NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR

NATIONAL CAPITAL REGION
DESIGN AND CONSTRUCTION BRANCH
WASHINGTON, D.C.

Peirce Barn and Peirce Springhouse
Historic Structures Report

Rock Creek Park
Washington, DC



Figure 1 Peirce Barn



Figure 2 Peirce Springhouse

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ADMINISTRATIVE DATA

Project Identification

Name: Peirce Barn and Peirce Springhouse
Historic Structures Report
PMIS 149248

Project Statement and Purpose

The purpose of this project is to produce a Historic Structures Report (HSR) including: Management Summary; Part 1: Developmental History; Part 2: Treatment and Use; as well as measured drawings and photographic documentation of the Peirce Barn and Peirce Springhouse. These documents are needed to guide restoration of the Peirce Barn and Peirce Springhouse.

Location Data

Name: Peirce Barn and Peirce Springhouse

Park: Rock Creek Park, Washington, DC

LCS ID: 011926

Address: Tilden Street and Beach Drive, NW
Washington, DC 20008-3812

Cultural Resource Data

Date entered on the National Register: 25 October 1973. National Register of Historic Places, Pierce[1] Springhouse and Pierce Barn (Art Barn), Washington, DC. National Register listing #73000222.

The Peirce Barn and Peirce Springhouse are listed as contributing resources to the Rock Creek Park Historic District. Date entered on the National Register: 23 October 1991. National Register of Historic Places, Rock Creek Park Historic District, Washington, DC. National Register listing #91001524.

Periods of Significance:

There are three periods of significance related to the Peirce Barn and Peirce Springhouse. The first (1800-1890) corresponds to the redevelopment of milling and establishment of the agricultural enterprises on the property by Isaac Peirce (b.1756, d.1841); his son, Abner Peirce (b. 1785, d.1851); and his grandson, Peirce Shoemaker (b.1816, d.1891). The second period of significance (1891-1933) refers to when the Barn, Springhouse, and Mill were incorporated within the boundaries of Rock Creek Park (1890). The final period of significance (1934-1955) relates to when the Barn, Springhouse, and Mill were restored as a living history museum.

Context of Significance:

The Peirce Barn and Peirce Springhouse are noteworthy in that they were originally part of a larger complex of buildings, the Peirce family farmstead. The Peirce family farmstead was a prosperous farm and mill located on the

[1] Over time the spelling of the Peirce/Pierce family name has fluctuated. The National Register of Historic Places nomination form uses the spelling Pierce.

west bank of Rock Creek, a forested valley with sloping hills and meadows. The complex of buildings originally included a residence, mill building, overseer's house, sawmill, cow barn, potato house, and distillery, in addition to the Barn and Springhouse.

Related Studies

National Park Service. Peirce Mill. 2012.

National Park Service. Peirce Mill Complex Cultural Landscape Report. 2009.

National Park Service. Peirce Mill Historic Structures Report. 2000.

National Park Service. Rock Creek Park Historic District. 1991.

National Park Service. Pierce[2] Still House. 1990.

National Park Service. Cloverdale, Pierce Shoemaker House. [3] 1990.

National Park Service. Pierce Springhouse and Pierce Barn (Art Barn). [4] 1973.

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[2] Over time the spelling of the Peirce/Pierce family name has fluctuated. The National Register of Historic Places nomination form uses the spelling Pierce.
[3] Ibid.
[4] Ibid.

EXECUTIVE SUMMARY

Developmental History

Historical Background and Context

The Peirce family was an important landowner in the District of Columbia during the late 1700s through the early 1900s. The Peirce Barn and Peirce Springhouse were constructed in the early 1800s on land that functioned as a prosperous farm and housed milling operations. The two buildings are significant as examples of the social and economic history of the area. The Barn, constructed between the years 1810-20, and the Springhouse, in 1801, are both fine illustrations of the early 1800s vernacular stone building construction.

Original Construction

Many of the original features of the Barn and Springhouse are in good condition.

Peirce Barn

The majority of the character-defining features of the Barn date to the periods of significance. The overall massing of the Barn is in good condition. A few exterior alterations have occurred throughout the years. Alterations include additional windows at the south elevation, a chimney, and the conversion of a pedestrian entrance at the east elevation to a window.

The interior spatial organization of the Barn has changed very little since it was constructed. Originally, the ground level housed carriage(s) and was used for tool storage. The second floor was presumably used for storage. The attic level is assumed to have been used for hay storage. Very little is known about the use(s) of the Barn from 1892 and 1971 when it was transformed into the Art Barn. Since the late 1990s the Barn has served as a visitor contact station for the Peirce Mill.

Peirce Springhouse

The majority of the character-defining features of the Springhouse date to the periods of significance. The overall massing of the Springhouse is in good condition. The exterior elevations of the Springhouse have not been significantly altered. However, the structure was struck by an automobile and as a result a quarter of the building was reconstructed in the late 1990s.

The interior of the Springhouse is simple, with no interior partitions. The unadorned lower level space provided access to spring water and was used to cool milk and butter in the summer. The upper level with its finished ceiling and plaster walls had a fireplace. The room was kept warm during the winter months to churn butter. There have been no alterations to the Springhouse, restoration work has matched existing.

Treatment and Use

Peirce Barn

The preferred use for the Barn is one that will continue contributing to the Park's interpretive message. The structure will be used as the main visitor contact station for tours of Peirce Mill. The second floor would be used for storage or office space. The attic would be used only for storage.

The preferred alternate is Alternate #2B – Rehabilitate. This project would revitalize the Barn as a visitor contact station. An accessible entry would be established at the east elevation. The existing entry at the south elevation would be retained. Interior work would include the addition of one (1) unisex staff toilet, drinking fountains, and a utility sink at the first floor. In addition, a fire protection system would be provided throughout the building.

Execution of the preferred treatment will have a minor impact on the historic and architectural character of the Barn. Accessibility path(s) will cause small visible intrusions to the exterior of the Barn. On the interior, the erection of new partition walls will slightly impact the spatial organization of the ground floor of the Barn. Fire safety, mechanical and electrical services will be concealed and will have a minimal effect on the historic character of the structure.

Peirce Springhouse

The preferred use for the Springhouse is a Park support structure. The upper level will continue to serve as storage/utility space for Park staff. The damp lower level shall remain vacant.

The preferred alternate is Alternate #1 – Preservation. The project would include selective repair and stabilization work of the site and of the building. Proposed work would include roof shingle replacement, stone wall repair, upper floor assembly repair, door and window rehabilitation, and paint at wood trim assemblies. The grade and door thresholds should be reworked to prevent water infiltration at both entrances. In this alternate the lower level of the Springhouse would be mothballed.

Execution of the preferred treatment will not have an adverse effect (i.e. impact) to the historic and architectural character of the Springhouse. The proposed treatment will improve the overall function and appearance of the structure.

CHAPTER 1.1: HISTORICAL BACKGROUND AND CONTEXT – PEIRCE BARN AND PEIRCE SPRINGHOUSE

Introduction

Both the Peirce[1] Barn and Peirce Springhouse are located near the intersection of Tilden Street and Beach Drive, NW, Washington, DC.[2]

The Peirce family was an important landowner in the District of Columbia during the late 1700s through the early 1900s. The Peirce Barn and Peirce Springhouse were constructed in the early 1800s and the land adjoining the Barn and Springhouse functioned as a prosperous farm, and housed milling operations. "The Peirce [farmstead] in its entirety is significant as an example of the social and economic history of the area."[3]

The area now falls within the boundaries of Rock Creek Park. Four original buildings built by Isaac Peirce remain: the Barn, Springhouse, Mill, and Distillery (or Still House). Today the Barn, Springhouse, and Mill structures are referred to as the Peirce Mill Complex and are owned and operated by the Federal government via the National Park Service. The Distillery is currently privately owned.

Peirce Family History

The Peirce family came to what is now known as Rock Creek Park in the late 1700s. Isaac Peirce and his wife established the Peirce family farmstead, a prosperous farm and mill. After Isaac Peirce's death, the farmstead was run by his eldest son Abner C. Peirce. Never married, Abner C. Peirce left the farmstead to his nephew Peirce Shoemaker. Upon his death in 1891, a portion of the Isaac Peirce farmstead was obtained by the Federal government through condemnation and was set aside as a Federal park. It has been said that Peirce Shoemaker's son, Louis Shoemaker was instrumental in the establishment of Rock Creek Park as one of the first Federal parks.[4]

Isaac Peirce (b. 1756, d.1841)

Isaac Peirce was born in 1756, the third-born son of Joshua Peirce (b. 1724, d. 1803). Isaac Peirce lived in Chester County, Pennsylvania for the first half of his life. Chester County was one of the three original colonies created by William Penn in 1682 and was home to members of the breakaway Christian group commonly referred to as the Quakers. The Peirce family was committed to the Pennsylvania Quaker way of life.

Society of Friends

The formal name for the Quakers is The Society of Friends. The Society is an offshoot of the sixteenth-century English Puritan movement, which emphasized the individual nature of Christian belief and saw no need for

[1] Over time the spelling of the Peirce/Pierce family name has fluctuated. Peirce will be used for the duration of this document.
[2] The street address for the Barn is 2401 Tilden Street, Washington, DC, 20008-3812. The Springhouse is situated within the planted median of Tilden Street (to the west of the Peirce Barn).
[3] Pierce Springhouse and Pierce Barn, National Register of Historic Places, Nomination form, pg. 3. Note the nomination form uses the spelling Pierce.
[4] National Register of Historic Places Nomination Form, Cloverdale Pierce Shoemaker House, section number 8, page 2. Note, again, the nomination form uses the spelling Pierce.

ordained ministers and consecrated buildings. Though morally strict and plain in dress, the Quakers did not believe in monastic isolation and withdrawal into remote communities. Pennsylvania Quakers endured fierce prosecution by the British as they refused to swear an oath of loyalty to the crown. However, their businesses prospered as a result of their reputation for honesty and dependability.[5]

Revolutionary War (1775-1783)

In 1775, with the onset of the Revolutionary War, the Pennsylvania Assembly ordered universal military service for all adult males. But as Quaker tradition did not permit military service, the Society of Friends was required to disregard the order and in addition told to "refuse to vote, pay taxes or hold office in the evolving revolutionary government." [6]

The Cloud Family (1780's)

The Peirce and Cloud families were neighbors in Chester County, PA. In 1780, Isaac Peirce married Elizabeth Cloud (b. 1761, d.1833), the only daughter of Abner Cloud Sr. (b. c.1738, d. c.1784). It is important to note that, Abner Cloud Sr. (Elizabeth's father) was disowned by the Kennet Quaker meeting for taking up arms in the Revolutionary War. As a result, when Isaac Peirce married Elizabeth he was also ejected from the Quaker fold. Elizabeth Cloud was a non-member because of her father's status.

Isaac Peirce began working with his wife's two brothers, Abner Cloud, Jr. (b. c.1772, d. c. 1812) and Amos Cloud (b. ?, d.1798) in the mid-1780's to purchase land in what would soon become the Nation's Capital. The Peirce-Cloud families began a property-buying spree that ranged over three states: Maryland, Virginia, and West Virginia. [7] [8]

Land Acquisitions (1790's)

Isaac Peirce and his wife began acquiring land in the vicinity of the present Barn and Springhouse as early as 1794.[9] A 150-acre parcel of land was sold to Peirce by William Deakins, a Georgetown merchant and real estate speculator which "included a house, dependencies, and a mill. The mill building was located on an adjacent ten-acre tract and was also conveyed to Peirce in the purchase agreement. From this parcel, Isaac Peirce built an important estate." [10]

During the late 1790s, as construction flourished in the area that would become Washington, DC, Isaac Peirce took advantage of the business opportunities. Peirce contracted with the Commissioners of Public Buildings, shipping plaster in small boats up Rock Creek to be ground at his mill. It is unclear whether or not plaster was ground at Peirce Mill, or if a separate mill was constructed for this work.[11]

[5] Peirce Mill, Two Hundred Years in the Nation's Capitol, pg, 3-4.
[6] Peirce Mill, Two Hundred Years in the Nation's Capitol, pg, 5.
[7] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 6.
[8] Note the District of Columbia was not officially organized until 1801.
[9] By the mid-1790s, Isaac and Elizabeth had seven children.
[10] ROCR Historic District Nomination, section 8, page 6.
[11] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 6.

Abner Cloud, Jr.
(b. c. 1772, d. 1812)

At the same time, the Cloud family settled on land near the Peirce family farm. Abner Cloud, Jr. married Susanna Pimmeett Smallwood in the late 1790s and built a house of grey fieldstone and a Mill about 1801. The Mill provided grain and flour to the city of Washington until 1870. The Abner Cloud house is one of the oldest structures on the canal.[12] The home was restored in the 1970's and is now owned by the National Park Service and managed by the Chesapeake & Ohio Canal National Historic Park. [13] The house is periodically open to the public. Nothing remains of the mill with the exception of a foundation, rubble, and the hint of a millrace.[14]

As the eighteenth century drew to a close, Abner Cloud Jr. was struggling financially. At the time of his death in 1812, he was deeply in debt. However, "Isaac Peirce's Mill and farm prospered, and Peirce began taking a series of low-profile civic positions in the new capitol. It was a role that he and his family would play for many years to come." [15]

Peirce Family Farmstead
(1800s)

"Isaac Peirce began expanding his operation on his Rock Creek property around 1800." [16] First, he built a saw mill (1800), followed by the Springhouse (1801), potato house (1804), cow barn and carriage house (Barn) (1810), a distillery (1811), and a miller's house (1820). [17] "He capped the enlargement of his farmstead in 1829, by completing the substantial stone mill building that stands along Rock Creek" (see Figure 1.1.4). [18] Peirce, however, did not do the milling himself. As he grew wealthier, Peirce used slave labor to operate his farm. It is probable that his enslaved work force also operated the mill, leaving him time to carry out his civic duties.[19] Slavery was abolished in 1862, and the mill was subsequently leased to a miller.

Joshua Peirce
(b. 1795, d. 1869)

In 1823, Isaac Peirce gave his youngest son, Joshua, 82 acres of land downstream to the southeast of his farm (see Figure 1.1.3). "Joshua Peirce's principal business was the propagation and sale of fruit and ornamental trees, flowers, shrubs and other plant materials used in landscaping street, suburban estates, and parks."[20] The Joshua Peirce estate was named "Linnaean Hill" in honor of the famous Swedish botanist Carl von Linne, inventor of the system of binomial nomenclature for biological species. The home is now referred to as the Peirce-Klingle Mansion.[21]

[12] Potomac River Guide, Abner Cloud House, http://www.riverexplorer.com/details.php4?id=523
[13]The Abner Cloud House is located on the Canal at Canal Road and Reservoir Road, NW, Washington, DC, adjacent to Fletchers Boat house (4940 Canal Road, NW, Washington, DC 20007).
[14] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 6-7.
[15] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 10.
[16] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 14.
[17] The original distillery (1811) was used as a stable during the late nineteenth century. It was converted into a residence in 1916 and is currently privately owned. The structure is located in the National Register of Historic Places as the Peirce Still House. The address is 2400 Tilden Street, NW, Washington, DC 20008.
[18] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 14.
[19] Peirce Mill, Two Hundred Years in the Nation's Capital, pg, 14.
[20] ROCR Historic District Nomination, section 8, page 11.
[21] The Peirce-Klingle Mansion is located at 3545 Williamsburg Lane, Washington, DC, 20008-1207.

The buildings constructed by Joshua Peirce were located in a designed naturalist landscape. The original 1823 building campaign resulted in the same quality, design, materials, and construction techniques as the structures built by Joshua's father, Isaac Peirce.

Peirce Neighbors

Land outside of the Isaac Peirce estate was largely "uncultivated or uninhabited."[22] Neighbors to the west of the Peirce estate included Thomas Bladen and General Haram Walbridge. To the north, farmers Jacob Hoyle, J. Moreland, Frederic Titnam, and James Piling owned small land parcels.

1840s

By the time of his death in 1841, Isaac Peirce "owned more than 1,200 acres in northwest Washington." [23] In January 1842, Abner C. Peirce (b. 1785, d.1851) inherited his father's farm. Very little is known about Isaac Peirce's eldest son, Abner. He is said to have worked as a farmer and stonemason. "The 1850 census showed that the farm he had inherited from his father remained a prosperous concern (see Figures 1.1.5 and 1.1.6). It included 80 acres of "improved" land and 880 "unimproved" acres of woodland and pasture." [24]

1850s

In 1851 Abner C. Peirce died at the age of sixty-six, leaving the Peirce estate to his nephew Peirce Shoemaker (b. 1816, d. 1891). Abner never married and had no children of his own. Peirce Shoemaker was the son of his sister, Abigail Peirce (b. 1797, d. 1873) and her husband David Shoemaker (b. (1795, d. 1850).

"By the late 1850's eleven buildings were standing at the Peirce farmstead just west of Rock Creek off Peirce's Mill Road. Two buildings, a Springhouse (1801) and potato house (1804), were sited north of the homestead and flanked Peirce's Mill Road. North of the main road was a cow barn (c. 1810). Clustered near the creek were Peirce Mill (1829), a sawmill (c. 1800, rebuilt 1865; razed 1907), and a carriage house [Peirce Barn] (c. 1810). At a point nearly equidistant between the farmhouse and the mills to the south of Peirce's Mill Road were the miller's house (c. 1820) and a distillery (1811)." [25]

Peirce Shoemaker (b. 1816, d. 1891)

Little information is known about Peirce Shoemaker. He was married to Martha Carbery. Together, they had one child, a son named Louis Peirce Shoemaker.

1870s

In 1876, Peirce Shoemaker razed the original Peirce farmhouse and built the existing Peirce Shoemaker residence, "Cloverdale," located to the west of the Peirce Barn overlooking Rock Creek (see Figure 1.1.3).[26] Figure 1.1.3It has

[22] ROCR Historic District Nomination, section 8, page 7.
[23] ROCR Historic District Nomination, section 8, page 6.
[24] ROCR Historic District Nomination, section 8, page 9.
[25] ROCR Historic District Nomination, section 8, page 7.
[26] Cloverdale or the Peirce Shoemaker House is located at 2600 and 2608 Tilden Street, NW, Washington, DC 20008.

been noted that Louis Peirce Shoemaker, son of Peirce Shoemaker, was instrumental in the creation of Rock Creek Park.[27]

Establishment of Rock Creek Park (1890)

In 1890, Rock Creek Park was founded as one of the first Federal parks. "When the park was established, it was on the edge of the growing city and was already a favorite area for rural re-treat. In the enabling legislation, Rock Creek Park was 'dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States'."[28]

"The Rock Creek Valley, as it extended from the north end of the National Zoological Park to the Maryland line, was transformed from a collection of individual farms, homesteads, and mill sites to a national park that could serve the recreational needs of the citizens of the District of Columbia."[29]
A portion of the Peirce family farmstead was acquired by the Army Corps of Engineers through the process of condemnation and incorporated into the Park in 1892.[30] The Peirce Barn, Springhouse, and Mill were conveyed. The remainder of the property remained in private ownership.

It is important to note that the Peirce Springhouse is located on a different reservation than the remainder of Rock Creek Park. The Springhouse is situated on Reservation 309A; while the Barn is located on Reservation 339. Both Reservation 309A and 339 are within the boundaries of Rock Creek Park.

[27] Cloverdale/Peirce Shoemaker House National Register of Historic Places Registration Form, section 8, page 2.
[28] http://www.nps.gov/rocr/historyculture/index.htm
[29] Peirce Mill Complex, Cultural Landscape Report, pg. 2.12.
[30] Historic Structures Report, Peirce Mill, pg. 1.2.3.



Figure 1.1.1

Topographical Map of the District of Columbia, in the years 1856 ’57 ’58 and ’59 by A. Boschke.
(Source: Library of Congress). Note: The location of the Peirce Mill Complex is indicated.

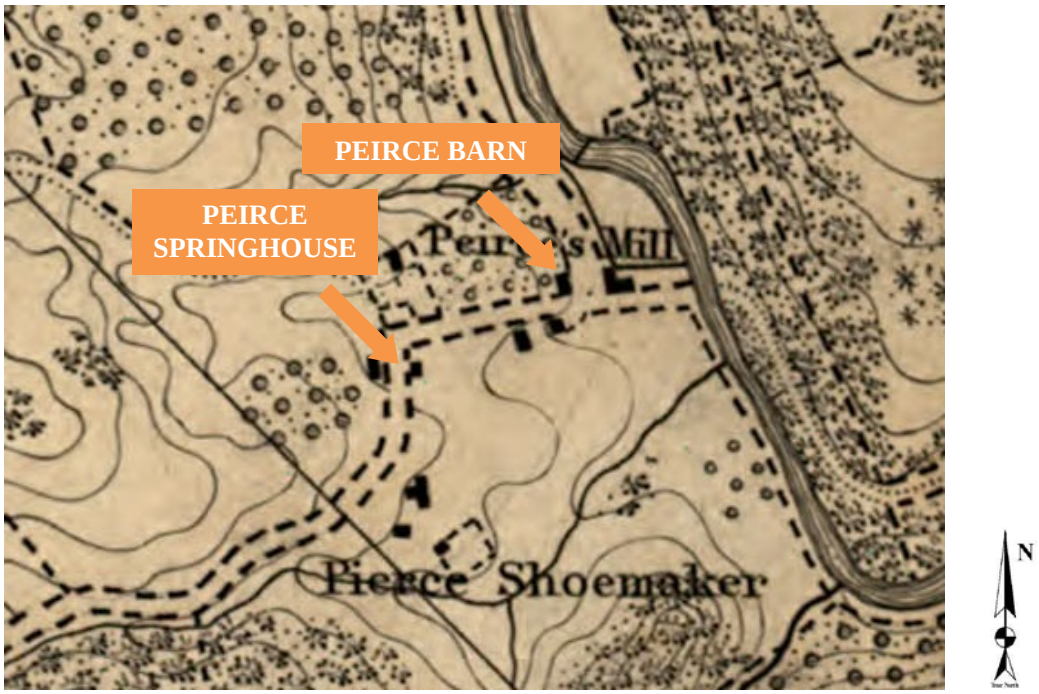


Figure 1.1.2

Plat of the Pierce Mill Road from Rock Creek to the Turnpike from Georgetown to Rockville, January 1864. (Source: Peirce Mill Complex Cultural Landscape Report, page 2.8) Note: The location of the Peirce Barn and Peirce Springhouse are indicated above with arrows.



Figure 1.1.3

Topographical Map of the District of Columbia, in the years 1856 ’57 ’58 and ’59 by A. Boschke.
(Source: Library of Congress). Note: The location of the Peirce Mill Complex is indicated within the oval. “Linnaean Hill,” the homestead of Isaac Peirce’s son Joshua Peirce is located within the area of the triangle. Peirce Shoemaker, Isaac Peirce’s grandson, owned the land highlighted within the rectangle. It is here where he built “Cloverdale” in 1876.

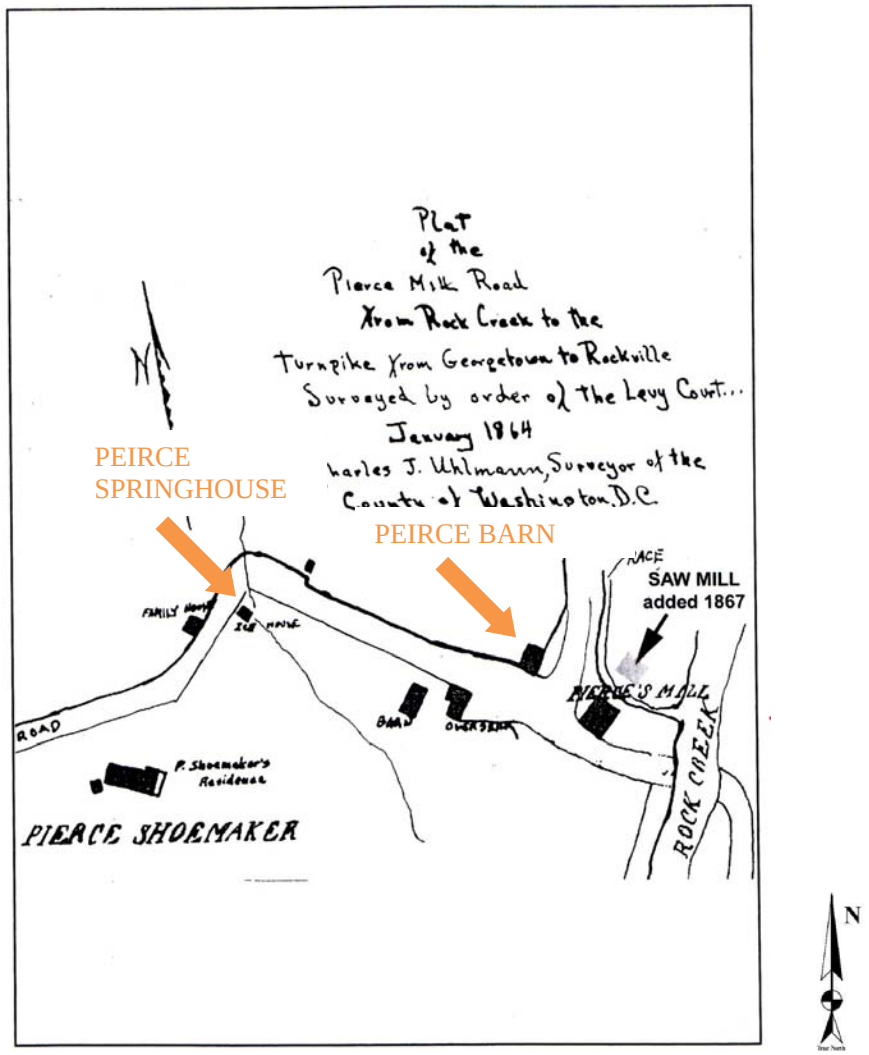


Figure 1.1.4

Plat of Pierce Mill Road from Rock Creek to the Turnpike from Georgetown to Rockville, January 1864.
(Source: Peirce Mill Complex Cultural Landscape Report, page 2.8.)
Note: The location of the Peirce Barn and Peirce Springhouse are indicated with arrows.



Figure 1.1.5

Topographical Sketch of the Environs of Washington, DC, July 18, 1866.
(Source: Library of Congress). Note: The location of the Peirce Mill Complex is indicated.



Figure 1.1.6

Detail of the Topographical Sketch of the Environs of Washington, DC, July 18, 1866.
(Source: Library of Congress). Note: The location of the Peirce Mill Complex is indicated within the oval. The Peirce Barn and Peirce Springhouse are labeled.

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CHAPTER 1.2: ORIGINAL CONSTRUCTION – PEIRCE BARN

Introduction

The original period of construction for the Peirce Barn is in the range of 1810-20. Sources differ with regard to the actual date of construction. With no primary resources, the original construction period accepted to be within those ten years.

Original construction

Overall Massing

Isaac Peirce constructed what is now commonly referred to as the Peirce Barn. The Barn was one of several buildings located on the Peirce family farmstead.

As originally constructed, the Barn measures approximately 26 feet wide and 35 feet deep. The stone walls are constructed of blue granite, quarried locally at the Broad Branch Road Quarry. The Barn's south elevation is constructed of vertical wood boards. On this elevation there are multiple openings: a large, out- swinging door assembly, a pedestrian door, a hayloft door, and a pulley system. At the north elevation, there is one window opening at each story. The east elevation consists of one window opening centered at the first and second stories. The west elevation has one window and one pedestrian entrance at the first story and two window openings at the second story. The gabled roof runs north to south with wood shingles.

Building Function

Throughout the years, the Barn has been referred to as a Carriage House, Wagon Barn, Stone Building, Coach House, and the Art Barn. Based on the labels used on historical maps, it is evident that the building served numerous functions over the years. With the different functions came different nomenclature.

In all probability, the Barn was originally constructed to house carriages or wagons. The layout of the first floor plan lends itself to this theory with the large double door to the west and single pedestrian entrance to the east. The second floor was seemingly used for hay storage, given the location of the hayloft door, high in the gable. The author believes that the third floor attic does not date to the original period of construction (see Figure 1.2.1).

Changes in ownership and use

The Barn was owned by descendants of Isaac Peirce until 1892 when the building and nearby acreage was acquired by the Federal government.

Renovations

1858

No written or photographic documentation exists of the Barn between the years of 1858 and approximately 1914. A photograph from 1858 shows the south elevation with a hayloft door directly under the gable with a double door to the west and a pedestrian door to the east. The entire elevation appears to be covered with wood vertical siding. An early 1900s photograph illustrates three transom windows at the south elevation (see Figure 1.2.2). Two are located over the out- swinging doors and one is located over the pedestrian entrance. New out-swinging doors and pedestrian entrance are also visible.

Finally, shutters have been installed at window openings on the east elevation. In all probability, the shutters were also installed on the north and west elevations at this time.

Approx. 1914 - 1936

Between approximately 1914 and 1936, the exterior of the Barn was further modified (see Figure 1.2.3). Most notably, three new windows were installed under the gable at the south elevation. An exterior wood shelf was installed above these windows and above that a series of thirteen access holes. The hayloft door was lowered to accommodate these windows and access holes. Finally, a brick chimney was added at the east side of the Barn, presumably to exhaust pot-bellied stoves.

The authors believe that third floor, attic was constructed at this time to accommodate pigeon keeping.[1] Pigeons are typically housed in spaces with low ceiling heights. The low ceiling prevents the birds from flying about when the pigeon fancier entered. Inside the attic there are shelves with dividers approximately 12" by 12". These were most likely nesting boxes for the pigeons (see Figure 1.2.4). While there is no documentation to confirm pigeons were kept at the Peirce Barn, pigeon-keeping was not uncommon during this time period.[2]

Pigeon Loft

Historically, pigeons were for bred a variety of reasons. Pigeons were raised for showing (fancy pigeons), racing (sporting pigeons), for food (utility pigeons) and for homing (homing pigeons). Fancy pigeons are bred to perpetuate particular features and to be shown in exhibitions, competing against each other for the title of best in breed. Sporting pigeons are bred for their aerial performance, hence the sport of pigeon racing. Utility pigeons are used for their meat and for their droppings, which make good fertilizer. Homing pigeons carried messages. The birds were transported to a location and when released the birds would "fly home" bringing with them messages.

While it is not clear for what purpose pigeons were kept in the third floor, attic space of the Peirce Barn, it has been suggested that the area was used as a coop for homing pigeons.[3] With no records to validate that pigeons were kept in the Barn, the physical changes to the structure in the early 1900s are the only clue. Changes to the south elevation include the addition of an exterior wood shelf and access holes, as well as the construction of the third floor, and the nesting boxes.

Late 1950s

In the late 1950s a wooden garage was attached to the northwest elevation of the Barn (see Figure 1.2.5). To the north a small building housed restrooms. It is unknown when these structures were built and for what purpose the interior

[1] Note the addition of the attic floor did not have a negative impact on the original roof framing. The floor was constructed around the original roof framing members.
[2] Pigeons, Everything There Is to Know about the Pigeon, http://pigeoncontrolresourcecentre.org/html/about-pigeons.html.
[3] Getting the Bugs Out of the Barn; For Years, Rock Creek Gallery Housed Cold War Surveillance Gear, Joel Achenback, The Washington Post, December 1, 1992.

spaces were used. In fact, very little documentation exists with regards to the use(s) of the Barn from 1892, when it was incorporated into Rock Creek Park, to 1971 when it was transformed into the Art Barn.

The Cold War (1946-1991)

Legend has it that the Central Intelligence Agency (CIA) occupied the third floor of the Barn during the Cold War period. In 1992, the Executive Director of the "Art Barn," Ann Rushforth said she believed that the gadgets stowed behind a false wall, in an area once used as a coop for homing pigeons, were used by CIA agents. She added that the pigeon loft was, perhaps, used as a listening post, targeting the Hungarian Embassy directly across the street and the Czech Republic Embassy farther up the hill.[4] This account is unconfirmed by the CIA.

The "Art Barn" 1971- 1992

In May of 1971, the Peirce Barn became known as the "Art Barn" (see Figure 1.2.6). Art exhibits and classes held in the Barn were sponsored by the Associates of Artists Equity and the National Park Service. This arrangement received special legal sanction in 1984, when Congress authorized the Secretary of the Interior to negotiate a five-year contract with the Art Barn Association, previously the Associates of Artists Equity. At the time, it was noted that using the Barn as an "Art Barn" would help ensure its preservation.

During this period a few minor changes were made to the Barn on the exterior. The screen door was removed and the door on the south elevation was replaced with a painted, wood Dutch door. Insect screens made of a wood frame and mesh were installed at the three transom windows on the south elevation.

A Washington Post article from 1992 noted that, "Federal budget cuts and a dramatic drop in private and corporate donations could force the 22-year-old Art Barn Gallery in Washington, DC's Rock Creek Park to close by the end of 1992." [5] However, the exact date of the closure of the Art Barn is unknown.

Site Renovations and Additions (1981 and 1989)

In 1981, the comfort station located to the northwest of the Barn was rehabilitated, and in 1989, a storage building was constructed adjacent to the existing comfort station. Construction drawings for these projects do not indicate work to the Barn structure itself.

President Ronald Reagan (1981-89)

Oral tradition suggests that the 40th President of the United States, Ronald Reagan, an avid equestrian, used the Barn as a staging point for rides along the Rock Creek bridle trails. He kept his saddle on the second floor of the Barn. Apparently NPS provided the mounts (see Figure 1.2.7). [6]

Rock Creek Gallery (1992-1998)

For a brief period of time, the Barn was referred to as the Rock Creek Gallery. According to outdated web pages, the gallery was open to the public Thursday

[4] Getting the Bugs Out of the Barn: For Years, Rock Creek Gallery Housed Cold War Surveillance Gear, Joel Achenback, The Washington Post, December 1, 1992.
[5] Art Barn Struggles for Funds, McCoy, Mary, The Washington Post, June 11, 1992.
[6] Mike McMahon, NPS staff. November 1, 2011.

through Sunday or by appointment.

1990s and 2000s

It is unclear exactly when the Barn ceased to function as the "Rock Creek Gallery." As early as 2000, it is reported that the Barn was used as a contact station for Peirce Mill.[7] During the years when the Mill was not operational from 1993-2011, the Barn was used to accommodate groups interested in learning about the history of the Peirce Complex and milling procedures in general (see Figure 1.2.8).

Present context

The entire site has evolved from a working farm/mill to an urban recreation site. Several buildings including the saw mill, potato house, cow barn, and miller's house have long since been removed.

A major rehabilitation of Peirce Mill Complex was completed in the fall of 2011. At this time, the Barn is used as an orientation center for the Peirce Mill historic site and includes a gift shop, small exhibit space, and a workshop area for children. The second floor and attic are currently used by the NPS for storage.

[7] Craig Harshman, NPS staff. November 8, 2011.



Figure 1.2.1

Photograph of Peirce Barn viewed from the southeast.
(Source: Photograph by Titian Peale 1858, Peirce Mill Complex Cultural Landscape Report).

Note: Peirce Mill is in the foreground and another Peirce barn, presumably the cow barn, is in the background. Arrow points to the Peirce Barn. Note the hayloft door and pulley system which is located high under the Barn's south gable.



Figure 1.2.2

Photograph of Peirce Barn viewed from the southeast. Peirce Mill in the foreground. 1914.
(Source: Rock Creek Park Historic Photograph Collection PMI-49).



Figure 1.2.3

Photograph of Peirce Barn, south and east elevations.
(Source: HABS photograph by John O. Brostrup November 25, 1936).



Figure 1.2.4

Photograph of the nesting boxes for pigeons located on the east wall of the storage room on the attic level.
(Source: QEA, 2011)

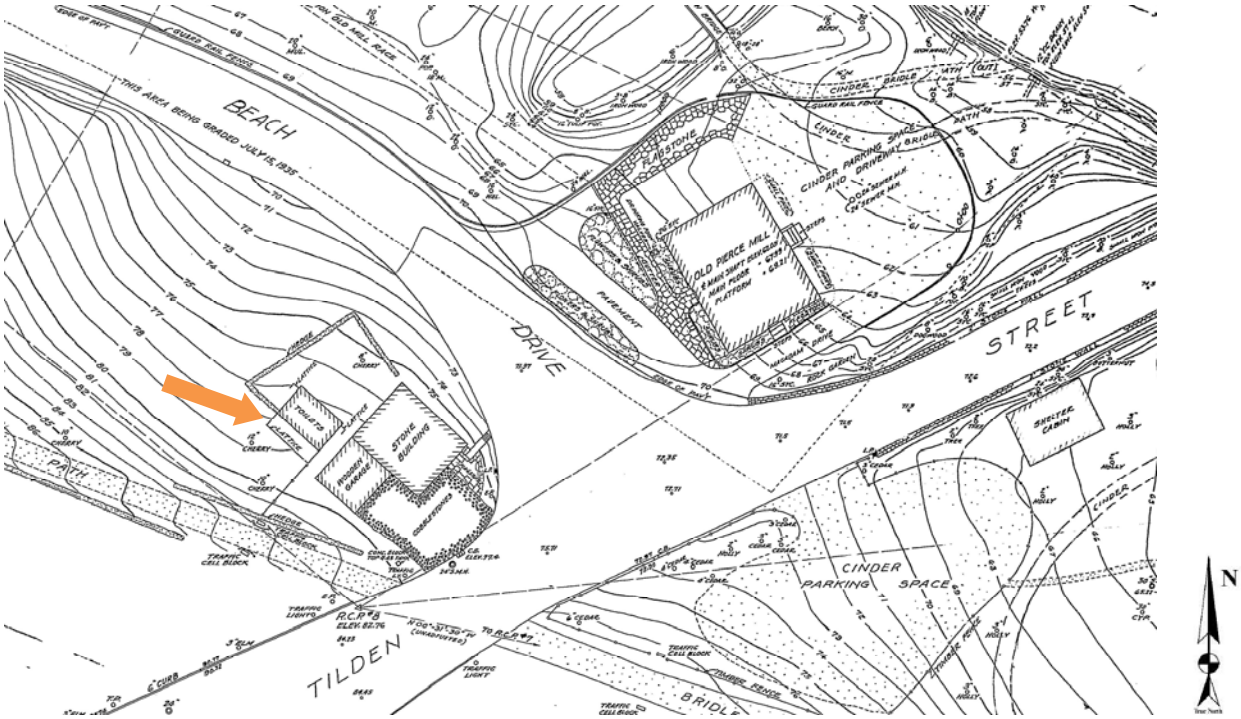


Figure 1.2.5

Topography Vicinity of Pierce Mill and Tilden Street, July 1935 revised April 4, 1957. (Source: NPS).

Note: The Barn is referred to as the Stone Building and has a wooden garage attached to the northern half of the west elevation. Also note the cobblestone driveway, toilets (see arrow), and hedge to the north of the Barn.



Figure 1.2.6

Photograph of the "Art Barn" from the southeast, 1975.
(Source: Rock Creek Park Hisotric Photograph Collection PMI-52) Note: The Art Barn was established in 1971. By 1975, the street lamppost just outside the Barn, along Tilden Street has been removed. Vegetation covers half of the east elevation of the Barn.



Figure 1.2.7

Photograph of the 40th President of the United States, Ronald Reagan, horseback riding at the Park Police Facility in Rock Creek Park, April 1983. (Source: Reagan Library Archives 5075-8)



Figure 1.2.8

Photograph of Peirce Barn, south elevation, in 2008. (Source: QEA, 2008)

Note: The landscape, cobblestone in front of out-swinging doors, exterior signage on the building, and the flagstone walkway.

CHAPTER 1.3: ORIGINAL CONSTRUCTION – PEIRCE SPRINGHOUSE

Introduction

A springhouse is defined as a structure built over a natural spring used to protect the water and cool food and milk.[1] This building type is typically a one-room building which provides a clean water supply. In addition, a springhouse was also used to store food that would otherwise spoil, for example, meat, fruit, and dairy products. The constant temperature inside the structure kept items cool in the hot summers.

Original construction

The Peirce Springhouse (1801) was the second of numerous structures to be built by Isaac Peirce. It is believed that a saw mill was the first building Peirce erected in 1800. Records indicating the exact date of construction and cost of the Springhouse are missing. The 1801 date is inscribed in a stone at the north gable. Therefore it seems reasonable to conclude that the Springhouse was constructed during that year (see Figure 1.3.1).

Overall Massing

As originally constructed, the Springhouse measured approximately 15 feet wide and 19 feet deep. The stone walls were constructed of blue granite, quarried locally at the Broad Branch Road Quarry. The Springhouse was built into the hillside with two points of entry (see Figure 1.3.2-3). Access to the upper level is from north elevation and entry to the lower level is from the south elevation. The east elevation consisted of two square windows at the lower level. One square window is located on the west elevation, at the lower level. In addition, there was one six-over-six window at the upper level on both the north and south elevations. The roof was gabled running north to south with wood shingles.

Change in ownership and use

The Springhouse was owned by decedents of Isaac Peirce until 1892 when the building and nearby acreage was acquired by the Federal government. The Springhouse is situated on Reservation 309A while the Barn is located on Reservation 339. Both Reservation 309A and 339 are within the boundaries of Rock Creek Park.

Renovations

Site Renovation
1913-15

Shortly after the Springhouse was incorporated into Rock Creek Park, the dirt road that passed just north of the Springhouse, known as Peirce's Mill Road, was paved (see Figure 1.3.4). Peirce's Mill Road became Tilden Street, a four lane city street with a planted median. The east bound lane passes just to the south of the Springhouse while the west bound lane passes dangerously close to the north elevation of the Springhouse.

With the alterations to the road, presumably, the grade surrounding the Springhouse was altered. Modifications reduced the incline for automobiles traveling the new Tilden Street. A stone retaining wall was also constructed around the Springhouse to protect it within the median strip at this time.

[1] Dictionary of Building Preservation, edited by Ward Bucher, pg. 442.

Proposed site alterations 1930

A tentative scheme for the Tilden Street median was drawn in 1930. The drawing notes a wide array of vegetation to be planted within the median (see Figures 1.3.5 A, B and C). The drawing also depicts a bridle trail running down the center of the length of the median, passing to the south of the Springhouse. It is unknown whether or not this planting plan was ever realized; however, photographs suggest that the bridle trail was completed (see Figure 1.3.6).

Restoration by the National Park Service 1934-36

Four decades after the Federal government acquired the property, the National Park Service restored the Springhouse.[2] Photographs of the Peirce Springhouse were taken for the Historic American Building Survey in 1936 (see Figure 1.3.7).

Grade changes

Over the years the grade surrounding the Springhouse has changed considerably. Since 1936, the pedestrian entrance at the south elevation has required three steps down from grade to enter the lower level. Presumably, the change in grade has occurred slowly over time. For comparison (see Figure 1.3.2 and Figure 1.3.7).

Building Rehabilitation - 1999

More than fifty years after the Springhouse was first restored by NPS, the structure was in very poor condition. This condition was worsened by one or more car accident(s). The west bound lane of Tilden Street is dangerously close to the north elevation of the Springhouse (see Figure 1.3.8). In 1998, construction drawings were prepared to repair to the Springhouse. Work to the Springhouse commenced in May of 1999 and was completed in December of 1999.

Photographs (see Figure 1.3.9-11); show that the most severe damage was to the northwest corner of the structure. Portions of the north and east walls had been compromised by the automobile accident(s). On the interior, the floor of the upper level was rotted from severe water infiltration and required total replacement.

Portions of the north and east elevations were shored as stone was removed from grade to the roof beam. According to the drawing notes, the approximately eighteen inch thick stone walls were to be repaired and restored to match the original as closely as possible. The stone walls were to be re-built using the original salvaged stones. To replicate the historic character, the stone pattern and joints of the original wall were documented and recreated (see Figure 1.3.12-15).

Present Context

Today, the Springhouse and the site walls remain a part of the Tilden Street planted median. Traffic on Tilden Street is heavy, in both directions, and automobiles often travel at high speeds. It is extremely difficult and dangerous for pedestrians to access the median to get a closer look at the Springhouse.

[2] Note that the Peirce Barn and Peirce Mill were also restored by the National Park Service from 1934-36. The extent of the restorations at the Springhouse is largely unknown. Photographs offer some visual clues.

Currently, the lower level of the Springhouse cannot be occupied since the original spring is still active below the Springhouse. With no trough to contain the water, the lower level floor is a layer of thick mud, making it unusable. The upper level is presently used as a storage space by the NPS, housing miscellaneous items including mud boots, wheelbarrows, shovels, rakes, and folding chairs precariously arranged around rotting wood floor boards.



Figure 1.3.1 Photograph of the inscription stone at the north gable of the Peirce Springhouse. (Source: QEA, 2011) Note: The initials stand for "Built-Isaac-Peirce-1801." The inscription stone is a different gneiss than the structure's randomly coursed stone walls. The source of the black "spots" on the stone is unknown.

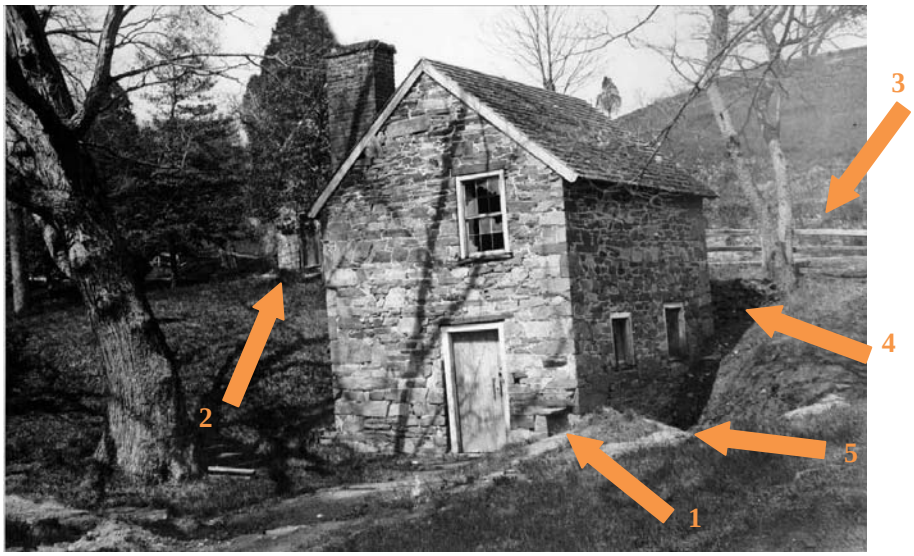


Figure 1.3.2 **Photograph of Peirce Springhouse, south and east elevations about 1897.**
(Source: Rock Creek Park Historic Photograph Collection PM1-56).
Note: In this early photograph of the Springhouse note the stone bench (1) protruding from the east side of the south elevation. To the northwest is an unidentified structure (2). The existing grade permits an on-grade entrance to the lower level of the Springhouse. There is a three-rail fence (3) separating the Springhouse, from the dirt road known at this time as Peirce Mill Road. At the north elevation there appears to be a rubble site wall (4) as well as some additional stone walls at the southeast corner of the structure (5).

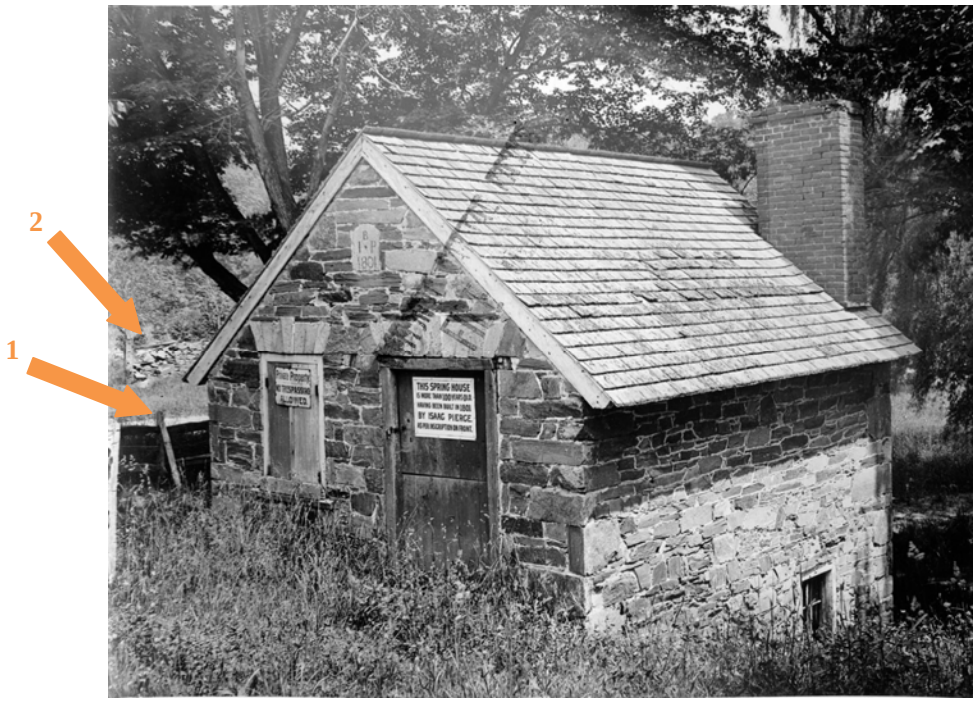


Figure 1.3.3 Photograph of Peirce Springhouse, north and west elevations, 1901-10.
(Source: Rock Creek Park Historic Photograph Collection PM1-53).
Note: The sign on the door reads, "This Spring House is more than 100 years old. Having been built in 1801 by Isaac Peirce as per inscription on front. The sign on the window reads, "Private Property, No Trespassing Allowed." It is suggested by the author that the photo dates to the early 1900s. The photo predates work to incorporate the Springhouse into the Tilden Street planted median. Note the split three rail fence (1) and stone wall (2) to the east on the Springhouse.

