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Preface

The opportunity to become closely associated with an historic property is always an adventure into truth, rumor and some nebulous place in between. It is clear that the name Kit Carson evokes many different thoughts among people who have a knowledge of his adventures, his duties as a soldier, his family, and his affiliation with the Masonic Brotherhood in Taos, N.M.

This report attempts to place into one document as much of the truth and as little of the fiction as possible with the intent to educate and create a platform for dialogue about the future of this important cultural resource.

The Board of Directors of the Taos Historic Museums, recognizing the need for long-range planning tools for the Kit Carson Home and Museum, authorized the Museums' directors to apply for grants to prepare a Historic Structure Report. This was the first step to achieve that goal. The National Park Service offers funding for studies and for capital improvement projects to National Landmark properties. These challenge grants require matching funds from the applicant.

The purpose of the Historic Structure Report is to provide a master plan and guide to future preservation efforts at the property based on a careful review and analysis of the history, context and existing conditions. The National Park Service awarded a Challenge Cost Share Program Grant with additional money to complete an "emergency" restoration and repair of the Historic Kit Carson Street Portal.

In order to facilitate construction, the architects prepared a preliminary report for the portal only in the spring of 2001. The National Park Service approved this report and the proposed interventions and the portal restoration was accomplished using the Museums' maintenance staff with assistance from the Rocky Mountain Youth Corps.

The project was completed is an exemplary example of applied preservation techniques by the maintenance staff for the Museum, with the technical advice from the Park Service and under the guidance of the Architect, Dale F Zinn and Associates. In October of 2001, the approximately 200-year-old beam was preserved and placed back as a serviceable piece of historic fabric with great success.

It is anticipated that further work undertaken at the Museum will be executed with similar diligence and spirit to "do it the right way".

Carson's personal life at home with his family was deliberately downplayed and held closely by Carson for his own unknown personal reasons. That lost history of the house is possibly to be found in a more invasive investigation of the structure, although, with the alterations that took place from 1868 to 1958, there is not much hope of finding anything substantial.

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Kit Carson Home and Museum Compound – Historic Structure Report

Josefa Jaramillo's life in a small northern New Mexico town, with many relatives close by, was certainly occupied by the daily efforts of keeping her large family of seven children continuously fed and clothed. The story that the Museum eventually tells about the house will hopefully allow some light to shine on that history as it becomes available. The history of the Museum compound tells another story that is less elusive.

Few stewardship efforts can be found that span as many years as that of the Carson-Romero Houses combined with rehabilitation efforts made by the Masonic Order Bent Lodge #42 of Taos. Theirs is a remarkable example of voluntary efforts to preserve a place that can be used to honor a name.

For a period of over 90 years a small group of dedicated people have expended many hours to honor Kit Carson, a member of the Masonic Brotherhood. The effort has enabled thousands of visitors to seek out and enjoy the simple pleasure of sharing a space once occupied by the fabled Kit and Josefa Carson. In doing so the visitors are at once surrounded, maybe without their full knowledge, by the spirit of an entire community effort of the Masonic Lodge, the Taos Historic Museums Foundation, administration and staff.

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Kit Carson Home

Historic Information and Facts

Introduction

If the inconclusive date of construction (1825) for the Kit Carson House can be established, there is a history of over 175 years of occupancy to be documented within this Historic Structure Report. From the broad view of the history of the structure, two shaping forces emerged which resulted in an important cultural resource being preserved and made available for visitors to learn and from which to enjoy.

Through the preservation of a single cultural resource, important on many levels to the history of Taos, visitors are able to learn about the history of a well-known Mountain Man, Army General and Masonic Lodge member, Christopher Houston “Kit” Carson. In addition, they are exposed to the simplicity of architecture, finishes and lifestyle setting for a family living in that era. Tactile overriding feeling surrounds one walking within the walls once occupied by Kit Carson and his family. That feeling reinforces the quality of the Museum experience while telling the history of the building and the people through the museum exhibits. The history will also be evident in the touch and feel the visitor experiences as they move through the buildings.

Two Shaping Forces Echo Loudest

First was the decision of Kit Carson to buy the house. In seeking a wedding present for his new bride in 1843 and knowing that Josefa Jaramillo was connected with a politically important family in northern New Mexico, he wanted a house that would be equal to her social standing. He was offered a house that already belonged to family members, which guaranteed that it would be suitable to her family. The union of Carson, already a famous Mountain Man and Indian Scout, with the Jaramillo family, under the 21 vigas of the three-room adobe brought an added distinction to the structure. The house would not have gained a higher distinction without the association with the Carson/Jaramillo family with the property.

The short 25 years that the Carson family owned the house included times in which Taos “politicos” and prominent society were entertained. Carson’s nationally known reputation, experiences and duties outside of New Mexico also brought Generals, traders, Mountain Men and Congressmen from throughout the country to the shade of the Carson portal. The forces of family and bonds of friendship brought together within those walls were to make the structure a symbol for the strength of their combined families. Carson was not apt to care if his name was associated with a building or place where the family aspect of his life was public.

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He hid much of the details of family life from his biographers and in his own remembrances.

The other "shaping force" that continues at work today and, possibly, of greater importance is the accumulation of efforts precipitated by the Masonic Lodge Brethren in NM and Taos to preserve the House.

The first of these events, in the undercurrent of the Masonic Order's expansion in New Mexico, was the inclusion of Kit Carson as a Brother in 1854. This would not have been a shaping force if the members had not also prevailed in their efforts to continue the work of the Lodge despite very small numbers.

Later, extensive forces came together again in the efforts of the Masonic Bent Lodge #42 members who made a fateful decision to focus substantial efforts to save the Kit Carson House. In the early 1900s the members recognized the need to preserve the house by acquiring the property. The efforts exerted resulted in the purchase of the property by the Grand Lodge of New Mexico in April of 1910. This event was followed by continued tireless efforts by the Masons and their wives to raise funds for restoration of the very dilapidated property. (See photos 1908).

Their goal had a stated purpose of preserving the "place" that best served as a monument to fellow Brother Kit Carson. He was one of several well-known local historic figures that were members of the Bent Lodge, but Carson's star shined a little brighter on a national basis and was certainly the most recognized name in the group. The decision to purchase the house and make the house a place to honor and educate the public about their most famous member was followed, albeit many years later, by the substantial efforts by the Masonic Lodge to further restore and expand the use of the Kit Carson House and related properties for operation as a museum.

Historic Background and Context

The Kit Carson Home and Museum is located at 228 Kit Carson Road in Taos, New Mexico. At the time that Carson owned the property, the road on the south side of the property was called Taos Canyon Road. Most deeds refer to this road as the public street.

The House and Museum properties consist of the original three-room, 21-viga home of Kit Carson and his wife, Josefa, purchased in 1843, and an 1830-1856 structure known as the Romero House. These two historic adobe structures were subsequently connected on the west by a 1951-52 concrete block structure and expanded in 1958, with a "reconstruction" of two rooms of the Romero house, which were all but non-existent.

A rental property was constructed on the adjoining property to the east in 1953. The purpose of this building was to produce a revenue stream to support the efforts

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of the museum. Portals were added at that time to the courtyard face of the Carson House, to the additions and to the Romero House in 1958.

The multiple-building complex is listed on the State and National Registers of Historic Buildings and Places and listed as a National Historic Landmark. The State of New Mexico Register number is **08** and the National Register listing number is **#66000948**, which contains an official listing date of October 15, 1966. Records found in newspapers and newsletters from the Masonic Lodge indicate a celebration took place in 1963 to honor the listing of the property as a National Landmark. The National Register system was not in place until 1966.

A Historic American Building Survey file, (HABS) maintained by the National Park Service was created for the building complex. However, no drawings were ever placed into that file. The file number is **NM-111**. Drawings created under the Historic Structure Report, if acceptable to the keeper of the files, will be submitted for inclusion in the record.

Kit and Josefa Carson's association with the property was over a period of 25 years, for which there is little documentation or physical evidence available. The experience of the Carson House today is very much entwined with the history and stewardship by the Masonic Order Bent Lodge No. 42 of Taos, who have owned and maintained the property since 1910. (The Grand Lodge of NM purchased the property in 1908. The stewardship by the Masonic Lodge, in cooperation with the Museums spans a period of over 90 years. There are sufficient documents from the minutes of meetings and in a written report developed by Brother Jack K. Boyer that illuminate the record of their stewardship.

Located in the center of Taos, two blocks east of the Plaza stands the austere adobe structure with very simple "territorial"-trimmed windows and doors that face onto the road to Taos Canyon. Now known as Kit Carson Road, the street was once dirt and sometimes mud-paved open space that maintained a lower elevation in relationship to the walkways.

Paving and parking meters now march along with the portal posts, and maintenance of the historic fabric has evolved into a defensive effort to keep cars from impacting the fragile posts and to keep water that runs off the roofs and down the street from entering the building. The fragile portal, which looks more like a bit of the barrio, reminds people that they are stepping back into time and the hustle bustle of the commercial street is left behind as one enters the courtyard.

Before Carson strolled the Taos Canyon Road or leaned against the narrow posts in the south sun, he first had to find his way to Taos.

Christopher Houston "Kit" Carson was born on Christmas Eve, in 1809. He was a part-time resident of Taos beginning as a young man of 17. He started his adventures as a run-away from a saddle shop at the age of 16 in Missouri. The tales

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of high drama on the Santa Fe Trail coming from his brothers and friends was too much for the young Carson. He was the youngest child, being raised by his widowed mother. Young Kit was dutiful in helping her in every way, but also afraid that he was going to be trapped in a simple but respectable job of saddle making. He left home with good intentions of returning. Each time he started back to Missouri, however; a new adventure or opportunity lay in front of him and he seemed to always make the choice to follow adventure. He eventually enticed the saddle maker, from whom he had run away, to come to Taos as well.

During much of his time in the west, Taos was a point of return to socialize, re-supply and recoup from his travels as a Mountain Man, scout and adventurer. He was married twice from age 17 to 32, both times to Native American Indians. One child resulted from these unions. She was eventually raised in Missouri by Carson relatives and, as a teenager, brought to Taos to live with Josefa.

Josefa was only 13 years old when she met Carson. Her life was not one of high adventure or national fame but she was the daughter of a well-known and politically connected Jaramillo family in Taos. She was certainly wiser than her years for having helped entertain important government visitors in her father's house.

Carson purchased the house on Taos Canyon Road as a wedding present to his newest bride, Josefa Jaramillo, in 1843. Their occupancy of the house was interrupted by a four-year attempt at ranching in Reyado, NM, in the 1850s, (see photos) and in 1866-1867, while Brig General Carson was assigned as the commanding officer at Ft. Garland, which is about 100 miles north of Taos. (See photo)

Josefa gave birth to at least six children in the three-room house, which probably became quite crowded by the late 1860s. A fourth room appears in the deeds after Carson owned the property, although some of the deeds continue to describe the structure as having 21 and 22 vigas. Historic Maps (see Sanborn 1929) indicate that the Carson Room #4 was only a partial room approximately 10 feet by 18 feet long in 1929. (See maps)

Both Carsons died in 1868 in Colorado. She died in childbirth and Kit expired from complications of an aneurysm that resulted from an earlier fall off of his horse. The Carson family home and property was made a part of the estate to be sold for the benefit of the children. Thomas Boggs, a long-time family friend, handled the estate matters to that end. It would be another 43 years before the house would receive any substantial remodeling or rehabilitation.

