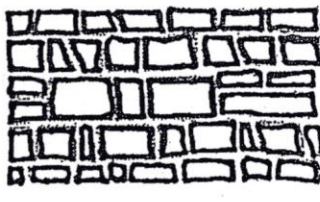
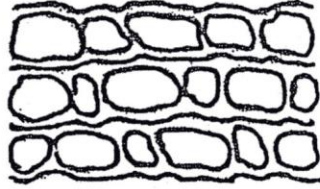
No courses



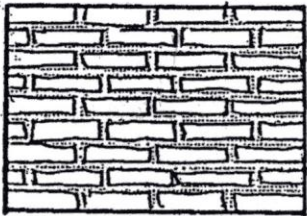
Irregular Courses



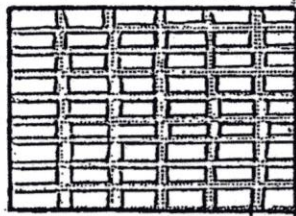
Regular Courses



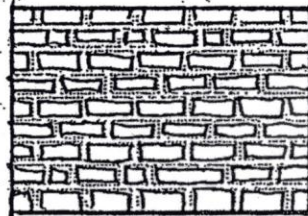
### BRICK



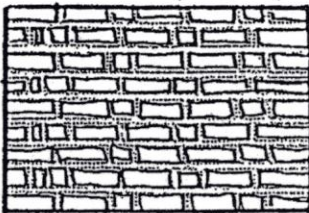
Running Bond



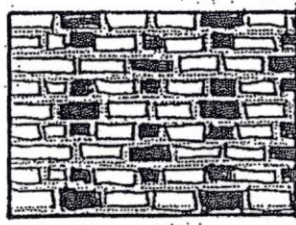
Stack Bond



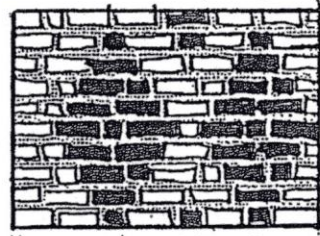
Dutch Bond



Double Stretcher



Cross bond



Diagonal Bond

## GLOSSARY OF TERMS

**Contributing resource or feature:** A site, building, structure, or object that adds to the historical associations, and/or the historic architectural qualities for which a property is significant.

**Fenestration:** The doors, windows or other intentionally designed openings in a structure.

**Cultural Landscape:** A cultural landscape is defined as a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features. Cultural landscapes commonly reflect the day-to-day occupational activities of people engaged in traditional work such as mining, fishing, and various types of agriculture. Often, they have developed and evolved in response to both the forces of nature and the pragmatic need to make a living.

**Historic Property:** A district, site, building, structure or object significant in American history, architecture, engineering, archeology or culture at the national, state, or local level.

**Integrity:** The authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period.

**In-kind replacement:** To replace a material with an identical or nearly identical type of material.

**National Register Criteria:** The established criteria for evaluating the eligibility of properties for inclusion in the National Register of Historic Places.

**Non-Contributing resource:** A site, building, structure, or object that does not add to the historical associations, and/or the historic architectural qualities for which a property is significant. A resource may be non-contributing because it was constructed outside the period of significance or has been so altered that it has lost its historic integrity.

**Preservation:** The act or process of applying measures to sustain the existing form, integrity and material of a building or structure, and the existing form and vegetative cover of a site. Preservation may include initial stabilization work as well as ongoing maintenance of the historic building materials.

**Protection:** The act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment. In the case of archeological sites, the protective measure may be temporary or permanent.

**Reconstruction:** The act or process of reproducing by new construction the form and detail of a damaged building, structure, or object, or any part thereof, as it appeared immediately prior to its damage or destruction.

**Rehabilitation:** The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural and cultural values.

**Restoration:** The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

**Routine maintenance:** Repair or replacement of materials, as required, to maintain the physical integrity of structure. Examples include, but are not limited to; painting, window pane reglazing and minor shingle replacement.

