

Bromley Farm

Master Plan

Historic Structures Assessment

Landscape Assessment



Prepared for:
City of Brighton, Colorado
Department of Parks & Recreation

Colorado Historical Society
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Prepared by:
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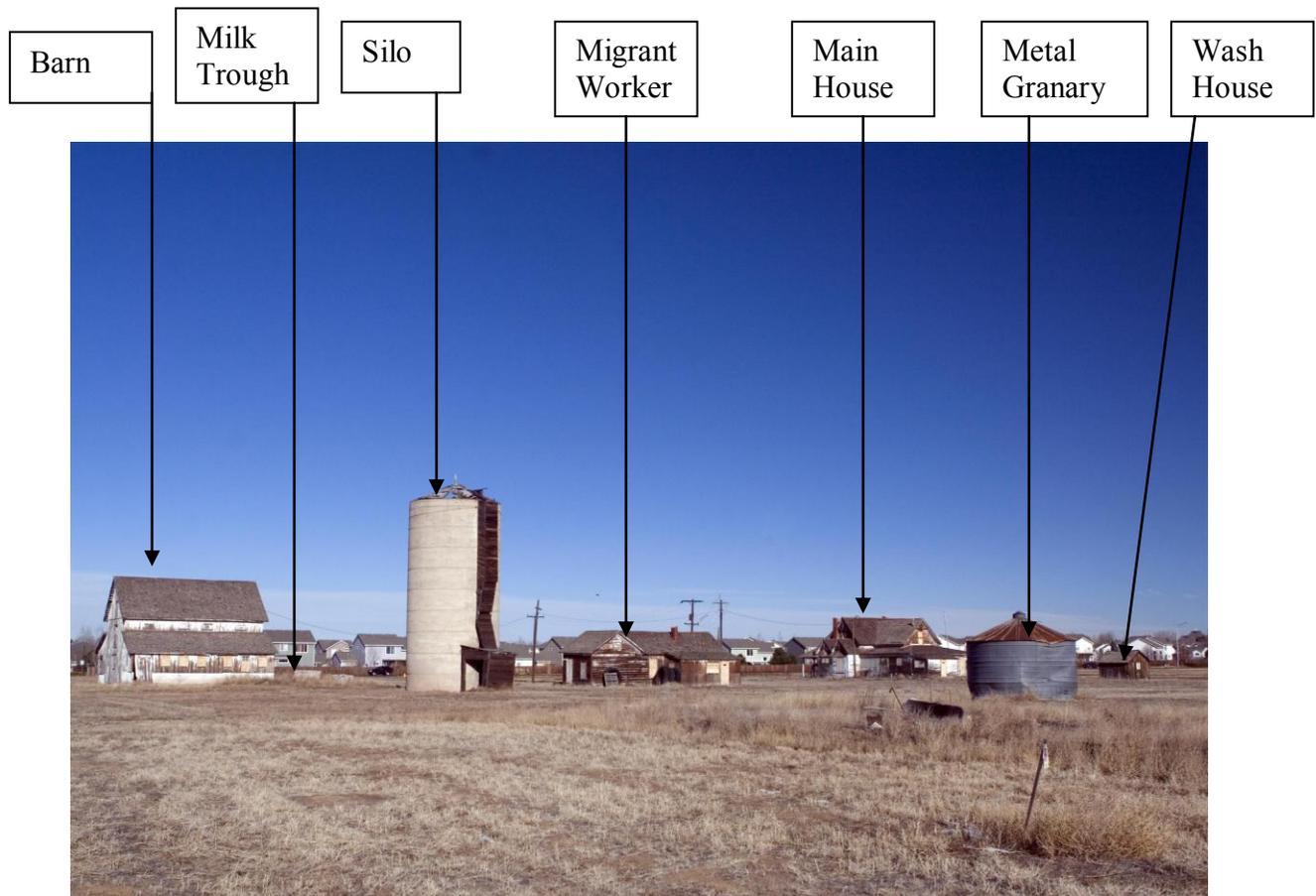
Section 1: Introduction

1.1 Background and Participants

Project Purpose

The purpose of the project is to prepare a master plan for preservation and adaptive re-use of the Bromley Farm – Koizuma-Hishinuma Farm in Brighton, Colorado. The farm will be referred to as the Bromley Farm throughout this document.

The property consists of 9.6 acres with four buildings (Main House, Migrant Worker House, Wash House and Barn) and four structures (silo, metal granary, cistern and milk trough). It was listed on the National Register of Historic Places (5AM1841) on August 16, 2007.



2008 photo looking northeast. Recent residential development north of the site is visible in the background.

This document contains historic structures assessments of the buildings and a cultural landscape assessment. The assessments document the site and buildings' current

conditions, in order to guide and prioritize preservation and maintenance activities for the next five years.

An archaeological assessment report dated June 24, 2009, was reviewed and accepted separately and is included with this document.

Funding

This project was paid for in part by a State Historical Fund grant from the Colorado Historical Society. The City of Brighton provided matching funds.

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1.2 Scope of Work and Procedure

The scope of work consists of historic structures assessments for the four buildings, archaeological investigations, a cultural landscape assessment and master plan. The tasks are summarized here. Please refer to the Appendix for a complete description of the scope of work.

Background Research

The team reviewed the National Register nomination, historical records and historic photographs provided by the Brighton Historical Commission, as well as land deed (grantor-grantee index) transfer records at Adams County. Meetings were held with local members of the Bromley, Roberts and Hishinuma families, who provided valuable background on the families and their use of the buildings and the site. Avenue L Architects obtained aerial photographs of the area from the National Archives, dating from 1937 and 1950. Information sources are listed in the Bibliography.

Historic Structures Assessment

Historical architects Kathy and Len Lingo of Avenue L Architects and structural engineer Dan Cooke of JVA documented the site in April and May of 2009. They recorded the building conditions using field notes, field measurements, photography, and field sketches. Len prepared field-measured computer-aided design (CAD) drawings of the building floor plans and exterior elevations. Repair recommendations are based upon professional best practices in compliance with the Secretary of the Interior Standards for Rehabilitation of Historic Structures. Cost estimating data comes from prior historic project experience as well as RS Means Repair and Remodeling Cost Data.

Mechanical engineer Mark Johnson of McGrath Incorporated and electrical engineer Jeff Nielsen of JCN Engineering documented the site in September of 2009. Their recommendations address deficiencies and treatment recommendations that should be implemented to make the buildings occupiable and usable. Additional work is likely to be required for a restaurant use in the Main House, but the details of this cannot be determined until a specific concessionaire with a specific restaurant plan has been selected.

Cultural Landscape Assessment

DHM Design planners Mike Gasper and Matt Norcross prepared the cultural landscape assessment, assisted by civil engineers/surveyors Noah Nemmers and Chris Duda of V3 Companies. V3 companies prepared a base map and provided additional information on topography, improvements and utilities. DHM identified site issues and character-defining features through on-site reconnaissance and photography. They analyzed

landscape changes over time using historical photographs, aerial photographs, and interviews with people who lived on the farm, visited the farm, or whose family lived on the farm. These included neighbors as well as members of the Bromley and Hishinuma families, as well as Mr. Frank E. Roberts, who lived on the farm in the 1930s and 1940s.

Archaeological Assessment

RMC Consultants, led by Marilyn Martorano and David Killam, conducted an archaeological assessment of the farm in May of 2009. The assessment was recorded in the document “Archaeological Assessment Report Bromley Farm/Koizuma-Hishinuma Farm” dated June 24, 2009. The report and archaeological component forms were submitted, reviewed and accepted separately by the State Historical Fund and have not been duplicated in this draft document. The archaeological report will be bound in with the final master plan documents.

Archaeological work consisted of three primary tasks:

Task I included pre-field analysis and evaluation of existing historic site data including site history, historic and recent aerial photographs, historic and recent photographs, maps and results of oral interviews with the farm families and their descendents. This analysis focused on determining the archaeological sensitivity of the site to focus fieldwork efforts in Task II. Likely sensitivity areas were identified and marked on the site map prior to the Task II fieldwork.

Task II included an on-site archaeological pedestrian survey of the entire 9.6 acre area owned by the City of Brighton. The fieldwork was conducted May 22, 2009. Marilyn Martorano served as Principal Investigator and David Killam as Project Director. The site was intensively inventoried for cultural resources by walking 20 m parallel transects east to west across the property.

During fieldwork, archaeological remains (artifacts) and any concentrations of materials were flagged and described, and their locations recorded. Detailed descriptions and photographs of potentially diagnostic artifacts were completed in the field. A Colorado Historical Society Office of Archaeology and Historic Preservation (OAH) Archaeological Component Form was also completed. A few selected artifacts were collected due to their vulnerability to unauthorized collection and/or disturbance. These artifacts were submitted to the City of Brighton for potential future interpretive purposes.

Task III consisted of the preparation of the Archaeological Assessment Report. It describes the results of the pre-field research and archaeological survey, evaluates the significance of the archaeological remains and provides recommendations for dealing with archaeological materials during future work at the site. An archaeological site sensitivity map was prepared, showing areas of high, medium and low sensitivity.

The Master Plan

The consulting team, along with the City of Brighton Parks & Recreation Department, evaluated many suggested new uses based upon several factors:

- extent of expressed community support;
- ability of the site and buildings to support the suggested uses;
- appropriateness of the uses for this historic property;
- potential to generate some revenue to help offset operating and maintenance costs;
- uniqueness of the proposed use to avoid duplication of other nearby attractions;
- ability to interpret the history and significance of the site to users.

The master plan for the adaptive re-use of the Farm developed over a period of one year with input from many people within the Brighton community. The interested parties included citizens from the Brighton community; members of the Bromley, Roberts and Hishinuma families; the Brighton Parks and Recreation Advisory Board; the State Historical Fund; the City of Brighton Parks & Recreation Department; the Brighton City Council; School District 27-J; Brighton Historic Preservation Commission; and the Brighton Development Review Committee (DRC). The DRC consists of representatives from the City departments of Community Development, Utilities Department Water Resource Division, Greater Brighton Fire District, Police Department, Stormwater Coordinator, United Power Company and Xcel Energy.

The Parks & Recreation Department played a pivotal role by reaching out to specific community members who could provide needed input as the project progressed. For example, as the idea of a living farm began to take shape, the Department contacted local members of the farming community. These people willingly provided valuable feedback about what is needed for a viable living farm.

Public Meetings

The master planning process has begun with a series of stakeholder and community meetings. Agendas and meeting summaries are in the Appendix. Meetings to date were as follows.

-May 14, 2009, with members of the Bromley, Roberts and Hishinuma families. The purpose of the meeting was to explain the master planning project and seek their input regarding the history of the farm. Current and historic photographs, as well as current drawings, were used to help spur discussion.

Outcome: the families provided valuable insight into how various parts of the property and various buildings on the site were used at different times. The meeting agenda and notes are in the Appendix.

-May 20, 2009, with community stakeholders who were invited based upon their known interest in the project, or their ability to represent. 22 persons attended the meeting.

Invited community stakeholders included representatives from the Brighton Historic Preservation Commission, Brighton Parks & Recreation Advisory Board, Brighton City Council, School District 27J, local magazine and e-newspaper, local arts organizations, business community, community volunteers, farming community, the Brighton Japanese-American Association, Fulton Ditch Company and the Adams County Historic Preservation Commission. The purpose of the meeting was to explain the master planning project and seek stakeholder suggestions regarding possible new uses for the property. The goal is to find a new use that will be supported by the community. Current and historic photographs, aerial photographs and drawings were used to spur discussion.

Outcome: the stakeholders identified existing models for other existing farms that are used for public visitation, such as at Grand Junction, Denver Four Mile House, and the Littleton Historical Museum. They talked about why the site is important to the Brighton community, suggested cooperative partners, and suggested various types of uses that they felt were appropriate. The meeting agenda and notes are in the Appendix.

-June 25, 2009, an open community meeting was attended by 32 members of the public. The meeting was publicized through invitations sent out with local water bills, the City of Brighton website and the local e-newspaper. The purpose of the meeting was to explain the master planning project and seek suggestions regarding possible new uses for the property. The goal is to find a new use that will be supported by the community. This meeting differed from the stakeholders meeting in that it was open to anyone. There was more emphasis on describing the property and its history, under the assumption that these attendees would have less familiarity than the stakeholders and family members. Current and historic photographs, aerial photographs, site plans and drawings were used to spur discussion.

Outcome: the community members suggested potential uses for the facility, such as a living farm, Japanese-American cultural center, and a site for various festivals, crafts, arts events and classes. The meeting agenda and notes are in the Appendix.

-August 6, 2009, met with stakeholders to present analysis of potential uses.

-September 2, 2009, presented proposed uses to Brighton Parks and Recreation Advisory Board and Historic Preservation Commission.

-October 13, 2009, presented proposed master plan with uses and phasing to Brighton City Council Study Session.

-October 22, 2009, presented proposed master plan and requested information from Brighton Design Review Committee, with representatives from the City departments of Community Planning, Fire, Police, Building, Utilities, Traffic, Stormwater. United Power and Excel Energy also responded to the project. All departments provided input, either at the meeting or later in writing.

1.3 Executive Summary of Findings

The vision for the property is a living farm with community/teaching gardens. Compatible uses will occur in the main buildings and a variety of outdoor community events will take place within and around the historic farmyard. Many of the site features from the period of significance (1883 – 1957) will be reconstructed. The buildings will be rehabilitated on the exterior to resemble their appearance during that era. Outdoor community events could include such attractions as farmers’ markets, outdoor concerts, arts festivals, or activities for school or scouting groups. A portion of the eastern end of the property may be used in conjunction with the adjacent Community Park and its planned aquatic park facility.

The primary site features of the historic Main House front lawn, the tree-lined entry lane and the entertaining/formal gardens will be reconstructed. The Main House is programmed to become a privately operated café/teahouse, operated by a private concessionaire under contract to the City of Brighton. The City will maintain ownership of the property.

The Barn will be used intermittently for small community classes or small special events. The Migrant Worker House will serve as the administrative space for the living farm and may house local history documents. A longer-term goal could include living quarters in this building for an on-site live-in caretaker. The smaller structures (Wash House, Silo and Metal Granary) will not contain adaptive new uses but will be interpreted for their original uses.

Preservation and rehabilitation actions are needed on many of the building and site features. Condition deficiencies are primarily in the categories of foundations, roofing, exterior siding, and exterior openings. Almost all of the critical deficiencies result from advanced weather damage. Interior repairs were estimated, but will need to be finalized when a use is determined. The buildings have suffered from long-term deferred maintenance, particularly exterior maintenance, which has led to accelerated deterioration. Local people have commented that the deterioration has accelerated greatly in the last few years.

COST SUMMARY (2009 dollars. Individual entries do not include overhead and fees)

Main House	351,650
Migrant Worker	130,335
Barn	132,268
Wash House	11,232
Silo	16,038

- Design and construct pedestrian hardscapes: paths and paving
- Interior construction, Migrant Labor
- Replace Silo roof

Phase IV

- Main House restaurant: upgrade site utilities, parking lot, site lighting.
- Main House: Interior design and construction of modifications to accommodate restaurant. Possible addition on south side for commercial kitchen if needed.

1.4 Property Location

The Bromley Farm is located in south-central Brighton, Colorado, on the south side of Bromley Lane, approximately one mile east of U.S. Highway 85 and one mile south of Colorado Highway 7. The property was annexed to the City of Brighton in 2005. Prior to that time, it was in unincorporated Adams County. The property address has recently been changed for consistency with the City of Brighton's system, and is now 1594 East Bromley Lane, Brighton, CO 80601. Until 2009 the property was addressed as 15820 East 152nd Avenue, Brighton, CO 80601. Its nomination form to the National Register is entered under the old address.

Bromley Lane is a busy 4-lane east-west highway that provides access east from U.S. Highway 85 to Interstate 76 in eastern Adams County. Bromley Lane's name changes to 152nd Avenue beyond the Brighton city limits. A few miles to the east of the site is Barr Lake State Park. Denver International Airport is ten miles to the southeast.

The Bromley Farm is located in an area that is changing from predominantly agricultural uses to new residential and retail uses. New single-family residential development is across Bromley Lane to the north and further to the south of the site. West of the site are large retail developments that have been built within the last ten years. New residential development is planned immediately to the south of the site. New retail development is planned to the west of the site. To the east of the site is land owned by the City of Brighton and dedicated to open space and recreation use.

Brighton is approximately 25 miles northeast of downtown Denver.

Locational Data:

UTM NAD 27 13 516953 E 4424401N

Derived from heads up digitization on Digital Raster Graphic (DRG) maps provided to the Colorado Historical Society Office of Archaeology and Historic Preservation by the U.S. Bureau of Land Management

USGS map: Brighton CO

A tract of land within the Northwest ¼ of Section 17, TWP1S R66W of the 6th PM

Subdivision: Bromley Farms, Track J

Full legal description is very long and duplicated within the Appendix

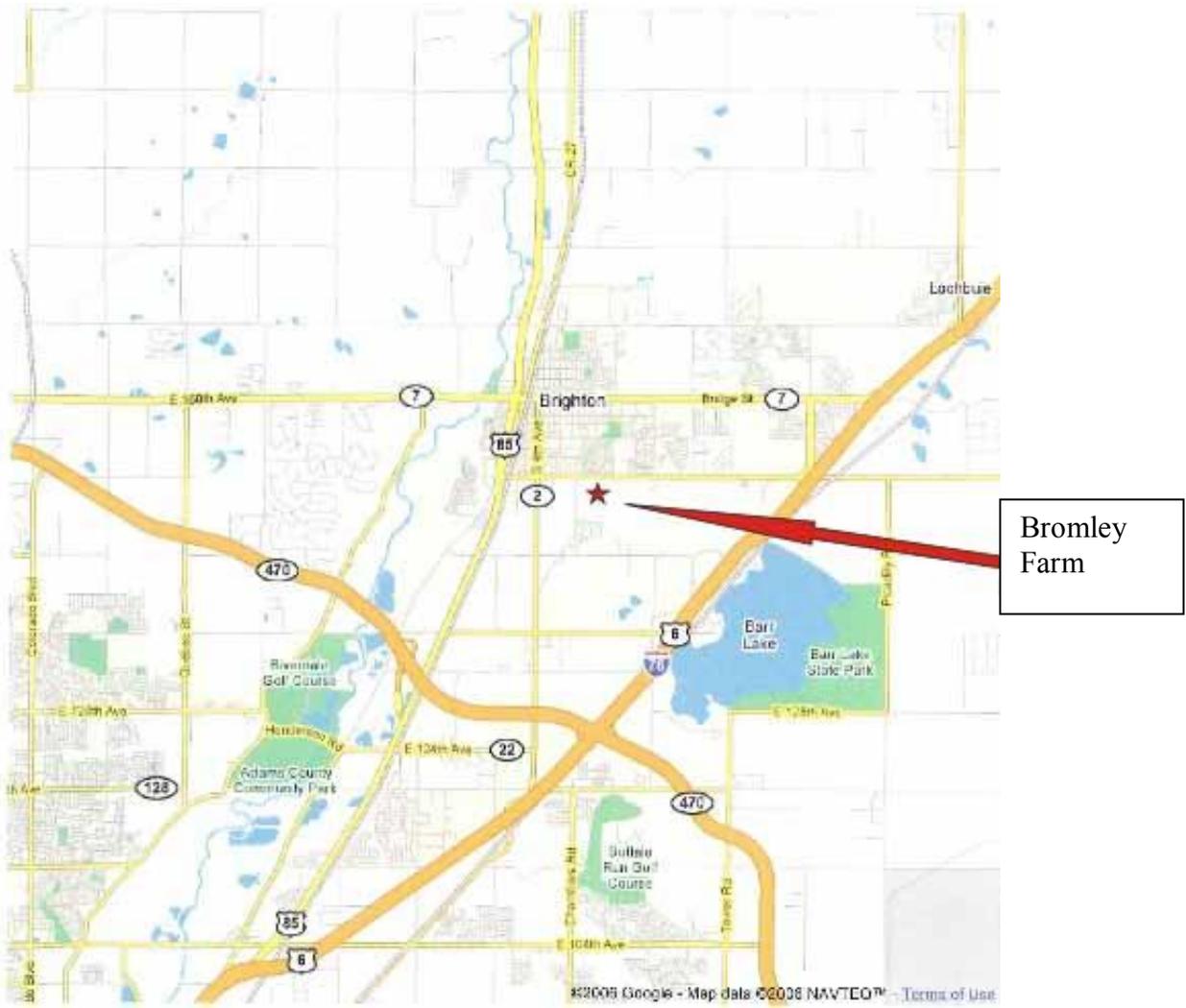
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Bromley Farm
Historic Structure Assessment
Section 1: Introduction



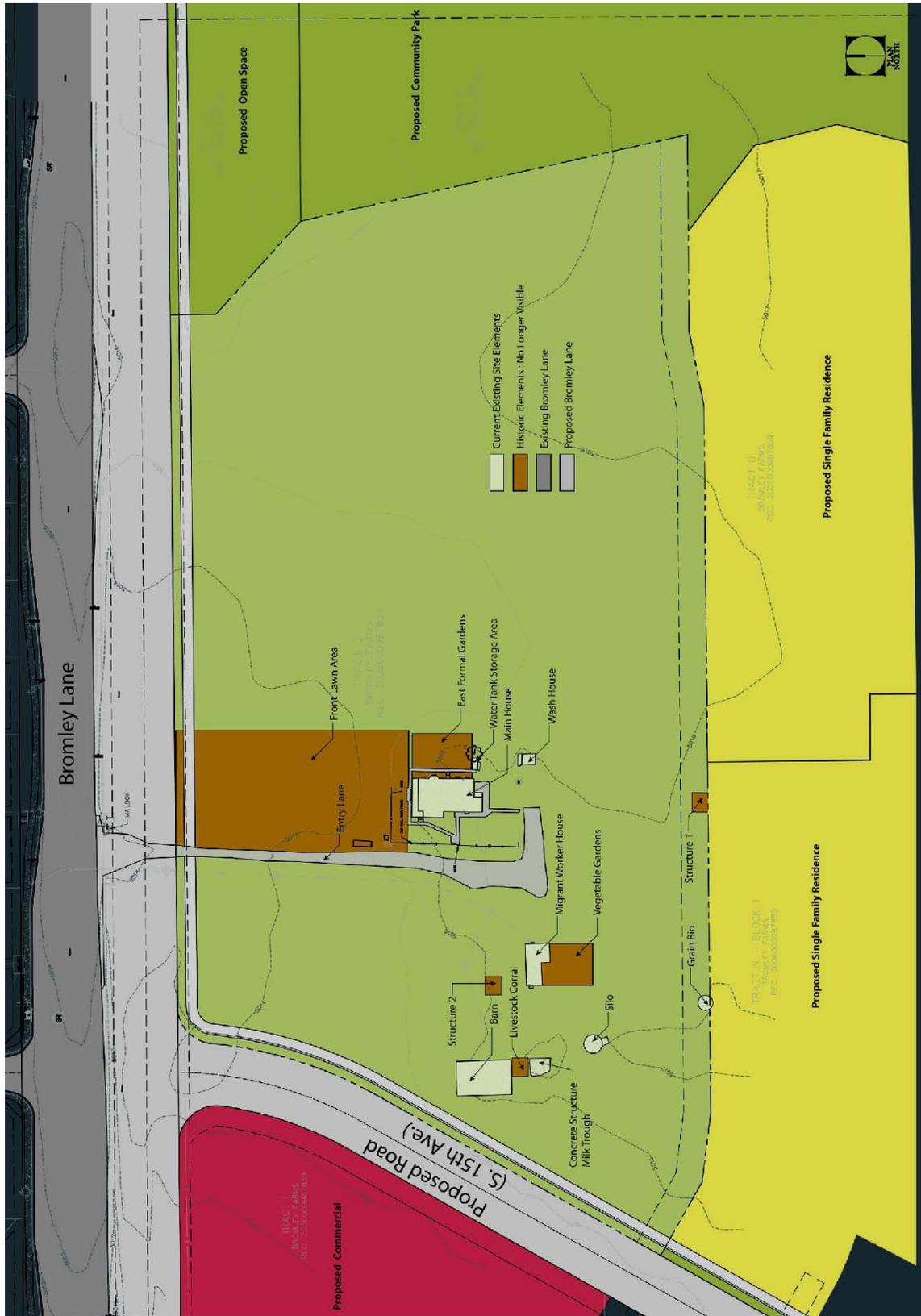
Local map, Brighton Colorado
Google Earth 2005

Bromley Farm
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Brighton Area regional map
Google Earth 2005

Bromley Farm
 Historic Structure Assessment
 Section 1: Introduction



Site diagram showing existing and historic features with proposed adjacent development, proposed new adjacent road and proposed widening of Bromley Lane.

Section 2: History and Use

2.1 Architectural Significance and History

Significance

The Bromley Farm / Koizuma-Hishinuma Farm is listed on the National Register of Historic Places under Criterion B in the areas of agriculture and politics/government for its association with Emmet Ayers Bromley. Bromley was an early settler who came to Colorado in 1877. He became one of the largest sheep and livestock owners in Colorado. He started this farm with 200 acres in 1883, and eventually farmed and ranched on several hundred acres of irrigated land and 8,000 acres of dry land. Emmet Bromley also built a long and distinguished record of public service. He served two terms in both the Colorado House of Representatives and the Colorado Senate. Bromley sponsored the 1901 State Senate bill that separated the northern half of Arapahoe County into Adams County, with Brighton as the County seat. Bromley died in 1922. The period of significance under this criterion is 1883 to 1922.

The Bromley Farm / Koizuma-Hishinuma Farm is listed on the National Register of Historic Places under Criterion A in the area of agriculture for its long association with farming and ranching in the South Platte River Valley. Following the Bromley family's many years of ownership of the property, it was sold to I.B. James, who hired the William O. Roberts family to operate the farm. The Roberts family raised a variety of crops including sugar beets, alfalfa, corn and grains. They also raised dairy and feed-lot livestock and hogs. In 1947, James sold the farm to the Koizuma family. The Koizumas and their relatives, the Hishinumas, farmed the land until 2006. At that time they split the acreage, selling much of it for development. The City of Brighton purchased the 9.6 acres containing the buildings that are the subject of this report. The period of significance under this criterion is 1883 to 1957.

The farm is listed on the National Register under Criterion A in the area of ethnic history for its association with Asian American families who made a major contribution to local agricultural and social history. Arriving in the Brighton area in the first years of the twentieth century, Japanese immigrants and their descendants were recruited to work for irrigation ditch construction and to labor in the sugar beet fields. As families saved money, some were able to purchase farms of their own. Typical of these families in the Brighton area, the Koizumas and Hishinumas raised sugar beets, cabbage, alfalfa and corn. The Great Western Sugar Company and local canneries such as Kuner's played a major role in the economic well being of Brighton. Japanese American farmers played a big part in the health of these industries. The period of significance under this criterion is 1947 to 1957.

The farm is listed on the National Register under Criterion C as an important and intact representation of a regionally disappearing Adams County agricultural complex. The architecture represents the full range of buildings and structures necessary for the operation of a twentieth-century Colorado cattle ranch and farm. The complex provides the visual context for understanding the development of early twentieth-century ranch and farm structures. All of the primary and secondary buildings and structures essential to farm life are in their historic locations, including a rare surviving example of migrant worker housing. No period of significance is identified for Criterion C.

Historical Background and Construction History

The history of the farm is summarized in this section. For a more comprehensive history, please refer to the National Register nomination.

For the greater part of 123 years the Bromley-Hishinuma farm was used for agricultural purposes. Over the course of this time the size of the farm expanded, contracted (exhibit 1, pg.2), and varied in use. The history and use of the Bromley-Hishinuma farm can be viewed as three eras defined by ownership and use.

The Bromley Era

In 1883 Emmet Bromley purchased 200 acres across from what is now South 15th Avenue and Bromley Lane in Brighton, Colorado. The farm expanded to upwards of 1,100 acres extending 1¼ miles to the east and 1 mile south from present day Bromley Lane.

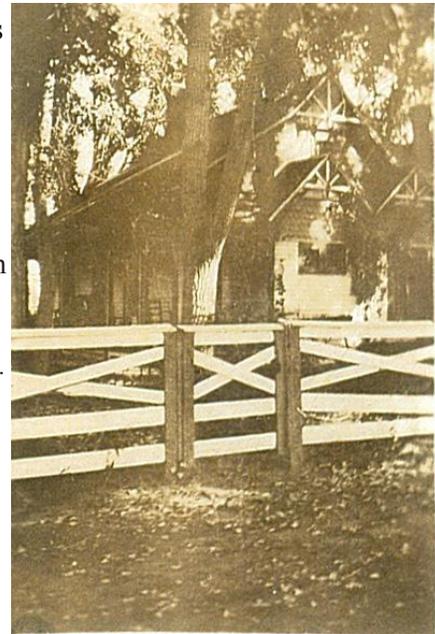
During the Bromley era, the property was used mainly for ranching with cattle, sheep, and horses. Emmet Bromley became one of the largest livestock ranchers in Colorado, grazing his cattle as far as Barr Lake before 1900. He is said to have spent a considerable amount of time improving some of the best breeds of cattle and Cleveland Bay horses. Emmet also raised field crops, planted orchards of black walnut and orange trees, and tended vegetable gardens. During



Bromley's time there is evidence that the farm property was populated by an abundance of large cottonwood trees shading the house and creating formal rows lining the drive entering the property. It is likely that the family planted other ornamental plant material and gardens around the main house perhaps for decorative purposes and to grow a variety of vegetables for family consumption. Through oral history it has been learned that there was a formal garden on the east side of the

house for entertaining. An ornate white-painted wood fence surrounded the main house (right).

Emmet Bromley's influence on the landscape extended beyond his homestead. Bromley served as president to the German Ditch and Reservoir Company, secretary of the Fulton Irrigation and Brighton Lateral Ditch companies, and was involved in oil development, serving as president of the Gibraltar Oil Company. While in the State Legislature he worked to simplify and liberalize water rights laws and was continually a strong advocate for farmers and ranchers around the state. Also, while in the legislature, Bromley helped craft bills that separated the northern part of Arapahoe County into Adams County, and named Brighton as the County seat. Emmet Bromley is known as the "Father of Adams County" because of his efforts. Emmet Bromley died in 1922. His family relinquished the deed to the



property to the Public Trustee in 1926. It is presently unclear who owned the property and how it was used between 1926 and 1935. Like many other agricultural properties in the area, it may have remained under public ownership during the Great Depression and Dust Bowl years. Further research in the Adams County Courthouse may shed light on this question.

The Bromley Era: Construction History

Exact construction dates for buildings on the site are unknown. All of the Adams County records burned in a courthouse fire on January 22, 1904. The county assessor's office lists the date of the Main House construction as 1901 and the Adams County courts estimated the construction date as 1899. It probably dates from the 1880s.

During the Bromley era, the property did not have electricity, running water, or indoor plumbing. A large wood or coal-burning central heater was the only source of heat, located in the "great room". At some unknown time during the Bromley ownership, the house was expanded to the south with the addition of a kitchen and back porch. The present east entry foyer was originally a porch similar to the west porch. This was enclosed to form a foyer at an unknown early date.

The wash house, south of the Main House, is attributed to c. 1920 in the National Register nomination. It had a wood or coal-burning stove, probably to heat water for washing. The stove does not remain but its chimney still exists on the roof.

The National Register nomination estimates the dates of other buildings and structures in the late 1920s or early 1930s. However it seems likely that these were built earlier, during the Bromley era, rather than during the period of time of Public Trustee ownership. These include the Migrant Worker House, the Silo and the Barn.

At least two brick structures, no longer extant, were on the site during the Bromley era. These are shown on the site diagram: one is south of the Wash House and one is east of the Barn. Their original functions are unknown, and it is unknown when they were removed.

The I.B. James / Roberts Era

The National Register nomination states that the William O. Roberts family owned the farm after the Bromley family. However information obtained later shows that the Roberts family managed the farm, but did not own it. In 1935, I.B. James purchased 160 acres of the farm. In the 1930s, several different members of the James family purchased numerous parcels of agricultural land in Adams County, totaling thousands of acres. Most of the parcels they purchased had been in Public Trustee ownership.

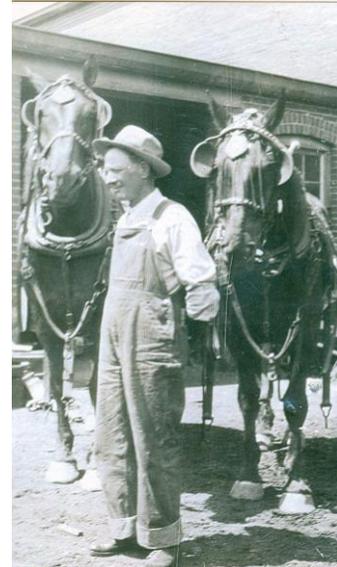
I.B. James owned the Burlington Bus Company in Illinois, a subsidiary of the Burlington Railroad. James was one of the founders of the Trailways Bus System, a conglomeration of smaller long-distance bus companies who banded together in the 1930s to compete with Greyhound. I.B. and his brother built the Grand Lake Lodge near what is now Rocky Mountain National Park. Trail Ridge Road, completed in 1932, greatly increased tourism to that area. I.B.'s brother took over the lodging side of the business and I.B. kept the tourist bus business. The James family envisioned a Grand Circle tour of the Rocky Mountains utilizing a combination of train and bus segments. Brighton was at the junction of the Denver Pacific Railroad (now Union Pacific) and Denver & Boulder Valley Railroad, and tourists actually did ride the train from Brighton to Boulder, from whence they were bussed to mountain towns. There were plans for a resort community on the west side of Barr Lake, but they never materialized. It seems likely, but has not yet been established, that the James family's extensive purchases of foreclosed

agricultural properties in Adams County were intended for this resort development. Further research in Adams County records will help to close this information gap, and determine whether the Bromley farm was intended to be part of the envisioned resort community.

In 1935, I.B. James hired William O. Roberts to farm and manage the former Bromley farm, with the first crop year in 1936. The crops that were grown during the Roberts era consisted of sugar beets, alfalfa, corn, grains, and at one time a large field crop of tomatoes was also grown to the west of the barn.

In addition to the fertile land for harvesting these crops, the Roberts family raised hogs along with dairy and feed lot livestock. The farm consisted of 160 acres during this period, with the majority of the land under irrigation from 40 shares of water owned by the farm, and provided by Fulton Ditch Company. Frank E. Roberts, son of William O. Roberts, lived on the farm from 1936 – 1946. In 2007, he described the farm complex as having:

“...many beautiful white buildings in 1936. Concrete walks connected each of the buildings related to serve the house. A large expanse of fenced blue grass surrounded by large cottonwood trees added beauty to the north side of the house. A long entry lane from the county road was lined with more cottonwood trees, separating the house from the outer buildings. Trees were evident in the field along the irrigation ditches and other areas providing shade and beauty to the farm”.



It should also be noted that motorized farm equipment was still in the development stages around 1935 and the fields were still tilled and plowed with draft horses and mules. The Roberts family built additions to the farm complex around the barn, including livestock corrals adjacent to the barn, and a large feed lot near the silo (below). The farm again changed owners in 1947 when the Hishinuma and Koizuma families purchased it for about \$40,000.

The I.B. James / Roberts Era: Construction History

During the James/Roberts era, the Main House was modernized with the additions of electricity, running water and a bathroom. A basement was added under the kitchen, enclosing a 500-gallon water pressure tank.

Bromley Farm
Historic Structure Assessment
Section 2: History and Use



The Koizuma-Hishinuma Era

The Hishinuma and Koizuma families bought the property in 1947. These two families had a deep agricultural past, farming the Barr Lake and Ft. Lupton area before relocating to the Brighton area. O.E Fink of the Blaney Cannery may have brought the Hishinuma-Koizumas to Brighton to produce crops for his canning operation, He probably provided both the seed and the machinery to grow these crops.



There is a rich Japanese-American agricultural history in Colorado. The leadership in the state allowed Japanese-Americans to own land during a time when many Americans had deep suspicions of the Japanese, due to the events surrounding the attack on Pearl Harbor. These Japanese-American families played a vital role in the production of crops for the local canneries.

The Hishinuma and Koizuma families raised a variety of crops including sugar beets, cabbage, alfalfa, and corn. The families also grew tomatoes, cucumbers, pickles, lettuce and cantaloupes for personal consumption. There is historic photographic evidence that much of the vegetation, including the grand cottonwood trees that were on the farm during the Roberts era, existed when the Hishinuma-Koizumas first settled the farm. However, at some point all of the trees were cut down. There is also photographic evidence that the family may have planted a variety of shrubs and other plantings around the main house.

After the deaths of the patriarchs of the Hishinuma and Koizuma families the land was passed on to the Hishinuma children. They maintained control of the property until 2006 when they sold most of the property to a developer. The City of Brighton purchased 9.6 acres, which included the central complex of buildings that are the subject of this report.



The Koizuma-Hishinuma Era: Construction History

The Hishinuma family expanded the Migrant Worker house to the west and south, adding the bathroom, basement and kitchen. They applied the current exterior wood siding over the original siding, which appears to still exist below. They removed the exterior wood trim on the Migrant Worker House, which originally matched the trim on the Main House. The trim is stored in the Main House. In the Main House, they relocated the entrance from the dining room to the kitchen. They used the Wash House for coal storage, and built stock cars in the Barn. An original cupola on the Barn was removed.

The three families utilized the rooms within the Main House very differently, and used different doors for their main entrances. These relationships are shown on the floor plan on the next page.

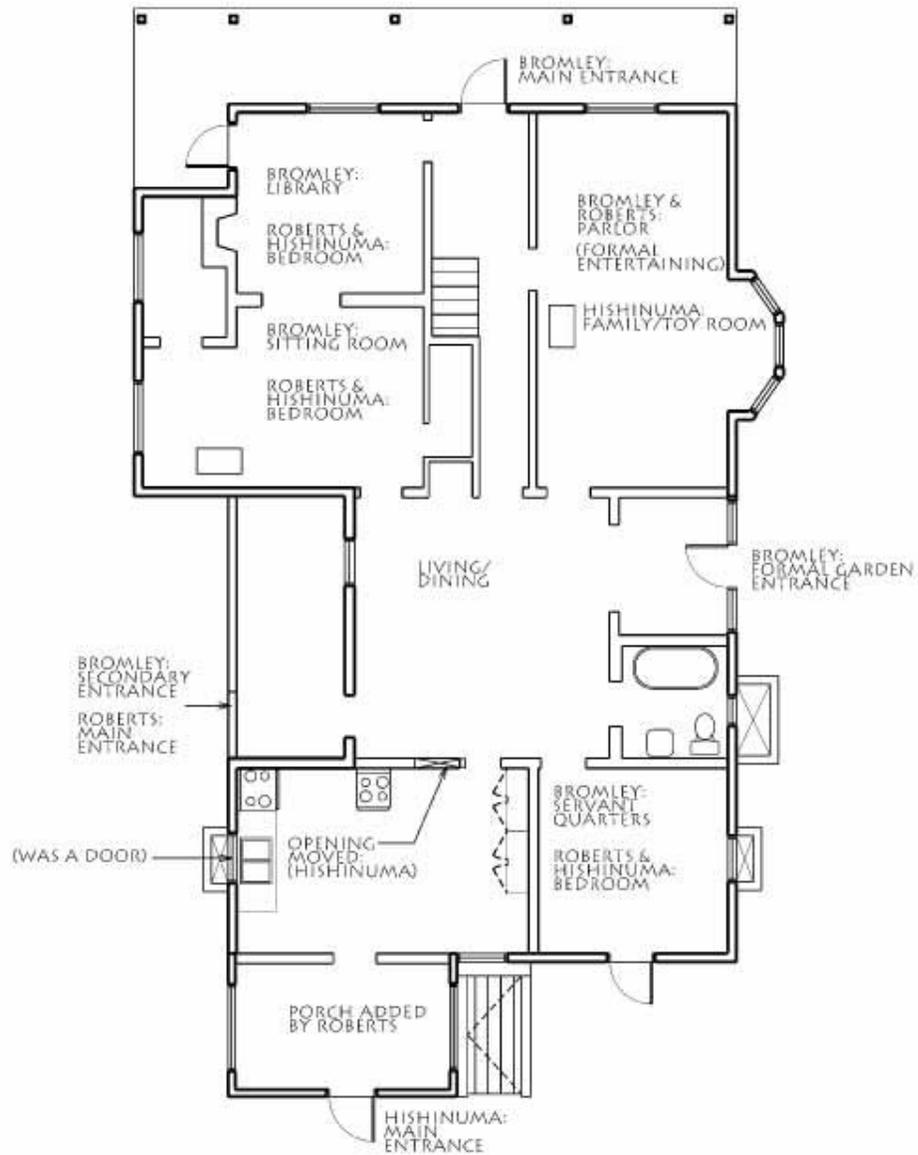
Other changes to the buildings date from unknown times. Physical evidence shows that the Main House gable siding was painted green, although it was later painted white. Early photographs of the Main House and Barn indicate trim and battens of a darker color, which may have also been green. No physical traces of anything but white paint on these features still exists. Raised concrete stem foundation walls in intermittent locations on all four sides of the Barn were added at some point. They exist now, but do not show up in historic photographs. Inside the Barn, ceiling material was added within the southernmost bay. A loft was above this area, but it no longer exists.



The City of Brighton

The City of Brighton purchased the property in 2005 for the purpose of preserving its history and finding a new, public use for it. During this ownership period, exterior windows have been removed and stored inside the buildings. Window openings have been filled in with plywood. The purpose of this temporary work is to secure the property against unauthorized entry and vandalism.

Bromley Farm
 Historic Structure Assessment
 Section 2: History and Use



MAIN HOUSE
 GROUND LEVEL PLAN



DATE: MAY 16, 2009

2.2 Architectural Styles

The architectural styles of the buildings as listed in the National Register nomination are Late Victorian and Late Nineteenth and Early Twentieth Century American Movements.

The Main House exhibits features of the Victorian Queen Anne style: steeply pitched roof of irregular shape, patterned shingles, bay window, asymmetrical façade with full-width one-story porch that wraps around to the side. Features of the Victorian Stick style can also be seen in the decorative trusses at the gables, overhanging eaves, and diagonal braces at the porch roof posts.

The Migrant Worker House originally featured some of the same detailing of the Main House, particularly in the decorative trusses. However it would best be classified in the more generic Late Nineteenth and Early Twentieth Century American Movement.

The other remaining buildings and structures are simple utilitarian agricultural structures. Photographs of the brick buildings that are no longer extant do not provide sufficient information to assign an architectural style.

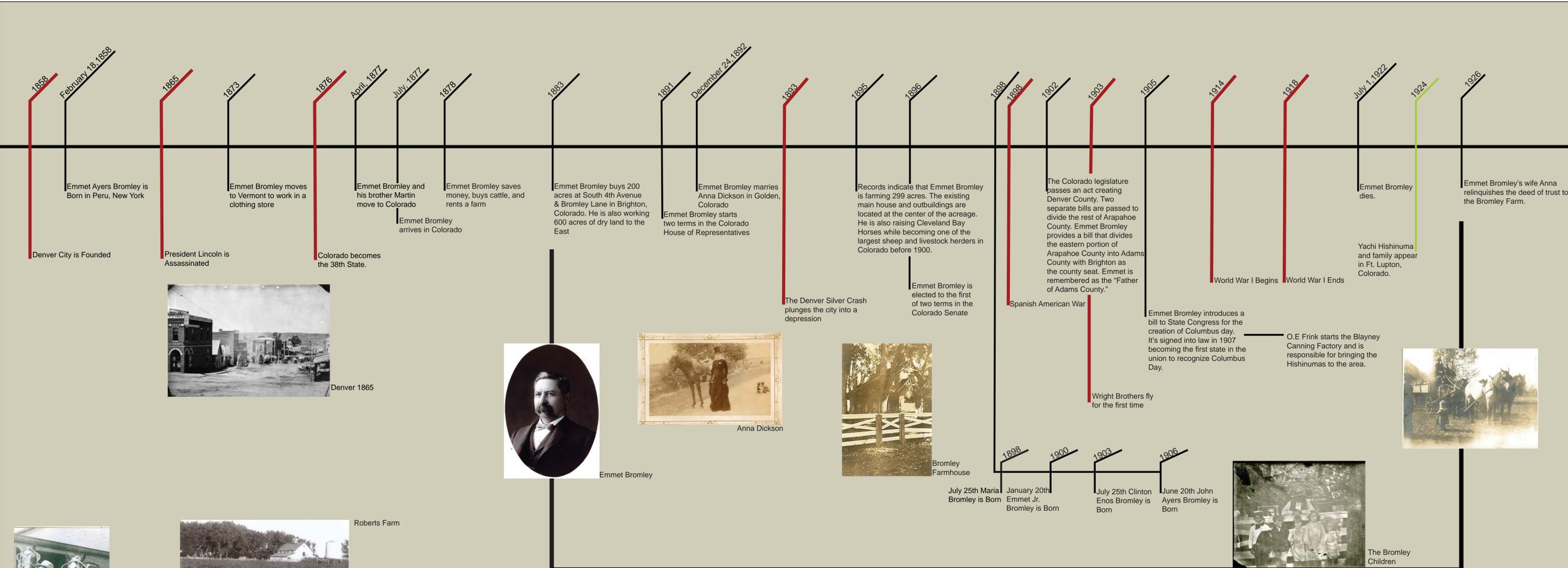
2.3 Proposed Changes in Use

Proposed changes in use are discussed in Section 1 and in greater detail in Section 7.

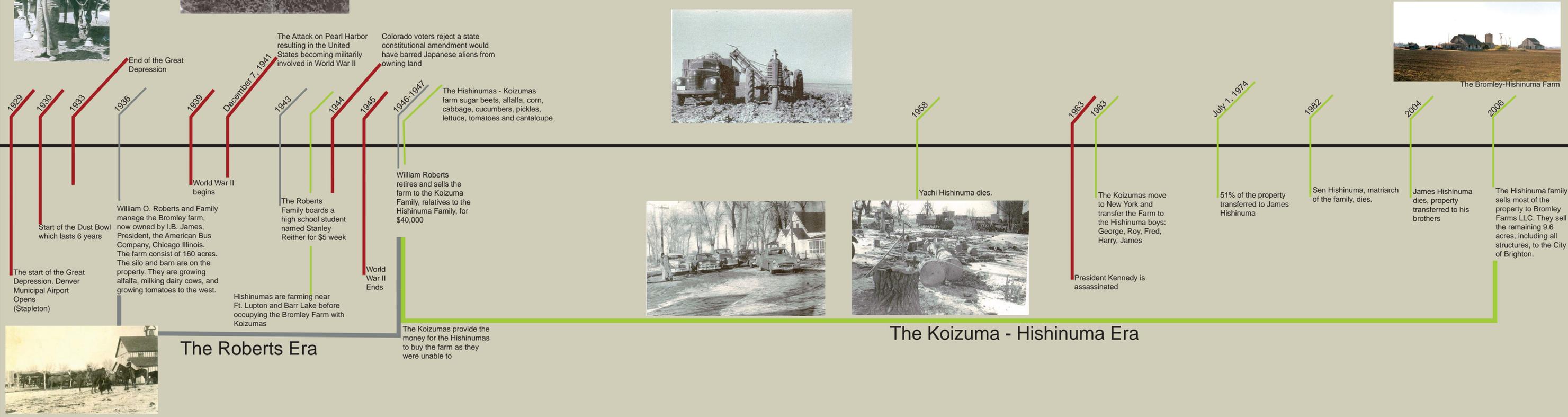
2.4 Cultural Resource Data

State of Colorado Site Number 5AM1841

Listed on the National Register of Historic Places on August 17, 2007



The Bromley Era



The Koizuma - Hishinuma Era

The Roberts Era

Section 3: Building Condition Assessment: Definitions

General description:

Five structures currently occupy the Bromley Farm site. These are the: Main House, Migrant Worker House, Barn, Silo, and Wash House.

Definitions:

Evaluations of building features or elements were recorded as being in good, fair, or poor condition. These terms are defined as follows.

Good Condition:

- The feature or element is intact, structurally sound, and performing its intended purpose.
- There are few or no cosmetic imperfections.
- The feature or element needs no repair and only minor or routine maintenance.

Fair Condition:

- There are early signs of wear, failure, or deterioration, although the feature or element is generally structurally sound and performing its intended purpose.
- There is failure of a sub-component of the feature or element.
- Replacement of up to 25 percent of the feature or element is required.
- Replacement of a defective sub-component of the feature or element is required.

Poor Condition:

- The feature or element is no longer performing its intended purpose.
- The feature or element is missing.
- The feature or element shows signs of imminent failure or breakdown.
- Deterioration or damage affects more than 25 percent of the feature or element and cannot be adjusted or repair.
- The feature or element requires major repair or replacement.

Treatment Priority 1: Critical. The element exhibits advanced deterioration that has resulted or will result in failure within two years. The deficiency is a current and immediate threat to the health and/or safety of the user. This category includes any critical safety issues, such as critical safety-related code violations or critical accessibility problems that represent current and immediate threats to health and/or safety of users.

Treatment Priority 2: Serious. The element exhibits deterioration that, if not corrected, will result in its failure within 2 to 5 years. This category includes any serious safety issues, such as safety-related code violations, or serious accessibility problems that represent potential threats to health and/or safety of users.

Treatment Priority 3: Minor: The element exhibits evidence that standard preventative maintenance practices have not been followed and there is a reduced life expectancy of the affected element.

Recommended Treatments:

The Secretary of the Interior's Standards for the Treatment of Historic Properties (36CFR Part 68) describes four approaches to treatment of historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The degree of intervention recommended depends on the existing condition of each specific element and its significance or importance to the property. Each historic property should have an ultimate treatment; in other words, one overriding treatment approach that guides the treatment philosophy for the entire property. Specific areas and specific portions of a building may have different recommended treatments, in response to conditions and needs.

The Secretary of the Interior's Standards define the treatments 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-required work to make properties functional is appropriate within a preservation project.

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.

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.

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.



Looking north along gravel entrance drive, 2009

The primary existing features of the site are the wire fence, the gravel road from Bromley Lane, the wooden electrical poles and the well.

The wire fence and gate are non-historic. The fence consists of barbed wire or woven wire fabric stretched between steel vertical channels with hooks. The barbed wire section is south of the west gate, while the woven wire section is north of the gate. There is a gate made from metal pipe and barbed wire at the concrete walk between the gravel drive and the west porch entrance to the house. A second gate is located near the north entrance, constructed of metal pipe and

woven wire fabric. The dates of the fence and gates are not known, but they do not show up in photographs dating from the 1950s or earlier.

Condition: Poor. The channels and pipe are bent, sagging and rusted. The wire is missing in many locations.

Recommended Treatment:

- Remove wire fence and gates. New fencing should be a reconstruction of the color, style and location of historic wood fencing shown in historic photographs (see Section 4)

Gravel road or Entry Lane:

There is a two-track gravel road from Bromley Lane to just west of the Main House. Weeds are growing in the center between the two tracks. This entrance is the historic approach to the site and was lined by cottonwood trees, which were removed at some point in the 1950s.

Condition: Fair. The surface is acceptable for minimal use by light vehicles, but it is not acceptable for frequent use. It is not wide enough for Fire Department emergency access. The removal of the cottonwood trees is a loss of a key character-defining feature.

Recommended Treatment:

- Restore the tree-lined canopy along the lane. Irrigation will be required.
- Grade the lane and widen it to meet minimum Fire Department access requirements of 20 feet.
- The lane should be paved with recycled asphalt on road base.

Wooden electrical poles

The wooden poles are spaced along the entry lane and near the Migrant Worker House. They are old, unpainted, unfinished wooden poles with non-functioning electrical equipment and wires.

Condition: Poor. The poles are split and leaning. They appear to be in danger of falling down.

Recommended Treatment:

- Remove the outdated electrical equipment (see electrical sections).
- Repair, reinforce and stabilize the wooden poles for interpretation.
- Since new electrical systems do not permit the use of similar poles, new electrical distribution should be underground. Above-grade, modern electrical masts would be visually obtrusive.

The well

The well is located east of the house. It is non-functioning and housed in a wooden board enclosure.

Condition: Poor. The wooden enclosure is splitting and nails have popped loose.

Recommended Treatment: Reconstruct well housing. Leave well non-functioning.

Vegetation and Drainage

Vegetation is minimal and mostly consists of weeds, many of which are noxious. These are described in greater detail in Section 4. Drainage is very flat, and also shown in Section 4.

Condition: Poor. While there are some drainage issues impacting buildings (immediately around the Migrant Worker House in particular), for the most part the drainage has not caused structural deterioration. However the Master Plan uses will require some parking and pavements.

Recommended Treatments:

- Begin a weed abatement program.
- Contract with a civil engineer for a grading and drainage plan for the site.
- Follow Master Plan recommendations (Section 7) for restoration of key character-defining landscape features.
- Follow Master Plan recommendations for additional plantings on the site, including the Community/Teaching gardens, the front lawn, the tree-lined entry lane, the formal entertaining gardens, and agricultural fields.

Concrete Walks

There are remnants of concrete walks around the Main House. The dates of these are unknown.

Condition: Poor. All walks are cracked and deteriorated.

Recommended Treatments:

- Remove existing concrete walks.
- New concrete walks should be added but their locations have not been designed yet.

The Main House is 1-1/2 stories tall and generally rectangular in plan with its primary elevation facing north. It has a usable attic level and a partial basement. The building is wood framed and generally rectangular in plan with projecting bays on the west and south sides and a projecting 4-sided bay window on the east side. A one-story open porch on the north elevation wraps around part of the west side. The first floor of the building extends approximately 51 feet from north to south and 36 feet from east to west. The upper level attic is much smaller, T-shaped in plan, resting above the central portion of the house.

The foundation consists of a variety of stone, brick and concrete. Exterior walls are horizontal painted wood lap siding with fish-scale shingles on the gable ends. The roof is cross-gabled and covered primarily with wood shingles. A one-story extension with a half-hipped roof wraps around the west and south sides.

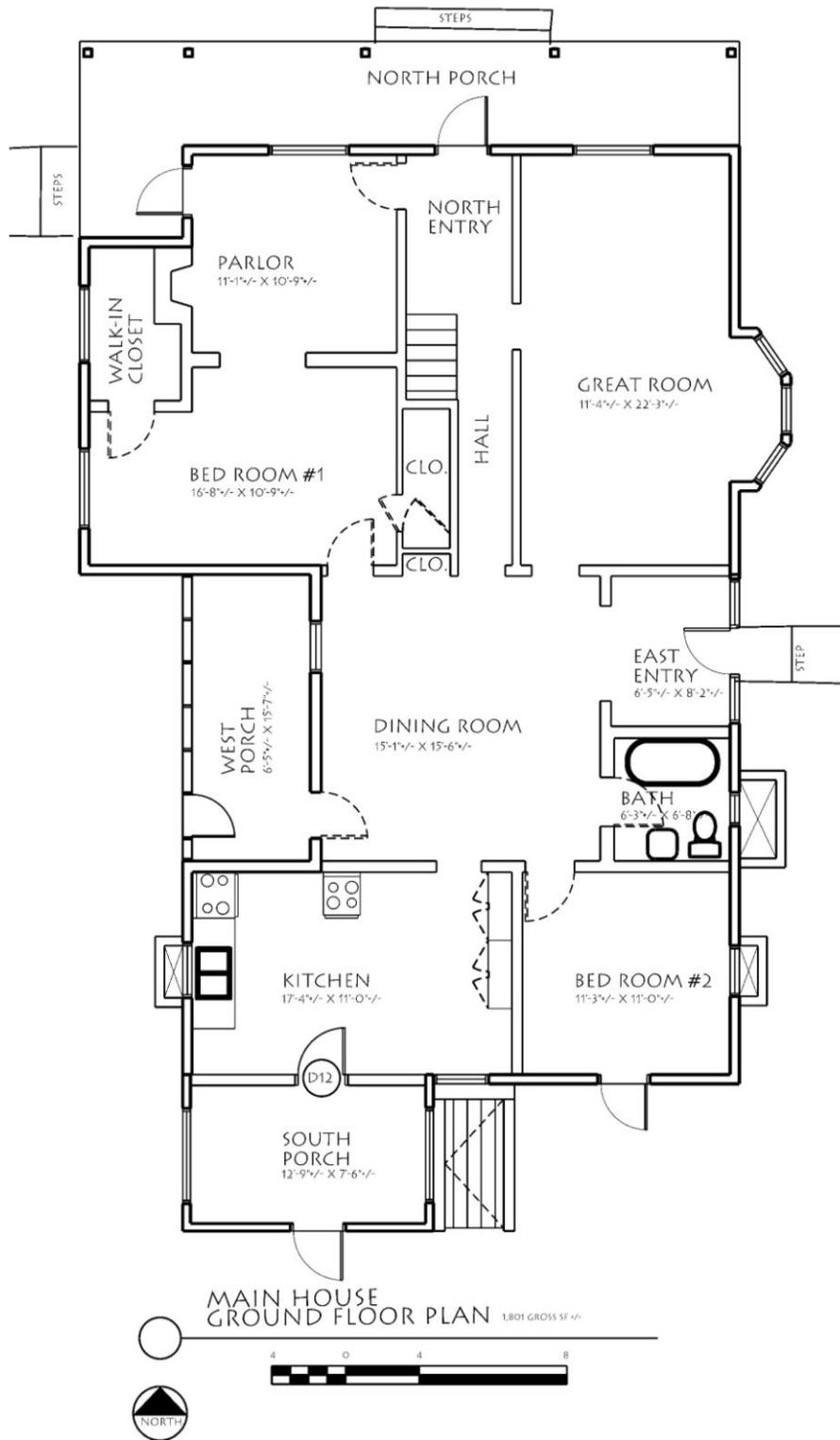


Looking southwest at Main House, 2009

The house is organized functionally around a central hall and central stairway. The northern portion of the house contains the public spaces: a Great Room to the east of the central hall and the Parlor to the west. Off the Parlor is a second room that has most recently served as a bedroom. As discussed in Section 2, different families used the rooms in the house differently. The central portion of the house is a dining room, with an enclosed porch to the west and enclosed entry and bathroom to the east. These are in a space that was originally an open porch, a mirror-image to the west porch. South of the dining room is the kitchen, and a second room

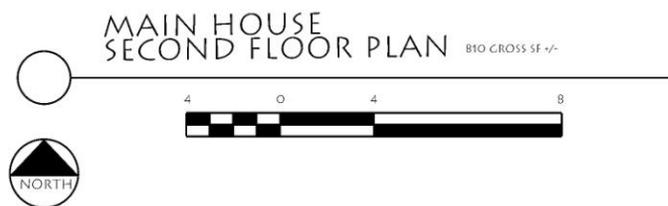
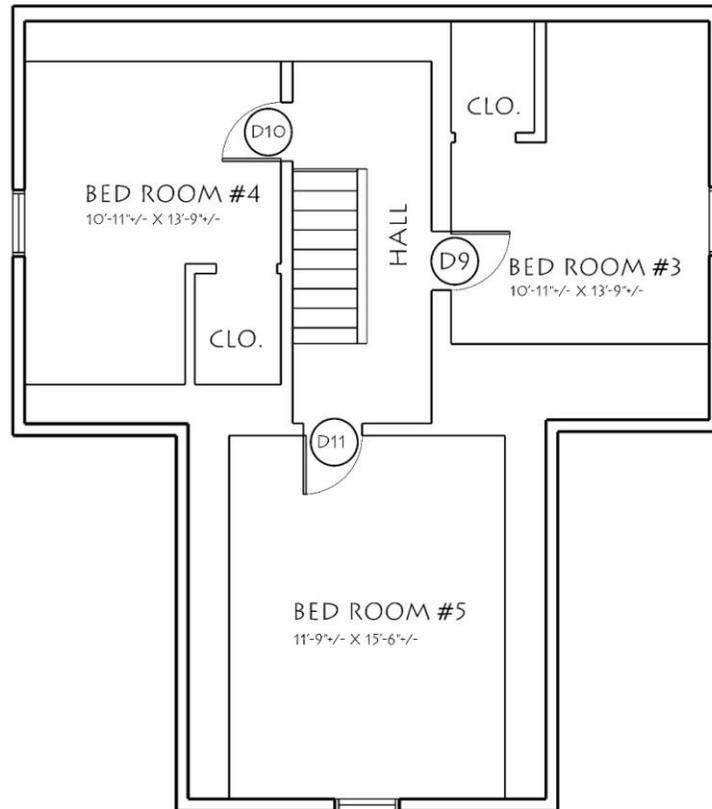
Bromley Farm
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that has most recently been used as a bedroom. A later addition, the south porch, provides entry to the kitchen from the south.



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The second floor is tucked under the gable roof, resting above the Great Room, Parlor and Bedroom #1, and Dining Room. The plan is T-shaped, with three bedrooms opening from the central hall.



3.1.2 Main House Foundation

Description

The exterior foundation system varies and consists of parged rubble stone or brick, bare brick, or poured concrete. Footings were not visible for assessment.

The interior foundation system is generally not visible. However, part of a rubble stone in concrete footing and stem wall was visible running east-west under the north wall of the Dining Room and near the wall separating the Parlor from Bedroom #1. Isolated dry stacked stone footings were also visible near mid span of observed floor joists. It is presumed that the original exterior foundation still remains under the east and west wall of the Dining Room but it was not accessible for confirmation. The north wall of the basement forms the interior foundation under the south wall of the Dining Room, West Porch and Bath. The south wall of the basement forms the interior foundation under the north side of the South Porch.

A partial basement was added after original construction under the Kitchen and Bedroom #2. The basement walls are approximately 12" thick stacked stone set in mortar and plastered on the interior. The wall appears to have been constructed inside the existing footing and stem wall line. This is an approach commonly used in the past to avoid shoring the existing footings while adding a basement. This leaves the existing footings supported on the soil behind the wall, but unsupported by the new wall, which is an important detail if work is required on the exterior of the basement wall.