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Kit Carson House and Museum – Schedule of Areas	
Net square footage for all museum buildings on site	Net heated interior area 3009 sf
Carson House Rooms #1,2,3	775 sf
Carson House Room #4	323 sf
1952 Addition (leather shop)	637 sf
Romero House Rooms #1,2, 3	816 sf
Bookstore and gift shop	442 sf
Portals 1953 additions (Not including east commercial bldg.)	854 sf
Historic Portal	560 sf

Significance and Preservation Approach

Introduction

The purpose of this section is to introduce a preservation approach that will be useful for project intervention and planning in the future. The mandates of the State and Federal law and the covenants are not specific when it comes to choosing a preservation approach and standards by which the performance of the Museums will be judged. It is important for the Museums to make a clear statement of preservation philosophy that is accepted by those reviewing current and future preservation plans.

The overriding and most important aspect of the Carson Home and Museum Compound is its association with specific persons who were primarily responsible for the character of the building and its furnishings. The fact that the Carson Home was placed on the register does not mean the entire complex is also contributing to the character of the original structure.

The structures at the site are not unique as examples of Taos architecture before, during or after the Carson or the Masonic Lodge eras. The property is unique because of its overall integrity as the home of a well-known folk hero and local legend and his family and as the compound, which was created through the unusual dedicated stewardship of the Masonic Lodge in Taos.

The history section will elaborate on the significance of the property through the course of human events surrounding the structure. It is sufficient to say that the overall significance and, therefore, the emphasis on preservation planning should be preservation efforts that prioritize **the character and feeling** of the Kit Carson House and the setting for which it can be best viewed for the Kit Carson/Josefa era. Materials, methods and design intentions of the Masonic Lodge in the accessory structures are of interest, but do not have the hierarchy of interpretation that should be reserved for the Carson and/or the Romero house.

The record of stewardship must continue to be well recorded and applauded since their stewardship extends over the property from 1908 to 1953. The Bent Masonic Lodge #42 remains owners of the property and actively involved in decisions for the property.

Those charged with maintenance, rehabilitation and preservation must have a clear picture of what is important to preserve.

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Character-Defining Features:

A simple building-by-building assessment of the character-defining features would be useful in making a clear determination of treatments for each structure.

Carson House: The street façade in scale and relationship to the street is highly significant. Colonial Spanish architecture is clearly represented in the orientation of the building directly on the street. The portal, which was recently restored, is significant in its austerity and simplicity, compared to the stylized and highly “worked” portal posts and beam portals in the vicinity. It is clearly a product of the mid-19th century, unpretentious and direct. Despite the alterations that took place in 1911 to raise the roof and change the roof drainage system, the character of the portal and location of the building in relationship to the street remained mostly uncompromised.

It would be preferable to revert from a concrete sidewalk under the portal to a wood or even gravel or earth paving. There are examples of historic buildings being excepted from having hard-surfaced concrete for walks. However, it is also the duty of the owners to minimize liabilities.

The modifications to the building that have taken place in the early 20th century reinterpreted the house as a more elegant “Victorian” interior with wood floors and deep-set, multi-lite, double-hung windows. These are part of the Masonic Lodge interpretation of the building, but may lead to a false impression of how Carson and his family lived. However, there is not any good documentation to definitively say that during the Carson era the windows and doors and interiors looked like “this”. Therefore, removal and reconstruction on a purely theoretical basis is not recommended.

Interiors have been heavily modified from the Carson era and reinterpreted throughout the life of the museum to suit the museum exhibit goals. Further remodeling would not be unthinkable if it was at least more accurate about the furnishings and finishes of the Carson era.

Vigas and decking in the Carson Rooms 1 and 2 were replaced in the 1911 rehabilitation and have gained some significance, in that they do not greatly harmed the historic feel of the rooms, although the volume of the rooms is significantly altered. Vigas and ceiling deck in Room 3 appear to be the ones that dated back to the 1855 roofing event. These ceiling members were also raised in 1911. Despite these alterations it would not be the recommendation of this report to reverse the roofing and ceiling changes made in 1911. The Romero House stands as a ready example of how the volume of the house was before the alterations. A simple graphic or physical device in the Carson House may serve to help visitors visualize the change.

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Plaster finished adobe walls have been channeled for electrical service and repainted with modern latex paints. There is some evidence, from documents, that wallpaper or cloth was stretched on the bedroom walls to eliminate dust and to brighten the spaces. In a recent rehabilitation intervention of Carson Room #3, referred to as the bedroom, a micaceous, light-blue clay rendering over plaster walls was discovered. This decorative application is unusual for northern New Mexico as a room finish but can be found in decorative art from the area. It appears that the decorative coating was applied to the west and north walls over several layers of thin white clay plaster. Careful planning of museum interpretation for the Carson rooms needs to be accomplished before new (replicated) finishes are applied. All finishes applied should be consistent with the era and furniture being displayed.

With the caveat of Museum exhibit design, the interiors of the Carson House should be reconstructed to the extent that it is known. Further invasive investigation might uncover some of the unknowns.

Doorways should be left in their current locations unless further investigation reveals significant information to locate them in alternate patterns. Enough information exists to reconstruct the pre-1911 era doors and windowsills on the exterior of the building. The Museums may choose to leave the interpretation by the Masonic Lodge in 1911 in place.

Romero House

The Romero House remains much as it was found in the late 1800s, although very little documentation is available. It is clear that windows and doors have been replaced both in the pre-Museum management days and subsequent to Museum stewardship, but the fenestration appears to have been maintained consistent in location for interiors and exteriors of the 15-viga two-room portions at least.

The building retains the scale and proportion of a long and low, single-file, earthen architecture house of the mid-19th century in New Mexico. While there have been some enhancements to the finishes, wood floors and casings around the doors, the finishes remain austere and without excess adornment.

The structure retains ceiling heights from its original construction, with the added mass of a pocket (envelope) roof that was placed over the earthen-fill and vigas to conduct water away from the building.

Interiors are rendered in plastering of lime, gypsum and earth from eras ranging from 1958 to very recently.

It is sufficient to say that the portal that was added in the 1950s masks and gives the house a certain gentrified feeling that it never had.

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Courtyard and Additions from 1950s

There is a dilemma in entering the courtyard for the trained preservationist eye and probably for those who are enticed by the very simple portal of the Carson house. The interpretation of the courtyard is that of a Victorian garden and the image projected is that Carson and Josefa entertained their society friends out in the this wonderful English symmetrical cruciform garden layout with well house at the center. The truth of the courtyard is that it never was a courtyard. It was a semi-protective area formed by two or three structures and a few fences and corals. Horses, burros and buggies were stored in this fairly barren landscape.

The landscape treatments in many ways are the most troubling to the historic preservation interpretation for the house and yet the easiest to reverse, if so desired.

Conclusion

The preservation of the Carson Home and Museum Compound should be mindful of the need to maintain a safe, clean and healthy environment for the occupants and visitors to the property. Reasonable accommodations can be made to achieve that goal through diligent conversations and negotiation with code and regulatory authorities when necessary.

The preservation philosophy of the Museums shall respect the intent of the covenant from the Masonic Lodge to maintain the building as a place to memorialize Carson and to maintain the buildings in good condition. The covenant gives wide authority by virtue of any further language, regarding preservation standards or thinking. A broader and philosophical intent needs to be accepted to guide decisions of the Museums, those charged with maintenance and those who may now or in the future be charged with the stewardship of the property.

The Museums and Bent Lodge No. 42 accept the following findings of fact as the basic foundation of the preservation philosophy:

1. Carson and family are the primary driving forces behind the present site structure and interior design configurations found at the Carson house site.
2. The philosophy of "restoration" is an acceptable standard in making decisions for the interiors of the Carson portion of the property where the interpretation of the house is intended to be a "house museum" faithful to the Carson era.
3. The philosophy of "reconstruction" may be used in the modification and/or building of lost elements when such elements are primary to the understanding of the Carson era occupancy. Adequate documentation in the form of drawings, photographs or physical evidence is necessary to initiate any reconstruction projects.
4. Rehabilitation standards shall be used to treat and maintain portions of the structure that are currently being used for exhibit, office or alternative uses other than original to the Carson and Masonic Lodge era. Maintenance of the historic pattern of openings, character and feeling of spaces and finishes shall be maintained to the best extent possible while meeting the adaptive reuse requirements for quality museum exhibitions.
5. Exterior spaces shall be treated with a rehabilitation philosophy with the knowledge and intent that these spaces are required for public access and traffic that are far different than the original household uses. Landscape treatments are useful in providing information and education to the public concerning the use of the buildings and site. The landscape features of the site were not primary to the significance of the Carson era; however, the overall character of the open spaces should not mislead the casual eye as to the amount of greenery and cultivated plantings that were found in the courtyard.
6. The landscape elements, in all cases, should not be installed or maintained to the detriment of the historic fabric of the structures.

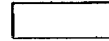
Kit Carson Home – Historic Structures Report

United States
Department of the Interior
news release
National Park Service Foley - Interior 4895
For Release to PM's, May 23, 1963

**SECRETARY UDALL ANNOUNCES TWENTY-THREE SITES
ELIGIBLE FOR REGISTERED NATIONAL HISTORIC LANDMARK
RECOGNITION**

The romance of the Santa Fe Trail is one of the Episodes of American history commemorated in the latest list of 23 sites approved for Registered National Historic Landmark status, Secretary of the Interior Stewart L. Udall announced today. In addition to sites connected with the historic Trail, new Landmark sites were named which illustrate the development of the movement for the conservation of the Nation's natural resources, and America's early naval history.

Secretary Udall explained that Registered National Historic Landmarks are areas which have been found to possess exceptional value and are of national significance in commemorating and illustrating the history of the United States. Such Landmark sites are not administered by the Department's National Park Service, but are recognized by the Service with a certificate and bronze plaque. The number of sites declared eligible for Registered National Historic Landmark status now totals 404.



The 23 additional sites were recommended by the Advisory Board on National Parks, Historic Sites, Buildings and Monuments from studies prepared by the National Survey of Historic Sites and Buildings.

They include: sites along the Santa Fe Trail, the first great trail of the Far West; sites of importance to a study of the conservation of natural resources, such as the home of the great landscape architect, Frederick Law Olmsted; the home of Gifford Pinchot, America's first Chief Forester; the home of Senator Francis Newlands, father of the Reclamation (Newlands) Act of 1902; an individual site, the Kit Carson House, Taos, New Mexico; and the U.S. Frigate Constellation.

Florida's Pelican Island National Wildlife Refuge was the first sanctuary provided by the Federal Government for the protection of wildlife. The area, essentially a mass of mangrove, is one large rookery, intended specifically to protect Brown Pelicans.