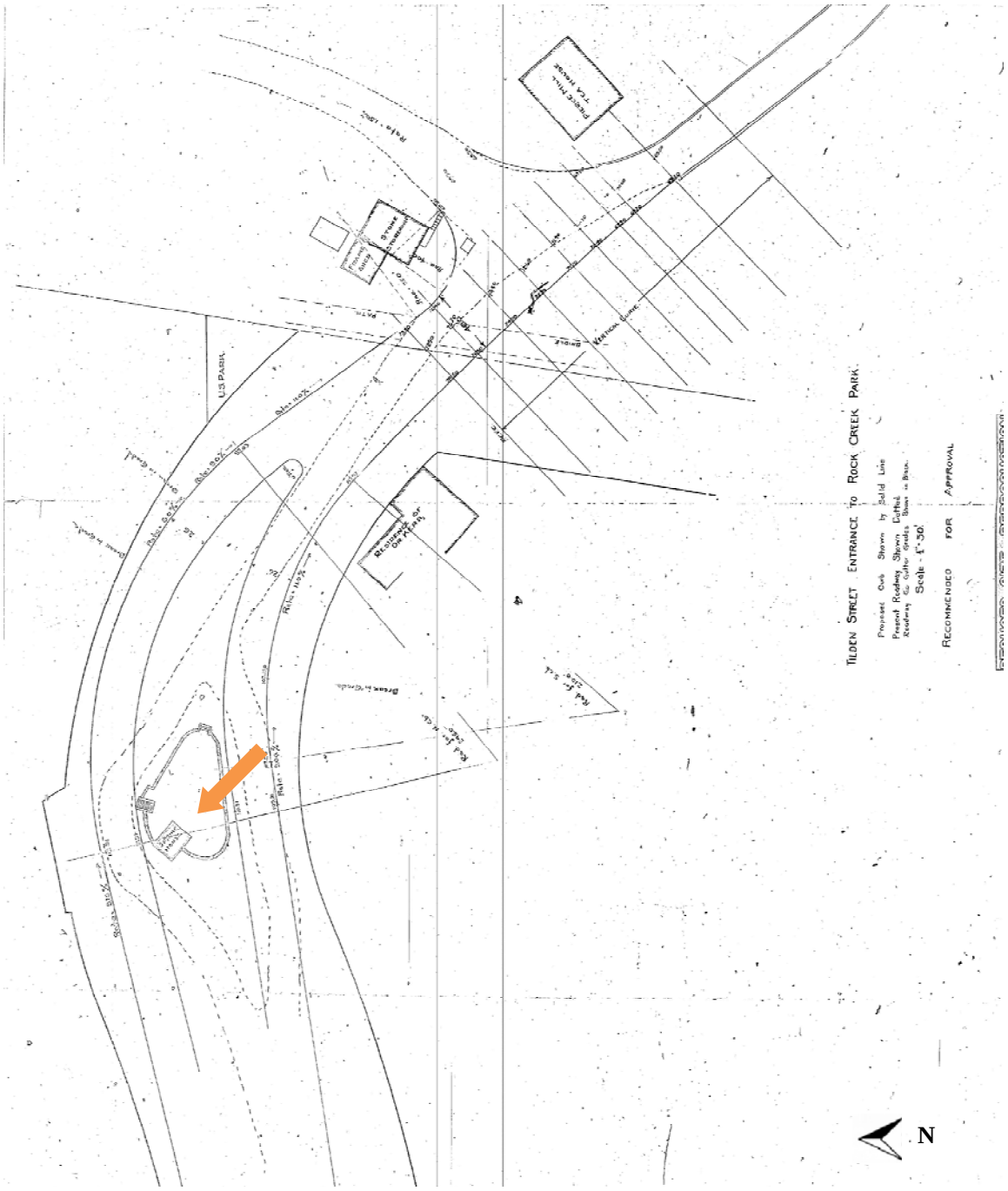
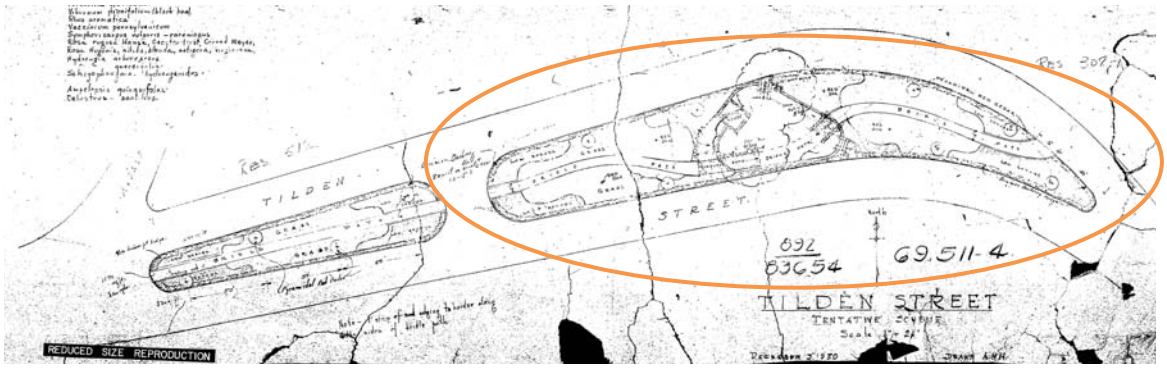
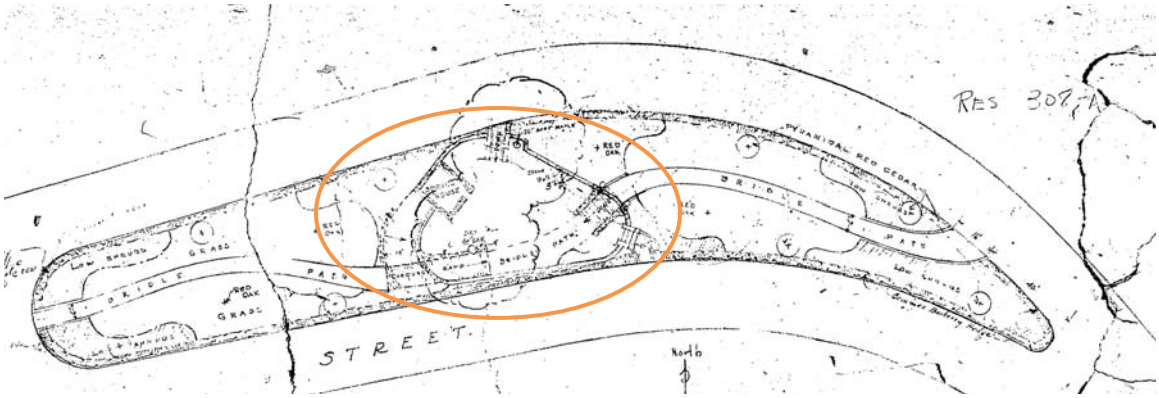


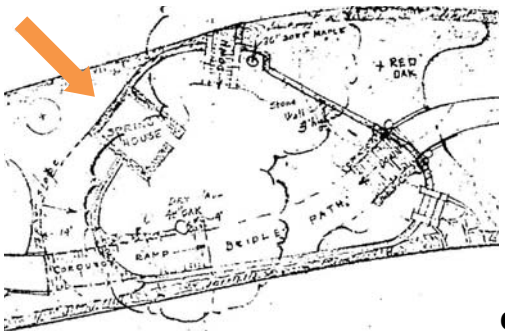
Figure 1.3.4 Tilden Street Entrance to Rock Creek Park. 1913-15. (Source: NPS).
Note: Proposed curb shown by solid line. Existing roadway is dotted. Tilden Street is being widened and the Broad Branch Road cross street has been created.



A



B



C

N

Figures 1.3.5 A, B and C Tilden Street Tentative Scheme, December 3, 1930.
Note: Drawings from 1930 planting plan. It is uncertain whether or not the planting plan was ever implemented. The presence of a bridle trail, however, is suggested by historic photos, (see Figures 1.3.6 and 1.3.7).



Figure 1.3.6 Photograph of the Springhouse, from the south, early 1930s.
(Source: Rock Creek Park Historic Photograph Collection PM1-41).
Note: Site walls are evident in this photo as well as a single rail fence that may correspond to a bridle trail within the Tilden Street median.



Figure 1.3.7 Photograph of the Springhouse, south and east elevations.
(Source: HABS photograph by John O. Brostrup November 25, 1936).
Note: The house on the hill, telephone pole and street lamp in the background. Single rail fence (1) to the left and cheek walls (2) at site wall steps.

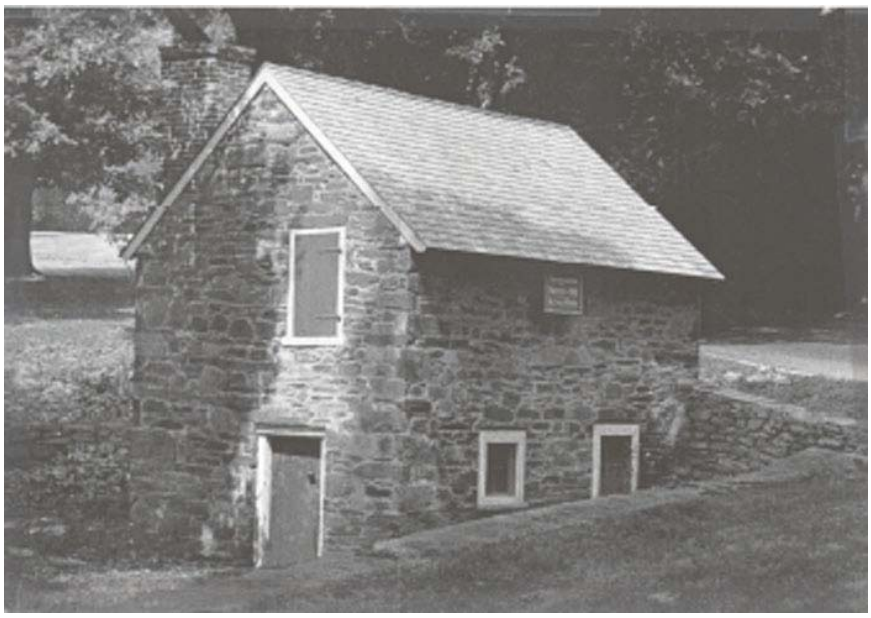


Figure 1.3.8 Photograph, looking northwest, of the Springhouse, about 1990.
(Source: NPS NCR Drawing No. 878/84910, Page No. 1 of 6, Repair to the Pierce Springhouse, Rock Creek Park, Washington, DC) [3]
Note: This photograph was taken prior to one or more car accidents involving the Springhouse. Photos of the Springhouse after this date have a wooden guardrail installed along the north elevation of the Springhouse.

[3] Note the 1998 repair drawings use the Pierce spelling.



Figure 1.3.9 **Photograph, looking northwest, of the Springhouse, during rehabilitation. 1999.**
(Source: National Park Service, National Capitol Region.)
Highlighted area shown in greater detail, (see Figure 1.3.10).



Figure 1.3.10 **Photograph of the east elevation of the Springhouse, during rehabilitation. 1999.**
(Source: National Park Service, National Capitol Region.)



Figure 1.3.11 Photograph of the north elevation of the Springhouse, during rehabilitation. 1999.
(Source: National Park Service, National Capitol Region.)



Figure 1.3.12 Photograph of the north elevation, jack arch at window, during rehabilitiation. 1999.
(Source: National Park Service, National Capitol Region.)



Figure 1.3.13 Photograph of the interior plaster, upper level of the Springhouse. 1999.
(Source: National Park Service, National Capitol Region.)



Figure 1.3.14 Photograph of the north elevation of the Springhouse post rehabilitation. 1999.
(Source: National Park Service, National Capitol Region.)



Figure 1.3.15 Photograph of the west elevation of the Springhouse post rehabilitation. 1999.
(Source: National Park Service, National Capitol Region.)

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CHAPTER 1.4: CHRONOLOGY OF DEVELOPMENT AND USE

Site History

The Peirce Barn and Peirce Springhouse were built in 1801 and 1810-20 respectively and were once central to the Peirce family farmstead. In 1892, the Federal government, through the process of condemnation, acquired a portion of the original farmstead. The Barn and Springhouse were conveyed with the property and became part of Rock Creek Park. The Barn and Springhouse were restored in 1933. Throughout the years the Barn has served the community as an Art Barn, and more recently as a visitor contact station for the rehabilitated Peirce Mill. The Springhouse has been vacant for more than a century, as its damp basement and location make it unsuitable for uses other than storage.

Timeline

Supplemental and contextual information is shown in italics.

Pre-history

1756 – Isaac Peirce was born in Chester County, Pennsylvania.

1775-1783 *– American Revolutionary War*

16 July 1790 – *Congress passed the Residence Act, which approved the creation of a national capital to be located on the Potomac river.*

1794 – Isaac Peirce "acquired 160 acres and an existing mill on Rock Creek" for 750 British pounds.[1]

1800 *– Washington, DC officially became the capital of the United States of America.*

Original Construction

1800 – Saw mill constructed by Isaac Peirce.

1801 – Peirce Springhouse constructed by Isaac Peirce.

1804 –Potato House constructed by Isaac Peirce.

1810-20 – Peirce Barn constructed by Isaac Peirce. A cow barn was also constructed by Peirce during this period.

1811 – Distillery constructed by Isaac Peirce, opposite the Barn on Tilden Street. The structure is now known as the Still House and is a private residence.

1820 – Miller's house constructed to the north of the Peirce Barn. As Isaac Peirce grew wealthier, the Mill was leased to a Miller.

1829 – Peirce Mill constructed**.** A mill already existed on the plantation; the 1829 mill is the Peirce Mill as we know it.

[1] Peirce Mill, Two Hundred Years in the Nations Capital, Pg. 3.

Change in Ownership and Use

1841 – Isaac Peirce dies at the age of 85. The Peirce estate was left to his son Abner C. Peirce.

1851 - Abner C. Peirce dies at the age of 66, leaving the Peirce estate to his nephew, Peirce Shoemaker.

1872 – *Peirce Mill Bridge built to span Rock Creek in the vicinity of the intersection of Beach Drive and Park Road, NW. The structure connects Tilden Street with Park Road, providing an east-west link for travel through the city via the narrow southern tip of Rock Creek Park. The bridge was 178 feet long and 29 feet wide with stone piers supporting the original wooden superstructure.*

1890 – Rock Creek Park is established as one of the first Federal parks.

1892 - Peirce Barn and Peirce Springhouse become a part of the Park. The buildings were acquired by the Army Corps of Engineers through the process of condemnation and incorporated into the park.

Rock Creek park

1894 – Rock Creek Board of Control was established to administer the park.

1895 – Improvements made to the Peirce Mill Bridge. Improvements included the installation of steel girders, a new wood deck, and railings.

1897 - Peirce Mill suffers a major breakdown and is no longer considered economically viable.

1909-33 – The Mill is used as a teahouse/restaurant and leased to a succession of concessioners.

1912-14 – Work completed at the Peirce Mill Bridge. Work included the construction of irregularly coursed masonry wing walls.

1913 –16 –Tilden Street, a four lane city through-route with a planted median, was laid over the historic western segment of Peirce Mill Road.[2] Peirce Springhouse was encircled with a granite wall and side entrance steps within the Tilden Street median.[3]

1917- The first comfort station was built to the north of the Peirce Barn.

1918 – Frederick Law Olmsted, Jr. submitted a report on Rock Creek Park to the DC Office of Public Buildings and Grounds. The report served as the Park's master plan until the 1940s.[4]

1921 – Work completed on the Peirce Mill Bridge. Work included the

[2] *Peirce Mill, Rock Creek Park.* Part 2a, pg. 9.
[3] *Rock Creek Park Historic District*. National Register of Historic Places. Section 7, Pg. 16.
[4] *Peirce Mill, Rock Creek Park.* Part 2b, pg. 1.

installation of asphalt decking and steel railings replacing the irregularly coursed masonry wing walls.

1924 – Still House, the distillery on the original Peirce family farmstead, was converted into a private residence.

Living History Museum

1930s – Plans for a planted Tilden Street median with a bridle trail were produced. While it is unknown if the planting plan was ever realized, historic photographs suggest the presence of a bridle trail.

1933-36 – Establishment of Rock Creek Park as a unit of the National Park Service in 1933 was followed by the Historic American Building Survey photo documentation of the Barn and Springhouse in 1936.

1934-36 – Peirce Barn and Springhouse are restored by the National Park Service.[5] The extent of the restorations is unknown, as documentation is limited.

1935 – Peirce Mill restored by the National Park Service. Mill machinery by the Fitz Water Wheel Company, under contract with the National Park Service, with labor provided by the Public Work Administration (Depression-era jobs program). At the same time the millrace and dam were reconstructed under NPS supervision by PWA labor.

1936-58 – Operation of the mill under NPS stewardship from completion of renovation until a break occurs in 1958. Flour produced by the mill during part of this period.

The Recent Past

1964 - Peirce Barn and Peirce Springhouse listed on the District of Columbia Inventory of Historic Sites.

1968-71 – Repairs and renovation to the mill between 1968 and 1971 carried out by the National Park Service. The millrace is filled in and a system of pipes and pumps is used to bring water to the water wheel.

24 March 1969 – Peirce Mill individually listed on the National Register of Historic Places.

1971 – Peirce Barn interior was modernized for use as an Art Barn. Art classes and exhibits were sponsored by the Associates of Artists Equity and the National Park Service. Some modifications were made to the interior of the Barn to accommodate the artists. Modifications included the construction of a few interior partitions on the first floor as well as the installation of an HVAC system, track lighting, and interior plumbing fixtures.

1971-1993 – Operation of the mill intermittently from 1971until 1993, when the mill breaks down.

[5] DC Inventory of Historic Sites, pg. 122.

25 October 1973 – Peirce Barn and Peirce Springhouse listed on the National Register of Historic Places.

1986- Two (2) windows sills and sash boards were replaced at the Peirce Barn [location unknown]. All windows were caulked and sealed. Double door at south elevation replaced (see Appendix 3.4 for drawings).[6]

1987- Peirce Barn and Peirce Springhouse were re-pointed, caulked and painted with "similar appearing material."[7]

1990- Peirce Springhouse received a new [wood] shingled roof.[8]

23 October 1991 – Rock Creek Park Historic District, or Reservation 339, listed on the National Register of Historic Places.

December 1996- Peirce Springhouse North corner struck by automobile. Corner was boarded up with plywood.[9]

1999 – Springhouse rehabilitated and jersey barriers replaced with guard rail.[10] Images show a portion of the north and east walls missing. Damage was the result of one or more car accidents involving the structure. Stones were salvaged and the walls rebuilt to match existing. Other repairs included new floor joists and decking at the upper level.

2004- Peirce Barn Chimney re-pointed.[11]

2009-Present - Peirce Barn functions as a contact station for the Peirce Mill historic site which includes a gift shop, small exhibit space, and a workshop area for children on the first floor. The second floor consists of storage and a workspace for NPS Rock Creek Park rangers.

Spring 2010 - Comfort station located to the north of the Barn was demolished and parking lot to the southeast of Barn removed.

June 2010 - Rehabilitation work to the Peirce Mill began. Comprehensive site work included re-establishing water power to the Mill, an accessible entrance and the construction of a bus drop-off. Work also included the introduction of a Millyard between the Barn and the Mill.

Fall 2011 - Rehabilitation of Peirce Mill completed.

[6] NPS, Assessment of Actions Having an Effect of Cultural Resources, Rock Creek Park-Carriage House, pg. 1
[7] NPS, Assessment of Actions Having an Effect of Cultural Resources, Rock Creek Park, Projects 674 & 667, pg. 1
[8] Peirce Springhouse, NPS Structural Detail Report, 10/26/2005.
[9] Peirce Springhouse, NPS Structural Detail Report, 10/26/2005. Note: While the Springhouse is rumored to have been involved in several automobile accidents, it was the 1996 accident that caused severe damage to the structure.
[10] Ibid.
[11] Peirce Barn, NPS Structural Detail Report, 10/26/2005.

CHAPTER 1.5: SIGNIFICANCE OF THE PROPERTY – PEIRCE BARN AND PEIRCE SPRINGHOUSE

Significance of the Properties

The significance of the Peirce Barn and Peirce Springhouse lies in their association with the Peirce family farmstead. The two buildings are significant "as an example of the social and economic history of the area."[1] The Barn, constructed between the years 1810-20, and the Springhouse, in 1801, are fine illustrations of the early 1800s vernacular stone building construction.

The Barn and Springhouse, along with the Mill, are four surviving buildings of what was once referred to as the Peirce family farmstead. Three of the structures are known today as the Peirce Mill Complex, the Peirce Barn, Springhouse, and Mill. The fourth building, the distillery (or Still house) is privately owned. The Peirce Barn and Peirce Springhouse were listed in the District of Columbia Inventory of Historic Sites in 1964. The Barn and Springhouse were then added to the National Register of Historic Places on October 25, 1973, NRIS #73000222.[2]

In addition, the Barn and Springhouse are listed as contributing buildings within the Rock Creek Park Historic District. The district was added to the National Register of Historic Places on October 23, 1991, NRIS # 91001524.

Properties listed in the National Register may be of five types: buildings, structures, objects, sites, or districts. They must possess both historic significance and integrity. To be considered historically significant, they must meet at least one of the four National Register criteria:

- Criterion A: Association with events that have made a significant contribution to the broad patterns of our history;
- Criterion B: Association with persons significant in our past;
- Criterion C: Embodiment of distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or
- Criterion D: Archeological potential to provide important information about prehistory or history.

The Rock Creek Park Historic District is architecturally and historically significant under the National Register criteria A, B, and C. The Barn and Springhouse are recognized under criterion C, as important examples of early 1800s stone vernacular construction in the District of Columbia.

[1] Pierce Springhouse and Pierce Barn, National Register of Historic Places, Nomination form, pg. 3.
[2] The Peirce Barn and the Peirce Springhouse are listed together on the same National Register nomination form.

Contextual Significance

The Peirce Barn and Peirce Springhouse are noteworthy in that they were originally part of a larger complex of buildings, the Peirce family farmstead. The Peirce family farmstead was a prosperous farm and mill located on the west bank of Rock Creek, a forested valley with sloping hills and meadows. The complex of buildings originally included a residence, mill building, overseer's house, sawmill, cow barn, potato house, and distillery, in addition to the Barn and Springhouse.

Architectural Significance

Peirce Barn (1810-20) and Peirce Springhouse (1801) are good examples of 1800s stone vernacular construction in the District of Columbia. Isaac Peirce constructed his farm buildings in a consistent manner, in terms of both design and materials. The agricultural buildings, specifically the Peirce Barn and Peirce Springhouse, were conservative in form and architectural detail. The Peirce Barn and Peirce Springhouse are symmetrical and their solid granite construction ensured that they would be permanent fixtures in the landscape.

Periods of Significance

As taken from the National Register Nomination, there are three periods of significance related to the Peirce Barn and Peirce Springhouse. The first period 1800-1890 corresponds to the redevelopment of the milling and establishment of the agricultural enterprises on the property by Isaac Peirce (b.1756, d.1841) and later by, his son, Abner Peirce (b. 1785, d.1851) and his grandson, Peirce Shoemaker (b.1816, d.1891). The second period of significance 1891-1933 refers to when the Barn, Springhouse, and Mill were incorporated within the boundaries of Rock Creek Park (1890). The final period of significance 1934-1955 relates to when the Barn, Springhouse, and Mill were restored and used as a living museum.

Regulations

There are numerous statutes, executive orders, presidential memoranda, and other regulations that apply to Federal agencies (such as the National Park Service) regarding historic preservation. The two major Federal laws that protect historic resources within the Federal government are: The National Historic Preservation Act of 1966 (NHPA), as amended, and The National Environmental Policy Act of 1969 (NEPA).

The passage of the NHPA established stewardship of cultural resources as a national policy and required Federal agencies to take into account the effect of Federal undertakings on America's historic buildings, structures, and sites. Section 110 of the NHPA mandates Federal agencies to "undertake such planning and actions as may be necessary to minimize harm" to historic resources, eligible National Register properties and Landmarks. A requirement of the act is consultation with the Advisory Council on Historic Preservation (ACHP). "The Advisory Council on Historic Preservation (ACHP) is an independent Federal agency that promotes the preservation, enhancement, and productive use of our Nation's historic resources, and advises the President and Congress on national historic preservation policy … ACHP is the only entity with the legal responsibility to encourage Federal agencies to factor historic preservation into Federal project requirements."[3]

[3] Advisory Council on Historic Preservation, http://www.achp.gov/aboutachp.html

Section 106 of the NHPA requires Federal agencies to "take into account the effects of their undertakings on historic properties" and "afford the Council a reasonable opportunity to comment on such undertakings."[4]

In brief, Federal undertakings are Federally funded or licensed actions, including grants, licenses, and permits, and that action has the potential to affect properties listed in or eligible for listing in the National Register of Historic Places. Each Federal agency must:

- Identify and assess the effects of its actions on historic resources;
- Consult with appropriate state and local officials, Indian tribes, applicants for Federal assistance, and members of the public, and consider their views and concerns about historic preservation issues when making final project decisions; and
- Resolve the effects by mutual agreement, usually among the State Historic Preservation Officer (SHPO) or the Tribal Historic Preservation Officer, the Federal agency, and any other involved parties. The Advisory Council on Historic Preservation (ACHP) may participate in controversial or precedent-setting situations. These steps are commonly known as the "Section 106 Review Process." A more expansive explanation of the Section 106 Review Process can be found in the ACHP regulations for implementing NHPA, Title 36 of the Code of Federal Regulations Part 800 Protection of Historic Properties (36 CFR 800).

Types of possible undertakings applicable to potential work at the Barn and Springhouse include:

- Maintenance of buildings, structures, and landscapes that might be historic, and maintenance of the land in general if such maintenance could alter the character of the historic landscape,
- Changes in the use of older buildings, structures, and land areas, which might have historic or cultural values,
- Accessibility programs, which can impact historic buildings, structures, and landscapes,
- Energy conservation programs, which can result in the demolition or substantial alteration of historic buildings and structures,
- Hazardous materials removal, which can alter the character of historic buildings, structures, and landscapes, or disrupt archeological sites and other resources,
- Environmental programs, which can result in land-use changes and other changes that can affect historic and archeological resources, and
- Ground-disturbing activities which may indicate the need for archeological investigations and considerations.

The purposes of the National Environmental Policy Act of 1969 are:

"To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will

[4] Code of Federal Regulations: 36 CFR 800.1(a)

prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality" (42 USC § 4321, Sec. 2). "Under NEPA, agencies have broad responsibilities to be concerned about the impacts of their activities on the environment, including historic properties. To an extent, NEPA addresses some of the same concerns as NHPA, for instance regarding identification of irreversible effects."[5]

The NEPA review process evaluates proposed actions and determines the level of documentation that is required for the action. The levels of documentation include:

- Categorical Exclusions (CATEX) are actions that are categorically excluded from further NEPA review. They do not individually or cumulatively have a significant effect on the human environment,
- A Record of Environmental Compliance (REC) is a record that briefly describes the proposed action and its anticipated timeframe, identifies the proponent, and explains why further documentation is not required,
- An Environmental Assessment (EA) is a detailed statement outlining the anticipated effects of the proposed action. An EA is prepared to document potential effects of a proposed action and is subject to review and comment. An EA results in a finding of no significant impact (FNSI) or a notice of intent (NOI) to prepare an Environmental Impact Statement (EIS), and
- An EIS is a detailed public statement documenting the environmental consequences of actions that may cause significant environmental impacts.

The regulations for implementing NEPA are found in Title 40, part 1507 of the Code of Federal Regulations. The independent Federal agency associated with NEPA is the Council on Environmental Quality.

There are other statutes, executive orders, Presidential memoranda, and other regulations that apply to Federal agencies and historic preservation. However, compliance with one or more of these other statutes does not substitute for compliance with ACHP's regulations, 36 CFR Part 800, unless ACHP explicitly agrees that it does through execution of a Programmatic Agreement or approval of alternate procedures. Also, the regulations allow Federal agencies to comply with Section 106 through the use of the NEPA process and documentation, so long as the steps and standards of Section 800.8(c) of ACHP's regulations are met.

With respect to listing in the D.C. Inventory of Historic Sites, the process for reviewing changes to historic buildings and the preservation objectives of the city is specified in the District of Columbia Historic Landmark and Historic District Act of 1978 (D.C. Law 2-144) and D.C. Municipal Code 12. The law

[5] Advisory Council on Historic Preservation, http://www.achp.gov/relationship.html

establishes the procedure for officially designating buildings, structures, districts, and sites as historic properties and provides for their protection. For the Federally-owned Peirce Barn and Peirce Springhouse compliance is achieved through the parallel review process with Section 106 of the National Historic Preservation Act of 1966. This involves the DC Historic Preservation Office in review of the Federal action.

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CHAPTER 1.6: PHYSICAL DESCRIPTION - PEIRCE BARN

Significant Site and Building Features

Definition

Significant features are the "character-defining features" of a building that embody its essence and convey its identity or special quality. More specifically, the term refers to the "essential physical features that must be present for a property to represent its significance."[1]

The *Secretary of the Interior's Standards* state that the "historic building's appearance may be defined by the form and detailing of its exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems; and the building's site and setting."[2] Therefore, character-defining features are those tangible qualities that capture the essence of the historic building.

These features should be retained and preserved when possible. The identification of a feature is based on the best assessment at this time and may be subject to new information from a more detailed analysis at a future time. It is important also to consider these individual features within a greater context relative to the building's overall massing and spatial configuration.

Site Features

Setting (1810-20, altered 1930s and 2010):

The original site features of the Peirce family plantation are no longer intact (see Figure 1.6.1). The widening of Tilden Street in the 1930s and the recent introduction of a bus drop-off and parking lot to the west of the Barn have negatively impacted the historic scene (see Figure 1.6.2 and Figure 1.6.3).

Exterior Features

There are several significant exterior features that date to the periods of significance.

Overall Building Massing (1810-20):

The Barn is a rectangular stone building approximately 26-0'x 35'-0" with symmetrical end gables on the north and south (see Figure 1.6.4 and Figure 1.6.5). The north, east and west elevations of the Barn are constructed of blue granite. The south elevation is made up of wood construction with horizontal wood siding at the ground floor and vertical wood siding at the second floor and attic.

[1] National Register Bulletin No. 15, p. 45.
[2] Secretary of the Interior's Standards, p. 119

Stone Walls (1810-20, re-pointing 1934-36, other dates unknown):

The stone for the Barn was quarried locally on the nearby Broad Branch Road Quarry, no longer extant. The stone is randomly coursed at all elevations. There are larger stone quoins at the building's four corners, (see Figure 1.6.6). The stone walls are eighteen inches thick. From the survey of the exterior stone walls, there have been approximately four mortar re-pointing campaigns.

Wood Siding, south (1810-20):

Both horizontal and vertical wood siding exists at the Barn's south façade (see Figure 1.6.7). Horizontal siding is present at the lower half of the building with vertical wood siding located at the upper portion of the building. The entire south elevation is painted white.

Lower Story Window openings, Sills, Lintels (1810-20):

The openings are original (see Figure 1.6.8 and Figure 1.6.9). The masonry sills and lintels are made of the same blue granite as the walls on the north, east, and west elevations.

It is clear that the north window, on the east elevation was originally a door opening (see Figure 1.6.10). Clues include a longer granite lintel over the window and a different appearance to the stone directly to the right (north) and below the window opening. Stones are more uniform in shape, not as randomly coursed as the remainder of the exterior wall. Finally, the mortar campaign appears to be pronounced, with a different appearance than that which surrounds it. The date of this alteration is unknown.

There is only one window opening at the first floor west elevation (see Figure 1.6.11). While the opening, sill, and lintel are original, the wood window assembly is smaller than the masonry opening. Concrete has been used to fill the gap between the stone lintel and window trim at the top as well as fill a smaller gap between the wood window trim and the masonry opening to the south. There is no evidence that this opening was originally a pedestrian door, only that the wood window assembly was originally larger.

Upper Story Window openings, Sills, Lintels (1810-20):

There is no evidence, visual or otherwise, to suggest that the upper story window openings are not original. The masonry sills and lintels are made of the same blue granite as the walls on the north, east, and west elevations.

There are two windows at the north elevation, one at the second and third floors. At the south elevation there are three non-operable windows, at the third floor: two rectangular windows which flank one arched window. At the east elevation, there are two windows at the second floor. The west elevation has one window at the second floor (see Figure 1.6.12-15).

Lower Story Window Assemblies (1810-20):

Wood window frames and sashes (#01-08), are located at the first and second floors. All window assemblies have a six-over-six lite configurations and are single hung (no chains or rope with a fixed top sash).

Upper Story Window Assemblies (1810-20):

One wood single hung, six-over-six window exists at the third floor north (#9). At the south elevation, there are three non-operable wood windows (#10-12). Two rectangular windows (#10 and #11). All flank one arch top window (#11); all three have six window panes each.

Shutters (1914-36):

Windows (#01-08) at the north, east and west elevations, first and second floors, are fitted with exterior wooden shutters. Shutters are made of vertical wood boards with cross bracing on the interior. Shutter hardware is not consistent.

Transom windows, south (1914-36):

There are three transom windows, at the first floor south elevation. Two are above the carriage house doors and one is above the pedestrian entrance (see Figure 1.6.17). The transom windows do not exist in an 1858 photograph of the Barn but they do appear in a photo of the Barn taken about 1914. It is assumed that the transom windows were installed to provide additional light into the first floor of the Barn, as neither the carriage house doors nor the pedestrian door had clear glass.

Dovecote openings (1914-36):

Thirteen dovecote openings exist directly above the three non-operable windows at the attic story on the south elevation. On the exterior, there is a shelf below the openings. On the interior there is an interior shutter above the openings. The shutter is an eight inch wide board on a hinge, with half inch diameter holes centered on each dovecote. The interior shutter is currently held in the open position with wire.

Exterior Door openings, sills and lintels (1810-20):

Two door openings exist at the south elevation; both are in their original location (see Figure 1.6.18 and Figure 1.6.19). The door openings are seen in the earliest photograph of the Barn dating to 1858.

Exterior Doors (1971):

The current out-swinging carriage house doors are made of alternating five and three inch wide wood planks laid at a forty-five degree angle. The length

of the four hinges varies and door hardware consists of an ornamental wood pierce, fitted with a padlock. It is worth noting that while the door may be operational; it is actually blocked off on the interior with a stud framed partition wall.

The existing Dutch style pedestrian door is made of vertical five inch wide boards with cross bracing at both the top and bottom halves. The hinges are modern as is the peep hole, two key locks and latch handle. There is currently one step up to enter the Barn, with a wood door threshold. To the right of the door is a small street number plaque, 2401.

Door Threshold (1971):

There is no threshold at the out-swinging carriage house doors. A wood door threshold is present at the pedestrian door, south elevation. The threshold material is wood.

Door hardware (1971):

At the pedestrian door, the hardware includes a simple latch handle, two key locks and one peephole on the exterior. On the interior, a deadbolt locks the upper and lower portions of the Dutch door. The door hinges are modern. At the out-swinging carriage house door there is a small padlock.

Exterior trim (1858-1914):

Exterior wood trim surrounds the transoms, carriage house doors and the pedestrian door on the south elevation. Exterior trim does not appear in the 1858 photograph of the Barn. In all probability, the trim was added at the same time the transom windows were installed, sometime after 1858 and before1914.

Roof, wood shingles (1971):

The ridge of the gable roof runs north to south (see Figure 1.6.23 and Figure 1.6.24). The roofing material is wood shingle. The roof has probably been replaced two or three times since the Barn was built in 1810-20. Wood shingle roofs are known to last about sixty years.

Chimney (by 1936):

The brick chimney does not date to the Barn’s original construction (see Figure 1.6.25). It is not until a 1936 photograph that an unpainted, brick chimney is shown. Presumably, the chimney was constructed to vent a pot belly stove at the first and perhaps second floors. The brick chimney remains unpainted in a 1975 photograph of the Barn (see Figure 1.6.26). It is currently painted white and includes a metal flue liner.

Interior Features

There are few significant interior features remaining at this time.

Spatial organization (1810-20):

The authors believe the interior layout of the Barn has changed very little since it was constructed. From its initial construction to the time the Barn was conveyed to the Federal government, the interior of the Barn was used as a carriage house (or wagon barn). The west two-thirds of the first floor plan of the Barn would have housed the carriages/wagons while the right third would have been used as a storage area, presumably for parts associated with the maintenance of carriages/wagons. The second floor would have been dedicated exclusively to hay storage.

Very little information is known regarding the interior use of the Barn from 1892, when it become part of the Park, to 1971 when it was established as an Art Barn. Exterior alterations offer a few clues. Sometime prior to 1936, three transom windows were installed under the gable at the south elevation. Directly above these windows there are thirteen dovecote opening with an exterior shelf. The location of the hayloft door was also lowered to accommodate the pigeon loft.

The authors believe that the third floor was reconfigured to accommodate pigeon keeping. In addition to the windows on the south elevation there is evidence to suggest that the attic floor joists are not original. For instance, joists show remnants of a plaster ceiling at the second floor, an unusual feature in a barn. This suggests that the joists were recycled from another building. The construction of nesting boxes at the attic level also support pigeon keeping.

In 1971, the Barn was retrofitted for use as an Art Barn. Some modifications were made to the interior of the barn to accommodate the artists, i.e. the installation of a series of interior partitions to house a restroom, furnace, and entry hall at the first floor.

Partition walls (1810-20):

Partition walls have been erected on all floors. The north/south partition wall of the first floor is covered with vertical wood board at the lower two-thirds while the upper portion consists of metal panels. Non-destructive testing occurred at this location on April 18, 2012. Vertical wood boards were removed from the entry hall, just south of the entry into the carriage house gallery. Additional metal panels were discovered behind the boards. Using a small camera to view the interior of the wall, wood columns were visible. Attached to these columns, horizontal furring to which the metal panels are attached.

Stairs (1810-20, unknown):

There are two staircases located within the Barn. The stair from the first to second floor runs from west to east along the north wall, (see Figure 1.6.27). The location of the staircase is probably original. However, the stair framing has probably been replaced. Evidence suggests that the pitch of the stair has been altered (see Figure 1.6.28). The second stair, from the second to third floors, runs from south to north, and is located approximately eight feet from east exterior wall, (see Figure 1.6.29). This stair was more than likely added when the attic level was altered to house pigeons.

Flooring (1810-20, attic assumed 1914-36, and 1971):

There are at least four different types/generations of wood flooring in the Barn. Inside the storage room, at ground level, there are two types of wood strip floors; however, one has a bead board detail (see Figure 1.6.30 and Figure 1.6.31). The entry hall and carriage house gallery have a stained, wood strip floor with three inch wide boards. The current flooring was installed directly on top of an earlier wood floor. The earlier generation of wood flooring was visible when a wood vertical board was removed during non-destructive testing on April 18, 2012. In the closet under the stair, there is a fourth flooring material of unstained wider boards, which appear to be the most recent flooring generation at this level.

At the second floor, the hayloft gallery, the flooring material is consistent throughout. There are unstained planks of five to seven inches in width with staggered joints. Portions of the attic floor are plywood, i.e. in the closet and a patch near the stairs. The remainder of the floor is covered with wood tongue and groove boards, with boards varying in width from 3 ½" to 6" (see Figure 1.6.32).

Non-significant Features

The work completed in 1971 to convert the Peirce Barn in to the Art Barn was generally in keeping with the historic character of the building. The authors believe the following non-significant features are not character-defining.

Interior Features

Interior doors (assumed 1971):

There are two interior doors on the lower level of the Barn, one on the second floor that corresponds to the location of the hayloft door, and two additional doors on the third floor. None of the interior doors are considered to be significant features.

On the first floor, the door (#103) providing access from the entry hall gallery to the furnace room is made up of wood vertical board, to match the walls. The door blends seamlessly into the room, has no casing, and was installed in 1971 ostensibly to shield the new furnace from the Barn's main entry hall. Door (#104) providing access to the space under the stairs is also free of any casing and is made up of three inch vertical wood boards that when closed blend seamlessly into the wall.

The lone door at the second floor is not a pedestrian door, but rather an interior door (#105) that corresponds to the exterior hayloft door. It is within a non-original interior partition located along the length of the south wall. The third floor has two interior doors (#106 and #107), one from the pigeon loft gallery to the storage room and another from the storage room to the closet respectively.

Partition Walls (1971):

At the second floor, a seemingly random six foot tall, five foot three inches long, stud wall stands at the northwest corner of the Barn. On the south elevation, while the exterior of the elevation is original, the interior side of the wall is made up of plywood. At the third floor, two partitions exist, separating the attic into three distinct spaces.

Ceiling, first floor (1971)

Originally constructed as a carriage house/wagon barn, a ceiling finish would not be typical in this building type. Currently, the first floor of the Barn has a metal panel ceiling (see Figure 1.6.33). At the second floor, evidence suggests that there may have been a plaster and lath ceiling. However, the third floor is presumably not original and therefore the second floor ceiling joists may have been recycled from another building (see Figure 1.6.34). In the attic, there is no evidence that a ceiling has ever existed directly under the roof rafters.

Light fixtures (1971):

Light fixtures throughout the Barn vary. On the first floor, in the entry hall, carriage gallery, and storage closet, track lighting fixtures are located on the ceiling. The fixtures were presumably installed in 1971, the result of upgrades to the Barn when it became the Art Barn. The finishes of the can lights are white, black and silver. There appears to be no explanation as to where the various finishes are installed (see Figure 1.6.35).

At the second floor, the hayloft gallery, there are two different light fixture campaigns. The same track lights from the first floor are present, but in addition, a series of exposed bulb fixtures seemingly pre-date the track light fixtures (see Figure 1.6.36). The same exposed bulb fixtures are also present at the third floor, the pigeon loft. Portions of the third floor also have fluorescent strip lighting (see Figure 1.6.37). The Barn's light fixtures are not a significant building feature.

Electrical (1971):

The exact date when electricity was installed in the Barn is unknown. However, by 1914, there are telephone poles, and electric street lights visible outside the Barn. The building's panel box and switches are located in the southwest corner of the carriage gallery on the first floor. The panel box controls the light fixtures on the second and third floors as well as most of the

fixtures on the first floor. Separate light switches are located in the storage room and entry hall gallery to independently control these rooms.

Plumbing fixtures (assumed 1971):

At the lower level in the storage room, in the northeast corner of the Barn, there is evidence that the room was once used as a restroom. The room is equipped with a potable water pipe and a sanitary waste pipe. No plumbing fixtures currently exist in the Barn. The plumbing is presently capped off.

Furnace and HVAC System (1971):

A furnace and HVAC system were installed in the Barn in 1971.

Structural Elements

Floor, framing (1810-20):

The ground floor of the Barn is divided into two spaces by the north-south wall. The western two-thirds of the building would have originally been used for carriage storage. The eastern third of the Barn would have been used for tool storage, etc. Early floor framing in this area is assumed to have been 3" x 11" wood floor joists. The addition of a series of columns along the ground floor of the west elevation and the installation of a temporary support column in the center of the carriage house gallery suggest that the carriage area may have originally been a double height space. Currently, the ground floor of the Barn is framed with modern floor joists, presumably 2"x 10." The original dirt floor is below.

The second level would have originally been a mezzanine level, to the east. Framing at this level is framed east to west. It is assumed to have been 3"x11" wood joists. At some point, the second floor was extended to the west. To support the second floor joists, several columns were used to support a ledger along the west elevation. At the same time the center column was added. This support is currently concealed within a 9 ¼" x 9 7/8" column cover.

Originally, the attic level would have been used for hay storage. None of the existing partitions are original. Attic floor framing joists run north-south, measure 3" x 5" and are spaced anywhere from 1'-6" to 2'-9" on center. Again, it is unknown when the loads in the attic increased to the point where three temporary support columns were required at the second floor. Two columns support the cross beam just to the south of the chimney. The third column supports a contemporary beam made up of three 2" x 8" members. This support does not run the full width of the structure (see Figure 1.6.38). All three columns measure 5 1/4" x 5 1/4".

Roof, framing (1810-20):

The roof rafters are marked with roman numerals and held together at the ridge with a hand hewn wooden peg (see Figure 1.6.20). The rafters are in all likelihood original. Wood rafters measure 3" x 4" and are spaced

approximately 2'-6" on center. Both the roof purlins and angled braces are also from the original construction period. Roof purlins measure 6" x 7". Angled braces measure approximately 3" x 5" (see Figure 1.6.21 and Figure 1.6.22).

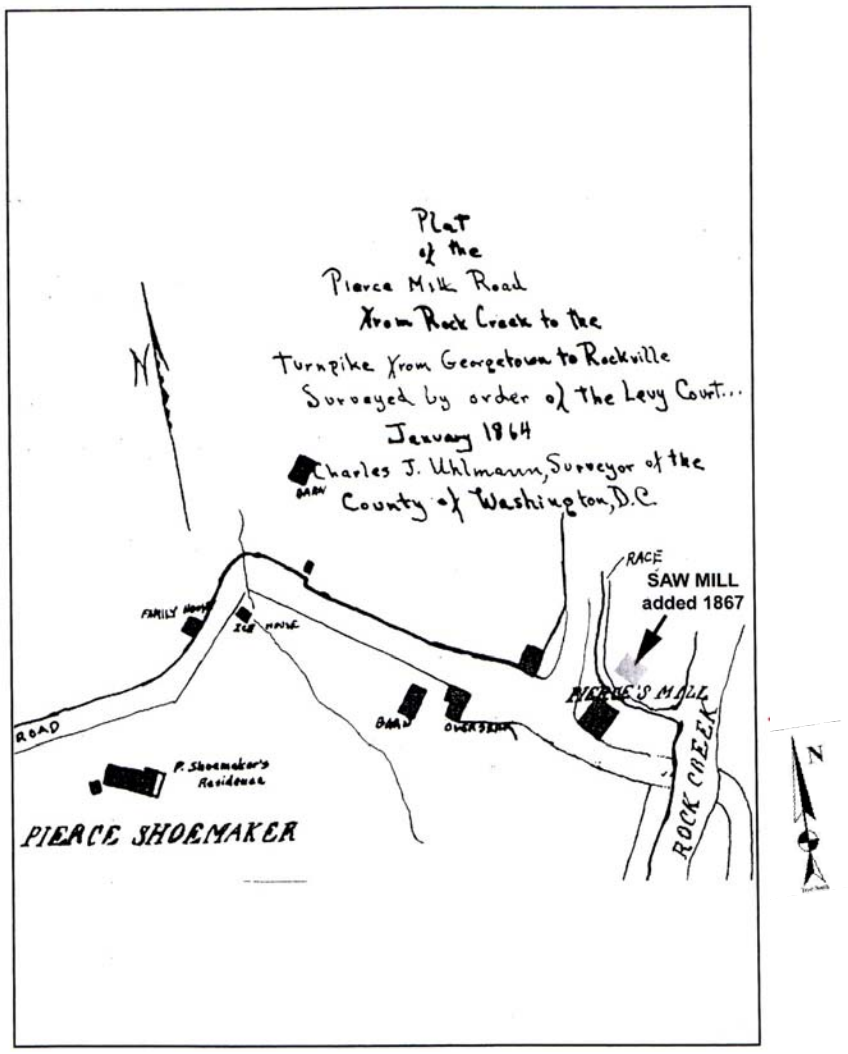


Figure 1.6.1

Plat of Pierce Mill Road from Rock Creek to the Turnpike from Georgetown to Rockville, January 1864.
(Source: Peirce Mill Complex Cultural Landscape Report, page 2.8.)
Note: The location of the Peirce Barn and Peirce Springhouse are indicated with arrows.



Figure 1.6.2 Photograph of the Peirce Barn in the context of Peirce Mill. (Source: QEA, 2011)



Figure 1.6.3 Photograph of the Peirce Barn in the context of the bus drop-off and parking area. (Source: QEA, 2011)



Figure 1.6.4 **Photograph of the Barn looking southwest.** (Source: QEA, 2012)
Note: The Distillery is in the background (right).



Figure 1.6.5 **Photograph of the Barn looking southeast.** (Source: QEA, 2011)
Note: Peirce Mill in the background (left).



Figure 1.6.6 Photograph of the northeast corner of the Barn, showing large granite quoins. (Source: QEA, 2011) Note: The stone is blue granite, randomly coursed. The exterior walls of the Peirce Barn (1810-20) closely match the stonework of the adjacent Peirce Mill (1829). See Figure 1.6.9 for a photograph of the original door location, highlighted in this figure.



Figure 1.6.7 **Photograph of the south elevation of the Barn.** (Source: QEA, 2011)
Note: Horizontal wood siding at the lower half of the building and vertical wood siding at the upper portion of the façade. Presumably, an opening as wide as the carriage house doors, in stone, would have required a hefty arch. The width of the opening was more easily achieved using a wooden lintel.



Figure 1.6.8 Photograph of the window, north elevation, ground floor. (Source: QEA, 2011)



Figure 1.6.9 Photograph of the south window, east elevation, ground floor. (Source: QEA, 2011)



Figure 1.6.10 Photograph of the north window, east elevation, ground floor. (Source: QEA, 2011) Note the "ghost" of a door, see arrow. A longer lintel and obvious re-pointing suggest a pedestrian entrance was originally located in this location.



Figure 1.6.11 Photograph of the window, north elevation, ground floor. (Source: QEA, 2011)



Figure 1.6.12 Photograph of the windows, north elevation, second floor and attic. (Source: QEA, 2011)



Figure 1.6.13 Photograph of the gable windows, south elevation, attic floor. (Source: QEA, 2011)

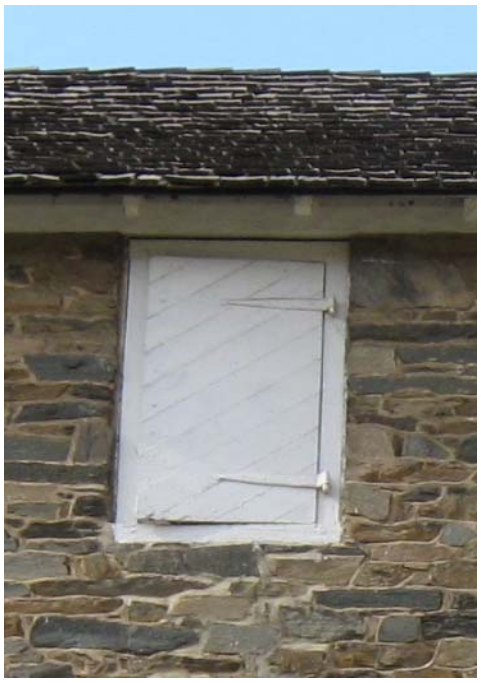


Figure 1.6.14 Photograph of the upper story window, second floor south, east elevation.
(Source: QEA, 2011)



Figure 1.6.15 Photograph of the upper story window, second floor north, east elevation.
(Source: QEA, 2011)



Figure 1.6.16 Photograph of the upper story window, second floor south, west elevation. (Source: QEA, 2011)



Figure 1.6.17 Photograph of the three transom windows at the south elevation. (Source: QEA, 2011)



Figure 1.6.18 Photograph of the barn door, south elevation, and two transom windows above. (Source: QEA, 2011) Note: The existing out-swinging carriage house doors were installed in 1986. The transom windows were installed sometime between 1858 and 1914.



Figure 1.6.19 **Photograph of the pedestrian door, south elevation.** (Source: QEA, 2011)
Note: The Dutch style pedestrian door is assumed to be from 1971. A 1936 HABS photo of the Barn shows a Dutch style pedestrian door made of vertical woods boards with an exterior screen door. The transom window above the door was installed sometime between 1858 and 1914.



Figure 1.6.20 **Photograph of the roof rafters.** (Source: QEA, 2011)
Note: The roman numerals on the rafters were used to match the rafters for both slopes of the roof. The wooden peg, see arrow, was used to hold the rafters together. The peg is hand-hewn and as a result has a rustic appearance. All of the roof rafters are numbered.

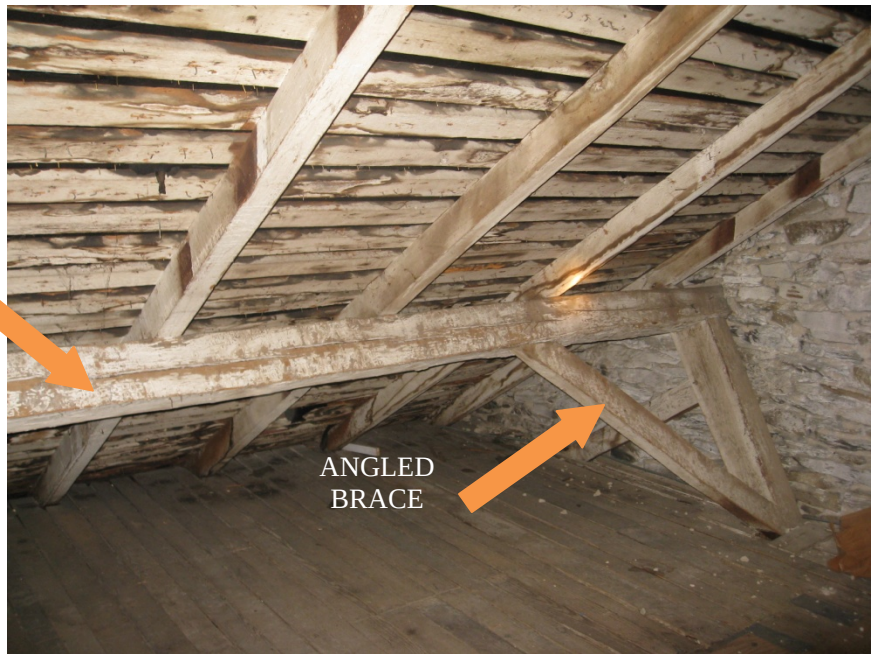


Figure 1.6.21 **Photograph of the Barn's attic, the Pigeon Loft, north.** (Source: QEA, 2011)
Note. Both the roof purlin and diagonal brace are essential to the Barn's structure.