There are no accessible crawlspaces under the house. The crawlspace was only observable from a small area of the basement and in a hole we cut in the floor in the north Dining Room closet. The floor joists were observed to be on or within inches of the soil below the Dining Room and Bedroom #1. The area under the first floor Bath appears to have been excavated to a depth of about 18" for plumbing subsequent to original construction. There is also evidence of excavation near the north wall of Bedroom #1 for an unknown reason.

Condition

The exterior foundation system is in fair condition but there are numerous isolated problems.

The perimeter foundation around the North Porch has three 1/4" wide cracks in it and has deteriorated due to exposure.

The concrete foundation under the north wall of the house is severely deteriorated near the eastern corner. The main house stud wall is unsupported for several feet where the foundation has completely disintegrated. It is unclear what has led to this unusual and localized severe deterioration. Poor quality concrete and freeze-thaw damage are suspected. Inadequate drainage in this area could have led to long term rising damp which can lead to the freeze-thaw damage. The damage stops abruptly at the NE corner indicating that the concrete in the deteriorated section was substantially poorer quality than the rest of the concrete.

The remainder of the perimeter foundation is cracked and deteriorated in isolated areas. The cracking appears to be due to long term differential settlement. Soils in the area are also known to be expansive. Some damage could be due to soil heaving although none of it is clearly caused by this. In general, the cracks appear to be weathered and filled with detritus indicating that the cracks are relatively old. However, there is no way to determine that the cracks are not actively continuing to grow without long term monitoring. None of the damage is severe enough to be compromising the buildings structural stability today.

The foundation under the Great Room bay window has settled away from the wall framing and is cracked in two locations.

The stone basement walls are bulging inward in some locations and the plaster and mortar is deteriorated on the lower 3' of the wall throughout the basement. The walls adjacent to the entry stairs and surrounding the door have experienced the worst deterioration. Entire stones and areas of parging are missing.

Change of occupancy to a restaurant substantially raises the Code required gravity live load on the foundations. Foundation walls and footings were not visible to determine whether the foundations are adequate to carry the higher loads.

Perimeter drainage appears to be adequate except under the North Porch, adjacent to the enclosed West Porch and around the back of the house. The North Porch appears to trap water in some areas due to grade draining towards the house. The remaining areas appear to be sloped away from the house but do not have the 8" minimum clearance required by Code between wood and grade.

There is no visible crawlspace ventilation.

Recommendations

- a. Excavate several locations around the perimeter to determine existing exterior footing and stem wall construction. Analyze to determine adequacy under new Code required loading. Foundations are generally oversized in residential construction for constructability. It is presumed that the foundations will be adequate and no costs for replacement are included in the cost estimate. Priority: Serious.
- b. Cut holes in the floor in several locations to determine existing interior footing and stem wall construction. Analyze to determine adequacy under new Code required loading. Based on limited observations it is assumed that the stone spot footings will require replacement with a new pressure treated girder and isolated concrete pad footings to meet Code. Continuous interior strip footings, like the one under the north wall of the Dining Room, are presumed to be adequate and no costs for replacement are included in the cost estimate. Priority: Serious.
- c. Excavate and epoxy inject the cracks in the perimeter foundation around the North Porch from top of wall to top of footing. Top of footing is expected to be no more than 24" below grade. Priority: Minor.
- d. Excavate and epoxy inject all cracks over 1/8" wide in exterior foundation from top of wall to top of footing. Priority: Minor.
- e. Excavate to expose the entire stem wall and footing under the Great Room bay window. Lift and stabilize the foundation to bring it back into contact with the sill plate with grout injection. Epoxy inject the two large cracks. Priority: Serious.
- f. Replace deteriorated stem wall under north wall of Great Room. Shore stud wall and remove all deteriorated concrete down to sound concrete (assume 20 linear feet x 2' deep). Dowel to and pour new concrete stem wall over sound concrete. Priority: Critical
- g. Remove and replace the footings under the North Porch per Section 3.1.3. Grade area under North Porch to new drains that daylight outside of porch. Priority: Critical.
- h. Repair the deteriorated finishes and install flashing to prevent moisture from reaching the structure per 3.1.4. Anticipate frequent painting and replacement of the finishes near grade. Alternatively, remove the concrete flatwork adjacent to the West Porch and around the back of the house to the entrance to the basement. Replace with new concrete, dropped to provide 8" minimum clear to wood finishes and wall structure. Regrade or install area drains to move moisture off of the flatwork and away from the house. Since this option is costly and the current problem is primarily impacting a small area of finishes that can be kept in repair with regular maintenance this option is not preferred and is not included in the cost estimate. Priority: Minor.

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- i. Install new interior foundations and excavate a crawlspace or install a new slab-on-grade under the West Porch and East Entry per Section 3.1.3. Priority: Serious.
- j. Cut holes or use a borescope to extensively investigate the crawlspaces throughout the house. Determine if deterioration exists due to lack of crawlspace ventilation and wood in contact with masonry or soil. If no, or limited deterioration is found, repair those areas. If widespread deterioration is found, consider excavating the entire crawlspace to current code depth (18" below framing) and installing new mechanical ventilation. Based on our limited observations, we do not expect widespread problems and thus the limited repair option is assumed in the cost estimate. Installation of crawlspace ventilation is not feasible with the limited clearances currently known and is not included. Priority: Serious.
- k. Repair the stone basement wall by replacing missing and displaced stones, pointing deteriorated joints and re-plastering the wall. Infill the opening on the west wall with matching stonework. Monitor the wall for continued inward movement and water damage. If unacceptable water damage or significant wall movement continues, extensive work will be required to waterproof the wall. This would involve underpinning the existing footings where they are not supported by the stone wall as well as the perimeter footings under the south porch. The soil down the back of the basement walls can then be excavated. A new concrete wall would be poured under the footing and against the back of the stone wall on a new footing. The whole wall would then be waterproofed. A perimeter drain should be installed at the bottom of the footing day lighting to a sump pit or to existing sewer if the invert is low enough and Code will allow it. In our opinion, the existing damage does not warrant such an expensive and invasive solution today and it is not included in the cost estimate. Priority: Minor.
- l. Remove portions of the basement slab-on-grade to install new concrete footings in the basement per section 3.1.3. Priority: Serious.
- m. Obtain a geotechnical report for the entire site recommending appropriate foundations and materials with specific reference to the possible causes of cracking observed in the existing foundations, analysis of sulfate content of the soil and recommendation for new footings and underpinning. Priority: Serious.

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East bay window; typical exterior foundation wall; notice cracking and displacement away from bottom of stud wall



Stone basement walls; water intrusion through west wall opening, failing parging along base of wall, 2009.

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Typical interior foundation of stacked stone and concrete. Looking west under north wall of Dining Room. Note untreated wood in contact with masonry, 2009.



Under NW corner of North Porch; typical brick foundation, concrete foundation beyond, isolated stone footings under posts, 2009.

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Foundation wall at perimeter of porch; notice cracking, 2009.



NE wall of house under porch; severe foundation deterioration, 2009.

3.1.3 Main House Structural System

Description

The Gable Roof (above the second floor) is a tied rafter system framed with 2x4 (full dimension rough sawn typical throughout building) wood rafters at 16" or 24" on-center sheathed with 1x8 gapped boards. 2x6 or 1x10 ceiling joists/collar ties are spaced to match the rafters. The bottom of joist is approximately 7'-10" above the second floor. The ceiling joists are side nailed to each rafter with three, 16d+/- nails. The ceiling is sheathed with plaster on wood lath.

The rafters bear on the interior and exterior walls they cross. The bearing condition was not visible. The rafters meet at the ridge and are end butted. The rafters over the North Porch are supported by a single 2x8 or 2x10 beam let into regularly spaced 5-1/2" square built up box posts.

The wrap-around hipped roofs are framed with 2x4 rafters bearing on or ledgered to the exterior stud walls. The west end of the wrap-around hipped roof over the West Porch bears on a single 2x10 beam let into 2x4 posts at about 28". The roof framing over the South Porch addition is 2x4 S4S @ 24" with 1x board sheathing and direct applied masonite wood ceiling.

Ceiling framing is generally not visible. Ceilings are typically plaster on wood lath in the older sections of the house. The kitchen has a dropped ceiling below the plaster and lath ceiling.

Second floor framing is typically 2x8 rough sawn joists at 16" running east-west to interior or exterior stud bearing walls. Spans are typically about 12' with a maximum of about 16' over the center of the house. The floor is sheathed with 1x6 T&G decking. The ceiling is plaster on wood lath. Headers over openings are not visible except between the Dining Room and East Entry. This 5' wide opening was cut through an existing exterior wall. No header was installed.

First floor framing is visible in only a few locations; in the basement; from the northeast corner of the basement looking under the Bath; and in a hole we cut in the floor in the north Dining Room closet. Framing throughout the house, excepting the basement, is generally inaccessible due to the very shallow crawlspace. Distance from joist to grade varies from about 0" to 6".

First floor framing observed is typically 2x8 rough sawn joists at 24" spanning to interior or exterior foundations. The joists run north-south under Bedrooms #1 and 2 and the Kitchen. The joists run east-west under the Dining Room. The floor is sheathed with 1x6 T&G decking. Spans are generally reduced to about 8' by the use of stone spot footings at mid-span. However, the floor joists over the basement span about 11'. Configuration and spans below the Parlor, Hall, Entry and great Room are unknown but are presumed to be similar to the framing under Bedroom #1.

2x6 joists running north-south at unknown spacing are visible under the Bath and East Entry. This appears to have been a porch that was enclosed at some time in the past. The floor framing at the South and West porch is not visible but is presumed to be similar.

The North Porch floor is framed with 2-1/8x6 or 2-2x6 rough sawn girders running parallel to the house at 24". The girders are supported on wood posts of varying sizes bearing on isolated stones or in the dirt. A 2x4 ledger is attached to the house to carry the 1x decking.

Exterior walls are typically 2"x4" rough sawn studs at about 24" on-center surfaced with 1x6 horizontal sheathing on the exterior and plaster on wood lath on the interior. The exterior wall structure at the East Entry consists primarily of door and window trim. There are no studs.

Condition

The roof structure is generally in fair condition. There are no obvious visible signs of distress or deterioration. The high roof framing over the second floor appears to comply with current Code snow

load requirements. However, connections to supporting walls were not visible and may not be compliant with wind uplift requirements. Most of the low roof framing was not accessible for assessment. Based on the visible rafter tails and trim heights it appears that most, if not all, of the low roofs are framed with 2x4 rafters at 24" centers. Due to the change in occupancy, Code requires this framing to comply with current IBC loading. Assuming 2x4 rough sawn members of douglas-fir in good condition, the framing over the North Porch, West Porch, East Entry and Bath would comply with basic Code snow load requirements. The longer spans over the Kitchen, South Porch and Bedroom #2 would not comply. All of these roofs are subject to snow drifting. Analysis including drifting would likely indicate that none of the low roofs is compliant with current Code. Connections to supporting walls were not visible and may not be compliant with wind uplift requirements.

The North Porch roof is supported by a single 2x8 or 2x10 perimeter beam. This beam does not comply with current Code loading requirements.

Second floor framing is generally in fair condition where visible. Calculated second floor capacity is inadequate for the proposed use. Per section 907.1 of the International Existing Building Code (IEBC), portions of a building subject to higher uniform loads must comply with the gravity load requirements of the IBC. The IBC requires a live load capacity of 100 pounds per square foot for a restaurant. Alternatively, per IEBC 1106.1, the code official can accept existing floors and approve operational controls that limit the live load on the floor.

The second floor, under Bedroom #3, is deflected by nearly 2" at mid span. The cause is not obvious but it appears to be related to the Great Room bay window below. The header over the window must be assumed to be inadequate. It is also possible that the foundation settlement under the bay window is connected but it is not clear how.

The head over the opening between the Dining Room and East Entry is visibly deformed due to the lack of a header. This wall is a bearing wall which supports the second floor and the roof.

First floor framing in the original interior portions of the house is generally in fair condition where visible. Floor framing under the West Porch, East Entry and Bath, and the South Porch are in unknown condition.

The first floor is out of level as is typical for buildings of this age due to differential settlement of the foundations and long term creep. Deflections do not appear to be a structural concern at this time.

First floor framing is untreated and in direct contact with the masonry and concrete foundations. Floor joists do not have the Code required clearance of 18" to soil per IBC 2304.11.2.1. This can lead to water absorption in the wood and subsequent deterioration. Deterioration was not observed in the few areas visible.

Calculated first floor capacity is adequate for the proposed use assuming that the joists are douglas-fir of good quality (#1 grade) and span no more than 8 feet. The joists under the Dining Room and Bedroom #1 meet these criteria, but this conclusion is based on very limited observation. The joists over the basement span 11 feet and thus do not meet Code. The 2x6 joists under the West Porch, East Entry and Bath do not meet Code for live load capacity. Based on the porch construction at the Migrant Worker House, it must also be assumed that the untreated joists are laying in soil and are deteriorated. The joists in other areas of the house were not observable but would meet Code if configured similarly to the area under Bedroom #1. Per IEBC section 1106.1, where live load capacity does not meet Code, the code official can also accept existing floors and approve operational controls that limit the live load on the floor.

The decking and joists at the North Porch are severely deteriorated as are the columns that bear on the deck.

Recommendations

- a. Remove small areas of ceiling in several areas to verify low roof rafter wood species, size, spacing, support and condition for analysis of capacity. Based on limited observations, the roof above the Kitchen, South Porch and Bedroom #2 will require sistering of all rafters and the addition of hurricane ties to meet current Code requirements. The high roof will likely require hurricane ties at all supporting walls. Priority: Serious.
- b. Remove small areas of ceiling in several areas to verify second floor joist size, spacing and support conditions for analysis of live load capacity. Based on limited observations, the second floor will not meet required Code capacity for a restaurant use. Reinforcement of the second floor would require removal of all historic ceilings and sistering of the joists. Headers, connections and other supporting framing would also likely require selective strengthening. This is costly, invasive and will result in loss of historic fabric. Since it is unclear if the second floor would be used in the new occupancy we have assumed that the floor be posted for its current live load capacity and that operational controls will be instituted to limit the floor live load. The City of Brighton building official will have to approve this approach. Priority: Serious.
- c. Remove finishes to investigate the second floor header condition over the Great Room bay window. Assume that the header will require reinforcing. Some floor deflection should be recovered during the shoring and strengthening process, but it is impractical to entirely level the floor without sistering or furring all of the floor joists to counteract long term deflection. Priority: Serious.
- d. Install a double 2x8 header over the opening between the Dining Room and East Entry. Priority: Serious.
- e. Remove small areas of first floor sheathing in the East Entry, South Porch and West Porch to confirm floor joist wood species, size, spacing, support and condition. The joists will likely require replacement with new joists bearing on new concrete footings to meet Code. Excavation of up to 24" of dirt will be required to provide proper clearance to the joists. This approach has been assumed for the cost estimate since it is more historically accurate. However, a slab-on-grade with wood sleepers may be a less expensive option if replacement is required. Priority: Serious.
- f. Strengthen the first floor joists above the basement by adding a new wood girder running east-west at joist mid-span supported on three new wood posts and concrete footings. Priority: Serious.
- g. Shore the North Porch roof. Demolish the North Porch floor girders, rim joists, posts and interior footings, salvaging the T&G decking where possible. Install new pressure treated girders on new concrete spot footings. Sister the existing perimeter girder carrying the rafters. Priority: Critical.
- h. Repair the posts supporting the North Porch roof by cutting off deteriorated sections and splicing new bottom ends to existing sound wood. The end grain should be sealed with epoxy and a standoff base of impermeable material should be installed. The posts should be supported directly on a new triple 2x6 pressure treated joist running from the new rim joist to the first adjacent girder. The decking should be pieced in around the post. Priority: Critical.
- i. The exterior wall of the East Entry requires strengthening. At least one king stud should be installed between each opening. The windows and door should be properly attached to the new framing. Priority: Serious.

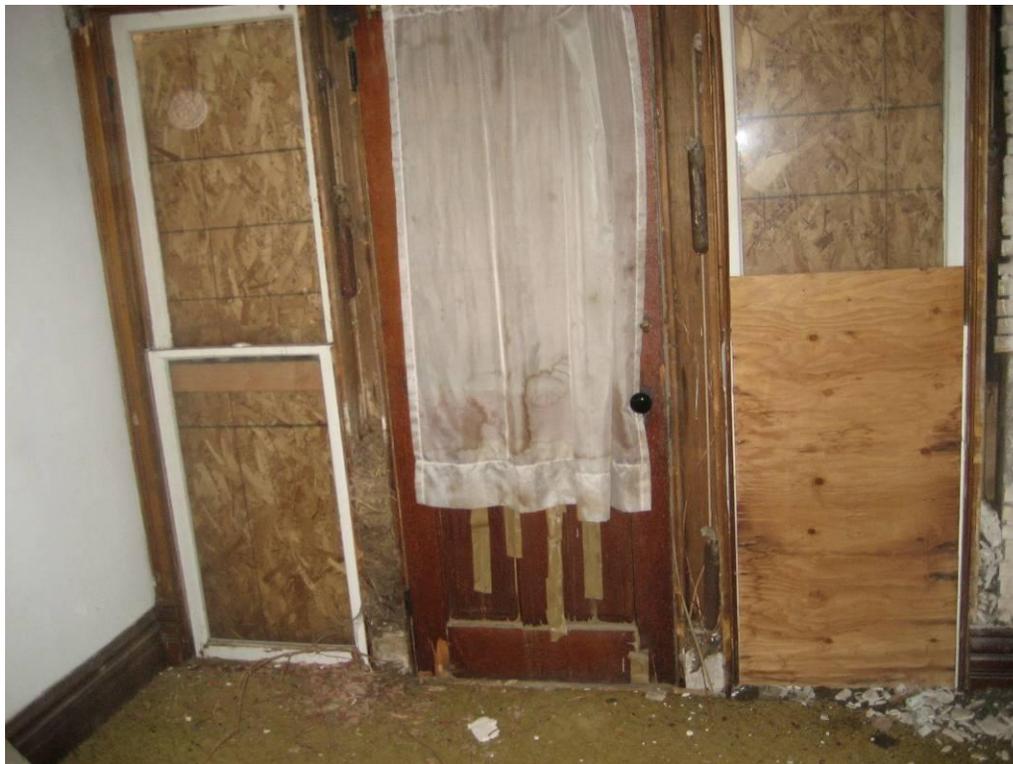
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Typical high roof framing, 2009.



East Entry wall framing; note lack of studs between door and windows, 2009.

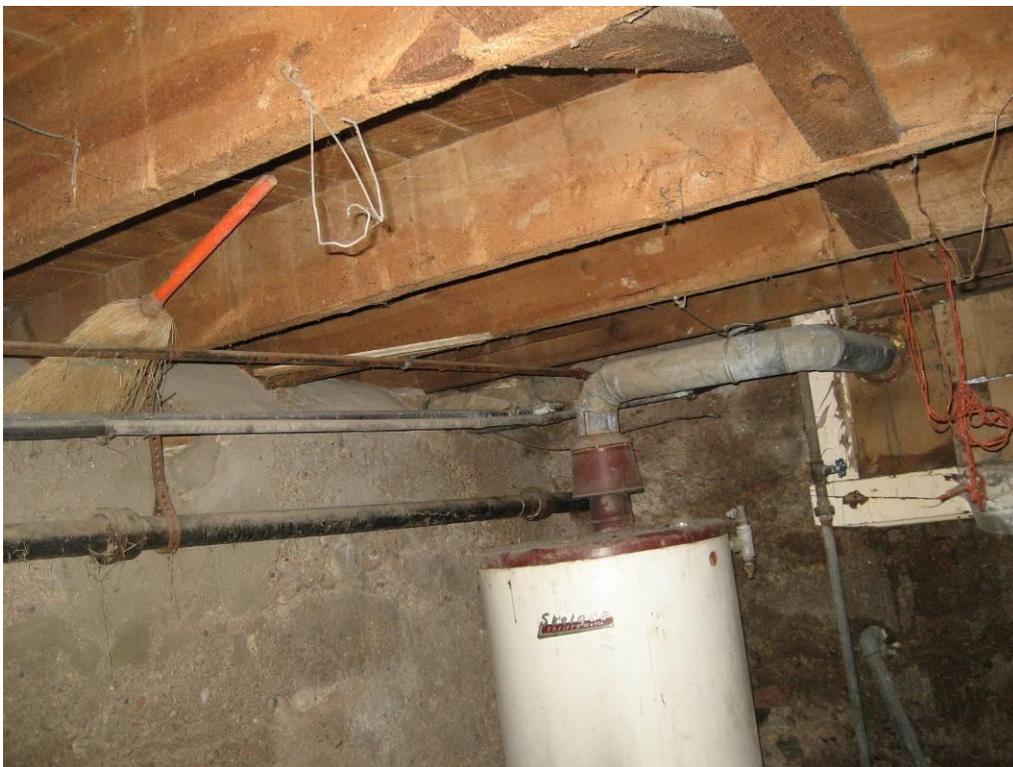
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North Porch decking, joist and post deterioration, 2009.



First floor framing above basement, 2009.

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Typical first floor framing looking north under Bedroom #1, 2009.



Cross section of typical exterior stud wall. Plaster and lath was added later over 1x horizontal boards at left, 2009.

3.1.4 Main House Envelope: Exterior Walls

Exterior wall facades, the north porch deck, and the north porch soffit are discussed in this section.

The East Facade



2009 photo.

The east facade can be subdivided into three separate areas.

Area A is the wall below the gabled roof. This is a 2" x 4" wood framed wall placed on top of a concrete stem wall. The south side of the wall extends approximately 13'-7" from foundation to underside of roof gable end. At its highest point below the roof ridge the wall is approximately 23' high. The wall is approximately 7'-9" high adjacent to the north porch.

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The exterior of **Area A** is divided vertically into three separate sections. The lower section is defined by horizontal wood lap siding with a 4 ½” exposure over felt underlayment over 1” horizontal board sheathing. Vertical wood trim covers the lap siding at the north and south ends of this area and at the approximate mid point between the bay windows and the North Porch. The middle section is covered with fish-scale shingles and extends approximately 7’-6” from the top of the wood lap siding up to the underside of a 1” x 9” bargeboard below the gable end of the roof and to the underside of the inverted wood picket stickwork, which forms the top section.

2009 photo.

A decorative wood truss embellished with a medallion and flat dropped pendant are set outboard from the inverted picket stickwork and below the roof gable in the top section.

A bay window projects from the lower section of **Area A**. The bay rests on a concrete stem wall and has a five-section hipped roof. The exterior face of the wall below each window has a panelized appearance. The fish-scaled middle section contains 2'-6" x 5'-2" window centered above the bay window. These windows are described more fully in Section 3.1.6, Exterior Openings.



Area B is the wall extending south from the gabled roof approximately 28'-7" where the exterior wall returns west to the South Porch. This is a 2" x 4" wood framed wall placed on top of a concrete stem wall which extends up approximately 8'-4" to the underside of a hipped roof. The exterior consists of horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. Vertical wood trim covers the lap siding at the north and south ends of this area, and at approximately 16'-6" south of its north end.

A 2'-6" x 6'-6" door flanked by full height sidelights is located at the north end of this area. A 1'-6" x 3'-0" window is to the south of the door opening. A 2'-5" x 5'-1" window is located at the south end of this area. These are discussed more fully in Section 3.1.6, Exterior Openings.

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Area C is the east wall of the south porch.

The foundation for this wall is obscured by the Cellar hatch and is not visible. The wall is approximately 7'-6" high at the south end and approximately 8'-7" high at the north end. The exterior of this wall is sheathing clad with wood ship lap siding with a 6" exposure. The siding is covered with vertical wood trim at the north and south ends.

There is a 4'-10" x 3'-0" window located in this section. This is discussed more fully in Section 3.1.6, Exterior Openings.

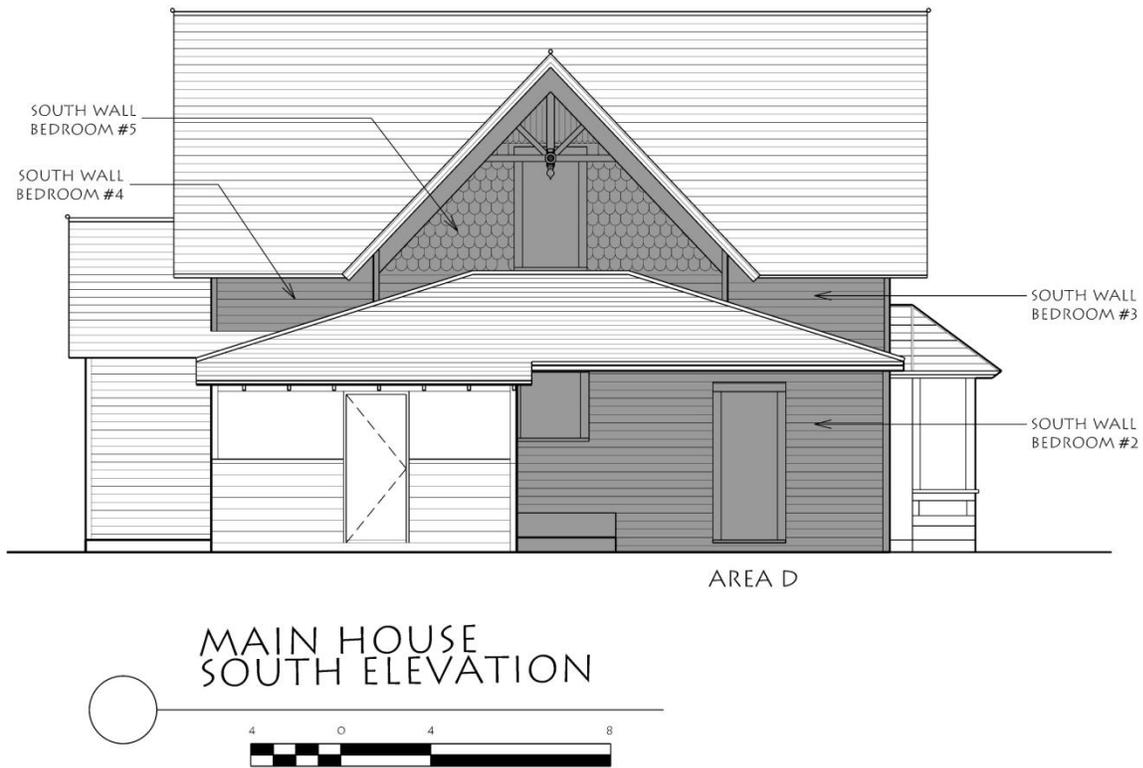
The South Façade



2009 photo.

The south facade can be subdivided into three separate areas.

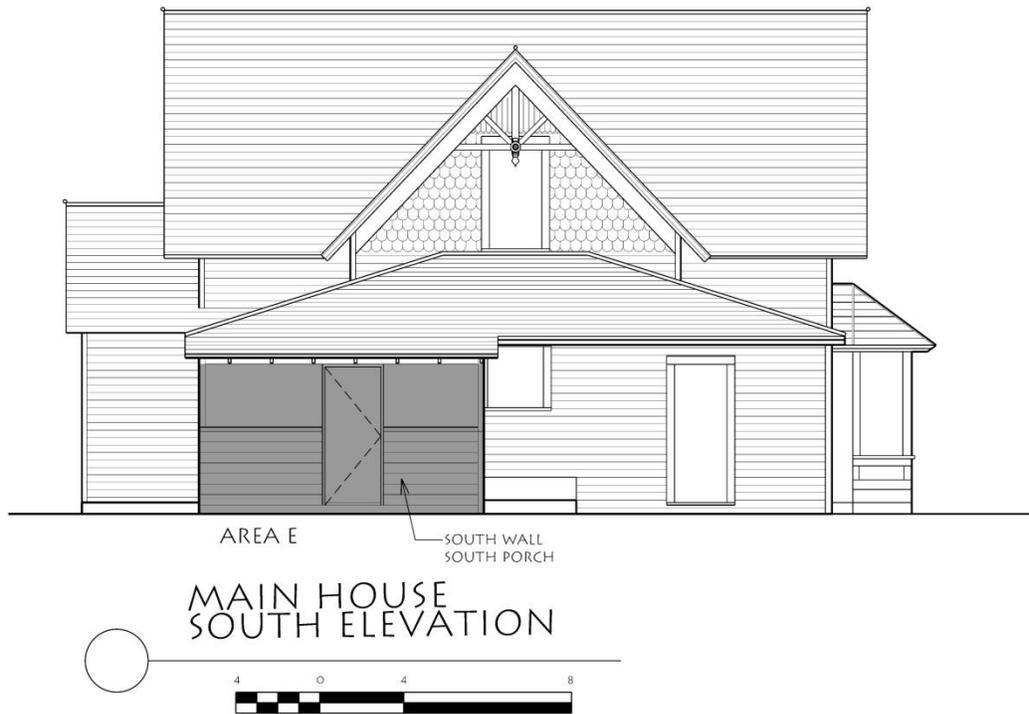
Area D includes the south wall of Bedroom #2. This is a 2" x 4" wood framed wall placed on top of a concrete stem wall. The wall's height is approximately 7'-9" to the underside of the hipped roof. The exterior consists of horizontal wood lap siding with a 4 ½" exposure over felt underlayment over 1" horizontal board sheathing. Vertical wood trim covers the lap siding at the east end of this area.



Area D also includes the south exposed walls of second floor Bedrooms #3 and #4. These are both 2" x 4" wood stud walls. The south wall of Bedroom #4 rests upon the south wall of Bedroom #1 below. The south wall of Bedroom #3 rests upon the south wall of the Great Room below. The exterior of both walls is horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. Both walls have vertical wood trim at their respective outboard ends which covers the siding.

Area D also includes the south wall of the second floor Bedroom #5. Construction of this wall is identical to the construction of the middle section of the **Area A** wall described previously. This wall rests upon the south Dining Room wall below.

There is a 2'-6" x 6'-6" door opening and a 2'-8" x 3'-0" window opening in **Area D**. The Cellar hatch is at the base of the west end of this area. These openings are discussed more fully in Section 3.1.6, Exterior Openings.



Area E is the south wall of the South Porch. The foundation wall was not visible. This 2" x 4" stud wall is approximately 7'-6" high. The bottom of the wall exterior is wood ship lap siding with a 6" exposure. The siding extends from grade to approximately 4' above grade. The bottom siding board west of the door opening is missing.

Painted plywood panels are located above the wood siding in **Area E**. Historic photographs show that this area had screened openings. These openings and the 2'-8" x 6'-6" door opening are discussed in Section 3.1.6, Exterior Openings.

Circa 1947 photo.



Area F is the exposed, south exterior face of Bedroom #1.



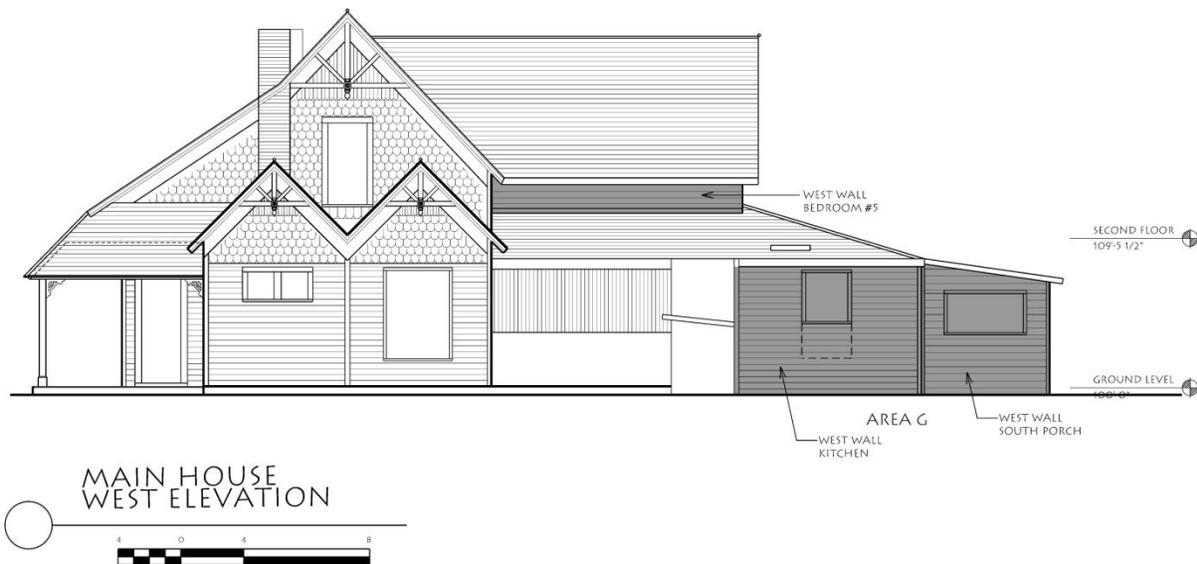
The 2"x 4" stud wall rests upon a concrete stem wall and is approximately 8'-1" high. The exterior consists of horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. Vertical wood trim covers the lap siding at the west end of this area.

The West Façade



2009 photo.

The west facade can be subdivided into four separate areas.



Area G is the west wall of the South Porch and the Kitchen. The South Porch portion of this wall is comprised of 2" x 4" wood studs spaced at 24" on center. The wall exterior is wood ship lap siding with a 6" exposure.

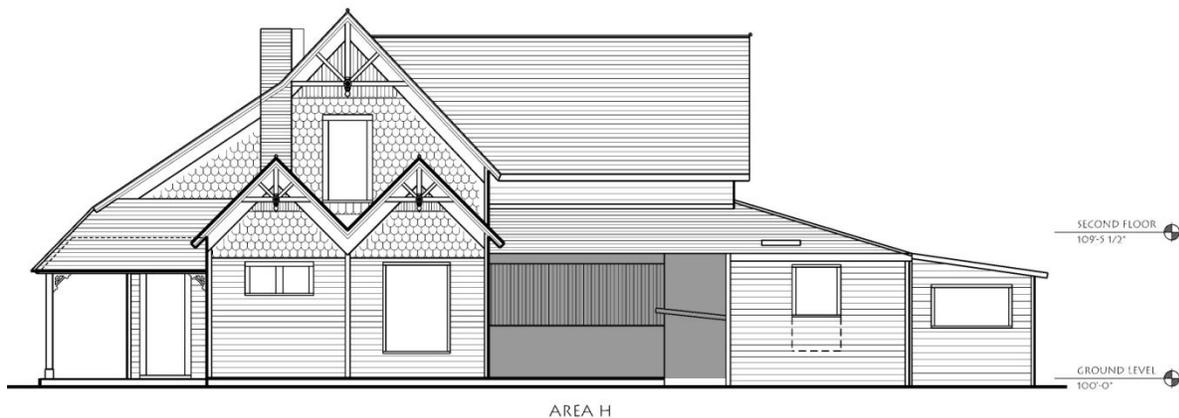
The siding extends from grade to 7'-2" on the south end and grade to 8'-3" on the north end. The foundation wall was not visible. Vertical wood trim covers the lap siding at the north and south ends of this area.

There is a 4'-10" x 2'-6" window opening in South Porch portion of the wall. This opening is discussed more fully in Section 3.1.6, Exterior Openings.

The Kitchen portion of this wall is comprised of 2" x 4" wood studs spaced at 16" on center. The wall rests upon a concrete stem wall. The wall exterior is wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. The siding extends 8'-3" above grade. Vertical wood trim covers the lap siding at the north and south ends of this area.

There is a 2'-8" x 3'-0" window opening in Kitchen portion of the wall. This opening is discussed more fully in Section 3.1.6, Exterior Openings.

Area G also includes the west exposed wall of second floor Bedroom #5. This is a 2" x 4" wood stud wall. This wall rests upon the west wall of the Dining Room below. The exterior of this wall is horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. This wall has vertical wood trim at the south end which covers the siding.

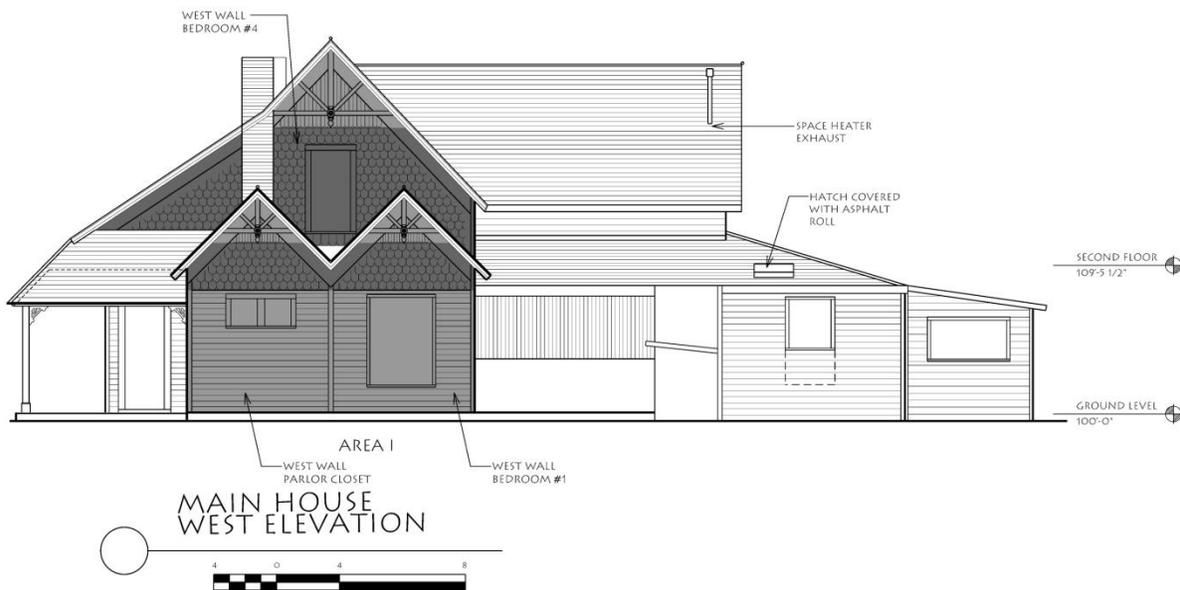


Area H is the west wall of the West Porch. This wall is constructed with 2" x 4" wood studs spaced at approximately 27" on center. The wall rests upon a concrete slab. The lower 3'-6" of the wall exterior is covered with plywood. The upper 4'-0" of the wall is covered with vertically aligned fiberglass panels. Photographs show a historic configuration for the porch with screened windows and a screen door.

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Circa 1947 photo.



Area I is the west wall of Bedroom #1, the Parlor Walk-in Closet, and Bedroom #4 on the second floor. The exterior face of the first floor walls is divided vertically into three sections - wood horizontal lap siding with a 4 1/2" exposure below, fish-scale shingles at mid level, and stickwork composed with inverted vertical wood pickets set edge-to-edge at the top. The horizontal wood lap siding section is 7'-9" high, the fish-scale shingle section is 3'-0" high, and the decorative wood picket section is 1'-10" high. Vertical wood trim covers the wood lap siding section at the north and south ends and at the mid point between the north and south ends. A decorative wood truss embellished with a medallion and flat dropped pendant are set outboard from the picket trim and below the roof gable.

The exterior face of the second floor Bedroom # 4 wall is divided vertically into a fish-scale shingle section and decorative wood picket section. A decorative wood truss embellished with a

medallion and flat dropped pendant is set outboard from the picket trim and below the roof gable.

The west wall of Bedroom #1 and the Parlor Walk-in Closet rests upon a concrete stem wall. The west wall of second floor Bedroom #4 rests upon the east wall of the Parlor Walk-in Closet. The foundation for this wall is not visible. All of these walls are constructed with 2" x 4" wood studs spaced at 16" on center.

There is a 4'-0" x 5'-7", a 3'-10" x 1'-9", and a 2'-6" x 5'-2" window opening in **Area I**. These openings are discussed more fully in Section 3.1.6, Exterior Openings.



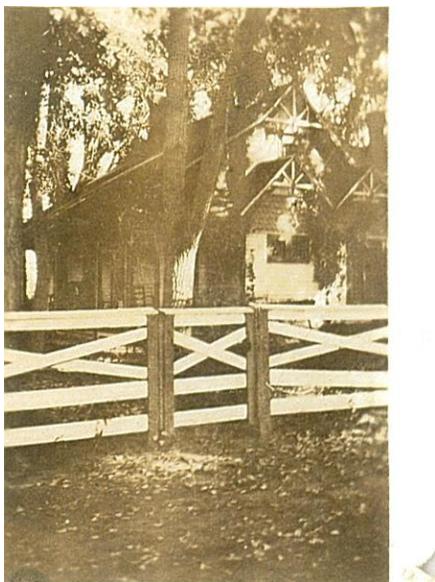
Area J is the exposed west wall of the Parlor. This wall was constructed with 2" x 4" wood studs at 16" on center and rests upon a concrete stem wall. The exterior of this wall is horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board sheathing. Vertical wood trim covers the wood lap siding at the north end of the wall.

There is a 2'-6" x 6'-6" door opening in **Area J**. This opening is discussed more fully in Section 3.1.6, Exterior Openings.

The North Facade



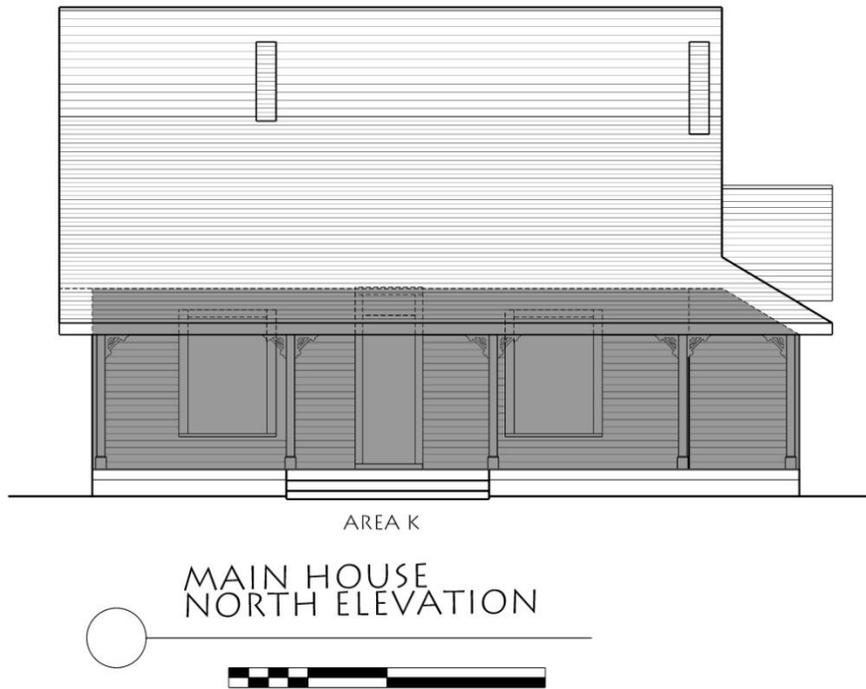
2009 photo.



North West corner. Before 1950.

The north wall of the Main House, **Area K**, is 9 feet tall. It rests upon a concrete stem wall set at the same level as the front porch. The inside face of the wall is plaster over horizontal wood lath in the Great Room and Entry. All walls are 2" x 4" wood studs spaced approximately 16" on center. The exterior of the wall is horizontal wood lap siding with a 4 1/2" exposure over felt underlayment over 1" horizontal board siding. The siding is covered with 1" x 4" vertical wood

trim at the east and west corners of the wall. The historic photograph on page 3.1.4-13 shows many of the elements just described.



An open, elevated porch projects north from the north wall. The west side of the porch wraps the west face of the north wall. The North Porch deck rests approximately 16” above grade and is covered with 1” x 4” tongue and groove wood over 2” x 6” wood framing at approximately 16” on center. Five 5”x5” wood posts support the projecting roof eave. The four posts to the east are spaced evenly and correspond to the length of the north wall. The fifth post at the west end of the porch has a spacing that corresponds to the projection of the west bays of the Main House. The North Porch soffit is beaded board which coincides with the slope of the roof until it reaches a height of 7’-1” where it becomes horizontal.

Each post has decorative wood brackets set at the top of the post and extending under the roof eave. Many of the 7” high wood trim pieces at the base of each post are missing.

The north wall has one door centered between two large window openings. These are discussed more fully in Section 3.1.6, Exterior Openings.

Exterior Wall Condition

Flashing, gutters, downspouts, roof fascia and soffits are addressed in Section 3.1.5, Roofing and Waterproofing. Windows, doors, and vents are addressed in Section 3.1.6, Exterior Openings.

1. Wood siding

Condition: Fair to poor. Wood siding on the north façade, which is protected by the overhanging North Porch roof, is in fair condition. It is mildly weathered and primarily needs to be repainted. Wood siding on the east, west, and south sides of the Main House is very weathered. Much of this siding is cupped and somewhat brittle. The cupping has caused the nails of many boards to work loose from the wood sheathing beneath. The cupping has also created large gaps between siding boards. This allows wind driven rain to come into direct contact with the felt underlayment between the siding and wood sheathing. The underlayment has significantly compromised where the siding is cupped. There are also a small, but significant number of siding boards that are split, broken, missing, or very loose. The protective coating of paint is extremely degraded on the east, south, and west sides of the Main House.

2. Fish-Scale shingles

Condition: Fair. All the fish-scale shingles are weathered and missing paint. A small number of fish-scale shingles are warped or loose. Most shingles are sound and have not deteriorated significantly.

3. Inverted decorative wood pickets

Condition: Fair to poor. Many of the pickets on the east, south and west sides of the house display signs of swelling and shrinkage cracking. This is due to the long term lack of protective coatings and exposure to hot sun, rain, and cold temperatures.

4. Decorative wood trusses

Condition: Fair to poor. Many of the pickets on the east, south and west sides of the house display signs of swelling and shrinkage cracking. This is due to the long term lack of protective coatings and exposure to hot sun, rain, and cold temperatures.

5. Wood trim and bargeboards

Condition: Fair to poor. Several vertical wood trim pieces are missing from the south façade. The vertical wood trim centered below the twin gabled roofs is loose. Most of the vertical trim pieces and bargeboards display moderate weathering and are missing paint.

6. North Porch deck and posts.

Condition: Fair to poor. Decking is missing on the east and west ends of the porch. The north ends of the deck are substantially deteriorated at various locations. Decking beneath all posts has deteriorated and is unsound. All decking is moderately weathered and missing paint. Structural support for the deck, which is discussed more fully in Section 3.1.3 – Structural System, has deteriorated and is inadequate, especially at the north end of the decking. Wood support posts are moderately weathered and missing paint. The posts at the east and west ends are unsupported by deck. The wood base trim for the posts is mostly missing. What remains of the trim is severely weathered and missing paint. Post brackets are structurally sound, but missing paint.

7. North Porch soffit.

Condition: Good. Because this is a protected location, beadboard paint looks slightly worn but un-weathered.

Recommended Treatments:

1. Wood siding

- Replace all wood siding on the east, south, and west facades.
- Match the profile and exposure of existing wood siding. The South Porch wood siding profile differs from the rest of the Main House.
- Inspect existing 1" horizontal board sheathing after existing underlayment is removed. Replace any boards that have deteriorated or are not sound.
- Install blow-in insulation between studs while siding is removed.
- Install new 30# felt underlayment after any sheathing has been replaced.
- Install flashing to prevent moisture from reaching the structure.
- On the north porch façade carefully remove existing siding so that it may be reinstalled. Replace the existing underlayment with new 30# felt.
- Remove all loose paint from existing siding to remain. Paint may contain lead. Sand and prep siding.
- Reinstall existing siding.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical

2. Fish-Scale shingles

- Replace loose or warped fish-scale shingles.
- Remove all loose paint from existing shingles to remain. Paint may contain lead. Sand and prep shingles.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Serious

3. Inverted decorative wood pickets

- Remove all loose paint from existing pickets. Paint may contain lead.
- Preserve deteriorated pickets with epoxy consolidant and filler.
- Sand and prep pickets.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Serious

4. Decorative wood trusses

- Remove all loose paint from existing decorative wood trusses. Paint may contain lead.
- Preserve deteriorated trusses with epoxy consolidant and filler. Un-repairable trusses should be reconstructed. Match existing profile, size, and species.

- Sand and prep trusses.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Serious

5. Wood trim and bargeboards

- Replace all missing wood trim. Preserve damaged wood trim to the greatest extent possible. Reconstruct the remainder. Match the profile and width of existing wood trim.
- Remove all loose paint from existing trim and bargeboards. Paint may contain lead. Sand and prep wood trim and bargeboards.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Serious

6. North Porch deck and posts

- Rehabilitate porch structure as described in Section 3.1.3, Structural System, Page 3.1.3-3, Sections g and h.
- Reconstruct all missing or damaged wood decking and post base trim. Match the profile and width of existing decking and post base trim
- Remove all loose paint. Paint may contain lead. Sand and prep decking and post base trim.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical

7. North Porch soffit

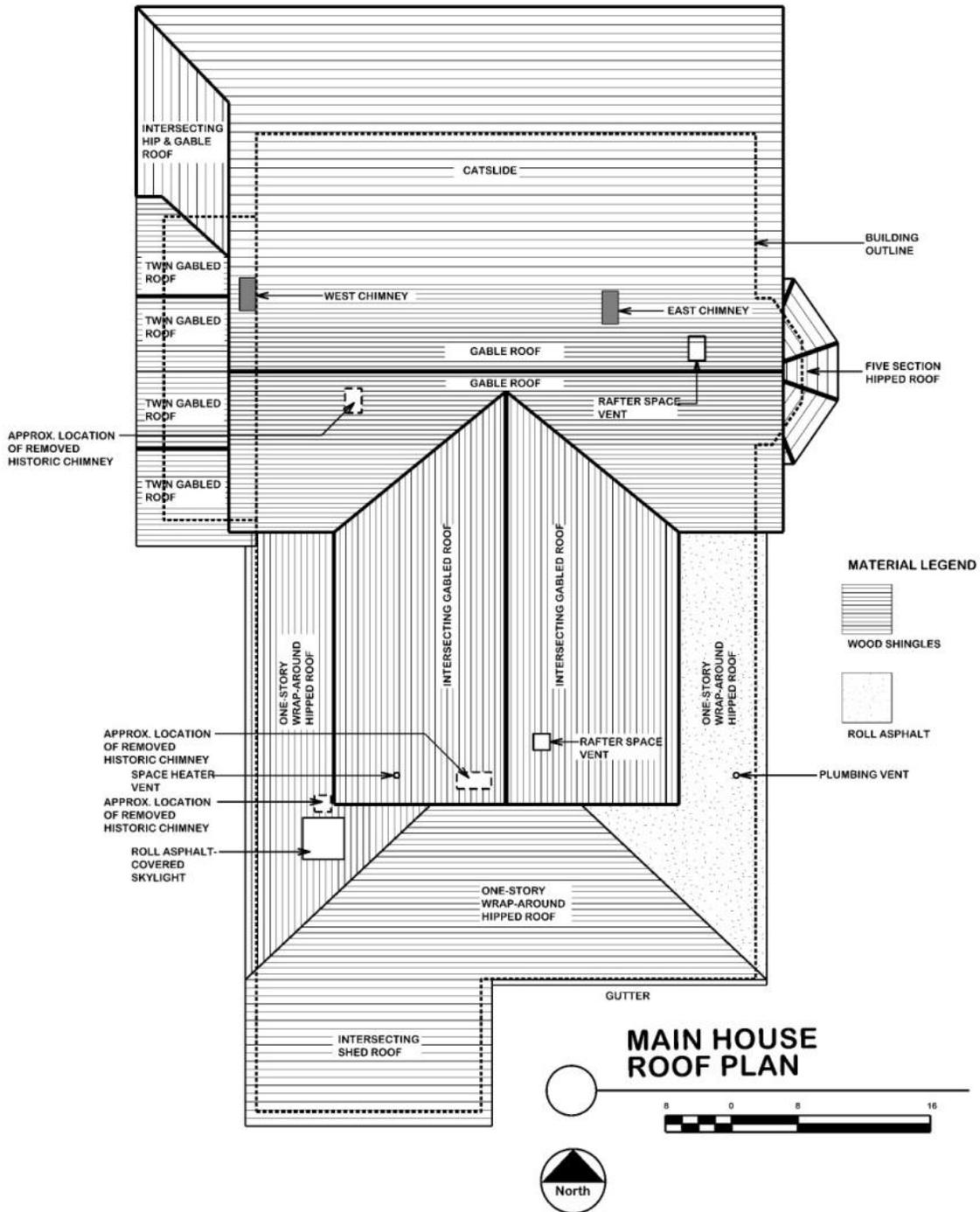
- Remove loose paint from soffit. Paint may contain lead. Sand and prep soffit.
- Apply two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Minor

3.1.5 Main House Envelope: Roofing and Waterproofing

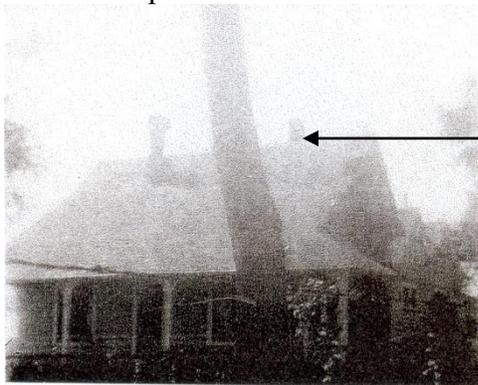
Roofing systems, flashing, gutters and downspouts, and chimneys are discussed in this section.

Existing Roof Plan

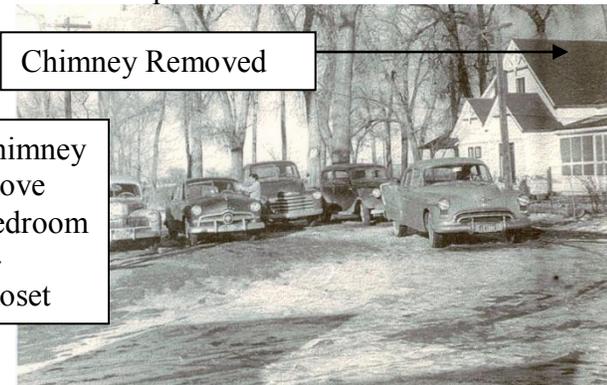


Gabled main roof. This is the highest and most prominent feature of the Main House. The roof has an east to west orientation and a 12:12 slope. Two layers of wood shingles with approximately 5" exposure cover the roof. The wood shingles rest upon gapped boards. It is assumed that the lower layer of wood shingles is original, because nails on the underside of the gapped board roof sheathing appear original, and there are no other nail holes visible. A painted galvanized metal ridge with ball cap ends divides the north and south faces of the roof. The gable ends project approximately 12" beyond the exterior wall. The gable end is covered with a 1" x 6" painted wood fascia and painted wood gable molding. A painted board soffit is fastened to the underside of the projecting gable. Two brick chimneys project through the north face of the roof. Both chimneys have had their upper courses replaced with a lighter colored, non-matching brick. A painted metal attic ventilator is located on the north face east of the east chimney. There are no gutters or downspouts on this section of roof. There is no visible evidence of the brick chimney located in the closet ceiling of Bedroom #4. An early photograph from the Koizuma-Hishinuma era (Circa 1947) shows this chimney in place. This chimney is not visible in somewhat later photographs (Circa 1950).

Circa 1947 photo.



circa 1950 photo.

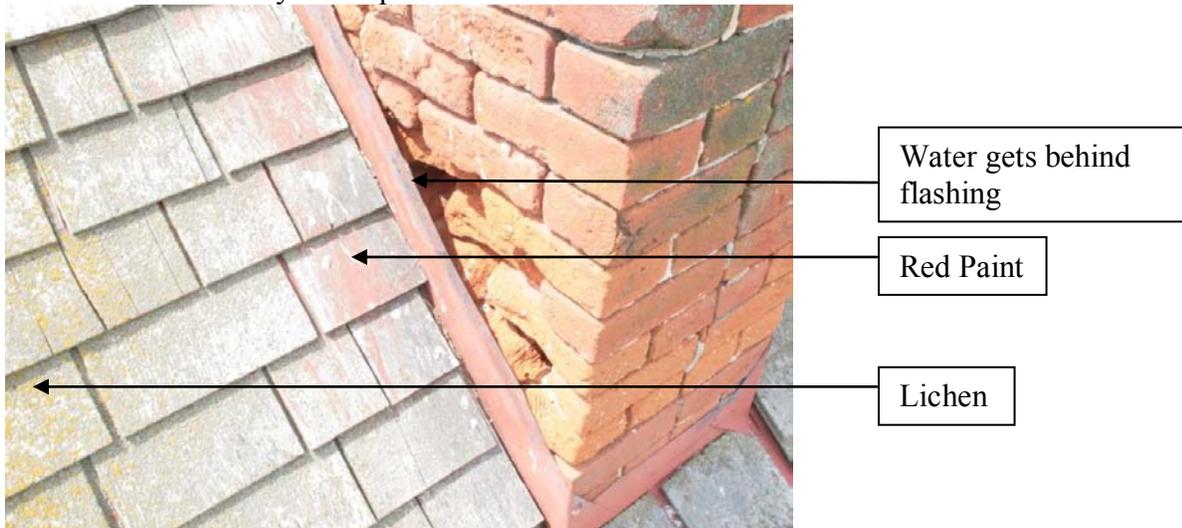


Condition: Roof-fair to poor. Many of the wood shingles are brittle, warped, and/or split. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration.

The shingles appear to be near the end of the serviceable life. The attic ventilator is improperly flashed and does not provide enough ventilation to meet current building codes. The gable molding is also very weathered and missing paint.

Chimneys-fair. Masonry joints in both chimneys are deteriorated. This is especially noticeable in the lower, older sections of the chimneys. Chimney caps are concrete or mortar. Testing would be required to determine the exact composition. The east chimney cap is moderately deteriorated. The west chimney cap is almost complete disintegrated. Brick on the lower east face of the east chimney is extremely deteriorated. Because of the deterioration, the flashing which is relatively intact is completely ineffective. There is water damage to the ceiling in the Bedroom #3 closet below this chimney. Flashing on the west chimney at the gabled main roof and north twin gabled roof is not directing water away from the brick. There is extreme water damage to the ceiling in the Bedroom #1 closet adjacent to this chimney.

East face east chimney. 2009 photo.



North face west chimney main gable roof and top and east face of west chimney.



2009 photo.

2009 photo.

Recommended treatment:

- Roof -remove all shingles down to gapped board sheathing.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Re-flash existing attic vent. Install new vents required to meet code.
- Rehabilitate and reuse the existing galvanized metal ridge with ball cap ends.
- Remove any loose paint from the gable fascia, soffit, and molding. Paint may contain lead. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the fascia, soffit, and molding for new paint.

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- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.
- Chimney - test mortar and chimney cap material to determine their composition.
- Remove all loose or crumbling mortar in existing joints. Re-point mortar joints using mortar of same composition, color, texture, and strike as the existing historic mortar. Re-pointing should be done by a professional mason specializing in historic masonry. Install new stepped flashing for both chimneys. Install a two-piece cricket above each chimney to facilitate drainage around the chimneys. Replace eroded and loose bricks. Install a new chimney cap for each chimney.

Priority: Critical.

Catslide. The upper end of the catslide roof begins at the level established by the lower side of the west chimney. At this level the gable roof transitions into the catslide. The slope of the catslide is 8:12. Two layers of wood shingles cover the catslide roof. A hipped roof intersects the catslide at its northwest corner and covers the wrap-around north porch. The south end of this hipped roof then intersects the lower north edge of the north twin gabled roof, which is discussed in the following section. There are no gutters or downspouts on the eaves for the catslide.

2009 photo.



Condition: Fair to poor. Many of the wood shingles are brittle, warped, and/or split. While no leaks were visible in the ceiling below, the shingles appear to be near the end of the serviceable life. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. The gable soffit is moderately weathered while the gable fascia is very weathered and missing paint. The gable molding is very weathered and missing paint. The catslide does not have sufficient rafter space ventilation to meet current building code requirements.

Recommended treatment:

- Remove all shingles down to wood deck.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Paint may contain lead. Remove any loose paint from the gable fascia, soffit, and molding. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the fascia, soffit, and molding for new paint.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.
- Install additional rafter ventilation which does not adversely impact the historical appearance and meets current building code requirements. UBC 2006 requires

ventilation to be not less than 1/150 the area of the space to be ventilated for rafter space not separated from the space below by a vapor retarder. Rafter area is approximately 215 square feet. Vent area required is approximately 1.5 SF.

Priority: Critical

Twin gabled roof. The symmetry and prominence of the gabled main roof are reinforced by a pair of projecting gabled roofs whose centerline is aligned with the gabled main roof ridge. These are located on the west side of the Main House. Each twin gable roof has a 12:12 slope, galvanized metal ridge with ball capped end, and a proportionally smaller decorative truss with medallion and flat dropped pendant near the gable.

2009 photo.



The roofs are covered with a double layer of wood shingles. There are no gutters or downspouts associated with the twin gabled roof.

Condition: Poor. Many of the wood shingles are brittle, warped, and/or split. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. The shingles appear to be near the end of the serviceable life. Water in the valley between the roofs does not drain adequately. This has caused the lower courses of wood shingles in the valley and the intersecting gable ends to deteriorate. Flashing around the chimney is inadequate. This is causing extreme water damage in the ceiling below. (See photographs on page 3.1.5-7.) The gable soffit is moderately weathered while the gable fascia is very weathered and missing paint. The gable molding is also very weathered and missing paint. The twin gable roofs do not have sufficient rafter space ventilation to meet current building code requirements.

Inadequate flashing on south face of west chimney at twin gable roof



2009 photo.

Water damaged ceiling below west chimney in closet west of Bedroom #1



2009 photo.

Recommended treatment:

- Roof -remove all shingles down to wood deck.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Rehabilitate and reuse the existing galvanized metal ridge with ball cap ends.
- Install new valley flashing with a minimum 20" width. The upper end of the valley flashing should be flashed behind the fish-scale shingle rake wall outside Bedroom #3.
- It is recommended that a scupper be installed on the lower end of the valley to conduct water away from the building. A more functional, but also more visually intrusive option would be to install a downspout at this location. This option

would eliminate the ground treatment required for a scupper, but may not meet the Secretary of the Interior's Standards for the Treatment of Historic Properties, and, therefore may not be allowed.