[U. S. Fish and Wildlife Service Home Page](#)

Brief Timeline of Carson - Stewardship and Construction Events

Kit Carson Home and Museum Compound (affidavits and abstracts of title)

- 1779** Spanish Land Grant officially, if not legally, recognized the Spanish Village of the Plaza de Don Fernando de Taos.
- 1804** Dendrochronology studies established non-cutting dates for the main structural beam on the portal main beam. Possibly reused in portal construction in 1843. (Note: Viga in Romero House dated at 1778 but core was incomplete by as much as 20 years or more.)
- 1809** Kit Carson, born in Madison County Kentucky, December 24, moved to 1811 Howard County, Missouri.
- 1825** Speculative date of construction of portions of Kit Carson House. Unverified. One viga sample for Carson exhibit room was dated at 1828 but others were from 1850s after Carson owned the home.
- 1826** August 1826 Kit Carson left in a wagon train headed for New Mexico.
- 1827** Carson, age 17 - First exposed to Taos through acquaintances from Missouri. Taos was 3600 residents, third largest town in New Mexico territory (according to data that may or may not have included Native Americans)
- 1843** Kit Carson purchased the house from Josephena Jaramillo (Josefa relative). The house was a wedding present for his new 14-year-old wife, Josefa Jaramillo, daughter of well-known and important Taos resident Don Francisco Jaramillo. It would be possible to argue that the portal was in place at this time or placed onto the structure as part of the present.
- 1849-**
- 1854** Carson lived in Rayado, NM (near Cimarron) to try ranching. Family moved there in 1851 after ranch house was built. (See photo)
- 1854-**
- 1861** Kit Carson appointed Ute Indian Agent with offices in Taos. (See photo of office)

- 1855** Roofing event (replaced or installed new vigas) at Romero House and Carson House. Dendro dates vigas felled in late spring-early summer of 1855. (Corresponds to Carson returning from Rayado in April of 1855) (See dendro report)
- 1864** Abraham Lincoln gives 17,360 acres to the Taos Pueblo and specifically withdraws a parcel of the pre-existing Hispanic settlement.
- 1865** Sen. Foster was on a fact-finding tour in Colorado to investigate cruelty to Indians by soldiers, became Vice President of the United States as a result of Lincoln's assassination. The congressional group was said to have spent the night in the Carson House after visiting with Carson to discuss Indian issues. An engraving showing an artist's rendition of the Carson House has similar portal balustrade and Italianate wood cornice work to the photos of the Palace of the Governors in Santa Fe as recorded in photos taken in the 1890s. (See attached engraving)
- 1866** Brevet. Brig. General Carson assigned command of Fort Garland, Colorado. (See photo)
- 1868** Josefa died in childbirth, April 27th (*markers say April 23*), 1868. Carson died May 23, 1868, both in Boggsville Colorado.

Note: The land on which the Carson House is located is a relatively small plot that extended either 56 feet along the street front and 18 feet behind the face of the easternmost room, which provided access to the back corrals and stables. The back line of the lot changes significantly throughout the transactions taking place from 1868 to 1909. The original lot line was probably about 6 yards beyond the back face of the house or 47 feet back from the street which would have included the well, located closer to Room #4 of the Carson Home and not in the center of the open space as it is depicted now.

- 1869** Thomas Boggs sells house, stables and corral for \$500.00 to Casimiroio Andrada.
- 1871** (Spanish deed says *setenta y uno*, which differs from handwritten translation which states the date as 1868.) Thomas Boggs, Executor of Carson Estate, transfers a property believed to be across the street from the Kit Carson Home, to Ygnacia Jaramillo with the sum of \$100 in exchange for promise to take custody of children of Josefa and Kit Carson. Property described as that which was formerly owned by Don Francisco Jaramillo, father of Josefa.
- 1874** Casimiroio Andrada and wife, Carmen, sold the property back to Thomas Boggs for \$305.00. (It is assumed he was not acting for the estate of Carson in this transaction.) No transaction found for transfer from Boggs to subsequent owner, Martinez.

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1889 Deseria Tafoya and Antonio Jose Martinez y Cordova sold the property to P.H. Healy for \$100. (Note: Description is four rooms with 22 vigas in lieu of previous 21 vigas that had been used.)

Note: Healey was the Singer Sewing Manufacturing Company agent in Taos and the deed was made out to both P.H. Healy and to the Singer Sewing Machine Co.

1890 Headstone erected on Kit Carson gravesite by the Grand Army of the Republic. This was an organization with Sen. Bronson Cutting as one of its leaders, who was dedicated to honoring the heroes of the Civil War. (The G.A.R also erected the monument in front of the US Courthouse in Santa Fe honoring Kit Carson which is made of red sandstone from the bluffs near the Dorsey Mansion constructed by Cutting, approximately 35 miles north and east of Springer.)

1893 Josefa Tafoya sold part of a house (assumed to Romero House) with 15 vigas (Romero House equivalent to 2 rooms) to Daniel Archuleta for the sum of \$25.00.

1900 Treasurer of Taos County sells the property for \$20 back taxes for years (1897 and 1898) to Alois Leibert (Senior) who owned the property adjoining the Carson property on the west. (Although deed describes Leibert, incorrectly as property owner to east.)

Photo G4 shows *Zaguan* or gate on east side of Carson House as access to the interior courtyard corrals and stable. G4/109 shows Montoya Home east of Carson House on land assembled by Dan Archuleta and which eventually included Romero property.

1903 County Treasurer reaffirms sale of 1901 in 1903, to clarify taxes were owed in 1895 plus the other years previously mentioned, against the Singer Mfg Corp. PH Healy Agent.

1904 Leibert transfers the Carson House to Mary L. Dolan for \$1.00.

Property is described as being only three rooms. Possibly an indication that the property was deteriorating to the extent rooms were unusable. (See map of land transfers)

Dolan property line was carefully carved out of the back patio to include essential portions of the lot associated with the Carson House, but excluded the central well.

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1905 Archuleta Estate sells Romero House (Described as house with five rooms) to Tomas Hartt for \$100.00.

1907 Julian Archuleta (Daniel's heirs) sold five-room house to Jose Montaner for \$190.00.

1908 Monument at Kit Carson gravesite replaced (due to curiosity seekers taking chunks of the original stone) by the Masonic Grand Lodge of NM. Stone was added to Joesfa's grave and a fence was erected around both. Ceremony by Masonic brothers from ten states have picture taken in front of very dilapidated Carson House which probably gave rise to the concept of buying the house to protect it.

1908 Montaner and wife sell 15 viga (approximately two room) Romero House and property to Martinez for \$1.00.

Photo showing Grandmaster of Masons and other Brothers in front of KCH. Notice that roofing at portal is either under reconstruction or being removed and some of the portal posts appear to be freshly cut and shaped.

1909 Masonic Order Bent Lodge #42 received a new charter from the Grand Lodge of NM to operate a chapter once again in Taos.

1910 Ownership of Carson House purchased by Masonic Grand Lodge of New Mexico from Mary Dolan for \$1000.00

1911 Montoyas, Manuel and Eduviges and Miguel and Winnie, sell Romero House and adjacent Montoya House on Taos Canyon Road to Grand Lodge of NM for \$10.00.

Described as house containing five rooms, two rooms finished and three rooms unfinished, bounded by street (adjacent to the Carson House approximately 38 feet wide) and former Kit Carson House. Same house purchased by Jose Montaner and wife in 1908.

1912 Carson House is rehabilitated through efforts of Taos Masonic Brotherhood. Photos G4/208, G4/ 21 and G4/ 43 (labeled 1910 but windows are changed) show fresh plastering, stepped parapet and dramatic window changes.

1915-

1916 Properties now known as the Kit Carson Home and Museum Compound, thus assembled by the Grand Lodge, financing transferred to the Bent Lodge #42 in February, recorded in March, for consideration of \$1.00 and remaining promissory note, which was released in 1921.

1927

(Circa) Photos G4/114 and G4/14 show stepped parapet to be rounded in cross section and stepped configuration altered to gentle (mission-like) single curve from lower edge to peak and down again. Interior remodeling of Room #3 of Carson House verified 1927. Newspaper behind baseboard.

1949 Committees formed to develop feasibilities and long-range planning to create Carson Museum.

1952 Constructed 19-6" x 32-8" (interior dimensions) connector for use by Morrow Leather Shop so Carson House could be used as museum exhibit space. See Photo G4/53 1950 showing pre-construction condition and north face of Carson Room #4 before addition.

1953 Jack Boyer became first curator director of museum.

Construction began to develop now empty lot (where Montoya House exited east of Carson House (see 1950 photo #G4/29) Development was designed to provide income for Museum and Lodge. 32-foot wide by 82-foot long commercial structure was built with 5-foot wide portal along west façade to provide cover for patrons visiting shops and Carson House Museum.

1953 through 1957 - Portals also constructed along face of Romero House, Carson north façade, east façade of Carson Room #4 and 1952 leather workshop addition. Courtyard furnished with well house and *horno* (Indian baking oven) and layout of landscape plan evident in 1957 photo G4/67.

1955 Color post card Photo G4/28 shows light blue paint on leather shop (west window) and darker blue on other windows along street front.

1956 Museum foundation took over use of leather shop space for additional exhibit space.

1958 Agreement between Lodge and Museum Foundation for use of Romero House that remains, three rooms in very poor condition. (See 1950s photo showing condition of Romero House and back three rooms as virtually non-existent.)

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Construction initiated to “restore” three east rooms of the Romero House for use by the Museum for offices and storage space. Construction is adobe; windows were replaced with metal sash units.

- 1963** Selected for National Historic Landmark status.
- 1966** Property placed on National Register of Historic Places as a result of the Sites Protection Act of 1966.
- 1991** Town of Taos allowed to develop public restrooms onsite adjacent to Romero House and 1958 additions.
- 1996** Survey plat created by AGS Land Survey of Taos and modified to establish back of curb marks May 2001 on south boundary.
- 2001** Taos Historic Museums Foundation granted funds to develop Historic Structures Report and make improvements to street portal in partnership with National Park Service.
- Portal 1804 beam restored and reinstalled October 2001. Steel plates, splices and inappropriate interventions removed, including corbel outriggers, from 1953.
- 2002** Interior of Carson House Room #3, remodel. Wall finishes returned to pre-1927 condition. Baseboards removed, blue clay mud plaster encapsulated. Blue paint over coating applied to match original colors found.

Kit Carson Home

Historic Context

Introduction

The history section of this Historic Structures Report is not intended to repeat the many excellent biographies or thoughtful writings about Kit Carson and his life. In many ways the history of the house is only partially about Carson and more about Josefa and the history of Taos, although there doesn't appear to be much documentation of her life before marriage to Carson. She was 14 at the time of her marriage and, first and foremost, was the mother of their children. Later, the history of the Masons and their efforts to preserve the house is of equal weight.

Deeds and title descriptions from the early 1800s either do not exist or are troubling in their descriptions to the extent that they cannot be relied upon for accurate documentation. In several instances in the post-1868 estate resolution times, Thomas Boggs uses conflicting cardinal directions in the deed descriptions and, in other Spanish to English translations; re-read carefully, dates were misinterpreted. The supporting documents for all information is either contained as attachments to this report or are readily available for inspection. Certainly there is plenty of room for alternate opinions regarding minor points of history. There are probably not too many conflicts that would change the course of importance to the house or to the activities that took place there once the properties were finally assembled.

Context of Taos History in Brief

In extracting from the Taos Historical Society the brief history of Taos, there needs to be a beginning. The Native American reduced and condensed version suits this document well.

"In the beginning below was found a dark and mysterious underworld, the womb of the earth itself, the people and the animals lived with their kind and loving mother. To the north near the sand, there was a lake where people first climbed the great fir tree and reemerged to populate the earth. With them came the good and bad spirits, who can dwell in everything, rocks, trees, animals, plants and also, (sic) unfortunately, in people."

Early people, **12000 BC**, for whom we have no records to know if they had good or bad spirits, roamed the area of Taos, along the rivers and in the hills where the hunting was not for elk but for large animals such as mammoths. Food was also gathered in a subsistence manner such as gathering wild berries, roots and edible plants. These people lived in crude shelters and sometimes in overhanging rock

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outcroppings or caves. They left very little for us to know them by. The landscape was far different and it is hard to picture the dry plains of today as lush forest.

In the era of **3000 BC**, people continued to roam the area, but were also adapting the concept of agriculture from their neighbors to the south in what is now Mexico. Feeling safe and secure to stay in one place long enough for crops to mature for harvest led to the construction of more permanent and more elaborate shelters. Building of shelters does not emote culture or cultural differences but the building of more permanent structures leaves a clearer finger or footprint that tells a more complete story for the archeologists and anthropologists to interpret.

Living year around in the area may not have occurred until **200 AD** time when people were now building more than shelters and clusters of houses, but also ceremonial structures for practice of religious activities and to memorialize those that have past.