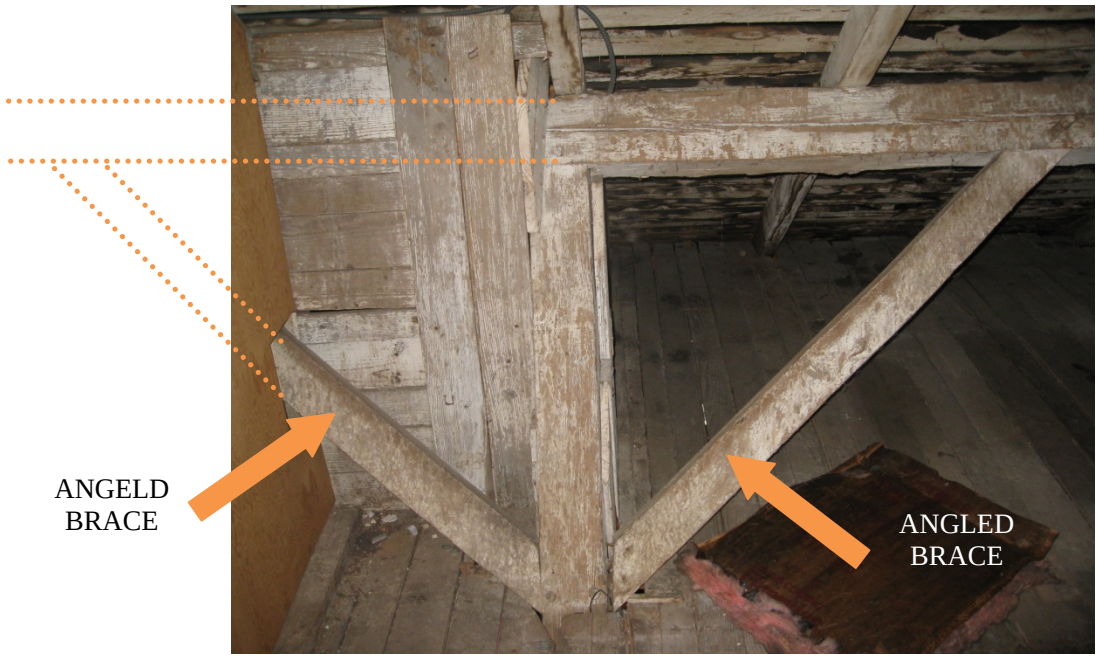


Figure 1.6.22 **Photograph of the Barn's attic, the Pigeon Loft, center.** (Source: QEA, 2011)
Note: Two diagonal braces help support the roof purlin. Also note that the attic floor was constructed around the original roof framing remembers, and thus had no negative impact.



Figure 1.6.23 **Photograph of the roof, east facing slope.** (Source: QEA, 2011)



Figure 1.6.24 **Photograph of the roof, west facing slope.** (Source: QEA, 2011)



Figure 1.6.25 Photograph of the Chimney, looking west. (Source: QEA, 2011)



Figure 1.6.26 Photograph of the Peirce Barn, chimney in 1975.
(Source: Rock Creek Park Historic Photograph Collection, PMI-52).



Figure 1.6.27 Photograph of the stair, rising west to east along the north wall, from first floor to second floor. (Source: QEA, 2011)



Figure 1.6.28 Photograph of the underside of stair, from storage area below. (Source: QEA, 2011)
Note: The pitch of the stair has been altered.

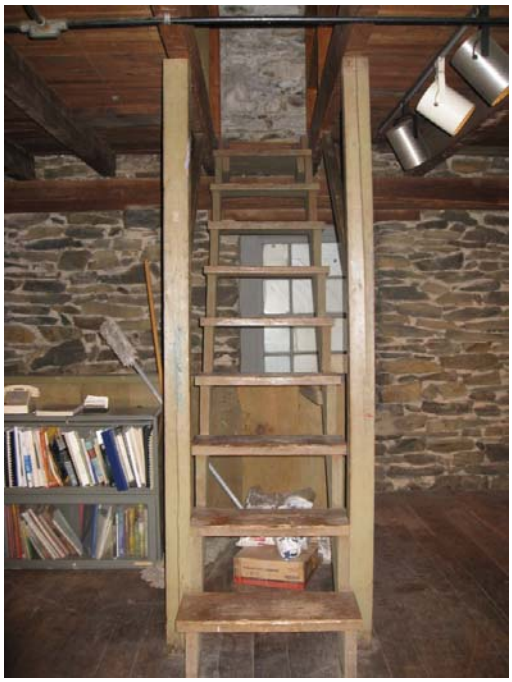


Figure 1.6.29 Photograph of the stair, rising south to north approximately eight feet from the east wall, from the second floor to third floor. (Source: QEA, 2011)



Figure 1.6.30 Photograph of one of the two types of wood floor boards installed at the first floor storage closet. (Source: QEA, 2011) Note: The beaded boards are approximately 3¼" wide.



Figure 1.6.31 Photograph of the second type of wood flooring at the first floor storage closet. (Source: QEA, 2011) Note: The strip floor boards are approximately 3" in width.



Figure 1.6.32 Photographs of the attic wood floor, at the pigeon loft gallery, and storage room. (Source: QEA, 2011) Note: The wood tongue and groove boards vary from 3 ½" to 6" in width.



Figure 1.6.33 Photograph of the Carriage gallery, first floor ceiling. (Source: QEA, 2012)



Figure 1.6.34 Photograph of the exposed attic floor joists. (Source: QEA, 2011)
Note: The markings which suggest there was wood lath for a plaster ceiling. However, a plaster ceiling would be highly unusual for a building of this type. And suggests that, perhaps, the floor joists were recycled from another building.



Figure 1.6.35 **Photograph of the track lighting.** (Source: QEA, 2011)
Note: Track lighting is typical at both the first and second floors.



Figure 1.6.36 **Photograph of the exposed bulb fixture at second floor.** (Source: QEA, 2011)
Note: Presumably, this fixture is from the first lighting campaign in the Barn, exact date unknown, but in all probability the fixture was installed in the 1930s. Track lighting was installed on the first and second floors in 1971. It is unclear to the author why the window sill has been in filled with a course of brick.



Figure 1.6.37 Photograph of the fluorescent strip lighting at the attic floor storage room and closet. (Source: QEA, 2011)



Figure 1.6.38 Photograph of the Peirce Barn, second floor. (Source: QEA, 2012)
Note: Unevenly spaced attic floor joists, two cross beams and three columns. Cross beam in the foreground appears to be original. Note how the cross beam in the background does not continue across the width of the Barn (see arrow).

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CHAPTER 1.7: PHYSICAL DESCRIPTION - PEIRCE SPRINGHOUSE

Significant Site and Building Features

Definition

Significant features are the "character-defining features" of a building that embody its essence and convey its identity or special quality. More specifically, the term refers to the "essential physical features that must be present for a property to represent its significance."[1]

The *Secretary of the Interior's Standards* state that the "historic building's appearance may be defined by the form and detailing of its exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems; and the building's site and setting."[2] Therefore, character-defining features are those tangible qualities that capture the essence of the historic building.

These features should be retained and preserved when possible. The identification of a feature is based on the best assessment at this time and may be subject to new information from a more detailed analysis at a future time. It is important also to consider these individual features within a greater context relative to the building's overall massing and spatial configuration.

Site Features

There are a few significant site features associated with the Peirce Springhouse.

Setting (1801):

The Peirce Springhouse was built in 1801 and is located in a triangular shaped hallow which is now part of a median strip between the dual lanes of Tilden Street, NW, Washington, DC (see Figure 1.7.1). The north elevation of the Springhouse is partially built into the hillside. A spring continues to run underneath the building. This spring is the most significant site feature; for there would be no Springhouse without the spring (see Figure 1.7.2).

Site Walls (1913-15):

In 1913-15, the Springhouse was preserved within the Tilden Street median. The structure was encircled with the addition of a horseshoe shaped dry-laid granite wall with a stepped side entrance (see Figure 1.7.3 and Figure 1.7.4).

[1] National Register Bulletin No. 15, p. 45.
[2] Secretary of the Interior's Standards, p. 119

Exterior Features

There are several significant exterior features that date to the periods of significance.

Overall Building Massing (1801, restored 1999):

The Springhouse is a rectangular stone building approximately 15'-0" x 19'-0" with symmetrical end gables on the north and south (see Figure 1.7.5 and Figure 1.7.6). The stone is randomly coursed at all elevations. Note the larger stone quoins at the four building corners (see Figure 1.7.7). This is typical of the Peirce Springhouse, Peirce Barn (1810-20), and Peirce Mill (1829).

The Springhouse is built into a hillside and as a result there are two points of entry into the structure. At the north elevation there is an entry to the upper level (see Figure 1.7.6). The entrance to the lower level is at the south elevation (see Figure 1.7.5). The grade surrounding the Springhouse has changed significantly since the building was originally constructed. The higher grade to the south of the Springhouse currently requires three steps down to access the lower level. Early photographs of the Springhouse show the exterior grade at the same elevation as the lower level floor.

Stone Walls (1801, re-pointing 1999, other dates unknown):

The stone walls are about eighteen inches thick. The blue granite was quarried locally at the Broad Branch Road Quarry. From the survey of the exterior stone walls, there have been approximately four mortar campaigns. Portions of the north and west walls were rebuilt in 1999, in order to repair severe damage following one or more auto accidents involving the structure.

Inscription Stone (1801):

At the center of the north elevation gable, a stone bears the initials B–I-P-1801 (see Figure 1.7.8). Numerous sources note that the initials stand for "Built-Isaac-Peirce-1801."

Lower Level Window openings, Sills, and Lintels (1801):

The openings are still in their original locations (see Figure 1.7.9-10). The masonry sills and lintels are made of the same blue granite as the walls. Note the granite sills protrude slightly from the face of the building. This is typical of all of the lower level windows.

The current window sashes are non-operable. Lower level windows currently have a wood frame with wire mesh installed on the exterior of the window frames. This "screen" appears in historic photographs of the Springhouse as early as 1936. If in fact the original windows were operational, the wire mesh was presumably used to keep unwanted guests from entering the building while at the same time allowed for air circulation.

Doors (openings, sills, lintels 1801):

There are two points of entry into the Springhouse. There is one door located on the north elevation, which provides entry into the upper level (see Figure 1.7.12). On the south elevation a second entrance maintains access to the lower level of the structure (see Figure 1.7.13). Both pedestrian entrances are in their original locations. While the openings are significant, the doors themselves are not.

The door threshold at the south elevation is covered by a layer of mud. The lintel in this location is the same blue granite as the building walls. At the north elevation, the door threshold appears to be stone; it is also covered by a very thick layer of mud. The lintel above the door at the north elevation is a jack/flat arch (see Figure 1.7.12). It is understood that the doors have been repaired/ replaced throughout the years.

Upper Level Window openings (1801), Sills (1801; 1999), and Lintels (1801):

There are two windows located on the upper level of the Springhouse (see Figure 1.7.14 and Figure 1.7.15). Both openings are in their original locations. The masonry lintel at the south elevation is made of the same blue granite as the building. However, at the north elevation a second jack arch exists, matching the jack arch over the door. Built-in wood window sills exist at both upper level windows. The sills, however, are documented as having been replaced as recently as 1999.

Exterior shutters (1936):

Window openings at the upper level of the Springhouse are fitted with painted wood vertical board shutters (see Figure 1.7.14 and Figure 1.7.15). These shutters date to 1936. It is unknown how early the shutters were installed at the upper level windows. The earliest photograph of the Springhouse from1897 does not show shutters at the south elevation. However, a photo from approximately 1901 does show a shutter on the window at the north elevation. It has been noted that the upper level of the Springhouse was, at one point, fitted out to be a residence.[3] Perhaps the shutters were installed to afford the occupant(s) privacy.

Roof (1801, patched 1998):

The ridge of the gable roof runs north to south (see Figure 1.7.16). Like the Peirce Barn, the roof material of the Springhouse is wood shingle. In all probability, the roof has been replaced two, three or four times since the Springhouse was built in1801. Wooden shingle roofs are known to last about sixty years.

[3] Peirce Mill Complex Cultural Landscape Report, Quinn Evans Architects, August 2009, page 3.21

Chimney (1801):

The brick chimney is a significant building feature (see Figure 1.7.17). At both levels of the Springhouse, a fireplace provided warmth during the winter months.

Interior Features

There are several significant interior features remaining at this time.

Spatial organization (1801):

Constructed as a Springhouse, the interior of the building is simple, with no interior partitions. The structure was functional. The unadorned lower level space provided access to spring water and was used to cool milk and butter in the summer. The upper level with its finished ceiling and plaster walls had a fireplace. The room was kept warm during the winter months to churn butter. It has been suggested that the upper level was used as a residence for a period of time.[4]

Flooring, lower level (1801):

The lower level of the Springhouse has a stone floor. However, a thick layer of mud keeps nearly all of the stone pavers covered (see Figure 1.7.18). The area is in a constant soggy state. Presumably the stones in the northwest corner of the building formed a trough where the spring water was accessed. A pool of water still exists at this location. The spring continues to run under the building. A metal grate exists just inside the building at the south door (see Figure 1.7.19). The stream is visible through the grate and audible. If one listens carefully, the babbling sounds of the spring below can be heard.

Flooring, upper level (1801, replaced 1999):

The upper level of the Springhouse has a wood floor (see Figure 1.7.20). The wood floor was completely replaced in 1999.

Fireplaces (1801):

The Springhouse has two fireplaces, both of which are significant building features. The fireplace lintel on the lower level is unique in its shape (see Figure 1.7.21). The hearth on the upper level is much simpler, shallower, and smaller (see Figure 1.7.22). The south wall, on which it is located, was finished with plaster and the exposed granite stone lintel is slightly arched at the top.

[4] Ibid.

Non-significant Features

Exterior Features

Window Assemblies (date unknown):

Wood windows appear to be from a series of renovation campaigns. The configurations of the original windows at the lower level have been maintained. However, the upper level window at the south elevation originally had six-over-six divided lites. At present, the lite configuration is four-over-four. Documentation is unavailable regarding the original configuration of the window on the north elevation. Presently, the window is also a four-over-four configuration. While the window openings are original and significant, the windows themselves are not.

Doors (date unknown):

The lower and upper levels of the Springhouse are each accessed by one pedestrian door. The door on the north elevation is a Dutch style door; the top and bottom halves have the ability to open independently of each other (see Figure 1.7.12). The Dutch door allows the lower half to remain closed, keeping animals and children out while the upper half can remain open. The door at the lower level is a simple vertical wood board door (see Figure 1.7.13). Both doors are highly susceptible to constant moisture from the ground. As a result, the doors have been repaired /replaced numerous times.

Exterior Trim (unknown, 1999):

Presumably, the exterior trim at Springhouse has required replacement. As recently as 1999, the rake boards were completely replaced.

Door Hardware (date unknown):

Throughout the years the Springhouse has had a series of door hardware changes. Currently, both pedestrian doors are secured with simple pad lock.

Graffiti (unknown):

Initials are carved into the stones of the jack arch on the north elevation (see Figure 1.7.26).

Sign (date unknown):

A sign defining the use of the structure as a Springhouse and the date of construction has been installed just to the South of the structure, within the Tilden Street median (see Figure 1.7.25).

The sign reads, “This small stone structure was built by Isaac Pierce in 1801. Constructed around a natural spring, it was used as a cooling place for cheese, milk and butter products during the hot summer months. It also provided a clean water supply. A fireplace provided warmth during the winter for cheese-

making and butter making activities."

Interior Features

Ceiling, upper level (date unknown):

The lower level of the Springhouse does not have a ceiling finish and probably never did (see Figure 1.7.23). The upper level has a wood plank ceiling (see Figure 1.7.24). The ceiling is canted at the east and west, presumably to allow for some additional ceiling height at the upper level.

Structural Elements

Roof, framing (1801):

Roof rafters are concealed by a wood plank ceiling. The exposed rafter tails suggest that rafters are 3"x6". No work was done to the roof rafters during the 1999 restoration of the Springhouse.

Floor, framing (1801, replaced 1999):

Floor framing members at the upper level are exposed from below. Wood floor joists measure 4" x 8" and run in the east-west direction. Joists are pocketed into the exterior stone walls and are spaced anywhere from 16" to 22" on center.

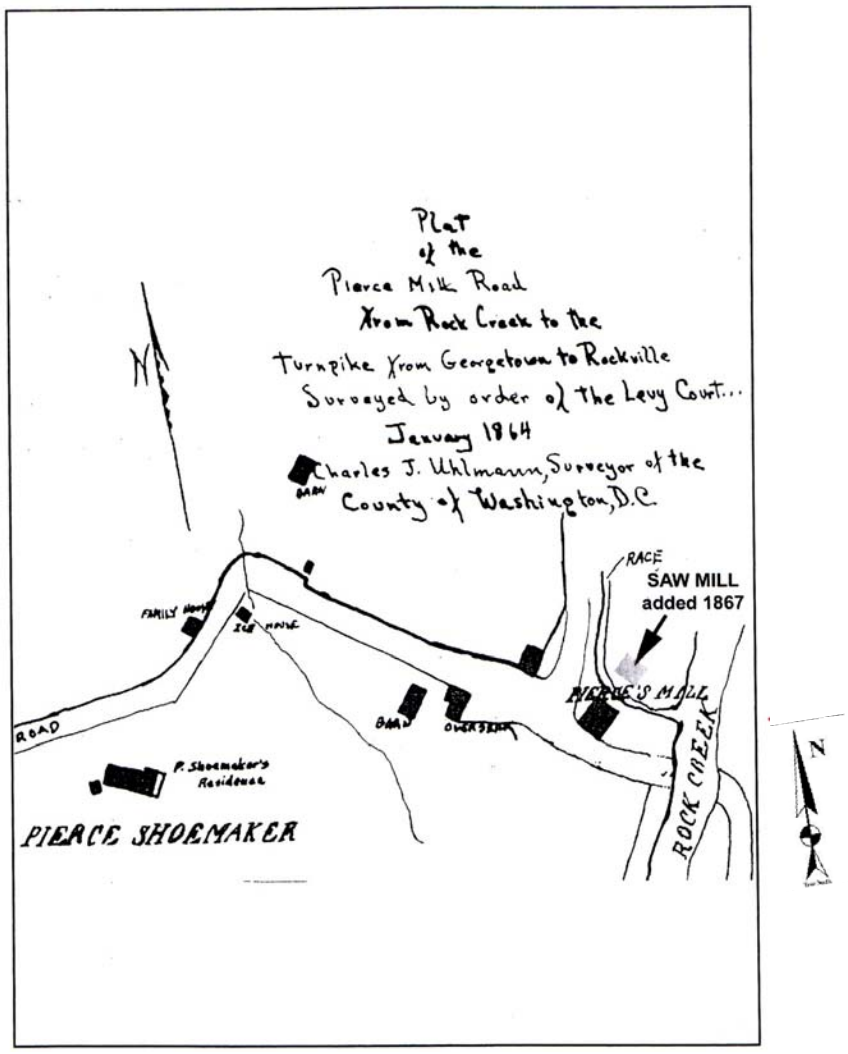


Figure 1.7.1

Plat of Pierce Mill Road from Rock Creek to the Turnpike from Georgetown to Rockville, January 1864.
(Source: Peirce Mill Complex Cultural Landscape Report, page 2.8.)
Note: The location of the Peirce Barn and Peirce Springhouse are indicated with arrows.



Figure 1.7.2 **Photograph of the Springhouse looking west.** (Source: QEA, 2011)
Note: The east bound lane of Tilden Street is in the foreground.



Figure 1.7.3 **Photograph of site wall surrounding the Springhouse, looking northwest.**
(Source: QEA, 2011) Note: The site walls were constructed in 1913-15, preserving the Springhouse within the Tilden Street median. Also, note how close vehicles traveling the west bound lane of Tilden Street are to the Springhouse. Guardrail installed in the 1990's after presumably a car accident caused severe damage to the historic structure.



Figure 1.7.4 Photograph of the side step of the site wall. (Source: QEA, 2011)
Note: The Springhouse is located to the left in this photo.
The west bound land of Tilden Street is in the background.



Figure 1.7.5 Photograph of the Barn looking northeast. (Source: QEA, 2011)
Note: The south entry provides access to the lower level.



Figure 1.7.6 Photograph of the Barn looking southwest. (Source: QEA, 2012)
Note: The north entry provides access to the upper level.



Figure 1.7.7 Photograph of the southwest corner of the Springhouse, showing large granite quoins.
(Source: QEA, 2011)



Figure 1.7.8 Photograph of the inscription stone, north façade, just under the gable. (Source: QEA, 2011)



Figure 1.7.9 Photograph of the west window, lower level. (Source: QEA, 2011)



Figure 1.7.10 Photograph of the east window, lower level, north. (Source: QEA, 2011)



Figure 1.7.11 Photograph of the east window, lower level, south. (Source: QEA, 2011)



Figure 1.7.12 Photograph of the Dutch door at the north elevation. (Source: QEA, 2011)
Note: See arrow for jack arch. The stones of the jack arch support the opening in lieu of a lintel.



Figure 1.7.13 Photograph of the door at the south elevation. (Source: QEA, 2011)



Figure 1.7.14 **Photograph of the window at the north elevation.** (Source: QEA, 2011)
Note: See arrow for jack arch. The stones of the jack arch support the opening in lieu of a lintel.



Figure 1.7.15 **Photograph of the window at the south elevation.** (Source: QEA, 2011)



Figure 1.7.16 Photograph of the roof, western slope. (Source: QEA, 2011)



Figure 1.7.17 Photograph of the chimney, north western face. (Source: QEA, 2011)



Figure 1.7.18 **Photograph of the lower level, stone floor.** (Source: QEA, 2012)
Note: Nearly all of the stones are covered with a thick layer of mud. NPS maintenance used a shovel to uncover the stone pavers on April 18, 2012.



Figure 1.7.19 **Photograph of the lower level, metal grate.** (Source: QEA, 2011)
Note: While standing in this lower level the sound of running water is audible. The spring can be seen through the grate.



Figure 1.7.20 **Photograph of the upper level floor framing.** (Source: QEA, 2011)
Note: The arrow points to a hole in the upper floor. A piece of the wood flooring is hanging down. The entire flooring system was replaced as recently as 1999.



Figure 1.7.21 **Photograph of the lower level fireplace, constructed of the same blue granite as the exterior walls.** (Source: QEA, 2011)
Note: The fireplace was used to heat the lower level during the winter months to ensure a warm temperature for churning butter, etc. during the cold winter months.



Figure 1.7.22 Photograph of upper level fireplace. (Source: QEA, 2011)
Note: The floor conditions were unsafe, and a better photo unattainable.



Figure 1.7.23 Photograph of the lower level. (Source: QEA, 2011)



Figure 1.7.24 Photograph of the upper level ceiling, looking south. (Source: QEA, 2011)



Figure 1.7.25 Photograph of the sign located to the southeast of the Springhouse, within the Tilden Street median. (Source: QEA, 2011)



Figure 1.7.26 Photograph of the graffiti at the north elevation of the Springhouse.
(Source: QEA, 2011) Note: Top-WS, Bottom-KIN. While it is impossible to know when or who carved these letters in the stone their presence should be noted.

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CHAPTER 1.8: CONDITION ASSESSMENT - PEIRCE BARN

Overview of Current Conditions

This chapter discusses the current conditions of significant building and site features. Preservation treatments and guidelines for these significant features will be discussed in Part 2.

The following condition assessment criteria will be used for the architectural elements: excellent, good, fair, and poor.

- *Excellent* is defined as elements that perform their original function and require no renewal or repair.
- *Good* is defined as elements that perform their original function and require only limited repair or renewal.
- *Fair* is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.
- *Poor* is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

Conditions were assessed on several days:
- November 8, 2011
- November 9, 2011
- November 15, 2011
- April 18, 2012

Many of the features of the Barn are in good condition. The majority of features date to the periods of significance. A discussion of the conditions by feature follows.

Condition Assessment by Feature

Site Features

Setting (1810-20, altered 1930s and 2010):

There are no remaining significant site features associated with the Peirce Barn that require a condition assessment.

Exterior Features

Overall Building Massing (1810-20):

The overall building massing is in good condition. The perimeter shape and gabled roof date to original construction. The Barn is two stories and contains an attic space, which is assumed to not be original.

Stone Walls (1810-20, re-pointing 1934-36, other dates unknown):

The exterior walls are in good condition (see Figure 1.8.1 through 1.8.6). There are some cracks in the granite stones, as well as several locations in which the mortar is crumbling (see Figure 1.8.5).

Wood siding, south (1810-20):

The horizontal and vertical wood siding at the south elevation is in fair condition. The siding is covered with layers upon layers of paint. Paint is chipped and alligatoring. Some horizontal boards are missing where the siding meets what is assumed to be the stone foundation at the areas to the right and left of the out-swinging carriage doors (see Figure 1.8.6). The vertical boards that make up the hayloft door are rotted and warping (see Figure 1.8.7).

Lower Story Window openings, Sills, Lintels (1810-20):

The masonry sills and lintels are made of the same blue granite as the walls on the north, east and west elevations. Window openings, sill and lintel are in good condition.

Upper Story Window openings, Sills, Lintels (1810-20):

The masonry sills and lintels are made of the same blue granite as the walls on the north, east and west elevations. Window openings, sill and lintel are in good condition.

Lower Story Window Assemblies (dates unknown):

Window frames and sashes (#01-08), at the first and second floors are in fair condition (see Figure 1.8.8 and Figure 1.8.9). The bottom sashes are difficult to operate and have screws in the top corners to prevent the sash from functioning. The sashes have no other hardware. Wood frames and sashes are chipped and warping, and paint is failing overall. Lites are in good condition, with few panes missing, cracked or slipping.

Upper Story Window Assemblies (dates unknown):

One wood single hung, six over six window exists at the third floor, (#9) attic, north elevation and is in poor condition (see Figure 1.8.10).The bottom sash and wood sill are rotting. Numerous lites are broken. The condition of the window was poor enough to necessitate the installation of plexiglass on the interior to prevent moisture and insect infiltration.

Also at the south elevation, third floor, attic, three non-operable wood windows (#10-12) are in fair condition (see Figure 1.8.11). Two rectangular windows (#10 and #11) flank one arch top window (#11); all three have six window panes. Wood frames and sashes are in good condition. Lites are in good condition. Paint is failing.

Shutters (dates unknown):

Windows (#01-08) at the north, east and west elevations, first and second floors are fitted with exterior wooden shutters. The shutters and their hardware are in fair condition with some rotting wood and chipping paint (see Figure 1.8.12).

Shutter hardware is in fair condition due to rust.

Transom windows, south (unknown prior to 1914):

Transom window frames and sashes (#13-15) at the first floor, south elevation, are overall in good condition. The wood, non-operable, three lite, transoms over the carriage doors are in good condition, with one broken lite. The third transom (#15), located over the pedestrian door, is also wood, non-operable, with six lites. It is in good condition, however the paint is failing. The transoms are deeply recessed and have wood framed mesh screens fixed on the exterior directly to the wood window trim (see Figure 1.8.13).

Dovecote openings (date unknown):

Dovecote openings above windows (#10-12) at the south elevation have a unique interior shutter. The shutter is in good condition, held in the open position with wire (see Figure 1.8.14). Plexiglass has been placed behind the dovecote openings; as a result, the interior shutter has no functional use at this time.

Exterior Door openings and lintels (1810-20):

Exterior door openings are in good condition.

Exterior Doors (1971):

There are two (2) sets of doors on the south elevation, two out-swinging carriage door leaves, and one pedestrian door. The Dutch style pedestrian door is in good condition. Exterior paint is alligatoring and chipping (see Figure 1.8.15). Wood out-swinging carriage doors are in fair condition. The angled wood boards located directly at grade are susceptible to deterioration at grade (see Figure 1.8.16). Paint is alligatoring and chipping.

Door Threshold (1971):

The wooden sill at the south elevation pedestrian door is in fair condition (see Figure 1.8.15). Heavy traffic has caused the sill to warp, the paint is failing and there are chips in the wood. There is no door threshold at the out-swinging carriage doors.

Door hardware (1971):

The door hardware is in fair condition, functional, but worn out. At the pedestrian door, a simple latch handle, two key locks, and one peephole exist on the exterior and are in good condition. On the interior, there is a deadbolt to lock the upper and lower portions of the Dutch door together. At the out-swinging carriage house door, a small padlock is functional and in good condition.

Exterior trim (1810-20), Window and Door trim (1858-1914):

The trim at the Barn's wood windows and door trim at the south elevation is in good condition. Paint is alligatoring and chipping. The wood rake boards at the north and south elevations are in fair condition (see Figure 1.8.17).

Roof, framing (1810-20):

Roof rafter tails are in fair condition. Deteriorated wood is visible (see Figure 1.8.18). At the east, west, and south elevations, mesh covers the eaves. It is likely that this is a solution to keep nesting birds away.

Roof, wood shingles (1971), Roof rafter tails (1810-20):

The wood shingle roof was replaced in 1971and is in good condition. While there are no missing shingles, some cupping on the shingles is visible.

Chimney (1914-36):

On the interior, specifically at the second floor, the brick chimney is visibly bulging to the north. The brick remains unpainted but is heavily discolored. The black/brown substances oozing from the chimney's mortar joints are known as creosote (see Figure 1.8.19). The presences of such substances are assumed to be the result of water infiltration at the chimney flue. In addition, the chimney is covered with excessive white powder. Known as efflorescence, this is also an indication of excessive water infiltration.[1] Water entering a masonry chimney causes damage not only to the flue but to the chimney structure as well.

Interior Features

Spatial Organization (1810-20, altered 1971):

The current spatial organization is based on the 1971 rehabilitation of the Barn as the Art Barn. The three levels of the Barn have never been significantly altered. Overall, the Barn's spatial organization continues to reflect the earliest period of significance, from 1800 to 1890, when agricultural enterprises were established by Isaac Peirce.

Partition Walls (1810-20):

There is one significant partition wall on the first floor. The wall runs north/south separating the entry gallery from the carriage house gallery. The wall divides the first floor into two distinct spaces. Two thirds of the first floor was originally dedicated to wagon storage; and the remaining third, the entry hall, was used as a workshop/storage area. At present, the wall is covered with vertical wood boards on both sides. This board finish, presumably added in 1971 as part of the Art Barn conversion, is in excellent condition.

[1] The white powder is the mineral salt left on the brick surface as water evaporates.

On April 18, 2012 NPS staff and Quinn Evans Architects performed exploratory demolition on the wall. A piece of "random board" was removed from the wall, on the entry gallery side. Behind the "random board" are metal panels, the same metal panels that cover the ceiling in this location. Unable to remove the metal panels, a telescopic video camera was snaked through a gap between the metal panels along the floor. The video shows, what appear to be 4"x4" or 6"x6" vertical wood posts that make up the core of the wall's structure. While the exact dimension of the posts from center line to center line is unknown, they appear to occur every 4'0" to 6'-0". Mounted horizontally to these posts is horizontal wood furring (dimensions unknown) to which the metal panels are attached. The floor, as expected, was dirt. This configuration appears to be the same on both faces of the wall. Video from the exploratory demolition session is included with the digital submission of this report.

Stairs (first to second floor1810-20, second to third floor assumed 1914-36):

There are two staircases in the Barn; both are in good condition. The staircase from the first to the second floor is showing heavy signs of wear. The wood treads and risers have lost their stain in the highly traveled middle section and the black paint at the stringer is chipped. The staircase from the second floor to the attic is showing similar signs of age. As this stair is less heavily traveled, the wood treads are only slightly worn.

Flooring (1810-20, attic assumed 1914-36, and 1971):

The majority of the Barn's flooring is in good condition. Wood flooring at the first floor storage room, however, is in poor condition. Plywood has been installed over a small, particularly dangerous area in front of the door between the storage and furnace rooms.

All of the wood flooring at the second floor is in good condition. There is a small section in the northwest corner of the Barn in which the floor was never stained. A portion of the attic is in poor condition. A four by eight piece of plywood has been installed to the west of the staircase. The remainder of the floor is sturdy.



Figure 1.8.1 Photograph of the south elevation of Barn. (Source: QEA, 2011)



Figure 1.8.2 Photograph of the north elevation of Barn. (Source: QEA, 2012)



Figure 1.8.3 Photograph of the east elevation of Barn. (Source: QEA, 2011)

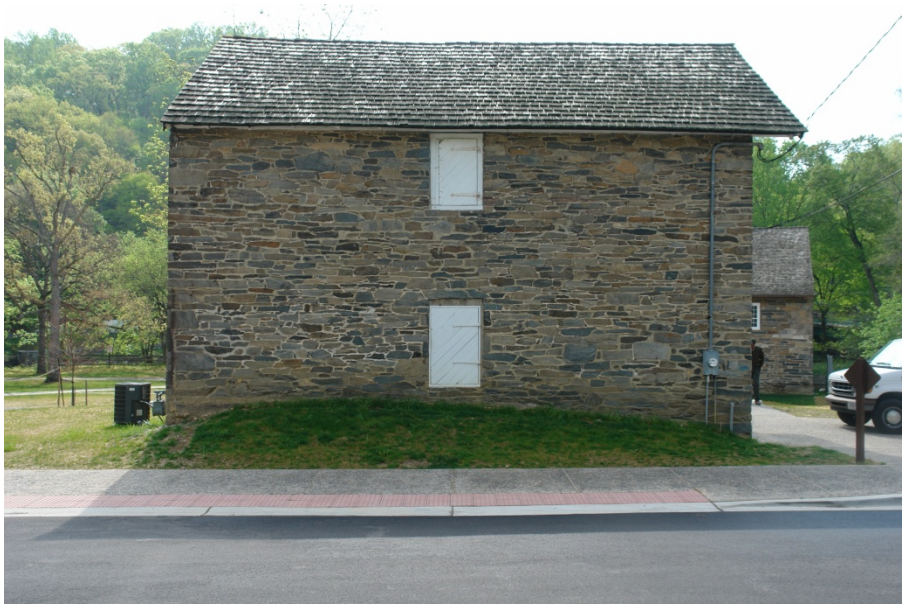


Figure 1.8.4 Photograph of the west elevation of Barn. (Source: QEA, 2012)

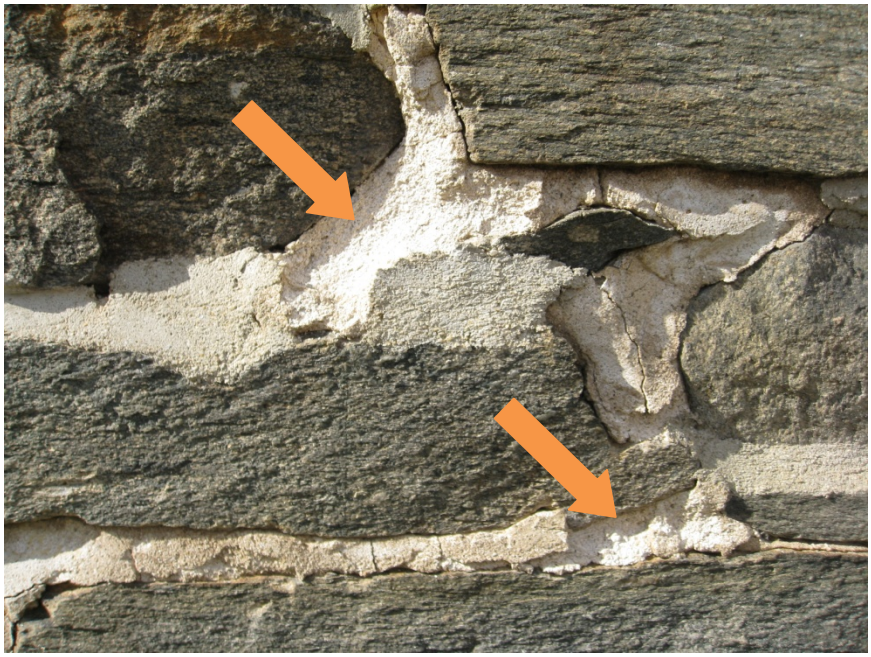


Figure 1.8.5 Photograph of the condition of the mortar of the east elevation. (Source: QEA, 2011)
Note: Areas of crumbling mortar, see arrows.



Figure 1.8.6 Photograph showing the condition of the wood siding at grade level.
(Source: QEA, 2011)



Figure 1.8.7 Photograph showing the condition of the wood siding at second floor level. (Source: QEA, 2011) Note: The transition from horizontal to vertical wood siding.



Figure 1.8.8 Photograph of the exterior south window on the east elevation. (Source: QEA, 2012) Note: Typical condition of window frames and sashes on both the exterior and interior.



Figure 1.8.9 Photograph of the interior of the window in the entry hall, east elevation, south window. (Source: QEA, 2011)



Figure 1.8.10 Photograph of third floor, attic window, north elevation. (Source: QEA, 2011)
Note: The plexiglass, broken window panes, and rotten wood sashes and sill.



Figure 1.8.11 **Photograph of the three non-operable windows at the third floor, attic, south elevation.** (Source: QEA, 2011) Note: Wood framed mesh screens are fixed to the exterior trim at all three windows.



Figure 1.8.12 **Photograph of shutter, north elevation, first floor.** (Source: QEA, 2011) Note: The edge of the wood shutter shows sign of wood rot and multiple layers of (green) paint. This condition is typical of all wood shutters at the Barn.



Figure 1.8.13 **Photograph of the three transom windows at the south elevation.** (Source: QEA, 2011) Note: The transoms are deeply recessed with wood framed mesh screens attached to the exterior trim. Both the windows and the mesh screen are in good condition. The reason for the mesh screen is unknown, since the transom windows are currently non-operable.



Figure 1.8.14 Photograph of the pigeonholes and interior shutter, at third floor attic.
(Source: QEA, 2011) Note: The plexi-glass, currently seals the pigeonholes off from the interior. The shutters provided ventilation to the attic and prevented the birds from flying in/out. Currently, a wire holds the wood shutter in the upright position.



Figure 1.8.15 Photograph of the Dutch style pedestrian door, south elevation. (Source: QEA, 2011)
Note: Door threshold is wood. Paint failure and warping are evident.



Figure 1.8.16 Photograph condition of the Barn door wood boards. (Source: QEA, 2011)
Note: Photograph is of the lower, left, corner of the left barn door.



Figure 1.8.17 Photograph of wood rake board at the south elevation. (Source: QEA, 2011)



Figure 1.8.18 Photograph of the roof rafter tails at the east elevation. (Source: QEA, 2011)
Note: A mesh screen is located under the eaves. The screen prevents birds from nesting in this area.

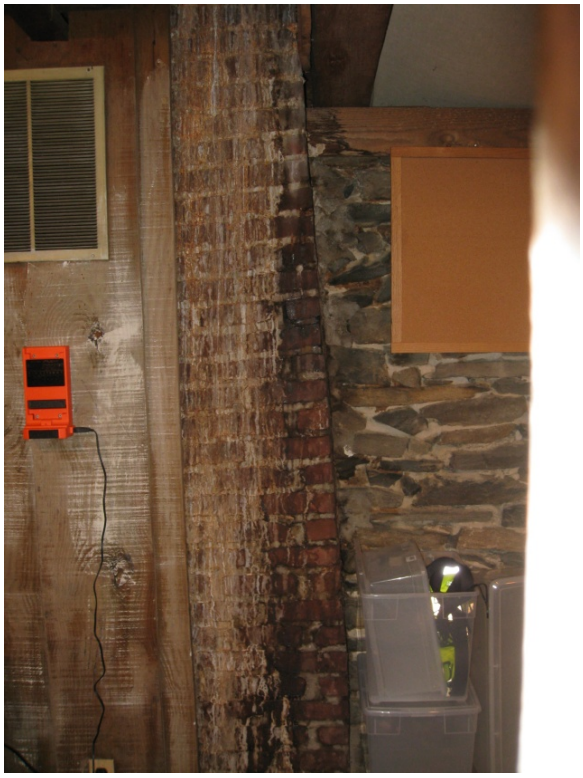


Figure 1.8.19 Photograph of brick chimney, at second floor. (Source: QEA, 2011)
Note: Visible black/brown substance on chimney. White efflorescence is also noticeable.

CHAPTER 1.9: CONDITION ASSESSMENT - PEIRCE SPRINGHOUSE

Overview of Current Conditions

This chapter discusses the current conditions of significant building and site features. Preservation treatments and guidelines for these significant features will be discussed in Part 2.

The following condition assessment criteria will be used for the architectural elements: excellent, good, fair, and poor.

- *Excellent* is defined as elements that perform their original function and require no renewal or repair.
- *Good* is defined as elements that perform their original function and require only limited repair or renewal.
- *Fair* is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.
- *Poor* is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

Conditions were assessed on several days:

- November 8, 2011
- November 9, 2011
- November 15, 2011
- April 18, 2012

Many of the features of the Springhouse are in good condition. The majority of features date to the periods of significance. A discussion of the conditions by feature follows.

Condition Assessment by Feature

Site Features

Setting (1801, altered 1913-15, altered 1930s):

The original site features of the Peirce family plantation are no longer intact. Alterations to the Tilden Street median in 1913-15 and the widening of Tilden Street in the 1930s have negatively impacted the historic scene (see Figure 1.9.1 and Figure 1.9.2).

Site Walls (1913-15):

Overall, the dry-laid granite walls are in fair condition (see Figure 1.9.3-6). There are however, portions of the site wall that are in poor condition with fallen, displaced, and missing stones. Where sections of the site walls have failed, vegetation covers the displaced stones. The side steps are in fair condition. There is a large crack at the bottom stone tread and a displaced cap stone at the cheek-wall.

Exterior Features

Overall Building Massing (1801):

The overall massing is in good condition. The perimeter shape and gabled roof date to original construction.

Stone Walls (1801, re-pointing varies, portions re-built 1999):

The stone walls are in fair condition (see Figure 1.9.7-10). There are cracks through stones as well as spalling stone on the exterior walls (see Figure 1.9.12). Large sections of the walls have severe mortar loss. The mortar will need extensive re-pointing (see Figure 1.9.11).

At the north elevation, flat arches above the door and window are marked with graffiti. The keystone, at the center of the flat arch is cracked (see Figure 1.9.13). At the north elevation, there is an inscription stone under the gable. The stone is in good condition (see Figure 1.9.17). The northeast corner of the Springhouse was re-built in 1999. The area of severe damage was the result of multiple car accidents involving the structure.

Windows Assemblies (varies):

Windows (#1-3) at the lower level are in good condition. Due to the dampness at the lower level, a green algae film is present on the window glazing, in addition to the thick cobwebs (see Figure 1.9.14). As a result of their proximity to the exterior grade, the window sashes are dirty. Mesh screens, on the exterior, are in good condition.

Windows (#2) and (#3) at the east elevation, with mesh screens, were rehabilitated during the 1998 renovations. The window units were repaired, painted and re-set in the rebuilt stone wall. The lintel at window (#2) was also re-set. Window (#1) remained in place in 1999; however, the screen was removed and the window was painted on the exterior and interior.

Windows (#4) and (#5) at the upper level are in good condition. Window (#4) was removed, repaired, and reinstalled in 1999. Window (#5) was repaired in place during the 1999 repairs. Rotten wood was replaced and the window components were painted.

Exterior Shutters (assumed 1936):

Windows (#4) and (#5) are fitted with exterior wood shutters. Shutters are in good condition. The shutter at window (#4) was removed from the building after a portion of the north and east walls were damaged by multiple automobile accidents sometime prior to 1998. The shutter was repaired and reinstalled in the rebuilt window opening.

North Door (opening 1801, frame 1999, door unknown):

The vertical wood Dutch style door (#102) is in fair condition. Wood is rotting at the bottom of the door, nearest to the grade. The door frame is in fair condition. Replaced in 1999, the frame, like the door, is rotting nearest to the grade. The door threshold is stone. Covered with a thick layer of mud, it is assumed to be in good condition. Wood lintels above the door are in good condition. The current lintels were installed as a part of the 1999 restoration to the Springhouse.

South Door (opening 1801, frame 1998, door unknown):

The vertical wood door (#101) is in fair condition. Like the north door, the bottom of the door is rotting, nearest to the grade (see Figure 1.9.15). Replaced in 1999 the door frame is in poor condition. The frame is severely rotted nearest the grade level (see Figure 1.9.16). If there is a door threshold in this location, it is hidden by two or more inches of mud.

Exterior Trim (1999):

Rake boards are in good condition. The boards were replaced in 1999. Window trim at both the lower and upper is also in good condition.

Roof (1990):

The current wood shingle roof is in poor condition. A thick layer of moss covers nearly the entire roof surface. While there are no missing shingles, cupping on the shingles is visible.

Chimney (1801):

The brick chimney is in fair condition. Above the roofline, the top eight courses of brick have mortar joints that are in poor condition i.e., mortar is missing and crumbling (see Figure 1.9.18).[1] Below the roof line the chimney is made of the same blue granite stone, as the Springhouse's exterior walls.

Interior Features

Spatial Organization (1801):

The current spatial organization of the Springhouse is in excellent condition. The upper and lower levels are void of partitions. The upper level space is sufficient for the Park's storage needs. However, the ground level with its mud coated floor and constant dampness cannot be occupied.

Perimeter Walls - Interior (1801):

On the interior of the lower level the stone is damp, extending to just under the window stills. Portions of the walls have green algae covering them.

[1] Note a close-up inspection of the chimney above the roofline was not performed.

However, the stone appears to be in fair condition with few cracks and some loss of mortar at the bottom of the walls. Evidence of stone parging survives on the walls of the lower level of the Springhouse (see Figure 1.9.19). At the upper level of the Springhouse, half of the walls are covered with plaster, from floor to ceiling (see Figure 1.9.20). The plaster appears to be in good condition.[2]

Floor structure (upper level 1999):

The lower level of the Springhouse has a stone floor. The stone pavers are irregular in size and shape and are covered by a thick layer of mud. The northwest corner of the ground has standing water (see Figure 1.9.21).

The upper level has wood plank flooring, over wood joists, which was also replaced in 1998. Generally the flooring is, in fair condition; however, the flooring at the northwest corner of the room is in unstable condition. The floor was very damp during survey and a hole was located in this area (see Figure 1.9.22). Due to the condition of the floor, the upper level of the Springhouse was not examined closely.

Ceiling, upper level (unknown):

The ceiling is in good condition (see Figure 1.9.23). No work was done to the ceiling during the 1998 restoration.

Fireplaces (1801):

The Springhouse has one chimney, with two fireplaces. The fireplace at the lower level is in good condition (see Figure 1.9.24). The fireplace at the upper level appears to be in good condition; however, close observation was not possible, due to the poor condition of the floor.

[2] An up-close inspection was not conducted due to the condition of the floor.

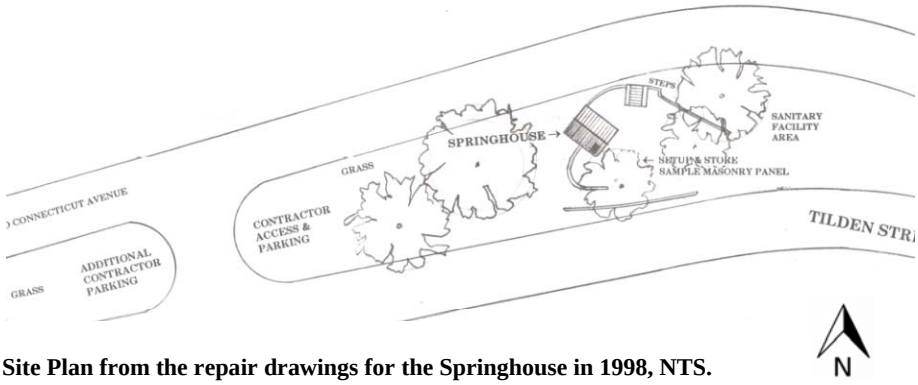


Figure 1.9.1 **Site Plan from the repair drawings for the Springhouse in 1998, NTS.** (Source: NPS NCR, Repair to the Pierce Springhouse, Site Plan, 6/98, drawing number 878/84910 page 1 of 6)



Figure 1.9.2 **Photograph of Springhouse site walls.** (Source: QEA, 2012)
Note: Site walls remain intact, for the most part. In several locations the wall has fallen, allowing vegetation to cover up the rubble.



Figure 1.9.3 **Photograph of displaced stones within the dry-laid granite site wall.** (Source: QEA, 2011) Note: View looking north, east elevation of Springhouse to the left, steps to the right (see Figure 1.9.6 below).



Figure 1.9.4 **Photograph of site walls. View looking south, east bound land of Tilden Street in the background.** (Source: QEA, 2011) Note: Many dry-laid stones have been displaced. Displacement can be the result of freeze thaw cycles and underground tree root systems.



Figure 1.9.5 **Photograph of site wall.** (Source: QEA, 2011)
View looking west, the site wall directly in front of the north elevation is almost unrecognizable.



Figure 1.9.6 **Photograph of steps at north portion of site wall.** (Source: QEA, 2011)
Note: The cheek walls are not dry-laid as the joints have mortar. The Springhouse located to the left.



Figure 1.9.7 Photograph of the north elevation of the Springhouse. (Source: QEA, 2011)
Note: The northeast corner of the building damaged by a car accident(s) in the late 1990's. The portion of the north elevation re-built in 1999 highlighted. Note also, the pressure treated wood guardrail running parallel to the west bound lane of Tilden Street, installed to help prevent future damage by automobile(s).



Figure 1.9.8 Photograph of the Peirce Springhouse, south elevation. (Source: QEA, 2011)



Figure 1.9.9 **Photograph of the east elevation of the Springhouse.** (Source: QEA, 2011)
Note: Northeast corner of the building damaged by a car accident(s) in the late 1990's. The portion of the east elevation re-built in 1999 highlighted.



Figure 1.9.10 **Photograph of the west elevation of the Springhouse.** (Source: QEA, 2012)
Note: Water enters the structure at grade (see arrow). This is probably from surface run-off that could be directed around the building.