- Lead paint may be present. Remove any loose paint from the gable fascia, soffit, and molding. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the fascia, soffit, and molding for new paint.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.
- Install additional rafter ventilation which does not adversely impact the historical appearance and meets current building code requirements.

Priority: Critical

Five section hipped roof.



2009 photo.

On the east side of the Main House the roof symmetry is reinforced by a projecting bay window covered with a five section hipped roof. The centerline of the bay window and the peak of its roof are aligned with the ridge of the gabled main roof. The roof is covered with wood shingles with a 5" exposure. A galvanized metal ridge covers the intersection between each roof section. There are no gutters or downspouts associated with this roof.

Condition: Poor. Many of the wood shingles are brittle, warped, and/or split. While no leaks were visible in the ceiling below, the shingles appear to be near the end of their serviceable life. The roof fascia and molding are moderately weathered and missing paint.

Recommended treatment:

- Roof -remove all shingles down to wood deck.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Rehabilitate and reuse the existing galvanized metal ridge pieces.

Priority: Critical

Intersecting gable roof.

2009 photo.



An intersecting gabled roof with north to south orientation meets the gabled main roof on its south face. This roof also has a 12:12 slope and a decorative wood truss with medallion and flat dropped pendant at its south gable end. The roof is divided by a galvanized metal ridge with a ball cap at the south end. This roof is slightly lower and less prominent than the gabled main roof, but still dominates the

south façade of the Main House. It is covered with two layers of wood shingles with a 5” exposure. There are no gutters or downspouts associated with the intersecting gable roof.

Condition: Poor. Many of the wood shingles are brittle, warped, and/or split. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. Roof leakage was visible in the ceiling below Bedroom #5. The shingles appear to be near the end of their serviceable life. The existing attic vent does not provide enough ventilation to meet current building codes. The gable soffit is moderately weathered while the gable fascia is very weathered and missing paint. The gable molding is very weathered and missing paint.

Recommended treatment:

- Remove all shingles down to wood deck.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Re-flash existing attic vent. Install new vents required to meet code. Install additional rafter ventilation which does not impact the historical appearance and

meets current building code requirements. UBC 2006 requires ventilation to be not less than 1/150 the area of the space to be ventilated for rafter space not separated from the space below by a vapor retarder. Rafter area is approximately 100 square feet. The required ventilation area is approximately 0.7 SF.

- Rehabilitate and reuse the existing galvanized metal ridge with ball cap ends.
- Lead paint may be present. Remove any loose paint from the gable fascia, soffit, and molding. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the fascia, soffit, and molding for new paint. Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical

One-story wrap around hipped roof.



2009 photo.

Below the intersecting gable roof on the east, south, and west sides is a one-story, wrap around hipped roof. The slope of the hipped roof is approximately 3.5:12. The east side of this roof is covered with asphalt roll roofing. The south and west sides of the roof are covered with two layers of wood shingles. The attic space below the roof was not accessible, therefore the nail ends penetrating the roof sheathing could not be observed. It could not be determined if the asphalt roll roofing on the east roof or the wood shingles on the south and west roofs are the original roof coverings. The west and south sides of the wrap around hipped roof display the

same red paint pigment and level of weathering that was observed on the gable roofs, so it is assumed that the gable and hipped roofs are probably contemporary with each other. The roof has a 4" wood fascia and shallow wood soffit. An east draining half round gutter without downspout is attached to the fascia at the east end of the south hip. A gutter and downspout are visible in the historic circa 1947 photograph below. The asphalt roll covered skylight on the southwest side of the roof is not visible in the Kitchen ceiling below. The brick chimney visible in a circa 1947 photo no longer exists.



Brick chimney and covered skylight on hipped roof. Shed Roof material appears similar to hipped roof material

Circa 1947 photo.



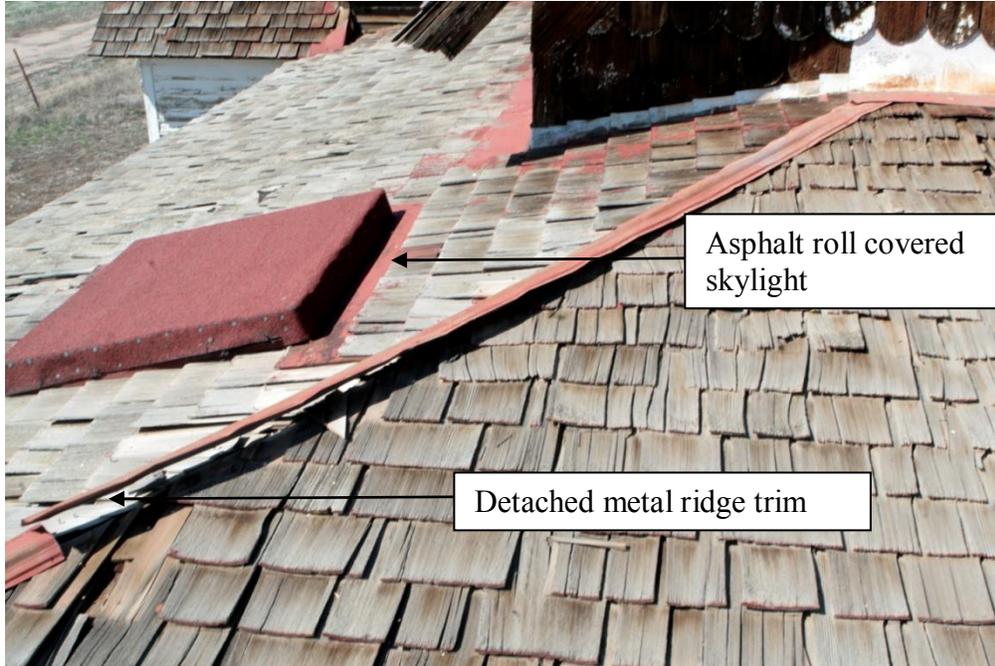
Downspout and gutter

Circa 1947 photo

Condition: Poor. Many of the wood shingles are brittle, warped, and/or split. Moss and lichen are also present. These slow drying after rains and accelerate deterioration. While no leaks were visible in the ceilings below, the shingles appear to be near the end of the serviceable life. The metal roof ridge trim on the southwest side of the roof is detached and bent. (See photograph on the next page.) The asphalt roll roofing on the east side is extremely weathered and in poor condition. It may also be a departure from the historic appearance of the Main House. The wood fascia and soffit are extremely weathered and in very poor condition on all three sides of the roof. This is due to the shallow slope of the roof and the lack of an adequate drip edge to conduct the water away from the fascia and soffit. The gutter is in very bad condition and does not serve

its purpose. The one-story wrap around hipped roof does not have sufficient rafter space ventilation to meet current building code requirements.

Detached metal roof trim on southwest side of roof.



2009 photo.

Recommended treatment:

- Remove all shingles and asphalt roll roofing down to wood deck.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Remove the existing wood fascia and soffit. Install new wood fascia and soffit. Install new eave flashing with drip edge. This should be painted to match the historic color of the fascia and will extend the life of the new soffit by conducting water away the soffit.
- Remove the existing half-round gutter and replace with a new half-round gutter and downspout. These help keep water away from the cellar hatch and the base of the building.
- Install additional rafter ventilation which does not impact the historical appearance and meets current building code requirements.

Priority: Critical.

Shed roof.



2009 photo.

A shed roof intersects the one-story, wrap around hipped roof at its southwest corner. This roof covers the South Porch. It has a very shallow 1.7:12 slope. This roof is covered with wood shingles with a 5" exposure. There are exposed rafter ends on the south side and a shallow wood fascia board below the roof on the east and west sides of the porch. Roof sheathing for this roof area was not visible and could not be determined. In historic photos circa 1947 the shed roof material appears to match the wood shingle roof of the wrap around hipped roof. There are no known earlier photographs which show the shed roof.

Condition: Poor. Many of the wood shingles are brittle, warped, and/or split. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. While no leaks were visible in the ceiling below, the shingles appear to be near the end of their serviceable life. The fascia boards are very weathered and missing paint. The exposed rafter ends are also in poor condition.

Recommended treatment:

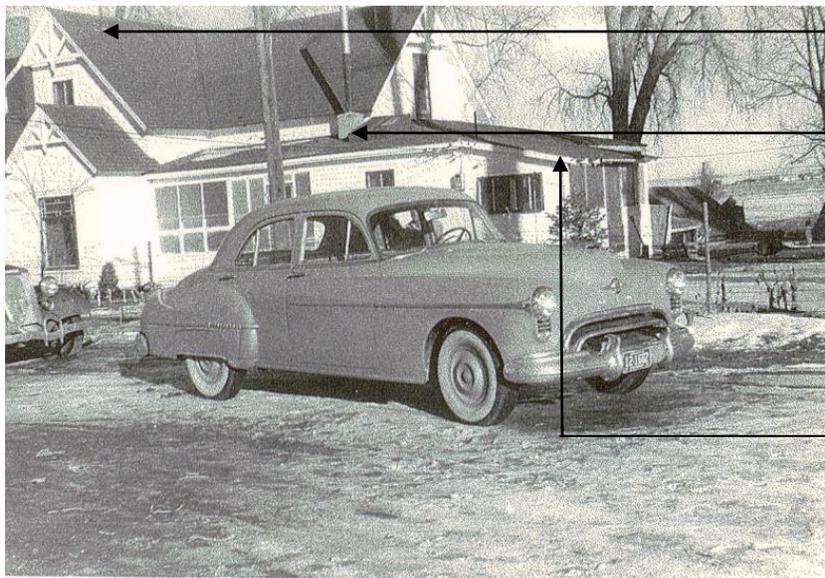
- Due to the shallow slope of the roof it is recommended that new wood shingles be installed over new cedar breather over new 30# felt over new ice and water guard over new solid wood sheathing. This would be a much more durable roof than the current roof.
- Replace the wood fascia boards on the east, south, and west sides. Metal eave flashing with a drip edge should be installed below the new roof material to help direct water away from the new fascia boards.

- Rafter ends should be preserved with consolidant, if possible, then primed and painted. New rafter ends should be spliced in, if consolidation is not practical. These would then need to be primed and painted.

Priority: Critical.

Additional observations.

There are two exhaust vents that appear on historic photographs which are no longer present on the Main House.



Vent from Bedroom #4

Chimney & vent from Kitchen

Same roof material as Wrap around hipped roof

Circa 1947 photo.

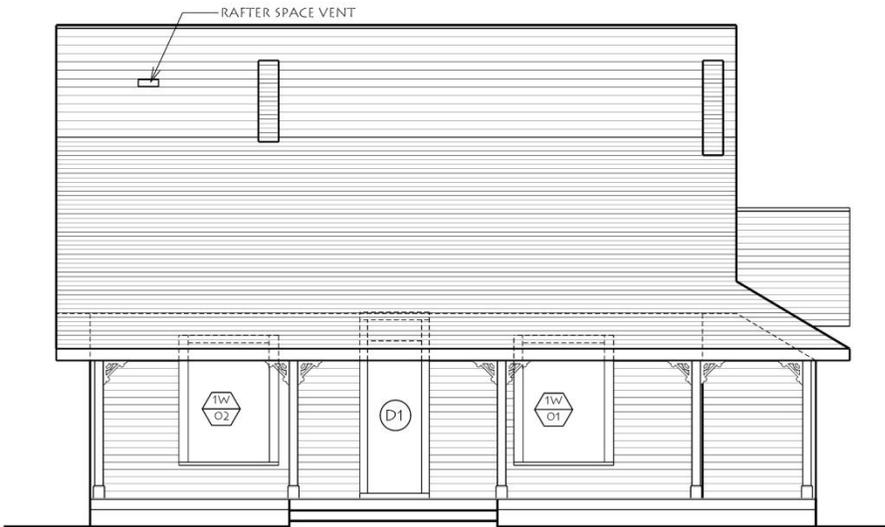
A chimney stack is located in the northwest corner of the closet in Bedroom #4 on the second floor. There is an opening for an exhaust vent to this chimney on the northwest face of the outside wall for this closet. At an early time there was probably a coal fired or woodstove located in this bedroom. There are no chimneys or vent openings visible currently in the Kitchen. Based upon the historic photograph the exhaust vent appears to be near the north wall.



Opening in Bedroom #4 Closet wall for exhaust vent from removed heater.

3.1.6 Main House Exterior Openings: Windows, Doors, Vents

North Façade Openings



Door D1. 2009 Photo.



Description: The north entry door, D1, is centered on the north façade of the Main House. It is a 2'-8" wide x 7'-0" high historic wood stile and rail door. The door has a single pane vertical light with three horizontal panels below. There is a horizontal transom with single pane glazing above the door. The historic wood screen door has been removed. (The later photo on the next page shows the screen door in place. The earlier photo shows that this screen door matches the style of screen door used circa 1947.) The exterior of the door and frame are painted white. The interior of the door and frame have a dark reddish stain with clear finish. Exterior trim is painted 1" x 4" wood. The interior trim is composed of a stained, fluted architrave, corner rosette, and plinth all with clear finish.

Condition: The exterior finish of the door and frame is moderately weathered. The interior finish is slightly worn. Exterior wood trim is moderately weathered, but sound. This opening is currently protected with a particle board inset on the exterior side. Interior trim is slightly worn.

Thick, non-historic carpet prevents the door from completely opening. The historic latch set is operable, but the door is missing its thumb turn.

Similar screen doors shown on circa 1947 and 2000 photographs.



Circa 1947 Photo



circa 2000 Photo

Many removed doors, windows, and pieces of interior trim have been stored in Bedroom #2. Some historic windows and doors are also resting at various locations throughout the Main House. An inventory of these removed items is beyond the scope of this initial report.

2009 Photo showing some of stored materials in Bedroom #2.



Recommended treatment: Inventory the historic screen doors stored in the Main House to determine if the screen door for door D1 still exists. (If it cannot be located, a new, historically accurate screen door based upon historic photographs should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the door, frame, and the exterior trim. Sand and prep. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the door, frame, and trim. Refinish with new clear finish. If possible, install weather strip at head, jamps, and sill. Rehabilitate the latch set. Install a new historically accurate thumb turn. Remove carpet and underlayment to make the door operable.

Priority: Minor.

Exterior and interior photos window 1W-01. - 2009.



Description: This window is located just west of the north entry door. It is 4'-0" wide x 5'-10" high. This is a historic wood single hung window with a decorative glass transom panel above. The transom panel is divided into twelve decorative lights with various colored glasses. The lower sash and wood screen have been removed and presumed to be stored inside the Main House with the many building articles located in Bedroom #2. There are also historic windows at other locations in the Main House which have not been inventoried. There are hooks at the top of the exterior frame to suspend a screened window. The window and frame exterior are painted white. The window and frame interior are stained with a clear finish. Exterior trim is painted 1" x 4" wood. The interior trim, which is composed of a stained, fluted architrave, corner rosette, and sill all with clear finish, has been removed. It is again presumed that the interior trim is stored in the Main House in Bedroom #2.

Condition: The exterior finish of the window and frame is moderately weathered, but the wood is sound. The interior finish is slightly worn. Exterior wood trim is moderately weathered, but sound. Interior trim is slightly worn. The window is not operable and not water tight because the lower sash is removed. This opening is currently protected with a particle board inset on the exterior side.

Recommended treatment: Inventory the windows stored on site. If this historic window and screen can be located, they should be repainted and installed. (If they cannot be located, a new, historically accurate window and screen should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Sand and prep. Install new glazing putty for all lights. If possible, install weather strip at head, jambs, and sill. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Refinish with new clear finish. Reinstall the removed trim and lower sash. Replace sash cords and counter weights. Restore and reinstall all stops. Restore window and hardware to operable and functional condition.

Priority: Serious.

Window 1W-02. This window is identical to 1W-01. Refer to the last section for a discussion of 1W-02.

East Elevation Openings



Exterior and interior photos of Windows 1W-03, 04, 05.- 2009 Photos.



Description: This window is the northern-most of the bay windows on the east elevation. It is 2'-10" wide x 5'-0" high. This is a historic wood double hung window. The upper sash is in place and has single pane glazing. The lower sash and wood screen have been removed and are presumed to be stored inside the Main House. There are hinges and screw holes at the top of the exterior frame to fasten a screened window. The window and frame exterior are painted white. The window and frame interior are stained with a clear finish. Exterior trim is painted 1" x 4"

wood. The interior trim is composed of a stained, fluted architrave, corner rosette, and sill all with clear finish. It is again presumed that the interior trim is stored in Bedroom #2 in the Main House.

Condition: The exterior finish of the window and frame are moderately weathered, but the wood is sound. The interior finish is slightly worn. Exterior wood trim is extremely weathered. Interior trim is slightly worn. The window is not operable and not water tight because the lower sash is removed. This opening is currently protected with a particle board inset on the exterior side.

Recommended treatment: Inventory the windows stored on site. If these historic windows and screens can be located, they should be repainted and installed. (If they cannot be located, a new, historically accurate window and screen should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Consolidate or splice in new wood where the existing trim and sash are rotted or damaged. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Restore with new clear finish. Restore the removed lower sash. Replace sash cords and counter weights. Refinish and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore windows and hardware to operable and functional condition. Inventory all windows stored on the site. If these historic wood screens can be located, they should be protected and installed. If they cannot be located, new, historically accurate wood screens should be fabricated and installed.

Window 1W-04. This window is identical to 1W-03 except that the upper sash glazing is cracked and should be replaced. Refer to the section above for 1W-03.

Window 1W-05. This window is identical to 1W-03. Refer to the section above for 1W-03.

Priority: Serious, all three windows.

Windows 2W-01, 2W-02, and 2W-03. 2009 Photos.



Description: The three second floor windows are all identical. Window 2W-01 is located directly above the bay windows on the east elevation. Window 2W-02 is centered below the south elevation gable end. Window 2W-03 is

centered below the west elevation gable end. They are 2'-6" wide x 5'-2" high. These are 2/2 wood double hung windows. The upper sash and lower sash have been removed at all three locations. The removed windows may be stored inside the Main House. Historic photographs do not show exterior wood screens, however; the windows stored on site should be inventoried to determine if a screen window for this opening might exist. The exterior and interior of each window and frame is painted white. Exterior trim is painted 1" x 4" wood. The interior wood molding and sill are painted white.

Condition: The exterior finish of the window and frame is moderately weathered, but the wood is sound. The interior finish is slightly worn. Exterior wood trim is extremely weathered. Interior trim is slightly worn. The window is not operable and not water tight because both sash have been removed. These openings are currently protected with a particle board inset on the exterior side.

Recommended treatment: Inventory the windows stored on site. If these historic windows and screens can be located, they should be repainted and installed. (If they cannot be located, a new, historically accurate window and screen should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Consolidate or splice in new wood where the existing trim and sash are rotted or damaged. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Reinstall the removed upper and lower sash. Replace sash cords and counter weights. Restore and reinstall all stops. Restore windows and hardware to operable and functional condition.

Priority: Serious.

Windows 1W-06 and 1W-07 and door D2. . 2009 Photos



Description: Windows 1W-06 and 1W-07 are identical 2'-1" wide x 6'-7" high historic double hung windows. They are located on either side of door D2. The upper sash of each window is in place. The lower sash of window 1W-07 has been removed, but the lower sash of 1W-06 is in place. The interior and exterior sides of each sash are painted. Glazing for both windows is single pane. Wood screens for

both windows have been removed. Hinges and screw holes for the screens are still in place on the exterior. The missing lower sash and window screens may be stored somewhere within the Main House. Exterior trim for both windows is painted 1" x wood. Interior trim for both windows has been removed and is likely stored in Bedroom #2. The plaster trace for the interior trim around this opening is identical to the interior wood trim around windows 1W-03, 04, and 05 which consists of architraves and corner rosettes with a clear finish.

Condition: The exterior finish of the window and frame is moderately weathered, but the wood is sound. The interior finish is slightly worn. Exterior wood trim is also moderately weathered. The lower ends of two vertical pieces of exterior wood trim are rotted. The windows are not operable and not water tight because stops and the lower sash of 1W-07 have been removed. These openings are currently protected with particle board insets on the exterior side.

Recommended treatment: Inventory the windows and interior trim stored on site. If the missing historic sash, interior trim, and screens can be located, they should be refinished and installed. (If they cannot be located, a new, historically accurate sash, interior trim, and screens should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Splice new wood on to the vertical trim with rotted bottom ends. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Refinish with new clear finish. Reinstall the removed trim and lower sash. Replace sash cords and counter weights. Restore and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore window and hardware to operable and functional condition.

Priority: Serious, both windows.

Door D2.

Description: Door D2 is located between windows 1W-06 and 1W-07. It is a 2'-6" wide x 6'-7" high historic, wood stile and rail door with two vertical panels and two divided single pane, half circle lights above. The exterior of the door and frame are painted white and the interior is stained with a clear finish. The screen door has been removed from its hinges, which are still in place. Exterior trim is 1" x 4 1/2" painted wood. Interior trim around the door has been removed. The door is nailed shut at its base. This opening is currently protected with a particle board inset on the exterior side.

Condition: The exterior of the door, frame, and the exterior trim are extremely weathered. The wood bottom rail, locking rail, and the lower ends of both stiles are rotted and loose. Some of the exterior wood trim is rotted in places. Daylight is visible through the south panel at its base from the inside. The interior finish on the door is in poor condition. Interior trim could not be evaluated, because it has been removed. The thick, non-historic carpet inside the door would prevent it from opening completely. The historic latch set, thumb turn, and hinges are in place. It could not be determined if the latch set and dead bolt were operable.

Recommended treatment: Inventory the screen doors stored on site. If this historic screen door can be located, it should be repainted and installed. (If it cannot be located, a new, historically accurate

screen door should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the door, frame, and the exterior trim. Splice new wood or consolidate rotted trim. Consolidate and/or reconstruct door bottom rail, locking rail, stiles, and panels. Sand and prep. Repaint exterior face with two coats high quality acrylic latex paint. Sand, prep, and stain the interior face of the door. Apply clear finish. Locate interior trim and sand, prep, and refinish with new clear finish. Reinstall the removed trim. Refinish and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Remove carpet so that door does not bind when it is opened. Restore so that the door is operable and that its locking hardware is functional.

Priority: Serious.

2009 Photo



Window 1W-08.

This is a historic 1'-6" wide x 3'-2" high wood double hung window. It is located above a crawl space access hatch on the east wall of the Bathroom. The upper and lower sash have been removed. Protective particle board panels currently cover the opening. There is no window screen and no window screen hooks or fastener holes for hooks were observed on the exterior trim. Exterior window trim consists of painted 1" x wood. Interior window trim is painted wood molding above a wood wainscot cap.

Condition: The exterior frame and trim are extremely weathered. The head trim piece is warped and split at the north edge. Interior wood frame and trim are only slightly worn. The window is not operational or weather tight, since the upper and lower sash are missing.

Recommended treatment: Inventory the windows stored on site. If the historic window sash can be located, it should be refinished and installed. (If it cannot be located, a new, historically accurate upper and lower sash should be fabricated and installed.) Assuming they are found remove all loose paint on the exterior face of the frame and the exterior trim. Consolidate or splice in new wood at the damaged areas of the exterior head trim piece. Paint may contain lead. Sand and prep. Install new glazing putty for all lights. If possible, install weather strip at head, jambs, and sill. Paint the upper and lower sash, frame, and wood trim with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Reinstall the upper and lower sash. Replace sash cords and counter weights. Refinish and reinstall all stops. Restore window and hardware to operable and functional condition.

Priority: Serious.

Window 1W-09 exterior and interior photos. 2009



Description: This is a vertically divided, four light, historic 2'-5" wide x 5'-2" high wood double hung window. It is located at the far south end of the east elevation. The upper sash, lower sash, and window frame have been painted white on the inside and outside faces. Glazing is single pane. Protective particle board panels currently cover the opening. There is no window screen. There are hooks in the frame for an exterior screen. Exterior window trim consists of painted 1" x wood. Interior window trim is a painted wood molding and sill.

Condition: The exterior finish of the sash, frame, and trim is extremely weathered, but the wood is sound. The interior finish is slightly worn. The lower, south-side light is broken. The window is not currently operable.

Recommended treatment: Inventory the windows stored on site. If this historic screen can be located, it should be repainted and installed. (If it cannot be located, a new, historically accurate screen should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Sand and prep. Replace broken glass pane. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, rehabilitate, and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore windows and hardware to operable and functional condition.

Priority: Serious.

Window 1W-11 exterior and interior photos. 2009



Description: Window 1W-11 is located on the east side of the South Porch and is 4'-10" wide x 3'-0" high. It has two fixed sash with vertically divided, single pane lights. The divided lights are shown in a historic photograph. The north and south sash are separated by a piece of vertical, painted wood trim on the exterior side. The sash, frame, and wood trim are painted white on the exterior. The interior face of the sash and frame are also painted white. There is no interior trim. There are no window screens. No window screens were found and no screen attachments were visible. It is assumed that this window never had screens.

Condition: The exterior finish of the sash, frame, and trim is extremely weathered. The interior finish is slightly worn. The north sash has been removed and rests inside the South Porch. Both lights of the south pane are broken. Exterior vertical and sill trim displays much deterioration. Part of the sill trim is missing.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the window, frame, and the exterior trim. Consolidate and/or replace deteriorated exterior trim. Sand and prep. Replace broken glazing in south sash. Install new glazing putty for all lights. Refinish and reinstall north sash. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. If possible, install weather strip at head, jambs, and sill.

Priority: Serious.

Windows BW-01 and BW-02. 2009 photo.



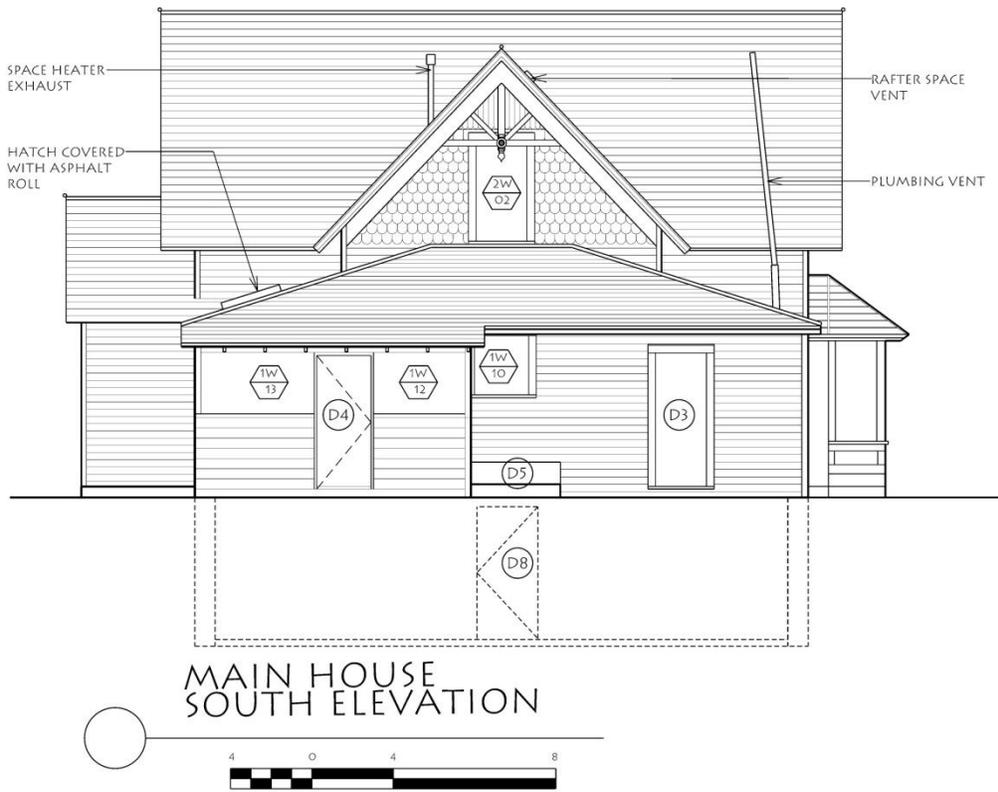
These windows are identical horizontally divided, single pane, three light fixed sash windows located in shallow light wells at the top of the east and west cellar walls. They are approximately 3'-0" wide x 1'-6" high and rest in a wood frame without any interior or exterior trim. The windows and frame are unpainted. Window BW-01 has painted 1" x 6" wood trim around its interior. There is no evidence that these windows ever had screens.

Condition: The sash and frame for both windows have minor weathering. The glazing for both windows is intact. Paint finish on window trim around BW-01 is deteriorated.

Recommended treatment: The windows and frames will hold up much better, if they are painted. Install new glazing putty for all lights. Remove loose paint from interior trim around BW-01. Clean and sand the existing windows, trim, and frames. Paint may contain lead. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

South Elevation Openings



Door D3, 2'-6" x 6'-7".

2009 photo.



Description: Door D3 opens into Bedroom #2 of the Main House from the south. It is a 2'-6" wide x 6'-7" high historic wood stile and rail door. The door has two single pane vertical lights with two vertical panels below. The historic wood screen door has been removed. Hinges for the screen door are visible on the east edge of the door frame. The exterior of the door and frame are painted white. The interior of the door and frame are also painted white. Exterior trim is painted 1" x 4" wood. The interior trim is a simple wood molding painted white. Door hardware consists of a historic latch set and thumb turn and a non-historic slide bolt, deadbolt, and keypad lockset.

Condition: The exterior of the door, frame, and the exterior trim are extremely weathered.

On the exterior the frame has been cut and partially removed adjacent to the keypad lock. Directly below this location the stop is broken and the west stile of the door is split. The wood stop at the head of the door is separating from the door frame. The west exterior vertical wood trim is rotted at its base. The west door panel has a long vertical split. The interior finish on the door, frame, and trim is in fair condition. The historic latch set, thumb turn, and hinges are in place. It could not be determined if the latch set and thumb turn were operable.

Recommended treatment: Inventory the historic screen doors stored in the Main House to determine if the screen door for door D3 still exists. (If it cannot be located, a new, historically accurate screen door based upon historic photographs should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the door, frame, and the exterior trim. Splice new wood where exterior stops are missing or broken. Splice new wood or consolidate rotted trim. Consolidate and/or reconstruct the damaged door stile. Rehabilitate split west door panel. Rehabilitate the separated head stop. Install new glazing putty for all lights. Sand and prep. Repaint exterior with two coats high quality acrylic latex paint. Paint may contain lead. Sand and prep the interior face of the door and, frame, and trim. Apply new paint. Refinish, repair, and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore so that the door is operable and that its locking hardware is functional. Install missing strike for historic thumb turn.

Priority: Serious.

2009 photo.



Window 1W-10. 2'-8" x 2'-11".

Description: Window 1W-10 is a 2'-8" wide x 2'-11" high historic double hung window. It is located just east of the South Porch. The interior and exterior sides of the frame and sash are painted. Glazing is single pane. There is no screen now and no evidence for a historic screen. Exterior trim is painted 1" x 4" wood. Interior trim is painted. The window is not currently operable.

Condition: The exterior frame and trim are extremely weathered. The frame is in very poor condition. The lower rail of the upper sash is in very poor condition. The interior wood frame and trim are only slightly worn. The window is not operational.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Replace the lower rail of the upper sash. Sand and prep. Install new glazing putty for all lights. Repaint the exterior with two coats high quality acrylic latex paint. On

the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore window and hardware to operable and functional condition.

Priority: Serious.

Openings 1W-12 and 1W-13. 2009 photo



photo circa 1947



Description: Opening 1W-12 is a 4'-6" wide x 3'-0" high opening on the south wall of the South Porch east of door D4. Opening 1W-13 is a 5'-7" wide x 3'-0" high opening west of door opening D4. The historic photograph shows what appears to be painted wood screens covering these openings. The openings are currently covered with painted plywood security panels. There is no exterior or interior trim visible. The historic photo is difficult to interpret, but it appears that there was never any exterior trim for this opening. It cannot be determined if these openings were ever glazed.

Condition: The exterior plywood panels are extremely weathered and starting to deteriorate. The interior particle board panels are in good condition.

Recommended treatment: Remove protective wood panels. If original wood screens cannot be found or salvaged, new historically accurate wood screens should be fabricated. Fabricate new removable exterior protective panels which can cover the screens when the building is not in use or secured.

Door D4.

The historic photograph shows a wood screen door at this location. The opening size is approximately 2'-6" wide x 6'-7" high. Currently there is no screen door; only a temporary, unpainted, particle board security panel on 2" x 4" framing with a padlock and hasp.

Condition: The temporary door and its frame are in poor condition.

Recommended treatment: Inventory the historic screen doors stored in the Main House to determine if the screen door for door D4 still exists. (If it cannot be located, a new, historically

accurate screen door based upon historic photographs should be fabricated and installed.) A method of securing the screened opening should be researched.

Door D5. 2009 photo.



Description: This door serves as the hatch to the Cellar. The door is approximately 3'-2" wide and 7'-0" high. It is constructed from five, unpainted vertical boards over 2" x wood framing. 2" x unpainted wood trim is on both sides of the door and at the head. Based upon the weathered appearance of the hatch, it appears to be original. There are no locks for this door.

Condition: The vertical boards and trim are moderately weathered and starting to warp. The door's operation is satisfactory. The door's hinges are still fastened securely to the frame.

Recommended treatment: It does not appear that the hatch was ever painted; however, its service lifetime could be extended by painting it with two coats high quality acrylic latex paint over a suitable primer. The paint should match the siding color.

Priority: Serious.

Door D8. 2009 photo.



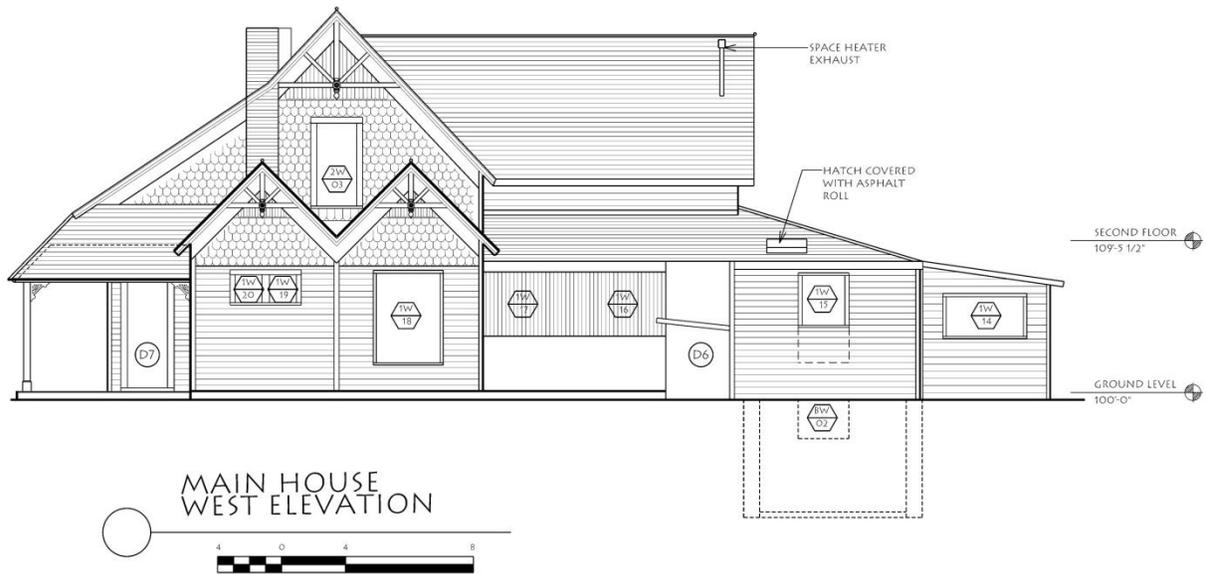
Description: This door is located at the entrance to the Cellar. It is approximately 3'-0" wide by 6'-6" high. It is built from vertical wood members painted white. The door has a historic keyed latch and non-historic padlock and hasp. There is no evidence that this opening ever had a screen door.

Condition: The door binds on the dirt floor of the Cellar. The door does not close tightly into its frame because the frame is not square or the hinges are slightly sprung. The paint finish on both sides of the door and frame is moderately weathered.

Recommended treatment: Remove excess dirt from the cellar floor so that the door does not bind when opened. Repair frame and/or hinges so that door fits squarely into its frame when shut. Attempt to rehabilitate the historic keyed lock and its strike so that the lock is functional. Paint may contain lead. Remove loose paint from the door and frame. Sand and prep. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

West Elevation Openings



Window 1W-14 exterior and interior photos. 2009.



Description: Window 1W-14 is located on the west side of the South Porch. The opening is 4'-10" wide x 3'-0" high. It is divided in half horizontally by a piece of vertical wood trim. All sash have been removed. A historic photograph shows the window with two vertically divided two light sash. The frame and wood trim are painted white on the exterior. The interior face of the frame is also painted white. There is no interior trim. There are no window screens. No screen attachments were visible.

Condition: The exterior finish of the frame and trim is extremely weathered. The interior finish is slightly worn. Exterior vertical and sill trim displays much deterioration. All of the sill trim is missing or deteriorated.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the frame and the exterior trim. Consolidate and/or replace deteriorated exterior trim. Sand and prep. Replace the missing north and south sash. One sash is located inside the South Porch.

Inventory the Main House to determine if the other sash can be located. If not, fabricate a new sash matching the existing sash. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, rehabilitate, and reinstall all stops. If possible, install weather strip at head, jambs, and sill.

Priority: Serious.

Window 1W-15. Circa 1947 photo. 2009 photo.



Description: This window is located on the west wall of the Kitchen. It is a single pane, double hung window that measures 2'-9" wide x 3'-1" high. The historic photograph shows that this window was once much taller. The inset wood siding below the window in the current photograph is also suggestive of this modification. An exact change for this modification cannot be determined. The window modification was after 1947 based on the photos above. The upper sash

and window frame are painted white. The lower sash has been removed. The window jamb has aluminum slides. The exterior trim is unpainted. The interior trim is painted white. There is clip hardware on the exterior face of the frame for a screen, but the screen has been removed.

Condition: The exterior frame, sash, and trim are extremely weathered. Interior wood frame, sash, and trim are moderately worn. The window is not operational or weather tight, since the lower sash is missing.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Sand and prep. Replace the missing lower sash. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, rehabilitate, and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Rehabilitate so that the window is operable and that its locking hardware is fully functional. Restoring this window to its original size should

be considered, if the Kitchen layout permits. The circa 1947 photo above could be used for this purpose.

Priority: Serious.

Door D6. 2009 photo



Circa 1947 photo



Description: This door is 2'-6" wide x 6'-7" high and exits the West Porch. Currently a non-historic aluminum screen door is installed in this opening. It is covered with an unpainted plywood security panel that is secured by a padlock and chain. The historic photograph shows a painted wood screen door.

Condition: The aluminum screen door was covered with plywood security panels on both sides and could not be evaluated.

Recommended treatment: Remove security panels, non-historic aluminum screen door and its frame. Enlarge the door opening so that it is handicap accessible. Replace with new painted, historically accurate wood screen door and hardware. The new screen door should be constructed using the above historic photograph as a guide.

Priority: Serious.

Window 1W-16.

Description: Refer to photographs for door D6 above. Window 1W-16 consists of six screened window openings on either side of door D6. Currently these openings are covered with vertically aligned fiberglass panels, painted plywood panels below the fiberglass, and a plywood security panel covering door D6 and the south window opening. Historically these openings were covered with painted, wood framed, screen windows above painted wood panels.

Condition: The fiberglass panels are sun-bleached and starting to delaminate. The paint finish on the plywood panels is extremely weathered. The plywood panels are starting to decompose.

Recommended treatment: Remove the existing fiberglass and plywood panels. Install new painted, wood framed window screens that are historically accurate. If these window screens are not stored within the Main House, then they should be rebuilt using the above historic photograph as a guide.

Priority: Serious.

Window 1W-17. 2009 photo.



Description: This window is located on the west wall of the Dining Room looking out to the West Porch. The window is double hung with single pane glazing. The upper sash, lower sash, and frame are painted white on both the interior and exterior sides. Exterior trim is painted 1" x 4" wood. The interior trim is composed of a stained, fluted architrave, corner rosette, and sill with a clear finish. An unpainted plywood security panel has been fastened to the exterior of the lower sash. Non-historic drapes and curtains cover the interior wood trim.

Condition: The sash, frame, and trim are in fair to good condition. The plywood security panel prevents the window from being operational.

Recommended treatment: Remove the security panel. Rehabilitate the sash, frame, exterior trim, and interior trim when other windows are being rehabilitated. Remove non-historic drapes and curtains. Restore so that the window is operable and that its locking hardware is fully functional.

Priority: Minor.

Window 1W-18.

2009 photo.



2009 photo.



Description: This window is located on the west wall of Bedroom #1. It is 4'-0" wide x 5'-7" high. This is a historic wood single hung window with a decorative glass transom panel above. The transom panel is divided into twelve decorative lights with various colored glasses. The lower sash and wood screen have been removed and presumed to be stored inside the Main House. There are hooks at the top of the exterior frame to suspend a screened window. The window and frame exterior are painted white. The window and frame interior are

stained with a clear finish. Exterior trim is painted 1" x 4" wood. The interior trim, which is composed of a stained, fluted architrave, corner rosette, and sill, all with clear finish, has been removed. It is again presumed that the interior trim is stored in the Main House.

Condition: The exterior finish of the window and frame are moderately weathered. The interior finish is slightly worn. Exterior wood trim is extremely weathered, but sound. Interior trim is slightly worn. The window is not operable and not water tight because the lower sash has been removed. This opening is currently protected with a particle board inset on the exterior side.

Recommended treatment: Inventory the windows stored on site. If this historic window and screen can be located, they should be refinished and installed. (If they cannot be located, a new, historically accurate window and screen should be fabricated and installed.) Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Refinish with new clear finish. Reinstall the removed trim and lower sash. Replace sash cords and counter weights. Refinish and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore window and hardware to operable and functional condition.

Priority: Serious.

Windows 1W-19 and 1W-20. 2009 photo.



Circa 2006 photo.



Description: These windows are located on the west wall of the Walk-in Closet in Bedroom #1. They are each 1'-9" wide x 1'-9" high. These are historic casement windows with a decorative divided lights composed of various colored glasses. The casement sash and wood screen have been removed and are stored inside the Main House. There are hooks at the top of the exterior frame to suspend a screened window. The window and frame exterior are painted white. The window and frame interior are stained with a clear finish. Exterior trim is painted 1" x 4" wood. The interior trim is composed of a stained, fluted architrave and sill with clear finish.

Condition: The exterior of the window frame is extremely weathered. The interior finish of the frame is slightly worn. Exterior wood trim is extremely weathered. Interior trim is slightly worn. The window is not operable and not water tight because sash has been removed. This opening is currently protected with a particle board inset on the exterior side.

Recommended treatment: The removed sash are stored within the Main House. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Refinish with new clear finish. Reinstall the removed casement sash for both windows. Restore and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore window and hardware to operable and functional condition.

Priority: Serious.

Door D7. Exterior and interior photos. 2009.



Description: Door D7 is 2'-6" wide and 6'-7" high. This door is a four panel, one light wood stile and rail door. Three panels are located below the light and one panel above. Each panel is divided horizontally into three sections. Glazing is single pane. The exterior of the door, frame, and wood trim is painted white. The screen door has been removed. Hinges for the screen door are still present on the frame. The interior of the door has a dark reddish stain with clear finish. Interior trim, which is composed of an architrave, corner rosettes, and plinths, is painted white. It is likely that this trim was originally stained with a clear finish like the trim around other openings in this part of the Main House. Further analysis could determine if this is the case. Hardware consists of a historic thumb turn and latch set with keyed lock. The opening is currently protected with an unpainted plywood panel screwed to the frame.

Condition: The exterior of the door and frame are very weathered. Exterior trim is also very weathered. The wood sill is starting to rot. The interior of the door and the interior trim are slightly worn. Non-historic carpet with a deep pile prevents the door from opening. The hardware could not be tested for its functionality.

Recommended treatment: Install new glazing putty for all lights. Sand and prep. Repaint exterior with two coats high quality acrylic latex paint. Paint may contain lead. Sand and prep the interior face of the door and, frame, and trim. Apply new clear, stained finish. Refinish, repair, and reinstall all stops. If possible, install weather strip at head, jambs, and sill. Restore so that the door is operable and that its locking hardware is functional.

Priority: Serious.

Vents.

Space Heater Exhaust. The space heater exhaust is located at the south end of the west face of the intersecting gable roof. The space heater was located in Bedroom #5. This exhaust is also discussed in Section 3.1.8, Mechanical Systems, water and wastewater.

Condition: The ceiling below the exhaust in Bedroom #5 has severe water damage.



2009 photograph.

Recommended treatment: Install new flashing when wood shingle roof is replaced.

Priority: Critical.

Plumbing vent. This vent is located at the southeast corner of the one-story wrap around hipped roof. This is also discussed in Section 3.1.8, Mechanical Systems, water and wastewater.



Condition: There is no water damage visible in the Bathroom ceiling below.

Recommended treatment: New flashing for this vent should be installed when the asphalt roll roofing is replaced.

Priority: Minor.

Historic skylight covered with asphalt roll roofing. 2009 photo.



Photo circa 1947.



This opening is not visible in the Kitchen ceiling below. Historically there was a skylight in the Kitchen ceiling.

Condition: There are no leaks visible in the ceiling below. The asphalt roll is deteriorated and in poor condition. Flashing is visible around the opening.

Recommended treatment: Since the hatch was a historic skylight, it is recommended that the asphalt roll roofing be removed and the skylight be reconstructed. Flashing around the skylight should be replaced when the new wood shingle roofing is installed. The Kitchen ceiling should be reconstructed so that the skylight is visible and serves its intended function.

Photo 2009.



Rafter Space Vents. There are two rafter space vents. One vent is located on the east side of the north face of the cross gable roof and the other on the south side of the east face of the intersecting gabled roof. Each vent provides approximately 20 square inches of vent area. The total vented area does not meet the current minimum requirements of the building code.

Condition: The vents are in good condition but lack bird screens. There is no sign of water leakage below the vents. The rafter space shows no signs of moisture or water damage. Paint on the vents is weathered. The area of the vents is insufficient to meet current building code requirements.

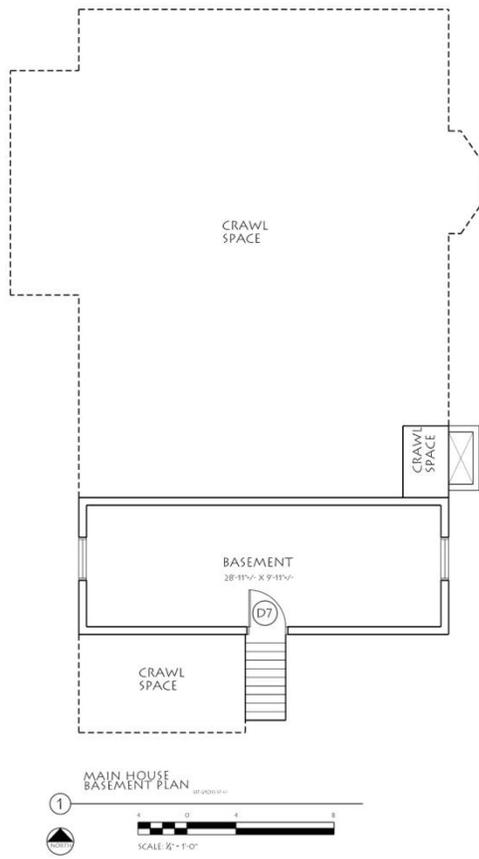
Recommended treatment: Repaint existing vents and install bird screen. Add new additional vents to meet building code requirements when wood shingles are replaced.

End of Section 3.1.6

3.1.7 Main House Interior finishes, Interior doors, and special interior features

Wall, ceiling, and floor finishes. Built-ins, window-coverings, and special features. Interior doors and trim.

Existing Basement Plan



+Basement east wall. 2009 photo.



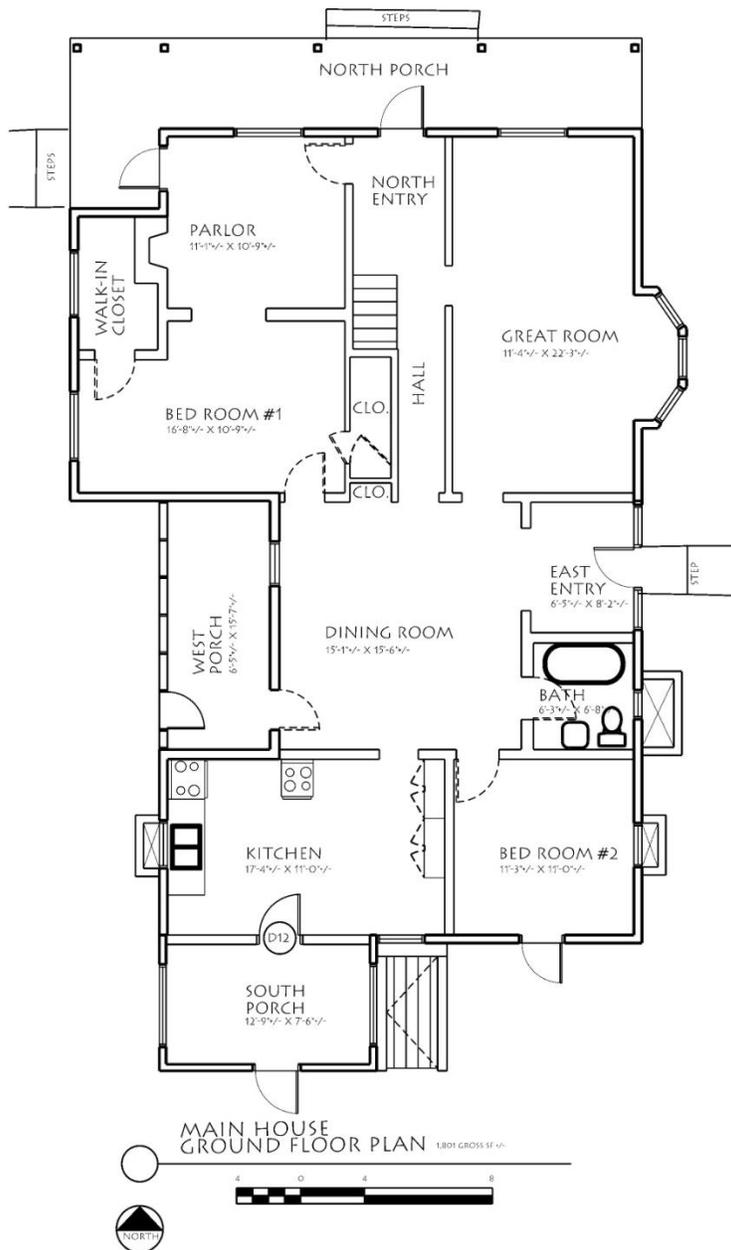
Walls: Concrete parging.
Ceiling: None. Exposed floor joists.
Floor: Earth over concrete slab on grade.
Base: None.
Interior Doors: D8. Vertical board door. Wood frame.
Window-coverings: None.
Special features, historic: None.
Special features, non-historic: Two water heaters and tank.

Condition: Floor is covered with debris and some animal droppings. Ceiling has cobwebs. Door does not open completely due to unlevel floor. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove dirt covering concrete slab on grade. Thoroughly clean and disinfect floor, walls, and ceiling. Adjust door for smooth operation. Repaint door and frame.

Priority: Minor

Existing First Floor Plan



+North Entry and Hall.

Walls: Painted wallpaper over plaster.

Ceiling: Painted wallpaper over plaster.

Floor: Non-historic carpet and underlayment over tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish. Base has been removed west of door D1.

Interior Doors: None, door into Parlor has been removed. Trim: Trim around the openings into the Great Room, Dining Room, and Parlor has been removed.

Window-coverings: There are no windows in these two rooms.

Special features, historic: Stained wood stair with clear finish.

Special features, non-historic: None.

Looking south at Hall and stair from North entry.
2009 photo.



Condition: Historic wallpaper is covered with paint and peeling away from wall at north end of stair. Historic wallpaper on the ceiling is covered with paint, but is in fair condition. The non-historic carpet is extremely soiled and covered with debris. Wood base is in fair condition. The handrail, balusters, wood edge trim, and some of the wood stair risers have been removed. Stair treads have been covered with non-historic rubber mat. Stair finish is in poor condition. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, stair, and ceiling. Restore wood base. Restore removed wood base. Remove rubber mats from stair treads. Restore stair treads, risers, balusters, handrail, newel post, and edge trim. Reinstall all removed pieces of stair assembly. Restore walls and ceiling to historically

appropriate appearance. Samples of wallpaper stored in closet can be used as a guide for appropriate patterns and colors. Since a full restoration is not intended, it is not necessary to install exact replicas of wallpaper.

Priority: Minor.

+Great Room.

Walls: South and west walls are painted wallpaper over plaster. East and north walls are painted gypsum wallboard over wallpaper over plaster.

Ceiling: Painted wallpaper over plaster.

Floor: Non-historic carpet and underlayment over tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish.

Interior Doors: None. Trim: Trim around the opening between the Great Room and Hall and the Great Room and Dining Room has been removed. It is assumed that this trim is stained with a clear finish and is stored in the Main House.

Window-coverings: Window coverings from all windows in this room have been removed.

Special features, historic: None.

Special features, non-historic: A propane space heater is located near the west wall of the room.

North wall of Great Room. 2009 photo.



Condition: Walls are dusty but in fair condition. No water damage is visible. Painted wallpaper is peeling off the ceiling in several locations. The non-historic carpet is extremely soiled and covered with debris. Wood base is in fair condition and intact. Door trim that has not been

removed is in fair condition. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base. Restore and reinstall removed wood trim. Rehabilitate walls and ceiling surfaces. Install wallpaper of appropriate colors and patterns. Remove propane heater.

Priority: Minor.

+Dining Room.

Walls: All walls are painted gypsum wallboard over wallpaper over plaster.

Ceiling: Painted gypsum wallboard over wallpaper over plaster.

Floor: Non-historic carpet and underlayment over tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish. Base is missing on the south wall.

Interior Doors: None. Trim: Interior trim at window 1W-14 consists of a stained wood sill, architrave, and corner rosettes with clear finish. Trim around the openings to Hall, Great Room, East Entry, Bathroom, Bedroom #1, Bedroom #2, and the West Porch has been removed. The opening between the Dining Room and the Kitchen is clad only with painted gypsum board. There is no structural header for the openings to the East Entry and the Bathroom. Refer to Section 3.1.3, Main House Structural System, for additional information.

Window-coverings: Non-historic drapes and curtains are hung on window 1W-14.

Special features, historic: None.

Special features, non-historic: A propane space heater is located in the southwest corner of the room.

Dining Room south wall. 2009 photo.



Condition: The painted gypsum board walls are damaged where trim has been removed. The painted gypsum wallboard ceiling is in fair condition. The non-historic carpet is extremely soiled

and covered with debris and some animal droppings. Wood base is in fair condition. Door and window trim that has not been removed is in fair condition. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base. Restore and reinstall removed wood trim. Rehabilitate walls and ceiling to historically appropriate appearance. Install wallpaper of appropriate patterns and colors. Remove propane heater.

Priority: Minor.

+Dining Room Closet.

Walls: The north wall consists of vertical wood boards. Lower boards of the north wall have a stained finish; upper boards are painted. The east and west walls are wallpaper over plaster.

Ceiling: Wallpaper over plaster.

Floor: Non historic underlayment over tongue and groove wood flooring.

Base: None.

Interior Doors: None. Trim: See Dining Room description.

Window-coverings: None.

Special features, historic: Stained wood shelving. Doors and drawers have been removed

Special features, non-historic: 1" x unfinished wood shelving.



Closet. 2009 photo.

Circa 2005 photo showing doors and drawers.



Condition: Painted and stained vertical boards are in fair condition. Painted wallpaper is faded and in poor condition on the east wall, west wall, and ceiling. A 1' x 2' opening has been cut into the wood floor. Historic wood shelving, doors, and drawers have been removed.

Recommended treatment: Restore vertical board north wall. Clean wallpaper with non-destructive

methods, or install new historically appropriate wallpaper after repairing any loose or damaged plaster beneath existing wallpaper. Repair wood floor. Restore existing historic upper wood shelves. Locate or replace missing historic wood shelves, drawers, and doors with new historically accurate millwork.

Priority: Minor.

+East Entry.

Walls: All walls are painted gypsum wallboard over wallpaper over plaster.

Ceiling: Painted gypsum wallboard over wallpaper over plaster.

Floor: Non-historic carpet and underlayment over tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish.

Interior Doors: None. Trim: Interior trim at windows 1W-06 and 1W-07 and Door D2 has been removed. Trim has also been removed at the opening to the Dining Room.

Window-coverings: A non-historic curtain is hung on door D2.

Special features, historic: None.

Special features, non-historic: None.

East wall of East Entry. 2009 photo.



Condition: The painted gypsum board walls are damaged where trim has been removed. The painted gypsum wallboard ceiling is in fair condition. The non-historic carpet is extremely soiled and covered with debris and some animal droppings. Wood base is in fair to poor condition. The condition of wood trim could not be assessed, since it has been removed. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base. Restore and reinstall removed wood trim. Restore walls and ceiling to historically appropriate appearance.

Priority: Minor.

+Bath.

Walls: All walls are painted gypsum wallboard over plaster above a painted beadboard wainscot.

Ceiling: Painted gypsum wallboard over plaster.

Floor: Linoleum over tongue and groove wood flooring.

Base: Painted ¼ round base shoe.

Interior Doors: Bath door has been removed. Trim: Interior trim at window 1W-08 is painted wood molding. Trim around Bath door opening has been removed.

Window-coverings: None.

Special features, historic: Claw foot bathtub.

Special features, non-historic: Water closet and wash basin.

Bathroom south east corner. 2009 photo.

Bromley Farm
Historic Structure Assessment
Section 3: Building Condition Assessment



Condition: The painted gypsum board walls are damaged where trim has been removed. Painted beadboard wainscot is chipped and worn. The painted gypsum wallboard ceiling is in fair condition. The linoleum is extremely soiled and in poor condition. The water closet, wash basin, and tub are not damaged. It could not be determined if they are operable. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: This area will be reconfigured to contain new accessible restrooms.

Priority: Serious.

+Bedroom #2.

Walls: All walls are painted gypsum wallboard over plaster.

Ceiling: Painted gypsum wallboard over plaster.

Floor: Non-historic carpet and underlayment over tongue and groove wood flooring.

Base: Painted 1" x 6" wood base.

Interior Doors: Bedroom #2 door has been removed. Trim: Interior trim at window 1W-09 is painted 1" x 4" wood molding with a painted wood sill. Trim around interior of door D3 is painted wood molding. Trim around Bedroom #2 door opening has been removed.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Note: Historic wood trim from other rooms is currently stored in this room.

East wall Bedroom #2 showing stored interior wood trim. 2009 photo.



Condition: The painted gypsum board walls are damaged where trim has been removed. The painted gypsum wallboard ceiling is in good condition. The non-historic carpet is extremely soiled and covered with debris. Wood base is chipped and dented. The condition of wood trim around the door opening to Bedroom #2 could not be assessed, since it has been removed. Wood trim around door D3 and window 1W-09 is in good condition. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: This area will be reconfigured to contain new accessible bathrooms.

Priority: Minor.

+South Porch.

Walls: East, west, and south walls are painted gypsum wallboard. The north wall is painted gypsum wallboard over wood siding.

Ceiling: Painted gypsum wallboard.

Floor: Linoleum over 1" x wood decking.

Base: Resilient base.

Interior Doors: See description in Kitchen section. Trim: None around door openings and screened windows.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: Electrical panels in northwest corner.

East wall of South Porch. 2009 photo.



Condition: The painted gypsum board walls have some water damage and are in poor to fair condition. The water damage is due to leaks around the window openings, through the siding, and through the roof. Gypsum board is missing in the northwest corner of the room. Insulation and wood siding are visible at these locations. The painted gypsum wallboard ceiling is in fair condition. The ceiling sags in some locations. This is probably due to water damage. The linoleum flooring is extremely soiled and covered with debris. The resilient base is loose and deteriorated. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove and replace gypsum wallboard ceilings and walls. Replace any damaged wood flooring. Replace linoleum.

Priority: Minor.

+Kitchen.

Walls: All walls are painted gypsum wallboard over plaster.

Ceiling: Painted gypsum wallboard over plaster.

Floor: Linoleum over underlayment over tongue and groove wood flooring.

Base: Painted wood base and base shoe.

Interior Doors: The door from the Kitchen to the South Porch is a twin vertical panel, twin vertical light, painted stile and rail door. Trim: Interior trim at windows 1W-10 and 1W-13 is painted wood molding surrounding the openings.

Window-coverings: A non-historic shade is hung on window 1W-10. Window 1W-13 has no window covering.

Special features, historic: Floor to ceiling built-in cabinets on east wall. Face frame cabinets with vertical bead board doors, five knuckle hinges, and surface mounted cupboard latches.

Special features, non-historic: Two, four-burner gas stoves and wood base cabinets with plastic laminate counter, backsplash, and non-historic sink.

West wall of Kitchen. 2009 photo.



Non historic cabinet and counter top.

East wall of Kitchen. 2009 photo.



Condition: Painted gypsum board walls are in fair condition due chips, dents, holes, and peeling paint. Painted gypsum board ceiling is fair condition due to peeling paint. The linoleum flooring is soiled, covered with debris, and torn in several locations. The painted wood base and base shoe are in fair condition due to scratches, dents, and loose paint. The built-in wood cabinets are in fair condition, but missing some latch hardware. These cabinets are scratched, dented, and have some loose hardware. Doors have been removed from the non-historic base cabinet on the west wall. This non historic cabinet and counter are in poor condition due to broken hardware and de-lamination of the plastic laminate counter top. They are poorly constructed. The sink and stoves were not evaluated. See Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting for condition assessments for the sink and stoves.