Taos visitors are fortunate to be able to experience the multi-storied earthen-architecture pueblo at Taos and Picuris. These ancient structures appeared first in New Mexico in **1050 AD** and appeared in Taos Valley soon thereafter.

In **1200 AD**, *Athabaskan* people (now called Apache and Navajos) moved from the north and the east to visit and to live nearby. The Taos Pueblo structure was probably built between 1300 and 1450 AD. Pot Creek Pueblo was apparently abandoned in 1350, which initiated immigration to Picuris and to Taos Pueblo approximately 3 miles north of the Kit Carson House site.

In **1540**, at the end of August, Hernando de Alvarado, Captain of Francisco Vasquez de Coronado's artillery company, was sent to Hawikuh to explore to the north and east. Leading a detachment of twenty soldiers he was accompanied by a chaplain of the Roman Catholic faith. Fray Juan Padilla and Alvarado traveled east past the great rock of Acoma and arrived at the great river, which he called Rio de Nuestra Senora. There they are visited by twelve representatives of nearby pueblos and those from the north with friendly greetings. Alvarado traveled north going from village to village, but arrived eventually at an impassible canyon. They were forced to climb onto the high plain and navigate along the edge until they came to a large pueblo (Taos Pueblo) divided by a stream. His understanding of the name used for the pueblo was " Braba". Without incident the travelers reported their findings to the general and traveled east to see the plains.

Don Juan Oñate had begun a new conquest and exploratory campaign in the late **1500s**. In September of 1598 a solemn event was celebrated in the capital of San Gabriel amongst the colonists and in a small temporary chapel. The governor asks chiefs of all of the Indian providences in the area if they would pledge allegiance to the Spanish Crown in exchange for military protection and for guidance of the missionaries. The Natives agreed to try the religious instruction and decide later if they would like to be "saved". Fray Alonzo rededicated each of the Franciscans

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under his group to be assigned to individual pueblos. Fray Francisco Zamora was assigned to Picuris and Taos the northernmost communities. The dendrochronology for one the vigas at the Romero house was dated to have begun around the time of Oñate's visit.

In **1609** Pedro de Peralta replaces Oñate as governor due to some complaints of cruelty to the Natives and living conditions under Oñate being too harsh. The first mission church, established in about 1610, became known as Mission de San Geronimo, now known as Española.

By **1640** the religious ceremonies of the Natives were being quashed by the Catholic missionaries. The resentment built up over the past 30 years by the Indians resulted in a revolt against the priest and other Spanish colonists in the area. Not until **1661** did the Taos people return to the Pueblo reluctantly at the urging of their Governor Lopez de Medisabal amid charges and countercharges between the governor and religious authorities.

Again in **1680**, all of the northern pueblos were skillfully organized by Popé, a native of San Juan Pueblo who lived in Picuris. The army rose in a revolt in early August. Seventy settlers in Taos and most of the priests were killed. The monument to the event in Santa Fe, the cross of the Martyrs, indicates 21 Franciscan priests lost their lives.

The combined Pueblo forces drove the Spanish completely out of what we know as New Mexico. They were not to return until 1692.

Don Diego de Vargas completed his mission of re-conquest of New Mexico in **1692 through 1696** when he was able to convince the Taos Pueblo people to drop their weapons and come back to the Pueblo from their hiding places in the mountains.

In **June of 1715**, Governor Juan Ignacio Flores Mogolion revalidated a grant made to a soldier Christobal de la Serna, who had not previously been able to take possession of his grant in 1710. The cacique (religious and spiritual leader) and other tribal leaders were called to Alcalde Juan de las Mora Pineda, Governor of the Territory, to hear that the land had been made a part of the grant to Serna. They made no objections to the act of possession by Serna. In 1716 Diego Lucero de Godoy land grant was re-granted to Antonio Martinez and became the Martinez Land Grant.

The Spanish government dictated that trade with the French was forbidden and limited the trade of the Plains Indians to only Taos and Picuris Pueblos. This gave rise to great trade fairs in the summer. In addition to trading for goods, captives from tribes were traded for horses, grain or products from Chihuahua, thus expanding Taos as a center for trade fare before the Santa Fe Trail.

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In **1760**, three thousand Comanches descended the Taos Valley with the intent on destroying the Pueblo. They managed to carry away 56 women and children. By legend Maria Rosa Villalpando, the beautiful daughter of a settler who, in order to gain friendship of the Indians, had once promised her as a child to one of the chiefs. She had refused to go once reaching age of marriage and thus is said to have precipitated the raid.

Six years previously Lindsey Carson was born in North Carolina. He was to become the father of Christopher H. Carson and 11 other children.

By **1776** and the American Declaration of Independence, a census was taken by Father Dominguez that placed the population of Taos at 67 families with 306 Spaniards. Ranchos de Taos was the most populated area at that time.

Spanish settlers who had been living close to the Pueblo for protection from raiding Indians had moved to the location of the present town of Taos by **1779**. Governor Fernando Chacon approved grants that placed 63 families in possession of the Village of Don Fernando de Taos. There were conflicts between the Serna grant mentioned earlier, the grants made to the Taos Pueblo and the more recent grants.

On the east coast the United Colonies were in the middle of their fight for independence from the British crown. Lindsey Carson fought in the American Revolutionary War and, afterwards, went with his brother to South Carolina where he married Lucy Bradley.

He brought his bride back to North Carolina but found himself wanting to follow his distant relative Daniel Boone west. In **1793**, he loaded up his family and, across the rutted trails forged by Boone and others, he headed toward Kentucky. Lucy died not too long after they arrived in Kentucky. Two years afterwards Lindsey married Rebecca Robinson of Virginia. They had six additional children increasing to 13 the people sharing the cabin on Tate's Creek in Madison County, Kentucky. The last child was Christopher Houston Carson born on the **day before Christmas 1809**.

In **1802**, Don Severino Martinez and family moved to Taos where upon they constructed the fortress style house called the Martinez Hacienda. In 1804, it was complete and, much later, became a part of the Taos Historic Museum properties.

Christopher "Kit" Carson relocated with his family in 1811 to Boonslick Missouri where his father began the daunting task of clearing land and making a living off of the land. In **1818** Carson's father lost his life while clearing land in an accident with a burning branch that fell suddenly. Carson was apparently witnessed to this event.

Rebecca was left in the situation of trying to raise all of the children and keep them warm and clothed. It was a task she could not accomplish alone despite the efforts of everyone in the family to help. Carson, himself at a young age, talked of tossing his book down on the floor of the school house and grabbing his gun to take

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up arms in defense of the family lands as the first sound of the cry “Indians” came floating through the schoolhouse window. He liked to say that the book lies there still. Thus Carson explains his lack of reading and writing skills. Rebecca remarried and Carson found himself more independent than ever. They say the youngest children are destined to raise themselves.

Carson certainly proved that point.

He never was compelled to go back to school to learn what was being offered there. He seemed determined to live and learn in a manner of independent studies. At age 15, he was allowed to take up an internship with a local saddle maker David Workman, in Madison County. He was eager to learn to work with his hands and to use tools in a proper manner, but he was also afraid that life was happening at a much faster pace outside of his humdrum work at the saddle shop.

The non-event in Taos of the independence of Mexico from the Spanish rule in 1821, was the beginnings of the trickle of a few newcomers from the east into northern New Mexico. Later that trickle became a steady stream, then a flood, after the opening of the Santa Fe Trail.

Each day it seemed to young Carson, around the streets near the saddle shop and at the table where Kit Carson took meals with his older brothers and sisters, tales were told of adventures and treasures that were found along the Santa Fe Trail.

His older brothers were first to set out on a wagon train headed west. They were full of elaborate stories that the young Carson could only dream about. He finally abandoned his position, which was a crime, and disappeared in **August 1826**, at age 16. His employer was obligated by law to advertise the runaway in the local papers, which he did with the generous reward of 1 penny for his return. Secretly the employer was envious of his young colleague's ability to go west. Later, Carson urged Workman to make visits to Taos although he did not make the West a permanent home.

It is reported, but unsubstantiated, that the original 21-viga house of three rooms on the Canyon Road was constructed in 1825. If so, it is very likely that Carson at the young age of 17 knew the house as he spent his first winter in Taos.

Kit Carson fully intended to return to Missouri to help his mother. He was actually on his way back when he was offered a job as a muleskinner for a wagon trail heading to Santa Fe. He promptly signed up and was back on the road.

His abilities at a young age, small as he was, only about 5 foot 6 inches, were instantly recognized as meeting those of men who were older. His enthusiasm was apparently shown in ways that allowed him to venture far and wide as a trapper, Indian Scout and later as an Army Officer.

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Carson did marry, in **1835**, an Arapahoe Indian woman named (Singing Wind) Waa-Nibe. They had a child who Carson named Adeline. *Singing Wind* died in 1838. Carson took his guardianship of Adeline seriously. First, marrying again to a Cheyenne woman (Making Out Road) in 1840, but she left when her tribe left the area. In **1842**, Carson took Adeline with him to Bents Fort and later to Missouri in order for her to be raised in a proper environment and to be well educated. He, by then, had realized that his own illiteracy was a detriment to many of his pursuits in business and finance.

In his many trips through Taos Carson had certainly become aware of the politically well-connected Jaramillo family. His friend, fellow trader, and later Territorial American Governor, Charles Bent had married into the family and he had the occasion to meet Bent's charming, beautiful and very young sister-in-law, Josefa. She was only 13 but Carson was smitten. He almost immediately arranged for their marriage.

Carson was baptized in **1842** and took instruction in the catechism of the Roman Catholic faith by Padre Martinez so he could be engaged properly to Josefa.

The 21-viga house located on Taos Canyon Road was owned by Joesephena Jaramillo. The Jaramillo family thus made the house available for sale to Carson early in **1843**. He married Josefa in February of that same year 1843.

The house was described as having 21 vigas in the deed from 1843 and continued to have the same description through the 1880s. Although sometimes the house was described later as having four rooms, but still containing 22 vigas. It is difficult to see where the additional room was subdivided within the house and may have more likely been the case that the deed carried over the original description plus a room. Carson house Room #4 as described in these documents was probably never a room during Carson's era. The thick walls found today are a remnant from several additions and alterations that occurred along the western boundary after the house passed to others.

Carson's original deed was not descriptive enough to discern the exact proportion of land allocated to the house. In later deeds it was clear that the back lot line was approximately 18 feet (6 yards) out from the face of the building. This description was probably sufficient to include the well located in that open space. In addition to the house the descriptions included corrals and stables as structures included in the sale. These were most likely located along the west boundary of the property and possibly attached to the Carson Room #3. The Romero House has not been thoroughly dated. Testing of the vigas in Romero Rooms #1 and #3 reveal cutting dates that indicate a roofing event took place in the middle 1850s and that one viga could be dated to as early as 1804. There were several adobe structures that were adjacent to the Romero house facing north. These structures belonged to the Max Romero family but probably did not share rooms with the 15-viga house described in most deeds.

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IN **1846** Col. Stephen Watts Kearney, with his "Army of the West," occupied New Mexico on behalf of the United States. Charles Bent of Taos was appointed as the first American Governor at that time. It was not until 1848 under the treaty of Guadalupe Hidalgo that the Mexican American War was ended officially. The treaty ceded all of the New Mexico territory, which included some of what is now known as Colorado to the United States. All inhabitants of the area who were non-Indians and who did not leave the country within one year became citizens of the US automatically. It is interesting to note the Indian had no choice in the matter. To this end Josefa and her children did not become US Citizens until **1849**.