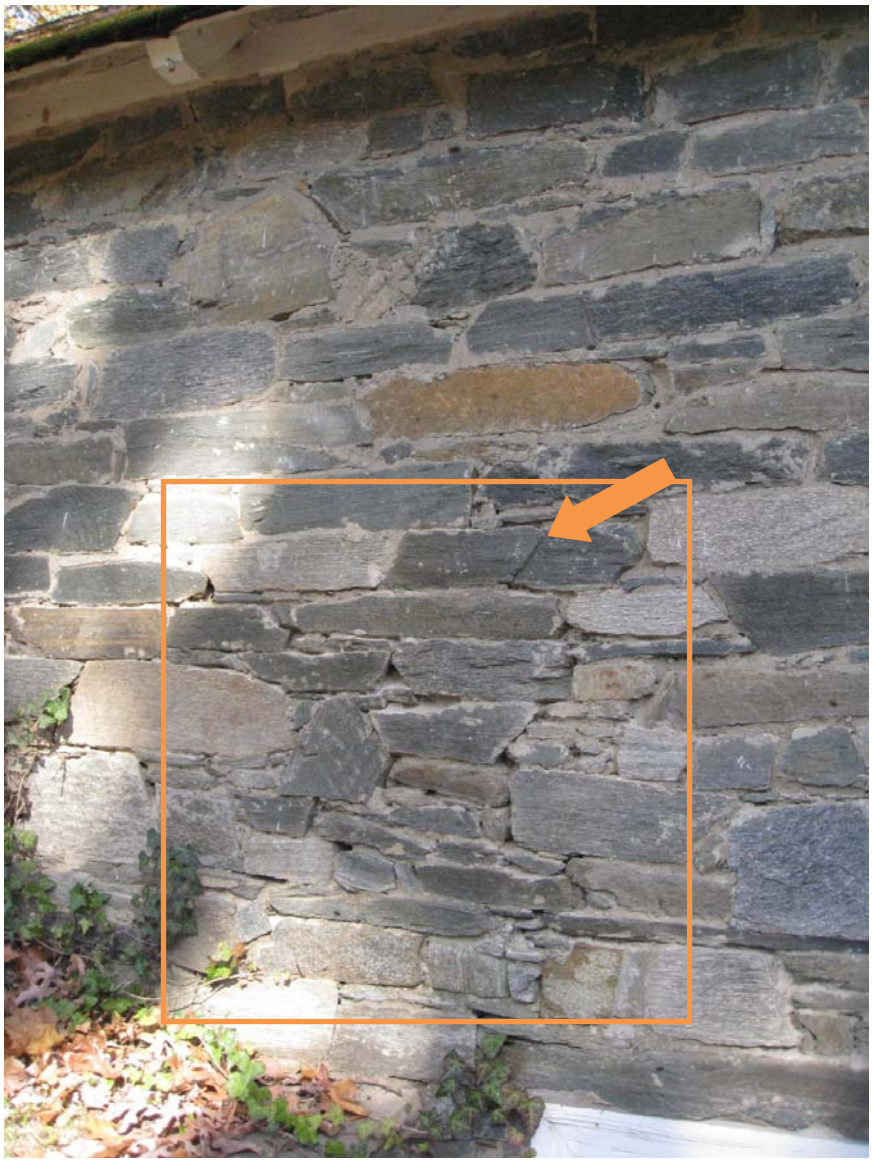


Figure 1.9.11 Detail photograph of the west elevation of the Springhouse. (Source: QEA, 2011)
Note: Area of notable mortar loss highlighted. Crack through stone also noted with arrow.



Figure 1.9.12 **Photograph of the Peirce Springhouse, northwest corner.** (Source: QEA, 2011)
Note: Area of spalling stone.

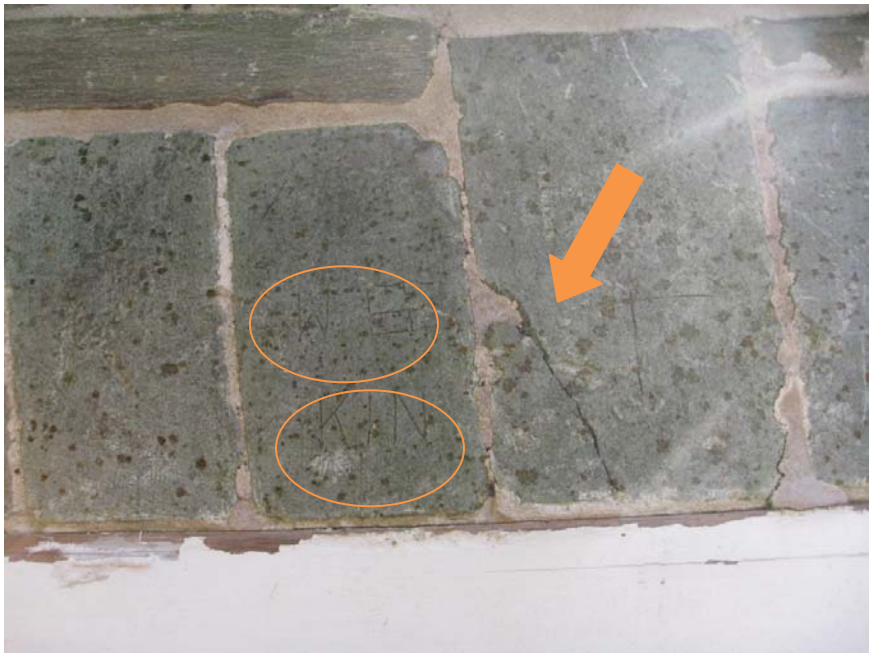


Figure 1.9.13 **Detail photograph of the north elevation, flat arch above door of the Springhouse.** (Source: QEA, 2011)
Note: The crack at the center keystone of the flat arch and the initials WS and KIN at the stone to the left.



Figure 1.9.14 Photograph from the interior, lower level of Springhouse window (#1).
(Source: QEA, 2011)
Note: The algae on the window panes, the line of stone dampness below the window sill and parging in the lower left-hand corner of the photo.



Figure 1.9.15 Photograph from the interior of Springhouse door #101. (Source: QEA, 2011) Note: The door is dirty and deteriorated at grade. The stone floor, covered by a thick layer of mud, surely contributes to the deteriorated condition of the wood door.



Figure 1.9.16 Detail photograph of the Springhouse's lower level door frame, door #101. (Source: QEA, 2011) Note: The layer of mud that covers the original stone floor of the lower level has caused severe deterioration to the wood door frame. There is nearly six inches of rotten wood visible in this location.



Figure 1.9.17 **Detail photograph of the inscription stone.** (Source: QEA, 2011)
Note: Source of the spots on the inscription stone is unknown.

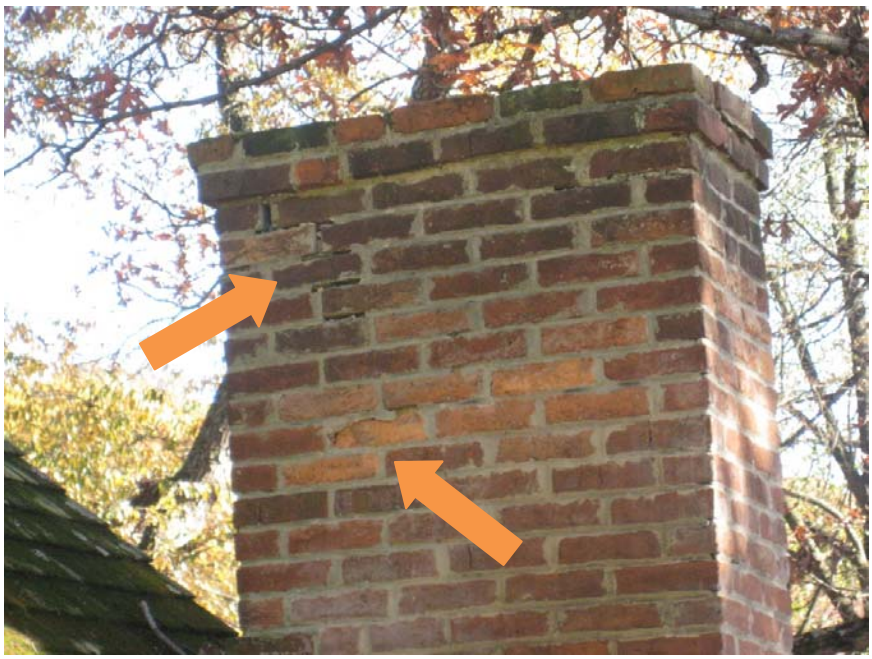


Figure 1.9.18 **Photograph of the top portion of the Chimney.** (Source: QEA, 2011)
Note: Open joints and deteriorating bricks (see arrows).



Figure 1.9.19 Detail photograph of the interior, lower level, east wall, parging at window sill. (Source: QEA, 2011) Note: Remnants of parging. The white top layer may be a whitewash or a paint finish applied to the wall surface.



Figure 1.9.20 Photograph of the interior, upper level, east wall, plaster finish not complete. (Source: QEA, 2011) Note: After the exterior repairs in about 1998 the plaster on the interior of the Springhouse's upper level was not finished. The portion of the wall without plaster delineates where the section of the stone wall was rebuilt.



Figure 1.9.21 **Detail photograph of Springhouses' lower level floor, northwest corner.** (Source: QEA, 2011) Note: Standing water and random stones. Presumably, this location was what provided the Peirce family plantation with a clean water source.



Figure 1.9.22 **Photograph of hole in the upper level wood plank floor.** (Source: QEA, 2011) Note: Severe deterioration of the wood plank flooring, due to water infiltration from the northwest corner, upper level entrance. The arrow points to a hole in the floor.



Figure 1.9.23 **Detail photograph of the upper level ceiling at the Springhouse.** (Source: QEA, 2011)
Note: The ceiling is excellent condition. The ceiling was not noted to be repaired on the 1998 repair drawings.



Figure 1.9.24 **Photograph of the lower level fireplace.** (Source: QEA, 2011)
Note: The fireplace is in good condition. Notice the unique shape of the mantel, its shape most likely is original.

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CHAPTER 2.1: PREFERRED TREATMENT AND USE - BARN

Preferred Use

The preferred use for the Barn is one that will continue contributing to the Park's interpretive message. The structure will be used as the main visitor contact station for tours of Peirce Mill.

First Floor

The preferred use of the first floor will be for public access for interpretive purposes as well as space for park staff. The floor may include a unisex toilet room for staff use.

Second Floor

The Park will plan to use the second floor for storage. The narrow stairway would remain, but there is not enough floor area to provide any form of mechanical lift without sacrificing exhibition space or space available for a toilet room. Therefore, the second floor would not be accessible to a staff person with disabilities. This could limit the usefulness of the second floor.

Attic

The attic level is accessed via another narrow stair. A lift is not feasible due to lack of floor space and headroom. The use of the attic would remain as potential storage for the Park.

Treatment Philosophy and Guidelines

In the previous chapters, this report identified the historically and architecturally significant features of the Barn and their conditions. This section outlines the overarching guidelines and recommendations for the proper treatment of these features. Treatment recommendations for each element are provided in chapter 2.3.

The National Park Service (NPS) has developed standards and guidelines for approaches to various treatments of historic properties. These are published in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. These standards are widely utilized and understood by historic preservation professionals, architects, engineers, contractors and craftsmen around the country.

Three principal treatment options apply to historic buildings: preservation, rehabilitation, and restoration. A fourth treatment, reconstruction, does not apply here. Choosing the appropriate treatment is the most fundamental decision involving the future of a historic building. The NPS indicates the following issues be addressed in making this choice:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements.[1]

[1] The Secretary of the Interior's Standards, p. 1.

Each of these issues is addressed in a comprehensive fashion in this HSR and the recommended treatment choice is described below. The three principal treatments which could be applied to the Barn are defined by the NPS as follows:

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the properties functional is appropriate within a preservation project.*[2] *The treatment emphasizes repair and conservation of significant building features and strives to retain existing materials and features while employing as little new materials as possible.*[3]

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular point of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*[4]

The guidelines state that the Preservation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Stabilize deteriorated historic materials and features as a preliminary measure;*
- *Protect and maintain historic materials and features;*
- *Repair (stabilize, consolidate, and conserve) historic materials and feature; and provide*
- *Limited replacement in kind of extensively deteriorated portions of historic features;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*[5]

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*[6]

[2] http://www.nps.gov/tps/standards/four-treatments/treatment-preservation.htm
[3] The Secretary of the Interior's Standards, p. 19-20.
[4] http://www.nps.gov/history/hps/tps/standguide/preserve/preserve_approach.htm
[5] http://www.nps.gov/history/hps/tps/standguide/preserve/preserve_approach.htm
[6] The Secretary of the Interior's Standards, p. 61.

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.*[7]

The guidelines state that the Rehabilitation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Protect and maintain historic materials and features;*
- *Repair historic materials and features;*
- *Replace deteriorated historic materials and features; and provide*
- *Design for the replacement of missing historic features;*
- *Alterations/additions for the new use;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*[8]

Restoration *is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.*[9]

Restoration as a treatment. *When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*[10]

The guidelines state that the Restoration treatment approach aims to:

- *Identify, retain, and preserve materials and features from the restoration period;*
- *Protect and maintain materials and features from the restoration period;*
- *Repair (stabilize, consolidate, and conserve) materials and features*

[7] http://www.nps.gov/history/hps/tps/standguide/rehab/rehab_approach.htm
[8] Ibid.
[9] The Secretary of the Interior's Standards, p. 117.
[10] http://www.nps.gov/history/hps/tps/standguide/restore/restore_approach.htm

from the restoration period;

- *Replace extensively deteriorated features from the restoration period;*
- *Remove existing features from other historic periods;*
- *Re-create missing features from the restoration period; and provide*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*[11]

Preferred Treatment

In selecting the most appropriate overall treatment for the Barn based on the NPS guidelines, there are a number of principal facts:

- The exterior's distinctive materials and features are essentially intact and thus convey the historic significance without extensive repair or replacement.
- Depiction at a particular period of time is not appropriate. The current interior finishes are fitting for the building's future use as a visitor contact station for Mill tours and for learning about the Peirce Mill Complex.
- A continuing or new use does not require additions or extensive alterations.
- Minor alterations are planned for a new or continued use. NPS desires the first floor to meet accessibility guidelines. NPS also desires a staff restroom and a fire suppression system to be installed.

Hence, the preferred overall treatment for the Barn is rehabilitation. As with the preservation treatment, rehabilitation will identify, retain, and preserve historic materials and features. It is conceivable to divide the Barn into two zones: a preservation treatment zone for the exterior and a rehabilitation zone for the interior.

Exterior Preservation / Interior Rehabilitation

Several issues unique to this property strongly suggest a preservation approach for exterior elements and a rehabilitation approach for the interior. They are as follows:

- The character-defining features on the exterior are intact and have not been altered much over the years.
- The interior has already been altered on several occasions, i.e. the addition of a mechanical and electrical systems. Adopting a "rehabilitation" approach for future interior work would be appropriate.

[11] http://www.nps.gov/history/hps/tps/standguide/restore/restore_approach.htm

CHAPTER 2.2: PREFERRED TREATMENT AND USE - SPRINGHOUSE

Preferred Use

The preferred use for the Springhouse is one that will return the structure to a condition of usefulness to the Park.

The structure will be used as a Park support structure, such as a storage/utility facility. No public access, restrooms, or other public facilities are anticipated. No heating, cooling, plumbing, electrical, and fire suppression systems are anticipated.

First Floor

Due to the dampness of the lower level, the space will not be utilized by Park staff and shall remain vacant.

Second Floor

The preferred use for the upper level will be as a storage/utility space for Park staff.

Treatment Philosophy and Guidelines

In the previous chapters, this report identified the historically and architecturally significant features of the Springhouse and their conditions. This section outlines the overarching guidelines and recommendations for the proper treatment of these features. Treatment recommendations for each element are provided in chapter 2.4.

The National Park Service (NPS) has developed standards and guidelines for approaches to various treatments of historic properties. These are published in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. These standards are widely utilized and understood by historic preservation professionals, architects, engineers, contractors, and craftsmen around the country.

Three principal treatment options apply to historic buildings: preservation, rehabilitation, and restoration. A fourth treatment, reconstruction, does not apply here. Choosing the appropriate treatment is the most fundamental decision involving the future of a historic building. The NPS indicates the following issues be addressed in making this choice:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements.[1]

Each of these issues is addressed in a comprehensive fashion in this HSR and the recommended treatment choice is described below. The three principal treatments which could be applied to the Springhouse are defined by the NPS as follows:

[1] The Secretary of the Interior's Standards, p. 1.

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the properties functional is appropriate within a preservation project.*[2] *The treatment emphasizes repair and conservation of significant building features and strives to retain existing materials and features while employing as little new materials as possible.*[3]

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular point of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*[4]

The guidelines state that the Preservation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Stabilize deteriorated historic materials and features as a preliminary measure;*
- *Protect and maintain historic materials and features;*
- *Repair (stabilize, consolidate, and conserve) historic materials and feature; and provide*
- *Limited replacement in kind of extensively deteriorated portions of historic features;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*[5]

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*[6]

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a*

[2] http://www.nps.gov/tps/standards/four-treatments/treatment-preservation.htm
[3] The Secretary of the Interior's Standards, p. 19-20.
[4] http://www.nps.gov/history/hps/tps/standguide/preserve/preserve_approach.htm
[5] http://www.nps.gov/history/hps/tps/standguide/preserve/preserve_approach.htm
[6] The Secretary of the Interior's Standards, p. 61.

treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.[7]

The guidelines state that the Rehabilitation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Protect and maintain historic materials and features;*
- *Repair historic materials and features;*
- *Replace deteriorated historic materials and features; and provide*
- *Design for the replacement of missing historic features;*
- *Alterations/additions for the new use;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*[8]

Restoration *is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.*[9]

Restoration as a treatment. *When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*[10]

The guidelines state that the Restoration treatment approach aims to:

- *Identify, retain, and preserve materials and features from the restoration period;*
- *Protect and maintain materials and features from the restoration period;*
- *Repair (stabilize, consolidate, and conserve) materials and features from the restoration period;*
- *Replace extensively deteriorated features from the restoration period;*
- *Remove existing features from other historic periods;*
- *Re-create missing features from the restoration period; and provide*

[7] http://www.nps.gov/history/hps/tps/standguide/rehab/rehab_approach.htm
[8] Ibid.
[9] The Secretary of the Interior's Standards, p. 117.
[10] http://www.nps.gov/history/hps/tps/standguide/restore/restore_approach.htm

- *Energy efficiency/accessibility considerations/health and safety code considerations.*[11]

Preferred Treatment

In selecting the most appropriate overall treatment for the Springhouse based on the NPS guidelines, there are a number of principle facts:

- The Springhouse's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement.
- The depiction at a particular period of time is not appropriate.
- A continuing or new use does not require additions or extensive alterations.

Hence, the preferred treatment for the Springhouse is preservation.

[11] http://www.nps.gov/history/hps/tps/standguide/restore/restore_approach.htm

CHAPTER 2.3: REQUIREMENTS FOR TREATMENT - BARN

Program Requirements

For this modest building, the program requirements are also modest. As a Park support structure, the space use program for the preferred use, using the existing layout as a guide, would be as follows:

First Floor:

Public space (Carriage Gallery)	425 SF
Public space (Entry Hall)	130 SF
Unisex staff restroom & service sink	77 SF
Mechanical Room	27 SF
Stairway	60 SF
TOTAL	720 SF

Second Floor:

Utility or office space	702 SF
Stairway	39 SF
TOTAL	740 SF

Attic:

Utility space	370 SF
Stairway	15 SF
TOTAL	385 SF

As a visitor contact station, accessible public toilet rooms and drinking fountains would be provided. They can either be located within a new comfort station adjacent to the Barn or within the Barn itself.

Life Safety Requirements

The following requirements and classification for this building are based on the International Building Code (IBC), 2006 edition.[1] These are general requirements that would likely apply for many years in the future.

Use Type

The closest IBC classification is Group A-3 Assembly. This use is intended for the gathering of persons for purposes such as exhibition halls, lecture halls, and museums.

[1] Washington, DC adopted the 2006 International Codes (I-Codes) and the National Fire Protection Association's (NFPA) 2005 National Electric Code (NEC). Changes, additions and/or deletions are set forth in Title 12 of the District of Columbia Municipal Regulations (DCMR). The 2006 I-Codes include the Building Code (IBC) and the Existing Building Code (IEBC). However, National Park Service projects that are managed by the Denver Service Center are to use IBC and IEBC 2009.

Construction Type	Type IV – Heavy Timber. This assumes non-combustible exterior walls (i.e. masonry) and solid wood interior building elements without concealed spaces. These masonry walls would have a 2-hour fire resistance rating. According to IBC, sawn wood columns shall not be less than 8" nominal in any dimension where supporting floor loads.[2] Sawn wood floor beams shall be not less than 6" nominal in width and not less than 10" nominal in depth.[3] Roof framing shall not be less than 4" nominal in width and not less than 6" in depth.[4]
Building Height and Area	For this use and construction type, the code would permit a 3 story (above ground), 15,000 SF structure, so the Barn is well within the allowable height and area. The area of the Barn within the surrounding exterior walls is 1,845 SF.
Historic Buildings	Chapter 34, Section 3407 "Historic Buildings" relaxes strict compliance with the life safety provisions of the code. When the actual design for the rehabilitation is taken further, individual life safety and code issues can be examined.[5]
Fire Suppression	Current NPS policy would mandate the installation of an automatic fire suppression system for this building.[6]
Means of Egress	Per section 10003.1 of IEBC, existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or traverse the means of egress. However, the swing of the main exit doors may need to swing in the direction of the path of exit travel as there is not another approved means of egress to serve the total occupant load.
Accessibility Requirements	As a Federal facility, the Barn must comply with the Architectural Barriers Act Accessibility Standards (ABAAS). ABAAS F201.1 and F202.1 require alterations to existing buildings to comply with these requirements.[7] These standards are consistent with those of the Americans with Disabilities Act (ADA). Accessibility requirements in the IBC Chapter 11 and IEBC Chapter 8 should also be met.

[2] The column supporting the second floor is concealed within a 9 1/4" by 9 7/8" box. The columns supporting the attic floor are 5 1/4" by 5 1/4".
[3] The beam supporting the second floor is concealed. The beam supporting the attic floor is 7" wide by 8" deep.
[4] The purlins supporting the roof rafters are 6" wide by 7" deep.
[5] Per section 3407.1, "The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard."
[6] Directors Order 50B, Chapter 12.2 Fire Safety Requirements.
[7] An alteration is a change to the building that affects or could affect the usability of the building or portion thereof. Alterations include, but are not limited to, renovation, rehabilitation, reconstruction, historic restoration, and changes or rearrangement in the plan configuration. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not *alterations* unless they affect the usability of the building or facility.

Accessible Route	The Barn is required to have an accessible route from the site through one entrance to the public spaces within the building to the maximum extent possible.[8] The accessible route is not required to extend to the second story per F206.2.3 Exception 6 and the Accessibility chapter in IBC as this would require extreme alteration of the interior.[9] To install a lift, both floors would lose considerable usable space. An exterior lift and access to the second floor would be unacceptable.
Toilet Facilities	As NPS desires to have a unisex staff toilet room within the Barn, the toilet room should meet the ABAAS accessibility standards. The exception in F203.2 Existing Elements does not obviate or limit in any way a federal agency's obligation to provide reasonable accommodations pursuant to the Rehabilitation Act of 1973. Federal employees with disabilities are entitled to reasonable accommodations in the workplace. Such accommodations may include modifications to areas of the workplace, including the common areas such as toilet rooms. Reasonable accommodations are always provided on a case-by-case basis and are specific to the unique needs of a person. As such, an accommodation may be consistent with, or depart from, the specific technical requirements of ABAAS, or any other document. One unisex toilet room complying with F213.2.1 is allowed per Exception 2 in F213.2.[10] ABAAS F213.2 requires toilet rooms to comply with F603 Toilet and Bathing Rooms. Compliance with F604 Water Closets and Toilet Compartments would also be required as well as all other requirements for turning space and clear floor space.
Drinking Fountain	A minimum of two drinking fountains are required by ABAAS F211.2 but the Exception states that a single drinking fountain that complies with F602.1-602.7 (with dual spouts) is allowed to be substituted for two separate drinking fountains. The drinking fountain could be located in the Barn or associated with a new comfort station.
Preservation Requirements	As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties. The following provides a narrative regarding treatments to the major site and building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

[8] Per ABAAS F202.1, F202.2, and F202.3 Exception 2.
[9] Per the Accessibility chapter in IBC, an accessible route is not required to the second floor as the aggregate area is less than 3,000 square feet and does not have a public use space with more than 5 occupants.
[10] However, one toilet room for each sex (meeting the requirements in F213.2.1) would also comply per Exception 2 in F213.2.

Site Features

- Setting (1810-20, altered 1930's and 2010):

  There are no significant site features that would need compliance with preservation requirements.

Exterior Features

As discussed in Chapter 2.1, the exterior features would be in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that cannot be preserved due to excessive deterioration should be replaced in kind.

- Overall Building Massing (1810-20):

  The overall massing has not changed since original construction. It would be retained and preserved.

- Stone Walls (1810-20, re-pointing 1934-36, other dates unknown):

  The exterior walls would be preserved and repaired. Mortar joints would require repointing. Routine selective repointing of the mortar joints should continue on a cyclical basis, perhaps every 10 to 15 years.

- Wood Siding, south (1810-20):

  The painted siding would be assessed for deterioration, repaired, and repainted. Where siding is missing, new siding could be installed.

- Lower Story Window openings, Sills, Lintels (1810-20):

  Masonry openings, sills, and lintels would be retained and preserved.

- Upper Story Window openings, Sills, Lintels (1810-20):

  Masonry openings, sills, and lintels would be retained and preserved.

- Lower Story Window Assemblies (dates unknown):

  Areas of deterioration would be repaired. Broken glass would be replaced. All wood frames and sashes would be repainted.

- Upper Story Window Assemblies (dates unknown):

  Areas of deterioration would be repaired. Broken glass would be replaced. All wood frames and sashes would be repainted.

- Shutters (dates unknown):

  Areas of deterioration would be repaired. Shutters would be painted. Shutter hardware would be cleaned of rust and brought to working condition.

- Transom windows, south (unknown prior to 1914):

  Wood sashes and frames would be assessed for deterioration and then repaired and repainted.

- Dovecotes (date unknown):

  Interior shutter hardware would be cleaned of rust and brought to working condition. Plexiglass should be removed and replaced with laminated glass.

- Exterior Door openings, sill and lintels (1810-20):

  Door openings, sills, and lintels would be retained and preserved.

- Exterior Doors (1971):

  Doors would be assessed for deterioration, repaired, and repainted.

- Door Threshold (1971):

  Areas of deterioration would be repaired and repainted.

- Door hardware (1971):

  Worn out door hardware would be replaced with compatible hardware.

- Exterior trim (1810-20), Window and door trim (1858-1914):

  Exterior trim and window and door trim would be repaired and repainted.

- Roof, framing (1810-20):

  Areas of deterioration on the rafter tails would be repaired.

- Roof, wood shingles (1971):

  As the wood shingle roof is approximately 40 years old and there is some cupping of the shingles. Any major future work should include wood shingle roof replacement.

- Chimney (1914-36):

  The stability of the chimney should be assessed. If possible the efflorescence on the interior should be removed and the unsightly stains removed or covered up. The flashing around the chimney should be assessed for any necessary repairs or replacement to keep water out. Mortar re-pointing may be required.

Interior Features

As discussed in Chapter 2.1, the interior features would be in the rehabilitation zone. The significant interior features should be repaired and restored where possible. Any interior features that cannot be preserved due to excessive deterioration should be replaced in kind. Documentation has been presented in the previous chapters to establish that the interior spaces have been substantially altered over time. There may be no remaining fabric or finishes from the original construction period. Should original elements be discovered through future selective probes or demolition, then the issue of preservation would be addressed at that time.

- Spatial Organization (1810-20, altered 1971):

  The spatial organization has not changed since original construction. It should be retained and preserved.

- Partition Walls (1810-20):

  The partition walls should be retained and preserved.

- Stairs (1810-20, unknown):

  Areas of deterioration should be repaired. The stairs should be repainted.

- Flooring (1810-20, attic assumed 1914-36, and 1971):

  Areas of deterioration should be repaired, especially in the storage room. Wood floors should be finished to the style of the time.

- Ceilings:

  There are no ceilings that would need compliance with preservation requirements. As such they can be altered as necessary for rehabilitation.

Architectural Improvements

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of a normal architectural scope of work:

- Provide an accessible pathway and entrance into the building on the south side. There is a current elevation change of about 10.5 inches to address.
- Provide a unisex staff restroom, with adjacent utility sink, drinking fountain and mechanical closet on the first floor.
- Examine the existing wooden stairway and upgrade where possible to assure safe utilization.
- Consider sustainable design strategies and apply selectively to this project to improve the performance and reduce future utility costs (i.e. low flow toilets and automatic faucets).
- Add thermal insulation to the roof/attic assembly and to the perimeter stone walls to meet energy conservation standards. Analysis will be required to determine the amount of thermal insulation required.
- Assure all window assemblies are in good condition to reduce air infiltration in the Summer and Winter and then to also provide fresh air ventilation during the mild months.
- For rehabilitated use, provide water and vapor barriers to the structural envelope. Analysis will be required to determine the amount of moisture protection required.

Structural Improvements

The structural condition of the building appears to be satisfactory, especially since the work in 1971 apparently added several temporary support systems and new floor framing. The only signs of distress are some cracks in selected areas of the exterior stonework.

In a future design phase, the wooden structure of the second floor should be examined to measure the size and spacing of joists and the condition. It would also be pertinent to assess the chimney for structural stability. The floor should be capable of supporting the anticipated loading for a utility / storage facility of 40 PSF.[11] A structural engineering assessment would confirm whether the current wooden framing is sufficient.

Fire Protection Improvements

An automatic fire protection systems meeting NFPA 72 would be installed within this building. The system would include smoke detection, fire alarm devices, and a fire suppression system. The extent and type(s) of system would be the subject of a future design phase.

Electrical Improvements

The existing electrical system should be assessed to see if it needs to be replaced with new service, secondary distribution, and power and lighting devices. The extent and type of electrical system would be the subject of a future design phase.

[11] Should this be used as office space, the loading requirement would increase to 50 PSF per Table 1607.1. If the second floor is to be used as an assembly space, it would need to be increased to 100 PSF.

Mechanical and Plumbing Improvements

Any existing plumbing and mechanical piping or equipment should be removed entirely. A new toilet, sink, and utility sink may necessitate repairs to the existing capped plumbing as well as new vents and an exhaust. If the drinking fountain is provided within the Barn, this would require extending the water and waste lines.

CHAPTER 2.4: REQUIREMENTS FOR TREATMENT - SPRINGHOUSE

Program Requirements

For this modest building, the program requirements are also very modest. As a Park support structure, the space use program for the preferred use would be as follows:

First Floor:

Utility	187 SF
TOTAL	187 SF

Second Floor:

Utility	186 SF
TOTAL	186 SF

Life Safety Requirements

The following requirements and classification for this building are based on the International Building Code (IBC), 2006 edition.[1] These are general requirements that would likely apply for many years in the future.

Use Type

The closest IBC classification is Group U Utility and Miscellaneous. This use is intended for buildings that are of an accessory character.

Construction Type

Type IV – Heavy Timber. This assumes non-combustible exterior walls (i.e. masonry) and solid wood interior building elements without concealed spaces. These masonry walls would have a 2-hour fire resistance rating. According to IBC, sawn wood floor beams shall be not less than 6" nominal in width and not less than 10" nominal in depth.[2] Roof framing shall not be less than 4" nominal in width and not less than 6" in depth.[3]

Building Height and Area

For this use and construction type, the code would permit a 4 story (above ground), 18,000 SF structure, so the Springhouse is well within the allowable height and area. The area of the Springhouse within the surrounding exterior walls is 373 SF.

Historic Buildings

Chapter 34, Section 3407 "Historic Buildings" relaxes strict compliance with the life safety provisions of the code. When the actual design for the

[1] Washington, DC adopted the 2006 International Codes (I-Codes) and the National Fire Protection Association's (NFPA) 2005 National Electric Code (NEC). Changes, additions and/or deletions are set forth in Title 12 of the District of Columbia Municipal Regulations (DCMR). The 2006 I-Codes include the Building Code (IBC) and the Existing Building Code (IEBC). However, National Park Service projects that are managed by the Denver Service Center are to use IBC and IEBC 2009.

[2] The beams supporting the second floor were not surveyed up close due to limited accessibility. Repair drawings from 1998 note the floor joists as 4” wide by 8” deep.

[3] The purlins supporting the roof rafters are concealed.

rehabilitation is taken further, individual life safety and code issues can be examined.[4]

Fire Suppression

Current NPS policy does not require the installation of an automatic fire suppression system for the Springhouse an unoccupied structure.[5] The decision to install a fire suppression system would be a Park management value decision during the design phase.

Means of Egress

As the Springhouse is not occupied, a means of egress is not required.[6]

Accessibility Requirements

As a Federal facility, a Park structure would be required to comply with the Architectural Barriers Act Accessibility Standards (ABAAS) which are consistent with those of the Americans with Disabilities Act (ADA). Accessibility requirements in the IBC Chapter 11 and IEBC Chapter 8 would also be met. As the Springhouse is an unoccupied building and would not be accessed by individuals with disabilities (per F101 of ABAAS), then the Springhouse is not required to comply. Additionally, the alterations proposed in the preferred treatment of preservation would not affect the usability of the building or portion thereof.[7] Also, compliance with the requirements for accessible routes, entrances, or toilet facilities could be determined by the SHPO or Advisory Council on Historic Preservation to threaten or destroy the historic significance of the building and hence, would be exempted according to the exception to F202.5 of ABAAS.

Preservation Requirements

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties. The following provides a narrative regarding treatments to the major site and building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Site Features

- Setting (1801, altered 1913-15, altered 1930s):

  There are no site features that would need compliance with preservation requirements.

[4] Per section 3407.1, "The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard."
[5] Directors Order 50B, Chapter 12.2 Fire Safety Requirements.
[6] Ibid.
[7] According to ABAAS, alterations include, but are not limited to, renovation, rehabilitation, reconstruction, historic restoration, and changes or rearrangement in the plan configuration. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not *alterations* unless they affect the usability of the building or facility.

- Site Walls (1913-15):

  The dry-laid site walls should be repaired. Displaced stones should be reinstalled. Any missing stones should be replaced. Cracked stone treads should be pinned and grouted.

Exterior Features

The significant exterior features should be repaired and restored where possible. Any exterior features that cannot be preserved due to excessive deterioration should be replaced in kind.

- Overall Building Massing (1801):

  The overall massing has not changed since original construction. It would be retained and preserved.

- Stone Walls (1801, re-pointing varies, portions re-built 1998):

  The exterior walls would be preserved and repaired. Mortar joints would require repointing. Routine selective repointing of the mortar joints should continue on a cyclical basis, perhaps every 10 to 15 years. Spalling stone should have loose material removed and assessed for stability. Cracked stone should be assessed to see if there is a structural issue.

- Windows Assemblies (varies):

  Windows should be cleaned to remove algae and soiling. Wood sashes and frames should be assessed for deterioration and then repaired and repainted.

- Exterior Shutters (assumed 1936):

  Shutters should be repainted.

- North Door (opening 1801, frame 1998, door unknown):

  Areas of deterioration should be repaired. The door should be repainted.

- South Door (opening 1801, frame 1998, door unknown):

  Areas of deterioration should be repaired. The door should be repainted.

- Exterior Trim (1999):

  Exterior trim should be repainted.

- Roof shingles (unknown):

  The wood shingle roof should be replaced in kind.

- Chimney (1801):

  The stability of the chimney should be assessed. Mortar joints should be repointed. Badly deteriorated bricks should be replaced in kind.

Interior Features

The significant interior features should be repaired and restored where possible. Any interior features that cannot be preserved due to excessive deterioration should be replaced in kind.

- Spatial Organization (1801):

  The spatial organization has not changed since original construction. It should be retained and preserved.

- Perimeter Walls - Interior (1801):

  Areas of deterioration should be repaired. Remnants of parging in the first floor should be cleaned and stabilized.

- Floor structure (upper 1999):

  Areas of deterioration should be repaired.

- Ceiling, upper level (unknown):

  The ceiling should be retained.

- Fireplaces (1801):

  The stability of the fireplaces and the chimneys should be assessed.

Architectural Improvements

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of a normal architectural scope of work:

- Adjust grade and door thresholds to reduce water infiltration at both entries.

Structural Improvements

The size and configuration of the wooden framing will support modest floor loading. However, it is assumed there is some level of deterioration from excess moisture. As long as the building continues to have very low intensive utilization, the structure is satisfactory.

In a future design phase, the wooden structure of the second floor should be examined to measure the size and spacing of joists and the condition. If the loading requirements are increased, then either a temporary support system or reinforced floor joists could be required. [8] If repairs or reinforcement are needed to meet these loading capacities, a structural engineer should provide the necessary details.

Fire Protection Improvements

If, at a later phase, NPS decides to install an automatic fire protection systems meeting NFPA 72 then it is likely that new underground water service would be needed to support such a system. The system would include smoke detection and fire alarm devices. The extent and type of system would be the subject of a future design phase.

Electrical Improvements

There is no existing electrical system. If NPS decides to install an electrical system, then the extent and type of electrical system would be the subject of a future design phase. The need for a security system or devices would also be confirmed in the future.

Mechanical and Plumbing Improvements

There are no existing mechanical and plumbing systems. If NPS decides to install mechanical and plumbing systems, then the extent of the systems would be the subject of a future design phase. New underground water, sanitary and storm sewer systems would most likely be required to support this structure.

[8] Should this be used as office space, the loading requirement would increase to 50 PSF per Table 1607.1. If the second floor is to be used as an assembly space, it would need to be increased to 100 PSF.

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CHAPTER 2.5: ALTERNATIVES FOR TREATMENT - BARN

Alternatives

There are three alternatives for the future utilization of this building. These are discussed below.

Alternate #1 - Rehabilitate, Add unisex staff toilet room within Barn, Accessible entry at carriage gallery

A straightforward project would include selective exterior repair and preservation work, coupled with interior rehabilitation. This project would provide a first floor space as a visitor contact station, drinking fountains, one (1) unisex staff toilet, and utility sink (see Appendix 3.1, Sheet A7). The second floor would be used for storage or office space. The attic would be used only for storage.

The entrance to the building would be from the south elevation. The carriage house door(s) would need to be reworked. The wall directly behind the doors would be rebuilt to include a single door to accommodate an accessible route. To provide an accessible route from the south elevation, a slightly sloped walkway with handrails is required to access the first floor from grade. The grade just outside the south elevation varies from 6”-10.5” across the south elevation. The walkway could be constructed out of wood or metal and would be reversible.

Regrading the site, from Tilden Street to the south entrance of the Barn, may eliminate the need for a handrail. The site grade, sidewalks, crosswalk, stairs, etc. should be studied further in a future design phase. A comprehensive study of the existing conditions may develop a solution that would elimination the need for a handrail at the south elevation of the Barn. Lowering the floor level is also a possibility; again this should be studied further in a future design phase.

A fire protection system would be provided throughout the building. Accessible public toilets would be accommodated in a new comfort station built next to the Barn. If NPS decides not to build a comfort station, a second toilet room could be provided in the southeast corner of the first floor (see Appendix 3.1, Sheet A7, detail 3).

Alternate #2A - Rehabilitate, Add unisex staff toilet room within Barn, Accessible entry at east elevation

A straightforward project would include selective exterior repair and preservation work, coupled with interior rehabilitation. This project would provide a visitor contact station, one (1) unisex staff toilet, drinking fountains, and a utility sink at the first floor (see Appendix 3.1, Sheet A8). The second floor would be used for storage or office space. The attic would be used only for storage.

The entrance to the building would be from the east elevation. A new accessible walkway and ramp would run along the north elevation of the Barn to provide entry on the east elevation. The current window opening would be converted back into a door, as it was originally constructed. A portion of the site, to the northeast of the Barn, would need to be re-graded to accommodate the ramp. The ramp could also be elevated above the grade.

A fire protection system would be provided throughout the building. Accessible public toilets would be accommodated in a new comfort station built next to the Barn.

The advantage to this scheme is that all persons would have access to the Barn from the same entry point. The disadvantage would be in way finding. Signage would be required to bring visitors from across Tilden Street and from the Peirce Mill to the restored entrance at the east elevation.

Alternate #2B - Rehabilitate, Add unisex staff toilet room within the Barn, Accessible entry at east elevation, Retain entry at south elevation

This project is similar to Alternate #2A in that it would provide a visitor contact station, one (1) unisex staff toilet, drinking fountains and a utility sink at the first floor (see Appendix 3.1, Sheet A9). The unisex staff toilet is recommended to have limited public use for persons with disabilities. The second floor would be used for storage or office space. The attic would be used only for storage.

In this alternate, the building would have access from both the east and south elevations. The accessible entry would be from the east elevation. Access from the south elevation would also be provided through the existing Dutch door. Making the carriage house doors operational was considered. The doors would have to be reconstructed to be weather tight. If not, they would pose problems with the mechanical system. In addition, the sloping grade at the south elevation would require the installation of two stair risers, to access the elevated first floor level which would have further access and aesthetic implications. Refer to Alternate #1 for a study of an accessible entry at the south elevation.

A fire protection system would be provided throughout the building. Accessible public toilets would be accommodated in a new comfort station built next to the Barn.

Advantages to this scheme include a clear way finding path from across Tilden Street and from the Peirce Mill to the Barn. The need for an accessible ramp and handrail at the front or south elevation is eliminated in this scheme. In addition, the accessible ramp is closer to the accessible parking and walkway to the Peirce Mill. The disadvantage is that there would be two separate entrances to the structure.

Alternate #3 - Rehabilitate, Add lift

If NPS decides to use the second floor for public use, a vertical platform lift would be required for accessible access to this level, see Appendix 3.1, Sheet A10. A lift could be added in what is currently the storage room in the northeast corner. However, a lift in this location would reduce the size of the landing at the top of the stair on the second floor. The accessible entry shown in Alternates #2A and #2B could be implemented. As this alternate is intrusive and not preferred by Park staff, it is hereby dismissed from the remainder of this report.

Preferred Treatment

Alternate #2B - Rehabilitate, Add unisex staff toilet room within the Barn, Accessible entry at east elevation, Retain entry at south elevation. The following are the most important reasons for this choice:

- It fulfills staff needs within the compact space available. It assumes that the comfort station would be a separate facility.
- The Alternate does not cause substantial impact to historic resources.
- The accessible ramp is closer to the accessible parking and walkway to Peirce Mill.

Disadvantage:

- There would be two separate entrances to the structure.

Further Recommendations

Archeological

It is known that a large gas line was disturbed during the rehabilitation of the Peirce Mill in 2010. At this time testing occurred around the Peirce Barn as a part of mitigation measures. As a result of this testing, NPS staff has noted that no archeological investigations or further testing would be required.

Architectural / Engineering Work

It is recommended to assess the chimney for structural stability. The wooden structure of the second floor should be examined to measure the size and spacing of joists and the condition. A structural engineering assessment would confirm whether the current wooden framing is sufficient.

Material Analysis / Testing

The plaster and parging on the interior side of the stone walls should be analyzed for their composition. Areas for testing would include the exterior wall under the stair to the second floor. The analysis would determine if it is whitewash and/or paint and its composition.

A mortar analysis and comparison of the many different types of mortar used on the Barn may help determine if there remains some original mortar (and what was added to possibly replicate original mortar).

Dendrochronology on wood elements would help determine the dates. Structural framing members and vertical wood board finish at the first floor would be good candidates for such an investigation, as these dates of some of these components are unknown.

Comparative Analysis

Further comparisons of exterior and interior details with other barns built around the same time period and in this region may guide the Barn's future rehabilitation.

Additional research into the lives of the Peirce’s, the use of the Barn for carriages or wagons, use as a living museum by NPS, and then the use as the Art Barn should be undertaken as it may provide additional information to guide the rehabilitation.

Missing Resources	The earliest photograph dates to 1858 and then the next earliest is 1914. Additional photographs or artwork before 1914 may provide evidence of changes not fully understood at this time. As well as in the 1970s to see what work specifically occurred in 1971.

CHAPTER 2.6: ALTERNATIVES FOR TREATMENT - SPRINGHOUSE

Alternatives

There are two alternatives for the future utilization of this building. These are discussed below. In addition, if NPS decides to change the use of the Springhouse from utility/storage to an interpretive exhibit space, a series of additional requirements would be necessary.

Alternate #1 – Preserve

A straightforward project would include selective repair and stabilization work of the site and of the building. Proposed work would include roof shingle replacement, stone wall repair, upper floor assembly repair, door and window rehabilitation, and paint at wood trim assemblies. The grade and door thresholds should be reworked to prevent water infiltration at both entrances. The upper level would be used for storage. In this alternate the lower level of the Springhouse would be mothballed.

Alternate #2 - Mothball
Not used, not occupied

The second alternate would consist of mothballing the Springhouse in its entirety. Proposed work would include the installation of temporary window and doors covers, smoke and heat detection systems and roof shingle replacement. Remote signaling of smoke and heat detection systems should be explored. Site work would include reworking the grade and door threshold to prevent water infiltration as well as repairs to the dry-laid site wall.

Change in use

If NPS decides to change the use of the Springhouse from utility/storage to an interpretive exhibit space, many additional requirements would be necessary to meet life safety and accessibility standards. Pedestrian access to the Springhouse requires crossing busy Tilden Street. Providing safe access to the structure would be of the utmost concern. The project would have modest requirements for electrical and fire protection systems. Heating could be done through an electric heater when needed. In addition, grade and door thresholds should be reworked to prevent water infiltration at both entrances.

Preferred Treatment

Alternate #1 – Preservation is the preferred treatment. The following are the most important reasons for this choice:

- The Park has expressed a desire to continue to use the upper level of the Springhouse for storage.
- This choice would assure that the conditions of the building will be monitored from time to time and cyclical maintenance will be undertaken.

Further Recommendations

Archeological

It is recommended that some archeological investigations be done to see if there are any remnants from when the Springhouse was in use.

Architectural / Engineering Work

It would be prudent to assess the exterior walls for any structural instability due to the spring running under the Springhouse, the change in grade when the median was created, and the effect of traffic vibrations.

Material Analysis / Testing	It is unknown if there was any material analysis done for when the new plaster was added in the 1999 project. A mortar analysis and comparison of the many different types of mortar used on the Springhouse may help determine if there remains some original mortar (and what was added to possibly replicate original mortar). Dendrochronology on wood elements would help determine the dates.
Comparative Analysis	Further comparisons of exterior and interior details with other springhouses built around the same time period and in this region may guide the Springhouse's future preservation. The full functionality of the building as a springhouse or icehouse is not clear. Additional research into the lives of the Peirce's and the use of the Springhouse may provide additional information to guide the preservation.
Missing Resources	The earliest photograph dates to 1897. Photographs or artwork from before this date (and slightly after) of this area may provide additional evidence of how the Springhouse was originally used.

CHAPTER 2.7: ASSESSMENT OF EFFECT - BARN

Introduction

This chapter provides a narrative regarding the effect (i.e. impact) to the historic and architectural character of the property with the execution of the preferred treatment. The details of these treatments are provided in Chapter 2.5 Alternatives for Treatment. This chapter hopes to answer the Advisory Council on Historic Preservation's (ACHP) criteria of adverse effect per the Section 106 process.[1]

- Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the Register [i.e. location, design, setting, workmanship, materials, feeling, and association].
- Adverse effects include physical destruction or damage; alteration not consistent with the Secretary of the Interior's Standards; relocation of a property; change of use or physical features of a property's setting; visual, atmospheric, or audible intrusions; neglect resulting in deterioration; or transfer, lease, or sale of a property out of Federal ownership or control without adequate protections.
- If a property is restored, rehabilitated, repaired, maintained, stabilized, remediated, or otherwise changed in accordance with the Secretary's Standards, then it will not be considered an adverse effect with the agreement of the SHPO.[2]

This narrative provides a professional opinion regarding compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966.

National Register Nomination Form

The Peirce Barn and Peirce Springhouse are listed together on the National Register of Historic Places (NRHP). Both buildings are listed on the same NRHP nomination form. In addition, the Peirce Barn and Peirce Springhouse are listed as contributing resources on the nomination form for the Rock Creek Park Historic District. A copy of the Peirce Barn and Peirce Springhouse nomination form is provided in Appendix 3.3, and an electronic copy of the Rock Creek Park Historic District nomination form is included in the electronic files associated with this report. The Peirce Barn and Peirce Springhouse nomination form was prepared in 1973 and is rather modest in content.

Preferred Treatment Summary – Alternate #2B

The preferred treatment is to rehabilitate the Barn. Work would include selective exterior repair and preservation work, coupled with interior rehabilitation. See Appendix 3.1 for plan and elevation drawings for the proposed rehabilitation.

[1] The Section 106 review process is spelled out in the regulations issued by the ACHP and published in the code of Federal Regulations at 36 CFR Part 800 “Protection of Historic Properties.”
[2] Excerpted from the ACHP Section 106 Regulations Flowchart Material, http://www.achp.gov/flowexplain.

Previous Building Alterations

Documentation has been provided in the previous sections of this report to establish that the historic and architectural integrity of this property has been compromised as follows:

- The current site was altered during the 2010-2011 Peirce Mill Rehabilitation project.
- Over the years, various alterations have occurred such as the addition of the attic windows, lowering of the hay loft door, the addition of the chimney, and the addition of mechanical, electrical, and plumbing systems.

Opinion on Effect

This opinion blends an evaluation of and takes into account three factors:

- An understanding of the National Register nomination form, especially in regards to the documentation of significance,
- A broad understanding of the changes and alterations that have occurred to the property over time, and
- An evaluation of the treatments. The proposed treatment is the "action" to be documented pursuant to the Section 106 of the NHPA.

Civil Effect	For rehabilitation Alternate #2B, municipal utilities will need to be upgraded per current code requirements. It is the author's understanding that the existing utilities have been capped underground and should remain in the same location.
Site and Setting Effect	Site disturbance to access and upgrade utilities and to provide building access will result in expanded site excavation work.
Architecture Effect - Exterior	With the execution of treatments towards selective exterior repair and preservation work, the historic and architectural integrity will be strengthened. Furthermore, using sound preservation technology will assure that the building will have a continued service life and viable use.
Architecture Effect - Interior	A rehabilitation approach will be followed for the interior of the building.
Structural Effect	Reconfigurations to the openings located within the north/south wall at the first floor would have an effect on the structure of this wall. The proposed treatment includes the addition of several new partitions at the first floor; however these walls would have no effect on the overall structural stability of the Barn. A future change of use, would require investigations of the second floor and attic floor joists, depending on the use the floor(s) may need to be reinforced to meet building codes.
Mechanical Effect	The mechanical system installed in 1971 is an existing visible intrusion. Should upgrades to the system be required mechanical equipment should be concealed.

Electrical Effect	As electricity was not part of the original construction, the existing electrical equipment is a visible intrusion. If upgrades to the electrical system are required conduit should be concealed.
Safety Effect	As fire protection was not part of the original construction, any sprinklers and associated piping would be a visible intrusion and will affect the feeling of an early 1800s barn. As this is a fairly small building, there is not much room to hide any equipment. Sprinkler piping can be concealed in the ceiling on the first floor and carefully spaced between floor joists and roof rafters above the second and third floors.
Accessibility Effect	In the alternative, accessibility to the exterior doors is achievable and will be a slight visible intrusion to the exterior of the Barn. A slightly sloped path would travel from the accessible parking area to the north of the Barn, turning south to enter the building through a door at the east elevation. The original door opening exceeds the minimum required accessible clearance. If automatic door openers and closers are installed, then they would affect the character. The addition of the accessible path would alter the site surrounding the Barn. However, the area surrounding the Barn, as noted earlier in this report, has previously been significantly altered. The path could involve a slight regrading effort to the northeast of the Barn. The path could also be elevated above grade; work in the design phase would address the advantages and disadvantages of both options. As the second floor and attic were not originally made accessible (and nor is it required per exceptions in ABAAS F206.2.3), any attempts to provide a lift to this floor would be a visible intrusion and will affect the feeling of an early 1800s barn. While providing an ABAAS compliant unisex staff toilet room will be beneficial to park staff, it will be a visible intrusion and will affect the character.
Sustainability Effect	The use of existing materials, such as exterior masonry walls, will help in retaining the heated and cooled air inside the Barn and will retain its historic character. The current windows could be replaced with double insulated glazed windows to increase the envelope's thermal performance. The new windows would replicate the historic window type and muntin grid pattern. New products such as paints that have no or low VOC's that will be used on the rehabilitated interior, though new, will give the appearance of plaster and will not affect the feeling or association.