Recommended treatment: Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base and base shoe. Install historic skylight opening in ceiling. Rehabilitate walls and ceiling. Restore historic built-in cabinets. Install historically accurate hardware that is missing. Remove stoves, non-historic base cabinet, and sink. Remainder of work in this room will be done by restaurant concessionaire.

Priority: Minor.

+West Porch.

Walls: East, north, and south walls are painted wood siding. Painted wood studs and the inside face of the exterior sheathing are visible on the west wall.

Ceiling: Painted bead board.

Floor: Painted 1" x 6" wood decking.

Base: None.

Interior Doors: This door has been removed and placed against the south wall of the Dining Room. The door is a single, one light painted stile and rail door. Decorative molding surrounds the glass and encloses the single panel. The glass light has a curved top rail and a surround consisting of twenty-two colored glass lights. Trim: Painted wood molding around door opening to Dining Room and window 1W-14.

Window-coverings: None.

Special features, historic: Historic window screens and screen door have been removed.

Special features, non-historic: None.

Condition: Paint on the walls and ceiling is slightly degraded. There is some wall damage where trim around the door opening to the Dining Room has been removed. Floor paint is moderately degraded. The about one-third of the ends of floor boards exposed to the exterior are rotted.

Refer to Section 3.1.6, Window, exterior doors, vents; for assessment of exterior door and window openings.

Recommended treatment: Paint may contain lead. Remove loose paint from walls, floor, and ceiling. Sand and prep these surfaces. Repaint with historically appropriate paint color(s). Splice new wood to replace rotted ends of floor boards. Modify the west exterior wall so that the ends of floor boards are covered by wall with a drip edge at the bottom. Remove loose paint from door and window 1W-14 trim. Sand and prep these surfaces. Repaint with historically appropriate paint color(s). Refer to Section 3.1.6, Window, exterior doors, vents; for recommendations for exterior door and window openings. West exterior door, interior door and frames will be reconstructed as an accessible entrance. Construct new interior door to same design and using same colored lights as historic door.

+Bedroom #1.

West wall. 2009 photo.



Walls: All walls are painted gypsum wallboard over wallpaper over plaster.

Ceiling: Painted gypsum wallboard over wallpaper over plaster.

Floor: Non-historic carpet and underlayment over wood tongue and groove flooring.

Base: Stained wood base, base shoe, and base cap with clear finish.

Interior Doors: Doors to the Dining Room, Walk-in Closet, and Closet have been removed. Trim: Trim for the door openings to the Dining Room, Closet, and Walk-in Closet has been removed. There is a cased opening between Bedroom #1 and the Parlor with no sign that it ever had a door. Interior trim around window 1W-15, with the exception of the sill trim, has been removed. All trim was stained with a clear finish.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Condition: The painted gypsum board walls are damaged where trim has been removed. The painted gypsum wallboard ceiling is in good condition. The non-historic carpet is extremely soiled and covered with debris and some animal droppings. Wood base is in fair condition due to scratches and dents. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base. Restore and reinstall removed wood trim. Restore walls and ceiling to historically appropriate appearance.

Priority: Minor.

+Bedroom #1 Closet.

Closet south wall. 2009 photo.



Walls: The south wall consists of a stained, vertical bead board cabinet with clear finish. This is described in the special features – historic section below. The east, north, and west walls are plaster covered with historic wallpaper.

Ceiling: Historic wallpaper over plaster.

Floor: Tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish.

Interior Doors: None. Trim: Stained wood coat rails with clear finish on east and north walls.

Window-coverings: None.

Special features, historic: Built-in storage cabinet on south wall. The cabinet is divided horizontally into an upper and lower section. Original hardware consisting of brass five-knuckle hinges and a cabinet latch are intact on the upper section.

Special features, non-historic: None.

Condition: The painted wallpaper is faded and marginally soiled, but mostly intact. The wood tongue and groove flooring is slightly soiled, but in fair to good condition. Wood base is in fair condition and intact. It displays scratches and dents. Historic wallpaper was found inside the closet. This should be removed and stored in a controlled environment for safekeeping and future research. The wood coat rail and bead board cabinet are in good condition. Also see

Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

Recommended treatment: Clean wallpaper with non-destructive methods. Rehabilitate wood cabinet, coat rail, and base.

Priority: Minor.

+Bedroom #1 Walk-in Closet.

Walls: All walls are plaster covered with 2-3 layers of historic wallpaper. Some of the wallpaper has been painted over.

Ceiling: Historic wallpaper over plaster.
Floor: Tongue and groove wood flooring.

Base: Stained wood base, base shoe, and base cap with clear finish.

Interior Doors: None. Trim: Interior of window 1W-16 – stained, fluted architrave, corner rosette, and sill with clear finish.

Window-coverings: None.

Special features, historic: Built-in storage cabinet with stained wood trim and clear finish on east wall. Also on east wall is a built-in wood closet with hat shelf. Wood shelving and trim is stained with a clear finish.

Special features, non-historic: None.

Condition: The wallpaper is somewhat faded and water damaged around the back of the west chimney. Water damage is due to improper flashing of west chimney at the roof. Ceiling

wallpaper, plaster, and wood lath near the west chimney is severely water damaged. The wood tongue and groove flooring is in fair to condition. Wood base is in fair condition and intact. The wood cabinet is in good condition. The wood closet is in fair condition and missing a pair of doors. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

2009 photo.



Recommended treatment: Leak in ceiling should be repaired as soon as possible to prevent further degradation to historical finishes and millwork. See Section 3.1.5, Envelope: roofing and waterproofing. Repair damaged plaster on east and north walls. Repair water damaged wallpaper on east and north walls. Clean wallpaper using preservative cleaning methods. Repair damaged ceiling lath and plaster. Restore ceiling wallpaper to the degree that restoration is possible. Refinish wood flooring. Refinish wood base, trim, historic cabinet, and historic closet. Refinish and reinstall, or reconstruct, historic wood closet doors.

Priority: Leak, critical. Interior finishes, serious.

+Parlor.

Walls: All walls are painted gypsum wallboard over wallpaper over plaster.

Ceiling: Painted gypsum wallboard over wallpaper over plaster.

Floor: Non-historic carpet and underlayment over wood tongue and groove flooring.

Base: Stained wood base, base shoe, and base cap with clear finish on south, east, and north walls. Non-historic painted wood base on west wall.

Interior Doors: Door to the North Entry has been removed. The opening between the Parlor and Bedroom #1 is cased and shows no evidence of earlier doors. Trim: Trim for the door openings to the North Entry and Bedroom #1 has been removed. Interior trim around window 1W-01, with the exception of the sill trim, has been removed. All trim was stained with a clear finish.

Window-coverings: None.

Special features, historic: Fireplace surround, hearth, and firebox. The surround and hearth are covered with historic ceramic tile. No mantel.

Special features, non-historic: None.

Parlor north wall. 2009 photo.



Parlor west wall. 2009 photo.



Condition: The walls and ceiling are in fair condition. The walls are damaged where wood trim has been removed. The walls and ceiling have numerous scratches, dents, and blemishes. The non-historic carpet is soiled and covered with debris. Wood base is in fair condition and intact. It also has scratches and dents. Wood trim around the door openings has been removed. Wood sill trim below window 1W-01 is in fair condition. The firebox has been removed from the fireplace. The surround and hearth have been extremely damaged by the removal. Also see Sections 3.1.8, Mechanical Systems, water and wastewater and Section 3.1.9., Electrical systems and lighting.

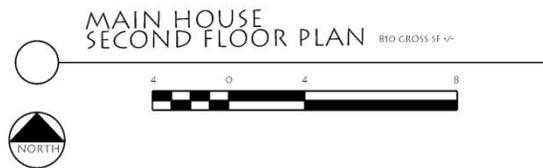
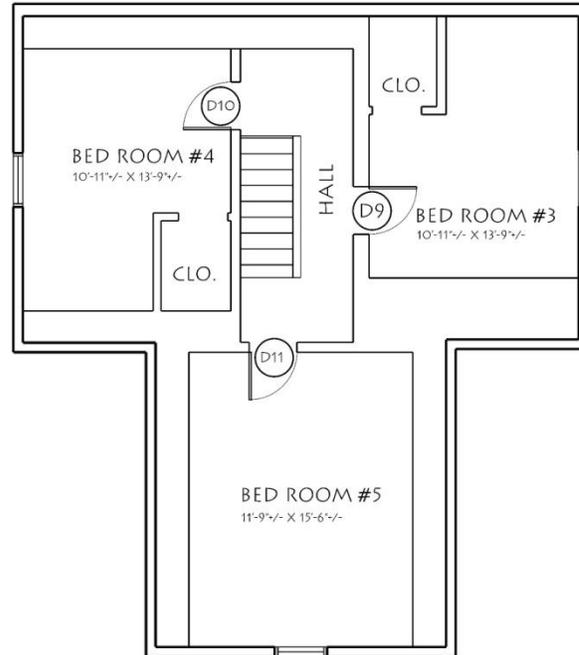
Parlor fireplace. Circa 2005 photo.



Recommended treatment: Remove non-historic carpet and underlayment. Restore wood flooring. Thoroughly clean and disinfect floor, walls, and ceiling. Restore wood base. Restore and reinstall removed wood trim. Restore walls and ceiling to historically appropriate appearance. Remove space heater. Reinstall firebox in fireplace and reconstruct historic surround and hearth. Ceramic tile and surround debris from the firebox removal remain at the fireplace. The firebox was observed in Bedroom #1. This material and the photograph above should be used as the basis for the fireplace and surround reconstruction, omitting the non historic space heater. The ceramic tile was a commonly used size and pattern. Replacement pieces may be available in architectural salvage outlets.

Priority: Serious.

Existing Second Floor Plan



+Hall.

Walls: Painted wallpaper over plaster.

Ceiling: Painted wallpaper over plaster.

Floor: 6" wood board flooring with linoleum in some locations.

Base: Painted wood.

Interior Doors: None. See descriptions for Bedrooms 3, 4, and 5. Trim: Painted wood around each Bedroom door opening.

Window-coverings: None.

Special features, historic: Stair to first floor. Note: historic Japanese newspapers are lying on floor.

Special features, non-historic: None.

Condition: Walls and ceiling are in fair condition. The floor has some areas of deteriorated linoleum and worn paint on wood flooring. Painted base and trim are in fair to good condition. Stair railing, balusters, and newel post have been removed.

Recommended treatment: Clean walls and ceiling. Restore to historically appropriate condition. Refinish wood flooring. Restore to historically appropriate condition. Paint may contain lead. Sand, prep, and paint wood base and trim. Rehabilitate and install stair railing, balusters, and newel post. If these no longer exist, then fabricate and install historically accurate recreations. Historic newspapers should be stored archivally off-site.

Priority: Serious.

+**Bedroom #3.** 2009 photo.



Walls: Painted wallpaper over plaster.
Ceiling: Painted wallpaper over plaster.
Floor: Linoleum over wood board flooring.
Base: Painted wood base, wood shoe, and base cap.
Interior Doors: Four vertical panel painted wood stile and rail door. Trim: Painted wood trim around door D9, Closet opening, and window 2W-01.
Window-coverings: None.
Special features, historic: None.
Special features, non-historic: Exhaust vent from space heater in Great Room below.

Condition: Walls and ceiling have areas of peeling wallpaper and are in poor condition. The floor linoleum is in fair condition. The linoleum is loose in spots and has tears and cracks. There is a “soft spot” in the floor in the middle of the room. A potential source for this problem is discussed on page 3.1.3-2 of the Main House Structural System. A 2’ x 2’ section of ceiling has been removed adjacent to window 2W-01 to access the attic. Paint on door D9 is slightly worn. Paint on the floor base, door opening trim, and window 2W-01 trim is slightly worn.

Recommended treatment: Clean and disinfect the floor, walls, and ceiling. Repair or replace damaged or missing lath and plaster on walls and ceiling. The walls and ceiling should be restored with historically accurate wallpaper. Rehabilitate deteriorated wood flooring below linoleum in the middle of the room. Protect existing linoleum flooring so that it may be reinstalled after floor repair. Paint may contain lead. Sand, prep, and paint wood base and trim.

Priority: Minor.

+Bedroom #3 Closet. 2009 photo.



Walls: Historic wallpaper over plaster.
Ceiling: Historic wallpaper over plaster.
Floor: 9” x 9” tile over wood board flooring.
Base: Painted wood base, wood shoe, and base cap.
Interior Doors: None. Trim: None.
Window-coverings: None.
Special features, historic: Brick chimney ledge on east wall covered with historic wallpaper.
Special features, non-historic: Galvanized pipe coat rod.

Condition: Walls and ceiling have water damaged areas. This is due to improper flashing in the chimney above this room. Flooring may be vinyl asbestos tile. Flooring is in fair condition. Paint on the floor base is slightly worn.

Recommended treatment: Clean and disinfect the floor. Repair or replace damaged or missing lath and

plaster on walls and ceiling after the roof is replaced. Preserve historic wallpaper on walls and ceiling. Test tile floor for asbestos. If asbestos is found, abate flooring and install new historically accurate linoleum. Sand, prep, and paint wood base and trim.

Priority: Minor.

+Bedroom #4. 2009 photo.



Walls: Painted wallpaper over plaster.

Ceiling: Painted wallpaper over plaster.

Floor: Linoleum over wood board flooring.

Base: Painted wood base, wood shoe, and base cap.

Interior Doors: Four vertical panel painted wood stile and rail door. Trim: Painted wood trim around door D10, Closet opening, and window 2W-03.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Condition: Walls and ceiling have areas of peeling wallpaper and are in poor condition. The floor linoleum is in fair condition. Paint on door D10 is slightly worn. Paint on the floor base, door opening trim, and window 2W-03 trim is slightly worn.

Recommended treatment: Clean and disinfect the floor, walls, and ceiling. Repair or replace damaged or missing lath and plaster on walls and ceiling. The walls and ceiling should be restored with historically accurate wallpaper. Repair deteriorated wood flooring below linoleum

in the middle of the room. Protect existing linoleum flooring so that it may be reinstalled after floor repair. Sand, prep, and paint wood base and trim.

Priority: Minor.

+Bedroom #4 Closet. 2009 photo.



Walls: Historic wallpaper over plaster.
Ceiling: Historic wallpaper over plaster.
Floor: Linoleum over wood board flooring.
Base: Painted wood base, wood shoe, and base cap.

Interior Doors: None. Trim: None.

Window-coverings: None.

Special features, historic: Brick chimney ledge on west wall covered with historic wallpaper. Painted wood coat rail on east wall.

Special features, non-historic: Galvanized pipe coat rod.

Condition: Wall and ceiling wallpaper are somewhat faded, but in moderately good condition. Linoleum flooring soiled and split near south wall. Paint on the floor base is slightly worn.

Recommended treatment: Clean wallpaper using preservative cleaning methods. Clean and disinfect the floor. Repair split in linoleum. Paint may contain lead. Sand, prep, and paint wood base and trim.

Priority: Minor.

+Bedroom #5. 2009 photo.



Walls: Paint over two layers of wallpaper over plaster.

Ceiling: Paint over two layers of wallpaper over plaster.

Floor: Two layers of linoleum over wood board flooring.

Base: Painted wood base, wood shoe, and base cap.

Interior Doors: Four vertical panel painted wood stile and rail door. Trim: Painted wood trim around door D11, Closet opening, and window 2W-02.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: Exhaust vent from space heater in Dining Room below.

Condition: Walls and ceiling have areas of peeling painted wallpaper and are in poor condition. There are two different layers of linoleum visible. Both layers are worn, torn, and have wood

flooring telegraphing through them. The linoleum is in poor condition. There is water damage to the ceiling around the vent opening in the southwest corner of the room. Paint on door D11 is slightly worn. Paint on the floor base, door opening trim, and window 2W-02 trim is moderately worn.

Recommended treatment: Clean and disinfect the floor, walls, and ceiling. Repair or replace damaged or missing lath and plaster on walls and ceiling. The walls and ceiling should be restored with historically accurate wallpaper. The linoleum flooring should be replaced with historically accurate sheet vinyl or linoleum. A new, thin layer of underlayment would help prevent telegraphing of the wood flooring through the new linoleum. Paint may contain lead. Sand, prep, and paint wood base and trim.

Priority: Minor.

Additional treatment: Sections 3.1.2, Main House Foundation, and 3.1.3, Main House Structural System recommend that small areas of floor, interior wall sheathing, and ceiling be removed to verify structural conditions which cannot be currently observed. This will become necessary if it is decided to change the occupancy of the Main House. These locations are not identified in this report, however; a cost for this work has been included in the structural budget.

3.1.8 Main House (and site) Mechanical Systems, Water, Wastewater

Mechanical

The mechanical systems for the main house consist of propane floor mounted heaters. The heaters have been installed in the locations of the original wood burning stoves/fireplaces. The propane heaters do not appear to be functional and the propane piping has been disconnected. A propane tank does not exist on site. It appears that the propane tank was located to the West or South of the Main house. The mechanical systems for this building will require complete replacement.

The most economical mechanical system for the building will be to install gas fired furnaces with a forced air distribution system. The furnaces will be high efficiency sealed combustion units. Natural gas would need to be brought to the site from existing gas distribution mains in Bromley Lane. The most feasible location for the gas meter would be on the South or East side of the house. Two furnaces would be utilized to condition the house. The furnace for the main level would be installed in the basement. New distribution ductwork would be routed in the crawl space below the floor to floor grilles or baseboard diffusers. The furnace for the upper level would be located up in the attic space and new distribution ductwork routed to new ceiling diffusers.

The proposed future use of the building is for a restaurant with an occupant load of 70 people. Ventilation to the spaces will be through the existing operable windows which comply with Chapter 4 of the IMC (International Mechanical Code). Cooling coils could be installed at the furnaces for the future addition of air cooled condensing units to provide cooling for the restaurant at a later date. The mechanical systems required for the restaurant will be evaluated after the kitchen requirements are determined.

Other mechanical systems that could be considered for the main house include geothermal heat pumps. The heat pumps would be the same configuration as the furnaces, but geothermal wells would be installed outside of the building. Auxiliary electric heat would be provided in the heat pumps to meet the heating requirements of the building.

Plumbing

Water was provided to the house through a well located to the East of the main house. The well is in poor condition and is no longer functional. There is an existing pressure tank located in a concrete basin on the East side of the building and one in the basement of the main house. The tanks are in poor condition. The existing domestic water distribution piping is galvanized and in poor condition. The existing domestic plumbing systems will require complete replacement.

An existing propane fired water heater is located in the basement of the house. The water heater is in poor condition and will require replacement.

The waste piping from the building routes to the East of the building. A leech field was not visible, but assumed to be located to the East of the house. The waste piping is in poor condition and will require complete replacement.

A new domestic water tap will be installed at Bromley Lane and a new water service routed to the Main house. The water meter will be installed near the street. New copper distribution piping will be routed to the new plumbing fixtures in the building. The size of the water meter and tap will need to be reviewed with the requirements for the commercial kitchen.

A new gas-fired sealed combustion water heater would be installed in the basement of the house to service the new toilet rooms. A separate water heater would be required for the kitchen to provide the 140 degree F water required by the health department. The water heater for the kitchen would be installed in the kitchen addition.

New sanitary sewer piping would be routed from the building to a new service main in Bromley Lane. The requirements for a grease interceptor will be reviewed with the requirements for the commercial kitchen.

Due to the A2 occupancy and the type VB construction, fire sprinklers will be required on the second floor of the main house if it is used for a restaurant. If the second floor is classified as a B occupancy (gift shop or offices), then the sprinklers will not be required. A new 4" fire service would be routed from Bromley Lane and a double check valve installed in the basement. New fire sprinkler piping would be routed from the fire service entry up to fire sprinklers on the second floor. The system would be a glycol system as not all of the piping can be routed in heater or insulated spaces. Sprinklers, if installed, should be installed in a manner that preserves the building's historic character and integrity.

3.1.9 Main House (and site): Electrical Systems including lighting, power and fire alarm/security

Description

The Existing Main Overhead Service to the Site



The Existing Main Distribution Location



The existing overhead service from Bromley Lane is 120/240 volts, single phase and is currently not active. The existing electrical systems include minimal exterior pole mounted lighting, interior incandescent lighting and no fire alarm or security devices.

Condition

All of the existing electrical systems are in poor condition due to their age and require replacement.

Recommendations

Provide and install a new 400 amp, 120/208 volt, 3 phase underground service to the Main House. This would include a primary underground service by the utility company from Bromley Lane to a new pad mounted transformer located near the southwest corner of the main house. On the exterior of the house a meter housing, a current transformer enclosure and a fused main disconnect would be required. Inside of the house, in the back porch area, a new 400 amp panel would be provided with branch breakers for circuits within the house, site lighting circuits and for feeders to the other buildings. Also, from this panel circuits would be provided for the entertainment garden, the community garden and landscaping/lighting in the center island of the entrance lane.

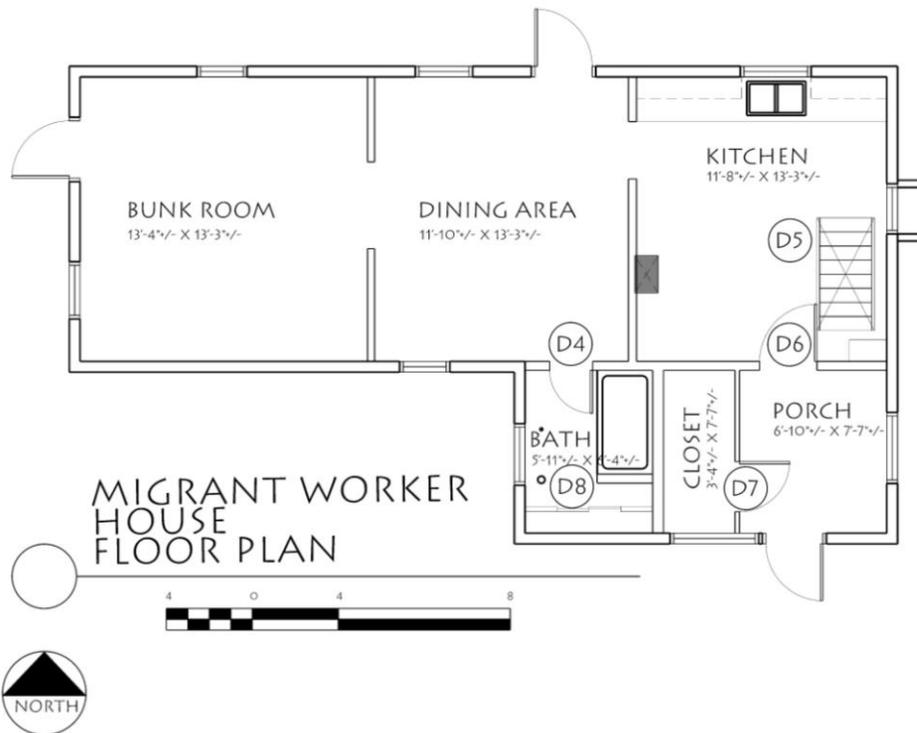
Interior work would include all new branch circuits for lights and receptacles. The new wiring would be in conduit or flexible AC Cable and it would be concealed in all finished areas. Receptacles would be placed throughout the building but would not meet residential spacing requirements since this will not be used as a residence. New period style light fixtures in each room would be ceiling mounted and utilize compact fluorescent lamps for efficiency.

Power and fire alarm requirements for a restaurant will be determined when the restaurant is designed.

Power for site lighting would also be provided from this location for four (4) Phase II pole mounted fixtures and one Phase IV pole mounted fixture.

A fire alarm system or a security system would not be required per code. A fire alarm system or security devices could be added later if desired.

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The rooms of the house are set side-by-side. Circulation occurs by walking through one room to the next, with no hallways. The projecting south bay addition contains an entry porch, closet and bathroom. The kitchen is at the east end of the house with a stairway to a partial cellar below. West of the kitchen is a large open room that also features an exterior door opening to the north. This room could serve as a dining area and open living area. The west addition opens to the dining room and also has its own exterior door, opening to the west. It is presumed to have served as the workers' bunkroom.



Migrant Worker House 2009, looking southwest

3.2.2 Migrant Worker House Foundation

Description

The areas below the Kitchen and Dining Area are founded on what appears to be a 6"x8" concrete stem wall on an 8" wide by 6" thick footing. The porch is founded similarly. The Bunkroom, which was apparently an addition, is founded on one or two courses of dry-stacked brick laid on the soil. There is no footing.

The interior foundation system is not visible but is probably limited to the original perimeter foundations of the house between the Bunkroom and Dining Area and the Kitchen and Porch. It is possible that there are intermediate stone footings under the floor joists but those areas are not accessible.

A partial basement (Cellar) was added after original construction under the Kitchen and extending west about 3' under the Dining Area. The Cellar walls are approximately 1'-4" thick at all locations except the east all which is 9" thick. The walls appear to be concrete but it is possible that they are parged stone walls.

The walls are typically offset to the interior of the original foundation at the north and south. This is an approach commonly used in the past to avoid shoring the existing footings while adding a basement. This leaves the existing footings supported on the soil behind the wall, but unsupported by the new wall, which is an important detail if work is required on the exterior of the basement wall.

The east wall was built directly under the existing stud wall. This was likely done because the floor joists run under and support the wall. Thus the wall could be safely undermined while installing the wall. The west wall is constructed similarly. There does not appear to have been a bearing wall or foundation in this location so the wall serves only to retain the soils to the west.

Condition

The exterior foundation system is generally in poor condition.

This residential structure is currently proposed to change to a business/retail occupancy. Per section 907.1 of the International Existing Building Code (IEBC), portions of a building subject to higher uniform loads must comply with the gravity load requirements of the IBC. The IBC requires a live load capacity of 100 pounds per square foot for a retail use. The Cellar walls are generally Code compliant. The remainder of the perimeter foundation violates Code requirements for frost depth, reinforcing, mortaring, and footing size.

Other than the Cellar foundation walls, the remainder of the foundation has predictably performed poorly and there is significant building deformation as a result. The areas under the Bunk Room and the Porch are particularly deformed with relative displacements of up to 3" and 3-1/2" in each area, respectively.

The basement walls are spalling due to efflorescence and freeze-thaw effects. Water is clearly penetrating the wall from the exterior. However, the damage is minor at this time and of no immediate structural concern.

Perimeter grade is high around the entire building but is particularly high at the west and around the enclosed porch. The soil is at or above floor level in some locations. This does not comply with the Code requirement for 8" minimum clear between grade and untreated wood.

There is no visible crawl space ventilation.

Recommendations

- a. Temporarily shore the walls around the Bunk Room, Dining Area and the Porch/Closet/Bath (all of the areas not over the Cellar). Remove the floor sheathing and floor joists per Section 3.2.3. Jack

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walls back to level. Remove the existing concrete and brick foundations. Excavate to provide the Code required minimum 18" deep crawlspace below the new floor framing or, alternatively, to install structural fill and gravel for a new slab-on-grade. Place a new trench formed footing extending to frost depth below the walls with a new pressure treated sill plate and anchor bolts to the existing walls. Despite the desirability of reproducing the existing brick "stem wall" under the Bunk Room, there is no feasible way to do so and meet current Code. A brick veneer over a concrete stem wall could be explored to preserve the historic appearance. Priority: Serious.

- b. Repair the Cellar walls by pointing deteriorated joints and re-plastering the wall. Monitor the wall for continued water damage. Regrading, as specified herein, should reduce the amount of moisture infiltrating the soils. However, if unacceptable water damage continues, extensive work will be required to waterproof the Cellar walls. This would involve underpinning the existing footings below the north and south walls of the Kitchen where they are not supported by the wall. The north wall is under the porch and Closet making underpinning and excavation much more difficult. The soil down the back of the walls can then be excavated. The west wall is under the Dining Area making excavation difficult. A new concrete wall would then be poured under the footing and against the back of the north and south walls on a new footing. All four walls would then be waterproofed on the exterior. A perimeter drain should be installed at the bottom of the wall day lighting to a sump pit or to existing sewer if the invert is low enough and Code will allow it. In our opinion, the existing damage does not warrant such an expensive and invasive solution today and it is not included in the cost estimate. Priority: Minor.
- c. Re-grade around the building to provide 8" minimum clearance to the bottom of the wood stud walls and 1/4" per foot minimum slope away from the building. Priority: Critical.
- d. Install a French drain or drain pan system around building to direct water away from building foundations. Priority: Serious.

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NW corner of house; typical brick exterior foundation wall, 2009.



Typical concrete perimeter foundation under east wall of Porch; note soil above top of stem wall, 2009.

Bromley Farm

Historic Structure Assessment

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South Cellar wall efflorescence and spalling, 2009.

3.2.3 Migrant Worker House Structural System

Description

The roof is a tied rafter system framed with 2x4 (full dimension rough sawn typical throughout building) wood rafters at 24" on-center sheathed with 1x gapped boards. 2x4 ceiling joists occur at all rafters. 1x collar ties occur on every other rafter. There was no physical access to the rafters to inspect connections or to closely inspect the framing. The ceiling is beadboard.

The rafters are birds mouth cut to bear on the north and south exterior walls. The rafters meet at a ridge plate of unknown size.

The area over the Bunkroom appears to be an addition based on the different foundation type found there. However, the gable roof over it is a true framed attic rather than the overbuilt roof one would expect to see on an addition. Since there was no physical access to this area it is unclear if there are other obvious indications that the framing was installed later. However, at the exterior, the rafter tails are 1x1 while the eastern portion of the house shows the typical 2x4 rafters extending out.

The roof over the Porch and Bath is framed with 2x4 S4S rafters at about 22" on-center bearing on the exterior stud walls. The roof is sheathed with 1x boards and direct applied masonite-like ceiling material.

First floor framing is visible in only a few locations outside of the Cellar. Framing below the Bunk Room and Dining Area is generally inaccessible due to the lack of clearance between the joists and the dirt. Framing in this area was only visible at an existing void in the foundation at the northwest corner. That framing is typically 2x6 joists at 16" running east-west to the brick foundation on the west and presumably the original exterior foundation of the house on the east. The floor is sheathed with 1x T&G decking. The joists likely span about 13' but they sit in the dirt, so span is essentially meaningless.

The Porch/Closet/Bath floor is framed with 2x6 joists running east-west at 16" on-center. The joists bear on bricks or the concrete footing. The floor is sheathed with 1x T&G decking. The joists span about 18'. It is likely that there are intermediate supports but they are not visible.

First floor framing below the Dining Area and Kitchen is typically 2x8 rough sawn joists at 17" on-center running north-south and spanning 14' to the basement walls. The floor is sheathed with 1x4 T&G decking. The floor joists are pocketed into the concrete foundation walls.

Exterior walls are typically 2x4 rough sawn studs at about 24" on-center surfaced with horizontal shiplap siding direct applied to the studs on the exterior. The exterior wall structure at the enclosed porch consists of 2x4 studs with 1/4" plywood on the exterior and gypsum board on the interior.

Condition

The roof structure over the house is in unknown condition. There are no obvious visible signs of distress or deterioration but access was very limited. Connections to supporting walls were not visible and may not be compliant with wind uplift requirements. Birds were also observed exiting the attic from the west end of the building indicating possible damage due to nesting materials and feces. The roof requires closer inspection to determine its condition. Tied rafter systems like this generally require some strengthening to meet current Code which will be required due to the change in use.

The roof over the porch is in fair condition. Some water damage to rafters is visible and rafter tails and decking are heavily weathered where exposed at the exterior. The ceiling framing is undersized and poorly constructed. While this is not directly affecting the structural stability of the building it will require strengthening if a new ceiling is installed to assure good long term performance.

First floor framing is generally in good condition above the Cellar. The floor joist ends are water damaged in some locations due to water absorption from the concrete they are pocketed into. However, there are no

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visible signs of rot. The floor is out of level by up to 1" in this area. This is minor but does indicate some foundation movement has occurred. Framing below the Bunk Room and Porch/Closet/Bath is in poor condition where visible due to direct contact with soil and associated rot.

Calculated floor capacity is inadequate for the proposed use. Per section 907.1 of the International Existing Building Code (IEBC), portions of a building subject to higher uniform loads must comply with the gravity load requirements of the IBC. The IBC requires a live load capacity of 100 pounds per square foot for a retail use. Alternatively, per IEBC 1106.1, the code official can accept existing floors and approve operational controls that limit the live load on the floor. Since much of the floor requires replacement, strengthening of the remaining joists above the Cellar appears to be justified.

Floor framing under the Bunk Room is in poor condition. The joists are in direct contact with soil. The floor is out of level by almost 3". Where visible, the rim joist and joist ends are deteriorated due to contact with soil and moisture. Considering the high grade around the building and lack of an adequate crawlspace, the floor must be assumed to have significant hidden damage.

Below the Porch/Closet/Bath, the floor joists do not meet minimum distance from grade requirements. The floor joists and decking are severely deteriorated near the entrance. The floor is out of level by up to 3-1/2" at the south side. Some of this was likely built in to the originally sloping porch floor, but the concrete landing at the entrance is about 4" above the floor at the door. Thus, significant settlement has occurred. Considering the rim joist rot seen on the east wall, it is likely that the south rim joist is rotting out leading to the floor joist and wall settlement rather than foundation movement.

The exterior walls are in fair condition. There is significant rotting at the base of the walls around the building where grade is high. The walls are also out of plumb by several inches in various locations.

Recommendations

- a. Cut an attic access hole and investigate the size, configuration, connections and condition of the existing roof framing. Analyze for compliance with current Code requirements. Based on previous experience, assume that new 2x collar ties will be required at each rafter line along with hurricane ties from each rafter to the top plate. Priority: Serious.
- b. The joists under the Bunk Room, Dining Area and the Porch/Closet/Bath should be demolished, salvaging the T&G decking where possible. Remove soil under these areas per Section 3.2.2. Replace the joists with new wood joists running north-south to the new perimeter foundation. A girder will be required under the bearing wall between the Bunk Room and Dining Area. Alternatively, a slab-on-grade with wood sleepers could be installed which would require less excavation and thus less expense. This would still allow reinstallation of the historic wood floors. Demolition is necessary to install the new foundations required regardless of the floor system chosen (See 3.2.2). The wood floor option is included in the cost estimate since it more historically accurate. Priority: Critical.
- c. Sister the 2x8 joists above the Cellar with 7-1/4" LVL's to bring the floor capacity into compliance with Code for the proposed use. Priority: Serious.
- d. Exterior walls will require extensive repair of stud bases and sheathing. Studs and ceiling framing should be opened up for observation on the south wall of the Bunk Room. Some damage from bird activity should be assumed. The walls should be pushed or pulled back to plumb prior to repairing exterior finishes but after installing the new foundation elements. Ideally, this work would occur after both layers of existing siding above the existing sheathing have been removed. This will allow the building to be racked back to plumb with minimal effort and less damage to the structure. Priority: Serious.

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Typical roof framing above the Kitchen, 2009.



Typical roof & ceiling framing above the Porch and Bath, 2009.

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South wall of Bunk Room; notice gap in siding at plate height being used by birds, 2009.



Typical floor framing above Cellar, 2009.

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Deteriorated floor framing under Porch, 2009.



Typical floor framing below Bunk Room; notice joists sitting in dirt and moisture, 2009.

3.2.4 Migrant Worker House Envelope: Exterior Walls

Exterior walls are discussed in this section.

The North Façade



2009 photo.

The north wall is a 2" x 4" wood framed wall. The wall below the eave rests upon a concrete stem wall. The wall below the gable end to the right in the photograph above rests upon one or two layers of dry-laid brick. The north wall is covered with two layers of wood siding. The outer layer is 7" x 1/4" shiplap siding. (This matches the size and profile of the siding on the South Porch and Kitchen west wall of the Main House. This suggests that this outer siding was installed on the Migrant Worker House at about the same time as the South Porch and Kitchen siding on the Main House.) Beneath the 7" shiplap siding is 5" x 3/4" siding over wood sheathing. A historic photograph from the 1940's shows the 7" siding in place. So the outer layer of siding was installed sometime during or before the 1940's. This façade has no vertical wood trim. A 1" x 6" painted bargeboard is located below the gable end on the west side of this wall. The wall is approximately 8'-5" high at the east end; approximately 9'-4" at the west end; and approximately 14'-3" high at the peak of the gable end. The north wall has three window openings and one door opening. The east window, which is located on the north wall of the Kitchen, has siding inserted below its sill. A historic photo (see East Façade description) shows that this was originally a taller window. Presumably the window was shortened when base cabinets were installed on the north wall of the Kitchen. No date for this remodel has been determined. Also see Section 3.2.6, Exterior Openings, for further discussion.

The East Elevation



2009 photo.

Circa 1947 photo.

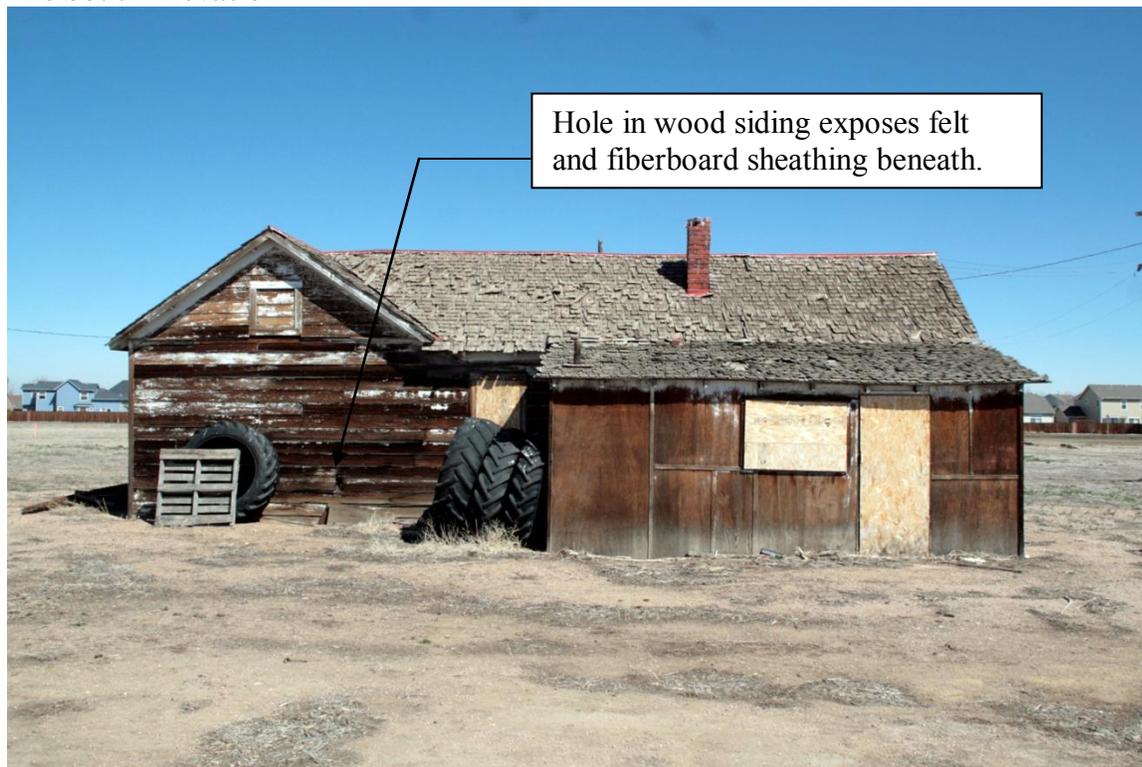


Decorative truss

Earlier Kitchen window taller than current Kitchen window.

The east wall is a 2" x 4" wood framed wall. The wall below the gable end rests on a concrete stem wall. The wall below the shed roof rests on a concrete stem wall at some locations and bricks at the remainder. The east wall below the gable roof is covered with two layers of wood siding. The outer layer is 7" x 1/4" shiplap siding. Beneath this is 5" x 3/4" siding over wood sheathing. The historic photograph shows that the gable end once had a decorative wood truss, possibly with a medallion below the soffit. The east wall below the shed roof is covered with one layer 1/4" plywood. There is no wall trim below the gable roof. Below the shed roof there is 1" x 3" trim at the south corner and wood battens covering the seams between plywood panels. The wall is approximately 8'-5" tall at the north end; approximately 12'-10" beneath the gable peak; and approximately 6'-4" tall at the south end. There is one window opening in the siding portion of the wall and one window opening in the plywood portion of the wall. The window openings are discussed further in Section 3.2.6, Exterior Openings.

The South Elevation



2009 photo.

The south wall is a 2" x 4" wood framed wall which has two sections: the porch section which is covered with 1/4" plywood, and the Dining Room/Bunkroom section which is covered 7" x 1/4" shiplap siding. These wall sections rest upon a combination of concrete stem wall at some locations and bricks at others. The south exterior wall of the Dining/Bunkroom does not have a second layer of siding beneath the shiplap siding. Instead this wall has a layer of tar paper over fiberboard sheathing. The Dining/Bunkroom section of wall has a 1" x 3" vertical wood trim piece covering the west corner and a 1" x 6" bargeboard below the gable roof soffit. Horizontal and vertical wood battens cover the seams between plywood panels on the Porch wall section. The Porch wall section is approximately 6'-4" tall at the east and west ends. The Dining Room/Bunkroom section is approximately 13'-2" beneath the gable peak and approximately 8'-6" tall at the east and west ends. There is one window opening and one door opening in the Porch section of the wall, and one window opening and an attic vent opening in the Dining Room/Bunkroom section of the wall. The door and window openings are discussed further in Section 3.2.6, Exterior Openings.

The West Elevation



2009 photo.

The west wall is a 2" x 4" wood framed wall which has two sections: the Porch section which is covered with 1/4" plywood, and the Bunkroom section which is covered 7" x 1/4" shiplap siding. These wall sections rest upon a combination of concrete stem wall at some locations and bricks at others. As on the north and east facades, the 7" shiplap siding covers 5" x 3/4" wood siding over wood sheathing. The Bunkroom section of wall has a 1" x 3" vertical wood trim piece covering the south corner. Vertical wood trim covers the south corner of the Porch wall section. The Porch wall section is approximately 6'-4" tall at the east end and approximately 8'-5" tall at the north end. The Bunkroom section is approximately 8'-6" tall at the north and south ends. There is one window opening in the Porch section of the wall, and one window and one door opening in the Bunkroom section of the wall. The door and window openings are discussed further in Section 3.2.6, Exterior Openings.

Exterior Wall Condition

Flashing, gutters, downspouts, roof fascia and soffits are addressed in Section 3.2.5, Roofing and Waterproofing. Windows, doors, and vents are addressed in Section 3.2.6, Exterior Openings.

1. Wood siding

Condition: Fair to poor. The outer layer of wood siding on all sides is very weathered. Much of this siding is cupped and somewhat brittle. The cupping has caused the nails of many boards to work loose from the wood sheathing beneath. The cupping has also created large gaps between siding boards. This allows wind driven rain to come into direct contact with the siding and underlayment beneath. There is a large gap between siding boards on the south façade Bunkroom Room wall below the boarded up vent. There are also a small, but significant number of siding boards that are split, broken, missing, or very loose. The outer layer of siding appears to be poorly constructed and in worse condition for its age than the older siding of the Main House which is still exposed. The protective coating of paint on the outer siding layer is extremely degraded on all sides of the Migrant Worker House. It is recommended that the outer layer of siding be replaced, but that further research into the significant features of each historic period is needed. The condition of the inner layer of siding for the Migrant Worker House could not be observed. Until this layer of siding is revealed, it is assumed that it was covered because it was not in good condition. For this reason it is likely that it would need to be replaced if an early historic interpretation is found appropriate for the final use. Both the inner and outer layers of siding are considered historic. The choice of which layer of siding to expose ultimately depends upon final use chosen for the site.

2. Decorative wood truss

Condition: Missing. A circa 1947 photograph shows a simple decorative wood truss on the east façade outboard.

3. Wood trim and bargeboards

Condition: Fair to poor. Corner wood trim pieces are missing on all façades. The wood trim piece on the west end of the south façade is split at its base. The few existing vertical trim pieces and bargeboards display extreme weathering and are missing paint.

4. Plywood panels and battens.

Condition: Poor. Plywood covering the Porch exterior is extremely weathered and starting to delaminate. Many battens are missing or broken.

Recommended Treatments:

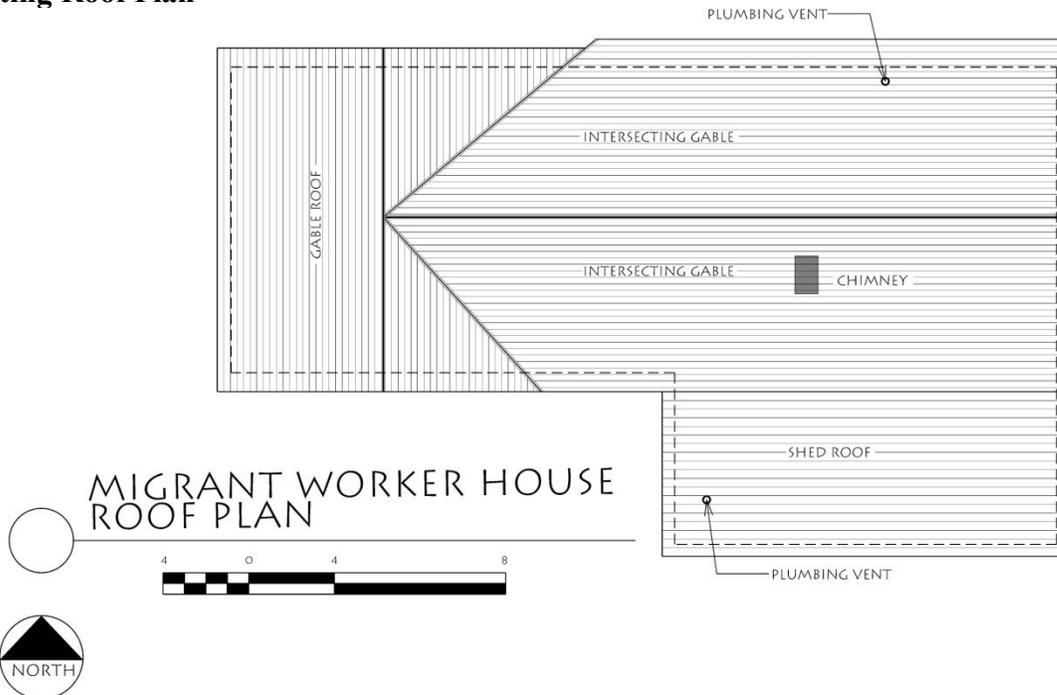
1. Wood siding

- Remove both layers of existing siding.
- For the south wall of the Dining/Bunkroom remove siding and fiberboard sheathing.
- Replace all wood siding on all facades. Provide new sheathing for the south wall of the Dining/Bunkroom.
- Install blow-in insulation between studs while siding is removed.

3.2.5 Migrant Worker House Envelope: Roofing and Waterproofing

Roofing systems, flashing, gutters and downspouts, and chimneys are discussed in this section.

Existing Roof Plan



Gable Roof. The roof has a north to south orientation and approximately an 8:12 slope. A layer of wood shingles with approximately 4 1/2" exposure covers the roof. A painted galvanized metal ridge divides the east and west faces of the roof. The north and south gable ends project approximately 10" beyond the exterior wall. The gable ends are covered with a 1" x 6" painted wood fascia. A painted board soffit is fastened to the underside of the projecting gable. A 2' x 2' attic vent is located on the south side of the gable roof. There are no other attic vents.



2009 photo.

Condition: Poor. Many of the wood shingles are brittle, warped, or split. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. The Bunk Room ceiling below has extensive water damage. See photograph below. The gable and eave fascia and soffit are weathered and missing paint. Attic ventilation area is not sufficient to meet current building codes.

Bunk Room ceiling, 2009 photo.



Recommended treatment:

- Investigate roof structural adequacy per recommendations on page 3.2.3-2.
- Roof -remove all shingles down to gapped board sheathing.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Rehabilitate and reuse the existing galvanized metal ridge.
- Install historically sympathetic attic vents to meet current building codes.
- Paint may contain lead. Remove any loose paint from the gable fascia and soffit. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the fascia and soffit for new paint.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical.

Intersecting gable roof.

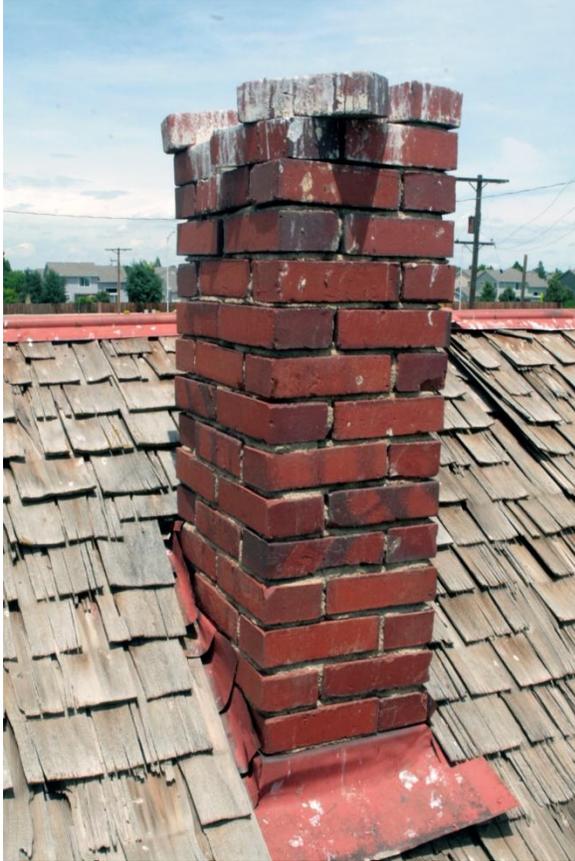


2009 photo.

The roof has an east to west orientation and approximately an 8:12 slope. A layer of wood shingles with approximately 4 1/2" exposure covers the roof. A painted galvanized metal ridge divides the north and south faces of the roof. The east gable end projects approximately 10" beyond the exterior wall. The gable end is trimmed with a 1" x 6" painted wood fascia. A painted board soffit is fastened to the underside of the projecting gable trim. A brick chimney projects through south face of the roof. There is a plumbing vent on the lower north face of the roof.

Condition: Poor. Many of the wood shingles are brittle, warped, or split. The fascia and soffit are weathered and missing paint. Moss and lichen are also present. These slow down the drying process after rains and accelerate deterioration. The plumbing vent on the lower north face is missing its stack and is poorly flashed. The brick chimney has deteriorated mortar joints, has loose bricks at the top, is missing a cap, and is poorly flashed. (See photograph on next page.) The gable and eave fascia and soffit are weathered and missing paint

Brick chimney on south face of roof. 2009 photo.



Recommended treatment:

- Roof - Roof -remove all shingles down to gapped board sheathing.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course. Per oral histories, the roof were painted red.
 - Recondition and reuse the existing galvanized metal ridge.
 - Paint may contain lead. Remove any loose paint from the gable fascia and soffit. Check them for decay. Consolidate or replace deteriorated areas.
 - Paint may contain lead. Sand and prep the fascia and soffit for new paint.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Chimney

- test mortar to determine its composition.
- Remove all loose or crumbling mortar in existing joints. Re-point mortar joints using mortar of same composition, color, texture, and strike as the existing historic mortar. Re-pointing should be done by a professional mason specializing in historic masonry.
- Replace existing flashing with new stepped flashing. Install a two-piece cricket to facilitate drainage around the chimney.
- Reinstall all loose bricks and install a new chimney cap. There is insufficient cap remaining to test its composition. It is recommended that it be reconstructed using the same material as the Main House chimney caps. Historic photographs should be used to reconstruct the chimney accurately.

Priority: Critical.

Shed roof



2009 photo.

This roof covers an addition to the Migrant Worker House and converges with the southeast end of the intersecting gable roof. The roof has approximately a 4:12 slope and is covered with wood shingles with a 4 ½" exposure. The roof has exposed horizontal sheathing ends on the east and west sides and exposed rafter ends on its south face. There is a plumbing vent for the Bathroom located at the southwest corner of the roof.

Condition: Poor. Many of the wood shingles are brittle, warped, or split. Moss and lichen are also present. These slow drying after rains and accelerate deterioration. The Porch closet ceiling below has extensive water damage. Daylight is visible above the porch ceiling. (See photographs on page 3.2.5-6.). Plumbing vent flashing has pulled away from the roof. (See photograph on page 3.2.5-6.)

Porch closet ceiling. 2009 photo.



Deteriorated shed roof shingles above Porch closet. 2009 photo.



Plumbing vent on shed roof. 2009 photo.



Recommended treatment:

- Roof -remove all shingles down to gapped board sheathing.
- Install new No. 1 blue label sawn wood shingles. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course.
- Repair or replace flashing around vent.
- Paint may contain lead. Remove any loose paint from underside of exposed sheathing boards and exposed rafter ends. Check them for decay. Consolidate or replace deteriorated areas.
- Sand and prep the underside of exposed sheathing boards and exposed rafter ends for new paint.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical.

3.2.6 Migrant Worker House Exterior Openings: Windows, Doors, Vents

North Façade Openings



Door D1, exterior 2009 photo.



Door D1, interior 2009 photo.



Description: The north entry door, D1, is actually a pair of wood doors, one swinging out, and one swinging in. They are located on the north façade of the Migrant Worker House between windows

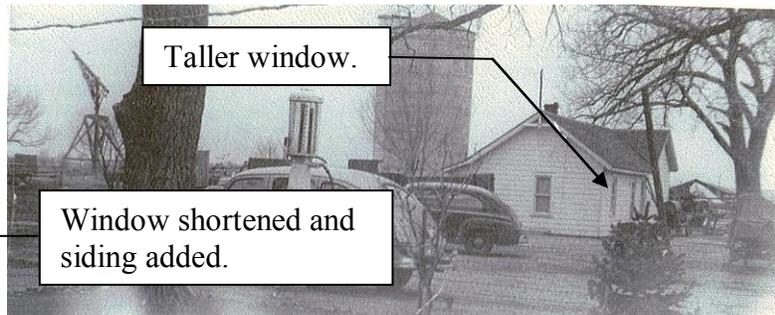
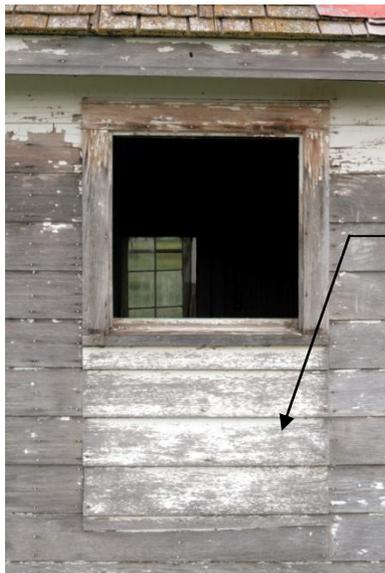
1W-01 and 1W-09. Each is a 2'-8" wide x 7'-0" high historic wood stile and rail door. The exterior door has four horizontal panels and no lights. The exterior door is not mounted on hinges; it only rests in the door opening. Hinges for a screen door are surface mounted on the top right of this door frame. It is highly unlikely that these three doors were in place at the same time. Most likely the interior door was original and the exterior door was placed in the opening at a later time as protection. The interior door has a pair of vertical panels and one horizontal panel. Both doors are painted white. Exterior and interior trim is painted 1" x 4" wood.

Condition: The finish of the exterior door, frame, and trim is severely weathered. A plywood panel screwed to the bottom of the door prevents observation of the condition of the lower portion of this door. The finish of the interior door, frame, and trim is moderately worn. The bottom rail and panel of this door has rotted away. The lower end of each stile is also rotted. Both doors are missing latch and lock hardware.

Recommended treatment: Remove the exterior stile and rail door. Investigate the possibility that it came from another opening on the Migrant Worker House, or one of the other buildings at the farm. Paint may contain lead. Remove all loose paint on the exterior face of the remaining interior door, its frame, and the exterior trim. Sand and prep. Repaint with two coats high quality acrylic latex paint. Sand and prep interior trim then repaint. Provide historically accurate latch and locking hardware for the door. The historic wood screen door may be stored inside the Migrant Worker House, or another building on the site. If the historic wood screen door can be located, it should be rehabilitated, repainted, and installed. If it can not be located, a new, historically accurate wood screen door should be fabricated and installed. The screen door is poorly depicted in the historic photograph currently available. Further research may yield more complete information about this screen door.

Priority: Serious.

Window 1W-01. 2009 photo. Window 1W-01. Circa 1947 photo.



Description: This window is located on the north wall of the Kitchen. The sash is missing. It appears that this was a fixed sash window. The window opening measures 3'-0" wide x 2'-6" high. The historic photograph shows that this window was once much taller and double hung. The inset wood siding below the window in the current photograph is also suggestive of this modification. The exterior trim is painted white. The interior trim is also painted

white. There is clip hardware on the exterior face of the frame for a screen, but the screen has been removed.

Condition: The exterior frame and trim are extremely weathered. Interior wood frame, sash, and trim are moderately worn. The window is not operational or weather tight, since the sash is missing.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the frame and exterior trim. Sand and prep. Replace the missing sash. Use the original sash, if it can be located and can be rehabilitated; otherwise, fabricate a new historically accurate sash and install. Install new glazing putty. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. Restoring this window to its original size and operation should be considered, if the final Kitchen layout permits. This will depend upon the building's final use, the specific period of restoration, and the significance of the window's current size. The historic screen for this window may be stored inside the Migrant Worker House, or another building on the site. If the historic screen for this window can be located, it should be rehabilitated, repainted, and installed. If it cannot be located, a new, historically accurate wood screen door should be fabricated and installed. The screen for this window is not shown in the historic photograph currently available. Further research may yield more complete information about this screen.

Priority: Serious.

Windows 1W-08 (interior photo) and 1W-09 (exterior photo). Both 2009 photos.



Description: These are historic 2'-4" wide x 4'-7" high wood double hung windows. They are located west of door D1 on the north facade. The upper sash, lower sash, and window frame have been painted white on the inside and outside faces. Glazing is single pane. Protective particle

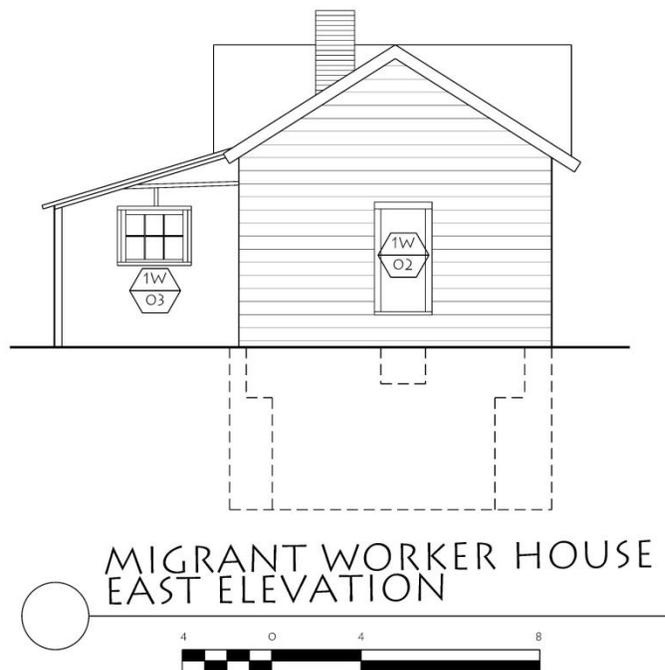
board panels currently cover each opening. There is clip hardware on the exterior face of each frame for a screen, but both screens have been removed. Exterior window trim consists of painted 1" x wood. Interior window trim is a painted wood molding and sill.

Condition: The exterior finish of the sash, frame, and trim for both windows is extremely weathered. The interior finish is slightly worn at each window. The lower sash of window 1W-08 is extremely deteriorated. The bottom rails of the upper and lower sash of window 1W-09 are extremely deteriorated. Neither window is currently operational. Lock hardware is missing.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim for both windows. Rebuild the lower sash of window 1W-08. Replace the lower sash rails of window 1W-09. Sand and prep. Replace broken glass pane in window 1W-09. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. Replace missing hardware with historically accurate hardware. Restore windows and hardware to operable and functional condition. The historic screens for these windows may be stored inside the Migrant Worker House, or another building on the site. If the historic screens for these windows can be located, they should be rehabilitated, repainted, and installed. If they cannot be located, new, historically accurate wood screens should be fabricated and installed. The screens for these windows are not shown in the historic photograph currently available. Further research may yield more complete information about this screen.

Priority: Serious.

East Elevation Openings



Window 1W-02. 2009 photo.



Description: This is a historic 2'-0" wide x 4'-7" high wood double hung window. It is located at the far north end of the east façade. The upper sash, lower sash, and window frame have been painted white on the inside and outside faces. Glazing is single pane. Protective particle board panels currently cover the opening. There is no window screen. There are, however, hooks on the frame for an exterior screen. Exterior window trim consists of painted 1" x wood. Interior window trim is a painted wood molding and sill.

Condition: The exterior finish of the sash, frame, and trim is extremely weathered. The head trim piece is warped and beginning to rot. The exterior stops are very deteriorated. The upper and lower sash do not fit tightly in the frame. The interior finish is slightly worn. Lock hardware is missing. The window is not currently operable.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Remove deteriorated stops in the frame. Recondition sash

and frame so that the window is operable and that its locking hardware is fully functional. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. The historic screen for this window may be stored inside the Migrant Worker House, or another building on the site. If the historic screen for this window can be located, it should be rehabilitated, repainted, and installed. If it cannot be located, a new, historically accurate wood screen door should be fabricated and installed. The screen for this window is not shown in the historic photograph currently available. Further research may yield more complete information about this screen.

Priority: Serious.

Window 1W-03. Exterior and interior. Both 2009 photos.



Description: This window is a 3'-0" wide x 2'-4" high historic wood six-light. The glazing is single pane in a fixed sash. Exterior trim is painted 1" x 2" wood. Interior trim is painted wood molding with a painted wood sill.

Condition: The exterior frame, sash, and wood trim are extremely weathered, but structurally sound. The interior of the sash, frame, and molding are worn and need paint. The lower left light is broken.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Replace missing glazing. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops.