Carson began to build a house on land that he had acquired near the settlement of Rayado. Northeast of Taos on the way to Cimarron and the Raton cutoff. (See photo) The ranch is now part of the Philmont Boy Scouts of American National Campground. Carson may have been motivated to take up a more rural lifestyle for his family by the events of **1849** in which rebel Taos Pueblo Indians and 'firebrand Hispano Nationalists," angry at the perceived unfairness of the land grants in awarding land to some and taking it away from others, decided to attack at the Governor's house. Governor Bent and his aide, Col. Burgwin, were killed. Josefa's sister and other members of the Jaramillo family tunneled their way out of the single room where they were hiding. They dug with few, if any, tools through the 18" adobe walls of one room into the house of an adjoining neighbor and, in disguises, were able to leave the area without being harmed.

From 1851 to 1854 Carson had his family with him in Rayado. Scientific studies of the vigas indicated that there were roofing events in the mid-1850 at the Carson House as well as the Romero House. This may indicate that Carson did not return much to Taos during that time and the house unfortunately fell into disrepair.

At the time of Carson's return to Taos, he was invited to join the Bent Lodge Masonic Order. This was seminal event in the preservation of the Carson house. Carson held officer duties with the lodge and appeared to genuinely adapt the discipline, order and faith of the Masonic Brotherhood.

The number of members eventually dwindled and the charter was transferred to the Grand Lodge of NM until such time that the Lodge could reinforce its numbers.

Carson returned to take up residency in Taos more permanently from 1854 through 1861 where he was appointed to act as the Ute Indian Agent. Carson was illiterate. However, he was very adept at languages. Over the years he had learned Spanish and French well enough to converse in those languages. He had also learned at least five Indian languages and dialects. His ability to negotiate and be at ease with Indians was useful in his management of Indian relationships treaties and disputes. Carson's daughter Adeline died in Missouri at the age of 24 in 1861. (See picture of Taos office)

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With the advent of the Civil War, in **1861** Carson's sense of duty again inspired him to serve. He was assigned to help the New Mexico Volunteers and took his family with him for his stay in Albuquerque training troops.

In **1864**, Abraham Lincoln granted the Pueblo of Taos 17,360 acres with the provision that application for withdrawals of private property could be made to the US Government for those people who had established permanent settlements, property lines and easements within that land area. This included just about the entire town of Taos.

Some of the withdrawals from the land granted to the Taos Pueblo were not adjudicated and made final until the tenure of Franklin D. Roosevelt in the late 1930s.

Carson was a colonel in the United States Army at this time after serving in the Civil War with duties to keep New Mexico from falling to the Confederates. Col. Carson was sent for the unenviable duty of escorting 8000 Navajos and 500 Mescalero Apaches in a relocation effort conceived in Washington – 3000 Native Americans died of starvation and disease in the “long walk”. They were marched 300 miles from Arizona across northern New Mexico to the Bosque Redondo on the Pecos River. The remaining Indians were allowed to go back to their homelands via their own means not too long afterward. The stain of that tragic event has forever marred Carson's reputation.

Carson's last assignment was a Brevet (temporary) Brig. General in charge of Ft. Garland, north of Taos in Colorado. His health was failing due to an aneurysm, but he moved his entire family to the fort and enjoyed having them close during his last duties in the Army. (See photo of Headquarters)

Again the house was left unoccupied and unattended, although some visits to Taos were inevitable.

Carson was ill apparently from an old injury suffered from falling off of his horse. In **1868** he took up offers from his friend Thomas Boggs and the Army surgeons to be treated at Fort Lyon in Colorado. He was being billeted at the home of General William Henry Penrose. Josefa was attending to Kit and nine months pregnant at the time. She gave birth to Josephine Carson and died in Boggsville Colorado, on April 27th. (Markers at her grave indicate April 23rd, but letters from those attending the birth of the child and death of Josefa give the dates as the 27th.) Carson died on May 23, 1868.

Thus ended the tenure of Carsons as owners of the house on Taos Canyon Road. Soon after the death of Carson, Thomas Boggs was appointed as executor of the estate and guardian of the children. One of his first duties was to take care of the remaining children. He began by selling off some properties to raise money for them.

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The 21-viga house was initially sold to Casimiro Andrada with the stables and corral for the sum of \$500 in **1869**. In **1874**, the property was sold back to Boggs for the sum of \$305. There is insufficient information on why this occurred.

Typically the concept of mortgages and notes without deeds being transferred was not a custom. It is possible that there was a loan being paid that became un-payable, and thus Boggs returned a portion of the money paid and took possession of the property once again.

Boggs arranged in August of 1871, to transfer a house that the Carsons owned south of his long time residence, to Ygnacia Jaramillo, sister of Josefa. This property was described as 91 feet east to west and 115 feet north to south and bounded on the north by the public street. The house and lands were transferred with \$100, under the stipulation that the children of Kit Cason and Josefa were to be educated and supported by her.

Deseria Tafoya and Antonio Martinez y Cordova were registered owners of the property in 1889 who then sold the property to PH Healy, an agent for the Singer Sewing Machine Company, for the sum of \$100. Some have speculated that they actually traded the house for a sewing machine but that could not be confirmed. The house is described in that deed as having 4 rooms but remains with the description slightly amended to 22 vigas.

Healy was not successful in selling or repairing sewing machines in Taos it seems, because the property was sold at auction by the County Treasurer for \$20.00 in back taxes for the years 1895 plus 1897 and 1898.

The dwindling value of the transactions seems to indicate that the house was also declining in repairs. The neighbor to the west, Alois Leibert, was the successful bidder.

Leibert transferred the house, now again described as 3 rooms, to Mary Dolan for the sum of \$1.00. The deed description was very precise in describing that the property lines included an awkward line stepping carefully around and excluding the central well, which was now on property owned by Dan Archuleta.

Mr. Archutelta had begun an acquisition and consolidation effort for all the properties adjacent to and behind the Carson house. In 1893, he purchased the Romero House, described as a 15-viga house (approximately two rooms) for the sum of \$25.00 from Josefa Tafoya. He had already acquired the land that ran from the street back to the face of the Romero House in two separate transactions. The adjacent property was then sold in separate parcels by Dan Archutelta heirs to Montoya at the street to Montaner for \$190.00.

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Montoyas constructed a house on the property adjacent to the Carson House. The parapet lines and design suggest they also had influence on the design used to rehabilitate the Carson House in **1911-1912**.

Through all the time that land was being transferred for small sums and sometimes even for sheep. It remains certain that the Carson House was deteriorating severely. Photos attached herein show the property in 1892. It appears almost abandoned.

In 1908, the Masonic Grand Lodge of New Mexico assembled representatives of 10 lodges from other states in order to replace the gravestone on Kit's grave and to place a stone on Josefa Carson's grave. They had also funded the construction of an appropriate gated fence around the graves to protect them from vandalism. Carson had become a curiosity and legend to the extent that curiosity-seekers took chunks of the sandstone grave marker placed on his grave in 1890 by the Grand Army of the Republic. By 1908 the marker was quite dilapidated.

The gathering of the Masonic brothers (see picture taken in front of Carson House on Canyon Road) became the seedling of an idea to acquire the property. Apparently sufficiently concerned by the condition of the Carson House, several members of the lodge remaining in Taos started fundraising efforts to acquire the property.

In 1910, the lodge members and their wives, through various fundraising activities including dinners prepared by the wives and sold for 35 cents, had achieved enough money to at least convince the Grand Lodge of NM that they were serious. The Lodge fronted the additional \$500 necessary to purchase the property and assigned a lien against the property to satisfy a note taken out by the Bent Lodge No. 42 members. In 1916, the title for the property was transferred to the Bent Lodge, which was a triumph of the efforts to save the Carson House.

As soon as the house was purchased along with other properties including the Romero house and the Montoya house, money was again needed to undertake the rehabilitation.

In **1911–1912** the house was remodeled much to the configuration that it appears today. Wood floors were added, ceiling vigas were replaced and, unfortunately, the ceilings were raised approximately two feet to create larger rooms and to facilitate a greater slope to the portal. The drainage of the roof was altered to slope east and west, which solved some of the problems with deterioration of the house but created other problems as described in the assessment.

Both houses were used for residential purposes through 1940s. Floyd Morrow, one of the Masonic brothers was a leather worker (which is a bit coincidental to the beginnings of the Young Carson). He rented the room on the extreme west for his shop and lived in the house as well. As an amateur historian and Carson enthusiast he was always willing to give a tour and show visitors his collection of Carson

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memorabilia. The house attracted much attention from visitors from all over the US and some from outside the county as well. People visited Taos and, knowing something about the legend of Carson, wanted to see his house.

In 1949, began the rumblings out of the Masonic Lodge to create a museum on the grounds of the Romero and Carson Houses.

The dream became reality when, as a first step in 1951-1952, a 20-foot by 33 foot concrete block building with concrete floor was built north of Room #4 of the Carson House to be the new shop for the leather worker. This step allowed the house to become completely accessible for visitors. Tours and visitors came in greater numbers to the extent that leatherworking was no longer a viable activity on the site.

In 1953, a commercial building was constructed at the east side of the property where the Montoya house once stood. Photos from 1950 show the lot empty with two red trucks parked thereon. (See photo)

Portals were also built around the interior courtyard now created by the several attached structures. This created a hacienda look, which was laid out with a landscaped patio and well house not over the original well but over the gas meters at the center of the courtyard.

In 1954 the Kit Carson Museum had Jack Boyer serving as Director-Curator and Executive Secretary of the Kit Carson Memorial Foundation. He volunteered his services to curate the Kit Carson House as an additional duty. Thus began the furnishing and exhibit installations in the house in 1955. (From Charles Randall history)

The rooms added to the east of the Romero house were reconstructions of rooms that were once on site. These rooms initially served as storage and archive, and office space for the Kit Carson Memorial Foundation.

The museum has been operated since 1963 as the Kit Carson Home and Museum with the property on a \$1 lease from Bent Lodge No. 42. Currently the lease is expired and negotiations on a management contract are underway with Taos Historic Museum (formerly Kit Carson Memorial Foundation).

In the early 1990s the Town of Taos was allowed to construct public restrooms in the courtyard adjacent to the east wing of the Romero House. This infill is controversial to neighbors who were under the impression that there was a public easement from the north side of the property through the courtyard. This is now, of course, a mute point but has caused some neighbor disputes as well as a maintenance problem that is discussed in other sections of the report.

Kit Carson Home – Historic Structures Report

In 2001, a National Park Service Challenge Cost Share Program Grant was accepted to rehabilitate the historic portal at the street on the south side of the Carson House. This work was accomplished admirably with in-house maintenance staff and with the advice and oversight of the National Park Service and Dale F. Zinn Architect of Santa Fe. The Rocky Mountain Youth Corps of Taos assisted in this effort.

The many steel straps, and broken pieces of beam were finally restored and placed back into their original locations and use in October of 2001. The portal remains as an austere unpretentious sample of mid-19th century Taos construction and how Carson lived his life.

Family History of Kit CARSON

The Kansas Heritage Server would like to thank Stephen Chinn (Steven.Chinn@Vanderbilt.edu) for providing this information.

11-Dec-2000 Family Group Sheet

Alexander Harvey CARSON died at age: 84
Born: 1663-1695 in: Scotland
Died: 1722-1779 in:

Father:

Mother:

M Child 1 **John CARSON** died at age: 90
Born: 1710 in: Bradnich,DEV,ENG
Died: 1711-1800 in:

M Child 2 **Samuel CARSON** died at age: 50
Born: 1712 in: Bradnich,DEV,ENG
Died: 1762 in: York County, PA¹

M Child 3 **James CARSON** died at age: 90
Born: 1717 in: Bradnich,DEV,ENG
Died: 1718-1807 in:

M Child 4 **William CARSON** died at age: 56
Born: 1715-1720 in: Bradnich,DEV,ENG
Died: 1776 in: Iredell County, NC
Spouse: **Eleanor MCDUFF** b. ABT 1722 d. 1814
Married: 1751 in: Iredell County, NC

M Child 5 **Alexander CARSON** died at age: 90
Born: ABT 1720 in: America
Died: 1721-1810 in:

M Child 6 **Thomas CARSON** died at age: 79
Born: 1669-1720 in:
Died: 1708-1799 in:

¹ Will Book A, York County, PA page 216

11-Dec-2000 Family Group Sheet

Husband: **Lindsey CARSON** died at age: 64
Born: 1-Aug-1754 in: IredellCo, NC
Died: 4-Sep-1818 in: Boonslick, HowardCo, MO
Father: **William CARSON**
Mother: **Eleanor MCDUFF**
Lindsey CARSON

The Kansas Heritage Server would like to thank Becky Ross
(rlr29@idt.liberty.com) for contributing this information.