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CHAPTER 2.8: ASSESSMENT OF EFFECT - SPRINGHOUSE

Introduction

This chapter provides a narrative regarding the effect (i.e. impact) to the historic and architectural character of the property with the execution of the preferred treatment. The details of these treatments are provided in Chapter 2.6 Alternatives for Treatment. This chapter hopes to answer the Advisory Council on Historic Preservation's (ACHP) criteria of adverse effect per the Section 106 process.[1]

- Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the Register [i.e. location, design, setting, workmanship, materials, feeling, and association].
- Adverse effects include physical destruction or damage; alteration not consistent with the Secretary of the Interior's Standards; relocation of a property; change of use or physical features of a property's setting; visual, atmospheric, or audible intrusions; neglect resulting in deterioration; or transfer, lease, or sale of a property out of Federal ownership or control without adequate protections.
- If a property is restored, rehabilitated, repaired, maintained, stabilized, remediated, or otherwise changed in accordance with the Secretary's Standards, then it will not be considered an adverse effect with the agreement of the SHPO.[2]

This narrative provides a professional opinion regarding compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966.

National Register Nomination Form

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Preferred Treatment Summary - Alternate #1

The preferred treatment is to preserve the Springhouse. Proposed work would include roof shingle replacement, stone wall repair, upper floor assembly repair, door and window rehabilitation, and paint at wood trim assemblies. The grade and door thresholds should be reworked to prevent water infiltration at both entrances.

[1] The Section 106 review process is spelled out in the regulations issued by the ACHP and published in the code of Federal Regulations at 36 CFR Part 800 “Protection of Historic Properties.”
[2] Excerpted from the ACHP Section 106 Regulations Flowchart Material, http://www.achp.gov/flowexplain.

The upper level would be used for storage. In this alternate the lower level of the Springhouse would mothballed.

Previous Building Alterations

Documentation has been provided in the previous sections of this report to establish that the historic and architectural integrity of this property has been compromised as follows:

- The current site was altered when the median was created in 1913 and the dry-laid walls were created.

Opinion on Effect

This opinion blends an evaluation of and takes into account three factors:

- An understanding of the National Register nomination form, especially in regards to the documentation of significance,
- A broad understanding of the changes and alterations that have occurred to the property over time, and
- An evaluation of the treatments. The proposed treatment is the "action" to be documented pursuant to the Section 106 of the NHPA.

Civil Effect	Re-grading efforts to prevent water infiltration in the northwest corner of the building would be minimal. This effort would have no civil effect on the Springhouse.
Site and Setting Effect	Portions of the dry-laid site wall would be rebuilt. Repairs to the site walls will improve the overall appearance of the grounds surrounding the Springhouse.
Architecture Effect - Exterior	With the execution of treatments towards selective exterior repair and preservation work, the historic and architectural integrity will be strengthened.
Architecture Effect - Interior	A preservation approach will be followed for the interior of the building. The interior of the building remains largely intact. Proposed work will preserve and enhance the feeling of an 1800s springhouse.
Structural Effect	Repairs to the upper level floor assembly will be replacements in kind. There will be no adverse structural effect on the Springhouse.
Mechanical Effect	The preferred treatment requires no mechanical work. As a result, there is no mechanical effect on the Springhouse.
Electrical Effect	The preferred treatment requires no electrical work. As a result, there is no electrical effect on the Springhouse.
Safety Effect	The preferred treatment requires no safety work. As a result, there is no safety effect on the Springhouse.
Accessibility Effect	The preferred treatment requires no accessibility work. As a result, there is no accessibility effect on the Springhouse.

Sustainability Effect	The preferred treatment requires no sustainability work. As a result, there is no sustainability effect on the Springhouse.

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APPENDIX 3.1: MEASURED DRAWINGS

Drawing Index

Cover Sheet
A1 Peirce Barn – Floor Plans
A2 Peirce Barn – Framing and Roof Plans
A3 Peirce Barn – Elevations
A4 Peirce Barn – Building Section
A5 Peirce Springhouse – Floor Plans, Framing and Roof Plans
A6 Peirce Springhouse – Elevations
A7 Peirce Barn - Alternate #1
A8 Peirce Barn - Alternate #2A
A9 Peirce Barn - Alternate #2B
A10 Peirce Barn - Alternate #3

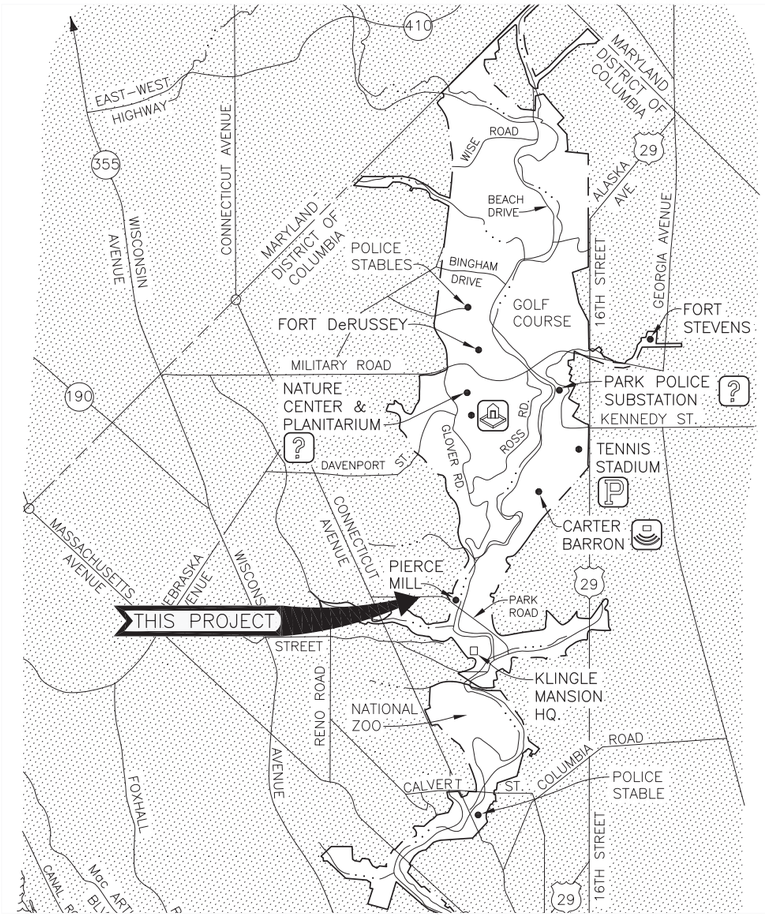
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UNITED STATES DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE

PEIRCE BARN & PEIRCE SPRINGHOUSE HSR

ROCK CREEK PARK
WASHINGTON, DC

PMIS 149248



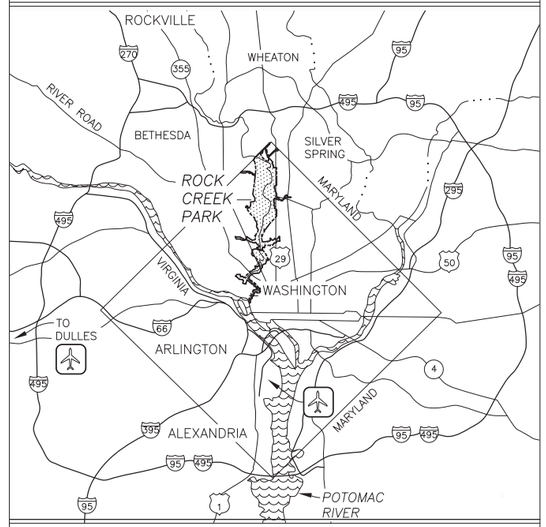
ROCK CREEK PARK

LEGEND

- PARK BOUNDARY
- STATE LINE
- CREEK
- HQ. PARK HEADQUARTERS
- INFORMATION CENTER
- PARKING
- AMPHITHEATER
- MAINTENANCE YARD

WASHINGTON, DC

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INDEX OF DRAWINGS

SHEET # OF #	SUB–SHEET	SHEET TITLE
1 OF 11	COVER	TITLE SHEET, DRAWING INDEX
2 OF 11	A1	BARN FLOOR PLANS
3 OF 11	A2	BARN ROOF & FRAMING PLANS
4 OF 11	A3	BARN ELEVATIONS
5 OF 11	A4	BARN BUILDING SECTION
6 OF 11	A5	SPRINGHOUSE FLOOR, ROOF & FRAMING PLANS
7 OF 11	A6	SPRINGHOUSE ELEVATIONS
8 OF 11	A7	ALTERNATE #1
9 OF 11	A8	ALTERNATE #2A
10 OF 11	A9	ALTERNATE #2B
11 OF 11	A10	ALTERNATE #3

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CHIEF, BRANCH DESIGN AND CONSTRUCTION
SUPERINTENDENT, PARK
APPROVED
REGIONAL DIRECTOR, NATIONAL CAPITAL REGION

A/E FIRM
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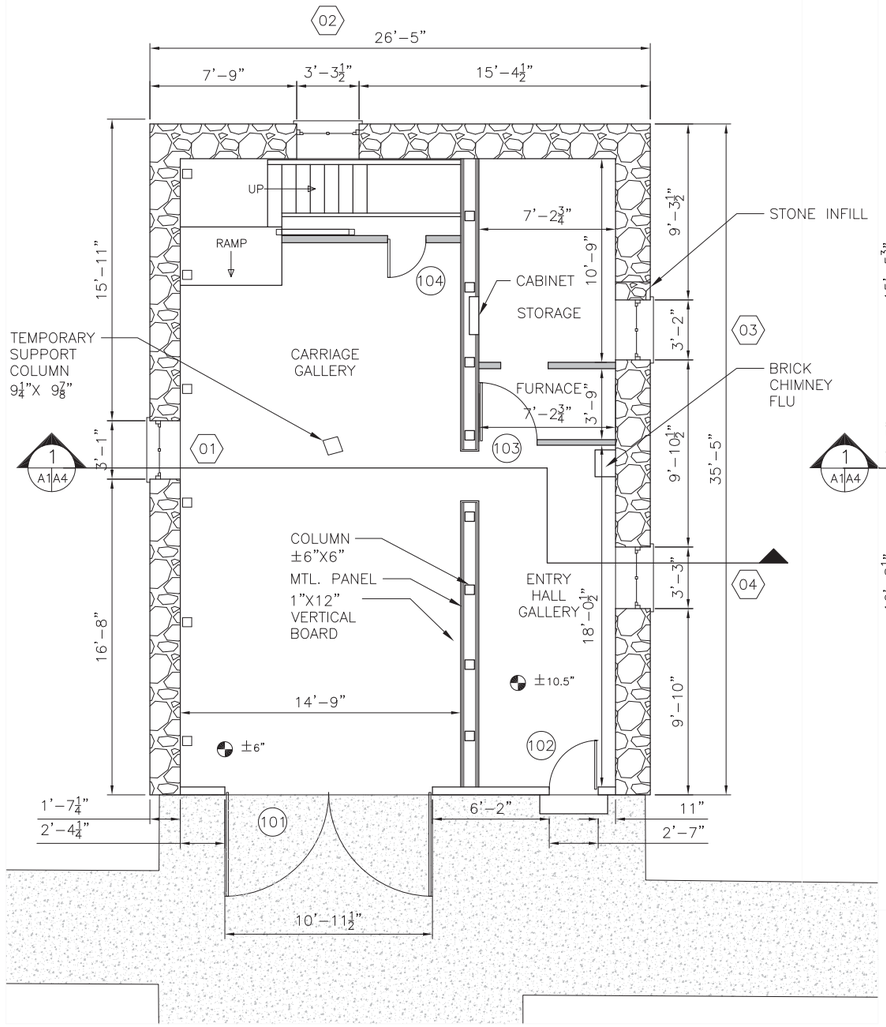
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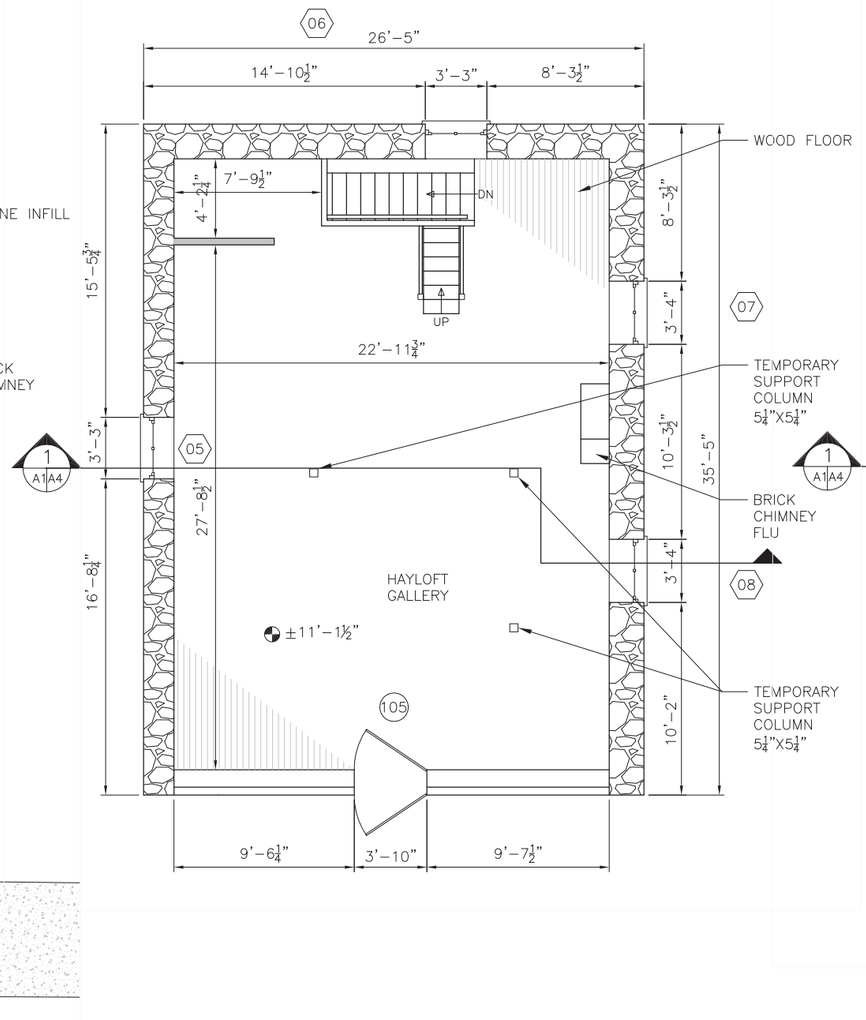
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NATIONAL PARK SERVICE – NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

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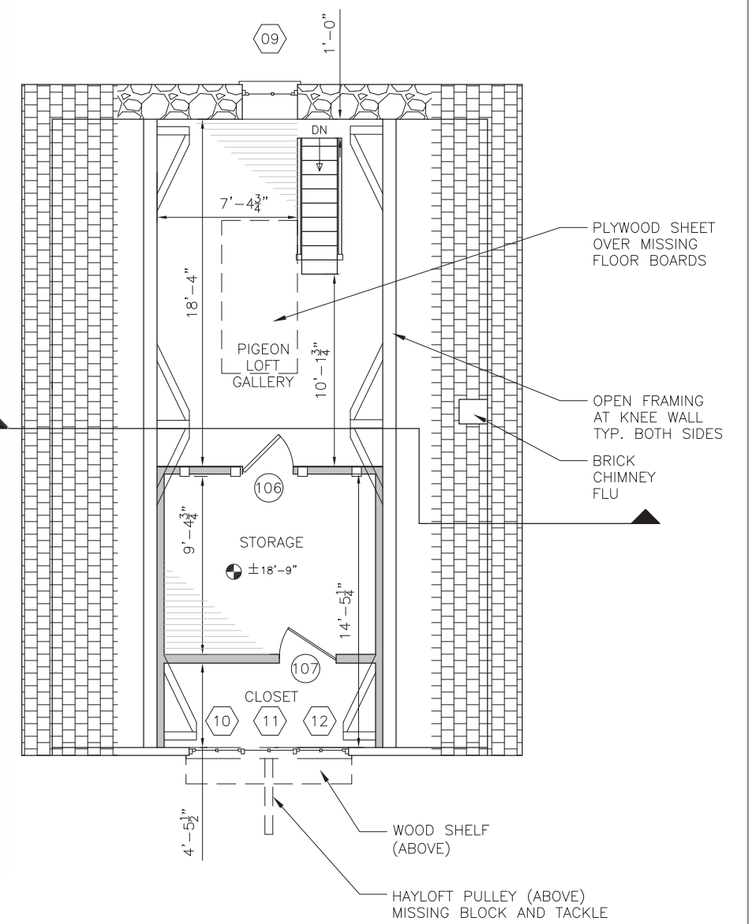
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SHEET 1 OF 11



1 A1 FLOOR PLAN – GROUND FLOOR



2 A1 FLOOR PLAN – SECOND FLOOR



3 A1 FLOOR PLAN – ATTIC FLOOR

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- STONE
- CONCRETE PAVING
- NEW PARTITION

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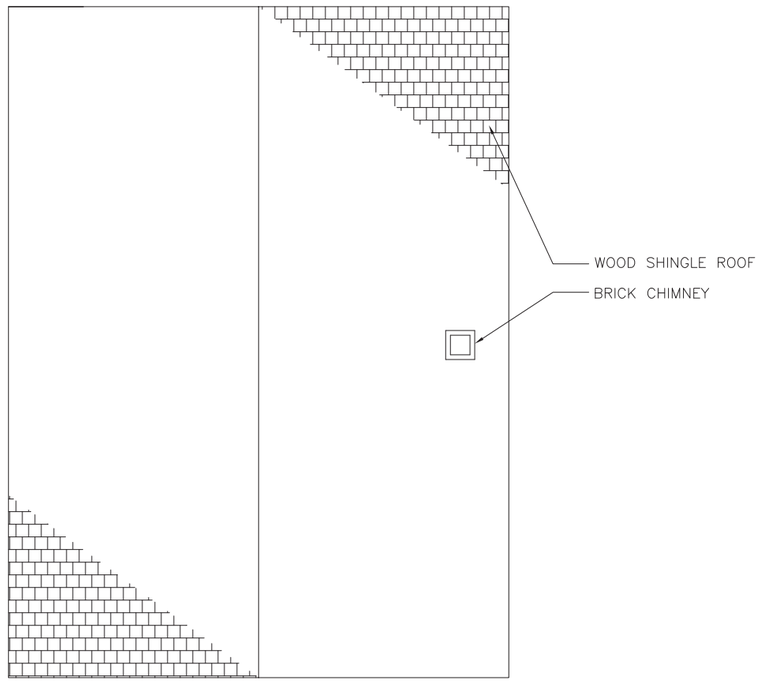
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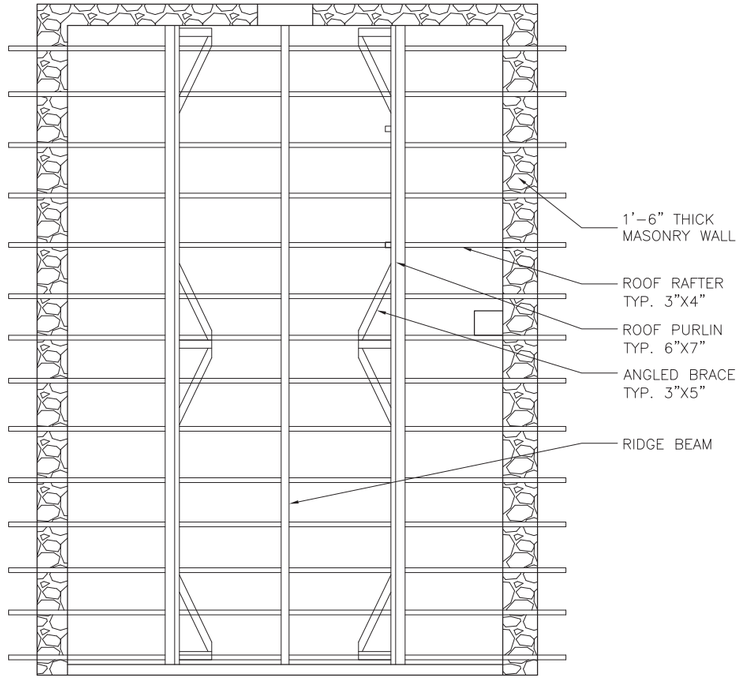
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BRANCH OF DESIGN AND CONSTRUCTION

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NAME OF PARK

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SHEET	2 OF 11



1 A2 ROOF PLAN



2 A2 ROOF FRAMING PLAN

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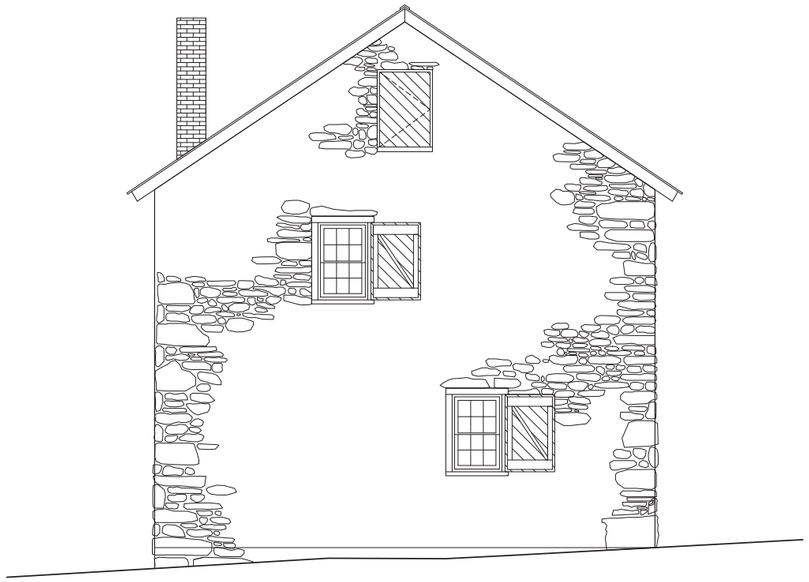
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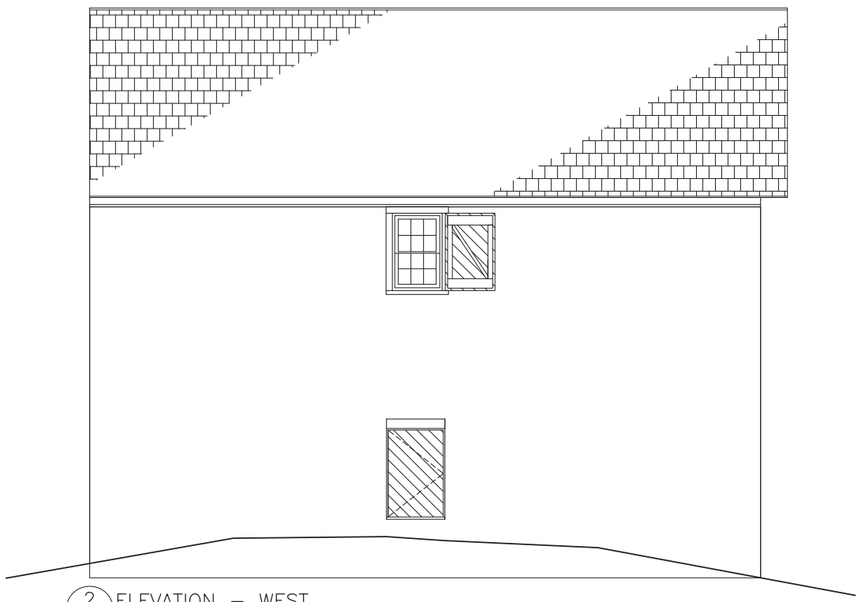
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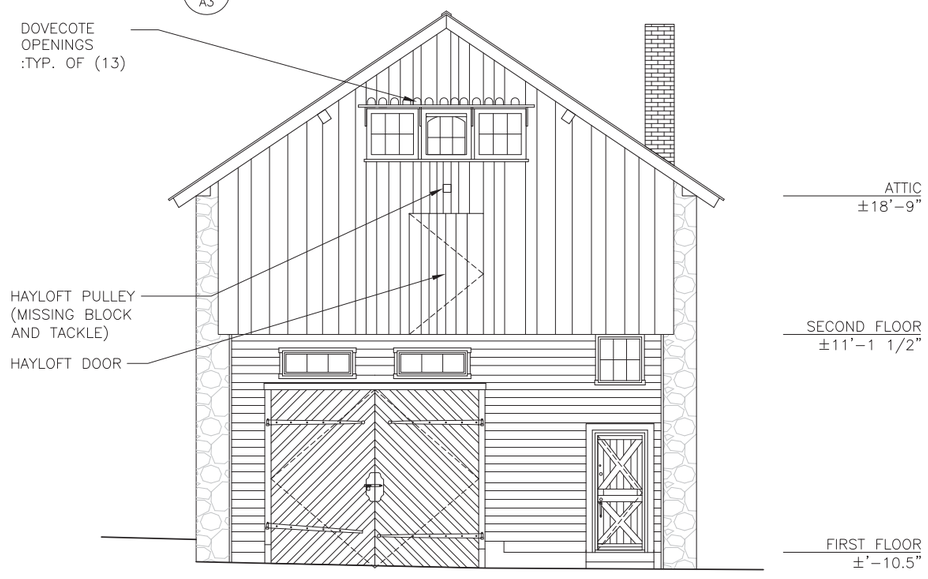
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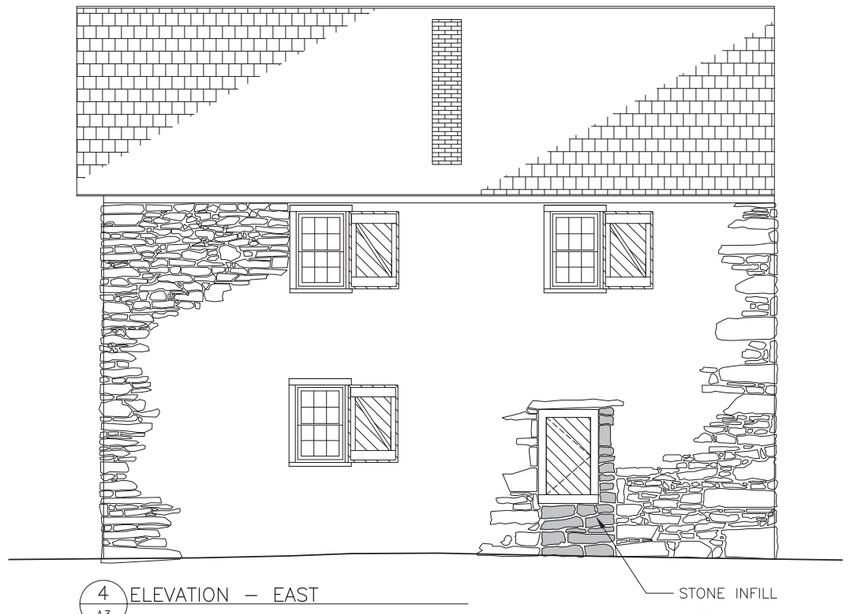
1 A3 ELEVATION – NORTH



2 A3 ELEVATION – WEST



3 A3 ELEVATION – SOUTH



4 A3 ELEVATION – EAST

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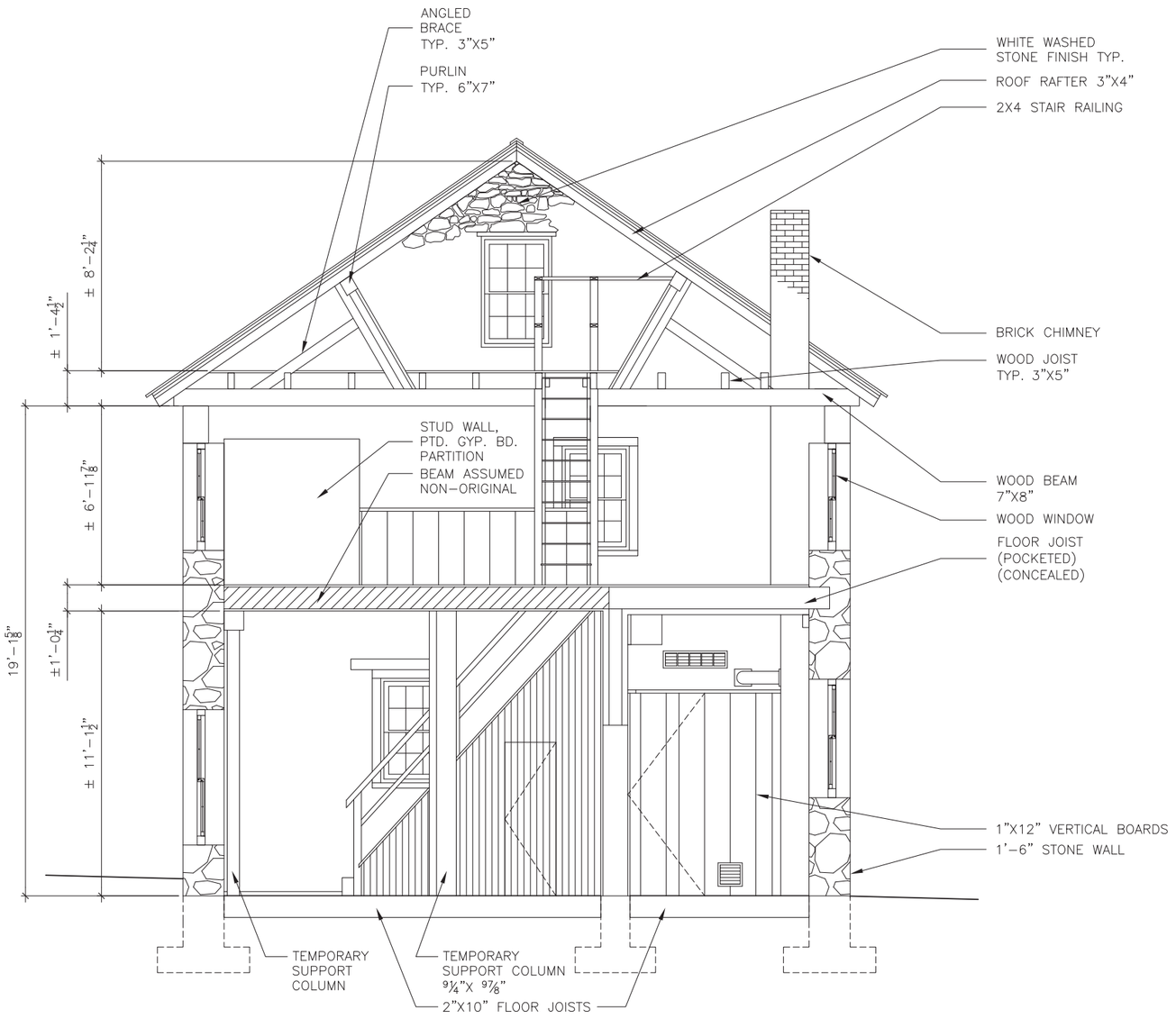
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DESIGNED	AES
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SHEET	4 OF 11



1 A4 BUILDING SECTION – EAST/WEST

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BEAM ASSUMED NON-ORIGINAL

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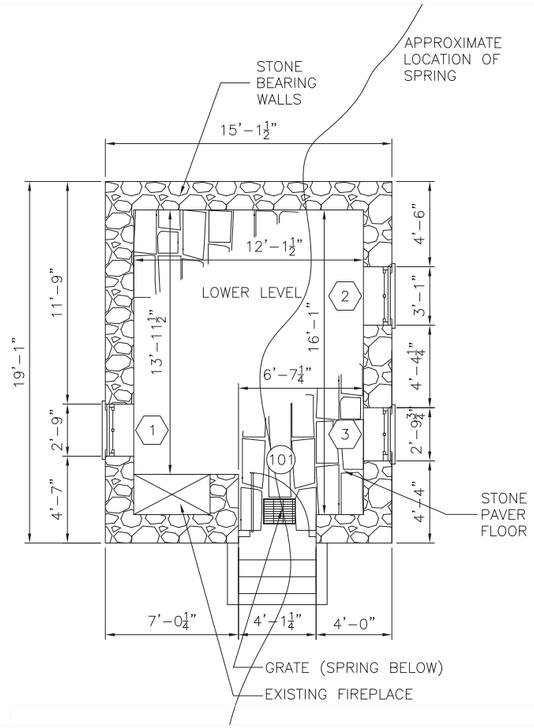
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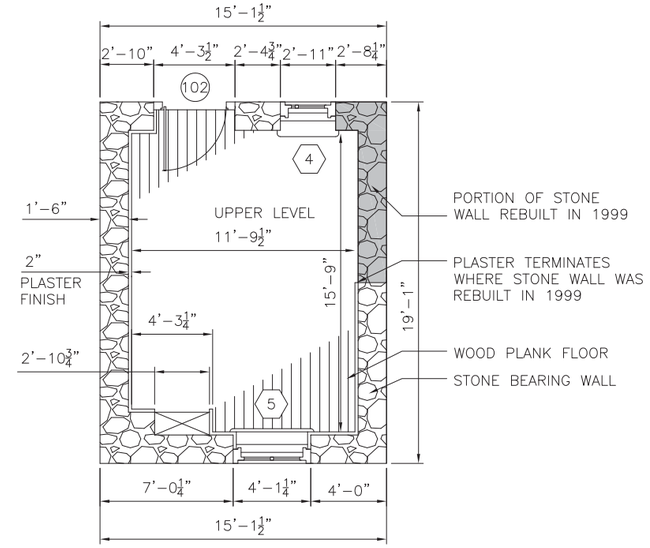
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ROCK CREEK PARK
NAME OF PARK

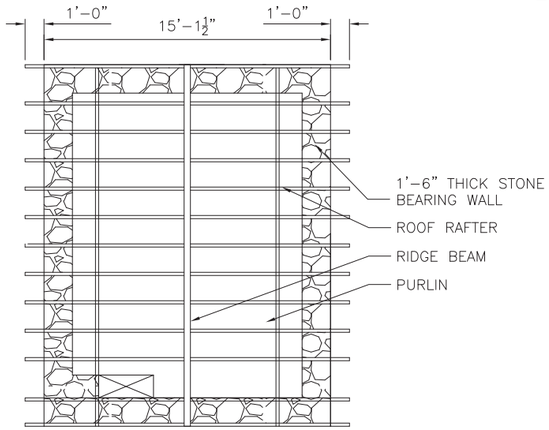
DESIGNED AES
DRAWN KI
CHECKED
DWG. NO. 821
111775
DATE 08.31.12
SHEET 5 OF 11



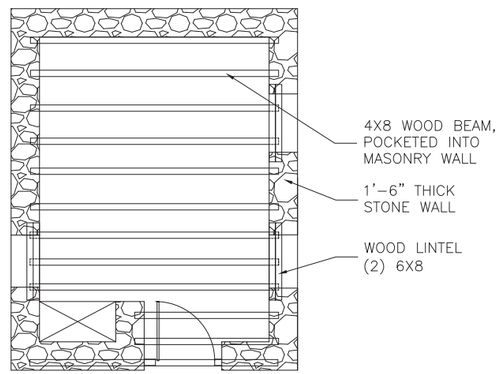
1 A5 FLOOR PLAN – LOWER LEVEL



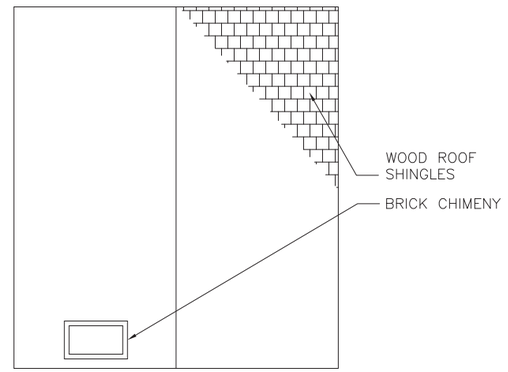
2 A5 FLOOR PLAN – UPPER LEVEL



3 A5 FRAMING PLAN – ROOF



4 A5 FRAMING PLAN – UPPER LEVEL



5 A5 ROOF PLAN



SCALE Ⓐ 4 0 4 8
SCALE OF FEET

LEGEND

STONE

A/E FIRM
QUINN EVANS ARCHITECTS

Mark	Sheet	REVISION	Date	Initial

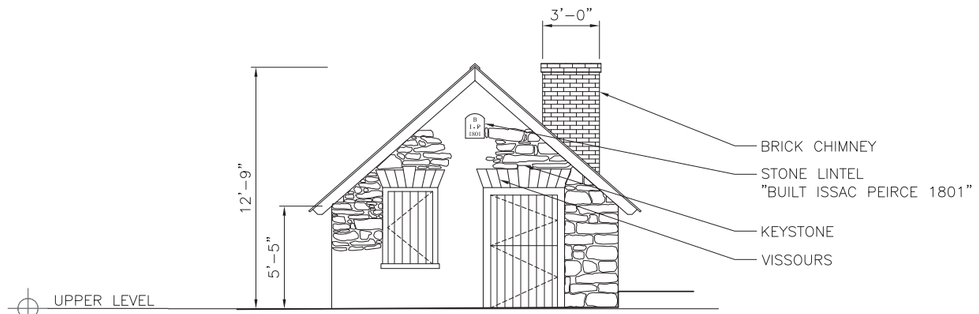
PEIRCE SPRINGHOUSE
FLOOR PLANS
TITLE OF DRAWING

A5
SUB SHEET NUMBER

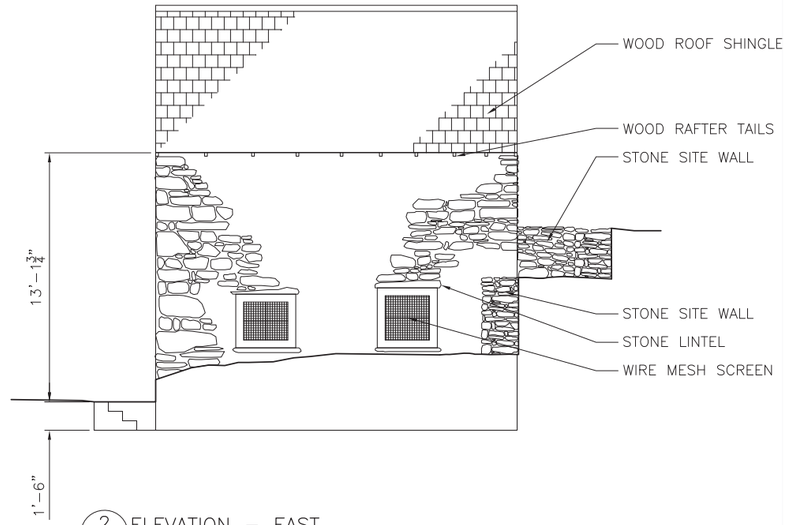
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE – NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT
TITLE OF PROJECT
PEIRCE BARN AND PEIRCE SPRINGHOUSE
LOCATION WITHIN PARK
ROCK CREEK PARK
NAME OF PARK

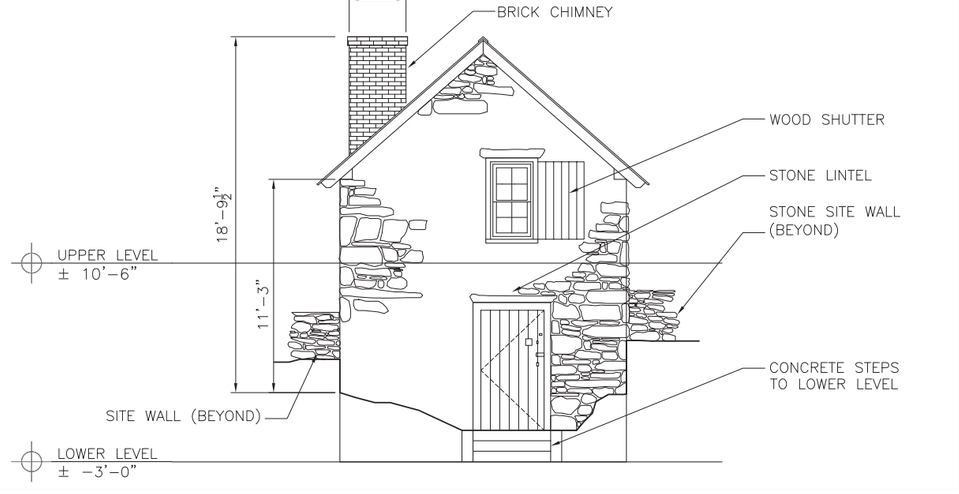
DESIGNED AES
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DATE 08.31.12
SHEET 6 OF 11



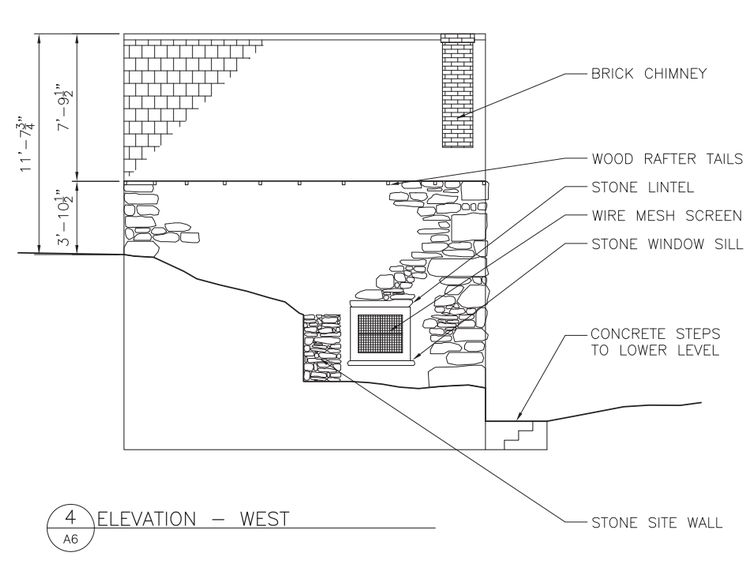
1 A6 ELEVATION – NORTH



2 A6 ELEVATION – EAST



3 A6 ELEVATION – SOUTH



4 A6 ELEVATION – WEST

SCALE Ⓐ 4 0 4 8 1/4"=1'-0"
SCALE OF FEET

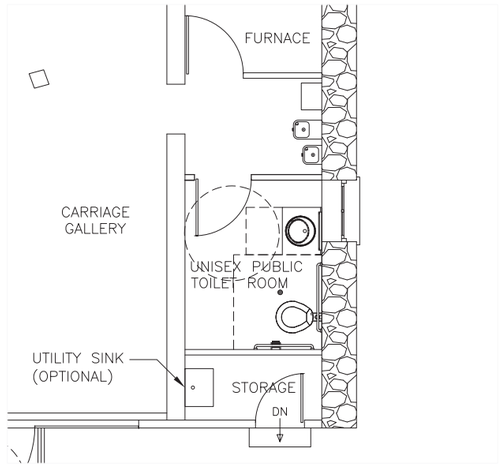
A/E FIRM	Mark	Sheet	REVISION	Date	Initial
QUINN EVANS ARCHITECTS					
PEIRCE SPRINGHOUSE – ELEVATIONS (TITLE OF DRAWING)					

A6 (SUB SHEET NUMBER)

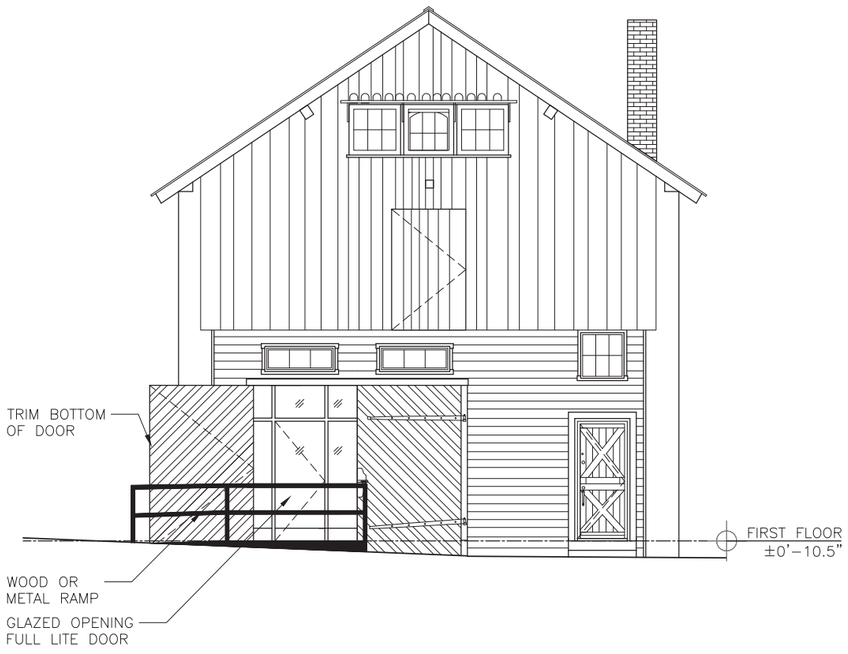
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT (TITLE OF PROJECT)
PEIRCE BARN AND PEIRCE SPRINGHOUSE (LOCATION WITHIN PARK)
ROCK CREEK PARK (NAME OF PARK)

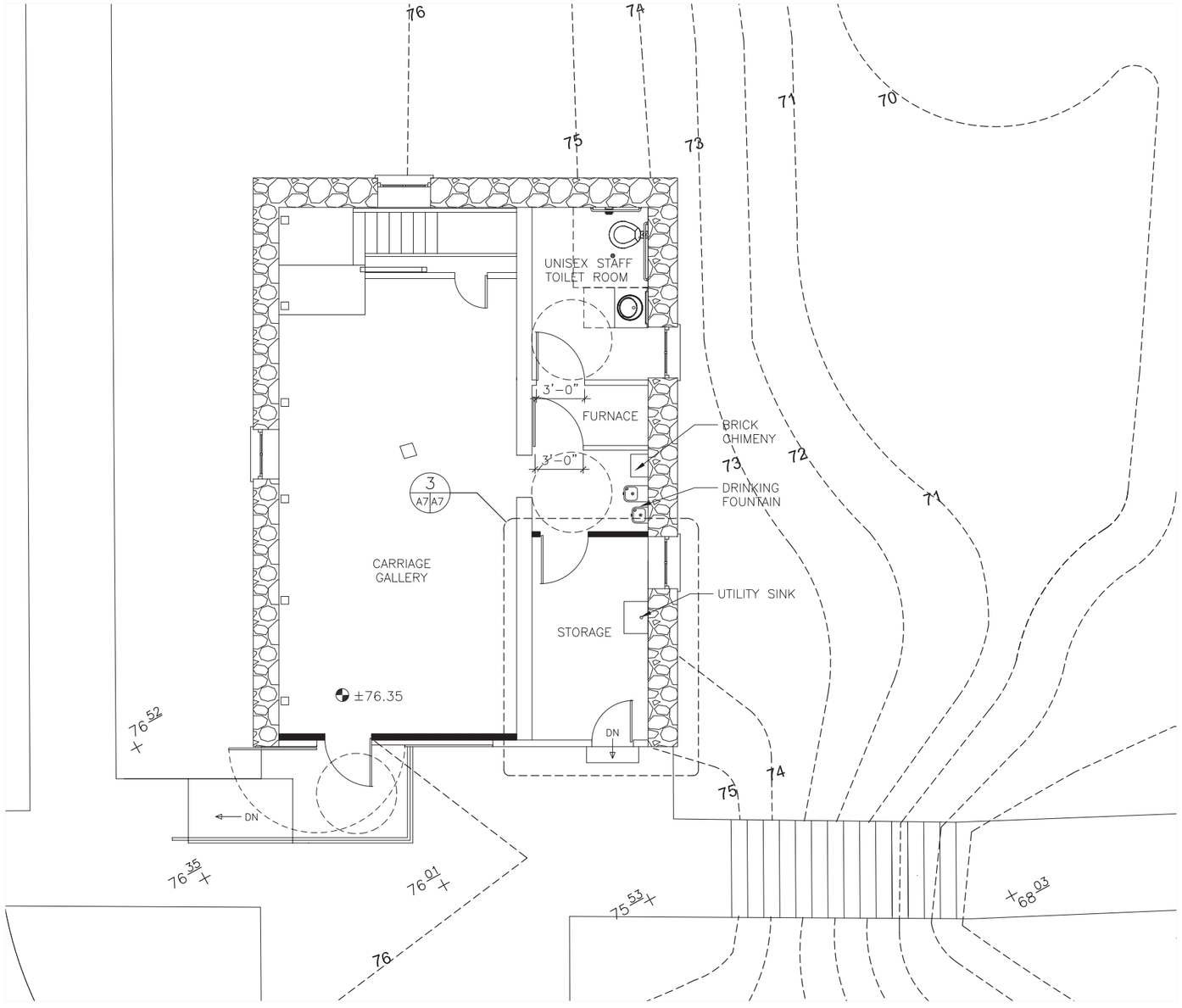
DESIGNED	AES
DRAWN	KI
CHECKED	
DWG. NO.	821
	111775
DATE	08.31.12
SHEET	7 OF 11



3/A7 FIRST FLOOR PLAN – OPT. SECOND TOILET



2/A7 PEIRCE BARN – SOUTH ELEVATION



1/A7 FIRST FLOOR PLAN

SCALE (A) 4 0 4 8
SCALE OF FEET

30°
BLDG.