Priority: Serious.

South Elevation Openings



Door D2.



Description: Door D2 is 2'-8" wide x 6'-4" high. It is a historic wood 8-light, single pane, stile and rail door. There is no exterior trim. Interior trim is molding painted white. There is no screen door. There is no hardware or other visible evidence which suggests that this opening ever had a screen door. There are no known historic photographs which show this side of the Migrant Worker House.

Condition: The exterior finish for the door and frame is severely weathered. Dirt has accumulated against the bottom of the door and is migrating inside the door opening. This prevents the door from closing completely. The bottom rail and lower end of both stiles water damaged and rotted. The bottom two lights and the top left light are broken. The interior face of the door and interior wood trim finish are moderately degraded. Currently the door opening is covered with a plywood security panel.

Recommended treatment: Paint may contain lead. Remove the existing door, frame, and interior wood trim. After the exterior grade has been corrected,

reconstruct the door and frame. Remove loose paint from the interior wood trim. Reinstall the door, frame, and wood trim. Rehabilitate and reuse existing hardware, if possible. Otherwise

replace hardware with new historically accurate hardware. Replace missing glazing. Install new glazing putty for all lights. Prime and repaint with two coats high quality acrylic latex paint.

Priority: Critical.

Window 1W-04. 2009 photo.



Description: This window is a historic 3'-10" wide x 2'-6" high wood slider. It is located on the south wall of the Porch and the Porch Closet. Glazing is single pane. Exterior and interior trim are painted 1" x 2" wood. There is no screen window. There is no hardware or other visible evidence which suggest that this opening ever had a window screen. Currently the window is protected by a plywood security panel. There are no known historic photographs which show this window.

Condition: The exterior finish is mostly worn away. Each sash is water damaged and has broken glazing. The frame is in poor condition. Exterior trim and sill are warped and water damaged. Interior trim is also water damaged due to the leaky ceiling and lack of glazing. Hardware is missing. The window does not appear to be operational.

Recommended treatment: Remove existing sliders and all wood trim including the sill. Reconstruct the window frame. Reconstruct each sash. Replace glazing. Install new glazing putty. Restore windows and hardware to operable and functional condition. Replace interior and exterior wood trim. Sand and prep sash, frame, and trim. Prime and repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Window 1W-05. 2009 photo.



Description: This is a historic 2'-0" wide x 4'-7" high wood double hung window. It is located at the southwest corner of the Dining Area. The upper sash, lower sash, and window frame have been painted white on the inside and outside faces. Glazing is single pane. Protective particle board panels currently cover the opening. There is no window screen. There are, however, hooks on the frame for an exterior screen. Exterior window trim consists of painted 1" x wood. Interior window trim is a painted wood molding and sill.

Condition: The exterior finish of the sash, frame, and trim is extremely weathered. The head trim piece is warped and beginning to rot. The exterior stops are very deteriorated. The upper and lower sash do not fit tightly in the frame. The interior finish is slightly worn. Lock hardware is missing. The window is not currently operable.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Remove deteriorated stops in the frame. Restore windows

and hardware to operable and functional condition. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. The historic screen for this window may be stored inside the Migrant Worker House, or another building on the site. If the historic screen for this window can be located, it should be rehabilitated, repainted, and installed. If it cannot be located, a new, historically accurate wood screen door should be fabricated and installed. There are no known historic photographs which show this window. Further research may yield more complete information about this screen.

Priority: Serious.

West Elevation Openings



Window 1W-06. 2009 photo.



Description: This window is located on the west wall of the Bathroom. It is a 2'-6" wide x 1'-8" high awning style window with single pane, clear glazing. Exterior trim is 1" x 2" wood. There is an aluminum screen located on the inside face of the opening. Interior trim is painting wood molding.

Condition: Paint on the exterior sash, frame, and trim is mostly worn away. Paint of the interior of the frame, sash, and molding has deteriorated. The sash does not fit tightly in the frame. Operation of the window could not be tested.

Recommended treatment: Paint may contain lead. Remove any loose paint on the window. Reconstruct the frame so that the sash fits more tightly. Replace the non-historic aluminum screen with a wood framed screen. Install new glazing putty. Sand and prep the sash, frame, and trim. Prime and repaint the exterior with two coats high quality acrylic paint. Repaint the interior frame, sash, screen frame, and wood trim. Recondition the window and provide historically accurate hardware so that the window is operational.

Priority: Serious.

Window 1W-07. 2009 photo.



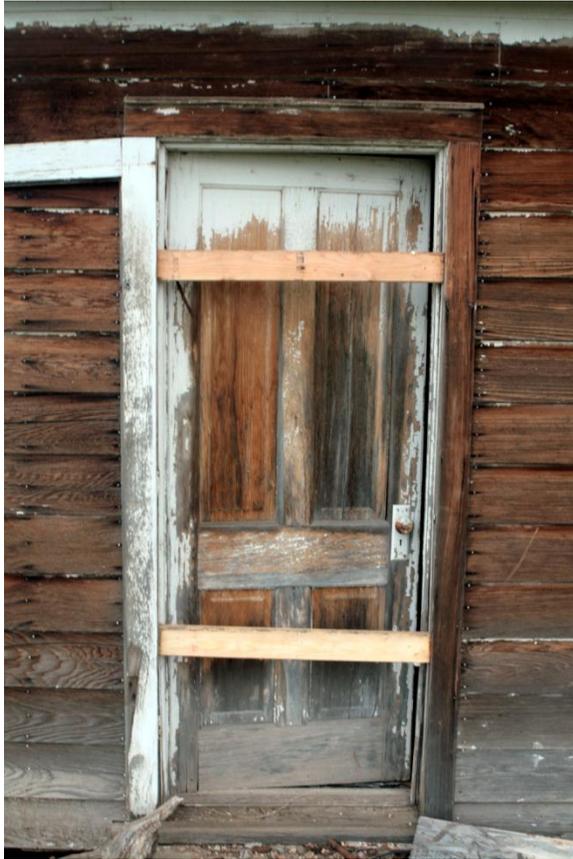
Description: This is a historic 2'-4" wide x 3'-11" high wood double hung window. It is located at the west wall of the Bunk Room. The upper sash, lower sash, and window frame have been painted white on the inside and outside faces. Glazing is single pane. Protective particle board panels currently cover the opening. There is no window screen. There are, however, hooks on the frame for an exterior screen. Exterior window trim consists of painted 1" x wood. Interior window trim is a painted wood molding and sill.

Condition: The exterior finish of the sash, frame, and trim is extremely weathered. The head trim piece is warped and beginning to rot. The exterior stops are very deteriorated. The upper and lower sash do not fit tightly in the frame. The interior finish is slightly worn. Lock hardware is missing. The window is not currently operable.

Recommended treatment: Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Remove deteriorated stops in the frame. Restore windows and hardware to operable and functional condition. Replace head trim. Sand and prep. Install new glazing putty for all lights. Repaint with two coats high quality acrylic latex paint. On the interior sand and prep the sash, frame, and trim. Paint. Remove, refinish, and reinstall all stops. The historic screen for this window may be stored inside the Migrant Worker House, or another building on the site. If the historic screen for this window can be located, it should be refurbished, repainted, and installed. If it cannot be located, a new, historically accurate wood screen door should be fabricated and installed. There are no known historic photographs which show this window. Further research may yield more complete information about this screen.

Priority: Serious.

Door D3. 2009 photo.



Description: Door D3 opens onto the west wall of the Bunk Room. It is a 2'-8" wide x 6'-11" high historic wood stile and rail door. The door has four vertical panels. The historic wood screen door has been removed. Hinges for the screen door are visible on the south edge of the door frame. The exterior of the door and frame are painted white. The interior of the door and frame are also painted white. Exterior trim is painted 1" x 4" wood. The interior trim is a simple wood molding painted white. Door hardware consists of a historic keyed latch set.

Condition: The exterior of the door, frame, and the exterior trim are extremely weathered and missing most of their paint. The frame is not square. This condition does not allow the door to close completely. The door sill is rotted. The interior finish on the door, frame, and trim is in fair condition. The historic latch set is in place, but it could not be determined if the latch set was operable.

Recommended treatment: Paint may contain lead.

Remove all loose paint on the exterior face of the door, frame, and the exterior trim. Rebuild the frame so that is square. Refinish, repair, and reinstall all stops. Replace the wood door sill. Sand and prep the door, frame, and trim. Re-hang the door. Repaint exterior with two coats high quality acrylic latex paint. Sand and prep the interior face of the door and, frame, and trim. Apply new paint. Restore door and hardware to operable and functional condition. The historic wood screen door may be stored inside the Migrant Worker House, or another building on the site. If the historic wood screen door can be located, it should be rehabilitated, repainted, and installed. If it cannot be located, a new, historically accurate wood screen door should be fabricated and installed. There are no known historic photographs which show this window. Further research may yield more complete information about this screen door.

Priority: Serious.

Vents.

Description: There is one 1'-10" wide by 1'-10" high attic vent located beneath the gable of the south façade of the Migrant Worker House. This vent has been covered with horizontal wood siding.

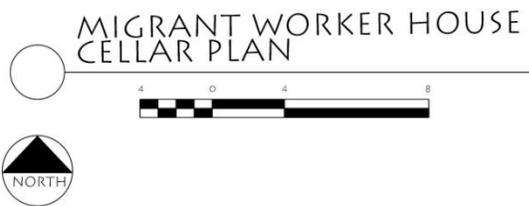
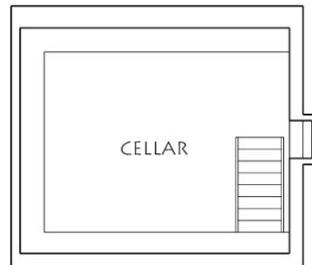
Condition: The vent is no longer functional, since it is covered with siding. The area of the vent is below current building code requirements.

Recommended treatment: Restore the vent to its historical appearance. Install bird screen. Provide additional vents which minimally impact the historic appearance of the Migrant Worker House as required to meet current build code attic ventilation requirements.

3.2.7 Migrant Worker Interior finishes, Interior doors, and special interior features

Wall, ceiling, and floor finishes. Built-ins, window-coverings, and special features. Interior doors and trim.

Existing Cellar Plan



+Cellar south wall looking at floor. 2009 photo.

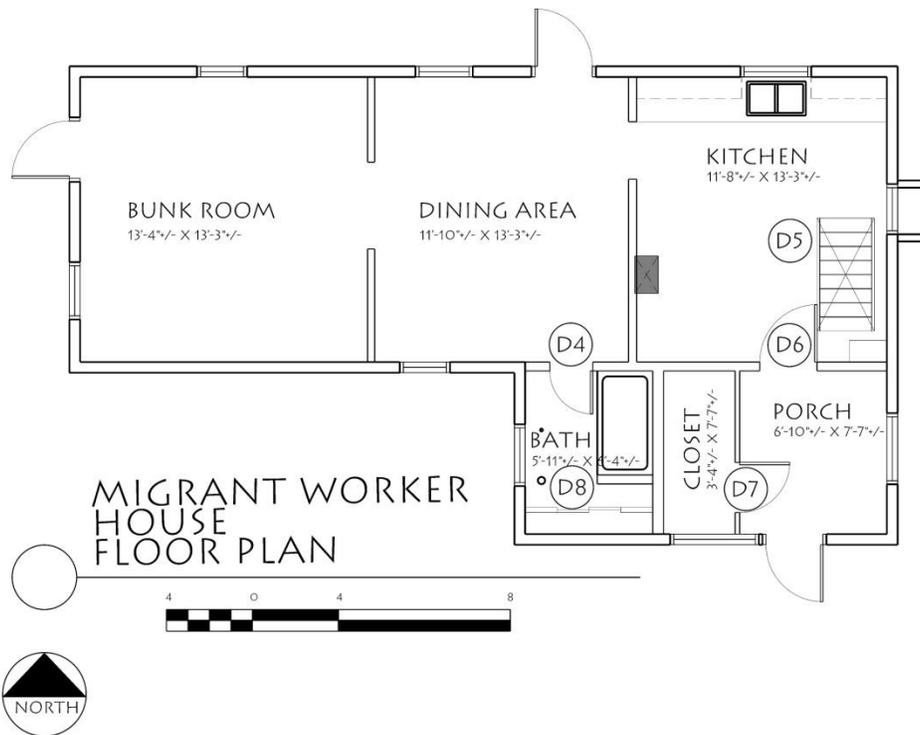


Walls: Concrete parging.
Ceiling: None. Exposed floor joists.
Floor: Concrete.
Base: None.
Interior Doors: D5. Floor hatch in ceiling above stair.
Window-coverings: None.
Special features, historic: Wood stairs on east side. Concrete shoulder walls, approximately 18" thick, on north, west, and south sides. Built-in wood shelving on west wall.

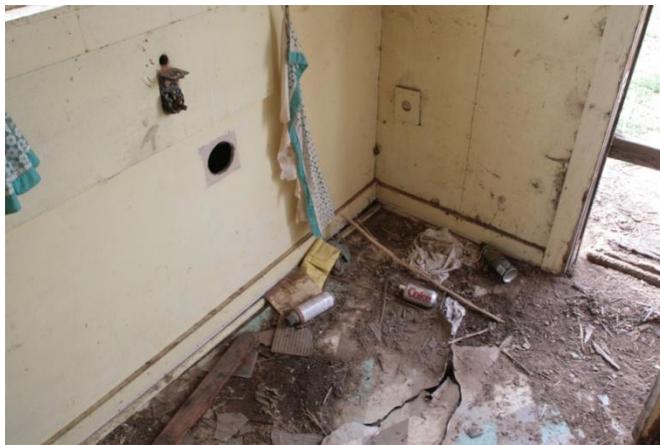
Special features, non-historic: None.

Condition: Floor is covered with dirt, debris, and some animal droppings. The wall is spalling due to efflorescence and freeze-thaw effects. Ceiling has thick cobwebs. Hatch is operable.

Recommended treatment: Thoroughly clean and disinfect floor, walls, and ceiling. Treat walls for spalling per structural recommendations on page 3.2.2-1, item b.



+Porch looking at southeast corner. 2009 photo.



Walls: Painted 5/8" fiberboard.
 Ceiling: Painted plywood.
 Floor: Linoleum over 3 1/4" tongue and groove wood flooring.
 Base: Painted 1"x 4" wood with 1/4 round shoe at floor.
 Interior Doors: See Kitchen and Closet descriptions.
 Window-coverings: None.
 Special features, historic: None.
 Special features, non-historic: None.

Condition: Floor structure and wood flooring are rotted near exterior door. Linoleum is torn and loose. Floor is covered with dirt, debris, and some animal droppings. 1/4 round base is broken and deteriorated. Fiberboard wall is broken in northeast corner. Wall paint is in poor condition. Ceiling has light minor water damage.

Recommended treatment: Remove linoleum. Repair floor structure per structural recommendations on page 3.2.3-2. Replace rotted tongue and groove flooring. Replace damaged fiber board wall with new fiber board and paint. Refinish painted plywood ceiling. Thoroughly clean and disinfect floor, walls, and ceiling. Treat for mold.

+Kitchen.



Kitchen north wall. 2009 photo.



Kitchen west wall. 2009 photo.

Walls: Painted bead board.

Ceiling: Painted bead board.

Floor: Linoleum over 1/2" fiberboard underlayment over 3 1/4" tongue and groove wood flooring.

Base: Painted 1/4 round shoe.

Doors: D6. Painted four-panel, one light stile and rail door. D5. Discussed in Cellar section.

Window-coverings: Curtain and drape on window 1W-01.

Special features, historic: Chimney shelf covered with bead board on west wall. Face frame base and wall cabinets on north wall. Wall cabinets have spring catches, surface mounted pulls, and surface mounted ornamental hinges. Cellar hatch in southeast corner.

Special features, non-historic: None.



Condition: Floor is covered with dirt and some animal droppings. Linoleum has cracks and is torn or missing in some locations. Base has gouges and scratches. Bead board wall has scratches,

dents, stains, and deteriorated paint. Door and trim are scratched and dented. Drapes are in extremely poor condition. Curtains are in poor condition. Ceiling has deteriorated paint. Wall cabinet doors do not close completely or stay latched. Four base cabinet sliding doors have been removed. Linoleum on counter top is torn and missing. Counter top underlayment is decomposing.

Recommended treatment: Thoroughly clean and disinfect floor, walls, and ceiling. Treat for mold. Replace linoleum flooring and underlayment. Sand, prep, and repaint walls, floor base, door and trim, and ceiling. Restore door D6 and hardware to operable and functional condition. Replace counter top. Rehabilitate or replace wall and base cabinet doors and catch hardware. Reuse and rehabilitate wall cabinet hinges. Thoroughly clean cabinet shelving and drawers. Repair and rehabilitate drawers and drawer slides for smooth operation. Replace window-coverings with new, historically accurate window-coverings. It is recommended that further research be conducted to determine what the kitchen configuration may have been before the sill for window 1W-01 was raised. The final layout of the kitchen is dependent upon the final use of this building and corresponding period of historical significance.

+Dining Area south east corner. 2009 photo.



Walls: Two layers wall-covering over 1/4" masonite over wood studs.
Ceiling: Painted 1/4" masonite covered with painted wood battens.
Floor: Two layers linoleum over 3 1/4" tongue and groove wood flooring. Dates of linoleum could not be determined.
Base: Painted 1" x 8" wood with 1/4 round shoe at floor.
Interior Doors: None. Trim: 1" x 4" wood trim on openings between Dining Area and Kitchen and Dining Area and Bathroom. 1" x 5" shiplap trim on opening between

Dining Area and Bunk Room.

Window-coverings: Shades on windows 1W-05 and 1W-08.

Special features, historic: Heater vent opening on east wall.

Special features, non-historic: None.

Condition: Extensive water damage to all walls. Masonite is becoming detached on east wall. Walls have mold. Extensive water damage to ceiling. Ceiling panels are sagging and bowed. Some battens have become detached from ceiling. Ceiling has mold. Floor is covered with dirt and some animal droppings. Linoleum is torn and split. Base is scratched and dented. Door and window opening trim is scratched and dented with deteriorating paint. Window shades are brittle and torn. Heater vent is detached from east wall. No heater was observed.

Recommended treatment: The floor in this room should be removed and replaced. See recommendation b. on page 3.2.3-2 for alternative replacement methods and additional information. Salvage existing tongue and groove flooring so that it could be rehabilitated and re-

used as a finish floor material over the new floor. Alternatively a new, historically appropriate linoleum could be used as a finish floor material. Treat walls and attic for mold. Remove and replace damaged wall-covering and masonite with new gypsum wallboard and historically appropriate wall-covering. Replace damaged ceiling with new painted gypsum wallboard and wood battens. Remove and rehabilitate existing wall base and re-install. Rehabilitate wood trim around openings. Replace shades with new historically appropriate shades.

+Bunk Room northwest corner. 2009 photo.



Walls: Two layers wall-covering over 1/4" masonite over wood studs.

Ceiling: Painted 1/4" masonite covered wallpaper. Painted 1" x 2" wood ceiling trim.

Floor: Two layers linoleum over 3 1/4" tongue and groove wood flooring. Dztes of lineoleum could not be determined.

Base: Painted 1"x 8" wood with 1/4 round shoe at floor.

Interior Doors: None. Trim: 1" x 5" shiplap trim on opening between Bunk Room and Dining Area.

Window-coverings: Shades on windows 1W-06 and 1W-07.

Special features, historic: None.

Special features, non-historic: None.

Condition: Extensive water damage to all walls. Extensive water damage to ceiling. Ceiling has mold. Floor is covered with dirt and some animal droppings. Linoleum is torn and missing in spots. Base is scratched and dented with deteriorating paint. Door and window opening trim is scratched and dented with deteriorating paint. Window

shades are brittle and torn.

Recommended treatment: The floor in this room should be removed and replaced. See recommendation b. on page 3.2.3-2 for alternative replacement methods and additional information. Salvage existing tongue and groove flooring so that it could be rehabilitated and re-used as a finish floor material over the new floor. Alternatively a new, historically appropriate linoleum could be used as a finish floor material. Treat walls and ceiling for mold. Replace damaged wall-covering and masonite with new gypsum wallboard and historically appropriate wall-covering. Replace damaged ceiling with new painted gypsum wallboard and historically appropriate wallpaper. Remove and rehabilitate existing wall base and re-install. Rehabilitate wood trim around openings. Replace shades with new historically appropriate shades.

+Bathroom.

Bathroom west wall. 2009 photo.



Walls: Wainscot. Wall-covering over fiberboard over wood studs. Above Wainscot. Painted fiberboard.

Ceiling: Painted fiberboard.

Floor: Linoleum over 3 1/4" tongue and groove wood flooring.

Base: 1"x 2" resilient base.

Interior Doors: D4. Four-panel wood stile and rail.

Trim: 1" x 4" painted wood trim. D8. One pair single panel painted wood bi-pass doors. Trim: painted wood valence.

Window-coverings: Shade on window 1W-04.

Special features, historic: Bathtub. Wood shelving along south wall.

Special features, non-historic: None.

Condition: Moisture damage to all walls. Walls are not water resistive. Moisture damage to ceiling. Ceiling is not water resistive. Ceiling has mold. Floor is covered with dirt and mold.

Linoleum is torn and brittle. Flooring is soft around water closet opening. Base is dented and water damaged, but is not historic. Door and window opening trim is in fair condition. Window

shade is brittle and extremely deteriorated.

Recommended treatment: This room will be redesigned to new handicap accessible bathroom.

3.2.8 Migrant Worker House Mechanical systems, Water, Wastewater

Mechanical

The mechanical systems for the migrant worker house consist of propane floor mounted heaters. The heaters have been installed in the locations of the original wood burning stoves/fireplaces. The propane heaters do not appear to be functional and the propane piping has been disconnected. A propane tank does not exist on site. The mechanical systems for this building will require complete replacement.

The most economical mechanical system for the building will be to install gas fired furnaces with a forced air distribution system. The furnaces will be high efficiency sealed combustion units. Natural gas would need to be brought to the site from existing gas distribution mains in Bromley lane. The most feasible location for the gas meter would be on the South or East side of the house. The furnace would be installed in the basement. New distribution ductwork would be routed in the crawl space below the floor to floor grilles or baseboard diffusers. A cooling coil could be installed at the furnace for the future addition of air cooled condensing units to provide cooling at a later date.

Plumbing

It appears that water is provided to the house from the well in the main house. The existing water piping is galvanized and is in poor condition and will require complete replacement. A new water service will be routed from the tap and meter being brought into the Main House to prevent the cost of a separate tap for the Worker House.

The existing bathroom in the Worker House is in poor condition and will require complete replacement.

Two new accessible restrooms will be provided in the Worker House and the plumbing will be reconfigured to accommodate the new restrooms. A new sanitary sewer service will be routed from the Worker house to the new service main connecting to Bromley Lane. A new gas-fired or electric instantaneous water heater will be installed in the basement to provide hot water to the new fixtures.

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3.2.9 Migrant Worker House: Electrical Systems including lighting, power and fire alarm/security

Description

The existing structure is fed with an overhead service to a weatherhead on the east side of the building. Within the structure there is a small breaker/fuse panel and minimal lights and receptacles. There are no fire alarm or security devices.

Overhead service to the house



Condition

All of the existing electrical systems are in poor condition due to their age and require replacement.

Recommendations

Provide and install a new 100 amp, 120/208 volt, 1 phase underground service from the Main house. This would include #2 copper conductors plus a ground in a 2" PVC conduit. On the exterior of the house a 100 amp, 2 pole fused disconnect would be required. Inside of the house a new 100 amp load center would be provided with branch breakers for circuits within the house.

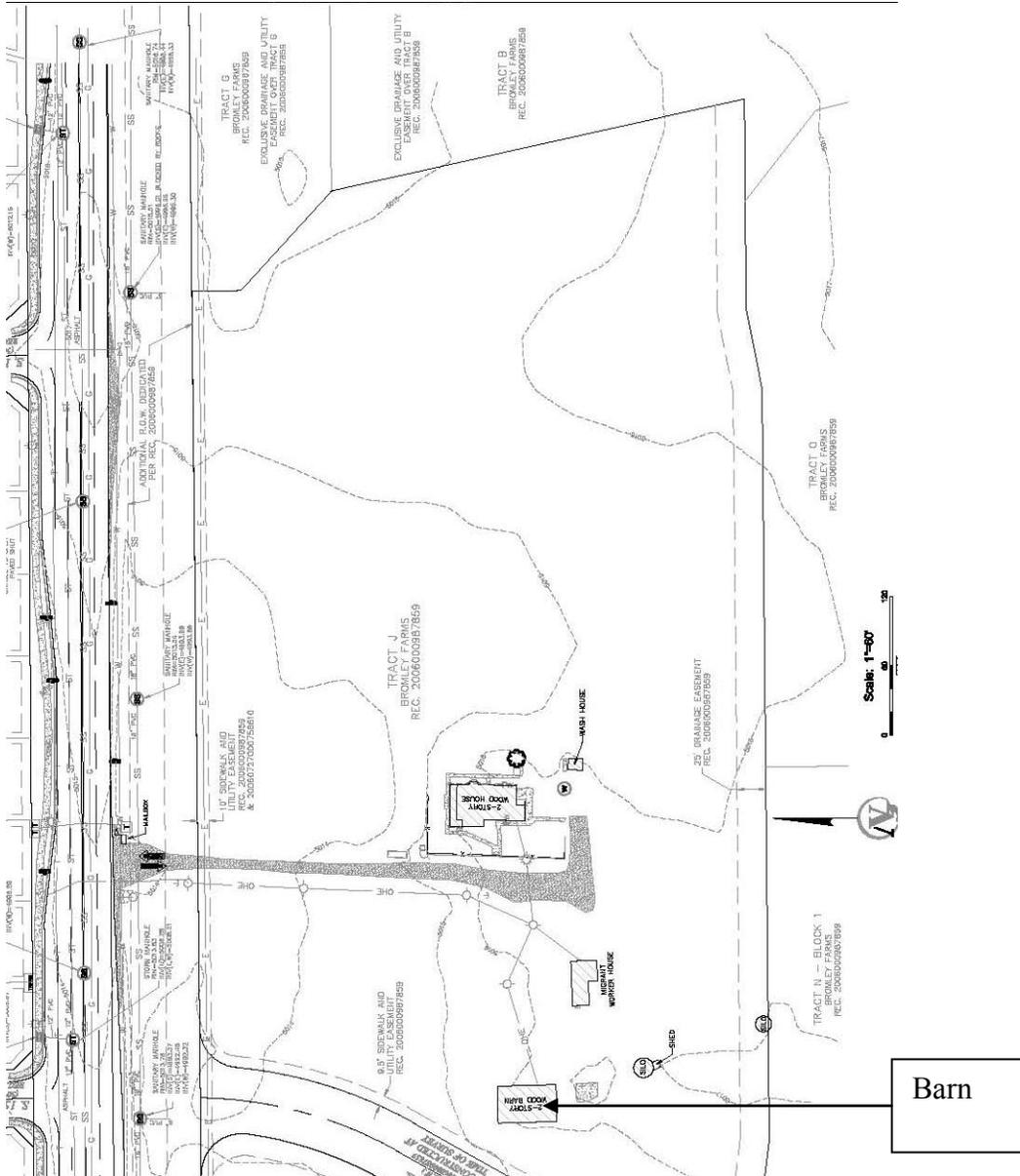
Interior work would include all new branch circuits for lights and receptacles. The new wiring would be in conduit or flexible AC Cable and it would be concealed in all finished areas. New period style light fixtures in each room would be ceiling mounted and utilize compact fluorescent lamps for efficiency. Receptacles would be placed throughout the building but would not meet residential spacing requirements since this will not be used as a residence. If it is determined that an on-site manager will reside in the building, then additional outlets should be installed to meet residential codes.

Power for site lighting would also be provided from this location for three (3) Phase IV pole mounted fixtures as well as north side of the Silo for outdoor events.

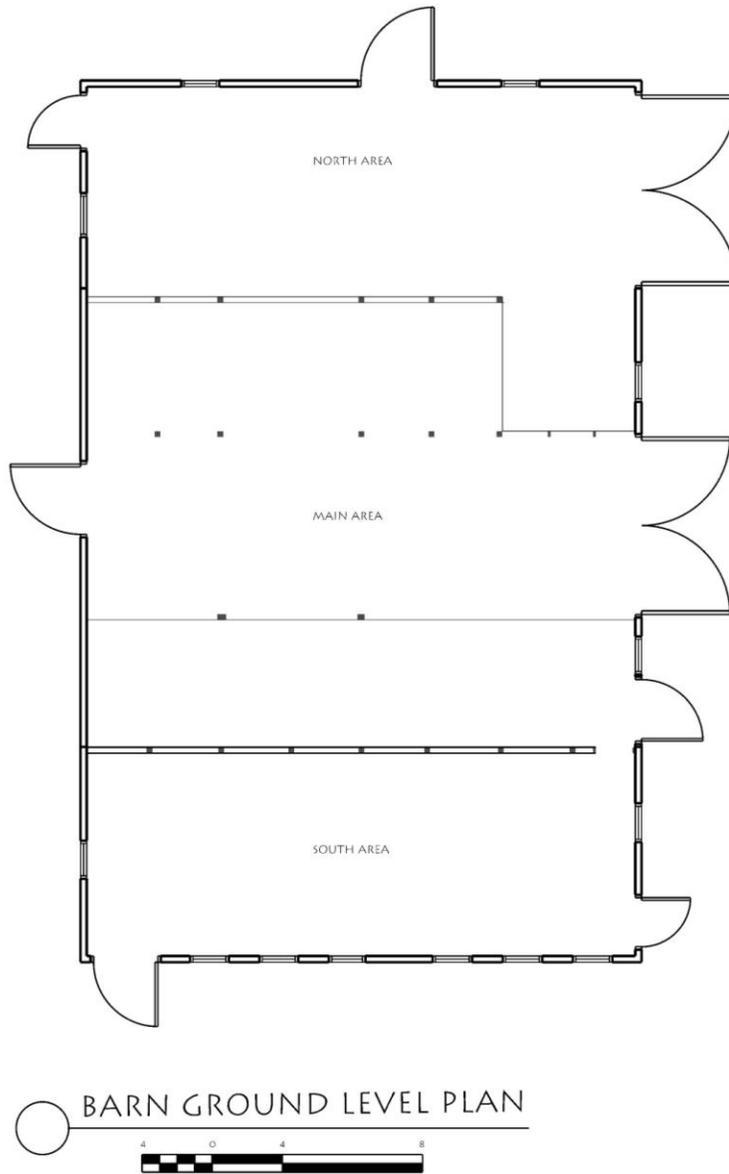
A fire alarm system is not required and security devices could be added if required by the owner.

3.3.1 Barn Site and Organization

The Barn is the westernmost building on the site, west and slightly north of the Migrant Worker House. With its height and volume, it is visually prominent on the site. The Barn is close to the west property line. Future off-site development plans call for a new road along the west property line, which is shown on the site plan below. There are no remaining walks or other features near the Barn. Vegetation and drainage are minimal and discussed in Section 4.



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The Barn contains one story plus a loft that is no longer accessible. The building is rectangular in plan with its long axis running north to south. It measures approximately 50 feet long by 32 feet wide. It is wood-framed with a two-story central gable roof flanked by single-story shed roofs over the north and south bays. The roofs are covered with wood shingles. A cupola shown in historic photographs no longer exists. The exterior siding is wood board and batten. There are numerous exterior windows and door openings.

The interior is divided into a main central area with separate bays to the north and south. The central and south areas are subdivided into wooden stalls.

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Looking southwest at Barn, 2009

3.3.2 Barn Foundation

Description

The exterior foundation system consists variously of rubble, brick and concrete. In general, the materials are embedded in a thickened slab edge. The northern and southern ends of the building are also slab-on-grade but have 5-1/2" thick concrete knee walls extending approximately 3' up from the slab on three sides. The knee walls appear to be monolithic with the slab at some locations. At others it appears to have been a separate pour with an obvious cold joint. There does not appear to be a footing or stem wall below the walls.

Interior foundations, other than the slab-on-grade, are not visible if they exist. In most cases, interior posts bear on 4x4 wood sills sitting on the slab. In some cases, the posts bear directly on the slab. The slab is covered with detritus in many locations which makes evaluation of the posts and sleepers impossible.

Condition

The exterior foundation system is generally in fair condition except at the concrete knee walls. The knee walls have rotated outward by between 1" and 3". The worst deflection has occurred at the north and northwest walls. Rotation appears to be a direct result of the lack of foundation support along the exterior while the inside of the walls are supported by the slab. The south walls are cracked over their full height in three locations. The cracking along the southwest wall is particularly severe and appears to be a result of vehicle impact.

The exterior foundation is likely inadequate to meet current Code for required lateral force resisting system upgrades. The structure is currently a "U" or utility occupancy. The proposed use will be classified as an "A" or assembly occupancy. Per IEBC Table 912.4, the proposed use represents an increase in hazard category. The occupancy category also increases from I to II per IBC Table 1604.5. This triggers a number of structural upgrade provisions in Section 907 of the IEBC. Per 907.2, the existing building shall be analyzed and comply with applicable wind or snow load provisions of the IBC. Per IEBC 907.3.1, the existing building shall conform to the seismic requirements of the IBC for the new seismic use group. A complete wind and seismic evaluation of the building is beyond the scope of this report but preliminary calculations indicate that new foundations under new lateral force resisting elements will be required as noted in the recommendations.

The interior foundation system is in fair condition. Some areas have built-up detritus on the floor which is holding moisture and rotting the wood sills and post bases. A complete evaluation cannot be made until the interior is cleaned down to the slab. Preliminary calculations indicate that new foundations will be required for conformance with wind and seismic provisions of the IBC as noted in the recommendations.

Grade around the building appears to be a problem only along the east wall where inadequate distance exists to wood framing. Some deterioration of exterior sheathing and wall framing has occurred, particularly south of the main barn door.

Recommendations

The Barn foundation needs to be strengthened, but actual details have not yet been designed. Below are some recommended options. Details will be developed during the construction documents phase, and reviewed for compliance with the Secretary of the Interior Standards at that time.

- a. Cut new reinforcing bars in across existing cracks in knee walls and grout. Pull the concrete knee walls back to plumb where they are displaced. Underpin all of the concrete knee walls with intermittent pad footings at frost depth supporting a short segment of 6" stem wall up to the bottom of the knee wall. Cut slots in the interior side of the walls to accept dowels from the new foundation elements and grout the slots. Backfill. Priority: Critical.

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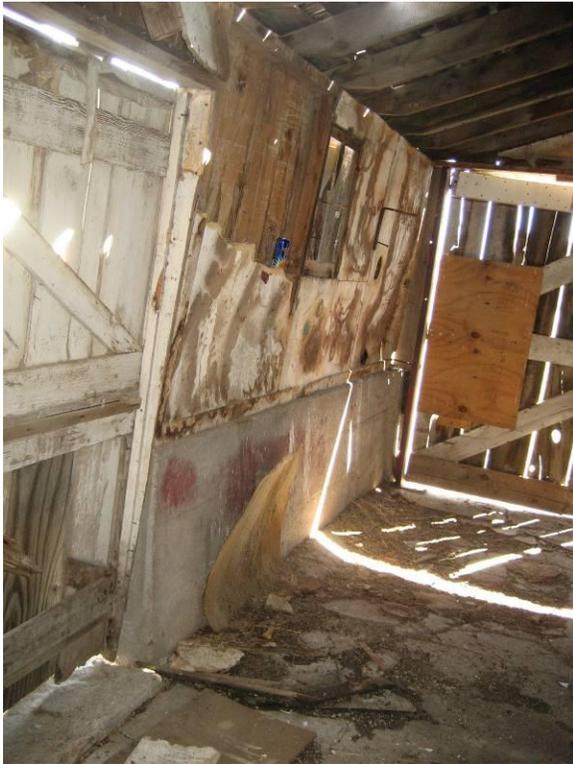
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- b. Shore the portions of the east and west walls in the Main Area that are to be strengthened for lateral force resistance (See 3.3.3). Remove the existing perimeter foundation and about 3' of the slab under the new braced wall. Install a concrete footing at frost depth with an 8" concrete stem wall extending up to a new pressure treated sill plate at the bottom of the wall. Provide anchor bolts and hold downs from the braced wall to the new foundation. Priority: Serious.
- c. Shore the north and south bearing lines in the Main Area. Remove the slab under the new lateral force resisting elements. Install a concrete footing at frost depth with an 8" concrete stem wall extending up to a new pressure treated sill plate at top of slab elevation. Provide anchor bolts and hold downs from the strengthened element to the new foundation. Priority: Serious.
- d. Clean the slab, sills and post bases for inspection. Replace 12 feet of deteriorated sill along the south interior stud wall. Epoxy consolidate or splice new ends to three deteriorated posts. Since the condition of the rest of the elements is unknown the cost estimate includes an informed guess for additional quantities of work required. Priority: Serious.
- e. Re-grade along the east wall to provide 8" minimum clear to wood framing. Priority: Serious.

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North concrete knee wall and stud wall leaning outward, 2009.

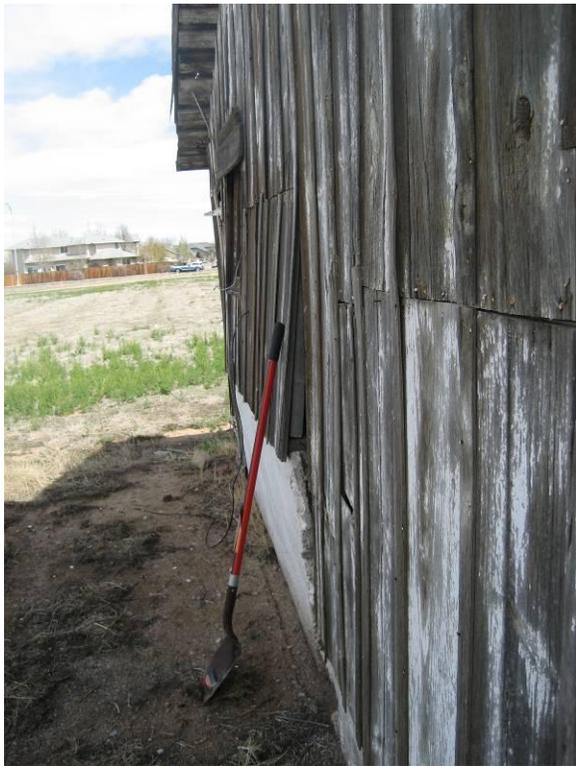


North knee wall at exterior showing lack of foundation under wall, 2009.

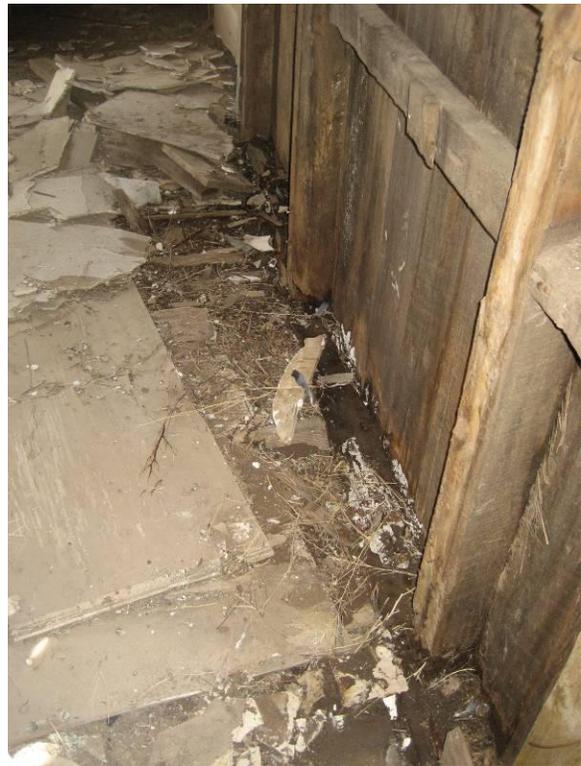
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Northwest knee wall rotation, 2009.



Rotting post bases and sill at south interior bearing wall, 2009.

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Southwest knee wall cracks, 2009.

3.3.3 Barn Structural System

Description

The high gable roof over the Main Area is a tied rafter system framed with 2x6 (full dimension rough sawn typical throughout building) wood rafters at 24" on-center sheathed with 1x gapped boards. 1x8 collar ties occur 10 feet above the loft floor on most rafters.

The rafters are birds mouth cut to bear on a double top plate atop the north and south exterior walls. There is no blocking between the rafters. The rafters are butted at the ridge. An intermediate double 2x6 (flat) beam occurs about 7'-10" from each exterior wall. The rafters span 7'-10" in the first bay and cantilever 5'-3" to the ridge.

The double 2x6 beams are supported by 4x4, 4x5 or 4x6 posts at about 8' on-center. The beams extend to the east and west walls but are unsupported by them.

The north and south bearing walls are 4x4 rough sawn posts at 4' on-center topped with 2-2x4 rough sawn plates. The top of plate is 7' above the loft floor. The exterior of the wall is sheathed with 1x vertical boards above the shed roof. The sheathing does not continue to the floor nor is their interior sheathing.

The gable end walls consist of 4x4 studs at about 4' on-center spanning from the loft floor to a single 2x4 rough sawn plate at 7' above the loft floor. A second flat 2x4 occurs about midway between this plate and the ridge. At the exterior, 1x board and batten sheathing spans from the first plate to the mid-height plate or the roof. There is no interior sheathing.

The shed roofs at the north and south ends of the buildings are framed with 2x6 rough sawn rafters at 24" on-center spanning about 12'. They are supported on the interior by the same 4x4 timber framed wall that supports the high roof. A 1-3/4"x4" ledger is nailed to each 4x4 about 4' above the loft with 2 spikes and the rafters are severely notched to bear on it. Every other rafter is tight to the side of a post and is side nailed to it with two spikes. There is no blocking tying the roof sheathing to the wall.

At the exterior, the rafters bear on a single 2x4 top plate atop 2x4 at 48" walls. There is no blocking between the rafters. 1x board and batten sheathing spans vertically from the top plate to a concrete knee wall. A ceiling occurs in the south end of the building and is framed with 2x4" ceiling joists at 24" on-center.

The loft floor is framed with 2x6 rough sawn joists at 24" on-center sheathed with 1x12 horizontal board sheathing. The joists run north-south and are supported by interior bearing walls at each end and two intermediate 4x4 rough sawn girders. Spans are about 8' at end spans and 9'-6" at the interior span. At the south end, every other joist has been cut off and is supported by a flat 2x4 nailed to the bottom of all the joists.

The 4x4 girders are supported by 4x4 rough sawn posts at about 4 feet on-center along the interior and at the east and west exterior walls. The posts bear on wood "footings" or directly on the slab-on-grade. A number of these posts were missing or had failed at the time of our site visit. The City has subsequently had those posts installed or replaced.

Condition

The roof structure is generally in good condition where visible despite numerous roof leaks. However there are a number of problems.

The existing roof sheathing is inadequate to meet current Code for lateral force resistance. The structure is currently a "U" or utility occupancy. The proposed use will be classified as an "A" or assembly occupancy. Per IEBC Table 912.4, the proposed use represents an increase in hazard category. The

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occupancy category also increases from I to II per IBC Table 1604.5. This triggers a number of structural upgrade provisions in Section 907 of the IEBC. Per 907.2, the existing building shall be analyzed and comply with applicable wind or snow load provisions of the IBC. Per 907.3.1, the existing building shall conform to the seismic requirements of the IBC for the new seismic use group. A complete wind and seismic evaluation of the building is beyond the scope of this report but preliminary calculations indicate that new or strengthened lateral force resisting elements will be required.

Connections from the roof sheathing to the supporting structure are inadequate to meet current wind and seismic requirements.

The double 2x6 intermediate roof girders are inadequate to meet current Code and require support at the exterior walls. None of the rafters are tied down to resist wind uplift.

The shed roof rafters are substantially deflected; probably due to snow drifting from the upper roofs. The framing does not meet current Code requirements for snow load. The single top plate is inadequate to carry rafter loads under current Code. The 1x exterior vertical sheathing is currently carrying part of those loads to the knee walls. The non-structural ceiling at the South Area is in poor condition and has partially collapsed.

The stud walls that bear on the north, south and northeast concrete knee walls have all deflected outward up to 3" at their base. The roof is inadequately supported by the deflected and damaged exterior walls. They support the shed roof and are unstable enough that they could fail entirely, potentially bringing the shed roof down with them.

The Loft floor is proposed to be abandoned in the new use. Therefore the framing does not require analysis or strengthening. If the Loft is returned to use it should be checked for compliance with the Code required loading for the new use.

The Loft floor decking is covered by plastic and bird feces. It should be cleaned and carefully inspected for deterioration as it will be required to act as part of the new lateral force resisting system. The decking appeared to be in good condition from below.

The gable end wall framing between the loft and high roof does not meet Code for resistance to out of plane wind loads.

The exterior wall sheathing, framing and connections are inadequate to meet current Code for wind and seismic resistance as a shear wall.

Recommendations

The Barn structure needs to be strengthened, but actual details have not yet been designed. Below are some recommended options. Details will be developed during the construction documents phase, and reviewed for compliance with the Secretary of the Interior Standards at that time.

- a. Re-sheath the entire roof with 7/16" plywood or OSB. Add new 2x blocking and hurricane ties to all rafters at bearing points. Priority: Serious.
- b. Install (2) 9-1/4" LVL or a 6x12 below the existing double 2x6 girder supporting the high roof rafters. Support the beam on the existing 4x posts at the interior and on new 4x4 posts in the gable end walls. Install hurricane ties from the rafters to the new girder and from the girder to the posts. Priority: Serious.
- c. Shore the existing shed roofs just inside the north and south exterior walls and near midspan as soon as possible to prevent possible collapse of the walls and roof. High snow loads on the roof could lead to failure thus shoring during the winter months is most important. Priority: Critical.

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- d. Jack the shed roofs near mid span to remove the majority of the deflection. Sister the joists with either a single 2x8 hem-fir #1 or (2) 2x6 hem-fir #2. Priority: Critical.
- e. Add studs in the north and south exterior walls to provide a maximum spacing of 24" with new headers over openings supported by trimmer and king studs. Add studs below top plate splices where they are missing. Alternatively, sister the top plate to span 4'. Sistering minimizes the impact to visible structure and is thus the preferred solution. Priority: Serious.
- f. Inspect the loft floor decking and connections for damage. Repair as necessary. Add nails from decking to joists if analysis indicates it is required for lateral force resistance. Priority: Serious.
- g. Strengthen the gable end walls by installing full height posts sistered to the existing short posts from the loft level to the roof. Existing horizontal and vertical members should be left in place except where careful cutting is necessary to install the new framing. Priority: Serious.
- h. Install new braced frames in the east and west walls of the Main Area from foundation to high roof eave height. The braces must be uninterrupted, thus the frames can only occupy those portions of wall with no openings. On the east wall, anticipate a frame extending about 8' from just north of the large door opening to the north end of the gable end wall. One of the rods would pass behind Window 1W-01. Options to avoid this could be explored further during future detailed design. On the west wall, anticipate a frame extending from the south edge of the Loft door to the south end of the gable end wall.

The braced frames would consist of 4x6 vertical posts at each end of the braced wall, in plane with the existing wall posts, with steel rod x-bracing in between. The posts would likely replace existing 4x4 posts in these locations. The x-bracing can be carefully passed through existing wall framing to minimize disturbance to the historic fabric. Timber bracing could also be used but would be more difficult. The posts and bracing would be visible from the interior but would have minimal aesthetic impact on the existing structure. The average person would be unlikely to even notice the additional structure. New horizontal wood elements will be required at the top of the frame and at the loft level.

Alternatively, if wall sheathing was desirable for weather tightness or other reasons, the existing board and batten could be removed and replaced so the entire wall could be re-sheathed with 7/16" wall sheathing. The proposed use does not require this approach and it is not the preferred option because the board and batten would no longer be visible from the interior.

Lateral force upgrades in the east-west direction will require a similar approach. However, the north and south exterior walls contain numerous openings making bracing or re-sheathing difficult. The most practical solution appears to be adding new sheathed walls or bracing to the interior column lines on the north and south side of the Main Area. The existing 4x4 posts along these lines can easily be modified to include bracing similar to the east and west walls.

In both directions, new foundations will be required to resist uplift and shear forces from the braced frames. See 3.3.2.

Various straps and blocking will be necessary to collect and drag forces to the new frames. These can generally be hidden or minimized to reduce the impact on the historic character of the existing structure. Priority: Serious.

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Typical high roof framing, 2009.



Typical high roof bearing at exterior walls, 2009.



Typical collar ties at gable roof rafters, 2009.



High roof rafter bearing on interior double 2x6 girder, 2009.

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Typical high roof girder unsupported at exterior wall, 2009.



Loft gable end wall, 2009.



Shed roof framing with significant deflection, 2009.



Shed roof framing; ledger and bearing notch through about half of rafter, 2009.

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Shed roof framing at north wall; note that plate supporting rafter is not attached to wall framing, 2009.



Loft floor decking covered with bird feces, 2009.

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Loft floor framing and intermediate girder; missing posts have been replaced, 2009.



Loft floor framing; south ends inadequately supported by flat 2x4, 2009.

3.3.4 Barn Envelope: Exterior Walls

Exterior wall elevations are discussed in this section.

The East Elevation 2009 photo.



Description:

The east wall consists of 2" x 4" wood studs spaced 24" on center covered with vertical board and batten siding. Most of this wall rests upon the thickened edge of a concrete slab. About twelve feet of the south end of this wall rests upon a concrete knee wall which is approximately 3'-4" high. The height of the east wall at its lowest point is approximately 7'-6" below the eave end of the shed roofs. Beneath the peak of the gable end of the roof the wall is approximately 25'-6" tall. A 1" x wood trim piece is located below the gable end of the roof. The wall has two equipment/animal doors, two man doors, and two windows on the ground level. There is one door opening and one window opening for the loft level. These doors and windows are described more fully in Section 3.3.6., Exterior Openings.



The South Elevation 2009 photo.



Description:

The lower portion of the south wall consists of 2" x 4" wood studs spaced 24" on center covered with vertical board and batten siding placed on top of a concrete knee wall which is approximately 3'-4" high. The lower wall has a man door at its west end and six, evenly spaced windows stretching to the east. These doors and windows are described more fully in Section 3.3.6., Exterior Openings. The upper portion of the south façade consists of 4" x 4" wood studs spaced at approximately 48" on center also covered with vertical board and batten siding. This wall extends from the roof eave down to the barn's concrete slab. There are four, evenly spaced, window openings in the upper wall. These are described more fully in Section 3.3.6., Exterior Openings.



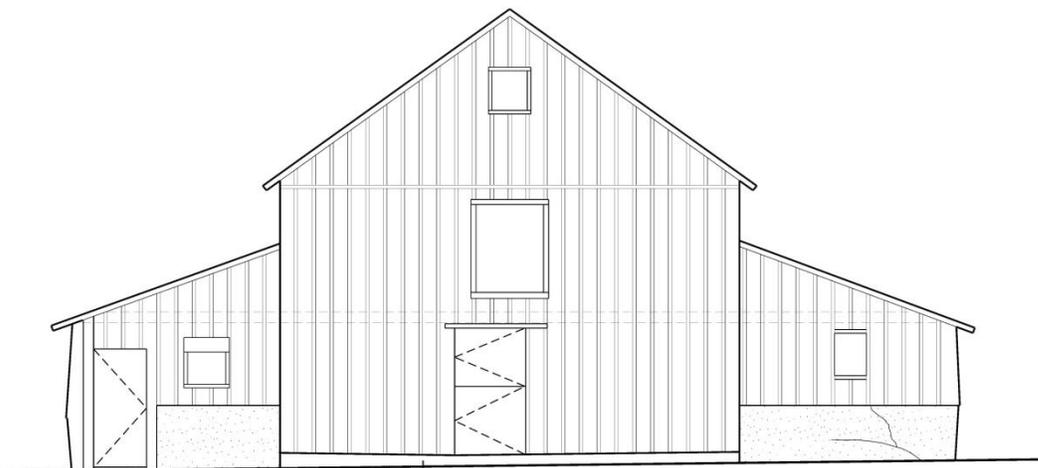
○ BARN SOUTH ELEVATION
4 0 4 8

The West Elevation 2009 photo.



Description:

The west wall consists of 2" x 4" wood studs spaced 24" on center covered with vertical board and batten siding. The west wall below the gable roof rests upon the thickened edge of a concrete slab. The west wall below the shed roof sections rests upon a concrete knee wall which is approximately 3'-4" high. The height of the west wall at its lowest point is approximately 7'-6" below the eave end of the shed roofs. Beneath the peak of the gable end of the roof the wall is approximately 25'-6" tall. The wall has a man door at the north end, a Dutch door centered below the peak of the roof, and two windows on the ground level. There is one door opening and one window opening for the loft level. These doors and windows are described more fully in Section 3.3.6., Exterior Openings



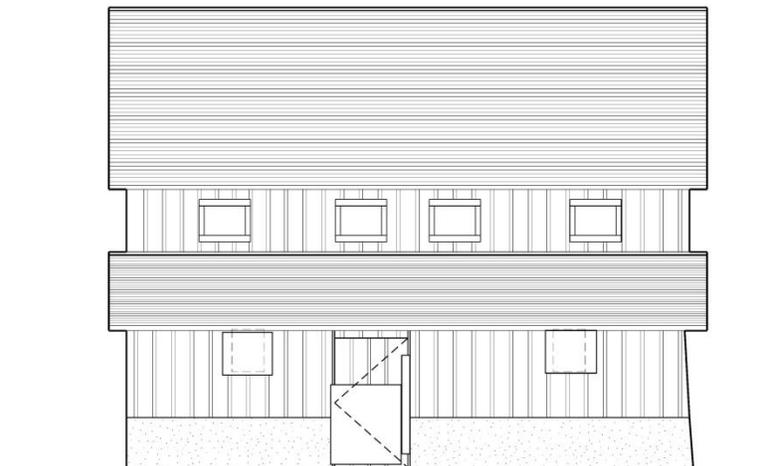
○ BARN WEST ELEVATION
4 0 4 8

The North Elevation 2009 photo.



Description:

The lower portion of the north façade wall consists of 2" x 4" wood studs spaced 24" on center covered with vertical board and batten siding placed on top of a concrete knee wall which is approximately 3'-4" high. The lower wall has a man door near the center of the wall and one window east and one window west of the door opening. These doors and windows are described more fully in Section 3.3.6., Exterior Openings. The upper portion of the north façade consists of 4" x 4" wood studs spaced at approximately 48" on center also covered with vertical board and batten siding. This wall extends from the roof eave down to the barn's concrete slab. There are four, evenly spaced, window openings in the upper wall. These are described more fully in Section 3.3.6., Exterior Openings.



○ BARN NORTH ELEVATION
4 0 4 8

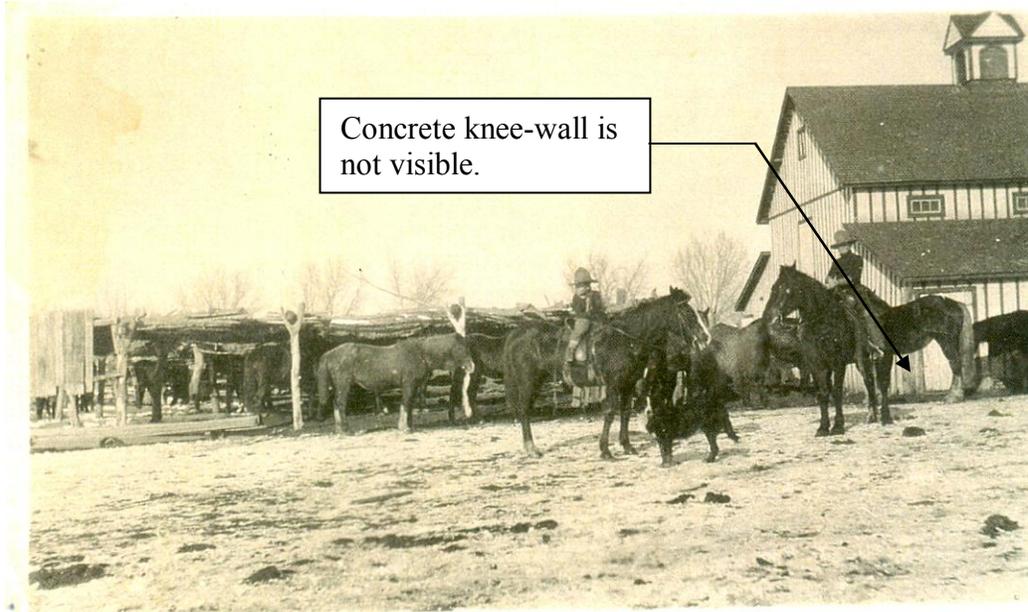
Exterior Wall Condition

Flashing, gutters, downspouts, roof fascia and soffits are addressed in Section 3.1.5, Roofing and Waterproofing. Windows and doors are addressed in Section 3.1.6, Exterior Openings.

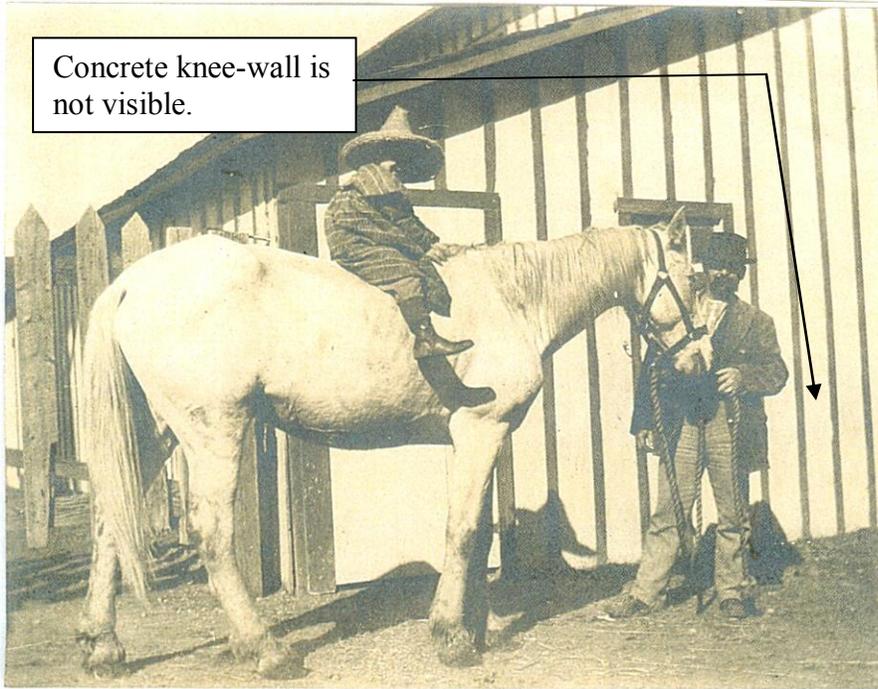
1. Vertical wood siding

Condition: Fair to poor. Wood siding on every side of the Barn is extremely weathered. Most of the protective paint coating has worn away. A large number of siding boards are warped. This warping has caused the nails of many boards to work loose from the wood studs they were fastened to. The warping has also created gaps between siding boards that allows wind driven rain to penetrate the exterior wall and increase the warping. There are also a significant number of siding boards that are split, broken, missing, or very loose. There is a ¼” to ½” gap between the bottom of the wall and the top of the shed roof on the north and south sides. This gap will allow wind driven rain to enter the Barn at the loft level. Many of the vertical wood battens are also split, broken, missing, or very loose. The Concrete knee walls are cracked in several locations. The tops of the concrete knee walls have rotated away from the building. The concrete knee walls are not visible in two historic photographs of the Barn, but most likely were covered by the wood siding. (See below.) Photographs taken for this report (See next page) show that the siding boards were cut away because the concrete knee walls rotated. These conditions are discussed more completely in Section 3.3.2, Barn, Foundation.

Barn south west corner. Circa 1900.



(Shadows indicate that photograph was taken from south side of barn. Silo would be visible in photograph from southeast side.)



(Shadows indicate that this photograph was taken from the south. If this was the south west corner, the roof eave would be visible instead of the gable end of the shed roof.)

Barn south east corner. Circa 1900 photo.

Barn south east corner. 2009 photo.



Wood siding overlaps concrete knee-wall indicating that siding was installed over the knee-wall. Wood sill plate rests on top of knee-wall.

2. Wood trim

Condition: Fair to poor. Wood trim is missing, broken, or loose at many locations on all sides of the Barn. The remaining pieces of wood trim display severe weathering.

Recommended Treatments:

1. Wood siding. The recommended treatment is to preserve the existing siding to the greatest extent possible. Missing, broken, and excessively siding should be replaced. It is estimated that approximately 50% of the existing siding will require replacement.
 - Replace all missing, broken, or excessively warped siding and battens.
 - Match the profile and exposure of existing wood siding and battens.
 - Remove all loose paint from existing siding to remain. Sand and prep siding.
 - Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate. Note that the battens and trim were darker than the siding in historic photographs. Oral histories note that the battens and trim were green and the siding was white. A speck of green paint was located on the inside sash of window 1W-03 during inspections. This evidence corroborates the oral histories.