From "Kit Carson: A Profile for Heros" Page 2: "Eleanor's three eldest sons were drawn into the American Revolution, serving under General Wade Hampton. After the war was over, Lindsey and Robert went to South Carolina. There Lindsey Married Lucy Bradley, with whom he later returned to Iredell County, where they lived until the urge to follow Daniel Boone drew them Westward." (probably between 1773 and 1782) Page 3: "In 1793 Lindsey Carson loaded a wagon with his wife Lucy, and their four children - William, Sarah, Andrew, and Moses -- and followed where Boone had led over the uneven, rutted Wilderness Road. Soon after their arrival in Kentucky a second daughter, Sophie, was born. Not long after ward, Lucy died. Two years later, Lindsey married Rebecca Robinson from Greenbrier County, Virginia. Six of their children were born in Kentucky: Elizabeth, Nancy, Robert, Matilda, Hamilton, and Christopher Houston. Kit came into the world the day before Christmas, 1809, making thirteen persons to share the log cabin Lindsey had built on Tate's Creek in Madison County." Page 4: "In 1811 Lindsey sold his Madison County farm and headed West." Page 5: "Lindsey took up land in the Boonslick area, ..." Page 10: "Lindsey lost his life working at his endless project of clearing land. One day in early September 1818, while he was working near a burning tree, a flaming limb broke away and fell on him, killing him instantly. He was sixty-four years old."

Wife: **Lucy BRADLEY**
Married: 1782 in: SC - his age: 27³
Born: in:
Died: ABT 1793 in:
Father:
Mother:

M Child 1 **William CARSON**
Born: in:
Died: in:

F Child 2 **Sarah CARSON**
Born: in:
Died: in:

³ "Kit Carson: A Profile for Heroes"

M Child 3 **Andrew CARSON** died at age: 90
Born: 1774-1793 in:
Died: 1781-1883 in:

M Child 4 **Moses CARSON** died at age: 90
Born: 1774-1793 in:
Died: 1781-1883 in:

F Child 5 **Sophie CARSON**
Born: ABT 1793 in: KY
Died: in:

Wife: **Rebecca ROBERTSON** died at age: 88
Married: 11-Feb-1796 in: MadisonCo, KY - his age: 41 - her age: 12
Born: 1759-1784 in: GreenbrierCo,VA
Died: 1812-1872 in:
Father: **James ROBERTSON**
Mother: **Agnes**

F Child 1 **Elizabeth CARSON** died at age: 46
Born: 29-Nov-1797 in: KY
Died: 1811-1844 in:
Spouse: **Robert COOPER**
Married: 1811-1844 in:

F Child 2 **Nancy CARSON** died at age: 93
Born: 28-Aug-1801 in: KY
Died: 1802-1895 in
Spouse: **Mr. BRIGGS**
Married: in:

M Child 3 **Robert CARSON** died at age: 89
Born: 10-Nov-1803 in: KY
Died: 1804-1893 in:

F Child 4 **Matilda M. CARSON** died at age: 93
Born: 4-Nov-1805 in: KY
Died: 1822-1899 in:
Spouse: **Adams HAMILTON**
Married: 1822-1855 in:

M Child 5 **Hamilton CARSON** died at age: 78
Born: 18-Jan-1809 in: MadisonCo, KY
Died: 15-May-1887 in: HowardCo, MO
Spouse: **Rachel COOK**
Married: 1855-1880 in:

Kit Carson Home – Historic Structures Report

M Child 6 **Christopher Houston CARSON**

also known as: **Kit CARSON** died at age: 58

Born: 24-Dec-1809 in: MadisonCo, KY⁴
Died: 23-May-1868 in: Fort Lyon, BentCo, CO
Buried: in: Taos, New Mexico
Ref: Occupation: Fur Trader, Western Scout
Spouse: **Waa-Nibe (Singing Wind)** b. 1805-1819 d. 1838
Married: 1835 in:
Spouse: **Making-Out-Road** b. 1801-1823 d. 1890
Married: 1840 in:
Spouse: **Maria Josefa JARAMILLO**
also known as: **Maria Josepha JARAMILLO** b. 19-Mar-1828 d. 23-Apr-1868
Married: 6-Feb-1843 in: Guadalupe Church, Taos, New Mexico

M Child 7 **Hampton CARSON** died at age: 89

Born: 23-May-1812 in:
Died: 1829-1902 in:
Spouse: **Annita CREWS**
Married: 1829-1862 in:

F Child 8 **Mary Ann CARSON** died at age: 93

Born: 25-May-1814 in:
Died: 1828-1908 in:
Spouse: **Mr. RUBEY**
Married: 1828-1861 in:

F Child 9 **Sarshall C. CARSON**

also known as: **Sashwell CARSON** died at age: 93

Born: 16-Jun-1816 in:
Died: 1817-1910 in:
Spouse: **Mr. ARNICH**
Married: in:

M Child 10 **Lindsey CARSON** died at age: 89

Born: 11-Sep-1818 in: Boonslick, HowardCo, MO
Died: 1819-1908 in:

⁴ "Kit Carson: A Profile for Heroes"

A marker in a yard on county road near Hamtonville, Iredell County, NC states "Birthplace of Kit Carson."

11-Dec-2000 Family Group Sheet

Husband: **Christopher Houston CARSON**
 also known as: **Kit CARSON** died at age: 58
Born: 24-Dec-1809 in: MadisonCo, KY⁵
Died: 23-May-1868 in: Fort Lyon, BentCo, CO
Buried: in: Taos, New Mexico
Ref: Occupation: Fur Trader, Western Scout
Father: **Lindsey CARSON**
Mother: **Rebecca ROBERTSON**
Christopher (Kit) CARSON

24-Dec-1809 Kit Carson was born at Madison County, Kentucky.

Kit CARSON lived at Old Franklin, Howard County, Missouri.

1826 The runaway 17-year-old Christopher ("Kit") CARSON on his first journey with a caravan of traders bound for Santa Fe, New Mexico.

1834 Bent's Fort (Fort William), fur trade post on the upper Arkansas established. A Bent, St. Vrain and Company party (with wagons) eastbound from Santa Fe in the late summer traveled by way of Taos and Raton Pass to Fort William; then came down the Arkansas to the Santa Fe trail--thus opening the Bent's Fort branch of the Santa Fe trail.

May 1842 Bent, St. Vrain and Company's wagon train reached Missouri after an April-early May journey across "Kansas" on the Santa Fe Trail, from Bent's Fort on the upper Arkansas. Kit CARSON (who brought with him his young half-Arapaho daughter to be cared for and educated in Missouri) was with Charles Bent on this trip.

May 1, 1851 "Kit" CARSON, who had left Rayado, N.M., on March 17, arrived at Kansas (City), Mo. He had come in by way of Bent's Fort. CARSON's own (later) account of the trip east was this: "I remained in Rayado till March and then started for St. Louis, took with me twelve wagons of Mr. [Lucien] Maxwell for the purpose of bringing out goods for him. Arrived at Kansas May 1. I proceeded to St Louis..."

June 1851 "Kit" CARSON, with 12 goods-filled wagons (Lucien Maxwell's), left Kansas, Mo., early in June, for Santa Fe. The company consisted of CARSON, his daughter, Adaline, his niece, Susan (wife of Jesse Nelson), and 15 employees--Jesse Nelson, a French-Canadian, and 13 Mexicans.

1856 Dictated his memoirs, which were edited in 1968 by H. L. Carter, entitled "Dear Old Kit."

Colonel in the Civil War.

1865 When Kit CARSON told the story of the Battle of Pawnee Rock to Henry Inman while they camped in the Raton Range.

⁵ 1 "Kit Carson: A Profile for Heroes"

A marker in a yard on county road near Hamtonville, Iredell County, NC states "Birthplace of Kit Carson."

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Taos Historic Museums - National Park Service Partnership
Dale F. Zinn, Architect Consultant

23-May-1868 Kit Carson died at the home of General William Henry Penrose at Fort Lyon, Colorado. (Source: History of the Penrose Family by Josiah Leach, pg. 118)

SOURCES:

[Encyclopedia Britannica] [Grinnell, Bent's Old Fort and Its Builders, Kansas Historical Collections, V. 15, pp. 78-81.]

[Barry, Louise. The Beginning of the West - Annals of the Kansas Gateway to the American West (1540-1854). Topeka: Kansas State Historical Society, 1972. Library of Congress Catalog Card No. 78-172252]

[Dary, David. True Tales of Old-Time Kansas. University Press of Kansas. 1984]

["CARSON, Bent, Boggs Genealogy" by Quantrille McClung, 1962.]

[BOONE GENEALOGY by Spraker]

Wife: **Waa-Nibe (Singing Wind)** died at age: 19
Married: 1835 in: - his age: 25 - her age: 16
Born: 1805-1819 in:
Died: 1838 in: New Mexico
Father:
Mother:
Arapahoe squaw.

F Child 1 **Adaline CARSON** died at age: 24
Born: 1837 in:
Died: 1861 in: MO
Spouse: **Louis SIMMONS** also known as: **Louey SIMMONS**
Married: 1851-1860 in:
Spouse: **George STILTS**
Married: 1851-1860 in:

Wife: **Making-Out-Road** died at age: 67
Married: 1840 in: - his age: 30 - her age: 17
Born: 1801-1823 in:
Died: 1890 in:
Father:
Mother:
Cheyenne squaw.
She walked off and left him when her tribe migrated.