LEGEND

STONE

A/E FIRM
QUINN EVANS ARCHITECTS

Mark	Sheet	REVISION	Date	Initial

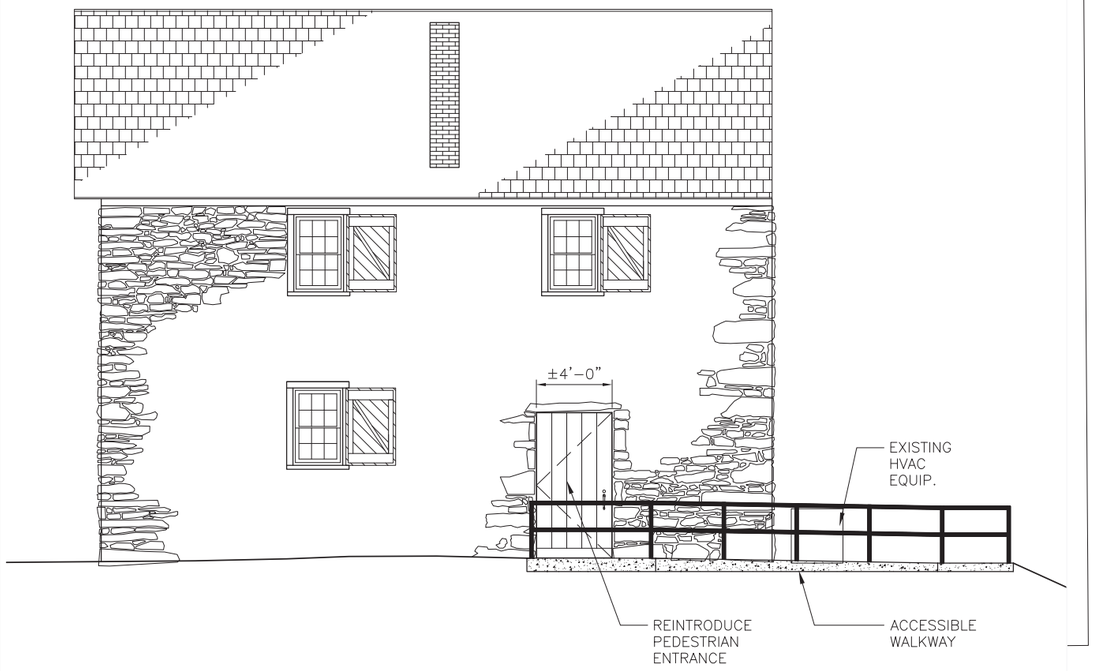
PEIRCE BARN – ALTERNATE #1
ACCESSIBLE ENTRY AT CARRAIGE GALLERY
TITLE OF DRAWING

A7
SUB SHEET NUMBER

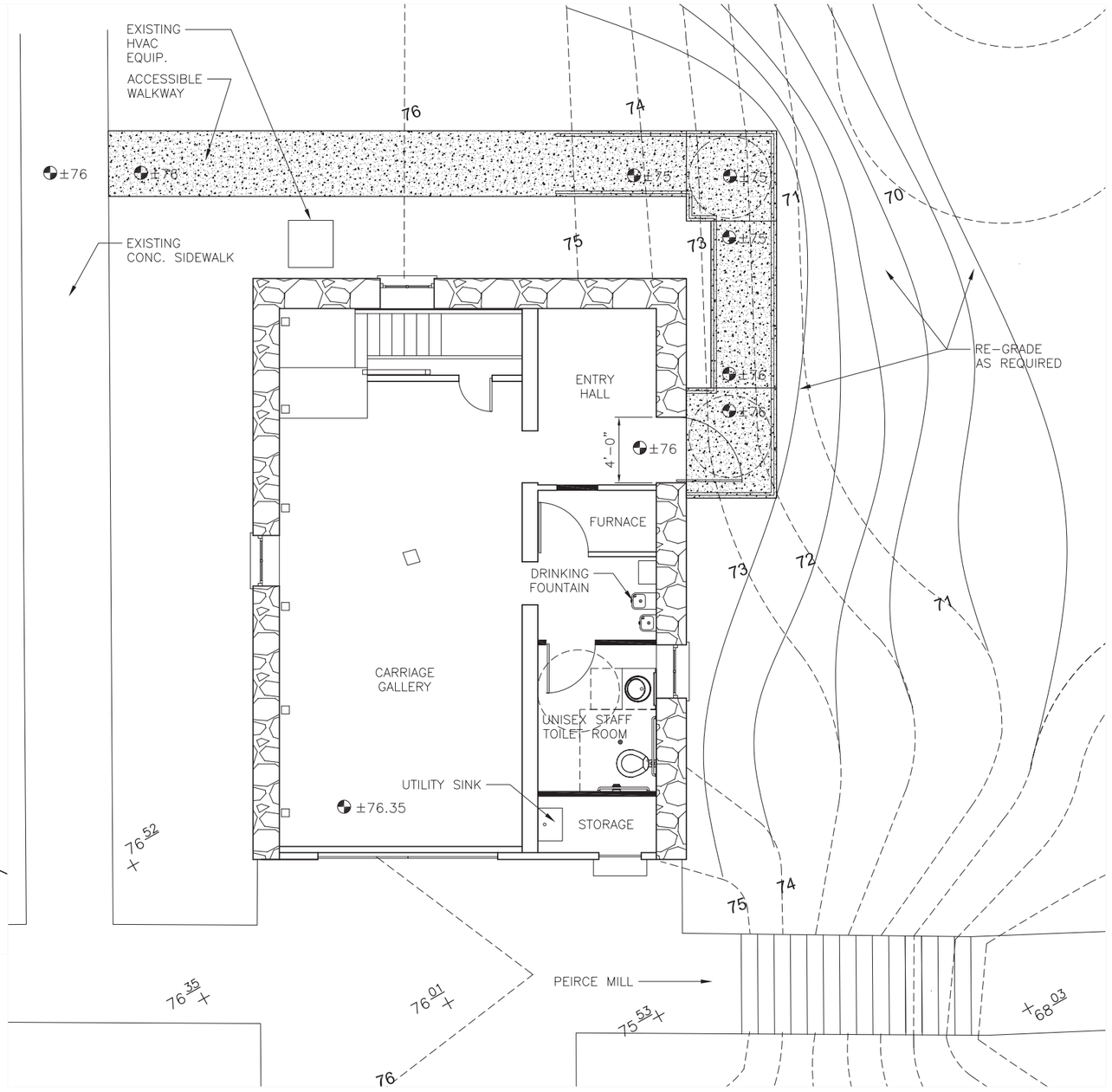
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT
TITLE OF PROJECT
PEIRCE BARN AND PEIRCE SPRINGHOUSE
LOCATION WITHIN PARK
ROCK CREEK PARK
NAME OF PARK

DESIGNED	AES
DRAWN	KJ
CHECKED	
DWG. NO.	821
	111775
DATE	08.31.12
SHEET	8 OF 11



2 A8 PROPOSED EAST ELEVATION



1 A8 PROPOSED FLOOR PLAN – FIRST FLOOR

SCALE Ⓐ 4 0 4 8
SCALE OF FEET

LEGEND

ADA PATH

A/E FIRM
QUINN EVANS ARCHITECTS

Mark	Sheet	REVISION	Date	Initial

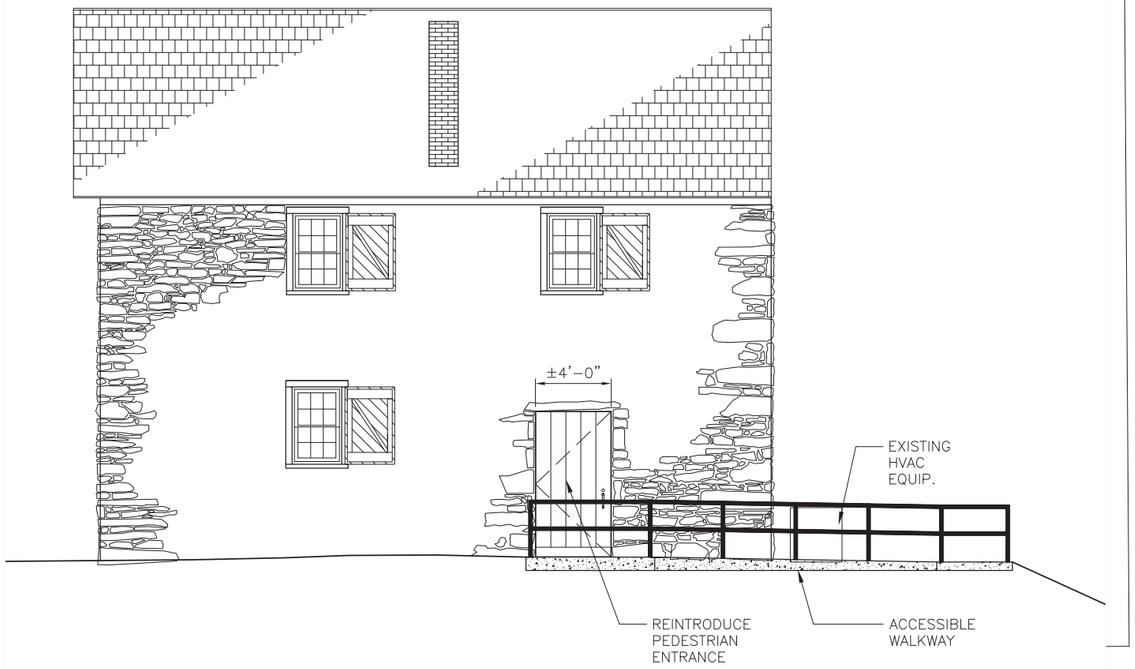
PEIRCE BARN – ALTERNATE #2A
ACCESIBLE ENTRY AT EAST ELEVATION
TITLE OF DRAWING

A8
SUB SHEET NUMBER

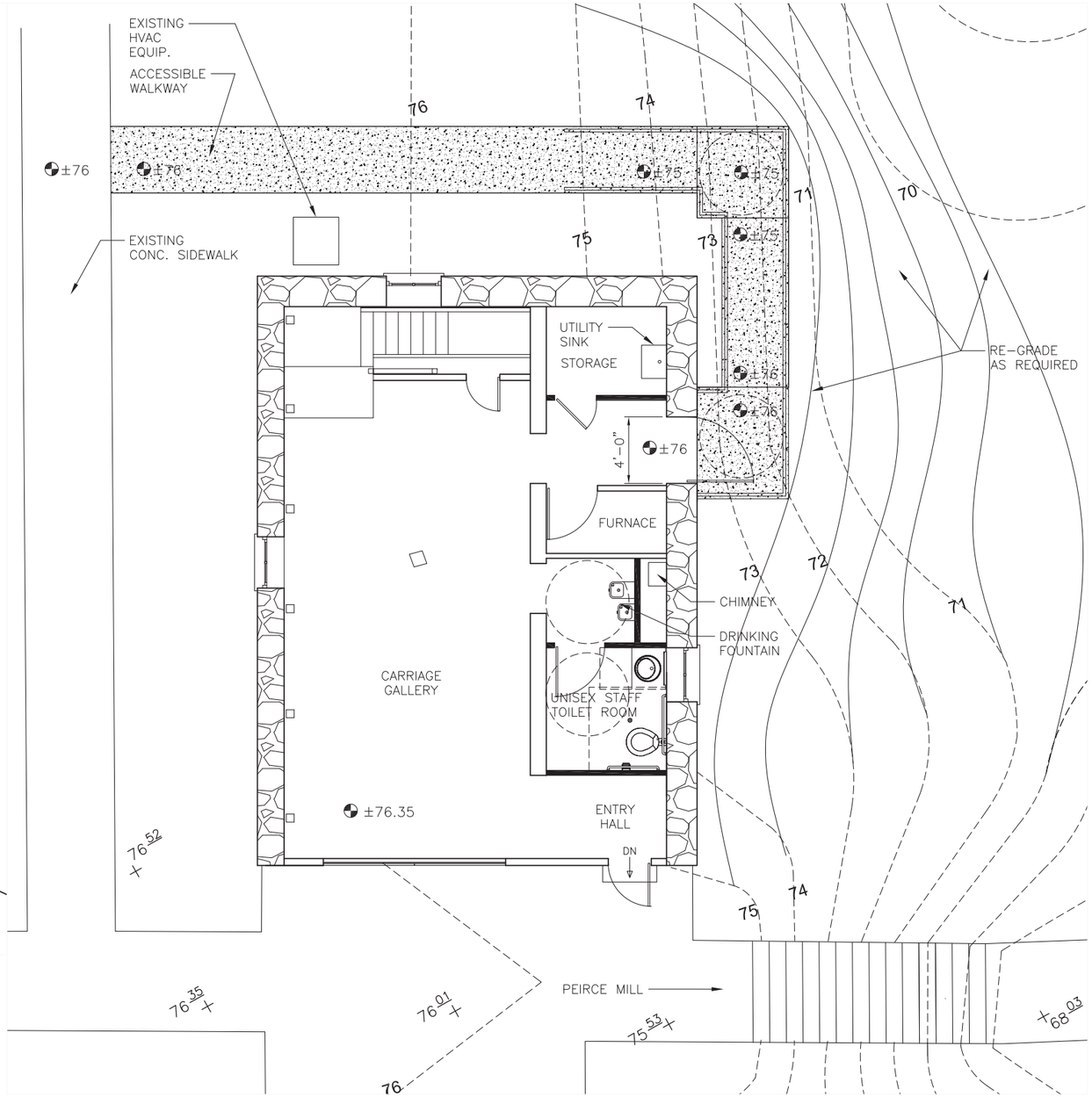
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT
TITLE OF PROJECT
PEIRCE BARN AND PEIRCE SPRINGHOUSE
LOCATION WITHIN PARK
ROCK CREEK PARK
NAME OF PARK

DESIGNED AES
DRAWN KJ
CHECKED
DWG. NO. 821
111775
DATE 08.31.12
SHEET 9 OF 11



2 A9 PROPOSED EAST ELEVATION



1 A9 PROPOSED FLOOR PLAN – FIRST FLOOR

SCALE A 4 0 4 8
SCALE OF FEET

30° BLDG.

LEGEND

ADA PATH

Mark	Sheet	REVISION	Date	Initial

A/E FIRM
QUINN EVANS ARCHITECTS

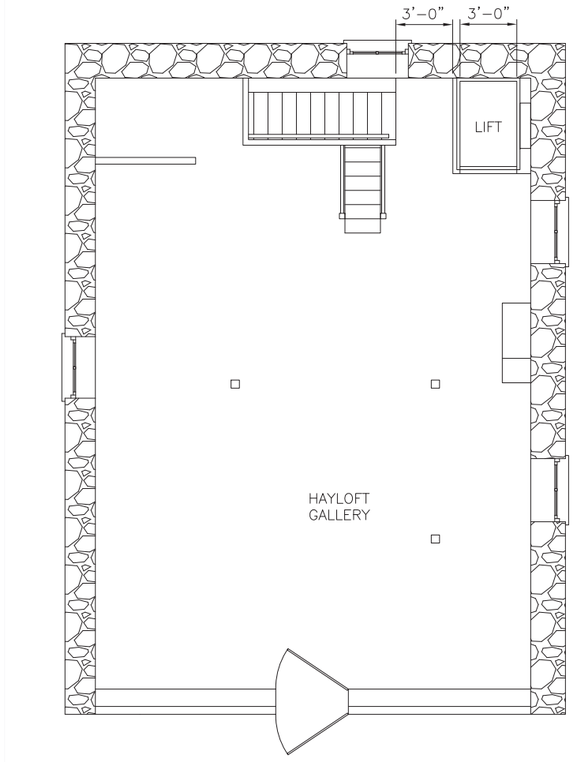
PEIRCE BARN – ALTERNATE #2B
SOUTH ENTRY/ACCESSIBLE ENTRY AT EAST
TITLE OF DRAWING

A9
SUB SHEET NUMBER

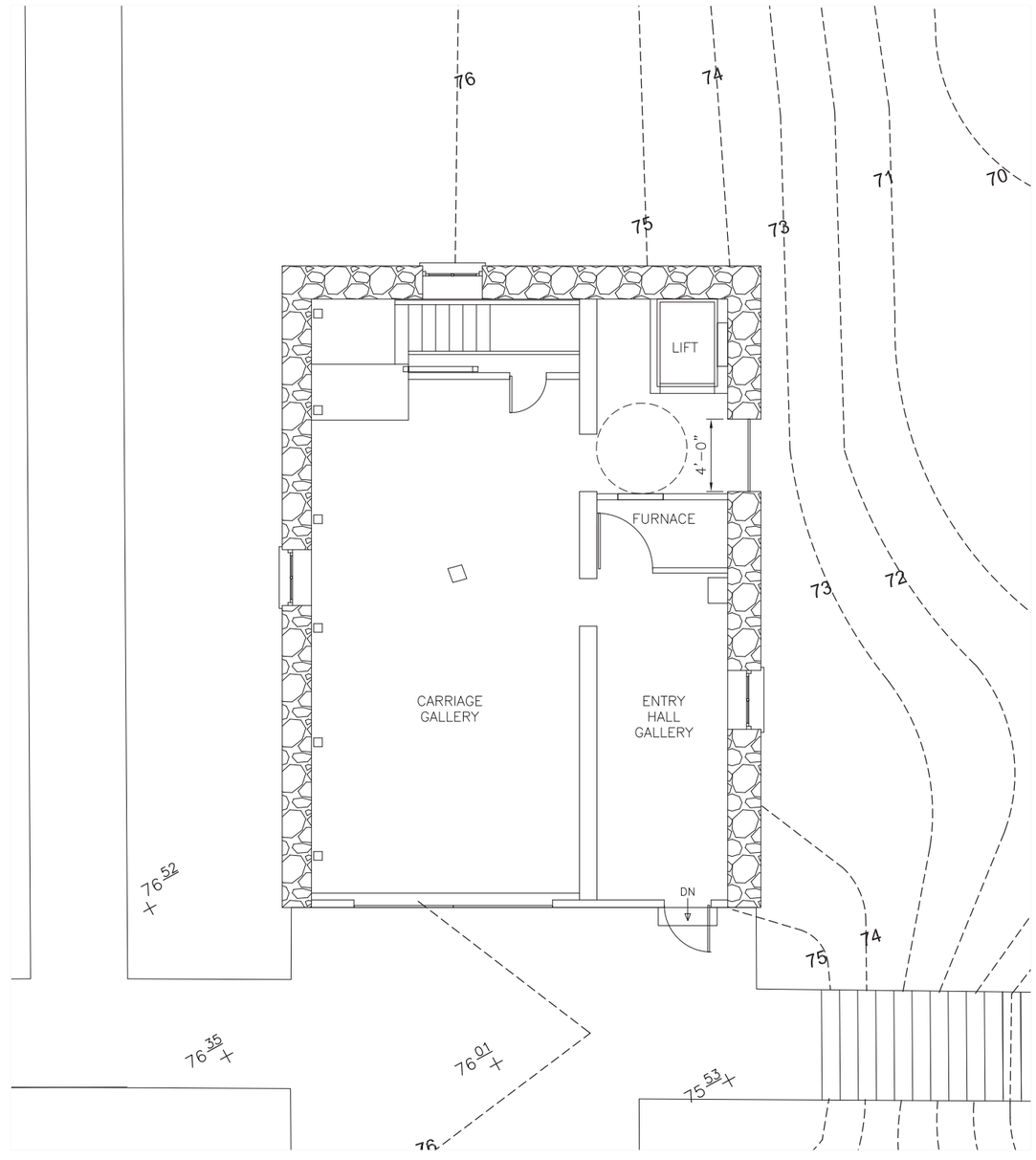
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE – NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT
TITLE OF PROJECT
PEIRCE BARN AND PEIRCE SPRINGHOUSE
LOCATION WITHIN PARK
ROCK CREEK PARK
NAME OF PARK

DESIGNED	AES
DRAWN	KI
CHECKED	AES
DWG. NO.	821
	111775
DATE	08.31.12
SHEET	10 OF 11



2 A10 FLOOR PLAN – SECOND FLOOR



1 A10 FLOOR PLAN – FIRST FLOOR

SCALE A 4 0 4 8 SCALE OF FEET

30° BLDG.

LEGEND

STONE

A/E FIRM

QUINN EVANS ARCHITECTS

Mark	Sheet	REVISION	Date	Initial

PEIRCE BARN – ALTERNATE #3
ACCESSIBLE ENTRY WITH INTERIOR LIFT
TITLE OF DRAWING

A10
SUB SHEET NUMBER

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE – NATIONAL CAPITAL REGION
BRANCH OF DESIGN AND CONSTRUCTION

HISTORIC STRUCTURES REPORT
TITLE OF PROJECT
PEIRCE BARN AND PEIRCE SPRINGHOUSE
LOCATION WITHIN PARK
ROCK CREEK PARK
NAME OF PARK

DESIGNED	AES
DRAWN	KJ
CHECKED	
DWG. NO.	821
	111775
DATE	08.31.12
SHEET	11 OF 11

APPENDIX 3.2: RECORD PHOTOGRAPHS - PEIRCE BARN

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Figure 1. Peirce Barn, south elevation. (Source: QEA, 2011)



Figure 2. Peirce Barn, north elevation. (Source: QEA, 2011)



Figure 3. Peirce Barn, east elevation. (Source: QEA, 2011)



Figure 4. Peirce Barn, west elevation. (Source: QEA, 2011)



Figure 5. Peirce Barn, pedestrian entrance, south elevation. (Source: QEA, 2011)



Figure 6. Peirce Barn, carriage doors, south elevation. (Source: QEA, 2011)



Figure 7. Peirce Barn, first floor, entry hall gallery. (Source: QEA, 2011)



Figure 8. Peirce Barn, first floor, storage room foreground, furnace, entry hall gallery in the distance.
(Source: QEA, 2011)



Figure 9. Peirce Barn, first floor, storage room. (Source: QEA, 2011)



Figure 10. Peirce Barn, first floor, carriage gallery. (Source: QEA, 2011)



Figure 11. Peirce Barn, second floor, hayloft gallery, south elevation. (Source: QEA, 2011)



Figure 12. Peirce Barn, third floor, pigeon loft gallery. (Source: QEA, 2011)



Figure 13. Peirce Barn, third floor, storage area. (Source: QEA, 2011)



Figure 14. Peirce Barn, third floor, closet. (Source: QEA, 2011)

APPENDIX 3.3: RECORD PHOTOGRAPHS - PEIRCE SPRINGHOUSE

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Figure 1. Peirce Springhouse, north elevation. (Source: QEA, 2011)



Figure 2. Peirce Springhouse, east elevation. (Source: QEA, 2011)



Figure 3. Peirce Springhouse, south elevation. (Source: QEA, 2011)



Figure 4. Peirce Springhouse, west elevation. (Source: QEA, 2012)



Figure 5. Peirce Springhouse, upper level, south elevation. (Source: QEA, 2011)

PEIRCE SPRINGHOUSE – SITE WALLS



Figure 6. Peirce Springhouse – Site Walls, stairs at north wall. (Source: QEA, 2011)



Figure 7. Peirce Springhouse – Site Walls, north wall to the west of steps. (Source: QEA, 2011)

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APPENDIX 3.4: HISTORICAL DOCUEMNTS

National Register of Historic Places Nomination Form PH0011924
Pierce Springhouse and Pierce Barn (Art Barn)
October 25, 1973.[1]

[1] Over time the spelling of the Peirce/Pierce family name has fluctuated. The National Register of Historic Places nomination form uses the spelling Pierce.

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PH0011924

Form 10-306
(Oct. 1972)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

FOR FEDERAL PROPERTIES

(Type all entries - complete applicable sections)

STATE: Washington, D.C.
COUNTY: District of Columbia
FOR NPS USE ONLY
ENTRY DATE: OCT 25 1973

SEE INSTRUCTIONS

1. NAME

COMMON: Pierce Springhouse and ~~Pierce~~ Barn (~~Art Barn~~)
AND/OR HISTORIC: Pierce Plantation

2. LOCATION

STREET AND NUMBER: 2400 block of Tilden Street, N.W.
CITY OR TOWN: Washington
CONGRESSIONAL DISTRICT: Congressman Walter E. Fauntroy, D.C.
STATE: District of Columbia — CODE: 11
COUNTY: District of Columbia — CODE: 001

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☒ Building	☒ Public	Public Acquisition:	☒ Occupied BARN	Yes:
☐ Site ☐ Structure	☐ Private	☐ In Process	☒ Unoccupied	☒ Restricted BARN
☐ Object	☐ Both	☐ Being Considered	☐ Preservation work in progress	☐ Unrestricted
				☒ No

PRESENT USE *(Check One or More as Appropriate)*

☐ Agricultural	☐ Government	☒ Park	☐ Transportation	☐ Comments
☐ Commercial	☐ Industrial	☐ Private Residence	☐ Other *(Specify)*	
☒ Educational	☐ Military	☐ Religious		
☐ Entertainment	☐ Museum	☐ Scientific		

RECEIVED SEP 14 1973 NATIONAL REGISTER

4. AGENCY

~~Department of the Interior, National Park Service~~
REGIONAL HEADQUARTERS: *(If applicable)* National Capital Parks
STREET AND NUMBER: 1100 Ohio Drive, S.W.
CITY OR TOWN: Washington
STATE: District of Columbia — CODE: 11

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: National Capital Parks
STREET AND NUMBER: 1100 Ohio Drive, S.W.
CITY OR TOWN: Washington
STATE: District of Columbia — CODE: 11

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY: National Park Service survey in compliance with Executive Order # 11593
DATE OF SURVEY: 1972 ☒ Federal ☐ State ☐ County ☐ Local
DEPOSITORY FOR SURVEY RECORDS: National Capital Parks
STREET AND NUMBER: 1100 Ohio Drive, S.W.
CITY OR TOWN: Washington
STATE: District of Columbia — CODE: 11

FOR NPS USE ONLY
ENTRY NUMBER: 73 1002
DATE: 10/25/73

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☒ Good	☐ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)			(Check One)		
	☒ Altered	☒ Unaltered		☐ Moved	☒ Original Site	

DESCRIBE THE PRESENT AND ORIGINAL *(if known)* PHYSICAL APPEARANCE

The Pierce Springhouse is located in Rock Creek Park on the green median strip between the dual lanes of heavily used Tilden Street, N.W. The Springhouse is constructed of blue granite that was quarried locally at a nearby Broad Branch Quarry. The structure has two stories, with a brick chimney and a gabled wood shingled roof. The ground floor has three windows; the upper level has one window at either end of the building. The front and rear sides of the Springhouse are 15'2" wide and the side walls are 19'1" wide. The building of the Springhouse predated the erection of any other existing buildings at the former Pierce Plantation site.

The Pierce Barn is located in the same area of Rock Creek Park as the Springhouse and the mill. The barn is approximately 26' wide and 35' in depth and is constructed of blue granite that was quarried locally at the Broad Branch Road Quarry. The front wall of the barn facing Tilden Street is made of woodboards. The rear wall contains a single window on each of the three levels. The side wall facing Rock Creek contains four irregularly spaced windows two on each of the first two floors. The other side walls contain a total of six irregularly sized windows, three small windows located above the double barn door and the nearby main entry door. Three windows are located at the third floor just below the gabled roof. The roof is of gabled wood shingles with a single brick chimney.

The barn stands approximately 34' off heavily travelled Tilden Street, N.W. Immediately adjacent to the rear of the barn is a recently constructed comfort station, which was designed generally in keeping with the barn, and a 10 to 12 car parking lot.

The Pierce Barn was reopened in 1971 for use as an Art Barn with art classes and exhibits sponsored by the Associates of Artists Equity and the National Park Service. Some modifications were made to the interior of the barn to accomodate the artists. The basic design remained unchanged, but the roof was reshingled, doors were replaced, and random board was used to cover metal walls. Modern lighting and safety facilities and features were also installed at this time.

RECEIVED
SEP 1 4 1971
NATIONAL REGISTER

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

☐ Pre-Columbian	☐ 16th Century	☐ 18th Century	☐ 20th Century
☐ 15th Century	☐ 17th Century	☒ 19th Century	

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☐ Engineering	☐ Religion/Phi-	☐ Other *(Specify)*
☐ Historic	☐ Industry	losophy	_____
☒ Agriculture	☐ Invention	☐ Science	_____
☐ Architecture	☐ Landscape	☐ Sculpture	_____
☐ Art	Architecture	☐ Social/Human-	_____
☒ Commerce	☐ Literature	itarian	_____
☐ Communications	☐ Military	☐ Theater	_____
☐ Conservation	☐ Music	☐ Transportation	_____

STATEMENT OF SIGNIFICANCE

The Pierce Springhouse and Barn are part of th e remains of the Isaac Pierce Plantation that during the early 1800's was a prosperous farm and grist mill operation. The Springhouse, used to cool milk and butter, was the first built, being constructed in 1801. The barn was one of several built by Pierce and its construction also predated the construction of the Mill, which is the focal point of the Plantation remains. But Isaac Pierce who built the mill was not a miller by trade but rather a farmer and a millwright. The mill was operated by a variety of neighboring millers, but the farm itself was worked by the Pierce family. The Pierce Plantation in its entirety is significant as an example of the social and economic history of the area.



SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

National Capital Parks files on the Pierce Mill Plantation and restoration, 1100 Ohio Drive, S.W. Washington, D.C.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

CORNER	LATITUDE			LONGITUDE		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	°	'	"	°	'	"
NE	°	'	"	°	'	"
SE	°	'	"	°	'	"
SW	°	'	"	°	'	"

OR

LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

LATITUDE			LONGITUDE		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
38°	56'	27"	77°	03'	13"
SPRINGHOUSE					
38	56	26	77	03	09

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: less that 1 each/ART BARN

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

RECEIVED SEP 14 1973 NATIONAL REGISTER

11. FORM PREPARED BY

NAME AND TITLE: Helen Dillon, Historian

DATE: November 27, 1972

BUSINESS ADDRESS: National Capital Parks

STREET AND NUMBER: 1100 Ohio Drive, S.W.

PHONE: 426 =6957

CITY OR TOWN: Washington

STATE: District of Columbia

CODE: 11

12. CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:

☒ Yes
☐ No
☐ None

x _____
State Liaison Officer Signature

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Liaison Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The recommended level of significance is ☐ National ☐ State ☐ Local

Russ Dickenson — 6/21/73
Federal Representative Signature — *Date*

Dir, Nat'l Cap Parks
Title

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Ernest A Connally
~~Director, Office of Archeology and Historic Preservation~~
Associate Director, Professional Services

Date OCT 25 1973

ATTEST: _____
Keeper of The National Register

Date 10.18.73

SEE INSTRUCTIONS

APPENDIX 3.5: SUPPLEMENTARY REPORTS

Assessment of Actions Having An Effect on Cultural Resources
IDLCS 11926 Peirce Springhouse, 4/9/98.

Assessment of Actions Having An Effect on Cultural Resources
Art Barn [Peirce Barn] and [Peirce] Springhouse, 7/27/87.

Assessment of Actions Having An Effect on Cultural Resources
Carriage House [Peirce Barn], 5/5/86.

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OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 8 5

To: STEVE STRACH or CINDY COX | From: R. STEVENS

Dept./Agency: | Phone # 619.7202

Fax # 202.282.7612 | Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

ORIGINAL-
792-98-03

NCFA

Appendixes

RM

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. DESCRIPTION OF UNDERTAKING

1. **Park:** Rock Creek Park **Tracking No.:** ROCR-PSH-001

2. **Work/Project Description:** Peirce Springhouse - Repair/Rehabilitate damage caused by several motor vehicles impacting the structure.-Lead abatement.

   a. **Project Name & No.:** IDLCS11926 Peirce Springhouse

   b. **Describe project and area of potential effects (as defined in 36 CFR 800.2c); explain why work/project is needed.**

   See attached combined Trip Report 12/1/96 and Scope of Work, Specifications, Drawings

3. **Has the area of potential effects been surveyed to identify cultural resources?**

   ___ **No**
   X **Yes - Source or Reference:** National Register of Historic Places 73000222
   X **Check here if no known cultural resources will be affected.** (if area has been disturbed in the past, please explain or attach additional sheets to describe nature, extent, and intensity of disturbance)

4. **Affected Resource(s):** (include name, IDLCS no., location, with UTM coordinates when available, and National Register Status)

   Name and number(s): 11926 N/A Location: _____ NR status #: C
   Name and number(s): _____ Location: _____ NR status #: ___
   (Repeat for each affected resource)

NR Status Numbers:
1 listed in Register and documented
2 listed but not documented
3 determined eligible by the Keeper of the Register
4 determined ineligible by the Keeper of the Register
5 found eligible for 106 purposes through consultation with the SHPO
6 found ineligible for 106 purposes through consultation with the SHPO
7 a designated National Historic Landmark
8 within a Register-eligible district - please name district
0 undetermined

5. **The Proposed Action Will:**

   ___ **Destroy, remove, or alter features/elements from a historic structure.**
   X **Replace historic features/elements in kind.**
   ___ **Add non-historic features/elements to a historic structure.**
   ___ **Alter or remove features/elements of a historic setting or environment (including terrain).**
   ___ **Add non-historic features/elements (including visual, audible, or atmospheric) to a historic setting or cultural landscape.**
   ___ **Disturb, destroy, or make archeological resources inaccessible, or alter terrain.**
   ___ **Potentially affect presently unidentified cultural resources.**
   ___ **Begin or contribute to deterioration of historic fabric, terrain, setting, landscape elements, or archeological or ethnographic resources.**
   ___ **Involve a real property transaction (exchange, sale, or lease of land or structures).**
   ___ **Other (please specify):**

6. **Measures to prevent or minimize loss or impairment of historic/prehistoric fabric, setting, integrity or data:** All damaged fabric will be replaced in kind. No known archeological resources will be impacted. All work will be closely monitored by the Park Section 106 Coordinator.

7. **Supporting Study Data:** (attach if feasible; if action is in a plan, give name and project or page number)

   Historical background data from various sources attached.

8. **Attachments:** [ ] Maps [X] Scope of Work [ ] Specifications [X] Photographs [ ] Samples
   [ ] Drawings [ ] Site Plan [ ] List of Materials [ ] Archeological Clearance, if applicable
   [ ] Other _____

9. **Prepared By:** Stephen G. Strach **Date:** 4/9/98

   Title: Park Section 106 Coordinator **Telephone:** 202-722-1339

B. PARK 106 COORDINATOR REVIEW AND RECOMMENDATIONS (completed by the park Section 106 coordinator)

1. **Assessment of Effect:**

   _____ No Effect ___X___ No Adverse Effect _____ Adverse Effect

2. **Compliance Requirements:** (the following is the park's assessment of Section 106 process needs and requirements for this undertaking)

   [X] A. STANDARD 36 CFR 800 CONSULTATION
   Consultation under 36 CFR 800 is needed subsequent to preparation and review by appropriate CRM advisors of this form.

   [X] B. PROGRAMMATIC EXCLUSION
   The above action meets all conditions for a programmatic exclusion under Stipulation IV of the 1995 Servicewide PA for Section 106 compliance.
   APPLICABLE EXCLUSION(S): IV.B ___9___ [Specify 1-13 or IV.C addition to the list of exclusions.]

   [ ] C. PLAN-RELATED UNDERTAKING
   Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 1995 Servicewide PA and 36 CFR 800.

   [ ] D. UNDERTAKING RELATED TO ANOTHER AGREEMENT
   The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR 800.7 or counterpart regulations.

   [ ] E. STIPULATIONS/CONDITIONS:
   Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR 800 criteria of effect or to mitigate potential adverse effects.

3. **Request Review by the Following Specialists:** The park is requesting review by specialists as indicated in the check-off boxes in Part C.

   Rebecca Stevens, Dr. Stephen Potter, Gary Scott

4. **Recommended By:** Stephen G. Strach, Park Section 106 Coordinator

   Date: 4/9/98

C. REVIEW BY CULTURAL RESOURCE SPECIALISTS

I have reviewed this proposal for conformity with requirements for the Section 106 process, with the 1995 Servicewide Programmatic Agreement (if applicable) and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, NPS Management Policies, and NPS-28. Below or attached is my best professional advice about this project and about issues relevant to the Section 106 process, including identification and evaluation of historic properties, assessment of the effects of this undertaking on historic properties, further review by the SHPO and Advisory Council, and mitigation and consultation on any potential adverse effects.

[-] ARCHEOLOGIST

Name: Dr. Stephen Potter
Date: 9/22/98
Comments: Area has been previously disturbed.

[ ] *Check if project does not involve ground disturbance*
Assessment of Effect: ✓ No Effect ___ No Adverse Effect ___ Adverse Effect ___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[ ] HISTORICAL LANDSCAPE ARCHITECT

Name:
Date:
Comments:

[ ] *Check if project meets Secretary's Standards*
Assessment of Effect: ___ No Effect *on historic/cultural landscapes* ___ No Adverse Effect ___ Adverse Effect
___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[ ] CURATOR

Name:
Date:
Comments:

Assessment of Effect: ___ No Effect ___ No Adverse Effect ___ Adverse Effect ___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[X] HISTORIAN

Name: Gary Scott
Date:
Comments:

Assessment of Effect: ___ No Effect ___ No Adverse Effect ___ Adverse Effect ___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[ ] HISTORICAL ARCHITECT

Name: Rebecca Stevens
Date: 9.25.98
Comments: Rebecca J Stevens

[X] *Check if project meets Secretary's Standards*
Assessment of Effect: ___ No Effect *on historic structures* ___ No Adverse Effect ___ Adverse Effect
___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[ ] ETHNOGRAPHER

Name:
Date:
Comments:

Assessment of Effect: ___ No Effect ___ No Adverse Effect ___ Adverse Effect ___ Programmatic Exclusion
Recommendations for conditions or stipulations:

[ ] OTHER ADVISERS

Name:
Date:
Comments:

Assessment of Effect: ___ No Effect ___ No Adverse Effect ___ Adverse Effect ___ Programmatic Exclusion
Recommendations for conditions or stipulations:

D. SUPERINTENDENT'S APPROVAL

The proposed work conforms to NPS Management Policies and NPS-28 and I approve the recommendations, stipulations or conditions noted in Section B of this form.

Signature of Superintendent Date

FY 98 HISTORIC STRUCTURE STABILIZATION PROJECT REQUEST

Park: Rock Creek Park

Historic Structure Name(s)/List of Classified Structures Number(s) (IDLCS): Pierce Springhouse - IDLCS 11926

Funding Requested: $60,000

Project Objectives and Description:

The U.S. Government acquired the Pierce Springhouse tract in 1897. Located on this property is a small ca.1801 springhouse constructed of blue granite that was quarried locally at the nearby Broad Branch Quarry. The structure has two stories with a brick chimney and gabled roof. In sum, the structure is significant as a rare example of surviving early 19th century springhouse architecture. It is listed on the National Register of Historic Places No.73000220 (copy attached).

This structure is situated in the middle of a busy traffic median flanked on each side by Tilden St.,N.W. During the past ten years the northeast corner of the structure has been struck numerous times by automobiles hydro-plaining on black ice that covers the adjacent highway. In November of 1996 a vehicle demolished the northeast corner of the structure causing massive damage (see attached photographs) including major cracks in the main wall between the northeast and southeast corners that may result in further collapse. The interior wood floor is severely damaged and unsafe to walk on. The structure may not survive the winter of 1997-1998 without further major structural damage being extremely susceptible to the elements at this time.

The objective of this project is to provide emergency stabilization to prevent further loss of this unique structure. The project would consist of refilling/rebuilding the northeast corner, repointing major structural cracks through two floors, reshoring the sagging roof and shoring up the interior floor which is in danger of collapsing, and patching damaged areas of the roof to prevent further water damage. In addition, code approved ballards will be situated adjacent to the structure to form a barrier against further traffic encroachments.

Form Completed By: Stephen G. Strach, Cultural Resource Management Specialist ROCR
Telephone: (202) 426-6828

ROCK CREEK PARK —
PIERCE SPRING HOUSE HDLCS - 11926

Photographer: STEPHEN STRACH
NOV. 1996



NORTHEAST CORNER
← DEMOLISHED -
~~[illegible]~~ TILDEN ST. ADJACENT.

DEMOLISHED CORNER
↙ ↓





FORM 10-[illegible]
(REV 1-76)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

DEVELOPMENT/STUDY PACKAGE PROPOSAL

FOR THIS PACKAGE

PACKAGE NO. 559

REVISION NO.

ORG. NO.	PARK (OR OTHER ORIGINATOR)	DEVELOPED AREA (NAME)	D.A. CODE	REGION
3450	Rock Creek Park	Springhouse	PG	NCR

STATE	STATE CODE	COUNTY(s)	CONGRESSIONAL DISTRICT(S)
Washington	DC	District of Columbia	At Large

PACKAGE TITLE: REHAB HISTORIC STRUCTURE SPRINGHOUSE

STUDY PACKAGE ☐
NEW CONSTRUCTION B ☐
REHABILITATION A ☒

NEW PACKAGE ☒
REVISION ☐

CRITERIA (INSERT 'X's)	PARK PRIORITY	DATE	REG'N PRIORITY	DATE

PROGRAM THRUST, STATUS AND OTHER INFORMATION

CULTURAL RESOURCE PRESERVATION PG

WILL ADDITIONAL OPERATING FUNDS AND POSITIONS BE NEEDED UPON COMPLETION OF THIS PACKAGE?
(IF 'YES' EXPLAIN NEEDS IN SECTION XI OUTLINE OF PLANNING AND MANAGEMENT REQUIREMENTS)
YES ☐
NO ☐

FULL PACKAGE DESCRIPTION:

The Springhouse is in need of preservation/rehabilitation to protect and retain the historical integrity of the facility.

Develop plans and specifications and perform the following:

1. Repoint walls on the interior and exterior of the facility.
2. Replace masonry along the foundation of the building.
3. Replace window frames and doors.
4. Install barriers to prevent vehicles from crashing into the building. This has occurred several times causing structural damage.

PACKAGE JUSTIFICATION/CONSEQUENCES:

The Springhouse is an integral part of the Pierce/Klingle Estate and is a part of the interpretive program at Pierce Mill. The building is progressively deteriorating on the interior and exterior. Rehabilitation work has not been performed on the structure in many years. It is located in a flood plain which creates a moisture problem for the historic fabric. If preservation is not performed on the building, deterioration will continue. Preservation will preserve the historic structure and satisfy management objectives.

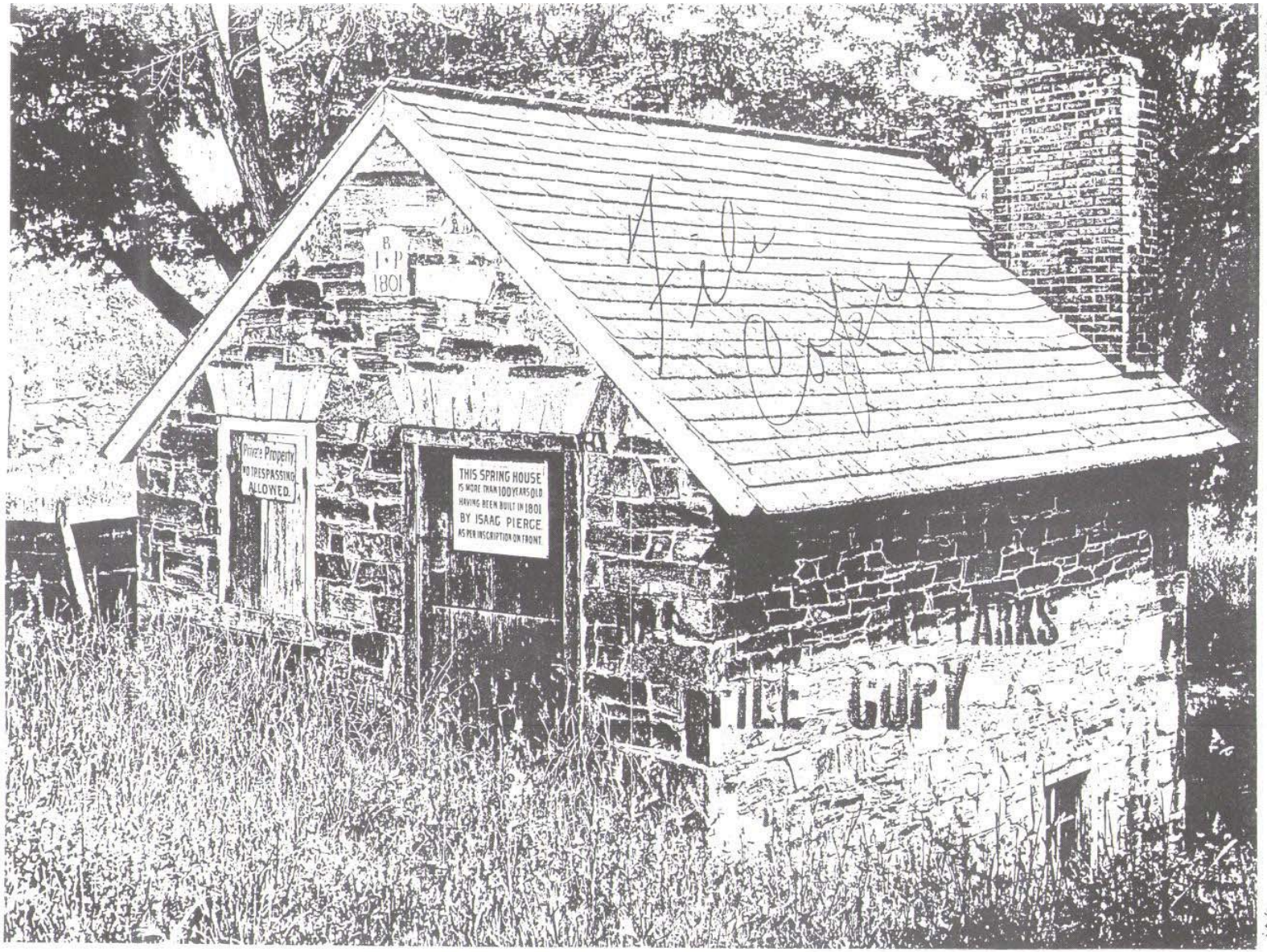
Estimated cost: $60,000

NOV. 1996 - NORTHEAST CORNER OF STRUCTURE COLLAPSED.

PLANNING AND MANAGEMENT REQUIREMENTS: *(Follow instructions and outline provided in Program Formulation Guideline)*

The Springhouse is listed on the National Register of Historic Places, therefore, compliance with Section 106 of the Historic Preservation Act is required.

ORIGINATOR (Signature and Title)	DATE	CONCURRENCE (Signature of Superintendent or Equivalent Official.)	DATE
Albert L. Barnes/Supervisory Park Ranger	3/8/93	William R. Nields	3/9/93
APPROVAL (Signature of Regional Director or Equivalent Official)			DATE


I·P
1801
Private Property
NO TRESPASSING
ALLOWED.
THIS SPRING HOUSE
IS MORE THAN 100 YEARS OLD
HAVING BEEN BUILT IN 1801
BY ISAAC PIERCE
AS PER INSCRIPTION ON FRONT
PARKS
FILE COPY

CIRCA 1910-?

SPRINGHOUSE

From: Steve Strach at NP--NCR 12/2/96 3:58PM
To: Regina Moriarty at NP--NCR, Adrienne Applewhaite-Coleman at NP-ROCR, Rebecca Stevens at NP-NCRO-FIN, Daniel Hodgson at NP--NCR, Paul Schilinski at NP--NCR
Subject: Pierce Springhouse - Condition Assessment
---------- Message Contents ----------

On Monday afternoon 12/2/96 Rebecca Stevens, NPS-SSO Historic Architect and I inspected the condition of the Pierce Springhouse to assess what course needs to be followed to restore the damage to the structure caused over the holiday weekend. First, the damage is much larger then at first perceived. At least, three quarters of the northeast wall (Both floors) and nearly all of the northwest wall will need to be basically dissembled and rebuilt. That portion of the northeast wall that is still standing has massive cracks throughout and is partially buckling, making it structurally unsound. All of the wood doorframes and windowframes need major rehabilitation work. The second floor level interior floor is structurally unsound, a small portion has begun to collapse. The basement has about one foot of undrained water sitting in it. We are not certain if there is any drain down which this water can receed. Glass window panes need to be replaced. The northeast corner of the roof sustained some minor damage.

Things that need to be done ASAP:

Some type of temporary support beam needs to be put in place very quickly to support the roof joists/beams in the northeast corner at the point where all the masonry dissolved. Heavy rains are expected again this coming weekend. The beam needs to be in place NOW.

After lunch on 12/3/96 (today) I directed three maintenance men in a basic cleanup operation. Almost all of the collapsed stone, mortise, and plaster was removed from the upper level exterior and interior of the structure and removed to the lower level exterior. Wood associated with the windowframe knocked out on the southwest wall was salvaged and stored inside the structure. Leaves surrounding or blocking access paths to the structure were cleared. All debris was cleared from the area adjacent to the damaged curbs. Salvaged stone, etc. was not covered as recommended by Rebecca Stevens. Time was limited and cover material was not immediately available.

The structure needs to be reboarded ASAP.

The salvaged stone needs to be repiled by approximate size ASAP. This will be a great help to the mason(s) that will tackle this job. The assorted piles should be covered with plywood not plastic.

The mortise needs to be analyzed. Samples were delivered by me to Rebecca Steven's office today.

We need to secure a mason(s) ASAP.

Sean McCabe from NCA suggested that IceT money might be

available for this work?

Rebecca Stevens suggested that we may need to employ a three-tiered approach which she will work up and pass on to us by week's end.

The DC Dept of Public Works/Transportation/Highways was contacted by ROCR and will reinstall damaged curbing on 12/4/96.

Paul Bowman will present a plan to install wooden guard rails adjacent to the structure along Tilden Street. For the record I am opposed to wood being used at this point. We need heavy concrete pilings with reflectors. As a quick and dirty solution we should drop a jersey barrier down immediately to prevent any more unwanted strikes at the building. In the interest of preservation lets forget temporarily how it looks.

Also,who wants to take responsibility for getting DC whoever out to do something about the water situation on Tilden Street that causes the sheets of ice that in turn cause the accidents that continually hurt our building and may yet cause a fatal traffic injury? Anybody want a lawsuit?

Thats all for now.

United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Area
1100 Ohio Drive, SW.
Washington, D.C. 20242

H30 (NCA-SCR)

JAN 17 1997

Memorandum

To: Superintendent, Rock Creek Park

From: Superintendent, National Capital System Support Office

Subject: Trip Report, Pierce Springhouse Emergency Repairs

Attached is the Trip Report produced by Chief Historical Architect Rebecca Stevens from her site visit on December 2, 1997, to the Pierce Springhouse.

(SIGNED) JOSEPH M. LAWLER

Attachment

cc:
ROCR: Cultural Resource Specialist Strach
ROCR: Chief of Maintenance Cox

12/1/96 TRIP REPORT
ROCK CREEK PARK
PIERCE SPRINGHOUSE

Prepared by: Chief Historical Architect Rebecca L. Stevens AIA

Purpose of Trip:

The park's Cultural Resource Specialist, Steve Strach, requested my services. He asked me to inspect the Pierce Springhouse and give my recommendations for the damage caused by the automobile that crashed into the building on November 27, 1996.

Background on Pierce Springhouse

Built in 1801, the Pierce Springhouse is arguably one of the oldest buildings in Washington D.C.; probably only the White House, the Capitol, and one or two other standing structures are older. It is one of the last remaining support buildings for the Pierce estate and pre-dates, by 20 years, the house is now used as the park headquarters.

Park Road, the street that runs beside the Springhouse, was originally a trade route to the Pierce Mill from the Rockville Turnpike. Park Road ran south of the structure. This route became an official east-west route across Rock Creek Park in 1872. The road was widened, regraded, and surfaced with gravel between 1898 and 1902. It was continuously upgraded to meet the increased demands of a major transportation route. In the late 1930's or early 1940's, the road was divided with the west bound lanes going north of the Springhouse and the west bound lane routed to the south. No documented major changes have altered the road since then, but repaving and routine road maintenance has occurred.

General Observations

The Springhouse is a two story rubble-filled stone structure. The walls are in excellent condition considering their age and the number of cars that have run into the building. The lime/clay mortar and grout appears to be original. Wooden timbers and framing support the gable roof and second floor. They show signs of deterioration at their ends. The roof has wooden shingles and was last replaced in the early 1970's. There are single door openings to access the basement and first floor. Windows are provided at both levels. Currently, shutters cover the windows for security purposes.

The first floor cannot safely support any loads because the floor boards are rotten. The basement level was not accessible at the time of my site visit; it was flooded. Maintenance crews have gone in since my visit, pumped the water from the basement, and cleaned out the floor drain. Obviously, the spring is still active.

ACCIDENT RELATED OBSERVATIONS

The accident had occurred 6 days before I was called to the site. By then the park maintenance staff had installed some basic security enclosures for the Springhouse. Plywood was placed over the 6 foot by 6 foot hole in the northeast corner and a window sash was removed from the north face of the building.

Masonry

In addition to the hole in the northeast corner, I observed that the east face wall was bulging along one half the length of the exterior wall and from the basement grade up to the sill of the roof rafters. The first floor stone door lintel was displaced. The north window framing was screwed. The stones from the wall were lying approximately where they fell from the accident.

Wood

The east side roof support was cantilevered out into the hole with no support. The beam for rafters was starting to sag. The rafters and ridge were starting to drop. Several wood shingles were missing and damaged at the roof eave.

The wood floor structure may not be tied into the masonry walls due to the movement of the walls. This could not be verified because the basement could not be accessed and the first floor did not appear to be safe. There was a hole in the floor where something had fallen through.

Site Conditions

The Springhouse sets in a hill. Road improvements have been made and the grade around the building has been altered. Retaining walls support the road bed and maintain the approximate original grade around the east and south sides of the building. The road is just feet away from the northeast corner and north side of the Springhouse. The west bound traffic is going up a hill as it passes the building. There are no barriers in place to protect the building.

Water sheets across the road in front of the building; the water runs downhill of a catch basin and misses the catch basin. When the sheet of water freezes, cars accelerating up the hill hit the icey patch and slide into the building.