Priority: Critical

5. Wood trim

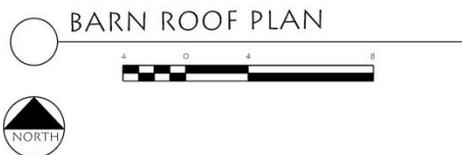
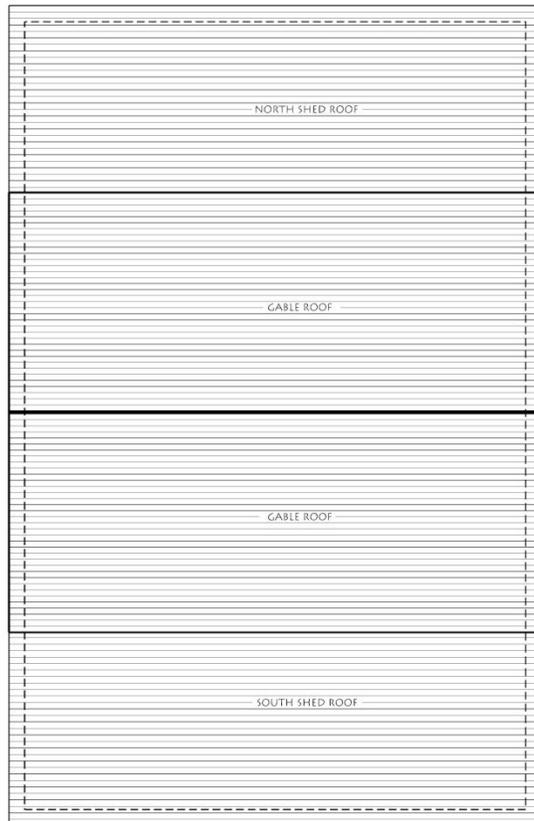
- Replace all missing or damaged wood trim. Match the profile and width of existing wood trim.
- Installing horizontal trim on the bottom of the wall intersecting the shed roofs might reduce wind driven rain penetrating the Barn envelope.
- Remove all loose paint from existing trim. Sand and prep wood trim.
- Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate. Trim was green.

Priority: Minor

3.3.5 Barn Envelope: Roofing and Waterproofing

Roofing systems and flashing are discussed in this section.

Existing Roof Plan



Gable roof. The gable roof has an east to west orientation and approximately an 8.5:12 slope. A layer of wood shingles with approximately 5” exposure covers the roof. A painted galvanized metal ridge with ball cap ends divides the north and south faces of the roof. The gable ends project approximately 12” beyond the exterior wall. The gable end is covered with a 1” x 4” painted wood fascia. A soffit is formed by the ends of projecting 1”x wood roof sheathing. There are no gutters or downspouts on the roof.

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Southwest corner of Barn. Circa 1900.

Condition: Poor. Many of the wood shingles are brittle, warped, or split. Daylight is visible through the roof in many locations from below. The wood fascia is broken or missing on the east and west gable ends. Moss and lichen are also present. These slow drying after rains and accelerate deterioration. The historic vented cupola visible in the picture above has been removed.

Southwest corner of Barn. 2009 photo.



Underside of Barn roof. 2009 photo.



Barn from the northwest. Circa 1947 photo.

Recommended treatment:

- Roof - remove all shingles and sheathing. Also refer to recommendations a., b., c., and d. on page 3.3.3-2 for structural changes to the roof.
- Rebuild the vented cupola. The date that the cupola was removed is unknown at this time, although from the photograph above, it appears to be some time after approximately 1947. It is recommended that further research be conducted to try to determine the date of removal.
- Completely replace the fascia board on the gable ends and eave.
- Install new metal edge trim with a drip edge over the decking and fascia at the gable and eave ends.
- Install new metal flashing and counter-flashing at loft wall. Wood battens will need to be trimmed above counter-flashing.

- Install new No. 1 blue label sawn wood shingles. Paint shingles red. Match size, exposure, nailing pattern, distinctive details, and decorative elements of existing wood shingles. Use a double layer of wood shingles for the starter course. Install cedar breather over 30# felt over the new sheathing specified in recommendation a., on page 3.3.3-2. Ice and water guard should be considered for the lower 4' of each roof section, especially the shed roofs with their lower pitch.
- Apply primer and two coats high-quality acrylic latex paint to the fascia and soffit at the gable and eave. Paint color(s) should be historically accurate.

Priority: Critical.

North and south shed roofs. The north and south shed roofs are covered with one layer of wood shingles and have a slope of approximately 4:12. The rake end of the roof projects approximately 12" beyond the exterior wall and has a 1" x 4" painted wood fascia. The rake end soffit consists of projecting 1" x wood sheathing boards. 2" x 4" wood rafters project approximately 9" at the eave. The ends of the rafters have not been trimmed and are covered with a 1" x 4" painted wood fascia. There are no gutters or downspouts on the north and south shed roofs.

Condition: Poor. Many of the wood shingles are brittle, warped, or split. Daylight is visible in many locations from below the roof. The wood fascia is broken or missing on the rake and eave ends.

Underside of north shed roof looking west. 2009 photo.



Recommended treatment:

- Refer to the gable roof recommendations on pages 3.3.5-3 and 3.3.3-4 for roof structural and shingle recommendations.
- Completely replace the fascia board on the rake and gable ends.

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- Install new metal edge trim with a drip edge over the decking and fascia at the rake and eave ends.
- Install new metal flashing and counter-flashing at loft wall. The lower ends the loft wall wood battens will need to be trimmed to accommodate the flashing and counter-flashing.
- Rehabilitate or replace rotted rafter ends.
- Apply primer and two coats high-quality acrylic latex paint to the fascia and soffit at the rake and eave ends. Paint red.

Priority: Critical.

3.3.6 Barn Openings: Windows, Doors, Vents

East Elevation Openings



Door D1. 2009 photo.



Door D1.

Description: Door D1, is pair of vertical plank doors located at the north end of the east elevation. Each leaf is approximately 5'-5" wide x 8'-1" high. The south leaf is fastened through the wood siding to wood framing with three strap hinges. The north leaf is fastened directly to a 2" x 6" steel channel with three strap hinges welded to the channel. The channel has in turn been fastened to wood framing.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. Each leaf has new lumber scabbed onto on the interior side. The doors are currently secured by a 2" x 4" board screwed to each leaf. Because of this, it could not be

determined if the door was operational; however, the door opening does not appear to be square. The steel channel is most likely a later modification added to keep the door operational.

Recommended treatment: Preserve the historic appearance and material of the vertical plank doors to the greatest extent possible, while restoring the door's functionality. This may require that

excessively deteriorated parts of the door and frame be rebuilt or replaced. The steel channel at the north jamb is not original, but the date it was installed could not be determined. The channel should be removed, if the north leaf can be structurally supported without the channel. Paint may contain lead. Sand and prep the refurbished door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Windows 1W-01 and 1W-02. Door D2. 2009 photo.



Description: These windows are located either side of door D2. Each window is approximately 1'-10" wide x 4'-6" high. Each is a historic wood, fixed-sash, four light window with single pane glazing. Both windows are currently protected by unpainted particle board panels

Condition: The exterior finish of both windows is severely weathered and missing most of their protective paint coating. One light is broken in window 1W-01. All lights are broken and one horizontal muntin is missing in window 1W-02. The sash, frame, and trim for each window have warped, broken, and rotted areas.

Recommended treatment: Preserve the historic appearance and material of both windows to the greatest extent possible, while restoring their degraded weather-tight qualities. Remove each sash and preserve with consolidant and/or new materials. Install new glazing for all glass lights. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or reconstruct the frame and trim so that each sash fits tightly. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall each sash and all stops.

Priority: Serious.

Door D2.

Description: Door D2, is pair of vertical plank doors located in the middle of the east elevation. Each leaf is approximately 5'-0" wide x 7'-8" high. The each leaf is fastened through the wood

siding to 4" x 4" wood framing with three strap hinges. The doors are currently secured with a non-historic padlock and hasp.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. The lower end of several planks on the south leaf is broken. The door leaves are operational, but rest in an open position and need adjustment.

Recommended treatment: Preserve the historic appearance and material of the vertical plank doors to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Paint may contain lead. Sand and prep the rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Doors D3 and D4. Window 1W-03. 2009 photo.



Door D3.

Description: Door D3, is a vertical plank door located at the north end of the concrete knee wall on the east elevation. The door is approximately 3'-6" wide x 6'-8" high. The door is fastened through the wood siding to wood framing with two strap hinges. The door is currently screwed closed.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. Several planks have long vertical splits in them, but this does not appear to affect the door's overall structural integrity. Because the door is screwed shut, its operation could not be tested.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Sand and prep the refurbished door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Window 1W-03.

Description: This window is located just above the concrete knee wall at the south end of the east elevation. It is approximately 1'-10" wide x 2'-4" high. The window is a historic wood, four light hopper with single pane glazing with a bowtie sash lock. It is currently protected by an unpainted particle board panel on the exterior face.

Condition: The exterior finish of the window is severely weathered and missing most of its protective paint coating. Glazing is intact in the sash. The window is operational, but its hardware is extremely rusty.

Recommended treatment: Preserve the historic appearance and material of the window to the greatest extent possible, while restoring its degraded weather-tight qualities and functionality. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Install new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so the sash fits tightly. Repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

Door D4.

Description: Door D4, is a vertical plank door located at the far south end of the east elevation. The door is approximately 2'-9" wide x 6'-3" high. The door is fastened through the wood siding to wood framing with two strap hinges. The door is currently secured with a non-historic padlock and hasp.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. The door binds against the frame when the door is opened and closed.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Sand and prep the rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Door D9. Window 2W-01. 2009 photo.



Door D9.

Description: Door D9, is a vertical plank door located in the middle of the east façade at the loft level. The door is approximately 4'-0" wide x 5'-0" high. The door is fastened through the wood trim and siding to wood framing with two strap hinges.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. Several planks have long vertical splits or broken ends, but this does not appear to affect the door's overall structural integrity.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Sand and prep the rehabilitated door and

frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Window 2W-01.

Description: This window is located above door D2 at the loft level of the east façade. It is approximately 1'-10" wide x 2'-4" high. The window is a historic wood, four light with single pane glazing. It could not be determined if this is a fixed sash or hopper sash window. It is currently protected by an unpainted particle board panel on the exterior face.

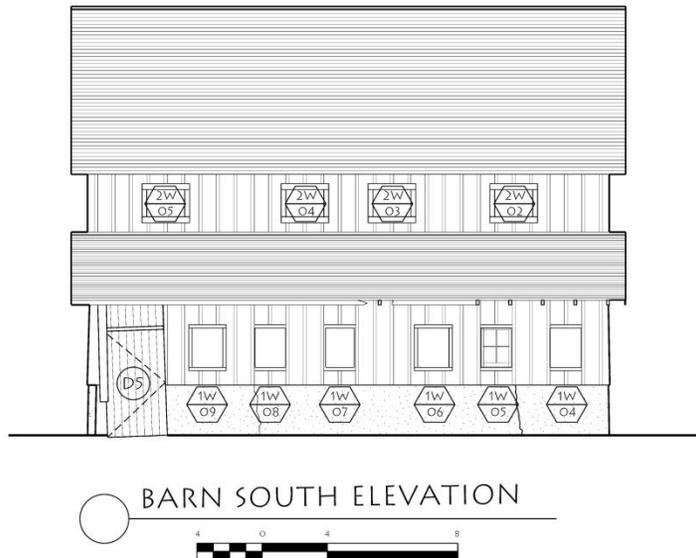
Condition: The exterior finish of the window is severely weathered and missing most of its protective paint coating. The upper right window pane is broken and the right side horizontal muntin is missing. The functionality of the window could not be tested.

Recommended treatment: Preserve the historic appearance and material of the window to the greatest extent possible, while restoring its degraded weather-tight qualities and functionality. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Install new glazing in the upper right light and new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or

rebuild the frame and trim so the sash fits tightly. Repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

South Elevation Openings



Windows 1W-04 thru 09.

Description: These windows are located just above the concrete knee wall at the south end of the south elevation. Each is approximately 1'-10" wide x 2'-4" high. Each window is a historic wood, four light hopper with single pane glazing. They are currently protected by an unpainted particle board panel on the exterior face.

Condition: The exterior finish of all windows is severely weathered and missing most of its protective paint coating. Glazing is broken in windows 1W-08 and 1W-09. Window 1W-08 is removed from its frame. The vertical muntin is loose and the horizontal muntins are missing in window 1W-06. Window 1W-05 is covered on both sides and could not be evaluated. The functionality of each window could not be tested.

Recommended treatment: Preserve the historic appearance and material of all windows to the greatest extent possible, while restoring their degraded weather-tight qualities and functionality. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Replace broken or missing lights. Install new glazing putty for all lights. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so each sash fits tightly. Repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

Door D5.

Description: Door D5, is a vertical plank door located at the far west end of the south elevation. The door is approximately 3'-8" wide x 6'-6" high. The door is currently being held in place by one strap hinge at the top of the door fastened through the wood siding to wood framing beyond.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. The bottom door hinge is completely detached and the door is held loosely in place by the top hinge. The door frame and header are severely damaged, possibly having been run into by a vehicle which also damaged the concrete knee wall on the west façade. The west jamb is completely detached from the door frame header.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. Excessively damaged parts of the door and frame must be rebuilt or replaced. This should be done after the west and south walls are rehabilitated. (Refer to Section 3.3.3, Structural System.) Paint may contain lead. Sand and prep the refurbished door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Critical.

Windows 2W-02 thru 05.

Description: These windows are located on the wall above the shed roof on the south elevation. Each is approximately 2'-4" wide x 1'-8" high. Each window is a historic wood, four light, fixed sash with single pane glazing. They are currently protected by an unpainted particle board panel on the exterior face.

Condition: The exterior finish of all windows is severely weathered and missing most of its protective paint coating. All lights are broken in windows 2W-02, 03, and 04. One light is broken in window 2W-05.

Recommended treatment: Preserve the historic appearance and material of all windows to the greatest extent possible, while restoring their degraded weather-tight qualities. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Install new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so each sash fits tightly. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

West Façade Openings



Windows 1W-10 and 11.

Description: These windows are located just above the concrete knee wall at the north and south ends of the west elevation. Each is approximately 1'-10" wide x 2'-4" high. Each window is a historic wood, four light hopper with single pane glazing. They are currently protected by an unpainted particle board panel on the exterior face.

Condition: The exterior finish of all windows is severely weathered and missing most of its protective paint coating. Three lights are broken in window 1W-10. Also the vertical and horizontal muntins are loose in window 1W-10. Glazing is intact in window 1W-11. The functionality of each window could not be tested.

Recommended treatment: Preserve the historic appearance and material of both windows to the greatest extent possible, while restoring their degraded weather-tight qualities and functionality. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Replace broken or missing lights. Install new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so each sash fits tightly. Repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

Doors D6 and D10. Window 2W-06. 2009 photo.



Door D6.

Description: Door D6, is a vertical plank Dutch door located in the middle of the west façade at the ground level. The door is approximately 4'-0" wide x 7'-2" high. The door is fastened through the siding to wood framing with two strap hinges on the upper leaf and two strap hinges on the lower leaf.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. Several planks have long vertical splits or broken ends, but this does not appear to affect the door's overall structural integrity. The door's operation could not be tested because the door is screwed shut.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Paint may contain lead. Sand and prep the

rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Door D10.

Description: Door D10, is a vertical plank door located in the middle of the west façade at the loft level. The door is approximately 4'-0" wide x 5'-0" high. The door is fastened through the wood trim and siding to wood framing with two strap hinges.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint coating. Several planks have long vertical splits or broken ends, but this does not appear to affect the door's overall structural integrity. The door hinges are detached from the door.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be rebuilt or replaced. Paint may contain lead. Sand and prep the rehabilitated door and frame. Check that the strap hinges are securely fastened to the frame and reattach the door to the hinges. Repaint with two coats high quality acrylic latex paint.

Priority: Serious.

Window 2W-06.

Description: This window is located above door D10 at the loft level of the west façade. It is approximately 1'-10" wide x 2'-4" high. The window is a historic wood, four light with single pane glazing. It could not be determined if this is a fixed sash or hopper sash window. It is currently protected by an unpainted particle board panel on the interior face.

Condition: The exterior finish of the window is severely weathered and missing most of its protective paint coating. Only the lower left glass light is intact. The horizontal and vertical muntins appear to be loose.

Recommended treatment: Preserve the historic appearance and material of the window to the greatest extent possible, while restoring its degraded weather-tight qualities. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Install new glazing to replace the missing lights and new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so the sash fits tightly. If this is a hopper window, then repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

Door D7. Window 1W-11. 2009 photo.



Door D7.

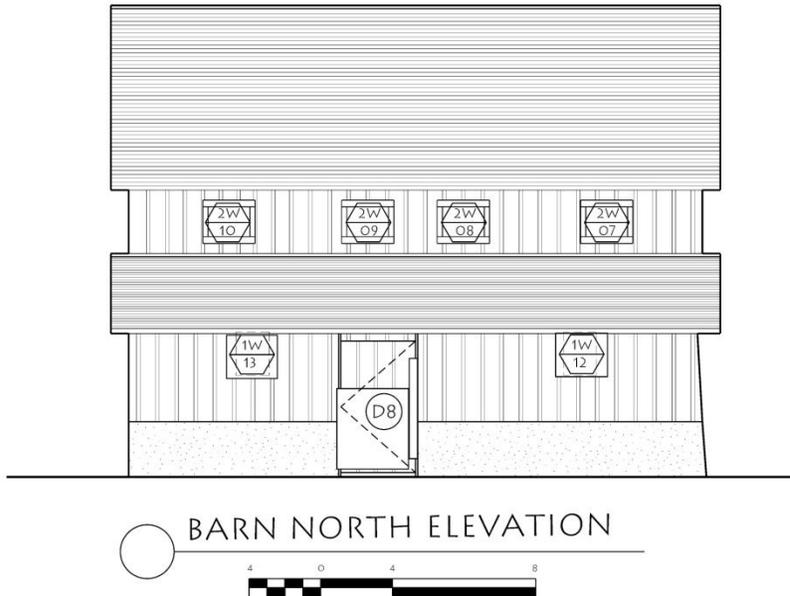
Description: Door D7, is a vertical plank door located at the far north end of the west elevation. The door is approximately 3'-0" wide x 6'-8" high. The opening is currently protected by an unpainted particle board panel on its exterior face.

Condition: The vertical wood planks could not be observed because of the security panel; however, it is assumed that its appearance is similar to the adjacent wood siding. The door is completely detached from its two strap hinges. The hinges are fastened through the wood siding into the wood framing beyond. The door header is detached from the jamb and no longer is supported at the north end. The door frame is extensively damaged and no longer square.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. Excessively damaged parts of the door and frame must be rebuilt or replaced. This should be done after the north and west walls are rehabilitated. (Refer to Section 3.3.3, Structural System.) Paint may contain lead. Sand and prep the refurbished door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Critical.

North Elevation Openings



Windows 1W-12 and 1W-13.

Description: These windows are located above the concrete knee wall on either side of door D8 on the north elevation. Each is approximately 1'-10" wide x 2'-4" high. Each window is a historic wood, four light hopper with single pane glazing. They are currently protected by an unpainted particle board panel on the exterior face.

Condition: The exterior finish of all windows is severely weathered and missing most of its protective paint coating. All lights are broken in window 1W-13. The functionality of each window could not be tested.

Recommended treatment: Preserve the historic appearance and material of both windows to the greatest extent possible, while restoring their degraded weather-tight qualities and functionality. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Replace broken or missing lights. Install new glazing putty for all lights. Paint may contain lead. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so each sash fits tightly. Repair existing hopper hardware, or, if necessary, replace with new historically accurate hopper hardware. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Serious.

Door D8. Windows 1W-12 and 1W-13. Windows 2W-7 through 10. 2009 photo.



Door D8.

Description: Door D8, is a vertical plank door located the middle of the north façade between two concrete knee walls. The door is supported by strap hinges fastened to an exposed wood jamb. The door is approximately 4'-2" wide x 7'-4" high. The lower two-thirds of the opening is currently protected by an unpainted particle board panel on its exterior face.

Condition: The vertical wood planks are severely weathered and have lost most of their protective paint covering. This door frame is twisted along with the rotated concrete knee wall and no longer plumb or square. This door could not be tested for functionality, but it is unlikely that it is operational due to its extremely distorted frame.

Recommended treatment: Preserve the historic appearance and material of the vertical plank door to the greatest extent possible, while restoring the door's functionality. Excessively damaged parts of the door and frame must be rebuilt or replaced. This should be done after the north wall is repaired. (Refer to Section 3.3.3, Structural System.) Paint may contain lead. Sand and prep the rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Critical.

Windows 2W-07 thru 10.

Description: These windows are located on the wall above the shed roof on the north elevation. Each is approximately 2'-4" wide x 1'-8" high. Each window is a historic wood, four light, fixed sash with single pane glazing. They are currently protected by an unpainted particle board panel on the interior face. Window 2W-10 appears to have a historic wood framed screen fastened to its exterior face.

Condition: The exterior finish of all windows is severely weathered and missing most of its protective paint coating. All lights are intact for window 2W-09, but it is removed from its frame. Two lights each are broken in windows 2W-07 and 2W-08. Window 2W-08 is displaced in its frame. All lights are broken in window 2W-10.

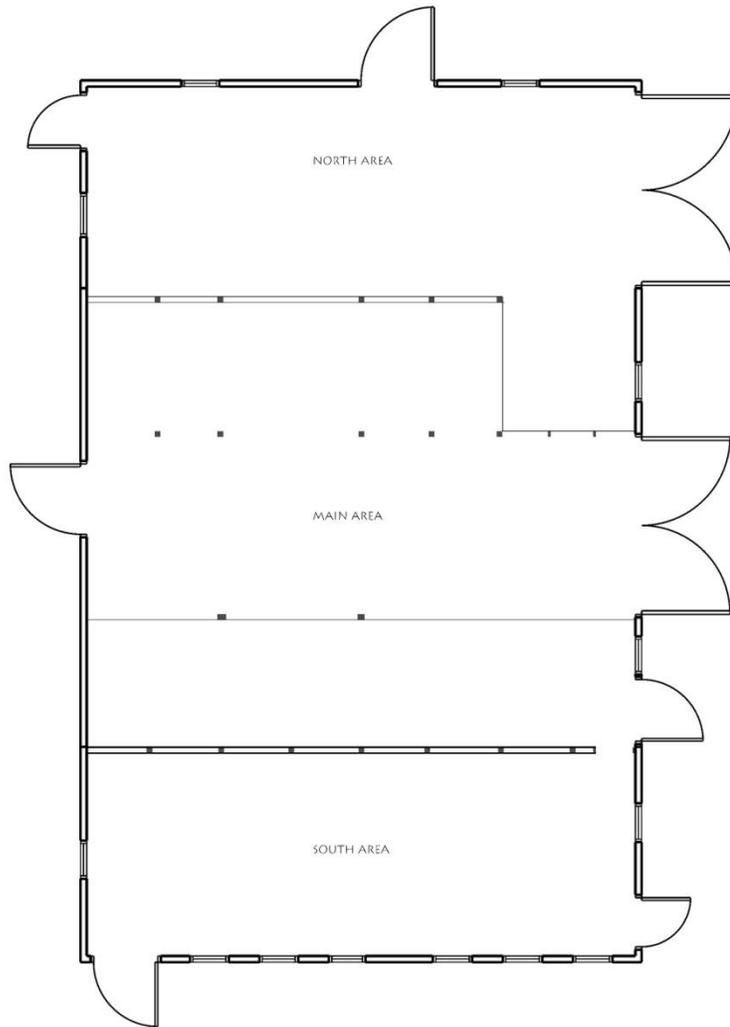
Recommended treatment: Preserve the historic appearance and material of all windows to the greatest extent possible, while restoring their degraded weather-tight qualities. Remove the sash and preserve with consolidant and/or new materials in degraded areas. Install new glazing putty for all lights. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so each sash fits tightly. Paint may contain lead. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops. Determine if exterior wood-frame window screens were a historic feature of the eight upper level windows, and, if so, replace the missing window screens.

Priority: Serious.

3.3.7 Barn Interior finishes, Interior doors, and special interior features

Wall, ceiling, and floor finishes. Built-ins, window-coverings, and special features. Interior doors and trim.

Barn Ground Level Plan



○ BARN GROUND LEVEL PLAN
4 0 4 8

+**South Area** looking west. 2009 photo.



Walls: Unpainted plywood panels above a concrete kneewall: east, south, and west walls.

Unpainted plywood: north wall.

Ceiling: Unpainted plywood.

Floor: Concrete.

Base: None.

Interior Doors: None.

Window-coverings: None.

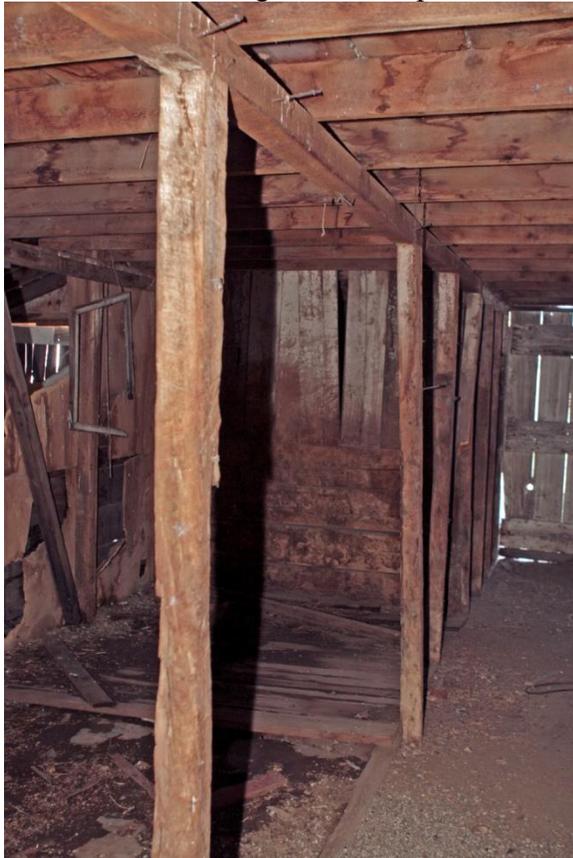
Special features, historic: Back side of feed bins slope in on north wall. Wood ladder to loft is in the northeast corner.

Special features, non-historic: None.

Condition: Floor is covered with dirt, debris, and animal droppings. Ceiling has extreme water damage.

Recommended treatment: Thoroughly clean and disinfect floor and wall. Replace plywood ceiling after roof repairs are completed. Also refer to recommendation b. on page 3.3.2-1 and recommendations c., d., and e. on page 3.3.2-2 for additional work.

+Main Area looking east. 2009 photos.



+Main Area looking east along stalls.



Walls: Unfinished.

Ceiling: Exposed floor joists for Loft.

Floor: Concrete.

Base: None.

Interior Doors: None.

Window-coverings: None.

Special features, historic: Sloped feed bins for stalls on south wall.

Special features, non-historic: None.

Condition: Floor is covered with dirt, debris, and animal droppings.

Recommended treatment: Thoroughly clean and disinfect floor and wall. Also refer to recommendation b. on page 3.3.2-1 and recommendations c., d., and e. on page 3.3.2-2 for additional work.

+North Area looking west. 2009 photos.

+North Area looking west at north wall.



Walls: Unfinished horizontal board wainscot with unpainted pressed board above to ceiling.

Ceiling: Exposed floor joists for Loft.

Floor: Concrete.

Base: None.

Interior Doors: None.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Condition: Floor is covered with dirt, debris, and animal droppings. Pressed board is water damaged, broken, and becoming detached from walls. Wainscot is stained and dented.

Recommended treatment: Thoroughly clean and disinfect floor and wall. Remove nests from walls. The pressed board may possibly contain asbestos. It is recommended that it be tested to determine if it is a hazardous material. This testing may help determine the time period that it was installed. Depending upon the historic time period associated with the ultimate use of the Barn and its content, the pressed board should either be removed or replaced with a material with a similar appearance. Also refer to recommendation b. on page 3.3.2-1 and recommendations c., d., and e. on page 3.3.2-2 for additional work.

+Loft Area looking at north and east walls. 2009 photo.



Walls: Unfinished .

Ceiling: Exposed roof joists.

Floor: 1" x 12" wood planks.

Base: None.

Interior Doors: None.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Condition: Floor is covered with dirt, debris, and animal droppings.

Recommended treatment: Thoroughly clean and disinfect floor and wall. Also refer to recommendations f. and g. on page 3.3.3-3 for additional work.

3.3.8 Barn Mechanical Systems, Water, Wastewater

Mechanical

There are no existing mechanical systems in the Barn.

The Barn is being proposed as an A3 occupancy. Ventilation will be provided through the existing operable windows in doors in accordance with Chapter 4 of the IMC. Heating will be provided through gas fired infrared tube heaters and gas fired unit heaters. A new gas service will be routed from Bromley Lane and a new gas meter installed at the South or West side of the building.

Plumbing

There are no existing plumbing systems in the Barn.

It is anticipated that there will be no new plumbing systems in the Barn.

3.3.9 Barn: Electrical Systems including lighting, power and fire alarm/security

Description

The existing structure is fed with an overhead service to a weatherhead on the east side of the building. Within the structure there is a small breaker/fuse panel and minimal lights and receptacles. There are no fire alarm or security devices

Condition

All of the existing electrical systems are in poor condition due to their age and require replacement.

Recommendations

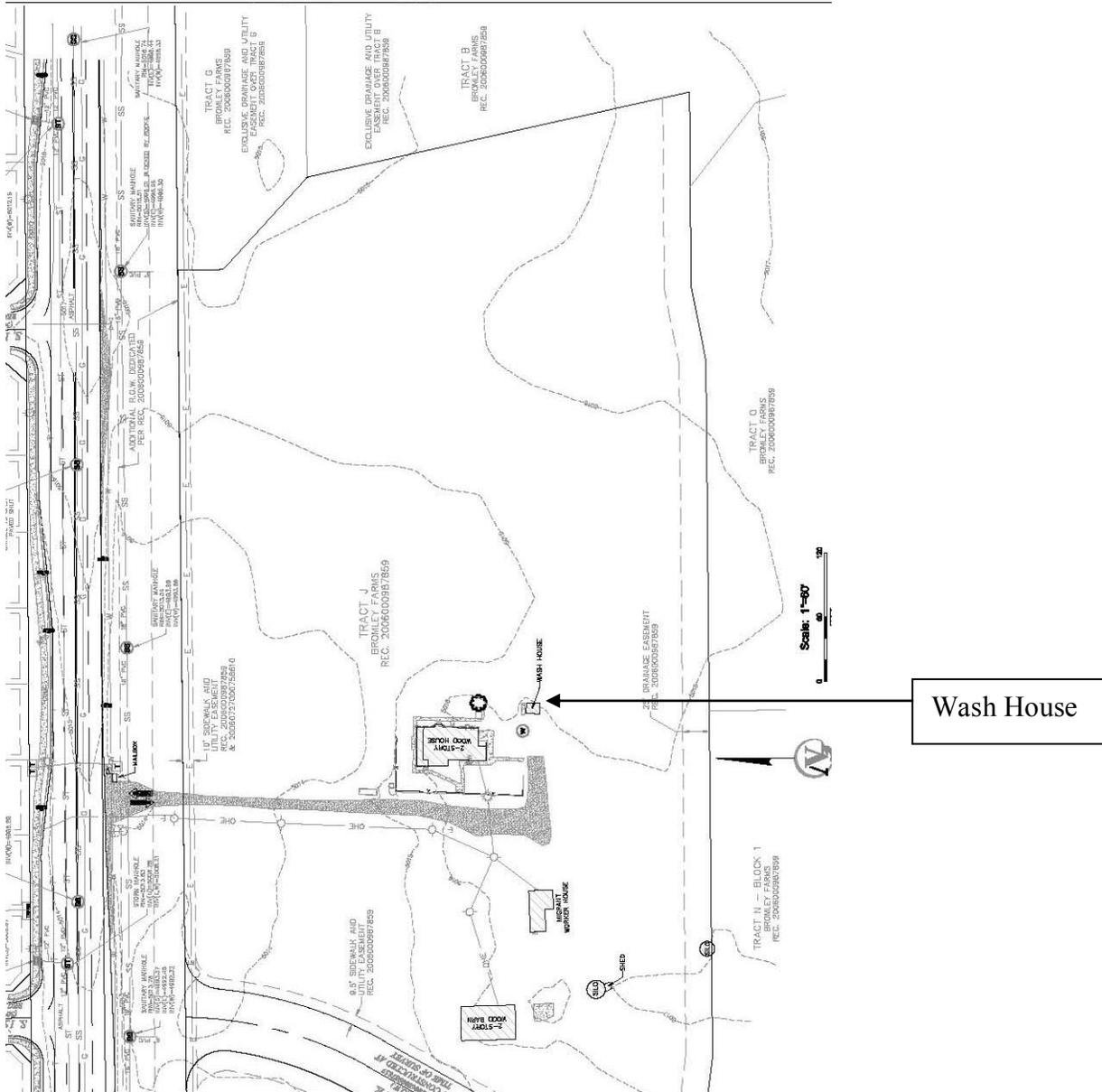
Provide and install a new 100 amp, 120/208 volt, 1 phase underground service from the Main house. This would include #2 copper conductors plus a ground in a 2" PVC conduit. On the exterior of the barn a 100 amp, 2 pole fused disconnect would be required. Inside of the barn a new 100 amp load center would be provided with branch breakers for circuits within the barn.

Interior work would include all new branch circuits for lights and receptacles. The new wiring would be in conduit and would be exposed in all areas. A minimal amount of receptacles and period style light fixtures would be placed throughout the building.

A fire alarm system is not required and security devices could be added if required by the owner.

3.4.1 Wash House Site and Organization

The Wash House is a small, simple utilitarian building just southeast of the Main House. There are no remaining walks or other features near the Wash House. Vegetation and drainage are minimal and discussed in Section 4.



The Wash House is rectangular in plan, approximately 12 feet long from north to south and 10 feet wide from east to west. The primary elevation faces north. The roof is a simple front gable covered with wood shingles. The building is wood framed and sided with board and batten siding. The interior consists of one single room.

Bromley Farm
Historic Structure Assessment
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Looking southwest at Wash House, 2009

3.4.2 Wash House Foundation

Description

The exterior foundation system consists of dirt or degraded slab-on-grade. There are no interior foundations.

Grade around the building is in contact with the base of the wall.

Condition

The proposed storage use is not a change in occupancy according to the IEBC. Therefore, comprehensive analysis and upgrades of the building are not required. However, per Section 1106, components or portions of a building that are dangerous, as defined in the IEBC, shall be required to be repaired strengthened or replaced.

The exterior foundation system is generally in poor condition. It is non-existent or degraded to the point that it is no longer effective.

Recommendations

- a. Move the building, install a new slab-on-grade with turned down edges on 4" gravel. Frost depth requirements would generally not have to be met for a utility structure making the turned down slab foundation a Code compliant option. Priority: Critical.
- b. Regrade around the building to provide the Code required 8" minimum between grade and untreated wood elements. Priority: Serious.

3.4.3 Wash House Structure

Description

The roof is framed with 2x4 rough sawn rafters at 24" on-center sheathed with 1x8 boards. The rafters are end butted at the ridge and are birdsmouth cut to bear on the exterior walls. 1x or 2x4 collar ties occur about 1'-6" below the ridge.

The first floor is severely degraded slab on grade.

The exterior walls are 1x board and batten vertical attached to a horizontal 2x4 at the top of the wall, near mid-height and at the base. There are no studs as in a conventionally framed wall.

Condition

The roof system is in fair condition. The decking is deteriorated in a number of locations.

The exterior walls are in poor condition with extensive deterioration at the base, weathering and missing boards. The 2x4 untreated sill is severely degraded to the point of being unidentifiable due to contact with grade. There are no corner studs or other ties to keep the building corners from spreading. The entire building leans up to 3-1/2" inches out of plumb. The building is unlikely to collapse in the near future but repairs should be commenced as soon as funding allows.

Recommendations

- a. Move the building to install the new foundation. Install a new pressure treated sill plate with anchor bolts to the new foundation. Move building onto new foundation. Push or pull the building back to plumb. Install new corner studs. Epoxy consolidate roof and wall boards that are salvageable. Finger joint in new pieces or replace boards entirely depending on severity of deterioration. If a weatherproof wall is required, the existing boards should be removed to allow installation of new 7/16" sheathing and vapor barrier. All of the previous repairs to boards, and installation of a new sill

Bromley Farm

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plate would still be required. This solution may not meet the Secretary of Interior's standards since the existing boards will no longer be visible on the interior. Therefore, the cost estimate assumes restoration of the existing system only. Priority: Critical.



Displaced and deteriorated southeast corner of wall, 2009.



Typical interior "studless" wall framing,, 2009.

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Typical roof framing, 2009.

3.4.4 Wash House Envelope: Exterior Walls

Exterior wall elevations are discussed in this section.

The North Elevation

2009 photo.



discussion.

The north wall consists of vertical board and batten siding fastened to horizontal 2" x 4" members. The wall does not appear to have a foundation. This façade has no vertical wood trim. The wall is approximately 6'-4" high at the eaves and approximately 10'-0" high below the peak of the gable. The north wall has one door opening. See Section 3.4.6, Exterior Openings, for further

The East Elevation

2009 photo.



The east wall consists of vertical board and batten siding fastened to horizontal 2" x 4" members. The wall does not appear to have a foundation. This façade has no vertical wood trim. The wall is approximately 6'-4" high at the eaves. The east wall has no openings.

The South Elevation

2009 photo.



The south wall consists of vertical board and batten siding fastened to horizontal 2" x 4" members. The wall does not appear to have a foundation. This façade has no vertical wood trim. The wall is approximately 6'-4" high at the eaves and approximately 10'-0" high below the peak of the gable. The north wall has one window opening. See Section 3.4.6, Exterior Openings, for further

discussion.

The West Elevation

2009 photo



The west wall consists of vertical board and batten siding fastened to horizontal 2" x 4" members. The wall does not appear to have a foundation. This façade has no vertical wood trim. The wall is approximately 6'-4" high at the eaves. The west wall has no openings.

Exterior Wall Condition

Flashing, gutters, downspouts, roof fascia and soffits are addressed in Section 3.4.5, Roofing and Waterproofing. Windows, doors, and vents are addressed in Section 3.4.6, Exterior Openings.

1. Wood siding and battens

Condition: Poor. Wood siding on all sides is very weathered. Much of this siding is cupped, split, or broken. The cupping has caused the nails of many boards to work loose from the horizontal framing beneath. The cupping has also created large gaps between some of the siding boards. This allows wind driven rain to the building. The northeast, southeast, and southwest corners of the building have significant damage and large openings. The east and west walls are out of plumb and the building has a pronounced “lean” to the west. A significant number of wood battens are missing, broken, or loose. The protective coating of paint is severely degraded on all sides of the Wash House.

Recommended Treatments:

1. Wood siding

- Move the building to a new foundation per recommendations of Sections 3.4.2 and 3.4.3.
- Remove all existing siding. Retain any salvageable siding and battens.
- Rebuild the foundation exterior wall per recommendations of Sections 3.4.2 and 3.4.3. The proposed solutions may not meet the Secretary’s Standards. If not, then other solutions should be explored during the design development stage.
- Install new and salvaged wood siding and battens on all facades.
- Apply primer and two coats high-quality acrylic latex paint to new siding. Paint color(s) should be historically accurate.

Priority: Critical.

3.4.5 Wash House Envelope: Roofing and Waterproofing

Roofing systems, flashing, gutters and downspouts, and chimneys are discussed in this section.

Gable Roof.

West side of Wash House. 2009 photo.



North side of Wash House. 2009 photo.



The gable roof has a north to south orientation and approximately an 8:12 slope. A layer of wood shingles with approximately 4 1/2" exposure is applied directly to 1" x 8" sheathing boards. The ridge is covered with wood ridge boards. The sheathing boards and rafters project approximately 7" beyond the exterior wall at the north and south ends. The south gable end is covered with a 1" x 4" wood fascia. Exposed rafter ends project from the eave and the east and west sides of the Wash House. A small brick chimney is located on the far southwest corner of the roof. This chimney terminates at a wood framed cradle below the roof.

Condition: Poor. Approximately 15% to 25% of the wood shingles are missing from each side of the roof. There is no underlayment between the shingles and sheathing. The ridge board is broken and mostly missing. The north side fascia is missing. The brick chimney is not flashed, does not have a cap, and is missing bricks at the top. Its mortar joints are severely degraded.

Recommended treatment:

- Roof -remove all shingles.
- Replace any deteriorated sheathing boards.
- Install new sawn wood shingles over existing board sheathing. Match style and exposure of existing wood shingles. Paint shingles red.
- Install new flashed roof ridge.
- Completely rebuild the chimney using existing brick. Test mortar to determine its composition. Replace existing flashing with new stepped flashing. Install a two-piece cricket to facilitate drainage around the chimney. This work should be done by a professional mason specializing in historic masonry.
- Replace the 1" x 4" fascia at the north and south gable ends. Sand and prep the fascia and soffit for new paint. Apply primer and two coats high-quality acrylic latex paint. Paint color(s) should be historically accurate.

Priority: Critical.

3.4.6 Wash House Openings: Windows, Doors, Vents

North Elevation Openings.

Photograph of north side of Wash House. 2009 photo.



Description: A historic four panel wood door is located in the middle of the north elevation. The door is approximately 2'-6" wide by 5'-9" high. The door is secured by a 2" x 6" screwed to the frame of the house.

Condition: The door is severely weathered. At least one of the panels is missing. The other visible panels have long vertical splits. The top rail and stile do not align. The door frame is out of square. The hinges are extremely rusty. One of the lower butt hinges is no longer fastened to the door. Door hardware is missing. Even if the door was operation, the high grade in front of the door would prevent it from opening.

Recommended treatment: Preserve the historic appearance and material of the door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be consolidated, rebuilt, or replaced. Install new historically accurate door hardware. Re-grade in front of the door to help restore the doors functionality and operation. Sand and prep the rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint.

Priority: Critical.

South Elevation Openings.

Photograph of south side of Wash House. 2009 photo.



Description: This window is located in the middle of the south elevation. The window is approximately 2'-0" wide x 2'-8" high. It is a historic wood, fixed-sash, two light window with single pane glazing. The window is currently protected by unpainted board panel inside the Wash House.

Condition: The exterior finish is severely weathered and missing most of their protective paint coating. Glazing is missing in the window. The sash, frame, and trim for this window is warped, broken, and rotted areas.

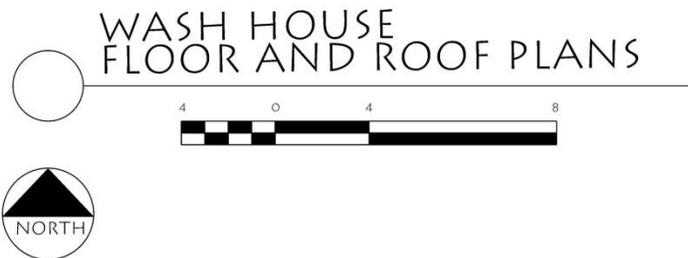
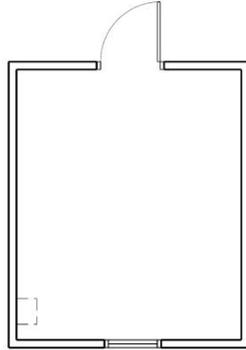
Recommended treatment: Preserve the historic appearance and material of the window to the greatest extent possible, while restoring its degraded weather-tight qualities. Remove the sash and preserve with consolidant and/or new materials. Install new glazing and glazing putty for both glass lights. Remove all loose paint on the exterior face of the sash, frame, and the exterior trim. Repair or rebuild the frame and trim so that the sash fits tightly. Sand and prep. Repaint with two coats high quality acrylic latex paint. Refinish and reinstall the sash and all stops.

Priority: Critical.

3.4.7 Wash House Interior finishes, Interior doors, and special interior features

Wall, ceiling, and floor finishes. Built-ins, window-coverings, and special features. Interior doors and trim.

Wash House Plan



Walls: Unfinished.

Ceiling: Unfinished.

Floor: Dirt.

Base: None.

Interior Doors: None.

Window-coverings: None.

Special features, historic: Bottom of brick chimney and wood cradle support for chimney.

Special features, non-historic: None.

Condition: Floor is covered with debris and animal droppings.

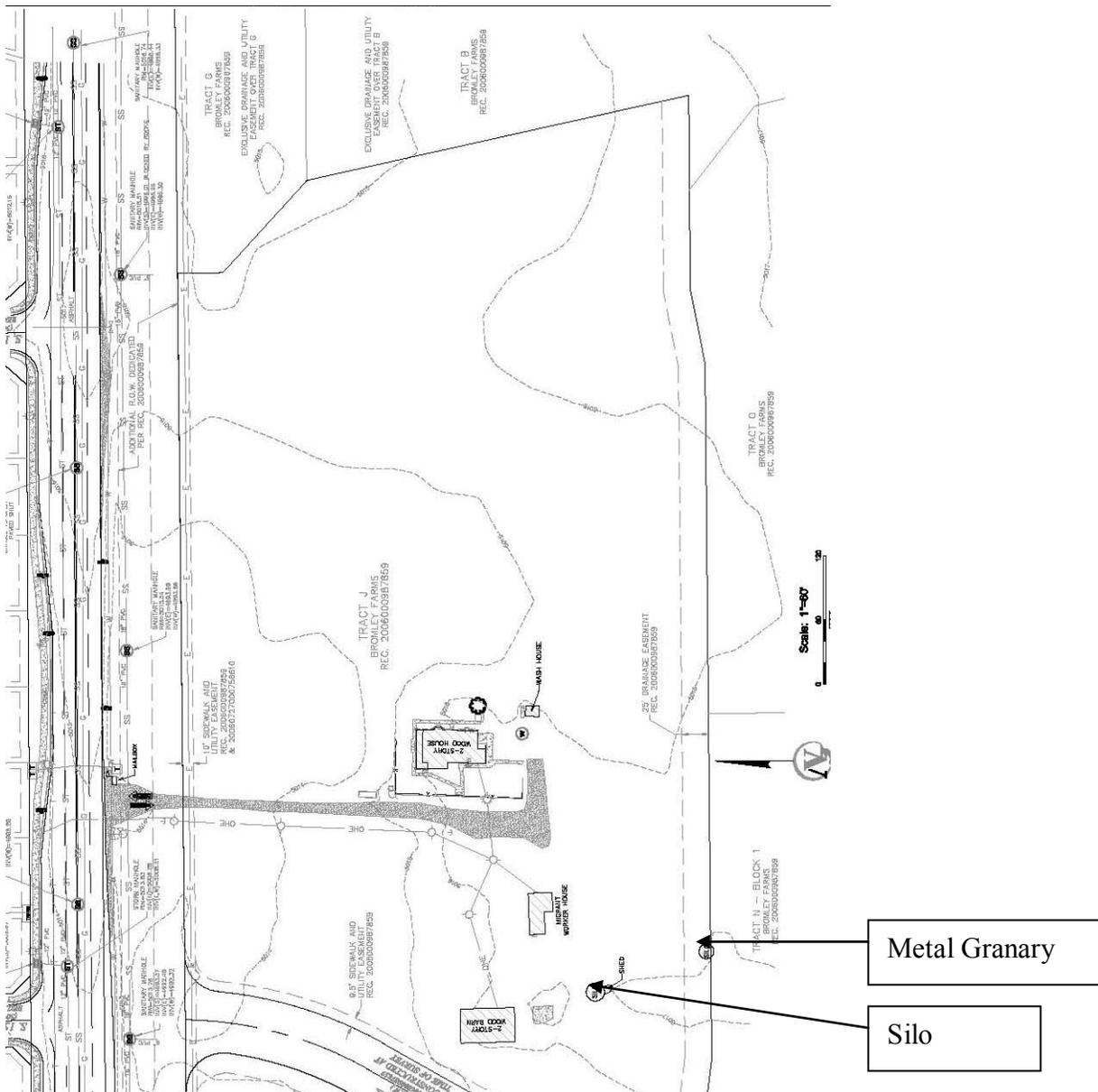
Recommended treatment: Rebuild walls per recommendations in Section 3.4.2. and Section 3.4.3.

Priority: Serious.

3.5.1 Utility Structures: Silo and Metal Granary

The Silo is located southeast of the Barn and southwest of the Migrant Worker House. It is a concrete structure reaching a height of about 37 feet. It is circular in plan with a 16 foot diameter. The Silo is visually prominent in the area due to its height and iconic agricultural profile. It has a partially collapsed wood framed conical roof and an attached wooden chute on the south side enclosing metal ladder rungs. The interior consists of an open space.

The Metal Granary is adjacent to the south property line, south and slightly east of the Silo. It is a small, prefabricated Butler building, circular in plan with a conical metal roof. It has a 17-foot diameter and its walls are approximately 8 feet tall. The interior is an open space.



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Looking northwest at Silo, 2009



Looking east at Metal Granary, 2009

3.5.2 Utility Structures: Foundations

Description

The silo foundation was not visible. However, the interior is dropped several feet relative to exterior grade. Although detritus obscures the structure underneath it is likely that the silo rests on a concrete footing, the top of which forms the bottom interior of the silo. The foundation under the chute was not visible.

The metal granary appears to rest on a severely deteriorated untreated wood footing system. The base of the granary is sheet metal similar to the rest of the structure. This is also technically part of the foundation.

Condition

There is no change in use proposed for these structures. Therefore, comprehensive analysis and upgrades are not required. However, per Section 1106, components or portions of a building that are dangerous, as defined in the IEBC, shall be required to be repaired strengthened or replaced.

The silo foundation system condition is unknown. However, there are no signs of visible distress or leaning of the structure. The base of the interior walls was moist and showed minor deterioration. There does not appear to be a drain in the silo. Being below grade it therefore traps water. Once the roof and chute are repaired there should no exterior sources of water. If the silo continues to accumulate water or further damage is seen in the below grade portion of the wall, the perimeter below grade should be excavated and waterproofed.

The chute foundation should be exposed by excavation for evaluation to determine its condition and suitability to be used as part of the restored ladder way.

The granary wood foundation is in poor condition. The sheet metal base of the granary appears to be in good condition.

Perimeter grade condition is acceptable for both structures.

Recommendations

- a. The metal granary existing foundation should be abandoned and disposed of. A new treated wood foundation on gravel should be constructed matching the base diameter of the granary to keep the metal base isolated from the soil. Priority: Minor.
- b. Clean the interior of the silo out. Monitor the silo for water intrusion and deterioration after roof and chute repairs are made. Priority: Minor.
- c. Expose the chute foundation for evaluation. The existing foundation is assumed to be adequate. Thus, no costs are included in the cost estimate. Priority: Minor.

3.5.3 Utility Structures: Structure

Description

The silo wall is 6" cast-in-place concrete with ¾" diameter hoop bars at 18" vertically. The roof framing was not accessible from the ground but appears to be 2x4 rough sawn rafters bearing on the walls and framed to each other at the center or to intermediate headers at every other rafter. Sheathing appears to be 1x boards.

The chute structure is 1x shiplap siding or 1x horizontal boards directly applied to 2x4 or 4x4 rough sawn posts.

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The metal granary is prefabricated galvanized sheet metal structure. There is no structure other than the sheet metal skin itself.

Condition

The silo wall is in good condition except for areas of cracking around the chute. These areas are subject to rapid deterioration since the reinforcing is exposed and provides a pathway for water into the wall. It is also the weakest part of the wall and the cracking may be a result of shrinkage or loading during the first years of service.

The metal granary is “well used.” It has numerous dents and gashes consistent with its long use on the property. There is minor rust in numerous locations on the interior walls and more widespread areas on the roof. The interior floor is partially covered by detritus and should be cleaned. The floor should then be carefully inspected from the interior and from underneath as deterioration is most likely here.

Recommendations

- a. Reconstruct the silo roof and chute to match the existing. Priority: Minor, but see Section 3.5.4 for discussion of potential safety hazard.
- b. Epoxy inject cracks around chute. Priority: Minor.
- c. Clean and inspect the granary floor and walls for active deterioration. Sand and re-galvanize or use zinc rich paint to repair areas where galvanizing has deteriorated. Priority: Minor.

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Silo wall cracking inside ladder-way, 2009.



Remnants of wood footing under metal granary at right, 2009.

3.5.5 Utility Structures Envelope: Roofing and Waterproofing

Roofing systems and flashing are discussed in this section.

The Silo Roof– from below. 2009 photo.



Conical Roof. The roof consists of seventeen segments of a cone. The construction could not be directly observed, but appears to be 1” x wood sheathing on 2” x 4” wood framing. The sheathing was most likely covered with wood shingles. No historic photographs were found which clearly show the Silo roof covering.

Condition: The roof framing is degraded and partially collapsed. Sheathing is missing and appears in poor condition from the ground below. It could not be determined, if any wood shingles still remain.

Recommended treatment: Rebuild the roof and restore it to its historic configuration.

Priority: Critical.

Metal Granary Roof.



Description: The prefabricated sheet metal roof and projecting vent are part of the Metal Granary structure.

Condition: The roof is moderately rusted. The conical roof vent appears to be in good condition.

Recommended treatment: Apply rust inhibitor, which will not adversely affect appearance, to metal roof.

Priority: Minor.

3.5.6 Utility Structures Openings: Windows, Doors, Vents

Silo door opening to shed. 2009 photo.



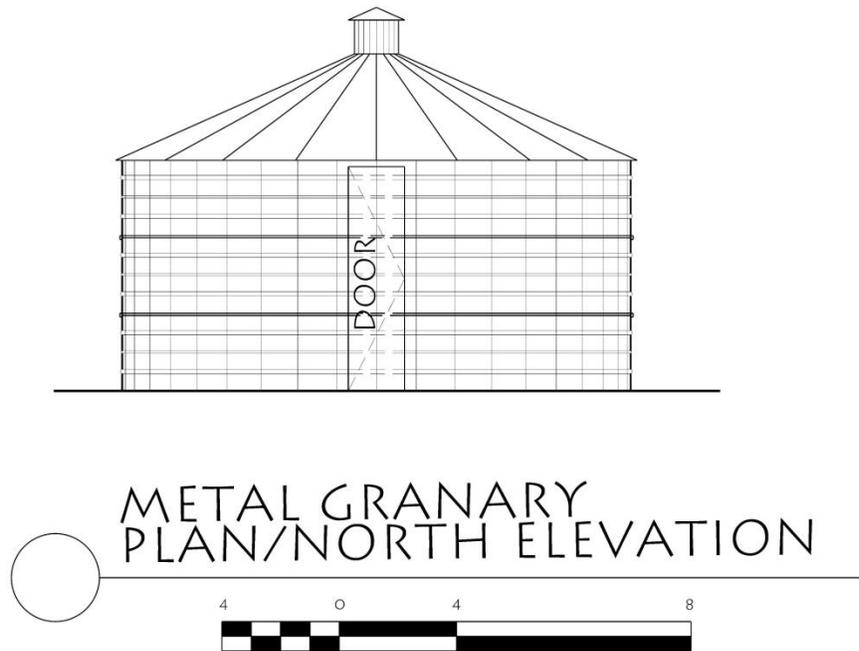
Description: This door opening is located on the west side of the utility shed attached to the south side of the Silo. The door opening is approximately 4'-8" wide by 6'-2" high. The historic wood plank door has been removed and is lying on the ground just west of the door opening.

Condition: The door is severely weathered and may be damaged.

Recommended treatment: Preserve the historic appearance and material of the door to the greatest extent possible, while restoring the door's functionality. This may require that excessively deteriorated parts of the door and frame be consolidated, rebuilt, or replaced. Install new historically accurate door hardware. Sand and prep the rehabilitated door and frame. Repaint with two coats high quality acrylic latex paint using historically accurate color(s).

Priority: Serious.

Metal Granary door.



Description: This door opening is located on the north side of the Metal Granary. The prefabricated, sheet metal door is approximately 1'-11" wide by 7'-8" high. Inside the door are some inscriptions written in pencil from the 1930's.

Condition: The door is in good condition for its age.

Recommended treatment: Investigate methods for preserving writing inside door. Determine if writing should be part of the interpretation of the farm.

Priority: Minor.

3.5.7 Utility Structures Interior finishes, Interior doors, and special interior features

Wall, ceiling, and floor finishes. Built-ins, window-coverings, and special features. Interior doors and trim.

Interior of Silo. 2009 photo.



Walls: Unfinished.
Ceiling: Unfinished.
Floor: Dirt.
Base: None.
Interior Doors: None.
Window-coverings: None.
Special features, historic: None.
Special features, non-historic: None.

Condition: Floor is covered with debris and animal droppings.

Recommended treatment: Clean and disinfect floor of Silo.

Priority: Minor.

Interior of Metal Granary.



Walls: Unfinished.

Ceiling: Unfinished.

Floor: Dirt.

Base: None.

Interior Doors: None.

Window-coverings: None.

Special features, historic: None.

Special features, non-historic: None.

Condition: Floor is covered with debris and animal droppings.

Recommended treatment: Place on new foundation per recommendations in Section 3.5.2, Foundation and Section 3.5.3, Structure.

Priority: Minor.

Section 4: Cultural Landscape Assessment

4.1.1 Purpose:

The purpose of this Cultural Landscape Assessment is to research and document, to the extent possible, the site history and existing conditions. Through analysis and evaluation of these findings the significance of landscape characteristics and features will be identified to determine the extent of the restoration, rehabilitation, reconstruction, and preservation that may take place. The Bromley-Hishinuma farm is part of a dying legacy in the American West and embodies a rich cultural history. Recommendations for treatments of specific site features are contained in Section 3.0.2, Site Features.

4.1.2 Limitations of the Work:

The limitations of this work are due to the existing conditions of the site. In the course of the site's 126 year history the farm has expanded, contracted, changed ownership/management, and has been cultivated with various degrees of intensity. Many of the site elements that are visible in site photos and oral history are no longer in place and in fact no surface evidence of them remains. Identification and location of these missing site elements relies on historic image, photos and oral history.

4.1.3 Process for Conducting the Work and Techniques to be used:

The process of investigating the history and significance of this site will be multi-faceted. There are photographs of the farm provided by relatives of former owners and managers of the farm. The historic investigation into the Bromley-Hishinuma farm will rely on interpretation of photographs, interviews of the various relatives, documentation previously gathered for the National Register Nomination, additional research of historic documents, and on-site investigation of existing conditions. In addition, an archeologist has been retained to prepare an archaeological assessment, and a new site improvement and topographic survey has been developed.

4.2 Description of Study Boundaries

The Bromley-Hishinuma farm is located within the northwest quarter of section 17, township 1 south, range 66 west of the 6th principal meridian, in the City of Brighton, Adams County, state of Colorado. Brighton, Colorado is located 19 miles northeast of Denver, Colorado and is considered to be a part of the Denver metropolitan area. The City of Brighton also falls within the Front Range corridor in the state of Colorado which is defined as a region that extends from Cheyenne, Wyoming south to Pueblo, Colorado. The Front Range's east and west



boundaries are defined by the foothills of the Rocky Mountains and the western edge of the Great Plains. The vast majority of the population of Colorado lives within the Front Range urban corridor. The property owned by the City of Brighton, and the subject of this report, comprises 9.6 acres with one access point from Bromley Lane on the north. The site is currently not defined by any type of man made or natural feature with the exception of Bromley Lane on the north side of the site. Open fields extend from the east, west and south sides of the site. However proposed uses for these adjacencies have been developed in the Hishinuma Farms PUD. The PUD document proposes single family residential development along the southern property line, and an extension of South 15th Avenue and commercial development to the west of the property. The land east of the property is owned by the City of Brighton and will remain open space.

4.3 Existing Conditions

A gravel drive accesses the farm building complex from Bromley Lane on the north side of the site. The main house is located approximately 290' south of Bromley Lane on the east side of the entry drive. A small wire fence encloses a yard on the north and east sides of the house. The barn, migrant worker house, silo and metal granary are located west and south west of the entry drive. There is a wash house located south of the main house. These structures define the farm complex.

The land around the buildings is largely devoid of shrubs and trees. There is evidence of large woody shrubs and trees around the main house and a few rotted stumps. The species of these shrubs and trees cannot be verified on the site. One large shrub to the east of the main house could possibly be a variety of serviceberry (*Amelanchier*). Cottonwood trees once lined the drive up to the house and were also planted around the house, farm complex, and front yard. There is no evidence remaining on the site as to where these trees were located. All of the stumps have since been removed or rotted away since the trees were cut down decades ago. The land in and around the site has very little desirable grass species. The dominant ground cover at present is Field Bindweed (*Convolvulus arvensis*). This is a very difficult weed to eradicate due to its extensive root system and long term viable seed source. Other weed species on the site include Foxtail Barley (*Hordeum jubatum*), Russian Thistle (*Salsola kali*), and Kochia weed. The agricultural fields that were once part of the property and surrounded the property are no longer under cultivation. However, the soils on site are still in prime condition and offer several options for future land use.

2009 Photo



The site generally drains from the south to the north with slopes less than 1%. There are no areas of concentrated drainage on the site at this time. The flatness of the site plus the proximity of the Fulton Ditch would have, in the past, made this area appropriate for agriculture use. The flattest area of the site occurs in the area defined by the existing farm structures and extending south to the south property line. In order to protect the existing as well as any future structures in this area as well as provide for usable outdoor spaces, grading and drainage will need to be carefully evaluated. The flatness of this area and significant distance from any existing storm sewer system provides an opportunity to investigate and implement more sustainable surface drainage solutions including irrigation augmentation.

There are overhead electrical poles that run along the west side of the entry drive and then come to a dividing point approximately 45' north-east of the migrant worker house. At this point the overhead electrical splits off to the various structures on the site. There is also a 3" water pipe that travels above ground in areas along the wire fence around the main house. These are the only two utilities visible above ground. No other major utilities run underground around the farm complex. The main house and migrant labor cabin on the property received plumbing sometime between 1936 and 1946. It has been speculated that there was some type of septic or leach field system in place to deal with waste water from the property. Through site visits and survey, no evidence of lids to a septic system have been located. Phone calls were made (05.28.2009 & 06.08.2009) to the Environmental Health Department, within the Tri-County Health Department Adams County Field Office, to determine if they had record of a septic system. They do not have any record of a septic system being installed; however, the department did not start keeping records of the septic permits until sometime in the 1940's. The complex received its drinking water from an artesian well system. This well has since been capped and is no



longer in use. The property had Fulton Ditch water rights to irrigate the property when farming operations were still being conducted. The farm no longer has any water shares. There are utilities that travel east and west in a 30' utility easement parallel to the south side of Bromley Lane. Depending on future re-use of the site, the farm complex will likely need to connect into these utilities for potable water, electricity, and sanitary sewer.