Wife: **Maria Josefa JARAMILLO**

also known as: Maria Josepha JARAMILLO died at age: 40

Married: 6-Feb-1843 in: Guadalupe Church, Taos, New Mexico - his age: 33 -
her age: 14

Born: 19-Mar-1828 in: Santa Fe, New Mexico

Died: 23-Apr-1868 in: Boggsville, CO

Buried: 1868 in: Taos, New Mexico

Father: **Don Francisco JARAMILLO**

Mother: **Maria Apalonia VIGIL**

M Child 1 **Charles CARSON** died at age: 1

Born: 1-May-1850 in:

Died: 21-May-1851 in:

M Child 2 **William Julian CARSON** died at age: 35

Born: 1-Oct-1853 in:

Died: 18-Jan-1889 in: La Junta, CO

Spouse: **Pasqualita TOBIN**

Married: 1880 in:

F Child 3 **Teresina CARSON** died at age: 61

Born: 23-Jun-1855 in:

Died: 6-Jul-1916 in:

Spouse: **DeWitt F. ALLEN**

Married: 14-Mar-1871 in: Boggsville, CO

M Child 4 **Christobal Charles CARSON** died at age: 70

Born: 12-Jun-1858 in: Taos, New Mexico

Died: 9-Feb-1929 in: La Junta, CO

Buried: in: Taos, New Mexico

Spouse: **Marie Guadalupe RICHARDS**

Married: 1890 in:

M Child 5 **Charles Christopher CARSON** died at age: 76

Born: 2-Aug-1861 in:

Died: 21-Jul-1938 in: CO

Spouse: **Mary Alice GALLAGHER**

Married: 12-Jul-1912 in: Trinidad, CO

F Child 6 **Rebecca CARSON** died at age: 20

Born: 13-Apr-1864 in:

Died: 9-Apr-1885 in:

Spouse: **John LEWIS**

Married: 1883 in: Fort Garland, CO

Kit Carson Home – Historic Structures Report

Taos Historic Museums - National Park Service Partnership

Dale F. Zinn, Architect Consultant

F Child 7 **Estifanita "Stella" CARSON** died at age: 32
Born: 23-Dec-1866 in: Fort Lyon, CO
Died: 1-Oct-1899 in:
Spouse: **Spear "Tom" Erasmus WOOD** b. ABT 1866 d. 1885-1957
Married: 3-Dec-1884 in: Taos, New Mexico

F Child 8 **Josefita (Josephine) CARSON** died at age: 24
Born: 13-Apr-1868 in:
Died: 10-Oct-1892 in:
Spouse: **William SQUIRES**
Married: 4-Nov-1890 in: Springer, New Mexico
Spouse: **James HOWARD**
Married: 15-Jan-1897 in: Springer, New Mexico

SEE ATTACHMENTS

From the: Laboratory of Tree Ring Research
PO Box 210058
University of Arizona
Tucson Arizona 85721-0058

Summary of Results

Dendrochronology is an interpretive science based on the known growth patterns of certain species of trees. The dating of samples provided either through small 5 mm coring or through slabs is dependant on the available tree ring type files and verified ring patterns that have been archived in certain tree ring labs across the country.

The University of Arizona holds a substantial amount of data for Taos area and, therefore, was selected to perform tree ring dating for core samples that were cut during a remodeling project.

Results and full reports are attached to this report for reference purposes. It must be stated that tree ring dates are considered accurate as to the cutting dates for the particular log that was sampled. Building materials, especially solid structural members such as log timbers (vigas) were often reused in rebuilding existing structures, sold and reused in structures other than the original use, and installed as replacements in the event a roof collapsed or was raised or rebuilt. Simply said, the age of the viga may very well set the date of construction for the structure and it may only set the date of cutting of a particular structural member that was used in several buildings, and the cutting date may not reflect the age of the structure on which it is now being used at all. Non-cutting dates are those dates taken from samples that have the outer rings either missing or so deteriorated that they cannot be read. Non-cutting dates require the researcher to speculate or find additional documentation to determine how many years are missing from the core sample.

The most recent (June 2001) coring by the HSR researchers and previous cores taken by others experienced in the technique were reported in two University of Arizona reports. (Attached to this report)

The reports estimated cutting dates for two samples taken from the Romero House of 1828 to 1856. It is assumed that the trees were incorporated in the construction or reconstruction in the 1850s. A non-cutting date taken from the largest vigas exposed on the north side exterior revealed a non-cutting date of 1778. If additional 20 years were added to account for the poor core condition, the tree would remain one of the oldest samples found in Taos to date. Because of the various dates found it is safe to assume there were vigas being used and reused along side ones that were newly harvested. The conservative date of construction of the Romero house is 1855.

Kit Carson Home – Historic Structures Report

Taos Historic Museums - National Park Service Partnership
Dale F. Zinn, Architect Consultant

We know that the Carson House was in poor condition when the property was purchased in 1908. The house went through several ownership transfers and was sold for non-payment of back taxes of \$25.00. This record would indicate that there were no significant sums of money applied toward capital improvements from the 1868 date to 1910.

Roofing events in the Carson House attributed to 1850s could very well have been reconstruction of certain rooms. During that period of time Carson was getting ready to return to Taos and undertake the position of Indian Agent. Improvements to the house would have been prudent prior to re-occupancy if there had been roof failures.

The south facing Taos Canyon Road portal beam was cored in those areas where it was reasonable to assume that the full depth of the beam core taken on a diagonal would replicate the full depth of a round tree trunk before being adzed into a rectangular shape. Significant is that one interior sample was dated at 1540 for the beginning of the tree. The interior was generally deteriorated and inner rings were not available for dating.

The portal dates are important in that the non-cutting dates establish that the logs for the main beam at the portal was erected sometime after 1804, which was the initial cutting date established by dendrochronology assessment techniques.

The report was unable to be conclusive due to incomplete ends and no true center core due to deterioration of the interior of the beam. (The interior core of the beam was completely rotted) With the loss of core ends that might represent 10 to 15 years of log growth, it is conceivable to say that the beam coincided with the assumed date of construction of the Carson House at 1825.

Recent restoration of the portal beam resulted in finding that the top of the beam was pocketed with mortises in such a manner that can be attributed to the possible original use of the beam in another location or in the same location used upside down before being reworked and reinstalled in the current configuration.

It is therefore difficult to date the beam on the portal as in place other than in photo documents that clearly show character-defining elements that fingerprint the beam as being installed in the early 1890s at the latest. It is known, however, that the structure had little maintenance or improvements from the time that the house was sold by the Carson Estate in the late 1860s and the Carsons were not using the house much in the mid-1850s and 1860s.

Barring any new information to the contrary, this report will use a date of 1843 as the date of the initial portal construction using reused beams and posts.

Even though the dates do not verify construction of the Carson House as early as 1825, additional testing on other structural elements not yet found could reestablish

Kit Carson Home – Historic Structures Report

Taos Historic Museums - National Park Service Partnership

Dale F. Zinn, Architect Consultant

the construction date. Certainly the house existed in 1843 and it can be safely stated that the house was erected between 1840-1842.

It is highly significant that both the 1778 non-cutting date projected to 1798 and the non-cutting date of 1804 are representative of the oldest Ponderosa Pine log cuttings on file for the Taos area. These test samples have reinforced and extended the type file available for testing of additional timbers in the Taos area.

Additional 5 mm core samples have been taken for future analysis of structural members exposed in recent room remodeling.

Kit Carson Home and Museum Compound – Historic Structure Report
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03/02/2001 15:50 5057500330
02/27/2001 TUE 18:02 FAX 5206218229

KIT CARSON MUSEUMS
U of AZ TREE RING LAB

PAGE 02
001

19 March 1996

Dr. Skip Keith Miller
Co-Director/Curator
Kit Carson Historic Museums
Drawer CCC
Taos, New Mexico 87571

Re: Accession A-1258

Dear Dr. Miller:

Here are the results of our analysis of ten archaeological tree-ring samples from three structures in Taos, New Mexico. Included are a date list, a species identification form, and a key to the symbols that accompany the dates.

Two cutting dates place a roofing of the Ernest Blumenschein House in 1828 or 1829, among the earliest tree-ring dated structures in the Taos area. Complete terminal rings show that South Vigas 1 and 8 were cut after the ponderosa pine growing season of 1828 but before the 1829 growing season. Both trees were felled sometime between the end of August 1828 and the beginning of May 1829. Thus, the beams could have been used as early as the autumn of 1828 or as late as sometime after the spring of 1829.

Three cutting dates place a roofing event in the Kit Carson Home in 1855. The combination of a complete terminal ring at 1854 and two incomplete terminal rings at 1855 indicates that these trees were felled at the beginning of the ponderosa pine growing season in the late spring or early summer. Thus, West Viga 1 and 6 in the Indian Exhibit Room and West Viga 7 in the Carson Exhibit Room were procured in the late spring or early summer of 1855 and probably used very soon thereafter. The three noncutting dates (those with the w symbol) from the Carson Home provide only lower temporal limits on the felling of the trees, which must have been cut sometime after their respective dates. The ++ symbols with these dates suggest that these trees were dying or already dead when they were felled; thus, all the beams could have been cut at the same time in the spring of 1855.

The single noncutting date from the Morada de Don Fernando de Taos indicates only that this tree was felled an unknown number of years after 1812. Thus the structure could not have been roofed before 1812. South Viga 2 in Room 1 of the Morada is a spruce or fir (the two genera are difficult to distinguish) log that lacked the ring-width variability necessary for dating.

If you have any questions about these results, please let me know.

Sincerely,

Jeffrey S. Dean
Professor of Dendrochronology

Kit Carson Home and Museum Compound – Historic Structure Report
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02/27/2001 TUE 18:02 FAX 5206210229

U of AZ TREE RING LAB

003

Taos Village (Historic) - reported 6 March 1996 - Accession A-1298

PROVENIENCE	TRL NO	FIELD	SPBC	ZIMMER	SYN	OUTER	BYR	COMMENT
1 Ernest Blumenschein Home and Museum, Studio	TNM-109	1	PP	1711		1828	U	comp.
	TNM-110	2	PP	1760	p	1838	V	comp.
						Count:	2	
2 Kit Carson Home and Museum, Carson Exhibit Room	TNM-113	3	PP	1815	D	1838	+++	
	TNM-114	4	PP	1783		1839	U	inc.
						Count:	2	
3 Kit Carson Home and Museum, Indian Exhibit Room	TNM-112	4	PP	1712		1834	V	comp.
	TNM-111	3	PP	1651	+/-p	1838	U	inc.
						Count:	2	
4 Kit Carson Home and Museum, Reception Room	TNM-116	5	PP	1629		1834	+++	
	TNM-115	7	PP	1676		1849	+++	
						Count:	2	
5 Horado de Don Fernando de Taos	TNM-118	10	DP	1725		1818	vv	
						Count:	1	
						Count:	9	

LABORATORY OF TREE-RING RESEARCH
ARCHAEOLOGICAL RESEARCH

EXPLANATION OF SYMBOLS

The symbols used with the inside date are:

- year - no pith ring present
- p - pith ring present
- fp - the curvature of the inside ring indicates that it is far from the pith
- tp - pith ring present, but due to the difficult nature of the ring series near the center of the specimen, an exact date cannot be assigned to it. The date is obtained by counting back from the earliest dated ring.
- ± - the innermost ring is not the pith ring and an absolute date cannot be assigned to it. A ring count is involved.

The symbols used with the outside date are:

- B - bark present
- G - beetle galleries are present on the surface of the specimen
- L - a characteristic surface patination and smoothness, which develops on beams stripped of bark, is present
- c - the outermost ring is continuous around the full circumference of the specimen. This symbol is used only if a full section is present
- r - less than a full section is present, but the outermost ring is continuous around available circumference
- v - a subjective judgment that, although there is no direct evidence of the true outside on the specimen, the date is within a very few years of being a cutting date
- vv - there is no way of estimating how far the last ring is from the true outside
- +
- ++ - one or more rings may be missing near the end of the ring series whose presence or absence cannot be determined because the specimen does not extend far enough to provide an adequate check
- ++ - a ring count is necessary due to the fact that beyond a certain point the specimen could not be dated

The symbols, B, G, L, c and r indicate cutting dates in order of decreasing confidence, unless a + or ++ is also present.

The symbols L, G, and B may be used in any combination with each other or with the other symbols except v and vv. The r and c symbols are mutually exclusive, but may be used with L, G, B, + and ++. The v and vv are also mutually exclusive and may be used with the + and ++. The + and ++ are mutually exclusive but may be used in combination with all the other symbols.

Laboratory of
Tree-Ring Research

THE UNIVERSITY OF
ARIZONA
TUCSON ARIZONA

P.O. Box 210058
Tucson, Arizona 85721-0058
Phone: (520) 621-6469
FAX: (520) 621-8229

13 May 2001

Dale F. Zinn
Dale F. Zinn Associates, Architects
P. O. Box 756
Santa Fe, New Mexico 87404

Re: Accession 1553

Dear Dale,

Here are the results of our analysis of six archaeological tree-ring samples from the Blumenschein and Kit Carson Houses in Taos, New Mexico. Enclosed are two date lists, a key to the symbols appended to the dates, and a copy of a paid invoice.