The concrete curbing directly beside the building was displaced the day I visited the site. This damaged occurred last winter. The gap in the curbing has allowed water to get behind the curb. The water is causing erosion on the northwest side of the Springhouse.

Recommendations

Immediate Action Operational Dollars $500 including labor)

The following were suggested to the park staff for action within 2 weeks of my site visit. Since the trip, many of the actions have been taken.

1. Install temporary bracing under the cantilevered roof beam.

2. Collect the stones that have fallen out of the wall. Gather in one place. Protect from thievery with a plywood box or remove from the site or store in the basement. (It will be nearly impossible to find replacement stones to match the original and these stones are dressed and sized. They will appeal to those wanting "nice" stones for their garden, or little wall.)

3. Remove loose stones from the damaged edges of the masonry.

4. Collect samples of the interior plaster, mortar, and grout for analysis. The repairers must use a mortar and grout that is similar to, but compatible with, the original lime/clay mix.

5. Install a temporary barrier between the road and building to protect the Springhouse from additional vehicular damage. This temporary barrier may have to remain in place until a permanent solution can be implemented.

6. Sandbag the curb in the location where water starts its course across the road. The objective is to direct the water down the north curb gutter rather that across and down the south gutter.

7. Sand bag the area where the curb is displaced to reduce ground erosion.

8. Install shingle patches in areas of missing shingles to ensure positive drainage.

Damage Repair/Preservation Actions (Emergency, Repair/Rehab,or Cyclic Funds $45,000)

These recommendations are made with the understanding that the Preservation Standards outlined in the Secretary of the Interior's Standards for the Treatment of Historic Properties are the quality measurement for the workmanship, methods, and materials of the repairs. To reduce additional damage and deterioration and to save costs, these repairs should be done within 6 months of the accident.

1. Rebuild bulged area of east wall. (Double masonry wall with rubble fill.)

2. Rebuild the northeast corner of the building.

3. Realign masonry lintel, frame, and structure of the north wall doors and windows.

4. Repair wooden roof sill beam, if necessary, and reset.

5. Install new wooden shingles in areas where shingles are missing.

6. Repair north door wooden frame. Reinstall with the door.

7. Repair north window wooden frame and sash. Reinstall.

Long Term Preservation Recommendations (Cyclic Maintenance, Repair/Rehab, Cultural Resource Preservation, Emergency Funds $35,000)

Again, any long term work must meet the preservation standards.

1. Repoint all areas having loose or missing mortar joints.

2. Repair and repaint wooden frames and sash. Install a louver for ventilating in several windows to provide ventilation. Store unused window sash in the building.

3. Repair deteriorated floor beams and wood flooring.

4. Reroof the building. This roof is near the end of its life cycle.

5. Put the building on the park's routine maintenance schedule to:
   - Clean out basement floor drain.
   - Clean out areaway to basement door.
   - Check for and remove pests (wasps, bees, and rodents)
   - Check water infiltration.

6. Work with the city on installing an appropriate masonry wall between the road and building. It is preferred that you work with the city to remove the west bound road, route all traffic on the south road, and reestablish the historic grades around the Springhouse.

XXX FORM

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

(Attach continuation sheets as necessary)

This form is required for all actions that have the potential to affect historic properties.

A. Originating Office

1. Park: Rock Creek Park Project 674 combined with 667

2. Description of proposed action:
   [ ] Implementing action included in plan under PMOA
   [X] Other PMOA Action Repair of Park Feature PRESERVATION MAINTENANCE
   [ ] Action not under PMOA.

3. Explain why the action is needed: Inspection revealed deterioration. Rehabilitation will restore and maintain integrity of building.

4. Cultural resources affected by proposed action (name and LCS number, if applicable): Art Barn, Peirce Mill, Spring House, and Old Stone House

5. The proposed action will (check as many as apply):

   ___ Destroy historic fabric.
   ___ Remove historic fabric.
   ___ Replace historic fabric in kind.
   ___ Replace missing historic fabric.
   ___ Add nonhistoric elements to a historic structure.
   ___ Remove nonhistoric elements from a historic structure.
   ___ Alter historic terrain, groundcover, or vegetation.
   ___ Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment.
   ___ Reintroduce historic elements in a historic setting or environment.
   ___ Remove historic elements from a historic environment.
   ___ Remove nonhistoric elements from a historic environment.
   ___ Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources.
   ___ Possibly disturb presently unidentified archeological resources or historic fabric.
   ___ Incur gradual deterioration of historic fabric, terrain, or setting.
   _X_ Other (Describe briefly): Repair and maintain historic buildings

   Describe the indicated effect(s) concisely: Point, caulk, and paint buildings with similar appearing material.

6. Identify supporting approved plan(s), comment and/or action thereon by Advisory Council on Historic Preservation, dates of ACHP action and NPS approval, and section(s) of the plan(s) pertaining to the action. If none, so state:

   NONE

March 1982

7. Identify relevant NPS management policies and guidelines:

8. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data: Preparation of detailed plans to govern work.

9. Identify supporting study data and date(s) of preparation (attach if feasible):

10. Prepared by: David P. Neuman Title: Facility Manager
11. Signature of Park Superintendent: Georgia A. Tollard Date: 7/27/87

B. Regional Cultural Resources Staff Review and Certification

1. The foregoing assessment is adequate; the proposed action is consistent with all applicable NPS management policies, standards, and guidelines reviewed and concurred in by the Advisory Council; and the proposal incorporates all feasible measures to minimize adverse effects to cultural resources.

2. The proposed action is authorized by a planning document or program reviewed and concurred in by the Advisory Council.

		Yes	No	N/A		
(Negative certifications must be justified on attachments.)	1	[ ]	[ ]			
	2	[✓]	[ ]	[ ]	Stephen Potter Regional Archeologist	8/26/87 Date
[ ] Energy Consultation Held	1	[ ]	[ ]	[ ]		
	2	[ ]	[ ]	[ ]	Yan Hall Regional Historian	8/19 87 Date
_____ _____ Regional Energy Coordinator Date	1	[✓]	[ ]	[ ]		
	2	[✓]	[ ]	[ ]	Paul Goldberger Regional Historical Architect	8/12/87 Date
	1	[✓]	[ ]	[ ]		
	2	[✓]	[ ]	[ ]	Pamela Beth West Regional Curator	9/16/87 Date

Additional requirements of the proposed action:

C. Regional Director Approval of Proposed Action including Additional Requirements

[✓] The proposed action, including any additional requirements stated above, meets all conditions in B.1 and 2.

9/18/87 Lowell V. Stuart
Date Regional Director

D. WASO Record

Assessment received and noted:

_____ _____
Associate Director, Cultural Resources Management Date

Drawings Attached

XXX FORM

RD LOG NO. 6/24 (3)

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

(Attach continuation sheets as necessary)

This form is required for all actions that have the potential to affect historic properties.

A. Originating Office

1. Park: Rock Creek Park - Carriage House

2. Description of proposed action:
   [ ] Implementing action included in plan under PMOA
   [x] Other PMOA Action _____
   [ ] Action not under PMOA.

3. Explain why the action is needed: The resource is in a progressive deteriorating condition, rehabilitation is needed to perserve the fabric.

4. Cultural resources affected by proposed action (name and LCS number, if applicable): Carriage House - LCS Number - 11927-171 (03-26-81)

5. The proposed action will (check as many as apply):

___ Destroy historic fabric.
___ Remove historic fabric.
_x_ Replace historic fabric in kind.
_x_ Replace missing historic fabric.
___ Add nonhistoric elements to a historic structure.
_x_ Remove nonhistoric elements from a historic structure.
___ Alter historic terrain, groundcover, or vegetation.
___ Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment.
___ Reintroduce historic elements in a historic setting or environment.
___ Remove historic elements from a historic environment.
___ Remove nonhistoric elements from a historic environment.
___ Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources.
___ Possibly disturb presently unidentified archeological resources or historic fabric.
___ Incur gradual deterioration of historic fabric, terrain, or setting.
___ Other (Describe briefly):

Describe the indicated effect(s) concisely: Replace two window sills and sash board; caulk and seal all windows; replace lower and upper entrance double doors and paint; and point and caulk exterior of entire facility.

6. Identify supporting approved plan(s), comment and/or action thereon by Advisory Council on Historic Preservation, dates of ACHP action and NPS approval, and section(s) of the plan(s) pertaining to the action. If none, so state:

None

March 1982

7. Identify relevant NPS management policies and guidelines;

NPS Management Policies, 1978 V., Culture Resource Management and Preservation

8. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data: All rehabilitation/restoration will be intended to reproduce the existing structure as it was originally. Management Policy 2-78, VI-1.

9. Identify supporting study data and date(s) of preparation (attach if feasible):

NONE

10. Prepared by: David C. Yeowman Title: Facility Manager
11. Signature of Park Superintendent: Georgia A. Ellard Date: 5/5/86

B. Regional Cultural Resources Staff Review and Certification

1. The foregoing assessment is adequate; the proposed action is consistent with all applicable NPS management policies, standards, and guidelines reviewed and concurred in by the Advisory Council; and the proposal incorporates all feasible measures to minimize adverse effects to cultural resources.

2. The proposed action is authorized by a planning document or program reviewed and concurred in by the Advisory Council.

	Yes	No	N/A		
(Negative certifications must be justified on attachments.)	1 [/]	[ ]	[ ]		
	2 [ ]	[ ]	[/]	Stephen R. Potter	6/12/86
				Regional Archeologist	Date
	1 [ ]	[ ]	[ ]		
[ ] Energy Consultation Held	2 [ ]	[ ]	[ ]	Gary Scott	6/12/86
				Regional Historian	Date
	1 [✓]	[ ]	[ ]		
Regional Energy Coordinator Date	2 [ ]	[ ]	[✓]	Paul Goldyn	6/12/86
				Regional Historical Architect	Date
	1 [✓]	[ ]	[ ]		
	2 [ ]	[ ]	[✓]	Pamela Bethell West	6/23/86
				Regional Curator	Date

Additional requirements of the proposed action:

C. Regional Director Approval of Proposed Action including Additional Requirements

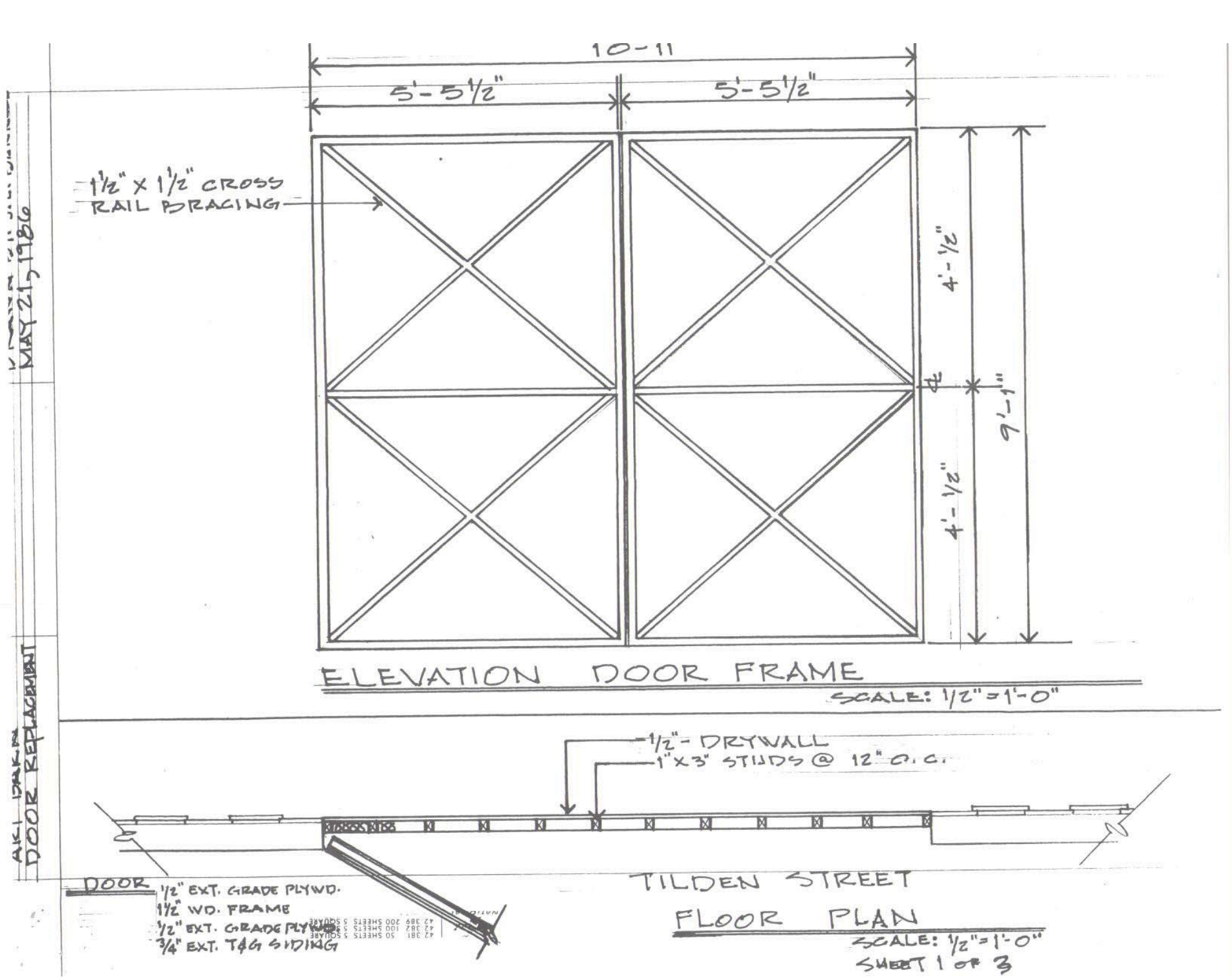
[✓] The proposed action, including any additional requirements stated above, meets all conditions in B.1 and 2.

6/25/86 Robert Stanton
Date Regional Director

D. WASO Record

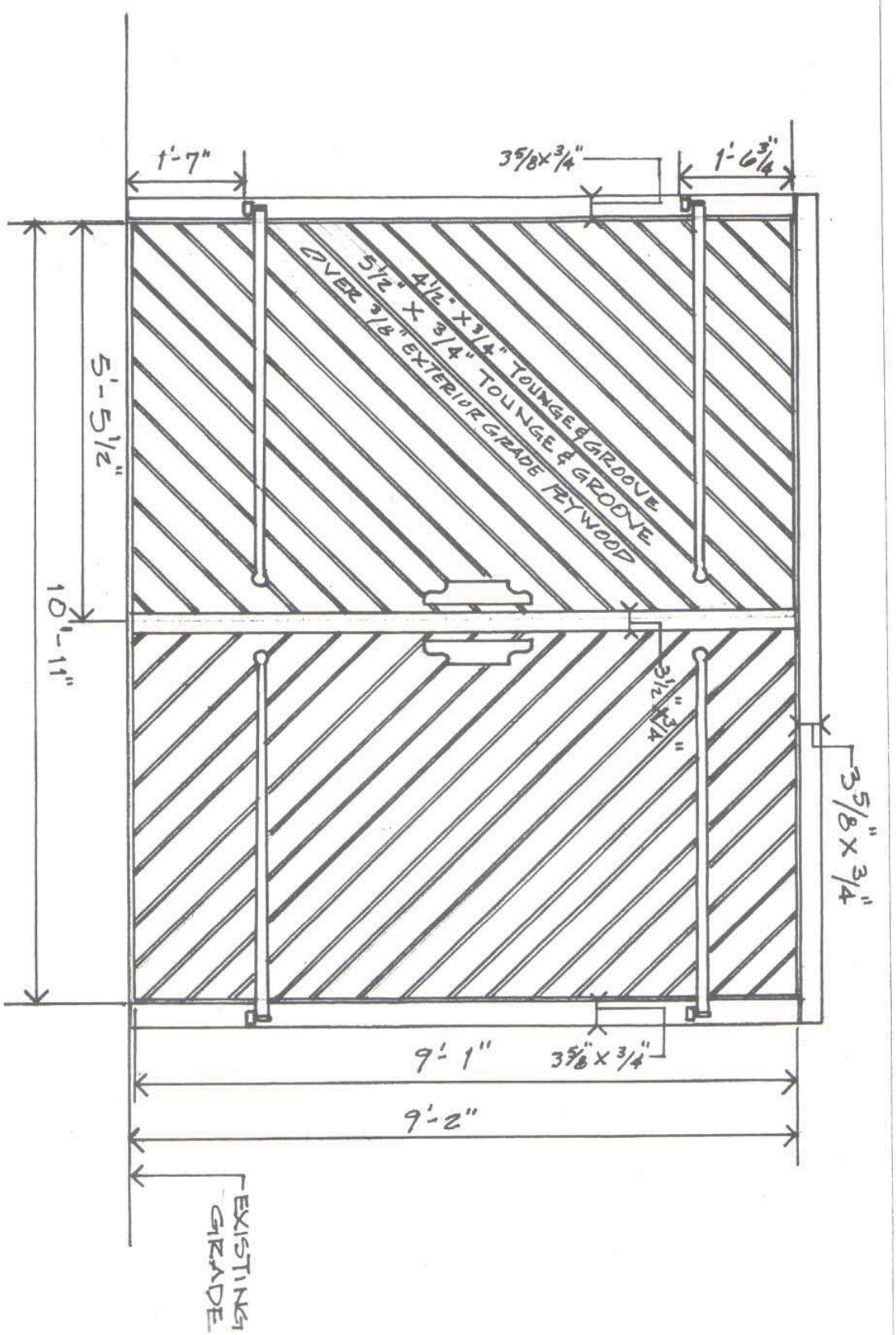
Assessment received and noted: _____ _____
Associate Director, Cultural Resources Management — Date

March 1982


10-11
5'-5½"
5'-5½"
1½" X 1½" CROSS RAIL BRACING
4'-½"
4'-½"
9'-1"
ELEVATION DOOR FRAME
SCALE: ½"=1'-0"
½" - DRYWALL
1"X3" STUDS @ 12" O.C.
DOOR
½" EXT. GRADE PLYWD.
1½" WD. FRAME
½" EXT. GRADE PLYWD.
¾" EXT. T&G SIDING
TILDEN STREET
FLOOR PLAN
SCALE: ½"=1'-0"
SHEET 1 OF 3
MAY 21, 1986
DOOR REPLACEMENT
AKL DRAWN

ART BARN
DOOR REPLACEMENT

DRAWN BY: J.L. BURRELL
MAY 21, 1986



ELEVATION @ TILDEN STREET

SCALE: 1/2" = 1'-0"

42 381 100 SHEETS 5 SQUARE
42 382 200 SHEETS 5 SQUARE
42 389 300 SHEETS 5 SQUARE
NATIONAL

MEANSCO FORM 180

QUANTITY SHEET PRICES PER GALLAGHER & HIGHLY

PROJECT ART BARN DOOR REPLACEMENT — SHEET NO. 123-86-24

LOCATION WEST of BEACH DRIVE ON — SECTION PARK ROAD N.W. — ESTIMATE NO. 3 OF 3

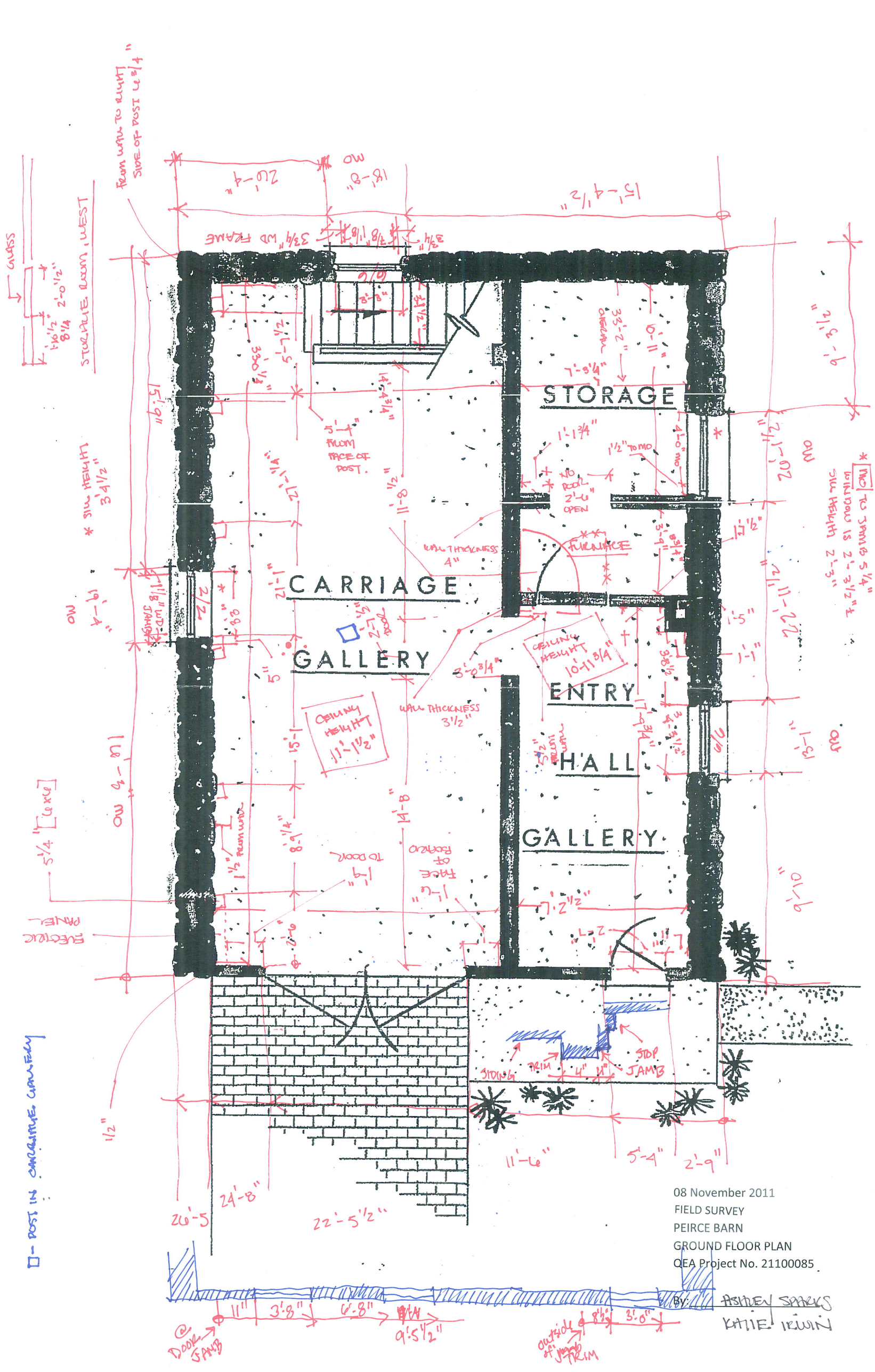
ARCHITECT J. L. BURRELL — OWNER NAT'L PARK SERVICE — DATE 5-21-86

TAKE OFF BY — EXTENSIONS BY — CHECKED BY

DESCRIPTION	NO.	DIMENSIONS L	W	T	MATERIAL UNIT	UNIT	MATERIAL COST	UNIT	LABOR UNIT	UNIT	LABOR COST	UNI
2"X2"X10' TREATED FRAMING FURRING		10'	2"	2"	2.62	EA.	38.70	15				
1"X3"X10' FRAMING STUDS		10'	1"	3"	1.97	EA.	29.55	15				
EXTERIOR GRADE PLYWD		10'	4'	1/2"	17.96	SH.	71.84	4				
T&G SIDING		8'	3 1/2"	3/4"	1.88	Bd.	125.00	25				
T&G SIDING		8'	4 1/2"	3/4"	2.00	Bd.	200.00	25				
R-19 INSULATION		110	16"		16.23	Rolls	64.92	4				
HARDWARE ALLOW							60.00					
SUB TOTAL MATERIAL							$590.01					

APPENDIX 3.6: FIELD NOTES

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STORAGE
CARRIAGE
GALLERY
ENTRY
HALL
GALLERY
STORAGE ROOM, WEST
GLASS
3¾" WD FRAME
SILL HEIGHT 3'4½"
CEILING HEIGHT 11'-11½"
CEILING HEIGHT 10'-11 3/4"
WALL THICKNESS 4"
WALL THICKNESS 3½"
FURNACE
STOP
JAMB
TRIM
TO DOOR
FACE OF FRAME
ELECTRIC PANEL
11'-6"
5'-4"
2'-9"
26'-5
24'-8"
22'-5½"
08 November 2011
FIELD SURVEY
PEIRCE BARN
GROUND FLOOR PLAN
QEA Project No. 21100085
BY: ASHLEY SPARKS
KATIE IRWIN

08 November 2011
FIELD SURVEY
PEIRCE BARN
SECOND FLOOR PLAN
QEA Project No. 21100085
By: ASHLEY SPARKS

* [1'-3" AT BASE AND MID POINT
1'-2" AT CEILING.

CEILING 1'-1½"
MID POINT 1'-3"
BASE 1'-4½"
WIDER BOTTOM BRICK 1'-6½"

CHIMNEY @ HAYLOFT.

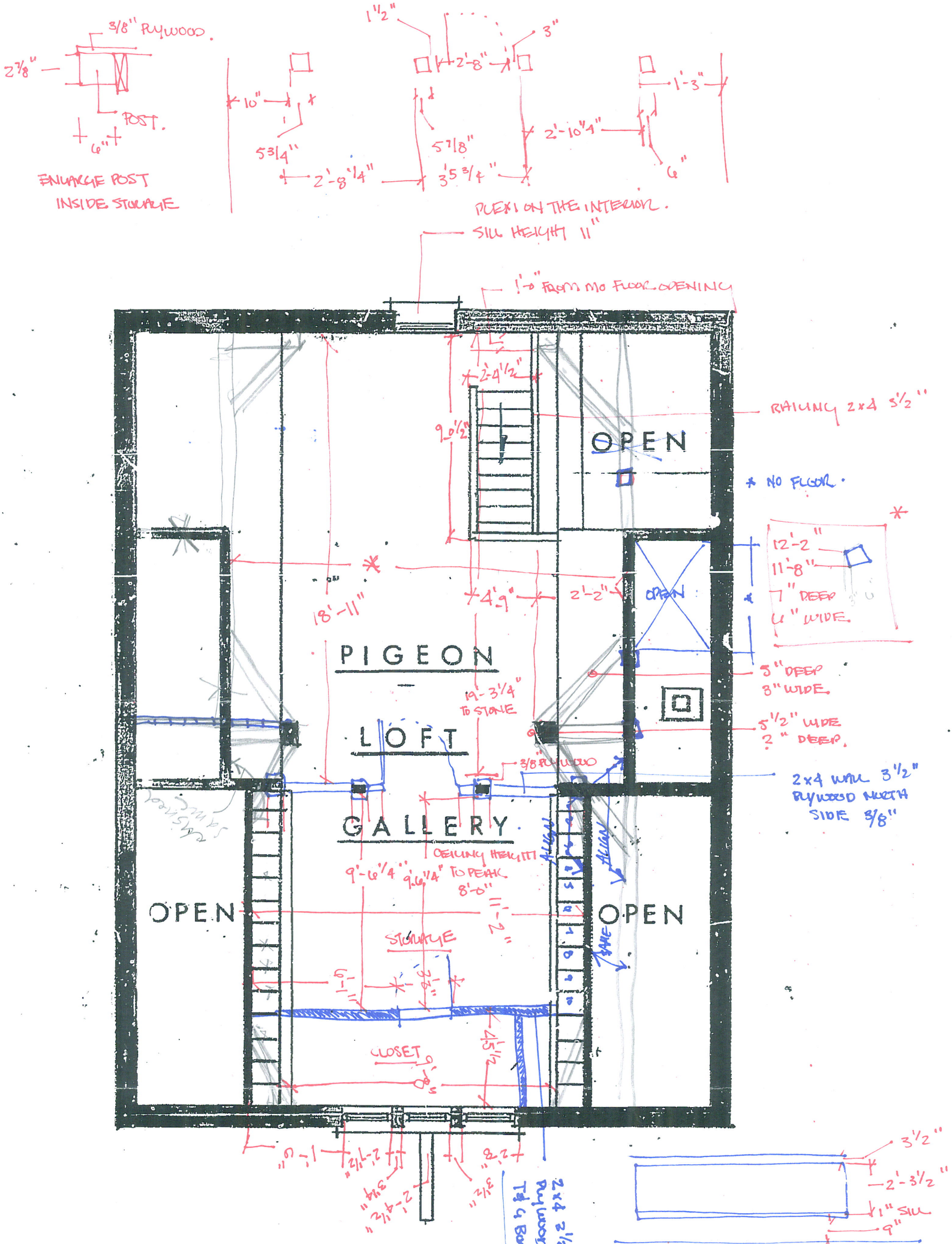
SILL HEIGHT. SEE SKETCH.

FLOOR JOISTS ATTIC FLOOR.

HAYLOFT

GALLERY

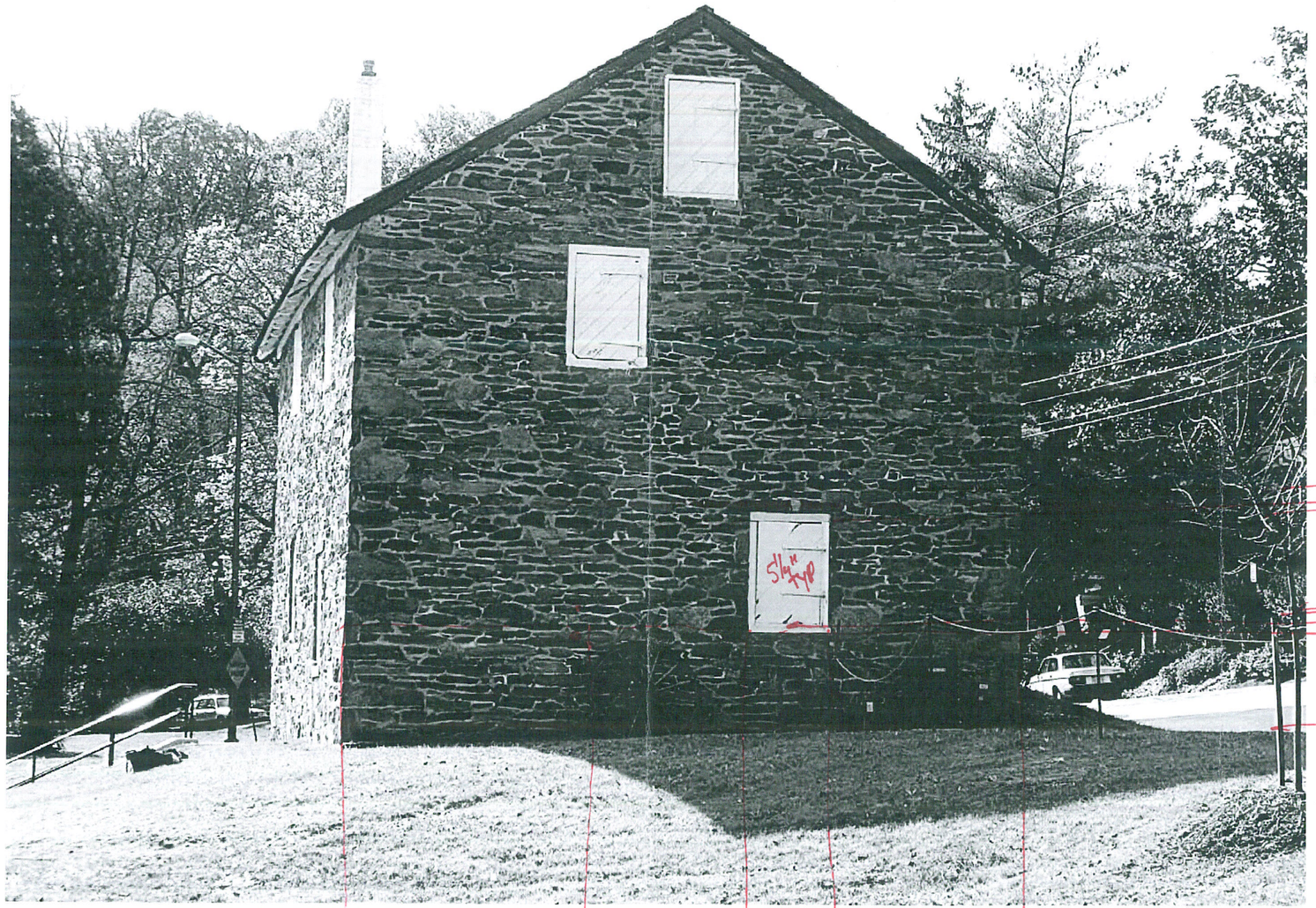
No column.



08 November 2011

FIELD SURVEY
PEIRCE BARN
THIRD FLOOR PLAN
QEA Project No. 21100085

By: ASHLEY SPARKS



08 November 2011

FIELD SURVEY

PEIRCE BARN

NORTH ELEVATION

QEA Project No. 21100085

By: ASHLEY SPARKS
KATIE IRWIN



08 November 2011

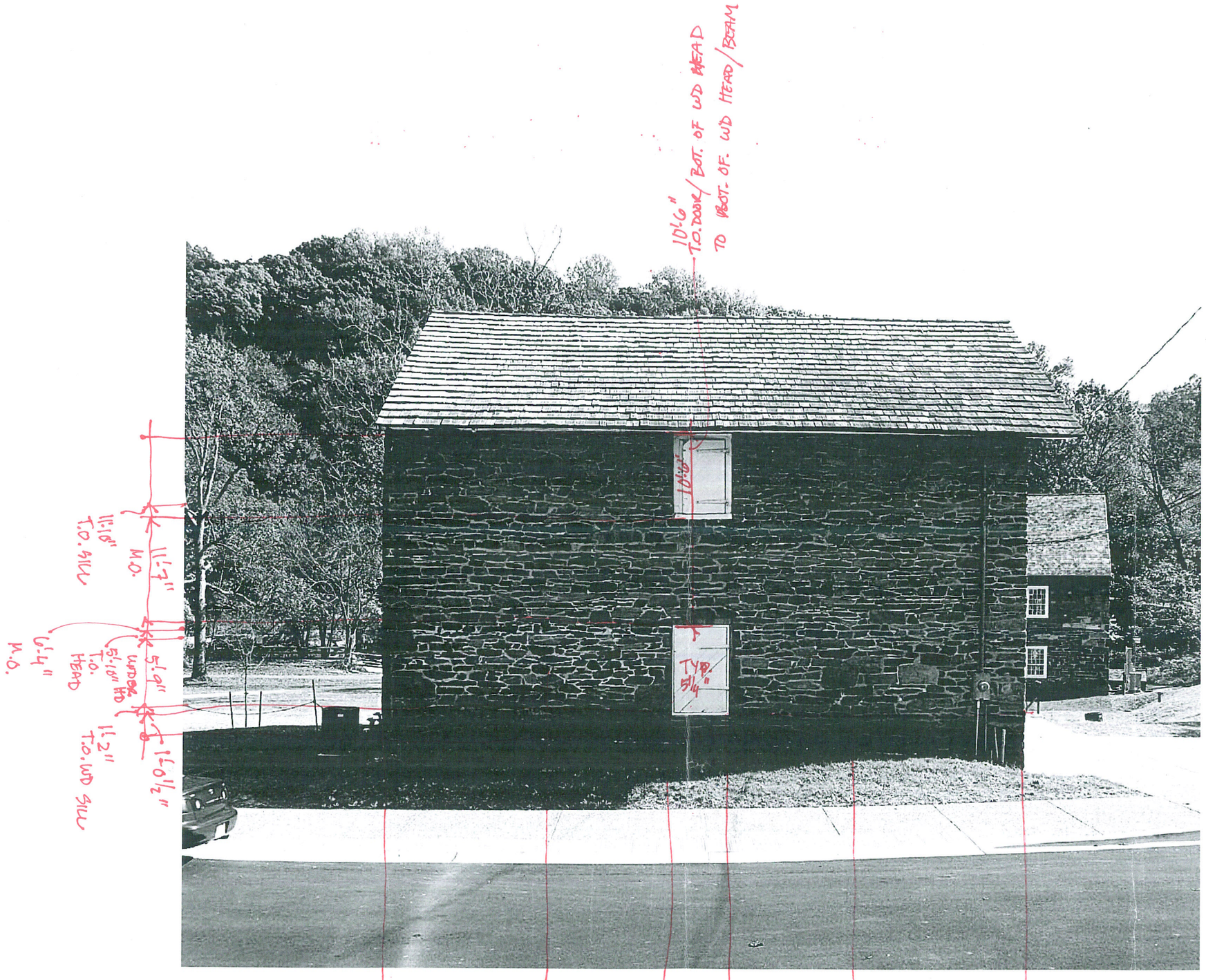
FIELD SURVEY
PEIRCE BARN
EAST ELEVATION
QEA Project No. 21100085

By: ASHLEY SPARKS
KATIE IRWIN

08 November 2011

FIELD SURVEY
PEIRCE BARN
SOUTH ELEVATION
QEA Project No. 21100085

By: ASHLEY SPARKS
KATIE IRWIN.



08 November 2011
FIELD SURVEY
PEIRCE BARN
WEST ELEVATION
QEA Project No. 21100085

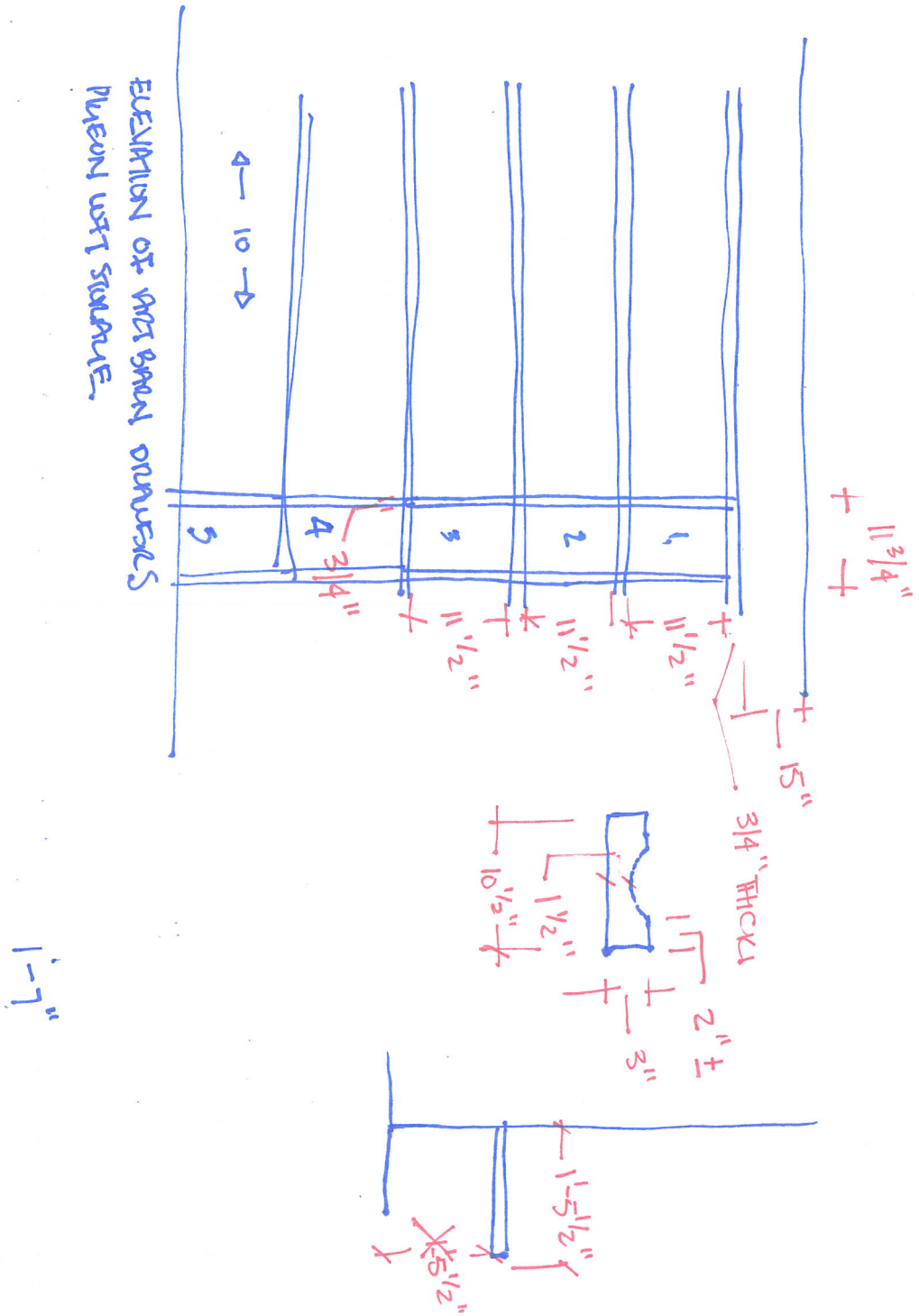
By: ASHLEY SPARKS
KATIE IRWIN

Date 15 NOVEMBER 2011 Subject FIELD SURVEY/ SKETCH

Project PEIRCE BARN From/By ASHLEY SPARKS

Project No 21100085 Sheet No 1

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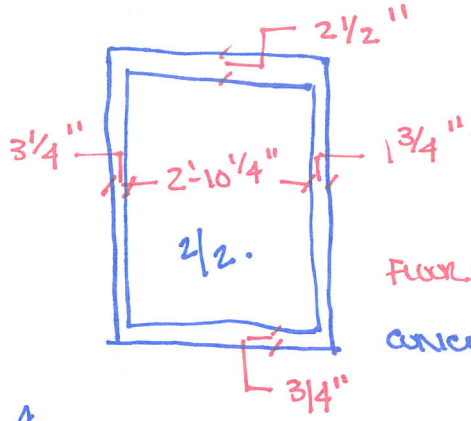
Date 08 NOVEMBER 2011 Subject FIELD SURVEY SKETCH

Project PEIRCE BARN. From/By ASHLEY SPARKS

Project No 21100085 Sheet No 4

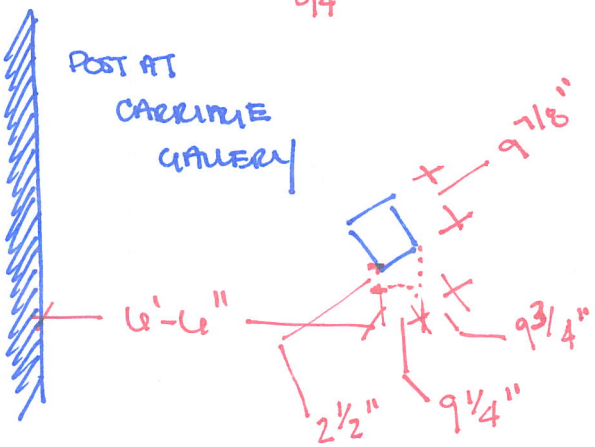
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GROUND FLOOR WEST WINDOW



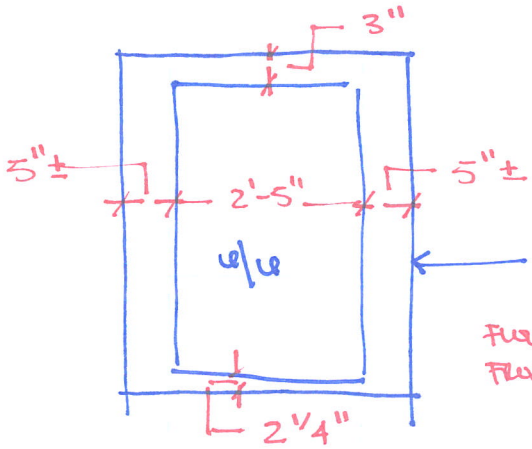
FLOOR TO SILL HEIGHT = 3'-5"

CONCRETE SILL



POST IS PRACTICALLY PLUMB AT THE TOP.

GROUND FLOOR NORTH WINDOW.