2009 Photo

The main drive into the property from the north, off of Bromley Lane, has always been the access point to the site. The drive is a mixture of loose gravel and soil. There is no evidence that the drive was ever concrete or any other paving material. At one time there were concrete walks that connected the various structures within the farm complex. These concrete walks still exist around the main house forming small planting areas between the back of the walk and side of the house. The walks are in poor condition with uneven settling of the slabs and significant cracking. There is currently no evidence remaining of the other concrete walks. With the exception of the main drive and concrete walks around the house there is little evidence of historic circulation patterns around the property.

Bromley Farm
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Existing Drainage Patterns Bromley-Hishinuma Farm

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Tree canopy coverage Bromley-Hishinuma Farm as interpreted from an aerial photograph dated 1937.



Tree canopy coverage Bromley-Hishinuma as interpreted from an aerial photograph dated 1950.

The site is set at a visually prominent high point along Bromley Lane. With the absence of tall trees on the site and the spacing between farm structures, there are significant views to the southwest and west of the Rocky Mountains and foothills. To the far south single family development can be seen, and to the east there is open space and some farm property. Directly to the north of the site single family development can be seen. (2009 photo, right)



Over the past decade, the land surrounding the property has gone through change due to the rapid development in the City of Brighton. What were once agricultural fields have now been developed into residential and commercial development. To the north and far south of the property are single family housing developments. To the far west of the property is a large commercial property. In 2003 the City of Brighton City Council approved the Hishinuma Farms PUD. This is significant as the PUD dictates land use around the current historic property. Proposed uses include single family residential development along the southern property line, with open space to remain along the eastern property line. A new road will run along the western property line that will have commercial development to the west.

The property's close proximity to the historic Fulton Ditch is also significant. At one point the property had 40 shares of water from the ditch to irrigate the fields. The property currently has no shares and depending on future use will need to acquire water shares for future irrigation.

The landscape of the Bromley-Hishinuma farm is in poor condition.

4.3.2 Analysis and Evaluation

The Bromley-Hishinuma farm had several historic landscape features and elements of significance that no longer exist. These features and elements were primarily discovered through historic photographs and oral history. Efforts have been made to corroborate the oral history with the historic photographs and verify the existence and location of the various historic landscape features and elements.



As evident in historic photographs, cottonwood trees lined the entry drive and were scattered around the property primarily around the main house and north side of the site. These trees are significant to visual history as they provided a setting to the property. They also had a practical purpose of shading the farm complex from the strong sun of the high plains. They were removed sometime in the 1950s. Currently, due to the lack of tall trees there are vistas to the west and southwest of the mountains. Some of the trees should be replanted. Views should be preserved as possible.

A white wood fence also surrounded the main house, front yard and east formal garden as evident in photographs and through oral history. These fences served a practical purpose of keeping livestock out of these areas, as well as adding a decorative element to the property. The fences were removed sometime after 1950 and should be restored.

Historic Photo, date unknown, prior to 1950

Bromley Farm
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Any future revegetation or farming type programs would require extensive initial herbicide applications to eradicate the weed species, especially the bindweed. It is likely that several herbicide applications would have to be made over a two-year period in order to successfully control the bindweed. Two herbicide applications should be applied several months apart within one year at appropriate times without any type of soil tillage. During the second year it may be advisable to either plow or use a chisel sweep to undercut the bindweed. The tillage operation would be used to encourage growth of more bindweed followed by additional herbicide applications as needed.



2009 Photo

Leaving the soil exposed could result in wind erosion and to a lesser degree water erosion. One option to overcome erosion may be to plant a sterile triticale hybrid after soil tillage in an attempt to chock out the bindweed. After the triticale matures, herbicide could be applied again if needed to control the bindweed. The stalks of the triticale could be left in place until a decision is made on a more permanent grass cover or annual crops. At that time native grasses could be interseeded into the stubble or turned under with an additional tillage operation. The triticale stubble would provide valuable organic matter to the soil and help trap snow cover to build up subsoil moisture.

2009 Photo below





Through oral history it has been learned there was a formal entertaining garden to the east of the main house. It is not known what species or varieties of plants were in this garden. There are no remnants of this vegetation currently on site. It has historic significance as the Bromley Family was socially prominent in the Brighton / Denver area, and this garden space was used for formal entertaining during that period. It was removed sometime after 1930 and it should be restored.

There was a traditional turf lawn on the north side of the main house that went all the way to Bromley Lane. The turf existed for a good portion of the period of significance, however exact years and length are not known. Emmet Bromley migrated from the east where turf lawns were common among households. This may have been planted to replicate homes on the east coast.

Historic Photo, date unknown, prior to 1950

The farm was serviced by an artesian well for drinking water. Associated with this well was a windmill, evident in photographs, to pump the water. The well is currently capped on the site and there is no evidence of a windmill. The exact location of the windmill is not known and its dates are unknown. However, based upon photographs and the location of the well cap, it can be surmised that the windmill was most likely south of the main house, between the well and the barn. The windmill and well have historic significance as they were the primary source of potable water for the farm during its historic periods. They should be restored. When the property was under active cultivation there were several shares of water rights from the Fulton Ditch to irrigate the fields. These shares have been sold and there is no active irrigation system on the property.



Depending on future re-use of the site, water shares will need to be secured by the City of Brighton. An alternative option would be to connect the irrigation into the city water system. A combination of water share purchasing and a tap into the city water system may present the best solution for future re-use of the site.

When the farm was settled the land in and around the farm was primarily native prairie grasses. These grasses are no longer evident on the site. This native grass prairie is important to the historic ecology of the area. This type of short grass prairie is disappearing in the greater regional landscape context.

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Historic Photos, ca. 1950. Windmill and gas pump were removed at an unknown date. Note gas pump in picture. Environmental assessment recommendations (see Section 7) to clean up gasoline remnants throughout site have been implemented.





2009 Photo

Section 5: Archaeology Report

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INTRODUCTION/METHODS

RMC Consultants, Inc. (RMC) of Lakewood, Colorado was contracted by Avenue L Architects LLC to conduct an archaeological assessment of the Bromley/Koizuma-Hishinuma Farm (Site 5AM1841) as part of Design Services for the Bromley Farm Master Plan Project, RFP #08-044, Brighton, Colorado. This project is conducted under the Colorado Historical Society (CHS), State Historical Fund (SHF) Project No. 2008-02-019. This report is SHF Deliverable No. 19; the Historic Archaeological Component Forms are SHF Deliverable No. 8.

The work consisted of three primary tasks:

Task I included pre-field analysis and evaluation of existing historic site data including site history, aerials, photographs, maps, etc. This analysis focused on determining the archaeological sensitivity of the site to focus fieldwork efforts in Task II. Archaeological remains are most likely to occur around and inside of existing structures, at former structure locations, and in work areas. They are also likely in subsurface deposits in areas such as formal and informal dumps, in subsurface deposits of outhouses, etc. Those types of sensitivity areas were identified and marked on the site map prior to the Task II fieldwork. Historic and recent photos and aerials of the site were examined, and results of the oral interviews with descendents of the farm families were reviewed.

Task II included onsite archaeological pedestrian survey of the entire 9.6 acre area now owned by the city of Brighton. The project fieldwork was conducted May 22, 2009. Marilyn Martorano served as Principal Investigator and David Killam as Project Director. The site was intensively inventoried for cultural resources by walking 20 m parallel transects east to west across the property.

During fieldwork, archaeological remains (artifacts) and any concentrations of materials were flagged and described, and their locations recorded. Detailed descriptions and photographs of potentially diagnostic artifacts were completed in the field. A CHS, Office of Archaeology and Historic Preservation (OAHP) Archaeological Component Form was also completed (on file at Colorado Historical Society). A few selected artifacts were collected due to their vulnerability to unauthorized collection and/or disturbance (see Archaeological Component Form). These artifacts will be submitted to the City of Brighton for potential future interpretive purposes.

Task III consisted of the preparation of this Archaeological Assessment Report. It describes the results of the pre-field research and archaeological survey, evaluates the significance of archaeological remains, and provides recommendations for dealing with archaeological materials during future work at the site. In addition to the report, an archaeological site sensitivity map was prepared. This map shows areas of high, medium and low sensitivity.

HISTORIC CONTEXT

The overall history of the site has been summarized in the National Register of Historic Places (NRHP) Registration Form prepared by Patricia Reither on February 23, 2006.

The Emmet Ayers Bromley family owned and occupied the site from 1883 to 1922. The public records of the property are unclear about the ownership of the property between 1926 and 1946. According to a memoir by Frank Roberts (2007), the property was purchased in 1935 by I.B. James, and William O. Roberts managed the property from 1936 until 1946. The farm was then sold to the Koizuma-Hishinuma families. The Koizumas and the Hishinumas continued to farm the land until 2006 (Reither 2006). The historic period of significance defined in the NRHP form is from 1883-1957.

RESULTS

Artifacts observed during the survey were located primarily around existing structures/features. Few artifacts, except for very small fragments, were noted between structures and most artifacts were located within approximately 20-40 feet of the structures. Details of artifacts associated with each feature are included on the Archaeological Component form. In general, the artifacts are mainly fragmented and most of the project area appears to have been disturbed in the past. Significant recent disturbance is evident by comparing aerial photos from 2002 (Google 2009) and from MapMart (2004). The areas immediately surrounding the structures appear to retain the most integrity, but even these areas contain a mixture of modern and historic trash, and many of the artifacts are highly fragmented (Figures 1-14).

Most of the historic era artifacts appear to be a mixture of domestic and farm-related artifacts, as expected. The only items that can be definitely related to the earliest occupation of the site by the Bromley family are purple glass fragments. Those artifacts are very small pieces that cannot be identified as to type or function. There is also modern trash on the site, including plastic bottles, alcoholic beverage containers, etc.

The Texas Centennial Exposition 1836-1936 spoon (FS-2) dates to 1936 (Figure 4). The Texas Centennial Exposition was a World's Fair held at Fair Park in Dallas, Texas to celebrate the 100th anniversary of Texas's independence from Mexico in 1836. The fair ran from June 6, 1936 to November 29, 1936 and was attended by over 10 million visitors (http://en.wikipedia.org/wiki/Texas_Centennial_Exposition). Perhaps one of the farm family members or relatives/friends attended the fair. The Owens-Illinois clear glass bottle fragment (Figure 3) can be dated from ca. 1929-1957. This item and the spoon were found adjacent to the metal granary.

FS-4 and 5 are Japanese decorated plate fragments (Figures 5, 6 and 11) and appear to date to the Koizuma-Hishinuma post-WWII occupation. The "MADE IN JAPAN" trademark on FS-4 dates to ca. post-1941 (http://www.gotheborg.org/marks/index_jap_marks.htm). The mark "...PAN" on FS-5 is also suggestive of a "JAPAN" or "MADE IN JAPAN" trademark and can be roughly date to post-1921, and may date to the same time period as FS-4.

The Homer Laughlin China (Eggshell Nautilus, Nassau pattern) plate found in the milk trough dates from the period 1937-1950s (Figure 12). This pattern of white roses and green leaves is Eggshell Nautilus, Nassau made by Homer Laughlin China, ca. 1937-

1950s; made for and sold by Montgomery Ward <http://www.robbinsnest.com/eggshell-nautilus/nassau.html>

The date of the Godmother charm (FS-1) is not known, and it could be related to more recent use of the site (Figure 14). It was found behind the migrant worker's house. The date of FS-3, the metal seed plate, is not known but also may date to one of the later occupations of the site (Figures 7-8). The Fiestaware plates found in the milk trough (Figure 10) likely date to ca. 1936-1951 or later (<http://www.madeintheusadinnerware.com/colors.htm>).

Note: no formal trash dumps associated with any of the known historic occupations, ca. 1883-1957, were observed. Based on oral interviews (Lingo 2009) with living decedents of the farm family members, the domestic trash was taken off-site and dumped to the west of the current property during the Bromley era, and trash was burned in the concrete silo during the Hishinuma era. During the current fieldwork, some of the artifacts located in areas surrounding the silo exhibit evidence of burning and several artifacts appear to date to this later time period.

The NRHP Registration Form for the site (Reither 2006), mentions that "To the west of the worker house, on the ground surface, are scattered bricks and wood boards believed by the previous owner to have been historic outhouse." This area was examined during the 2009 pedestrian survey and no evidence of the bricks or boards were identified. It is likely that they were moved or removed when the site was disturbed sometime between 2002 and 2004. It is also likely that the main house had an outhouse during early years prior to indoor plumbing. The locations of former outhouses associated with the main house are not known, and no physical surface evidence of former outhouses (construction materials or depressions) was observed during the 2009 pedestrian survey.



Figure 1. Artifacts and modern trash south of main house.



Figure 2. Artifacts located adjacent to metal granary. The flag marks the location of the spoon (FS-2).



Figure 3. Clear glass bottle bottom with Owens-Illinois trademark (ca. 1929-1957) found adjacent to the metal granary.



Figure 4. Spoon (FS-2) embossed with "Texas Centennial Exposition 1836-1936" found adjacent to the northeast corner of metal granary.



Figure 5. Japanese design on plate fragments (FS-4) found north of the concrete silo.



Figure 6. Back of plate fragments (FS-4) showing “MADE IN JAPAN” trademark (ca. post-1941), http://www.gotheborg.org/marks/index_jap_marks.htm



Figure 7. Front and back view of metal seed plate (FS-3) “Planet Jr. USA” found south of concrete silo.



Figure 8. Close-up view of table for seed plates (FS-3)



Figure 9. Brick, miscellaneous wood and metal artifacts located west of the milk trough.



Figure 10. Fiestaware and other artifacts located inside of the milk trough.



Figure 11. Plate (FS-5) with Japanese design found inside of milk trough (on left). Trademark with "...PAN" on back (on right).



Figure 12. Plate found in milk trough. Pattern is Eggshell Nautilus, Nassau made by Homer Laughlin China, ca. 1937-1950s; made for and sold by Montgomery Ward (<http://www.robbsnest.com/eggshell-nautilus/nassau.html>).



Figure 13. Trash and artifacts south of migrant worker's house.



Figure 14. Godmother charm, front and back. Found behind the migrant worker's house.

Description of artifacts observed during 5/22/2009 pedestrian survey by RMC Consultants, Inc.:

Main House area (exterior) – white porcelain fragment, 1 piece of purple bottle glass, metal bolts, metal screws, a metal spring, a D alkaline battery, concrete fragments, clear glass bottle fragments, fragments of a clay flower pot, red brick with no markings, white brick with no markings, 1 square nail (visible under the porch floor boards), wire nails (numerous), 2 red bricks supporting the porch beams, an electric fence post, galvanized stove pipe, metal window screening, plastic bucket and bottles (modern), 1988 license plate, clear window glass, metal mower tooth (2), rubber hose, a utility meter plate, metal oven rack, plexi-glass fragment, metal locks (2), pencil, saw blade, aluminum rain gutter fragment, 1994 license plate, small fragment of floral pattern transferware, metal lamp socket.

Concrete trough north of Main House – Interior: hub-cap, 1 red brick (no markings), iron bed frame corner fragment, aluminum soda can, plastic bottle, broom fragment, metal machine tread fragment, rusted fuel can, concrete fragments, metal pipe with rubberized exterior, iron drain cover, corrugated fiber glass fragment, clear glass fragment with screw-on lid, miscellaneous metal fragments, metal rivet.

Wash House (exterior) – wire nails, metal bolt, white porcelain fragments, clear glass bottle fragments, car battery cable, car plastic lens fragment, iron pipe fragment, rubber-coated aluminum car trim fragment, light green glass bottle bottom, asphalt roofing or

siding fragment, 1 fragment of purple glass, iron bed rail, yellow brick with no markings, coal fragments, red brick fragment, clear window glass fragments.

Migrant Worker House (exterior) – light green glass bottle fragment, crown cap, wire nails (ca. 40-50), Budlight bottle (smashed), rock, tire iron, metal file, 2 gas caps, oil filter, galvanized tin, 2 red bricks with no marks, 1 concrete brick, metal fence posts (2), metal chain, clear window glass fragments, spark plugs, metal bolts, 4 tractor tires, wooden pallet, fuel pump, radiator hoses, enamel canning pot, metal spring, AAA battery, CO2 cartridge from pellet gun, shell fragments, small porcelain fragments (2 with painted grape and apple design), small plastic beads, metal “Godmother” charm (FS-1) [collected], rebar fragment, glass canning jar lid fragment. Note: there is a small concentration of artifacts (ca. 1 m x 1 m) located approximately 3 m south of the house. The concentration contained the charm, porcelain, beads, and shell fragments. The area just to the south of the concentration appears to have been recently disturbed (probably by the Phase 1 environmental work that occurred in this area).

Metal Granary (Butler Building) (exterior) – 1 red brick fragment with no marking, metal refrigerator or stove handle, wire nails, bolts, strapping, milled wood pieces with wire nails, nuts, galvanized stove pipe, clear window and bottle glass fragments, clear glass jug base with Owens-Illinois trademark (ca. 1929-1957), plastic fragments, square nails (4), rubber hose, rolled roofing, metal fitting/braces, metal track chain, Budweiser bottle (modern), unidentified metal fragments, metal spring, unidentified bone fragment (cut), spoon (FS-2) [collected] from “Texas Centennial Exposition 1836-1936”, clear glass Pepsi bottle fragment.

Silo (exterior) - porcelain toilet fragments, white and brown crockery fragments, “Planet Jr. USA” metal “Table for seed plates, Nos. 300-155-160” (FS-3) [collected], red bricks with no marks (4), milled wood with wire nails, sewer pipe fragments, clay flower pot fragments, cold cream jar fragments, aluminum foil, light bulb base, clear glass screw-on lid jar fragments, porcelain plate fragments with Japanese design “MADE IN JAPAN” trademark (FS-4) [collected], aluminum cans, plastic bottles, modern gas cap, asphalt fragments, concrete fragments, clear glass fragments, wire nails, metal pipe fragments, galvanized roofing nails, wooden pallet with wire nails, door (to silo) made of milled wood with wire nails, small blue glass fragments, 1 piece of purple bottle glass, single-edge razor blade in burned matrix, clear glass bottle fragment with plastic screw-on lid, burned globs of unidentified material.

Milk House remains and trough - milled wood 1” x 6” with wire nails, concrete block fragments, galvanized metal fragments, concrete fragments, aluminum cans, various metal fragments, rubber hose, pile of red brick with no marks (ca. 25), metal wire, bolts, nuts, metal clamp, spark plugs, Dr. Pepper green glass fragments, aerosol starter fluid spray can, cut wood (cottonwood?), wire nails (ca. 50), fence staples, hand painted porcelain/china with painted “...PAN” Trademark (2 pieces) (FS-5) [collected], plate (2 pieces), “Nautilus Made in USA H51 N8”, 3 items of broken Fiestaware (2 light green, 1 orange plate), antifreeze can.

Barn (exterior) – milled wood fragments, rubber pipe fragments, galvanized metal fragments, wire nails, telephone pole fragment, wooden pallet, clear window glass fragment, large wooden beam with large metal spikes, red brick fragments, porcelain insulator fragments, metal fragments (unidentified), metal screw, white milk glass bowl fragment, green milk glass cup fragments, clear bottle glass fragments.

ARCHAEOLOGICAL SENSITIVITY

Even though historic artifacts were not as common on the site as expected for such a long historic occupation, based on the archaeological survey, the site contains several areas of archaeological sensitivity (see Archaeological Sensitivity Map). Those areas considered *High Archaeological Sensitivity* include the following structures and areas surrounding them: the main house (including the wash house and cistern), migrant worker's house, silo, barn, milk trough remains, and the metal granary. The areas of sensitivity include the exterior surrounding these structures that are likely to contain buried archaeological remains or materials where outside activities took place. Also, the locations of outhouses are also likely to contain buried archaeological remains, should they be identified in the future. Artifacts are also likely on the inside of the structures (under floorboards, in walls, on the inside of the silo where trash may have been burned, etc.).

Three areas are considered *Medium Archaeological Sensitivity* including the locations of two previous structures identified from historic photos and oral interviews: a possible brick structure (garage?) located south of the main house, a possible structure (tool shed/garage?) located north of the migrant worker house, and also the location of the possible garden located south of the main house. See end of this section for copies of historic photos in the possession of Pat Reither showing some of the possible former structures. It also includes a historic photo of a metal granary that may be the same metal granary that exists on the site today or is possibly a similar structure that was located in another location on the farm.

Other areas of the site not included in these two sensitivity zones are considered low sensitivity for archaeological remains based on: 1) the lack of artifacts identified during the survey and the probable lack of intensive historic activities taking place in these locations, and 2) based on historic photos and oral history information.

MANAGEMENT SUMMARY/RECOMMENDATIONS

The archaeological assessment of the Bromley/Koizuma-Hishinuma Farm property currently owned by the City of Brighton included a pedestrian archaeological survey of the property on May 22, 2009, recordation of surface-visible artifacts, completion of an OAHP Archaeological Component Form, and creation of an Archaeological Sensitivity Map.

The following recommendations are made based on the results of this project:

- It is recommended that the Archaeological Site Sensitivity Map be utilized during future planning for the site. If any of the areas identified as sensitive will be disturbed, at a minimum, archaeological monitoring by a professional archaeologist is recommended during any ground disturbing activities or if tasks are planned such as removal of interior floorboards, foundations are to be exposed or treated. If archaeological deposits or features are discovered during monitoring, work should be temporarily halted while the artifacts/features can be recorded and evaluated by a professional archaeologist. If large areas that are considered sensitive will be disturbed, archaeological site testing or non-destructive investigations such as use of ground penetrating radar (GPR) are recommended prior to disturbance. These techniques can assist in identifying significant archaeological deposits or features prior to disturbance.
- If additional diagnostic artifacts, such as those collected during this project, are discovered on the site, it is recommended that they be collected for potential future interpretive purposes.

REFERENCES

Reither, Patricia

2007 *National Register of Historic Places Registration Form for 5AM1841.*
Submitted February 23, 2007.

Lingo, Kathy (recorder)

2009 Meeting Notes, May 14, 2009. Bromley, Hishinuma and Roberts family representatives, City of Brighton, Avenue L. Architects and DHM Design. Notes on file at Avenue L Architects, Denver, CO.

Roberts, Frank E.

2007 Bromley Lane Farm, Historical Perspective, From Memory as Experienced from Living on the Farm, 1936-1946. Ms. On file at City of Brighton.

Bromley Lane

Proposed Road
(S. 15th Ave.)

TRACT G
BROMLEY FARMS
REC. 2006000987859

TRACT B
BROMLEY FARMS
REC. 2006000987859

TRACT J
BROMLEY FARMS
REC. 2006000987859

TRACT O
BROMLEY FARMS
REC. 2006000987859

TRACT N - BLOCK 1
BROMLEY FARMS
REC. 2006000987859

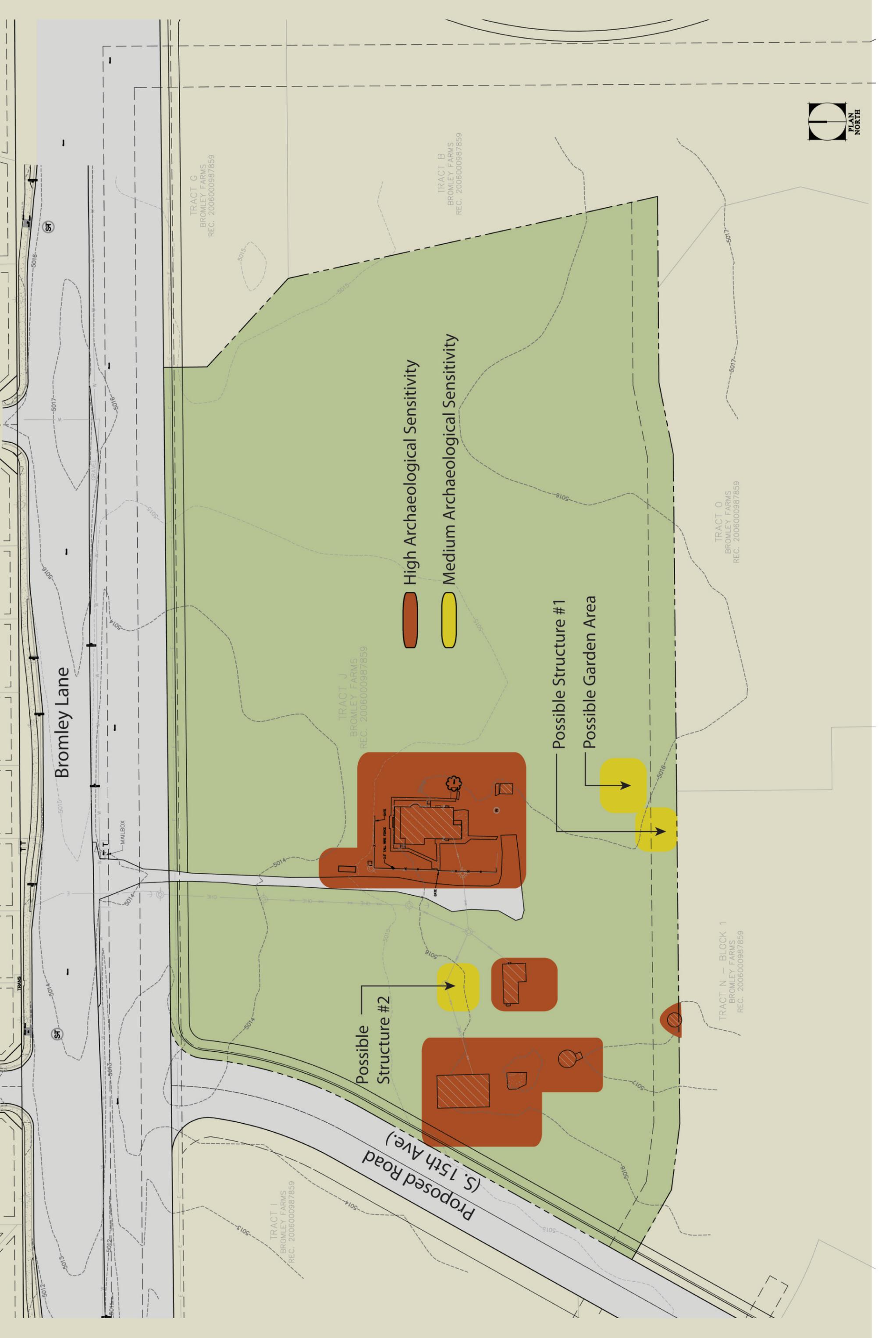
TRACT I
BROMLEY FARMS
REC. 2006000987859

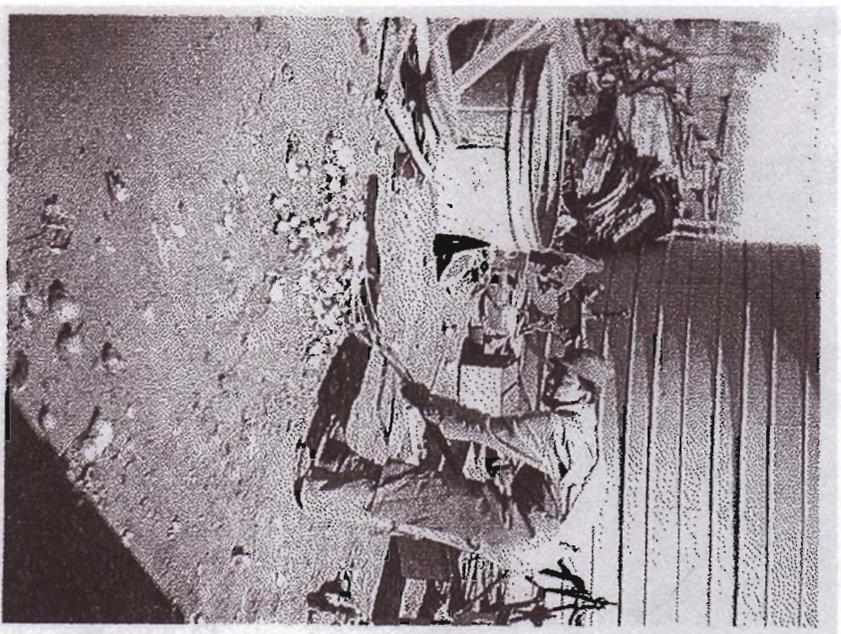
High Archaeological Sensitivity
Medium Archaeological Sensitivity

Possible Structure #2

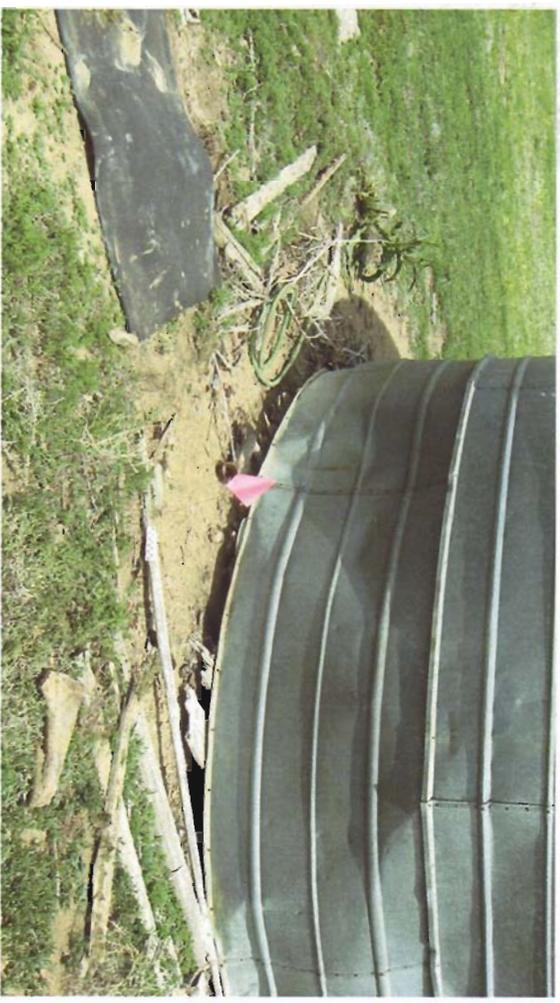
Possible Structure #1

Possible Garden Area





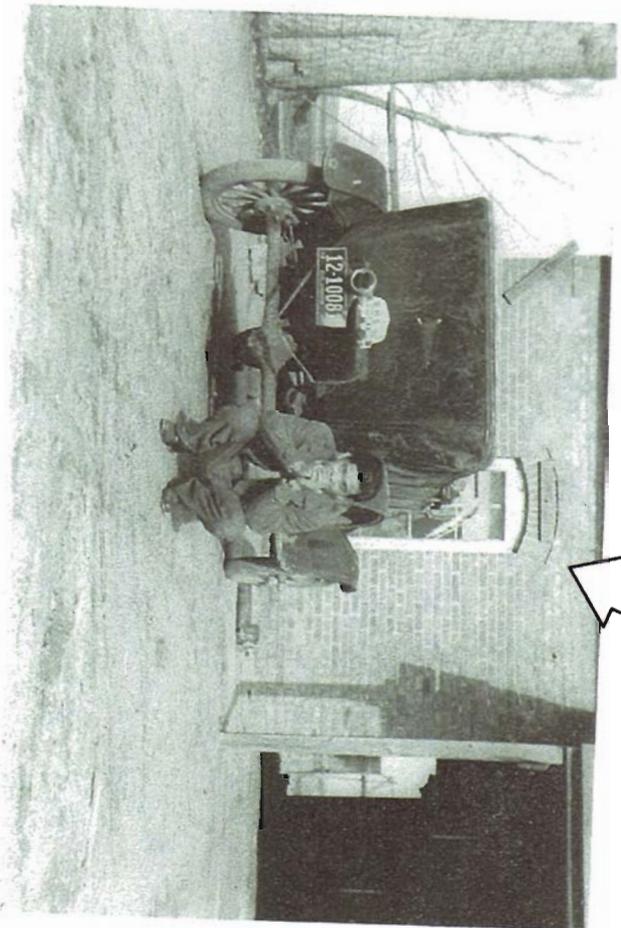
Site 5AM1841 historic photo of metal granary; possibly same structure located onsite in 2009.

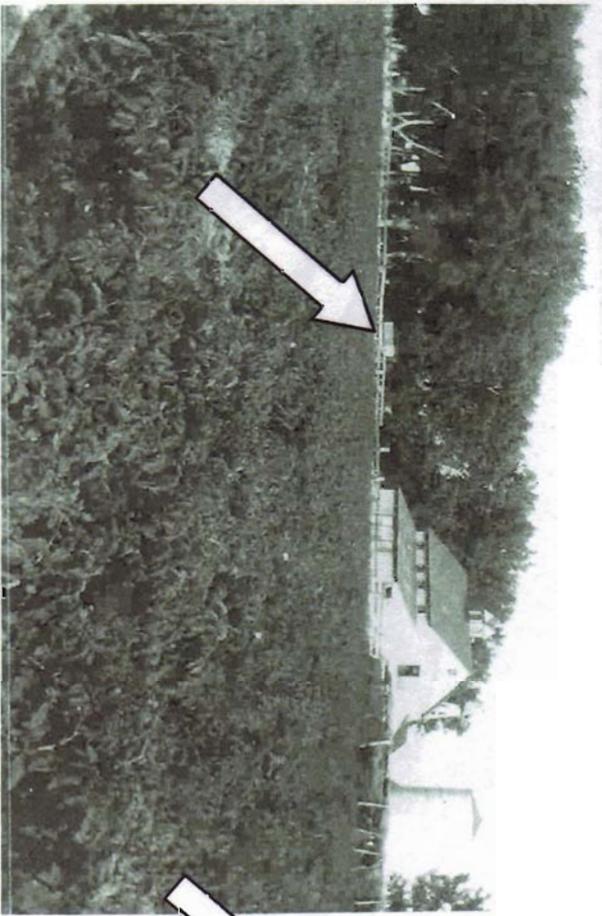


Site 5AM1841 photo of metal Butler building taken 5/22/2009

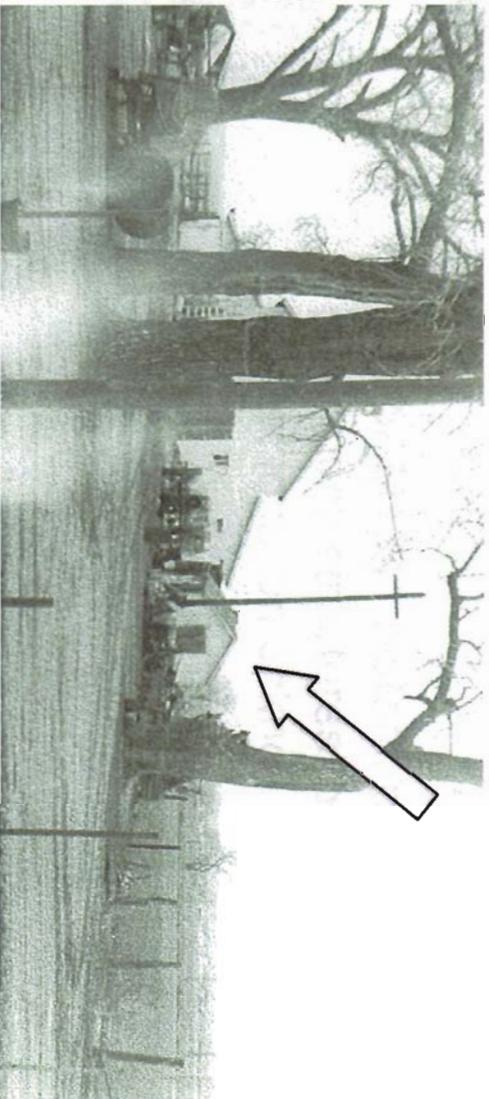


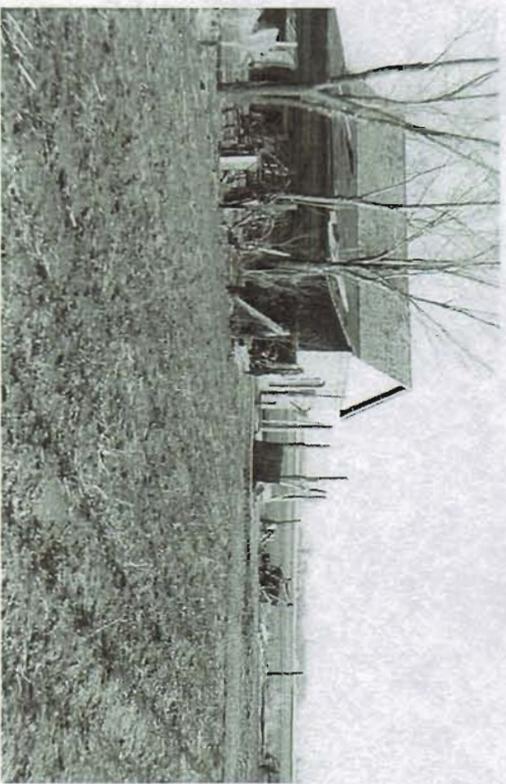
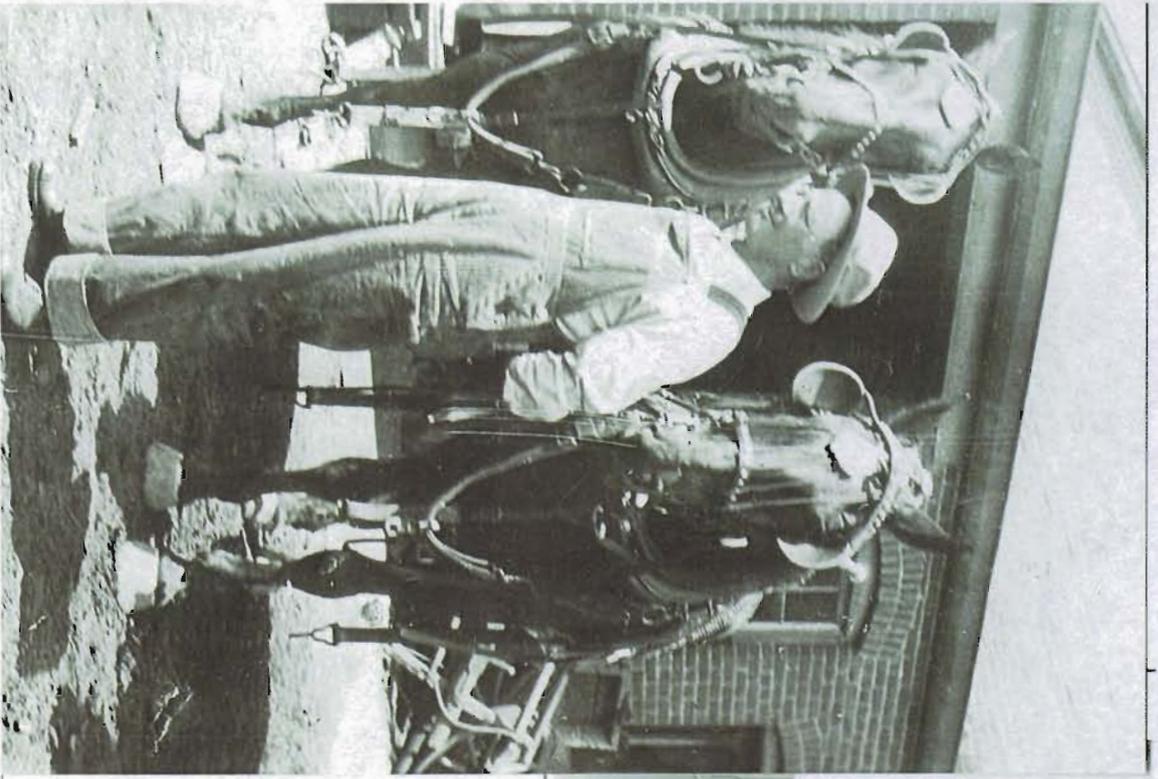
Site 5AM1841 Historic photos
of former brick structure
(garage) located south of main
house.





Site 5AM1841 historic photos of former structure (shed?) located east of barn and north of migrant worker's house





Site 5AM1841 historic photos of other brick structures formerly onsite; location unknown.

Section 6: Analysis and Compliance

This Section discusses:

Hazardous Materials

Phase I

Molds and Organic Hazards

LBP

ACBM

Materials Testing Recommendations

Zoning

Building codes and Local Requirements

Accessibility

6.1 Hazardous Materials

Phase I Environmental Site Assessment

The City of Brighton commissioned a Phase I Environmental Site Assessment for the Bromley Farm property prior to this master plan. The Phase I assessment is documented in the report, “Final Phase I Environmental Site Assessment Update, Tract J of Bromley Farm at Bromley Lane and Chambers Road, Brighton, Colorado”, dated October 26, 2006, prepared by ERO Resources Corporation of Denver, Colorado. ERO had previously completed a report for the entire 160-acre Bromley Farm property, dated July 30, 2001. Both reports are on file at the City of Brighton Parks & Recreation Department.

The purpose of the Phase I reports is to identify known or suspect site environmental conditions based upon review of federal, state and local public records. ERO collected additional information through site reconnaissance and interviews with persons knowledgeable about the property.

At the time of the site reconnaissance in 2006, ERO’s report identified six recognized environmental conditions on the property. Gary Wardle, Director of the Parks & Recreation Department reports that all of the conditions have been mitigated. Formal documentation of the mitigation methods should be attached to the property records when applications are made for site construction permits.

Suspect asbestos-containing materials

The following locations should be tested for asbestos within the Main House and Migrant Worker House: floor mastic under linoleum, wallboard joint compound, roofing felt flashing, pipe joint compounds, pipe wraps.

Mold and Organic Hazards

Mold was noted in several locations throughout the Main House and Migrant Worker House. Animal droppings were noted in numerous locations in the Main House, Migrant Worker House, Barn and Silo. Simple disinfectant procedures using a very low concentration of household bleach and water should be used. It is important to remove the source of the mold by removing the source of water, and to prevent the access of wild animals into the buildings.

Bromley Farm
Historic Structure Assessment
Section 6: Analysis and Compliance

The Main House and Migrant Worker House have either bees or wasps living in some of the exterior walls. When the exterior siding is repaired/replaced on these buildings, a qualified expert in removing these insects should be contracted to perform the work.

Lead-based paint

Based on the age of the buildings, all interior and exterior paints should be considered lead-based unless determined otherwise by sampling and analysis. Since the buildings will not be used as residences, abatement or encapsulation are not required. However, any scraping, cutting or removal of painted surfaces should be undertaken by workers trained in the handling of materials painted with lead-based paint.

Lead in soil

Lead can accumulate in the soil surrounding the perimeter of buildings with lead-based exterior paint. It should be assumed that all of the building exteriors were painted with lead-based paint. Much of the exterior paint on all of the buildings has flaked off. There is a good chance lead has accumulated in the soil around the buildings. Where food crops are to be grown within ten feet of any of the buildings, the soil should be tested for the presence of lead. Lead-contaminated soil may require excavation and disposal in the areas where food crops are planned.

6.2 Material Testing Recommendations

The mortar should be tested in the chimneys of the Main House and Migrant Worker House. The results of the tests should be used to develop masonry repointing specifications. Historic paint analysis is recommended for documentation of historic colors.

6.3 Zoning

The property is zoned as part of the Hishinuma Farms Planned Unit Development (P.U.D.), reception #200400585040, dated July 7, 2004. The PUD covers a 157-acre site that includes the Bromley Farm property. Various parcels within the PUD are zoned differently. The Bromley Farm parcel is zoned PA-2, a high-density residential zone that incorporates R3 zoning up to a 40-foot height. Most of the remainder of the Hishinuma Farms PUD is zoned for medium to high density residential use. The exceptions are the parcel directly west of Bromley Farm, which is zoned PA-1 commercial, an open space Community Park designation immediately west of Bromley Farm, and a Neighborhood Park on a non-contiguous parcel further to the south.

During the master planning process, the City of Brighton Community Development Department recommended changing the zoning of the Bromley Farm to best accommodate the desired public uses. They recommend that the Bromley Farm property should be rezoned to take it out of the Hishinuma Farms PUD and changed to a zone district PL (Public Lands category). The Public Lands category is a district in which public and semi-public facilities are located, including governmental and educational uses. The Community Development Department further recommends that the table of allowed uses in PL should be amended to allow a restaurant and to allow a live-in on-site caretaker, if desired. This change would need to be approved by City Council. City Council and the Community Development Department have been involved in the development of this historic master plan document.

The Department of Parks & Recreation does not intend to pursue this rezoning until after this master plan document has been approved by the State Historical Fund and adopted by Brighton City Council.

6.4 Building Codes and Local Requirements

The City of Brighton currently uses the 2006 International Building Code. At the Development Review Committee meeting of 10/22/09, the Building Department representative stated that they intend to adopt the International Existing Building Code (IEBC) and will review this project under the historic provisions of the IEBC.

Site requirements (including Fire Department access) are discussed in Section 7, Master Plan.

Code Analysis:

Main House:

Occupancy (restaurant): A2

Occupant load: 70 people first floor, 40 people second floor.

Type of Construction: VB.

No fire alarm required due to occupant load less than 300.

Sprinklers will be required on the second floor only, if the second floor is used as part of the restaurant. If the second floor is not used as an assembly occupancy, but rather as a B occupancy (such as a gift shop or administrative offices), then no sprinklers will be required.

A2 occupancy will require structural strengthening as discussed in Section 3.1.3.

Migrant Worker House:

Use is assumed to be a combination of administrative office space, historic records archives, and possibly a live-in caretaker.

Occupant load: 8

Barn:

Occupancy (classes, exhibits): A3

Occupancy on main level = 81 people. Loft level shall remain inaccessible and no occupant load is included from the loft.

No sprinklers or fire alarms required.

Toilet rooms will be provided in the Migrant Worker House since the Barn occupancy will be sporadic.

A2 occupancy will require structural strengthening as discussed in Section 3.3.3.

6.5 Accessibility

Main House:

Assuming the restaurant use, the Main House will require two accessible toilet rooms, each containing one water closet and one lav. The Main House currently does not have handicap access. The access should be provided on the west side into the West Porch area. This will require reconstructing the existing door frame and door on that side. Handicap parking is shown on the Master Plan on the west side. The West Porch entry is very close to grade and no ramp will be required.

The second floor of the Main House is not accessible and can remain so. If a gift shop is added on the second floor, accommodations should be made on the first floor. For example, a first floor display case could contain examples of products sold upstairs, with staff available to bring products downstairs upon request.

Bromley Farm
Historic Structure Assessment
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Migrant Worker House:

Provide two accessible toilet rooms, each containing one water closet and one lav. The Migrant Worker House is currently not accessible due to the width of its doors, but they are very close to grade and no ramp would be needed. Depending upon the final interior configuration of the Migrant Worker House, one of the exterior doors should be rebuilt to be accessible, along with the doors to the two accessible toilet rooms.

Barn:

Existing door openings into the Barn are wide enough to be accessible, and close to grade so that no ramp will be required.

Section 7: Master Plan

7.1 Vision for the Site

The vision for the property is a living farm with community/teaching gardens. Compatible uses will occur in the main buildings and a variety of outdoor community events could take place within and around the historic farmyard. Many of the site features dating from the period of significance (1883 – 1957) will be reinstated. The buildings will be rehabilitated on the exterior to resemble their appearance during the period of significance.

This is not intended to be a restoration project. The period of significance remains important, however, and is listed in the National Register nomination as 1883 – 1957. Very little construction was done after the Bromley era (1883 – 1922), and during this period the site and buildings were best maintained and cared for. Little information and no photographs exist from the Roberts occupation. During the Koizuma and Hishinuma occupation, none of the presently extant buildings were constructed, many of the character-defining landscape features were removed to conserve water, and the buildings fell into disrepair.

Living Farm and Community/Teaching Gardens

The living farm will be open to the community during scheduled hours. The farm operation is intended to preserve and interpret the Brighton area's significant but fast-disappearing agricultural history. This effort should include interpretation of the historically significant sugar beet industry. While the remaining farm is too small to support an economically viable sugar beet operation, a small portion of it should be dedicated to growing this crop on a demonstration basis. Sugar beets were an important component of the local economic and agricultural history, although they are seldom grown in Colorado anymore.

A variety of crops can be grown at the farm for demonstration and educational purposes. A pumpkin patch and corn maze could be incorporated for recreational purposes. The farm is not intended to be a significant source of revenue. As shown on the Master Plan drawing at the end of this section, the eastern portion of the site, an area of approximately five acres, is available for agricultural use. Until such time as the living farm is established, native short grass prairie should be planted in this location. A portion of the eastern end may be used in conjunction with the adjacent Community Park and its planned aquatic park facility.

The area south and east of the Main House is programmed for community and teaching gardens. This should be managed and operated by a community-based group. Its configuration is intended to be flexible at this time. Water and a hose bibb should be provided at a central location, and a small, new outbuilding may be needed for tool and equipment storage. Plots could be made available on a rental basis to individual community members. A community group, rather than individuals, should manage the teaching gardens. This group should have specific educational goals for their gardens. These goals might include topics such as xeriscape or low-water-use gardening, organic gardening, heritage vegetables or historic floral garden design.

Outdoor Community Events

The site should support a variety of outdoor community events. These could include farmers' markets, old-fashioned summer picnics, outdoor concerts, harvest festival, arts festivals, field trips for school groups, scouts, Future Farmers and 4H groups, winter hayrides, classic car shows, and rotating festivals and exhibits on ranching, farming, or ethnic contributions.

Bromley Farm Section 7: Master Plan

The historic Farm Yard, located between the Barn and the Main House and extending south to the Silo, is programmed for more intensive community event usage. An area for individual stalls or tents (such as for arts festivals or farmers' markets) is shown on the plan to east of the Migrant Worker House. The Farm Yard and event stalls area will be surfaced with crusher fines. The Silo, with its iconic profile, can serve as a recognizable wayfinding device and backdrop for performers, speakers, awards ceremonies, and the like. This event space is diagrammatically shown on the plan drawing to the northeast of the Silo.

The site contains ample flexible expansion space for larger outdoor events and overflow parking. The northwest sector of the site, programmed as native short grass prairie, can serve as the primary expansion space. The front lawn and eastern short grass prairie can provide additional expansion space for larger events.

Large community events will require temporary porta-a-potties. Limited accessible bathrooms for public use will be provided in the Migrant Worker House.

7.2 New Uses for the Buildings

Main House, Front Lawn, Entry Lane, and Formal Garden

The Main House is programmed to become a privately operated café/teahouse. The building will remain in City of Brighton ownership and the City intends to issue a Request for Proposals for a concessions contractor to operate the café/teahouse. Experienced members of the local restaurant community have already expressed interest in this opportunity.

Significant site features should be re-established, including the tree-lined entry lane from Bromley Lane, the fenced front turf lawn north of the house, and the formal entertaining garden east of the house.

As shown in Section 4, the property once had extensive tree coverage. Some trees should be re-established on the property in specific locations, as shown on the Master Plan drawing, to recreate this feeling. In order to conserve water resources and allow for other site uses, the addition of new trees will be limited. The front lawn, trees and formal garden will require irrigation.

The formal garden has been mentioned in several oral histories, although no physical or photographic evidence of it remains. The formal garden would work well with the proposed café use and would likely provide additional outdoor dining space. The concessionaire could utilize some of the garden and agricultural space to grow vegetables and herbs for the café. Successful examples of such operations exist in other Front Range locations, but it would be unique in Brighton.

In order to support the café/teahouse concession, it is anticipated that additional space for a commercial kitchen will be needed. This should be located in a proposed one-story addition on the south side of the house (shown on the Master Plan drawing). This addition should be smaller in width than the house and should not be readily visible from the front (north side) of the house. Until the concessionaire is selected and contracted, no further information is available on the exact kitchen or other operational requirements.

The interior layout of both floors should not be modified. The existing floor plans with their small rooms will work well for an intimate dining experience. The concessionaire may elect not

Bromley Farm Section 7: Master Plan

to use the second floor for dining, but rather for a gift shop or office space. In either case, its layout should not be modified. The first floor will require the addition of accessible restrooms. Existing interior wood trim, which was removed and stored in the house, should be re-installed throughout. Some remnants of historic wallpaper were found stored in the house and should be used as a guide for patterns of wallpaper to be installed. Since this is not a true restoration, it is only important that similar patterns and colors be used, and not necessarily exact replicas.

The concessionaire will be encouraged to help interpret the history of the house, the farm, and the Bromley, Roberts and Koizuma-Hishinuma families. Interpretation inside the house will include displays of historic photograph duplicates, limited signage and printed materials available to patrons. The Bromley descendants have offered access to historic artifacts in their possession, such as furniture, household items and clothing. These are probably fragile but could be used as the basis for duplicates, or possibly a few pieces could be shown within secure display cases.

The Barn

The Barn will be used intermittently for small community classes or small special events. Classes could be on a broad range of topics such as arts, organic gardening, or local history. Small events could include small parties or barn dances.

Because of the anticipated intermittent use, the Barn will not be turned into a “finished” interior space and will not be fully conditioned for year-round interior temperature control. Due to its projected uses, the Building Department will require that the building be structurally upgraded to meet current codes, as discussed in the Structural assessment section. While this will have some impact on its appearance, the intent is for it to retain as much of its historic fabric and “barn-like” appearance as possible. Interior lighting will be installed. Ceiling mounted space heaters will be installed to extend the season for possible use, but no attempt will be made to make the building comfortable all year round. Users of the Barn will utilize restroom facilities in the Migrant Worker House. No plumbing or restroom facilities will be added to the Barn.

Migrant Worker House

The Migrant Worker House will serve as the administrative space for the living farm and outdoor events. The interior layout will not be changed significantly, although two accessible bathrooms should be added with outdoor access. The interior will contain office space and possibly storage for local history documents that are in the possession of the Brighton Historic Preservation Commission. A longer-term goal for this building is living quarters for an on-site caretaker for the farm.

Wash House, Silo, Metal Granary

These structures will not contain new adaptive uses. They will remain in place and be interpreted for their historic uses, but their small sizes do not lend themselves to new uses.

7.3 Site Circulation

Bromley Lane access

Site circulation will follow the historic pattern from the Farm Yard north to Bromley Lane. The character-defining Entry Lane from Bromley Lane to the north is an important historic feature that must be retained. The tree canopy along the lane should be restored. The lane will be paved with recycled asphalt on road base. The lane will need to comply with Fire Department access

Bromley Farm Section 7: Master Plan

requirements for 20 feet minimum width and trees must be trimmed to maintain unobstructed vertical clearance of 13 feet 6 inches.

The City of Brighton has adopted two documents with important design criteria relative to Bromley Lane and access to the Farm. These are the Brighton Comprehensive Plan (Bromley Lane District) and the 2004 Bromley Lane Master Plan. These documents plan for the Bromley Lane Corridor, which is anticipated to become a major east-west arterial in Brighton. The concept for Bromley Lane is a boulevard with a wide planted median, limited curb cuts, and multiple transportation mode opportunities that mix open areas with moderate density residential uses, business, office and retail along primarily the south side of Bromley Lane. The corridor is intended to be multi-modal to accommodate cars, bicycles, buses and pedestrians.

The master plan drawing shows Bromley Lane in its future configuration when it is widened. The drawing also shows the future planned 15th Avenue along the west property line. The timing of these modifications is unknown.

A traffic study will probably be required for the Bromley Farm project. The Bromley Lane plans do not include a break in the median at the Farm Entry Lane, although there will be one at the future 15th Avenue. When the median is installed, full turning movements will not be possible. Depending upon the results of the traffic study, the City of Brighton Community Development Department has stated that full turning movements may not be allowed prior to the median construction, thus the access may be right-in, right-out only.

Community Development has stated that primary access to the site should be from 15th Avenue once it is constructed. This may be unacceptable to a restaurant operator and further discussions are warranted. Community Development has further stated that the Entry Lane access point may not be allowed to remain once 15th Avenue is constructed. This is unacceptable from a historic preservation standpoint since the tree-lined Entry Lane is an important character-defining feature. This entrance is the historic entrance to the site and was lined by cottonwood trees, which were removed at some point. Restoration of the tree-lined drive is recommended. Further discussions with Community Development will be needed.

City sidewalks will be constructed along Bromley Lane and 15th Avenue. A future bus stop may be constructed at 15th and Bromley. This is outside the scope of this project and not included in the cost estimate.

Drives and Parking

New parking lots and drives are concentrated at the south end of the site to minimize intrusion on the historic landscape. The primary access to the Main House will be from the Entry Lane off of Bromley Lane, with paved parking lots near the south property line. Parking lots and drives will be landscaped and will be constructed of recycled asphalt on road base. Parking for a few cars, handicap accessible parking spaces and a small service/loading area will be located immediately south of the Main House. Construction of pavement and landscaping can be phased as the development of the property progresses.

Access from 15th Avenue will occur near the south property line, when the Avenue is constructed. Until that time, the Fire Department will require a temporary second access road, shown on the drawing. Drives through the site need to comply with Fire Department access regulations for surface material, width and turning radius.

A walking trail has been diagrammatically shown along the south property line. This is intended to link with a future trail system along the ditch to the east, and to the Community Park property to the east.

7.4 Drainage and Storm water

The site is very flat and contains no provision for storm water conveyance or detention. A grading and drainage plan should be prepared as part of the second phase of the project. That effort will determine the appropriate drainage and storm water improvements. A drainage facility will eventually be constructed for the entire residential Planned Unit Development south of the Farm, but its timing is unknown. Until that drainage facility is built, temporary drainage solutions will be required for the Farm. Estimated fees for a drainage study have been included in the Master Plan cost estimate, but the cost of any associated improvements is unknown and not included.

7.5 Utilities

The property presently has no water and sewer mains and no natural gas service. Untreated water was provided from an artesian well that appears to be non-functional. Windmills are visible in some historic photographs of the Farm Yard, so there may have been multiple wells serving agricultural purposes in addition to domestic needs.

Wastewater is assumed to have been septic with a leech field, although no tank or leech field have been found and there are no Adams County records of these on the property. Until recently, the property was unincorporated Adams County, though it has been added to the City of Brighton. The property has been unoccupied since 2006. For several years prior to that, the lone resident of the site lived in a recreational vehicle (RV) that was parked south of the Migrant Worker House. Presumably waste was transported to an off-site RV dump.

New water and wastewater lines will need to be brought to the site, with connections to existing services in Bromley Lane. Sizing of these lines will depend upon the restaurant demand, and how these construction and operational costs are divided between the City and the concessionaire has yet to be determined.

The site has no natural gas. Natural gas should be brought to the site, with connections to existing service in Bromley Lane. Previously the occupants utilized propane, and prior to that, coal and presumably wood were used as energy sources. Natural gas demand and sizing will depend upon the restaurant demand, which have yet to be determined.

An archaeologist should monitor all new utility trenching.

7.6 Site Lighting and Electrical Power

Existing electrical power is overhead from Bromley Lane, but it is not active. As described in the Electrical assessment section, new underground power and a new transformer are needed. Conduit should be oversized to accommodate the restaurant loads, which are unknown at this time. United Power will require new 10-foot-wide easements around the perimeter of the property.

Bromley Farm Section 7: Master Plan

Although the Farm historically had overhead power on wooden poles, it is not possible to replicate this appearance with new overhead service. For this reason, underground power is recommended. The existing wooden power poles should be decommissioned but retained for interpretation purposes, since they illustrate how power was historically provided to and around the property. These poles will require structural repair for safety reasons.

New underground power will be routed to the Main House, Migrant Worker House and Barn. Power for site uses will be provided to the Silo Event Space, the Community/Teaching Garden area and the entertainment garden. Site lighting will be fairly minimal but must comply with Commercial Design Standards in the City of Brighton Land Use and Development Code. There will be some light standards along the entrance drive and the parking areas. When exterior light fixtures are selected, they should appear agricultural in style. The exception to this is the area immediately around the Main House and entertainment garden, where a more upscale appearance is appropriate. Site lighting can be phased as the project progresses.

An archaeologist should monitor all new utility trenching.

7.7 Landscape, Plantings, Irrigation and Fencing

The property needs fairly extensive herbicide applications, starting as soon as possible, to eradicate the noxious weeds. Planting concepts are shown on the master plan drawing. Re-establishment of the Entry Drive tree canopy and re-establishment of some trees throughout the site are of key historic importance.

The master plan drawing shows the areas of different types of plantings: short grass prairie, future agricultural fields, the turf lawn, community/teaching gardens, and entertainment garden. The turf lawn, gardens, and trees will require irrigation. Alternatives for irrigation are potable water, or purchase of non-potable ditch shares, or a combination of both.

Historic photographs show the formal front lawn with a painted white picket fence. This should be re-constructed around the front lawn area only. The east, west and north property perimeter needs fencing in order to deter trespassing, although there is no information to suggest that it was fenced historically. The east, west and north property lines should be fenced with a post-and-rail fence using cedar or treated copperwood on 6x6 posts.