**Stabilization:** The act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

## **ADDITIONAL RESOURCES**

### **Publications**

McAlester, Virginia and Lee. *A Field Guide to American Houses*. Alfred A Knopf, Publisher. New York. 1984.

### **Federal Regulations**

36 CFR Part 68: The Secretary of the Interior's Standards for the Treatment of Historic Properties,  
[http://www.nps.gov/hps/tps/standguide/overview/using\\_standguide.htm](http://www.nps.gov/hps/tps/standguide/overview/using_standguide.htm)

### **Historic Preservation Briefs:**

<http://www.nps.gov/history/hps/tps/briefs/presbhom.htm>

Preservation Brief 1: *The Cleaning and Waterproof Coating of Masonry Buildings*

Preservation Brief 2: *Repointing Mortar Joints in Historic Masonry Buildings*

Preservation Brief 3: *Conserving Energy in Historic Buildings*

Preservation Brief 4: *Roofing for Historic Buildings*

Preservation Brief 6: *Dangers of Abrasive Cleaning to Historic Buildings*

Preservation Brief 8: *Aluminum and Vinyl Siding on Historic Buildings: The Appropriateness*

Preservation Brief of Substitute Materials for Resurfacing Historic Wood Frame Buildings

Preservation Brief 9: *The Repair of Historic Wooden Windows*

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

Preservation Brief 14: *New Exterior Additions to Historic Buildings: Preservation Concerns*

Preservation Brief 15: *Preservation of Historic Concrete: Problems and General Approaches*

Preservation Brief 16: *The Use of Substitute Materials on Historic Building Exteriors*

Preservation Brief 17: *Architectural Character - Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character*

Preservation Brief 18: *Rehabilitating Interiors in Historic Buildings Identifying Character-Defining Elements*

Preservation Brief 19: *The Repair and Replacement of Historic Wooden Shingle Roofs*

Preservation Brief 24: *Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches*

Preservation Brief 25: *The Preservation of Historic Signs*

Preservation Brief 26: *The Preservation and Repair of Historic Log Buildings*

Preservation Brief 28: *Painting Historic Interiors*

Preservation Brief 35: *Understanding Old Buildings: The Process of Architectural Investigation*

Preservation Brief 36: *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*

Preservation Brief 37: *Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing*

Preservation Brief 39: *Holding the Line: Controlling Unwanted Moisture in Historic Buildings*

### **National Register Bulletins**

<http://www.nps.gov/history/nr/publications/>

National Register Bulletin 15: *How to Apply the National Register Criteria for Evaluation*. U.S Government Printing Office, Washington, D.C. 1995

National Register Bulletin 30: *Guidelines for Evaluating and Documenting Rural Historic Landscapes*. U.S Government Printing Office, Washington, D.C. 1995

### **Reports**

(Available from Isle Royale National Park)

Franks, Kathryn E. and Arnold R. Alanen. *Historic Structures at Isle Royale National Park: Historic Contexts and Associated Property Types*. Prepared by the University of Wisconsin-Madison for the National Park Service, Midwest Regional Office. Omaha, Nebraska. 1999.

### **Additional Material**

Gale, Thomas P. and Kendra Gale. *Isle Royale: A Photographic History*. Isle Royale Natural History Association. Houghton, Michigan. 1995.



## **APPENDIX A:**

### **The Secretary of the Interiors Standards for the Treatment of Historic Properties, 1995**

#### **Standards for Preservation**

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.



## **Standards for Rehabilitation**

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## **Standards for Restoration**

1. A property will be used as it was historically or be given a new use which reflects the property's restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.

## **Standards for Reconstruction**

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.
2. Reconstruction of a landscape, building, structure, or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will recreate the appearance of the non-surviving historic property in materials, design, color, and texture.
5. A reconstruction will be clearly identified as a contemporary re-creation.
6. Designs that were never executed historically will not be constructed.