FLOOR TO SILL HEIGHT TAKEN FROM THE 3RD TREAD = 1'-5½"

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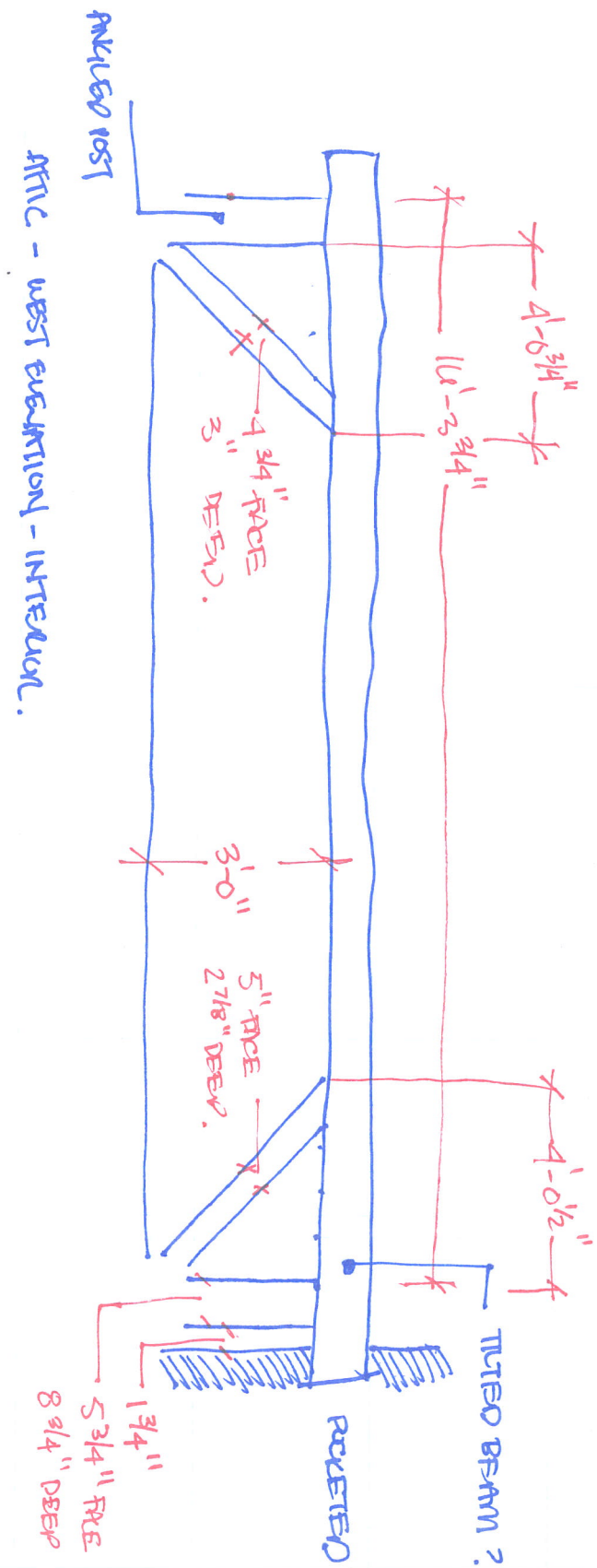
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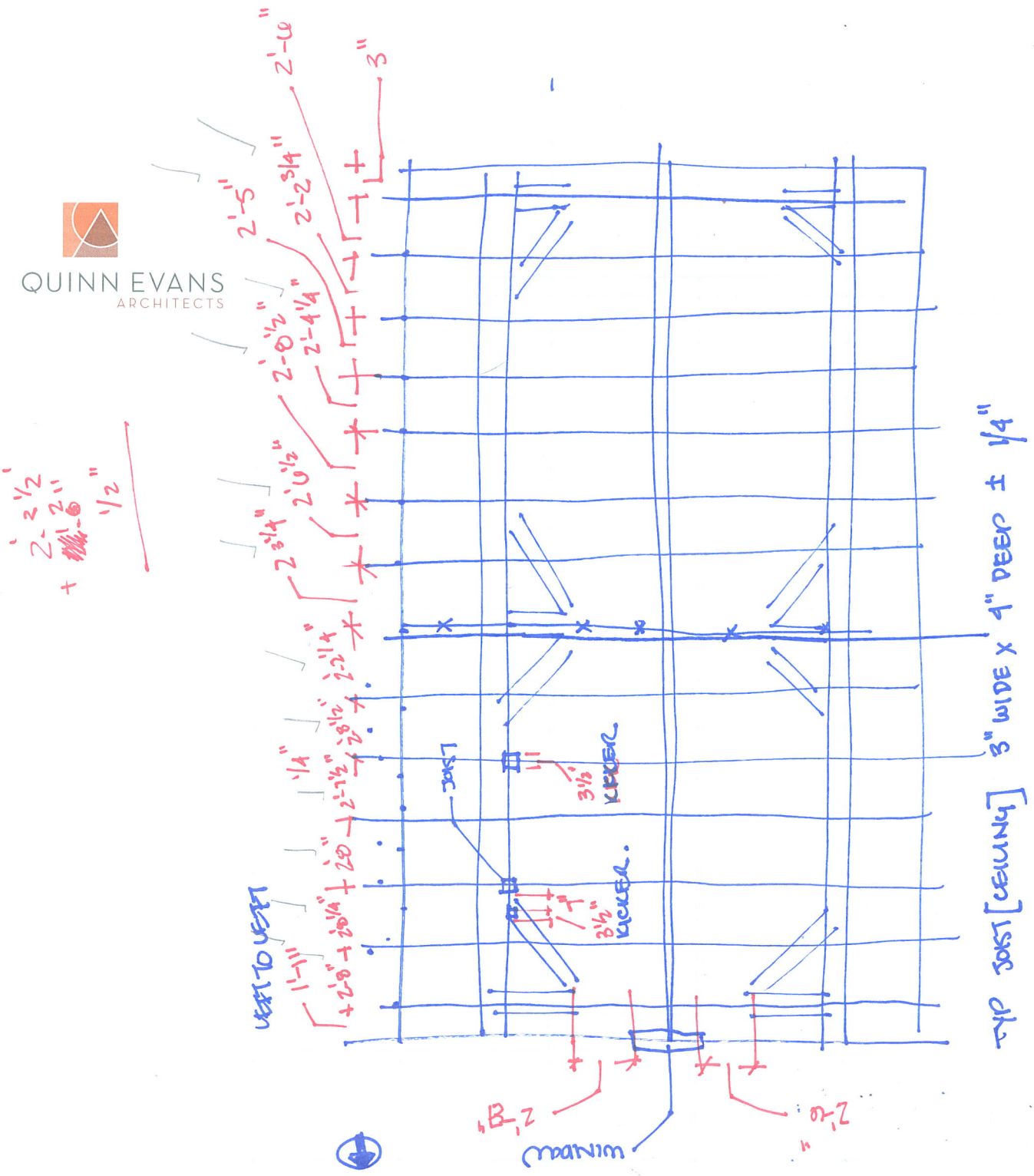
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Date 08 NOVEMBER 2011 Subject FIELD SURVEY SKETCH

Project PEIRCE BARN From/By ASHLEY SPARKS

Project No 21C0085 Sheet No 1

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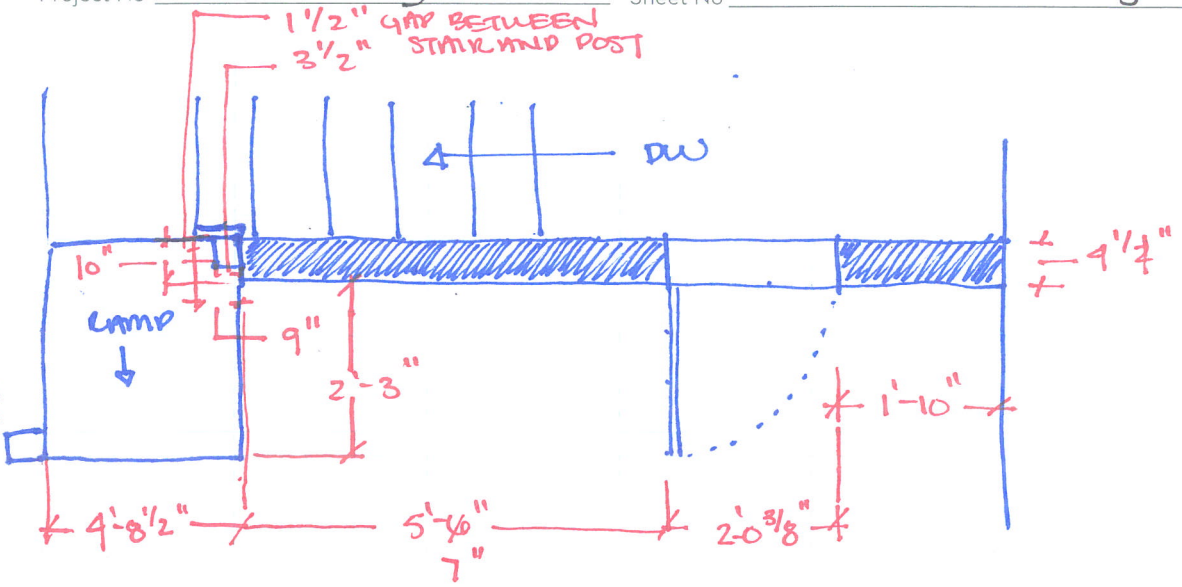
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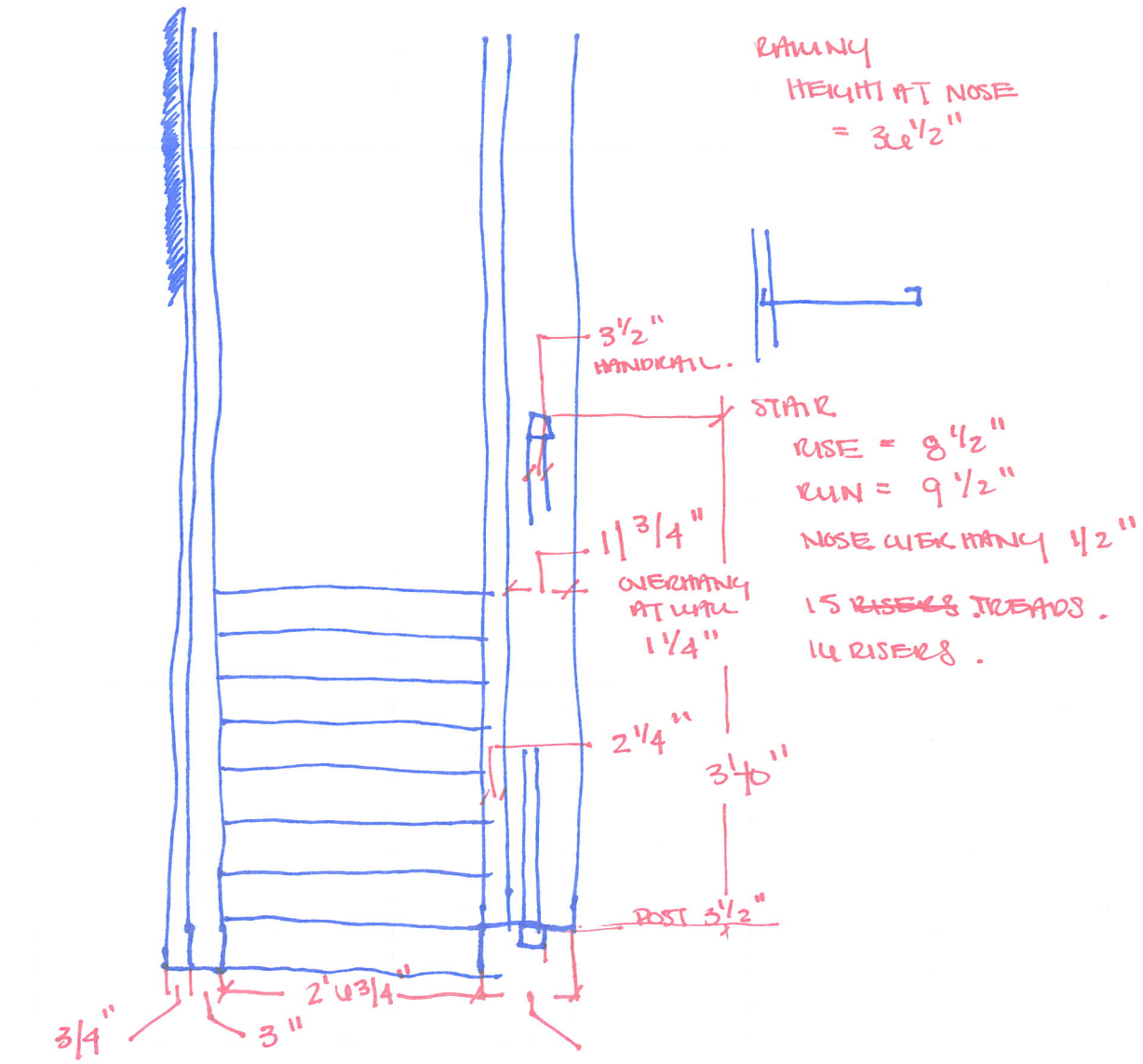
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Project PEIRCE BARN. From/By ASHLEY SPARKS

Project No 21100085 Sheet No 3





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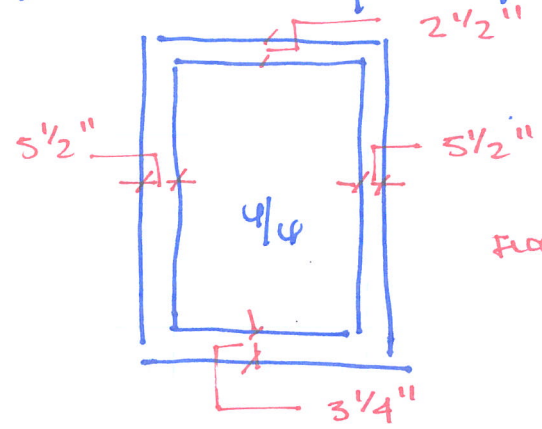
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Date 08 NOVEMBER 2011 Subject FIELD SURVEY/SKETCH

Project PEIRCE BARN. From/By ASHLEY SPARKS

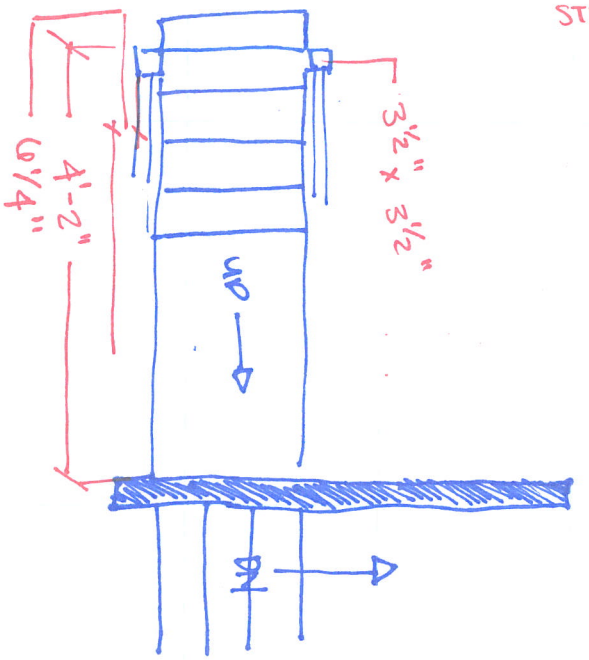
Project No 21200085 Sheet No 2

GROUND FLOOR. ENTRY HALL GALLERY/, EAST WINDOW.



FLOOR TO SILL HEIGHT = 3'-10"

HAYLOFT STAIRS TO ATTIC.



STAIRS

RISE 9 3/4"

RUN 9½"

TREADS — 9

OPEN — 10

NOSE = 1/2"

HANDRAIL HEIGHT FROM 3RD STAIR = 28½"

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Date 9 NOVEMBER 2011 Subject FIELD SURVEY SKETCH

Project PEIRCE BARN From/By ASHLEY SPARKS

Project No 21100085 Sheet No 2

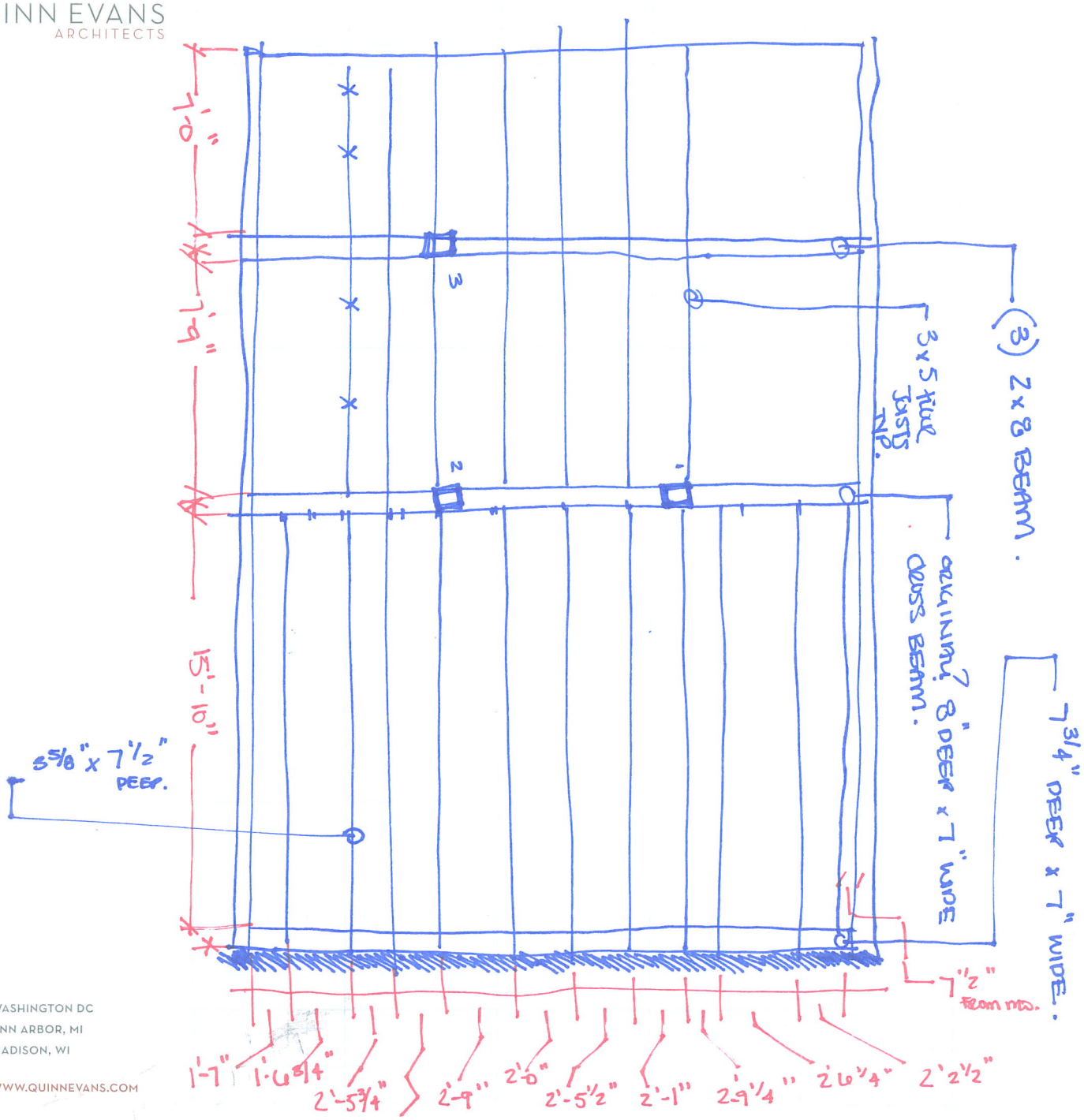
POSTS

1: 5 1/4 x 5 1/4

2: 5 1/8 x 5 1/4 EAST/WEST

3: 5 1/8 x 5 1/4 . EAST/WES.

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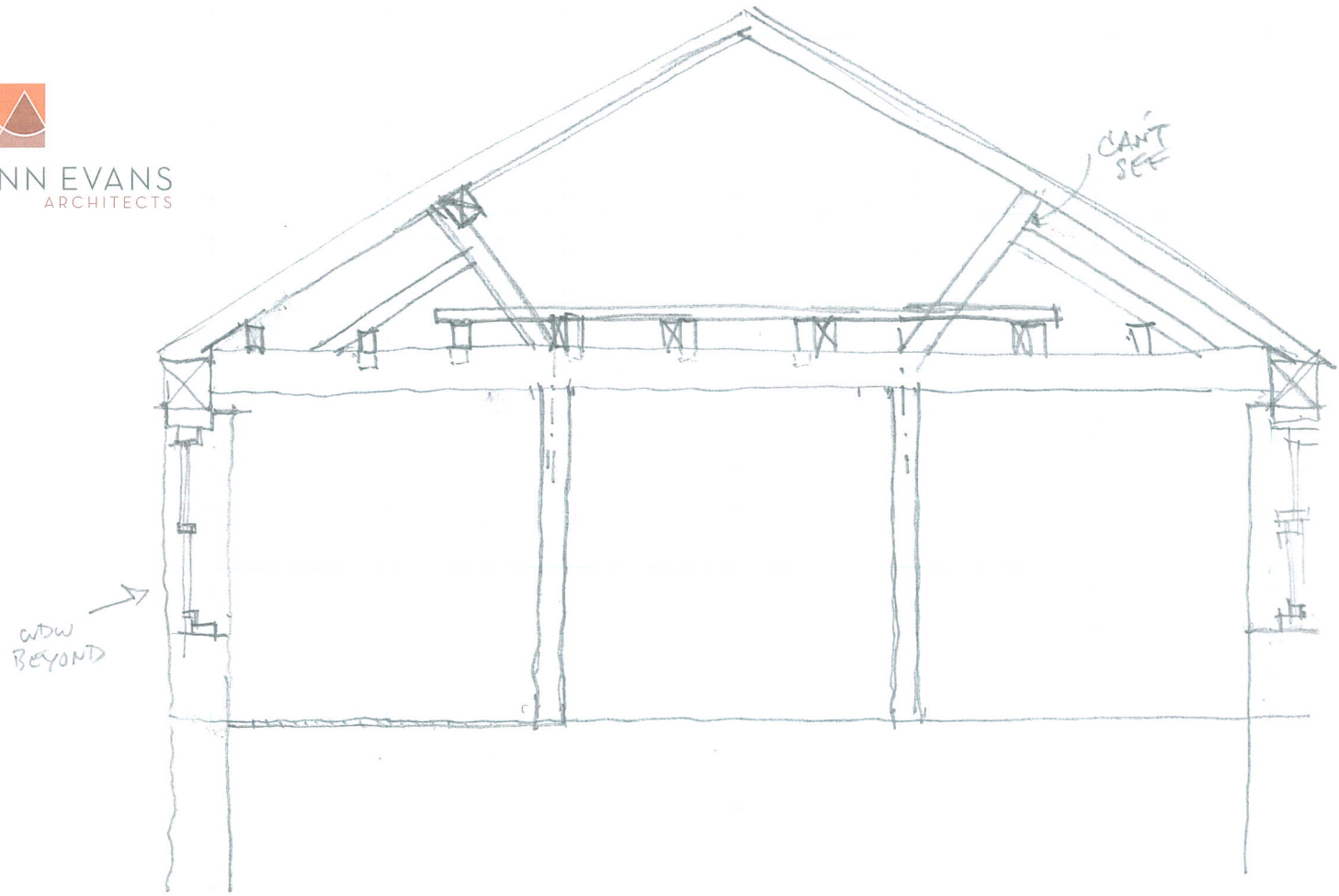
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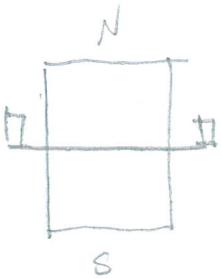
Date 08 NOVEMBER 2011 Subject FIELD SURVEY/SKETCH

Project PEIRCE BARN From/By KATIE IRWIN.

Project No 21000085 Sheet No 1

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ARCHITECTS



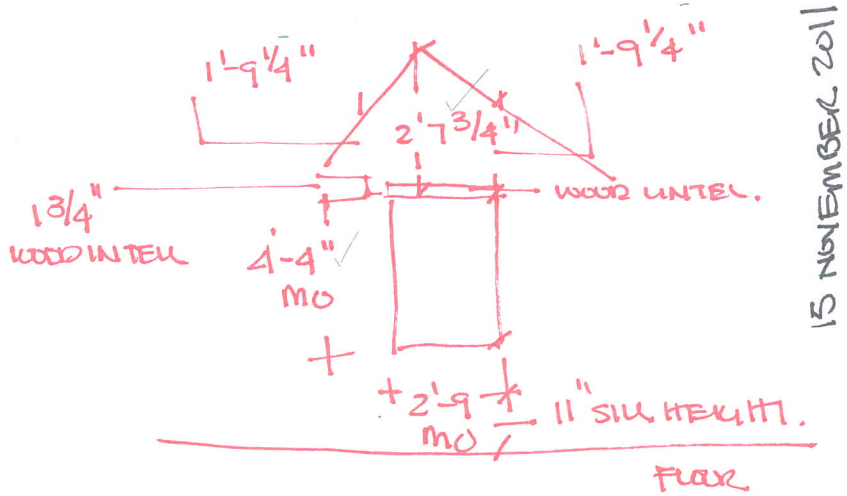


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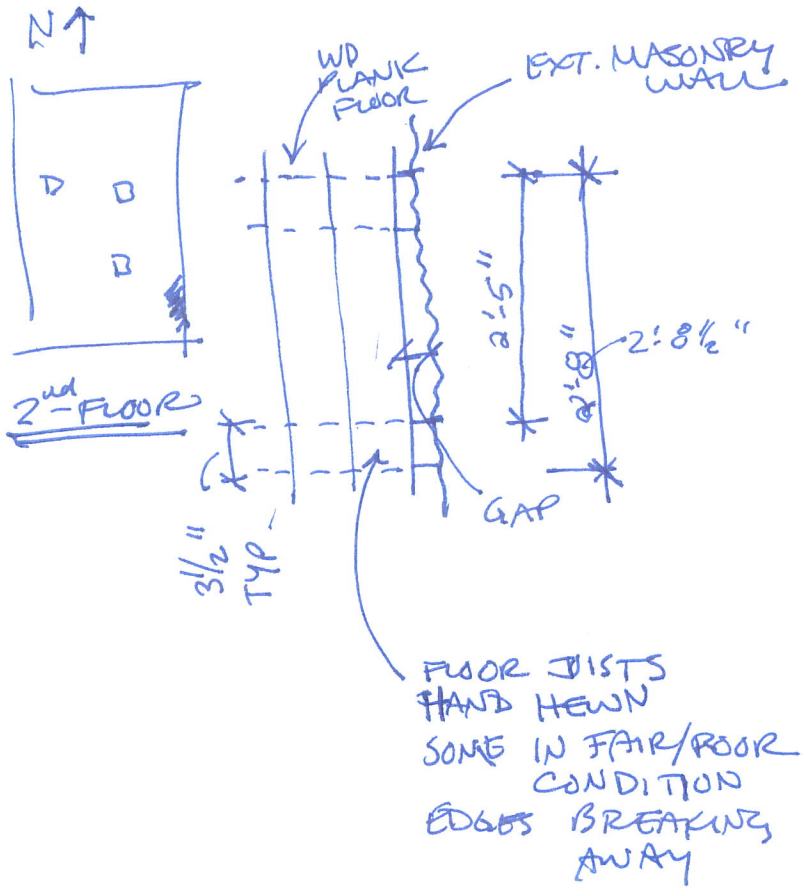
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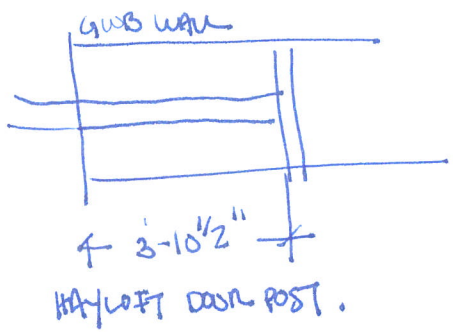
ATTIC. NORTH WINDOW



15 NOVEMBER 2011
FIELD SURVEY
PEIRCE BARN
OPRA PROJECT NO. 2110085
BY: ASHLEY E. SPARKS.

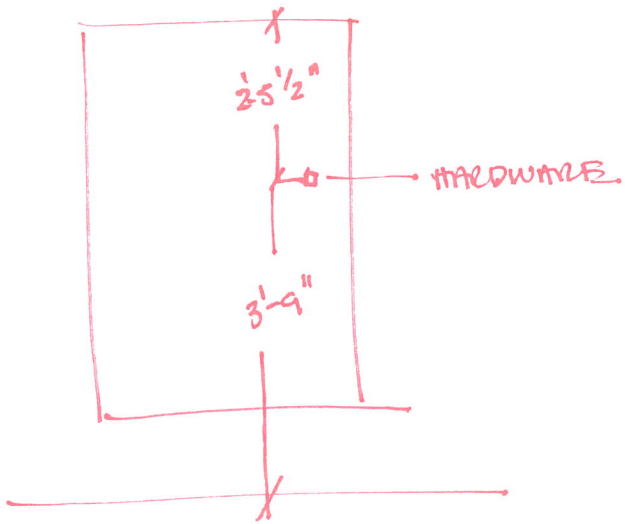
Eastern National





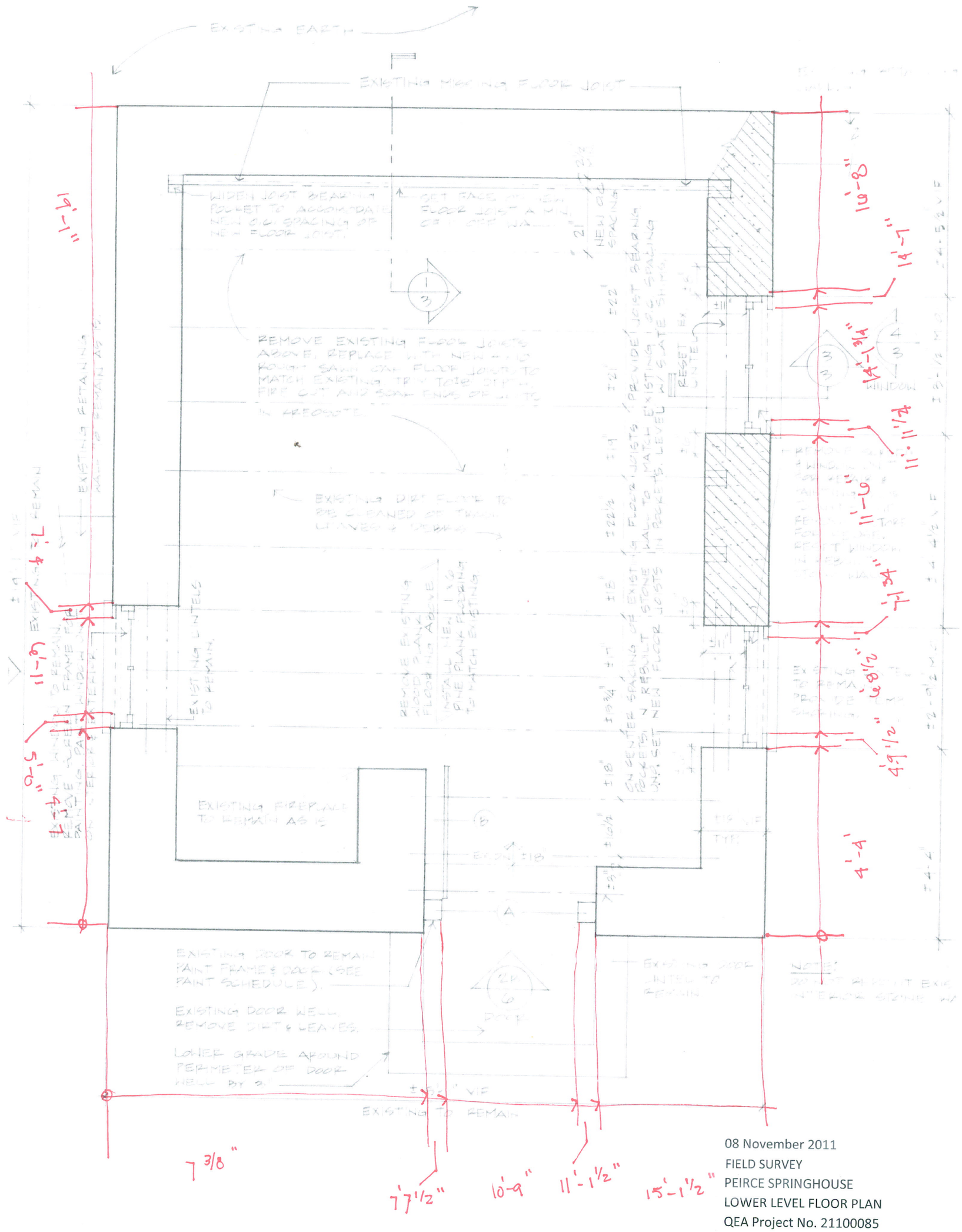
15 NOVEMBER 2011
FIELD SURVEY
PEIRCE BARN
QEA PROJ. NO. 2110085
BY: ASHLEY SPARKS
KATIE IRWIN.

Eastern National



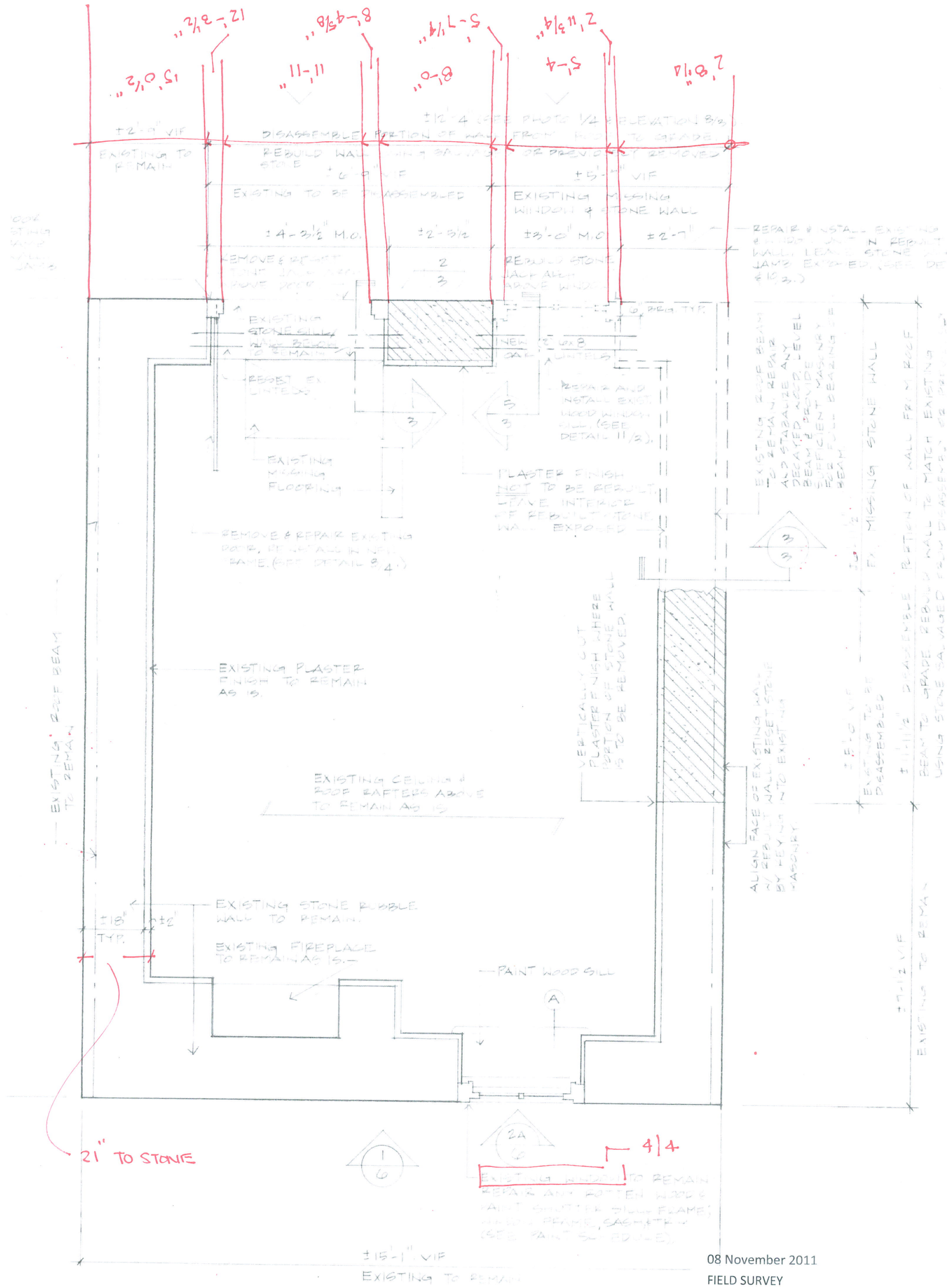
HAYLOFT GALLERY
INTERIOR - HAY DOOR.

15 NOVEMBER 2011
FIELD SURVEY
PEIRCE BARN
QEA PROJECT
NO. 21100085
BY: ASHLEY
SPARKS



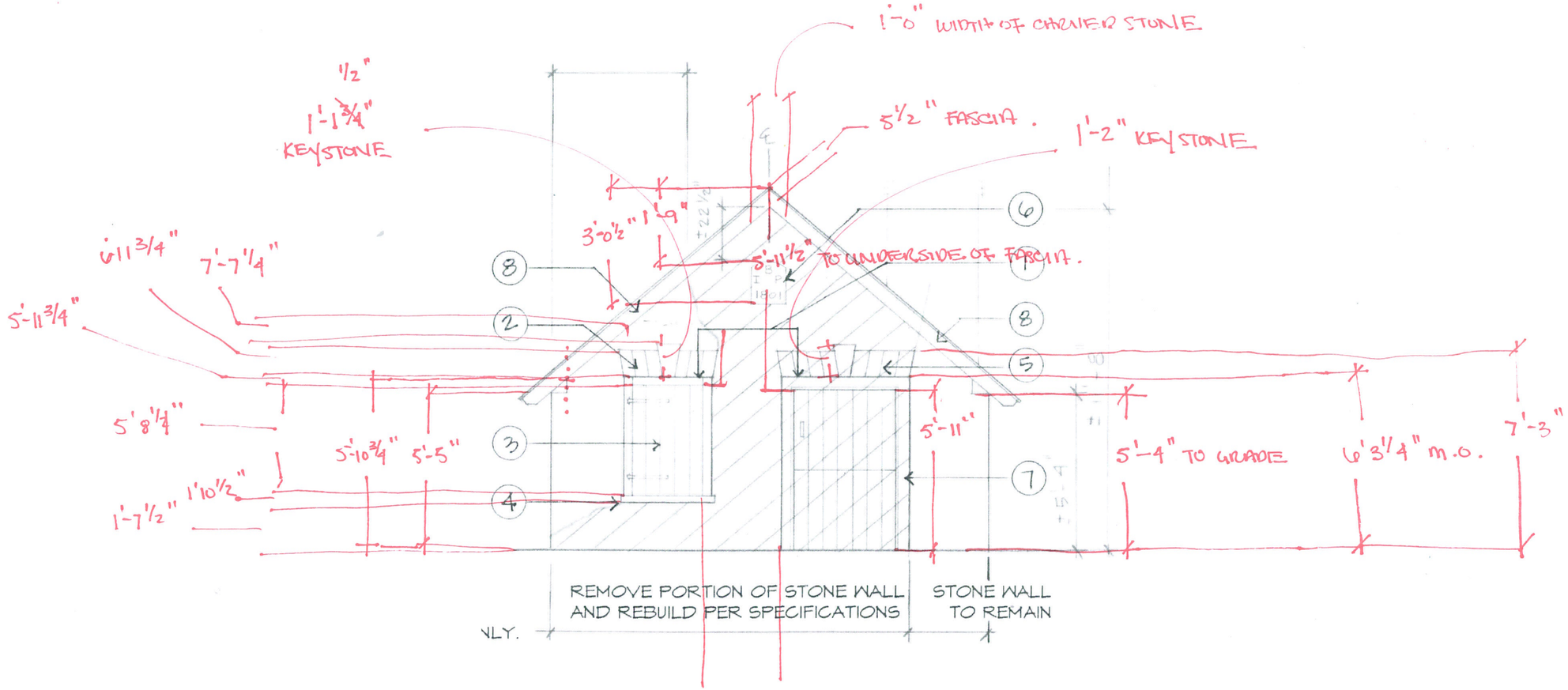
08 November 2011
FIELD SURVEY
PEIRCE SPRINGHOUSE
LOWER LEVEL FLOOR PLAN
QEA Project No. 21100085

By: ASHLEY SPARKS



08 November 2011
FIELD SURVEY
PEIRCE SPRINGHOUSE
UPPER LEVEL FLOOR PLAN
QEA Project No. 21100085

By: ASHLEY SPARKS



08 November 2011
FIELD SURVEY
PEIRCE SPRINGHOUSE
NORTH ELEVATION
QEA Project No. 21100085

By: Ashley Sparks

08 November 2011
FIELD SURVEY
PEIRCE SPRINGHOUSE
SOUTH ELEVATION
QEA Project No. 21100085

By: ASHLEY SPARKS

APPENDIX 3.7: CLASS C COST ESTIMATE – PEIRCE BARN

Cost Estimate

Using cost estimate guidelines established by the NPS, an estimate has been prepared by the design team. The detailed Class "C" estimates are included in this appendix.

Estimate Assumptions

The estimates are based on the review of this narrative report with a drawing set, dated June 2012.

Assumptions:

1. At this time, a design contingency of 30% is included in the estimate. This percentage reflects the fact that the design at this time indicates "concepts," not final designs.

2. This estimate does not reflect costs to the government that would occur during the construction period, such as fees for construction management, project management, nor contingencies for construction change orders.

3. The mark-up factors indicated (i.e., remoteness, historic preservation factor, etc) have been developed by the NPS for similar projects and have been adopted for this project.

Estimate Summary – Alternate #1 –

The Class C estimate for this alternate indicates an estimated net cost of construction at about $525,000. This work would be comprehensive in nature for the exterior and interior of the 2286 SF building.

Estimate Summary – Alternate #2 –

The Class C estimate for this alternate indicates an estimated net cost of construction at about $560,000. This work would be comprehensive in nature for the exterior and interior of the 2286 SF building.

Project: **PEIRCE BARN &PEIRCE SPRINGHOUSE HSR** **Estimate By:** BMS

Park: **Rock Creek Park, Washington, DC** **Date:** 05/23/2012

PMIS: **149248** **Class C estimate is based on 2012 costs**

PEIRCE BARN ESTIMATE **Reviewed By:**

Building Area = 2286 SF **Date:**

Item No.	Description	Quantity	Unit	Cost/Unit	Total
	ALT. #1 -				
	Rehabilitate, Provide accessible entrance at east elevation, Add unisex staff toilet room (optional second unisex staff toilet room)				
1	Site work, landscaping	1	LS	$5,000.00	$5,000
2	Provide accessible entry ramp at south elevation (alt. work)	1	LS	$12,000.00	$12,000
3	Provide new entry door and frame	1	EA	$1,200.00	$1,200
4	Provide unisex staff restroom and utility sink	1	EA	$13,500.00	$13,500
5	OPTIONAL Provide second unisex restroom (see below)				$0
6	Provide partition walls, GWB two sides	50	LF	$18.00	$900
7	Replace wood flooring	100	SF	$12.00	$1,200
8	Provide interior paint & finishes	1000	SF	$4.00	$4,000
9	Provide drinking fountain	1	EA	$1,200.00	$1,200
10	Provide vapor barriers, interior perimeter walls	4000	SF	$4.00	$16,000
11	Provide thermal insulation to the roof attic assembly	2000	SF	$7.00	$14,000
12	Repoint and repair stonework	1500	SF	$10.00	$15,000
13	Repair & repaint exterior wood trim and assemblies	1	LS	$8,000.00	$8,000
14	Rehabilitate exisitng window & door assemblies	15	EA	$800.00	$12,000
15	Roofing repairs	1	LS	$2,500.00	$2,500
16	Provide automatic fire protection system	2286	SF	$17.00	$38,862
17	Provide MEP system upgrades	1	LS	$45,000.00	$45,000
	Subtotal Direct Construction Costs				**$190,362**
	Published Location Factor - zero				$0
	Remoteness Factor - zero				$0
	Federal Wage Rate Factor (4 Percent)				$3,046
	Design Contingency (30 Percent)				$57,109
	Total Direct Construction Costs				**$250,516**
	Standard General Conditions (20 Percent)				$50,103
	Government General Conditions (10 Percent)				$25,052
	Historic Preservation Factor (10 percent)				$25,052
	Subtotal NET Construction Cost				**$350,723**
	Overhead (15 Percent)				$52,608
	Profit (10 Percent)				$35,072
	Estimated NET Construction Cost				**$438,404**
	Contracting Method Adjustment - Competitive - 10%				$43,840
	Inflation Escalation (to 6/2013) = 8%				$40,918
	Total Estimated NET Cost of Construction				**$523,162**
	Summary - Overall per square foot costs	$683.87		**SAY**	**$525,000**

Optional Second Uni-sex toilet: Add about $35,000, with markups.

Project: PEIRCE BARN &PEIRCE SPRINGHOUSE HSR — **Estimate By:** BMS

Park: **Rock Creek Park, Washington, DC** — **Date:** 05/23/2012

PMIS: **149248** — **Class C estimate is based on 2012 costs**

PEIRCE BARN ESTIMATE — **Reviewed By:**

Building Area = 2286 SF, Site area about 0.5 acres — **Date:**

Item No.	Description	Quantity	Unit	Cost/Unit	Total
	ALT. #2 -				
	Rehabilitate, Provide ADA access at south elevation, Add unisex staff toilet room				
1	Site work, landscaping	1	SF	$15,000.00	$15,000
2	Provide accessible entry ramp at east elevation	65	LF	$225.00	$14,625
3	Provide new exterior door assembly, alter stone work	1	EA	$2,500.00	$2,500
4	Provide unisex staff restroom and utility sink	1	EA	$13,500.00	$13,500
5	Provide partition walls, GWB two sides	25	LF	$18.00	$450
6	Replace wood flooring	100	SF	$12.00	$1,200
7	Provide interior paint & finishes	1000	SF	$4.00	$4,000
8	Provide drinking fountain	1	EA	1200.00	$1,200
9	Provide vapor barriers, interior perimeter walls	4000	SF	4.00	$16,000
10	Provide thermal insulation to the roof attic assembly	2000	SF	7.00	$14,000
11	Repoint and repair stonework	1500	SF	10.00	$15,000
12	Repair & repaint exterior wood trim and assemblies	1	LS	8000.00	$8,000
13	Rehabilitate exisitng window & door assemblies	14	EA	800.00	$11,200
14	Roofing repairs	1	LS	2500.00	$2,500
15	Provide automatic fire protection system	2286	SF	17.00	$38,862
16	Provide MEP systems upgrades	1	LS	45000.00	$45,000
	Subtotal Direct Construction Costs				**$203,037**
	Published Location Factor - zero				$0
	Remoteness Factor - zero				$0
	Federal Wage Rate Factor (4 Percent)				$3,249
	Design Contingency (30 Percent)				$60,911
	Total Direct Construction Costs				**$267,197**
	Standard General Conditions (20 Percent)				$53,439
	Government General Conditions (10 Percent)				$26,720
	Historic Preservation Factor (10 percent)				$26,720
	Subtotal NET Construction Cost				**$374,075**
	Overhead (15 Percent)				$56,111
	Profit (10 Percent)				$37,408
	Estimated NET Construction Cost				**$467,594**
	Contracting Method Adjustment - Competitive - 10%				$46,759
	Inflation Escalation (to 6/2013) = 8%				$43,642
	Total Estimated NET Cost of Construction				**$557,996**
	Summary - Overall per square foot costs	$729.41		**SAY**	**$560,000**

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APPENDIX 3.8: CLASS C COST ESTIMATE – PEIRCE SPRINGHOUSE

Cost Estimate

Using cost estimate guidelines established by the NPS, an estimate has been prepared by the design team. The detailed Class "C" estimates are included in this appendix.

Estimate Assumptions

The estimates are based on the review of this narrative report with a drawing set, dated June 2012.

Assumptions:

1. At this time, a design contingency of 30% is included in the estimate. This percentage reflects the fact that the design at this time indicates "concepts," not final designs.

2. This estimate does not reflect costs to the government that would occur during the construction period, such as fees for construction management, project management, nor contingencies for construction change orders.

3. The mark-up factors indicated (i.e., remoteness, historic preservation factor, etc) have been developed by the NPS for similar projects and have been adopted for this project.

Estimate Summary – Alternate #1 – Preserve

The Class C estimate for this alternate indicates an estimated net cost of construction at about $90,000. This work would be comprehensive in nature for the exterior and interior of the 390 SF[1] building.

Estimate Summary – Alternate #2 – Mothball, not used, not occupied

The Class C estimate for this alternate indicates an estimated net cost of construction at about $60,000. This work would be comprehensive in nature for the exterior and interior of the 390 SF building.

[1] Building square footage calculated as the total floor area for all three floors, from the interior face of the exterior walls.

Project: PEIRCE BARN & PEIRCE SPRINGHOUSE HSR **Estimate By:** BMS

Park: **Rock Creek Park, Washington, DC** **Date:** 05/23/2012

PMIS: **149248**

PEIRCE SPRINGHOUSE ESTIMATE

Building Area = 390 SF **Reviewed By:**

Class C estimate is based on 2012 costs **Date:**

Item No.	Description	Quantity	Unit	Cost/Unit	Total
	ALT #1-				
	Preserve				
1	Site work - landscaping, repair dry-laid site wall	1	LS	$ 15,000.00	$ 15,000.00
2	Roofing repairs	1	LS	$ 1,500.00	$ 1,500.00
3	Repoint and repair stonework	1	LS	$ 2,500.00	$ 2,500.00
4	Replace upper level wood floor boards	195	SF	$ 25.00	$ 4,875.00
5	Rehabilitate window & door assemblies	6	EA.	$ 800.00	$ 4,800.00
6	Repair & repaint exterior wood trim and assemblies	1	LS	$ 4,000.00	$ 4,000.00
	Subtotal Direct Construction Costs				**$32,675**
	Published Location Factor - zero				$0
	Remoteness Factor - zero				$0
	Federal Wage Rate Factor (4 Percent)				$523
	Design Contingency (30 Percent)				$9,803
	Total Direct Construction Costs				**$43,000**
	Standard General Conditions (20 Percent)				$8,600
	Government General Conditions (10 Percent)				$4,300
	Historic Preservation Factor (10 percent)				$4,300
	Subtotal NET Construction Cost				**$60,200**
	Overhead (15 Percent)				$9,030
	Profit (10 Percent)				$6,020
	Estimated NET Construction Cost				**$75,251**
	Contracting Method Adjustment - Competitive - 10%				$7,525
	Inflation Escalation (to 6/2013) = 8%				$7,023
	Total Estimated NET Cost of Construction				**$89,799**
				SAY	$90,000

Project: PEIRCE BARN & PEIRCE SPRINGHOUSE HSR
Park: Rock Creek Park, Washington, DC
PMIS: 149248
PEIRCE SPRINGHOUSE ESTIMATE
Building Area = 390 SF, Site area about 0.5 acres
Class C estimate is based on 2012 costs

Estimate By: BMS
Date: 05/23/2012
Reviewed By:
Date:

Item No.	Description	Quantity	Unit	Cost/Unit	Total
	ALT #2-				
	Mothball, not used, not occupied	390	SF		
1	Provide temporary window and door covers, with ventilation	6	EA.	$150.00	$900.00
2	Provide smoke and heat detection, remote signals	1	LS	$4,000.00	$4,000.00
3	Roofing repairs	1	LS	$ 1,500.00	$1,500.00
4	Site work - landscaping, repair dry-laid site wall	1	LS	$15,000.00	$15,000.00
	Subtotal Direct Construction Costs				**$21,400**
	Published Location Factor - zero				$0
	Remoteness Factor - zero				$0
	Federal Wage Rate Factor (4 Percent)				$342
	Design Contingency (30 Percent)				$6,420
	Total Direct Construction Costs				**$28,162**
	Standard General Conditions (20 Percent)				$5,632
	Government General Conditions (10 Percent)				$2,816
	Historic Preservation Factor (10 percent)				$2,816
	Subtotal NET Construction Cost				**$39,427**
	Overhead (15 Percent)				$5,914
	Profit (10 Percent)				$3,943
	Estimated NET Construction Cost				**$49,284**
	Contracting Method Adjustment - Competitive - 10%				$4,928
	Inflation Escalation (to 6/2013) = 8%				$4,600
	Total Estimated NET Cost of Construction				**$58,812**
				SAY	$60,000

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APPENDIX 3.9: BIBLIOGRAPHY

Dryden, Steve. *Peirce Mill, Two Hundred Years in the Nation's Capital.* Bergamot Books, 2009.

Wheelock, Perry, Jennifer Hanna, and Nancy Brown. *Pierce Mill, Rock Creek Park.* National Park Service Cultural Landscapes Inventory. Washington, DC: 1998; rev. 2003.

Achenbach, Joel. "Getting the Bugs Out of the Art Barn, For Years, Rock Creek Gallery Housed Cold War Surveillance Gear." The Washington Post. December 1, 1992.

McCoy, Mary. "Art Barn Struggle for Funds." The Washington Post. June 11, 1992.

National Park Service. NPS Reference Manual #50B: Occupational Safety and Health Program. Section 12.2 Fire Safety Requirements, page 36. 1999.

National Park Service. Peirce Mill Complex Cultural Landscape Report. 2009.

National Park Service. Peirce Mill Historic Structures Report. 2000.

National Park Service. An Administrative History – Pierce Mill and the Art Barn http://www.nps.gov/rocr/historyculture/adhi4f.htm. 12/12/2012.

National Park Service. Rock Creek Park, History and Culture. http://www.nps.gov/rocr/historyculture/index.htm. 12/12/2012.

Andrus, Patrick W. "National Register Bulletin #15, How to Apply the National Register Criteria for Evaluation." Revised for internet, 2002.

Halsted D. Byron. *Barns, Sheds and Outbuildings, Placement, Design and Construction*. Alan C. Hood and Co., Inc., 1994.

Cleek, Richard K. and Noble, Allen G. *The Old Barn Book, A Field Guide to North American Barns and Other Farm Structures*. Rutgers University Press, 1997.

Herman, Bernard L. and Lanier, Gabrielle M. *Everyday Architecture of the Mid-Atlantic, Looking at Buildings and Landscapes*. The Johns Hopkins University Press, 1997.

Ward Bucher, editor, *Dictionary of Building Preservation.* John Wiley Sons, Inc., 1996.

Weeks, Kay D. and Grimmer, Anne E. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.* U.S. Department of the Interior, NPS, Washington, DC, 1995.

National Park Service. Choosing an Appropriate Treatment for the Historic Building. http://www.nps.gov/history/hps/tps/standguide/preserve/preserve_index.htm. 05/23/2012.

National Register of Historic Places Nominations

National Register of Historic Places, Peirce Springhouse and Pierce Barn (Art Barn), Washington, DC, National Register #73000222.

National Register of Historic Places, Peirce Mill, Washington, DC, National Register #69000014.

National Register of Historic Places, Rock Creek Park Historic District, Washington, DC, National Register #91001524.

APPENDIX 3.10: GLOSSARY

Condemnation The taking of real estate by a government agency for a public purpose, such as constructing a highway with just compensation paid to the owner. See also eminent domain.[1]

Dendrochronology A process used to date historic structures and living trees by comparing the sequence of annual rings of a sample of wood with a known standard piece from the same geographic area.

Dry-laid Masonry construction built without the use of mortar, including all dry-stone.

Dovecote A structure that houses tame pigeons; has multiple openings in an exterior wall leading to nesting boxes; typically mounted on a post or building wall. Also known as dove house, pigeon house.

Dutch door A door divided horizontally so that the top and bottom parts can be opened separately; introduced in North America by Dutch settlers; used to provide ventilation by opening the top half while preventing passage of animals and children. Also referred to as a half door.

Efflorescence Water-soluble salts leached out of masonry or concrete by capillary action and deposited on a surface by evaporation; usually crystalline sulfates of sodium, potassium, magnesium, calcium, and iron.

Eminent Domain The right of a government to take property for its own use, typically through the process of condemnation.

Extrados The outer boundary of voussoirs of an arch.

Jack Arch An arch in which intrados and extrados are level; used above square-headed openings.

Intrados The lower boundary or soffit of the voussoirs of an arch. The line formed by the intersection of the soffit and the face of the arch.

Living Museum A type of museum, in which historical events are brought to life. It is a type of museum that recreates to the fullest extent the conditions of a culture, natural environment, or historical period. The power of living museums is the ability for visitors to actually experience the past in an active way. [2]

Oxide Jacking The displacement of building elements due to the expansion of iron or steel products as the metal rusts and becomes iron oxide.

[1] Definitions are provided by the Dictionary of Building Preservation, edited by Ward Bucher, AIA. Exceptions are noted.
[2] Based on text from the Virginia Association of Museums
http://www.vamuseums.org/Resources/ForMuseumStudiesStudents/TypesofMuseums

Parging	A rough coat of mortar on the surface of a masonry wall; used for damproofing. Also known as pargeting.
Pigeon House	A dovecote, especially a raised frame structure.
Potato Hole	A cellar used to store potatoes; may be a separate structure or the lower part of a building.
Potato House	A building used to store potatoes; may be above grade or a potato hole.
Random Coursed	A masonry pattern with random sized stone blocks laid in short, discontinuous, interlocking horizontal courses, with varying sized stones within each course.
Rustic Quoin	A stone quoin with rough, split faces with chamfered edges; used to give an appearance of rugged strength.
Slaked Lime	Quicklime that has been steeped in water to prepare it for mixing with other ingredients of mortar; may be in the form of wet lime putty or dry powdered hydrated lime. See also whitewash.
Spalling	The continuous formation of spalls on masonry units or concrete after insulation; may have various causes including freeze thaw action, oxide jacking, or salt decay.
Springhouse	A structure built over a natural spring; may be rustic in an architectural style; used to protect the water and cool food and milk; sometimes large enough to sit inside.
Quicklime	Calcium oxide (CaO) or lime, produced by heating limestone or shells until they are reduced to powder.
Quoin	A large, rectangular block of stone used to physically and aesthetically fix an outside corner of a building; typically in a toothed from with alternate quoins projecting and receding form the corner.
Voussoir	One of the individual masonry units of an arch or vault, usually wedge-shaped with the abutting faces aligned with a radius of the center; typically uniform in size, except in gothic style arches.
Whitewash	A surface coating applied as a creamy paste composed of slake lime and water, and sometimes other ingredients such as salt, sugar, or whiting; most commonly used as an interior wall and ceiling finish before 19c, then commonly used on exterior wood, masonry and concrete, or interior surfaces below grade; sometimes tinted with bluing, indigo, Indian red, lampblack, raw umber, or yellow ocher.





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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