Bromley Farm
Section 7: Master Plan



Rendering of Proposed Farm Scene after Rehabilitation



Bromley Lane

South 15th Avenue

Entry Lane

Front Lawn

Re-Established Tree Canopy

Native Short Grass Prairie

Native Short Grass Prairie / Future Agricultural Field

Main House

Formal Entertaining Garden

Barn

Farm Yard

Migrant Worker House

Wash House

Event Space

Demonstration / Community Gardens

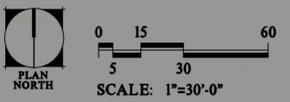
Parking

Silo

Parking

New Out Building

Temporary Emergency Access / Egress Route



Temporary Emergency Access / Egress

S. 15th Avenue

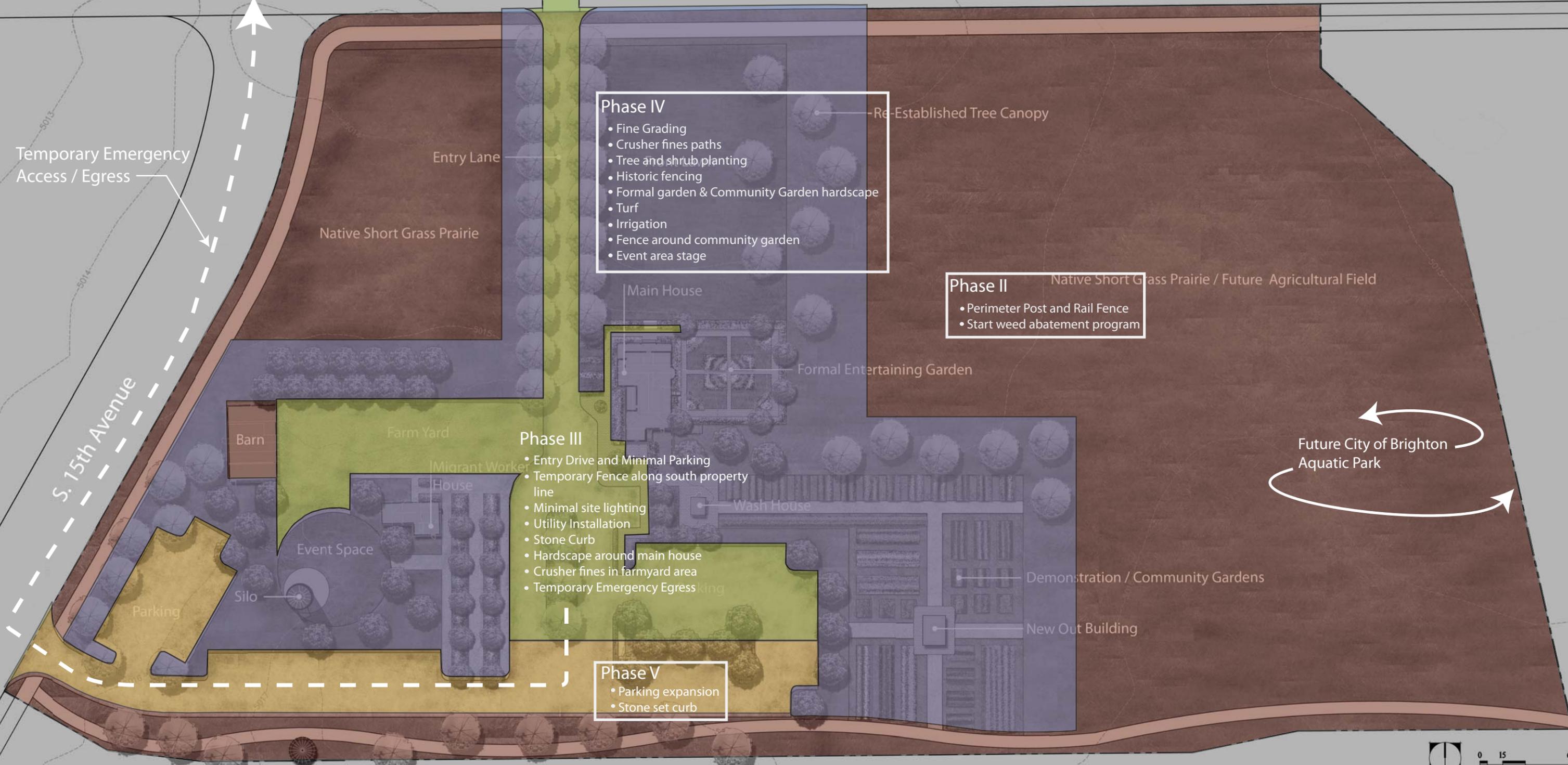


- Phase IV**
- Fine Grading
 - Crusher fines paths
 - Tree and shrub planting
 - Historic fencing
 - Formal garden & Community Garden hardscape
 - Turf
 - Irrigation
 - Fence around community garden
 - Event area stage

- Phase II**
- Perimeter Post and Rail Fence
 - Start weed abatement program

- Phase III**
- Entry Drive and Minimal Parking
 - Temporary Fence along south property line
 - Minimal site lighting
 - Utility Installation
 - Stone Curb
 - Hardscape around main house
 - Crusher fines in farmyard area
 - Temporary Emergency Egress

- Phase V**
- Parking expansion
 - Stone set curb



Future City of Brighton Aquatic Park

Legend

	Phase II		Phase IV
	Phase III		Phase V

Note: Phase one included building exterior rehabilitation only. Site and landscape improvements start in phase two.

PLAN NORTH

SCALE: 1"=30'-0"

Section 8: Prioritized Work and Costs

Introduction

The following pages contain summaries of the work recommended in this draft assessment, along with estimated costs. The work is listed by building, and prioritized as 1 (critical), 2 (serious) and 3 (minor).

Costs were estimated based upon previous historic project experience and Means Cost Estimating Data books. These are 2009 costs and should be inflated for later years.

Costs that are specific to a new restaurant use in the Main House, such as a commercial kitchen or needs that might be specific to a concessionaire are not included.

The estimate does include repair recommendations for interior finishes. Some of those recommendations may need to be adjusted when the concessionaire is selected. Other flooring or wall finishes may be required by use in certain areas, rather than repair or restoration of some of the existing finishes.

Project Phasing

Phase I

- Hazardous materials testing, Main House and Migrant Labor
- Test for lead in soil in areas adjacent to buildings where food may be grown
- Exterior design and construction on Main House
- Exterior design of Migrant Labor. Replace roof on Migrant Labor
- Design Barn modifications
- Begin weed control program, entire site
- Site fencing, post and rail

Phase II

- Detailed site design (grading, utilities, parking lots and drives, landscaping, site design)
- Install underground utilities
- Construct main drive and minimal parking lot at Main House
- Install minimal site lighting
- Construct Barn improvements
- Exterior construction on Migrant Labor (other than roof)
- Interior design and construction, Main House
- Design and construction, Wash House

Phase III

- Install irrigation, trees and plantings
- Design and construct pedestrian hardscapes: paths and paving
- Interior construction, Migrant Labor
- Replace Silo roof

Phase IV

- Main House restaurant: upgrade site utilities, parking lot, site lighting.
- Main House: Interior design and construction of modifications to accommodate restaurant. Possible addition on south side for commercial kitchen if needed.

COST SUMMARY (individual entries do not include overhead and fees)

Main House	351,650	
Migrant Worker	130,335	
Barn	132,268	
Wash House	11,232	
Silo	16,038	
Metal Granary	4,850	
Plus contingency, Overhead & profit, Design fees, & Archaeology		
Grand total, buildings:		\$1,786,248
Phase II		
Landscape, sitework, fees	325, 778	
Phase III		
Landscape, sitework, fees	421,732	
Phase IV		
Landscape, sitework, fees	89,410	
Grand total, sitework:		\$ 836,928
Grand total project (2009 costs, should be inflated for future years)		\$2,623,176

	A	B	C	D	E	F	G	H
1				Quantity	Unit	Unit Cost	Total Cost	Priority
2	Main House							
3	Exterior walls							
4	Repair damaged trim			500	SF	2.00	1,000.00	1
5	Replace inset panels below bay window			3	EA	50.00	150.00	2
6	Replace damaged siding			1	ALLOW	30,000.00	30,000.00	1
7	Repair fish scale gable shingles			1	ALLOW	1,000.00	1,000.00	1
8	Remove & replace T&G north porch deck			216	SF	6.50	1,404.00	1
9	Prime/paint porch deck			216	SF	1.00	216.00	1
10	Replace north porch roof post bases			5	EA	100.00	500.00	1
11	Replace rim joist west side			12	LF	50.00	600.00	1
12	Test for lead in exterior paint			1	LS	1,000.00	1,000.00	1
13	Test for lead in soil			1	LS	1,000.00	1,000.00	2
14	Prime & paint exterior walls			2403	SF	2.00	4,806.00	1
15	Prime & paint exterior trim			1166	LF	3.00	3,498.00	1
16								
17	Interior Work							
18	Clean, disinfect basement floor			287	SF	1.50	430.50	3
19	Clean, disinfect first floor			1565	SF	1.50	2,347.50	2
20	Clean, disinfect second floor			551	SF	1.50	826.50	2
21	Remove non-historic carpet throughout			1523	SF	0.85	1,294.55	3
22	Remove linoleum and underlayment throughout			420	SF	2.25	945.00	3
23	Remove 9" x 9" floor tile throughout			1	LS	900.00	900.00	2
24	Refinish exposed wood flooring throughout			1678	SF	2.50	4,195.00	3
25	Repair wood flooring in Dining Room Closet and Bedroom #3			1	LS	450.00	450.00	3
26	Install new linoleum throughout			438	SF	6.75	2,956.50	3
27	Repair damaged wood stairs, railings, and trim			1	LS	9,000.00	9,000.00	2
28	Refinish and reinstall wood base and trim throughout			1	LS	8,000.00	8,000.00	3
29	Refinish and reinstall interior doors			8	EA	1,200.00	9,600.00	3
30	Remove non-historic gypsum wallboard from walls & ceiling			2826	SF	1.25	3,532.50	3
31	Repair damaged plaster walls & ceiling			3500	SF	8.25	28,875.00	3
32	Clean/repair/replace damaged wallpaper walls and ceiling			257	SF	8.25	2,120.25	3
33	Paint all walls and ceilings except those with wallpaper finish			7700	SF	0.95	7,315.00	3
34	Reinstall or replace Dining Room Closet shelving			1	LS	2,400.00	2,400.00	3
35	Refinish and repair built-in Kitchen cabinets			8	LF	85.00	680.00	3
36	Remove non-historic fixtures and appliances in Kitchen and Bathroom			1	LS	750.00	750.00	3
37	Install new historically, accurate fixtures in Kitchen and Bathroom			1	LS	6,000.00	6,000.00	3
38	Remove non-historic cabinets in Kitchen			1	LS	580.00	580.00	3
39	Rebuild damaged fireplace in Parlor. Install firebox.			1	LS	2,800.00	2,800.00	3
40	Replace non-historic space heaters with historically accurate devices			6	EA	800.00	4,800.00	2
41	Install historically accurate window coverings throughout			10	EA	120.00	1,200.00	3
42								
43	Exterior Openings - doors							
44	Repair exterior stile and rail doors/frames. Restore functionality.			4	EA	400.00	1,600.00	2
45	Repair exterior vertical board doors/frames. Improve functionality.			2	EA	250.00	500.00	2
46	Find, recondition, install or build, install new wood exterior screen doors			6	EA	240.00	1,440.00	2
47	Refinish exterior doors and frames			8	EA	160.00	1,280.00	2
48	Build and install wood window-well covers			2	EA	60.00	120.00	3
49	Exterior trim repair			110	SF	5.00	550.00	2

	A	B	C	D	E	F	G	H
50								
51	Exterior Openings - windows							
52	Find/rebuild single hung window with decorative transom and frame. Restore hdw & functiona			3	EA	600.00	1,800.00	2
53	Rehabilitate double hung window and frame. Restore hdw & functionality			5	EA	400.00	2,000.00	2
54	Find/rebuild double hung window and frame. Restore hdw & functionality.			7	EA	340.00	2,380.00	2
55	Rehabilitate fixed sash two-light window and frame & hdw.			3	EA	160.00	480.00	2
56	Find/rebuild fixed sash two-light window. Repair frame & hdw.			1	EA	240.00	240.00	2
57	Rehabilitate fixed sash three-light window and frame & hdw.			2	EA	135.00	270.00	2
58	Rebuild and install missing wood screens. Repair/rebuild frames.			8	EA	85.00	680.00	2
59	Rehabilitate casement windows with decorative glass and frames & hdw. Restore functionality			2	EA	100.00	200.00	2
60	Find/rebuild missing screens for hung and casement windows.			17	EA	180.00	3,060.00	2
61	Refinish window sash, frame, hdw and screens.			48	EA	180.00	8,640.00	2
62	Replace broken glazing in double hung windows.			2	EA	80.00	160.00	2
63	Exterior trim repair			289	SF	5.00	1,445.00	2
64								
65								
66	Main House							
67	Foundation							
68	Excavate to expose exterior foundations and analyze			1	LS	870.00	870.00	2
69	Interior Foundations			1	LS	8,097.00	8,097.00	2
70	Epoxy inject north porch cracks			1	LS	265.00	265.00	3
71	Epoxy inject main house perimeter foundation cracks			1	LS	734.00	734.00	3
72	Bay window foundation repair			1	LS	1,532.00	1,532.00	2
73	Repair foundation under north wall Great Room, east end			1	LS	1,784.00	1,784.00	1
74	Replace north porch foundations, add drains			1	LS	925.00	925.00	1
75	Repair foundations under West Porch, East Entry			1	LS	1,000.00	1,000.00	2
76	Investigation & limited repair floor framing			1	LS	3,000.00	3,000.00	2
77	Repair basement walls			1	LS	4,800.00	4,800.00	1
78	Install new footings in basement			1	LS	4,000.00	4,000.00	2
79	Geotechnical report			1	LS	2,500.00	2,500.00	2
80								
81								
82								
83	Main House							
84	Structure							
85	Strengthen roofs			1	LS	4,572.00	4,572.00	2
86	Investigate 2nd floor framing			1	LS	1,654.00	1,654.00	2
87	Strengthen header over bay window			1	LS	997.00	997.00	2
88	Install header over east entry opening			1	LS	1,020.00	1,020.00	2
89	Replace East Entry/Bath and West Porch floor if needed			1	LS	3,878.00	3,878.00	2
90	Strengthen first floor above basement			1	LS	1,372.00	1,372.00	2
91	Rebuild and strengthen North Porch structure			1	LS	2,824.00	2,824.00	2
92	Strengthen East Entry wall			1	LS	1,800.00	1,800.00	2
93								
94								
95								

	A	B	C	D	E	F	G	H
96	Main House							
97	Roof							
98	Remove 2 layers existing roofing			3300	SF	1.50	4,950.00	1
99	Allowance for damaged underlayment			1	LS	1,000.00	1,000.00	1
100	New wood shingle roofing			3300	SF	3.50	11,550.00	1
101	Roofing felts 30#			31	SQ	12.00	372.00	1
102	Add rafter vents			1	LS	1,000.00	1,000.00	1
103	Flashing replace & restore metal ridge			346	LF	4.50	1,557.00	1
104	Reflash valley @ twin gables, repair sheathing			1	EA	5,000.00	5,000.00	1
105	Add scupper @ twin gable valley			1	EA	1,000.00	1,000.00	1
106	Replace damaged fascia, trim, decorative trusses			500	LF	5.00	2,500.00	1
107	Replace damaged soffit, west side			32	LF	5.00	160.00	1
108	Restore skylight			1	EA	2,000.00	2,000.00	3
109	Replace gutter, south side			16	LF	9.00	144.00	1
110	Restore damaged rafter tails, so. side			7	EA	25.00	175.00	1
111	Chimneys - replace caps			2	EA	400.00	800.00	2
112	Chimneys - repoint			200	SF	7.00	1,400.00	2
113								
114								
115	Main House							
116	Mechanical/Plumbing							
117	Demolition			1	LS	1,040.00	1,040.00	2
118	Furnace & Distribution Ducts			1	LS	12,060.00	12,060.00	2
119	Exhaust Fans			1	LS	720.00	720.00	2
120	Plumbing Fixtures & distribution			1	LS	19,060.00	19,060.00	2
121	Gas Piping			1	LS	4,360.00	4,360.00	2
122	Sanitary Service			1	LS	12,560.00	12,560.00	2
123	Water Service			1	LS	11,600.00	11,600.00	2
124								
125	Main House							
126	Electrical							
127	New underground utility company charges			1	LS	15,000.00	15,000.00	2
128	New meter and main disconnect			1	LS	4,800.00	4,800.00	2
129	New panel with branch breakers			1	LS	3,900.00	3,900.00	2
130	New interior lighting and branch circuits			1	LS	6,000.00	6,000.00	2
131	New interior receptacles and branch circuits			1	LS	4,000.00	4,000.00	3
132	Mechanical equipment connections			1	LS	1,300.00	1,300.00	3
133								
134	SUBTOTAL MAIN HOUSE					351,649.30		

	A	B	C	D	E	F	G	H
135								
136	Migrant Worker House							
137	Exterior walls							
138	Repair damaged trim			100	SF	2.00	200.00	1
139	Remove outer siding layer			1150	SF	1.00	1,150.00	2
140	Reconstruct decorative truss			1	LS	1,000.00	1,000.00	2
141	Repair damaged historic siding, allow			1	LS	2,000.00	2,000.00	1
142	Test for lead in exterior paint			1	LS	700.00	700.00	1
143	Test for lead in soil			1	LS	700.00	700.00	2
144	Prime & paint exterior walls			1150	SF	2.00	2,300.00	1
145	Prime & paint exterior trim			512	LF	3.00	1,536.00	1
146								
147	Interior Work							
148	Clean, disinfect basement floor			135	SF	1.50	202.50	3
149	Clean, disinfect first floor			476	SF	1.50	714.00	2
150	Remove linoleum and underlayment throughout			476	SF	1.80	856.80	3
151	Install new underlayment and linoleum throughout			476	SF	6.85	3,260.60	3
152	Repair rotted wood flooring			1	LS	780.00	780.00	2
153	Repair damaged walls and ceilings, treat for mold			1	LS	5,200.00	5,200.00	2
154	Refinish and reinstall wood base and trim throughout			1	LS	860.00	860.00	3
155	Refinish and reinstall interior doors			1	LS	800.00	800.00	3
156	Clean/repair/replace damaged wallpaper walls and ceiling			1185	SF	8.25	9,776.25	2
157	Paint walls and ceiling without wallpaper			1089	SF	0.95	1,034.55	2
158	Refinish and repair built-in kitchen cabinets			12	LF	65.00	780.00	3
159	Remove non-historic bathroom fixtures			1	LS	300.00	300.00	3
160	Install new historically, accurate bathroom fixtures			1	LS	1,200.00	1,200.00	3
161	Install historically accurate window coverings			6	EA	120.00	720.00	3
162								
163	Exterior Openings - doors							
164	Repair exterior stile and rail doors/frames (No lights). Restore hdw & functionality			2	EA	400.00	800.00	2
165	Repair exterior stile and rail doors/frames (8 lights). Restore hdw & functionality			1	EA	520.00	520.00	2
166	Find, recondition, install/build, install new wood exterior screen doors			3	EA	240.00	720.00	2
167	Refinish exterior doors and frames			3	EA	160.00	480.00	2
168	Exterior trim repair			60	SF	5.00	300.00	
169								
170	Exterior Openings - windows							
171	Rehabilitate double hung window and frame. Restore hdw & functionality			5	EA	400.00	2,000.00	2
172	Rehabilitate two-light slider window and frame. Restore hdw & functionality			2	EA	200.00	400.00	2
173	Replace non-historic awning window. Repair frame. Restore hdw & functionality			1	EA	600.00	600.00	2
174	Rebuild missing fixed sash window in Kitchen. Repair frame.			1	EA	500.00	500.00	2
175	Rehabilitate fixed sash six-light window, hdw and frame.			1	EA	400.00	400.00	2
176	Find/rebuild missing screens for double hung, slider, and awning windows.			8	EA	180.00	1,440.00	2
177	Exterior trim repair			140	SF	5.00	700.00	2
178	Refinish window sash, frame, and screens.			18	EA	180.00	3,240.00	2
179								

	A	B	C	D	E	F	G	H
180	Migrant Worker House							
181	Foundation							
182	Replace foundations at Porch and Bunk Room			1	LS	6,041.00	6,041.00	2
183	Repair Cellar wall			1	LS	874.00	874.00	3
184	Regrade around building			1	LS	961.00	961.00	1
185	Install French drain			1	LS	485.00	485.00	2
186								
187	Migrant Worker House							
188	Structure							
189	Cut attic access and inspect roof framing			1	LS	1,360.00	1,360.00	2
190	Replace floor framing			1	LS	6,144.00	6,144.00	2
191	Sister floor framing above cellar			1	LS	490.00	490.00	2
192	Repair bases of exterior walls			1	LS	2,542.00	2,542.00	2
193								
194								
195	Migrant Worker House							
196	Roof							
197	Remove 2 layers existing roofing			961	SF	1.50	1,441.50	1
198	Allowance for damaged underlayment			1	LS	300.00	300.00	1
199	New wood shingle roofing			961	SF	3.50	3,363.50	1
200	Roofing felts 30#			10	SQ	12.00	120.00	1
201	New roof vents			1	LS	500.00	500.00	1
202	Flashing replace & restore metal ridge			300	LF	4.50	1,350.00	1
203	Replace damaged fascia			12	SF	5.00	60.00	1
204	Replace damaged soffit			24	SF	5.00	120.00	1
205	Chimney test mortar			1	LS	250.00	250.00	2
206	Chimney repoint			96	SF	7.00	672.00	2
207	Replace chimney cap			1	LS	400.00	400.00	2
208								
209	Migrant Worker House							
210	Mechanical/Plumbing							
211	Demolition			1	LS	520.00	520.00	3
212	Furnace & Distribution Duct			1	LS	5,120.00	5,120.00	3
213	Exhaust Fans			1	LS	460.00	460.00	3
214	Plumbing Fixtures & Distribution			1	LS	17,000.00	17,000.00	3
215	Gas Piping			1	LS	3,090.00	3,090.00	3
216	Sanitary Service			1	LS	8,700.00	8,700.00	3
217	Water Service			1	LS	6,700.00	6,700.00	3
218								
219	Migrant Worker House							
220	Electrical							
221	New underground service from Main House			1	LS	4,000.00	4,000.00	2
222	New disconnect			1	LS	1,900.00	1,900.00	2
223	New panel with branch breakers			1	LS	2,100.00	2,100.00	2
224	New interior lighting and branch circuits			1	LS	2,900.00	2,900.00	3
225	New interior receptacles and branch circuits			1	LS	1,800.00	1,800.00	3
226	Mechanical equipment connections			1	LS	400.00	400.00	3
227								
228	SUBTOTAL MIGRANT WORKER					130,334.70		
229								
230	Barn							
231	Exterior walls							

	A	B	C	D	E	F	G	H
232	Repair damaged trim			75	SF	5.00	375.00	1
233	Replace damaged siding, repair where feasible			1	ALLOW	10,000.00	10,000.00	1
234	Test for lead in exterior paint			1	LS	500.00	500.00	1
235	Test for lead in soil			1	LS	800.00	800.00	2
236	Prime & paint exterior walls			2037	SF	2.00	4,074.00	1
237	Prime & paint exterior trim			540	LF	3.00	1,620.00	1
238								
239	Barn							
240	Foundation							
241	Repair concrete knee walls			1	LS	6,446.00	6,446.00	1
242	New foundations under east and west braced walls			1	LS	8,122.00	8,122.00	2
243	New foundations under north and south braced walls			1	LS	7,522.00	7,522.00	2
244	Clean, inspect and repair post bases and sills			1	LS	4,527.00	4,527.00	1
245	Re-grade along east wall			1	LS	660.00	660.00	2
246								
247	Barn							
248	Structure							
249	Strengthen roof diaphragm			1	LS	4,900.00	4,900.00	2
250	Strengthen roof girders			1	LS	1,016.00	1,016.00	2
251	Temporarily shore shed roofs			1	LS	5,120.00	5,120.00	1
252	Strengthen shed roofs			1	LS	4,160.00	4,160.00	1
253	Strengthen shed roof walls			1	LS	256.00	256.00	2
254	Strengthen loft floor diaphragm			1	LS	400.00	400.00	2
255	Strengthen gable end walls			1	LS	1,040.00	1,040.00	2
256	Strengthen lateral force resisting system			1	LS	9,000.00	9,000.00	2
257								
258	Barn							
259	Roof							
260	Remove 2 layers existing roofing			2114	SF	1.50	3,171.00	1
261	New underlayment			2114	SF	1.00	2,114.00	1
262	New wood shingle roofing			2114	SF	3.50	7,399.00	1
263	New 30# felt			21	SQ	12.00	252.00	1
264	Replace flashing			66	LF	4.50	297.00	1
265	Replace damaged fascia			260	LF	5.00	1,300.00	2
266								
267								
268	Interior Work							
269	Clean, disinfect first floor			1548	SF	1.50	2,322.00	2
270	Clean, disinfect loft			790	SF	1.50	1,185.00	2
271	Remove and replace South Area ceiling			360	SF	4.50	1,620.00	2
272	Replace fiber board wall North Area			1	LS	900.00	900.00	3
273								

	A	B	C	D	E	F	G	H
274	Exterior Openings - doors							
275	Rebuild vertical plank, single-leaf door.			1	EA	500.00	500.00	2
276	Rehabilitate vertical plank, single-leaf door.			6	EA	400.00	2,400.00	2
277	Rehabilitate vertical plank, two-leaf door.			2	EA	800.00	1,600.00	2
278	Rehabilitate vertical plank dutch door.			1	EA	400.00	400.00	2
279	Rebuild frame for single leaf, vertical plank door.			3	EA	250.00	750.00	2
280	Refinish vertical plank, single leaf door and frame.			7	EA	120.00	840.00	2
281	Exterior trim repair			40	SF	5.00	200.00	
282	Refinish vertical plank, two-leaf door.			2	EA	240.00	480.00	2
283								
284	Exterior Openings - windows							
285	Rehabilitate four-light hopper windows. Restore functionality			11	EA	160.00	1,760.00	2
286	Replace broken glazing in four-light hopper windows.			4	EA	80.00	320.00	2
287	Rehabilitate three-light fixed sash windows.			8	EA	120.00	960.00	2
288	Replace broken glazing in three-light fixed sash windows.			6	EA	60.00	360.00	2
289	Rehabilitate four-light fixed sash windows.			4	EA	120.00	480.00	2
290	Replace broken glazing in four-light fixed sash windows.			4	EA	60.00	240.00	2
291	Refinish windows and frames.			29	EA	120.00	3,480.00	2
292	Exterior trim repair			220	SF	5.00	1,100.00	
293								
294	Barn Mechanical							
295	Gas Fired Heaters			1	LS	9,200.00	9,200.00	2
296	Gas Piping			1	LS	6,700.00	6,700.00	2
297								
298	Barn Electrical							
299	New underground service from Main House			1	LS	4,300.00	4,300.00	2
300	New disconnect			1	LS	1,900.00	1,900.00	2
301	New panel with branch breakers			1	LS	1,700.00	1,700.00	2
302	New interior lighting and branch circuits			1	LS	1,200.00	1,200.00	3
303	New interior receptacles			1	LS	300.00	300.00	3
304								
305	SUBTOTAL BARN					132,268.00		
306								
307								
308	Wash House							
309	Exterior walls							
310	Repair damaged trim			30	SF	5.00	150.00	1
311	Repair damaged siding			221	SF	10.00	2,210.00	1
312	Test for lead in soil			1	LS	200.00	200.00	3
313	Prime & paint exterior walls			221	SF	2.00	442.00	1
314								
315	Interior Work							
316	None							
317								
318	Wash House							
319	Foundation							
320	Move building off, install new foundation, move building back			1	LS	2,760.00	2,760.00	1
321	Re-grade around building			1	LS	106.00	106.00	2
322								
323	Wash House							
324	Structure							
325	Repair walls			1	LS	2,000.00	2,000.00	1

	A	B	C	D	E	F	G	H
326								
327	Wash House							
328	Roof							
329	Remove 2 layers existing roofing			185	SF	1.50	277.50	1
330	New underlayment			185	SF	1.00	185.00	1
331	New wood shingle roofing			185	SF	3.50	647.50	1
332	New 30# felt			2	SQ	12.00	24.00	1
333	Repair chimney			1	LS	500.00	500.00	1
334	Replace flashing			20	LF	4.50	90.00	1
335	Replace damaged fascia			28	LF	5.00	140.00	1
336								
337	Wash House							
338	Openings - windows							
339	Exterior trim repair			30	SF	5.00	150.00	1
340	Rehabilitate four-light fixed sash window.			1	EA	240.00	240.00	2
341	Replace broken glazing in four-light fixed sash window.			1	EA	80.00	80.00	2
342	Refinish window and frame.			1	EA	120.00	120.00	2
343								
344	Wash House							
345	Openings - exterior Doors							
346	Exterior trim repair			20	SF	5.00	100.00	1
347	Rehabilitate vertical plank, single-leaf door.			1	EA	400.00	400.00	2
348	Rebuild frame for single leaf, vertical plank door.			1	EA	250.00	250.00	2
349	Refinish vertical plank, single leaf door and frame.			1	EA	160.00	160.00	2
350								
351	SUBTOTAL WASH HOUSE					11,232.00		
352								
353								
354	Silo							
355	Reconstruct ladder chute enclosure			1	LS	8,500.00	8,500.00	3
356	Temporarily secure chute entrance			1	LS	500.00	500.00	1
357	Reconstruct roof			1	LS	5,000.00	5,000.00	3
358	Epoxy inject cracks							3
359	Scaffolding			1	LS	500.00	500.00	3
360	Epoxy injection grouting			6	LF	33.00	198.00	3
361	Evaluate chute at foundation			1	LS	500.00	500.00	3
362								
363	Interior Work							
364	Clean, disinfect below grade floor			200	SF	1.50	300.00	2
365	Rehabilitate vertical plank, single-leaf door.			1	EA	300.00	300.00	2
366	Rebuild frame for single leaf, vertical plank door.			1	EA	160.00	160.00	2
367	Refinish vertical plank, single leaf door and frame.			1	EA	80.00	80.00	2
368								
369	SUBTOTAL SILO					16,038.00		
370								

	A	B	C	D	E	F	G	H
371	Metal Granary							
372	Construct new treated wood foundation on gravel for Metal Grainary.			1	LS	2,400.00	2,400.00	3
373	Clean and disinfect Metal Granary interior.			1	LS	250.00	250.00	3
374	Dispose of abandoned wood foundation and regrade.			1	LS	1,200.00	1,200.00	3
375	Sand and regalvanize exterior walls			1	LS	500.00	500.00	3
376	Apply rust inhibitor to exterior walls			1	LS	500.00	500.00	3
377								
378	SUBTOTAL METAL GRANARY					4,850.00		
379								
380								
381	Subtotal						646,372.00	
382	Contingency 20%						129,274.40	
383	Contractor overhead & profit 25%						161,593.00	
384	Archaeological monitoring						10,000.00	
385	Architectural & engineering fees 20%						129,274.40	
386								
387	Grand Total, BUILDINGS					1,076,513.80		
388								
389								

	A	B	C	D	E	F	G	H
390								
391	Site Work/ Landscape							
392	Revised 12.21.2009							
393	Phase 2							
394								
395	Perimeter Post and Rail Fence (Copperwood, 3-rail,6x6 post)			3120	LF	13.37	41,714.40	1
396	Weed Abatement & Revegetation			1	LS	20,028.80	20,028.80	1
397	Temporary Fence along back property line (dirt set, jumbo round copperwood, v-mesh)			1045	LF	12.00	12,540.00	2
398	Entry Drive and Minimal Parking							
399	1 1/2" rock (Class 5) 5" deep (24,877sf)			561	Ton	10.75	6,030.75	2
400	Recycled Asphalt 4" deep (24,877sf)			561	Ton	12.00	6,732.00	2
401	Earthworks (24,877sf)			387	CY	12.00	4,644.00	2
402	Curb Along Entry Drive and minimal Parking - stone sets			1580	LF	30.00	47,400.00	2
403	Site Utilities (sewer and water from Bromley Lane to Main House)			1	LS	25,000.00	25,000.00	2
404	Install minimal site lighting(4 Post fixtures) and exterior power drops(6 exterior boxes)			1	LS	17,000.00	17,000.00	2
405	Hardscape around main House			1676	SF	11.00	18,436.00	2
406	Sedimentation and erosion control			47038	SF	0.50	23,519.00	2
407	Crusher fines - main farmyard			9947	SF	3.00	29,841.00	2
408	Crusher fines earthworks - main farmyard (9,947 sf)			184	CY	12.00	2,210.40	2
409	Temporary Emergency Egrees Road (9,010sf) recycled asphalt 4" deep			203	Ton	12.00	2,436.00	
410			Sub-Total				257,532.35	
411	Mobilization			1	LS		25,753.24	2
412			Sub-Total				283,285.59	
413	Phase 2 Site Design Fees						42,492.84	
414								
415			Phase 2 SITEWORK Total				325,778.42	
416								
417	Assumptions							
418	* It's assumed that the fence along back property line is only temporary and the future developer to the south will install permanent fencing							
419	* A detailed drainage and grading study must be performed prior to any landscape or site work is to begin.							
420	* Estimate does not include connections to adjacent, existing, or proposed surface or sub-surface drainage systems.							

	A	B	C	D	E	F	G	H
421								
422	Phase 3							
423	Earthworks for Crusher Fines (Promenade Portion of Farmyard & Paths: 9,915sf)			134	CY	12.00	1,608.00	3
424	Earth Works (Fine Grading)			249000	SF	0.15	37,350.00	3
425	Deciduous tree 2.5"			89	EA.	400.00	35,600.00	3
426	Ornamental tree 2.5"			22	EA.	350.00	7,700.00	3
427	Foundation Planting/ Formal Garden			5731	SF	3.00	17,193.00	3
428	Bed Prep/Mulch			5731	SF	0.90	5,157.90	3
429	Historic "criss-cross" Fencing -copperwood			1079	LF	15.12	16,314.48	3
430	Hardscape -Pavers			2944	SF	11.00	32,384.00	3
431	Crusher Fine Paths & promanade portion of farmyard			9915	SF	3.00	29,745.00	3
432	Turf -front lawn/event zone			28489	SF	0.40	11,395.60	3
433	Steel Edger			1450	LF	3.50	5,075.00	3
434	Curb - stone sets			443	LF	30.00	13,290.00	3
435	Irrigation Drip			29475	SF	0.90	26,527.50	3
436	Irrigation Spray (Bluegrass turf and limited native prairie areas)			67090	SF	1.00	67,090.00	3
437	Soil Amendments For Comm. Garden			17700	SF	0.40	7,080.00	3
438	Fence around Community Garden (Ranch Style fence, jumbo round copperwood, v-mesh)			726	LF	12.00	8,712.00	3
439	Native re-seed of short grass prairie			4	AC	260.00	1,144.00	3
440	Event zone "Stage" area - concrete			706	SF	4.00	2,824.00	3
441	Power for gardens/landscape			1	LS	3,600.00	3,600.00	3
442	Power for outdoor events			1	LS	3,600.00	3,600.00	3
443								
444			Sub-Total				333,390.48	
445	Mobilization			1	LS		33,339.05	3
446			Sub-Total				366,729.53	
447	Phase 3 Site Design Fees						55,009.43	3
448								
449			Phase 3 SITEWORK Total				421,738.96	
450								
451	Assumptions							
452	*New outbuilding in community garden area by others.							
453								
454	Phase 4							
455	Additional parking southwest portion of the site							
456	1 1/2" rock (Class 5) 5" deep (24,609 sf)			555	Ton	10.75	5,966.25	3
457	Recycled Asphalt 4" deep (24,609 sf)			555	Ton	12.00	6,660.00	3
458	Earthworks (\$12/CY)			382	CY	12.00	4,584.00	3
459	Curb			1649	LF	30.00	49,470.00	3
460	Addition parking lot lighting (2 post lights, fixture cost only)			1	LS	4,000.00	4,000.00	3
461								
462			Sub-Total				70,680.25	
463	Mobilization						7,068.03	
464			Sub-Total				77,748.28	
465	Phase 4 Site Design Fees						11,662.24	
466								
467			Phase 4 SITEWORK Total				89,410.52	
468								
469								
470	Site and Landscape Improvement Grand Total						836,927.90	
471								
472	Not Included							

	A	B	C	D	E	F	G	H
473	Trail Along Southern Property Line			8186	SF	4.00	32,744.00	4
474	Total						32,744.00	
475								
476								
477	Site Work / Landscape Notes & Assumptions							
478	* Sidewalk along Bromley Lane and S. 15th Avenue to be installed by others with Bromley widening and 15th Avenue. installation.							
479	* Easement improvements (from back of walk to curb) to be made with sidewalk installation by others.							
480	* All site lighting and power costs are for fixtures only, conduit power runs not included.							
481	* Trail along southern property line to be installed with open space and parks projects located to the east of the property.							
482								
483	GRAND TOTAL, BUILDINGS AND SITEWORK						1,946,185.70	
484	2009 dollars, should be inflated for future years							

Section 9: Bibliography

Published Works:

Blumenson, John J.-G. *Identifying American Architecture: A Pictorial Guide to Styles and Terms, 1600 – 1945*. Second Edition. W.W. Norton & Company, New York & London, 1981.

Brighton Genealogy Society, Pat Reither and Billie Schmer, co-chairpersons. *The History of Brighton, Colorado, and Surrounding Area*. Curtis Media Corp., Dallas, TX, 1987.

Colorado Historical Society. *Colorado Cultural Resource Survey Manual, Volumes I and II*. Second Edition. Office of Archaeology and Historic Preservation, Denver, CO, 1998, revised 2001.

Colorado Historical Society. *A Guide to Colorado's Historic Architecture and Engineering*. Second Edition. Office of Archaeology and Historic Preservation, Denver, CO, 2003.

McAlester, Virginia & Lee. *A Field Guide to American Houses*. Alfred A. Knopf, New York, 2004.

U.S. Department of Housing and Urban Development. *Lead Paint Safety: A Field Guide for Painting, Home Maintenance and Renovation Work*, 2001.

U.S. Department of the Interior, National Register Bulletin, *How to Complete the National Register Registration Form*, 1997.

Universal Portland Cement Company. *Concrete Silos: A Booklet of Practical Information for the Farmer*, Pittsburgh, PA 1914.

Wagner, Albin. *Adams County Crossroads of the West*, Vol. I. Board of County Commissioners, Adams County Colorado, 1977.

Unpublished Manuscripts and Reports:

Roberts, Frank E. "Bromley Lane Farm Historical Perspective From Memory as Experienced from Living On the Farm, 1936 – 1946". 2007 manuscript on file at City of Brighton.

Articles and Periodicals:

Journal. Issue 1/2007, Volume 24, Number 1. "Brick Maintenance and Repair for Historic and Landmark Structures."

The Maintenance Series, Information Sheet 5.1. "Wood Preservation."

Period Homes Magazine, May/June 2002. "Reading Historic Roof Flashing Details."

Archival Resources:

National Archives and Records Administration, Washington, D.C. Historic aerial photos: RG 145 Can #DN1671 Exposure YF 35-88 10"x10" aerial negative: Bromley, CO, 1937
RG 145 Can #ON 35119 Exposure YF 11G-177 10"x10" aerial negative: Bromley, CO, 1950

Willits Farm Map, 1899, on display at Adams County Museum, Brighton, CO

Oral Interviews:

May 14, 2009 interview by Kathy Lingo, Avenue L Architects, Mike Gasper and Matt Norcross of DHM Design with:
Bromley Family: Bill, Jean, Ken, Lou, Shane, Sara and Taylor Bromley
Hishinuma Family: Teri and Kylie Hishinuma
Roberts Family: Frank and Betty Roberts

Governmental and Organizational Files:

Adams County, Colorado. *Grantor-Grantee Index* files, various dates.

On file at City of Brighton Department of Parks & Recreation, CO:

File box on Bromley Farm. Contains historic photos from Bromley and Hishinuma ownership periods, articles, research on Bromley and Koizuma - Hishinuma families, timelines, and research documents used in preparing the National Register nomination.

Final Phase I Environmental Site Assessment Update, Tract J of Bromley Farm, ERO Resources Corporation, Denver, Colorado, October 26, 2006.

Improvement Survey Plat: Tract J – Bromley Farms. V3 Companies, 2009. On file at City of Brighton, CO.

National Register of Historic Places Nomination Form – Bromley Farm / Koizuma-Hishinuma Farm. Prepared by Patricia Reither, 2006. On file at the Colorado Historical Society, Denver, CO.

On file at City of Brighton Department of Community Development, CO. Note that most of these documents were prepared for a proposed residential development called "Hishinuma PUD" but sometimes referred to as "Bromley Farm" or "Hishinuma Farms". The land in question includes the historic farm but also much more land to the south and west.

Amendment to Brighton Watershed Tributary to South Platte River Outfall Systems Planning, WRC Engineering, Nov. 20, 2002

Bromley Farms Final Plat. August 2006

Geotechnical Report of Subsurface Exploration Program. Ground Engineering. 4/30/01

Bromley Farm
Historic Structure Assessment
Section 9: Bibliography

Hishinuma Farms Final PUD. Reception 200400585040. WRC Engineering, 7/7/04

Hishinuma Farms Revised Site Plan: Traffic Impact Analysis Update. Aldridge Transportation Consultants, 11/7/02

Master Drainage Report for Bromley Farms. Milestone Engineering, Nov. 19, 2004, rev. 4/21/06

Master Utility Report for Bromley Farms. Milestone Engineering 2/25/05, rev. 7/15/05

Monumented Land Survey Plat. Advanced Survey Services Inc. 3/7/01

City of Brighton Adopted Planning Documents applying to this site:

Brighton Comprehensive Plan, Bromley Lane District and Bromley Lane Corridor Area. 6/9/09

Bromley Lane Master Plan. Short Elliott Hendrickson, Boulder CO. 4/30/04

City of Brighton Land Use and Development Code, amended 1964.

Internet Sites:

GoogleEarth.com, 2005 and 2007
Grandlaketelodge.com
Jon'sTrailwaysHistoryCorner.com

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Bromley Farm / Koizuma-Hishinuma Farm
Adams County, Colorado

Section number 10 Page 12

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

SUB:BROMLEY FARMS DESC: TRACT J
Parcel Number: 0156917202001

Legal description of Tract J:

A TRACT OF LAND IN THE NORTHWEST QUARTER OF SECTION 17, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 17, SAID POINT BEING A 3-1/4" ALUMINUM CAP LS# 23519 IN RANGE BOX, SAID POINT BEING S 89.57'43" E, 2649.15 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 17, SAID POINT BEING A 3-1/4" ALUMINUM CAP LS# 23519 IN RANGE BOX; THENCE ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 17, S 00°05'17" W, 85.00 FEET TO A POINT; THENCE LEAVING SAID NORTH-SOUTH CENTERLINE S 89°49'10" W, 372.06 FEET TO THE TRUE POINT OF BEGINNING; THENCE ALONG THE FOLLOWING NINE (9) COURSES:

- 1) S 00°10'50" E, 41.97 FEET TO A POINT;
 - 2) THENCE S 47°16'43" E, 116.20 FEET TO A POINT;
 - 3) THENCE S 12°09'47" E, 365.00 FEET TO A POINT;
 - 4) THENCE N 90°00'00" W, 180.54 FEET TO A POINT;
 - 5) THENCE S 79°11'05" W, 71.24 FEET TO A POINT;
 - 6) THENCE S 89°52'10" W, 650.00 FEET TO A POINT;
 - 7) THENCE N 82°23'52" W, 64.67 FEET TO A POINT;
 - 8) THENCE N 60°07'50" W, 77.74 FEET TO A POINT;
 - 9) THENCE N 29°52'10" E, 298.68 FEET TO A POINT OF CURVATURE;
- THENCE ALONG A CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 23°57'47" AND A RADIUS OF 388.00 FEET, AN ARC LENGTH OF 162.28 FEET, A CHORD BEARING OF N 17°53'16" E, AND A CHORD DISTANCE OF 161.10 FEET TO A POINT OF REVERSE CURVATURE; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 83°51'31" AND A RADIUS OF 34.30 FEET, AN ARC LENGTH OF 50.20 FEET, A CHORD BEARING OF N 47°40'06" E, AND A CHORD DISTANCE OF 45.84 FEET TO A POINT OF TANGENCY; THENCE N 89°49'10" E, 637.52 FEET MORE OR LESS TO THE TRUE POINT OF BEGINNING, SAID PARCEL CONTAINS 9.60 ACRES OR 418,143 SQUARE FEET, MORE OR LESS.

Tract J is depicted in the aerial photo labeled "Assessors Aerial Photograph/Site Map."

BOUNDARY JUSTIFICATION

The boundary includes all the land historically part of the Bromley Farm / Koizuma-Hishinuma Farm not slated for future residential development as the Bromley Farms Subdivision.

Bromley Hishinuma Farm Masterplan
Meeting Notes: May 14, 2009 at Brighton Recreation Center

Attendees:

Gary Wardle, Director, City of Brighton Parks and Recreation
 Consultants: Kathy Lingo, Avenue L Architects
 Mike Gaspar and Matt Norcross, DHM Design
 Bromley Family: Bill, Jean, Ken, Lou, Shane, Sara, and Taylor
 Hishinuma Family: Teri and Kylie
 Roberts Family: Frank and Betty

Goals of the meeting were to learn:

1. How the Bromley Hishinuma Farm and its buildings were used during the time of each family's occupation
2. How the Farm changed over time
3. Families' ideas for possible new uses.

Representatives of the three families who owned/occupied the Farm were present. Their connections to the Farm:

Teri Hishinuma spent summers there in the 1970s (verify this) and visited her relatives who lived there. Her brother John worked on the farm.

Frank Roberts lived there 1936-1946.

Most of the Bromley family recollections come from family photos and conversations with Maria Bromley (Emmet Bromley's daughter), who lived on the Farm and passed away in 2000.

1. Project background: The City of Brighton contracted with the consulting team of Avenue L Architects and DHM Design to prepare a masterplan for preservation and re-use of the Farm. This includes documentation of the site and buildings, their history as it evolved over time, a phased, prioritized plan for rehabilitation of the buildings, a phased plan for implementation of a new use, and cost estimating. The work is paid for by the City of Brighton and the Colorado Historical Society State Historical fund.

Land Use:

2. (Bromley era): East side of Main House was used for formal garden parties. The Bromley family had an upscale social life. West side of Main House was informal, used by the kids. A white fence surrounded the house, the east garden, and the lawn area north of the house.
3. (Bromley era): Huge vegetable garden east and south of Main House.
4. (Roberts era): Huge vegetable garden south of the Migrant Worker House.
5. Trash removal: (Bromley era): trash was hauled away to the west. (Hishinuma era): trash was burned in the concrete silo.
6. (Bromley era): walnut, orange, and apple trees were planted further west of the current site. Cottonwoods were planted in about the 1880s.
7. (Hishinuma): Lower 1/2 of site (from the house to Chambers) was planted in corn, the rest was alfalfa.
8. (Roberts): 160 acres were planted in sugar beets, corn, and alfalfa. Crops were rotated.
9. (Bromley): Was the largest cattle/sheep owner in Colorado.
10. Bromley's built a deep artesian well. This was highly prized at the time.

Buildings no longer there:

11. Brick building in the pictures was a garage. A second brick building, about 200 feet south of the Main House, was for chickens. A concrete walk led to that building. Why brick for buildings of secondary uses? Emmet Bromley owned a brick company. The brick buildings were built around the 1920s.
12. There was a tool storage and machine shop north of the Migrant Worker House.
13. The Roberts family built a cattle shed.

Existing Buildings:

14. Main House floor plan and exterior design are original to the Bromley family, except for the south porch, which was added in the Roberts era. East chimney was added later (Hishinuma era) to accommodate a space heater added to the large room in the northeast corner.
15. Hishinuma's built drag cars in the Barn.
16. Migrant Worker south porch addition was built during the Hishinuma era.
17. See attached first floor plan of Main House for uses of different rooms during different eras.

Family Suggestions for Future Uses:

- Have people in period costumes to demonstrate what people did on the Farm
- Bring in school kids
- Interpret the histories of the three families
- Represent a small working farm with some livestock
- Interpret the sugar beet industry, also cabbage and alfalfa
- Involve the local schools
- "Pump life into it"
- Without farms and countryside, the community loses a lot
- Show it as an evolutionary process
- Give some recognition to Emmet Bromley's accomplishments
- Local models: Greeley Centennial, Anderson Farm in Platteville

Families were encouraged to stay involved with the master plan project.

Meeting minutes by: Kathy Lingo

Any comments or concerns should be directed to the author within one week.

Attachment: Main House First Floor Plan

Bromley-Hishinuma Farm

Stakeholders Meeting

Date: May 20, 2009

Time: 5:30pm – 8:30pm

Location: Brighton Recreation Center

1. Introductions
2. Project Overview & Goals
3. History and significance of the site
4. What's been done so far?
5. Issues and uniqueness of the site
6. How you can be involved:

-Make suggestions and ask questions tonight

-Email your thoughts and questions by May 28, 2009, to either:

Kathy@avenueLarchitects.com OR

Mnorcross@DHMdesign.com

-Write your ideas down and leave them on the table tonight

-Write your ideas down and mail or bring them to:

City of Brighton, Parks & Recreation

1901 E. Bridge

Brighton CO 80601

Project Title: Bromley Farm Master Plan and Historic Assessment
Project Number: 2008-02-019
Grant recipient: City of Brighton, Colorado
Deliverable #15
Stakeholders meeting minutes May 20, 2009

**Bromley-Hishinuma Farm Masterplan Stakeholder Meeting
Meeting Notes: May 20, 2009 at Brighton Recreation Center**

*This is a compilation of notes from easels at the meeting, as well as memos,/notes left behind or mailed by attendees.

Attendees:

City of Brighton:

Gary Wardle, Director, City of Brighton Parks and Recreation
Mark Heidt, Assistant Director, City of Brighton Parks and Recreation
Wilma Rose – City Council Member

Consultants: Kathy Lingo, Avenue L Architects
Mike Gaspar and Matt Norcross, DHM Design

Stakeholders Attending: Bowers, Russell; Case, Teresa; Decrescentis, Ruth; Dunham, Kevin; Ferrell, Tim & Claudia; Glynn, Terry; Hamilton, Pat; Kasza, John; Kring, Robin; Lockwood, Allison; McCutcheon, Richard; Morris, Laura; Petrocco, Dave Sr. & Susan; Reither, Pat; Steele, Brice; Strider, John; Tagawa, Glenn; Worth, Susan
Bromley Family: Ken, Lou, Taylor

Examples or Models of Existing Farm Attractions

- Fort Collins - Martinez Farm-12 Ac.-Students, animals
- Fort Collins-Springs Gardens-Classes, gardens, compost, greenhouse (sell plants)
- San Antonio Sea World map
- Adams County Museum has house
- Grand Junction historic farm – good example
- Centennial
- Denver Four Mile House
- Littleton Historical Museum
- Greeley
- Fort Lupton plans tractor display

Brainstormed Ideas:

Uses:

- Might not be best location for Japanese/American center
- Living farm and vegetable gardens community gardens – volunteers to raise crops & donate food
- Future of farming

- Evolutionary site
- Greenhouse – may not be viable
- Living farm – What makes tourists visit? Western culture
- Family reunions
- Field trips – School District
- Japanese/American influence emphasis
- Camping – Boy Scouts pay fee – currently no place local, horses – arrange with local stables
- 1 x year – Boy Scouts and projects
- 4H active groups, get kids interested; chickens, volunteers
- Migrant house – office
- Main House – historic research library
- Barn events – Luis Burrell – famous storyteller, Women of the Corn
- Working farm representing progressive history - all 3 eras (kids) sugar beets history
- Involve School District – community service
- Sino/American cultural history center (nowhere in Country?)
- Japanese/American-dry crops-character actors and exhibits
- Life cycle costs – Operation & Maintenance of the farm \$
- Event based calendar – not open 24-7-365
- Coordinate cultural histories
- Don't make it too difficult to pull off – don't make it complicated – schedule – theme
- Water rights? – No old ditch rights
- Appreciate the historical context – younger generation
- Kids – need to see sugar beets
- Self-sustaining?
- Seasonal Activities : Old fashioned picnics (summer), autumn harvest festival, winter hayrides, discovering the country in the winter, spring planting kick off
- Artists contests: photos, paintings, sketches of the farm to be used for a variety of media representations like note cards prints, ect used to raise funds
- Classes: horticulture, land-use, historic preservation, crafts, local history,
- Small meeting reception functions
- Community organization- service organizations, scouts, churches, adopt the farm for one month during the year to do light maintenance and clean-up
- Artist co-op gallery
- Use for community events, weddings reunions, room for a large tent.

Site Features:

- Barn – play equipment
- Map of Colorado showing farms – on tables, melodrama, cooking demos
- There is no Brighton Museum. Attractions: picnic stop, mini-tours, sell or make crafts & antique barn, tractor rides, victory garden

- Community garden – walking path “crop circle”, events: teas, storytelling, garden parties, jam-making, quilts
- Western garden demonstration, walks (xeric)
- Barn – represent livestock
- Underground parking
- Exhibits: farm tools, quilts, livestock, spinning, weaving, other crafts,
- Restore barn for barn dances
- Consider pergolas or shade structure for picnic areas
- Because of wood structures: no fireworks, bonfires, BBQ’s
- Limit Driveway – Only handicapped or service vehicle to drive into property, put parking close to Bromley Lane

Why this is important to the community:

- Appreciate the historical context – younger generation
- Japanese American presence is dying out in Brighton
- Need oral histories of old memories from the local farming community
- What is the future of farming?
- Younger generation needs to appreciate the historical context
- People need to have pride in their community
- Farmland is disappearing
- It needs to be protected NOW!
- Younger generation should know about the sugar beet industry and what a sugar beet looks like.

Suggestions for cooperative partners:

- Denver group plotting Japanese/American farm ownership – call Mr. Tagawa
- Adams County Museum
- Ft. Lupton
- School District
- Grants – Anschutz
- Community organizations, service organizations, scouts, churches
- Heritage tourism cooperation

Other:

- Japanese American presence dying out
- Denver group plotting Japanese/American farm ownership – call Mr. Tagawa
- Close to DIA – imaginative, forceful
- Need oral history of old memories (farming community)
- Other City buildings
- A piece of history that is missed
- Our grandparents
- Sq.ft. and condition of houses?
- 1960’s – no pesticides found (city) – Ph. I & II environmental assessment

- Pride community
- Disappearing farmland
- Adams County Museum does some of these – how do we separate ourselves, don't compete - joint
- Adams County has house
- School, families
- Economic viability-City greenhouses (flower) – hide south of barn
- Old City Hall – use as City Museum
- Bob Sakata – Asian American connection
- Protect it now
- Ft. Lupton – intends tractor museum
- Self-sustaining?
- Centennial
- Grants – Anschutz – adopted by community groups
- Have a professional photographer shoot the house and property from angle that don't show development in the area, so people can envision what the farm looked like in “earlier days”

Project Title: Bromley Farm Master Plan and Historic Assessment
 Project Number: 2008-02-019
 Grant Recipient: City of Brighton, Colorado
 Deliverable #14
 Community meeting agenda June 25, 2009

Bromley Hishinuma Farm
 Community meeting June 25, 2009

1. Introductions: City and consulting team representatives
2. Project Overview & Goals
 - a. City of Brighton acquired historic farm with 9 acres. Wants to preserve & rehabilitate the buildings and find a use for the site.
 - b. Public process: collect community input, ideas and support for new use
 - c. City contracted with Avenue L/DHM team, architects and planners specializing in historic preservation.
 - e. The planning process is funded by the City and a grant from the State Historical Fund.
 - d. Project process:
 - 1) Assess and prioritize needs to stabilize and rehabilitate the buildings
 - 2) Development alternatives for re-use of the site, including associated costs, priorities, and phasing.
 - e. Project goals: find a new use that is appropriate, sustainable and achievable. Develop a vision for the site and structures, with a defined program for success. The plan will be based on a thorough understanding and analysis of the history of the site, the property's opportunities and constraints, and the needs of the City and the community.
 - f. Project schedule.
3. Summary of history and significance of the site
4. What we've done so far: historic research, interviews with family members, condition assessment by structural engineer and architects, archaeological survey.
5. Issues
 - a. Define the uniqueness of the site. What can we do that is unique to this farm and will not jeopardize its listing on the National Register, and will not duplicate other programs that are available nearby?
 - b. What uses would be welcome in this area?
 - c. Does the new use need to generate revenue? Does it need to pay for itself?
6. How you can be involved:
 - a. Make suggestions and ask questions tonight.
 - b. Email your thoughts and questions to the team within the next week.
 - c. Write your ideas down and mail or bring them to the City office within the next week.
7. Open for questions and suggestions.

Combined notes for suggested uses, suggested ideas

Ongoing Uses, site:

Living farm

Interpret sugar beet industry

community garden plots

Formal gardens

Restore trees and gardens from Bromley era

Issues: irrigation, maintenance, on-site management. Little revenue generated.

Ongoing (fixed) uses, buildings:

Restoration and interpretation:

Restore interiors, interpret history of Bromleys and Hishinumas, living history

Issues: parking, ADA. No negative impacts to buildings. Little revenue generated. Add water, wastewater utilities and increase electrical service.

Museums, cultural centers, libraries:

Japanese-American cultural history center, exhibits, character actors

Historic research library

Local history archives

Political museum

Issues: more parking than other uses. Extent of community support is questionable. Ongoing maintenance and operational costs. Mechanical impacts for archival uses. Add water, wastewater utilities and increase electrical service. Strengthen floor framing in Main House. ADA.

Major Revenue Generators:

New building: City greenhouse

Water park

Major impacts, major costs, extensive utilities.

Special events and rotating uses:

Arts:

Art and photography exhibits

Artist competitions

Artist co-op gallery

Craft shows

Storytelling

Issues: parking, utilities, lighting, bathrooms, ADA. Possibly add plumbing to Barn. Strengthen floor framing. Check proposed uses in restored Armory.

Kids:

School district field trips

Boy scout camping

4H groups

Add bathroom building, possibly in Wash House. ADA. Bathrooms in both houses. Bus parking.

Adult education:

Classes on horticulture, xeriscape, land use, historic preservation, local history

Teach old crafts like canning, quilting

Exhibit farm tools

Issues: parking, add utilities, ADA, bathrooms in both houses and possibly Barn.

Special catered events (formal):

Family reunions

Weddings

Small business meetings and receptions

Issues: parking, utilities, ADA, bathrooms, more electrical service, might want air conditioning for greater temperature control to make it more marketable (mechanical). Strengthen floor framing.

Outdoor events, informal:

Farmer's markets

Old fashioned summer picnics

Harvest festival

Winter hayrides

Spring planting kick-off

Rotating festivals and exhibits (ranching, farming, ethnic contributions)

Issues: parking, bathrooms, wear and tear on the site, site might be too small for some of these (hayride). ADA for bathrooms.

Entertainment

Barn dances (*seismic upgrades if required by Building Dept.*)

Murder mystery theater

Halloween haunted house

Issues: parking, add utilities, bathrooms in both houses and possibly Barn. ADA.

Bromley Farm Agenda

Wednesday August 5, 2009

Meeting with Brighton Parks & Recreation Advisory Board, Historic Preservation Commission, and stakeholders group

1. Introductions
2. Summary of work done to date: background research; architectural, structural, landscape, and archaeological assessments; cost estimates for repairs only (not use changes); meetings with families, stakeholders, and community at large
3. Limitations of buildings:
 - Main House: 2600 gross square feet
 - Existing layout: 38 people for an event, but only 22 in one room
 - Gut first floor: 54 people for an event on the first floor
 - First and second floor dining and outdoor dining: 72 people
 - Barn: 1600 gross square feet on main floor. 106 people for a barn dance
 - Migrant Labor: 692 gross square feet
4. Community suggested uses (see attached)
 - Most community support:
 - Living Farm with rotating events
 - For-profit venture, i.e. White Fence Farm restaurant
 - Other ideas, less frequent mention: Museum, cultural center, library, City greenhouse, water park
5. Site plan, limitations of site, and suggested site uses
6. Operational Alternatives
 - Operated by City
 - Leased as a for-profit venture
 - Leased as a living farm with living history interpretation, farmer's market coop
7. Feedback/response/questions

Suggested New Uses for Bromley/Hishinuma Farm

Ongoing Uses, site:

Living farm

Interpret sugar beet industry

community garden plots

Formal gardens

Restore trees and gardens from Bromley era

Issues: irrigation, maintenance, on-site management. Little revenue generated.

Ongoing (fixed) uses, buildings:

Restoration and interpretation:

Restore interiors, interpret history of families, living history

Issues: parking, ADA. Little revenue generated. Add water, wastewater utilities and increase electrical service.

For-profit venture, like White Fence Farm restaurant

Issues: parking must be paved and close to entrance. ADA, utilities.

Commercial kitchen. Impacts on potential funding sources (State Historical Fund). Strengthen floor framing

Museums, cultural centers, libraries:

Issues: Parking, ADA. Extent of community support is questionable. Ongoing maintenance and operational costs. Mechanical impacts for archival uses. Add water, wastewater utilities and increase electrical service. Strengthen floor framing in Main House.

New building: City greenhouse

Water park

Major impacts, major costs, extensive utilities.

Special events and rotating uses:

Arts:

Art and photography exhibits

Artist competitions

Artist co-op gallery

Craft shows

Storytelling

Issues: parking, utilities, lighting, bathrooms, ADA. Possibly add plumbing to Barn. Strengthen floor framing, possible seismic upgrades to Barn. Don't compete with existing facilities.

Kids:

School district field trips

Boy scout camping

4H groups

Add bathroom building, possibly in Migrant Labor. ADA. Bus parking.

Adult education:

Classes on horticulture, xeriscape, land use, historic preservation, local history

Teach old crafts like canning, quilting

Exhibit farm tools

Issues: parking, add utilities, ADA, bathrooms in both houses and possibly Barn.

Special catered events (formal):

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Issues: parking, utilities, ADA, bathrooms, more electrical service, might want air conditioning for greater temperature control to make it more marketable (mechanical). Strengthen floor framing.

Outdoor events, informal:

Farmer's markets

Old fashioned summer picnics

Harvest festival

Winter hayrides

Spring planting kick-off

Classic car shows

Rotating festivals and exhibits (ranching, farming, ethnic contributions)

Issues: parking, bathrooms, wear and tear on the site, site might be too small for some of these (hayride). ADA for bathrooms.

Entertainment

Barn dances (*seismic upgrades if required by Building Dept.*)

Murder mystery theater

Halloween haunted house

Issues: parking, add utilities, bathrooms in both houses and possibly Barn. ADA.

Bromley Farm Agenda

Wednesday September 2, 2009

Meeting with Brighton Parks & Recreation Advisory Board and Historic Preservation Commission

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2. Summary of work done to date: background research; architectural, structural, landscape, and archaeological assessments; cost estimates for repairs only (not use changes); meetings with families, stakeholders, and community at large
3. Limitations of buildings:
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Kids:

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Boy scout camping

4H groups

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Adult education:

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