Both cross sections from the doorway in the dining room at the *Blumenschein House* produced cutting dates at 1803. A cutting date refers to the last ring grown by the tree before it was felled. Complete terminal rings show both these trees to have been cut after the end of the 1803 ponderosa pine growing season and before the beginning of 1804 growing season; that is, between, roughly, September 1803 and June 1804.

Except for some late 18th century dates for structures in Ranchos de Taos, TNM 138 and 139 are the earliest dated *in situ* timbers from European buildings in the Taos area. Depending on wall abutment relationships and other architectural evidence, these dates could place the construction of one or more rooms in the Blumenschein House to the fall 1803 - spring 1804 interval. If so, the TNM 109 and 110 dates could mean that the studio was added to the 1803 structure in the fall 1828 - spring 1829 period or, if built at the same time as the dining room, was reroofed at that time. In any case, these dates coincide with several others to identify a flurry of construction activity in the Taos area in the first decade of the 19th century.

Each of the four samples from the *Kit Carson House* produced a noncutting date; that is, a date for the last ring on the sample, which may or may not be the last ring produced by the tree. The noncutting date status of three of these samples (TNM 140, 141, and 142) results from the fragmentation that sometimes afflicts cores removed from dead wood with an increment borer.

A ++ symbol suggests that one sample (TNM 142) from the *Portal* may represent a tree that was harvested while dying or already dead. Thus, this tree could have been felled several years after 1794. The other two trees, TNM 141 and TNM 140, were felled in or an unknown number of years after 1796 and 1804, respectively. Collectively, these dates indicate that the *Portal* was built no earlier than 1804 but could have been constructed an unknown number of years thereafter.

Similarly, a ++ symbol suggests that TNM 143 represents a deadwood element acquired some years after 1778. This date indicates only that some building activity associated with **Room 2** occurred an unknown length of time after 1778.

If you have any questions about these results, please let me know.

Sincerely,



Jeffrey S. Dean

Kit Carson Home and Museum Compound – Historic Structure Report
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Kit Carson House, Taos NM - Reported 04 May 2001 - Accession A- 1553

PROVENIENCE	TRLNO	FIELD	SPEC	INNER	SYM	OUTER	SYM	COMMENT
1	Portal	TNM-142	K-3	PP	1723	1794	++vv	Outer end of core fragmented.
		TNM-141	K-2	PP	1739	1796	++vv	Outer end of core fragmented.
		TNM-140	K-1	PP	1741	1804	++vv	Outer end of core fragmented.
					Count:	3		
2	Room 2	TNM-143	K-4	PP	1570	1778	++vv	
					Count:	1		
					Count:	4		

Laboratory of Tree Ring Research
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**Sample Schedule for submittal April 2001
 Kit Carson Historic Museums**

No	Type	Provenience	Location on site	Wood Spec	Comments
K 1	6mm core	Kit Carson House	Portal beam	Assumed PP	Samples taken on diagonal from corner to center of hand squared beam
K 2	6 mm core	Kit Carson House	Portal Beam	PP	
K 3	6 mm core	Kit Carson House	Portal Beam	PP	
K 4	6 mm core	Baca House	Viga end north wall outside	PP	Same vicinity of samples 3-4 from previous submittals A-1258
B 5	Slab 8-9.5" diam	Blumenschein	Indian room Dining room	PP	
B 6	8-9.5" diam	Blummenchien	Dining room	PP	

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Benefits and Mandates for Protection

Impact of State - National Register – and National Historic Landmark Listing

Masonic Lodge Deed Covenant

The Kit Carson House is listed on the New Mexico and National Register of Historic Places and was placed on the register on October 10, 1966.

In addition to the protections that are granted to properties with those designations; the property is honored as a National Historic Landmark on May 23, 1963. There are fewer than 2500 National Historic Landmarks in the United States. The property has the unusual protection of a covenant that was created as a condition of the deed, which transferred the buildings from the Grand Lodge of NM to the Bent Lodge No. 42 in 1916.

Specific laws that govern the property under the protection and mandates of those listings are attached to the Historic Structures Report for further review. In general the effects of these listings are protective in nature.

No State or Federal funds can be used that would have a negative impact on the structures. This simple statement goes very far in the course of protection of the cultural resources under the protective umbrella. For example: The State of N.M. Department of Transportation (Highway) funds cannot be used to pave, widen, or even employ the use of damaging vibrating compactors that would damage the building. Federally licensed or regulated authorities like electric cooperatives, or Federally regulated quasi-public facilities such as a bank cannot set into motion any project that would have a negative effect on the property. The laws apply to the buildings, the site and surrounding seen or unseen cultural artifacts within the boundaries of the official nominated site.

A major benefit of the National Landmark status of the property lies in the availability of technical and planning assistance from the National Park Service. Separate planning funds are designated nationally for assistance in the form of advice and for limited funds for preservation planning on NHL properties. NHL structures and sites also receive greater consideration when being considered for grants from private and public foundations due to the uniqueness of the properties.

The State of New Mexico Office on Cultural Affairs, Historic Preservation Officer, (in New Mexico, the Division Director) is identified in the State and Federal Laws, as the qualifying review agency for the purpose of complying with the Federal and State laws pertaining to preservation.

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The State and Federal laws do not mandate that private non-profit foundations submit to the mandates for review of proposed modifications or interventions under the protective laws. However, when Federal or State funds are used in the process of providing assistance through planning or actual interventions, compliance review is required. It is **NOT** the duty of the Taos Historic Museums to initiate review under the mandates for either state or federal historic sites protection laws. It is the duty of the agency providing the assistance that must initiate the compliance review through the State of NM SHPO.

The conditions placed into the deed transfer between the Masonic lodges were not overbearing or difficult to interpret. In brief, the covenant states that the purpose of purchase of the Carson House was to “preserve and perpetuate the memory of one of the earliest members of the craft and one who has indelibly stamped his name upon the early history of the state.”

Minutes of the meeting in October of 1915 used language that also required the Bent Lodge to assume the responsibility for the proper care of the property and carrying out the purpose of which the property was acquired, as so stated above.

The resolution that passed also stated the following: “The house is to be used for the Bent Lodge purpose and the Kit Carson room shall for ever be maintained as a museum and the balance of the property to be held as a memorial to the deceased brother Kit Carson” if in any event the property is not maintained in this manner the property shall revert to the Grand Lodge of N.M.

National Register and National Landmark Listings

The National Register of Historic Places is the official list of the nation's historic and archaeological resources worthy of preservation. The register is a national inventory to which public agencies as well as private citizens may refer. It contains buildings, districts, historic and prehistoric sites, structures, and objects significant on a national, state, or local level.

The National Park Service under the Secretary of the Interior administers the National Register. In each state, a state preservation office, guided by a State Historic Preservation Officer (SHPO), conducts the program and related preservation activities. In NM, the Historic Preservation Division, a part of the Office of Cultural Affairs, administers these programs.

The National Register is intended primarily for use as a planning tool to encourage preservation without restraint upon private property interests. Listing of a property does not impose any responsibilities upon the private property owner for maintenance or restoration. A private owner may alter or demolish a National Register site without consultation with HPD or the National Park Service. However, the result of any such action that compromises the historic character of a site may cause the property to be removed from the register.

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Restrictions

There are no restrictions imposed by the National Register as to what private property owners may or may not do with their property. Listing in the register does not give anyone else the right to impose restrictions. National Register listing does not dictate use or zoning. Private property owners may alter or demolish a listed property subject only to applicable local government regulations.

Benefits of Listing

The National Register and as a National Historic Landmark, formally recognizes properties possessing a documented level of significance and that contribute to the understanding and appreciation of the history or prehistory of a community, the state, or the nation.

By honoring such important sites, the National Register accomplishes the following:

- Increases pride of ownership and expands community interest and appreciation of its cultural resources;
- Stimulates local preservation planning;
- Develops local interest and support of neighborhood and commercial revitalization;
- Creates a body of information available for community promotion purposes by such local and state agencies as chambers of commerce and tourism departments;
- Encourages the renovation of income-producing properties and revitalization of historic commercial districts and residential neighborhoods through tax incentives. These incentives include investment tax credits toward approved renovation costs of listed commercial, industrial, or rental residential buildings;
- Qualifies a property to compete for grants from many national and local State Historical Funds;
- Permits easement donations. Buildings, structures, and open spaces listed on the National Register qualify under the Federal Income Tax Regulations and the New Mexico Conservation Easement Statute as certified properties for the donation of a conservation easement. Such a donation enables the property owner to protect a property in perpetuity and allows for a charitable contribution deduction;
- Provides limited protection to listed or eligible sites from adverse actions by federal agencies or agencies using federal funds. Such agencies must request the comments of the SHPO as well as the Advisory Council on Historic Preservation before beginning projects affecting historic properties. The purpose of this consultation is not to impede or halt development, but rather to assure that the value of historic properties is given direct consideration in federal project planning decisions;
- Qualifies a property to receive federal assistance for historic preservation, when funds are available.

Building Code Analysis

Kit Carson Home and Museum

The Museum complex including the Kit Carson Home the Romero House with all additions has been reviewed for general compliance with the current Uniform Building Codes and Life Safety Codes. The Americans with Disabilities Act has code as well as civil rights aspects that need to be addressed at the Kit Carson Home and Museum Compound and all properties owned and managed by the Foundation.

Historic Buildings that have building code deficiencies under the Uniform Building Code are eligible for waivers from the building code officials under 104 Paragraph "f". It is the building code official's prerogative to waive the non-code issue if there are compelling reasons not to enforce the code. It is not an automatic waiver. The State of New Mexico Historic Preservation office has been influential in working closely with building code officials to grant such waivers. No remodeling, additions or enhancement to the museum facilities should ever make code requirements worse than they already exist and, in as many cases as possible, improvements in the health and safety of the facility should be improved. The Americans with Disabilities Act is not a building code but there are elements of accessibility that are contained in the building codes that pertain to new construction and new exhibits that should be followed. Reasonable efforts must be made to provide access to all facilities to persons with disabilities.

Health and safety issues will be addressed as being of primary importance in meeting the spirit, if not the letter, of the various building codes. It is these deficiencies that expose the administration and foundation directors to the greatest liability risks.

The current edition of the Uniform Building Code developed by the International Conference of Building Officials was used as the major reference to code compliance citations. There is a Uniform Building Code for Historic Buildings that has not been adopted in New Mexico, but is useful for use in interpretation and enforcement of specific code citations. This code is written to recognize the unique and, sometimes, conflicting nature of modern codes being applied to older buildings.

In general, the Museum Complex does not need to meet new building code standards as a matter of law because the building has not been out of use for a period of time and, therefore, is "grandfathered" in for many non-code features.

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However, it is necessary as a matter of good stewardship and administrative practice that any hazards or potential threats to life and safety should be addressed and corrected whenever possible.

Any interventions in the form of remodeling, rehabilitation or stabilization should always include planning and budget to remedy or reduce wherever possible any code violations. New work must always meet current building codes. This report attempts to identify code issues with the existing facility.

A current code deficiency that needs to be addressed relates to building use, occupancy, numbers and locations of exits and distance for persons to reach an exit. Because of the low impact usage and space taken up by exhibits throughout the buildings, it is not practical to use an occupancy factor of 7 s.f. per person for concentrated assembly use, which may be the case in a more sophisticated museum. The practical analysis of the use calls for the occupancy factor to be comparable to that of a retail store, which is 30 s.f. per person.

Code Review

Uniform Building Code

Building Occupancy

B-2 includes retail shops, offices and government buildings with normal building services and storage components.

Area Separations

The rating of walls, ceiling and floors that separate different occupancies and/or hazardous areas are required to meet a standard of fire resistance in order to protect the area of less hazard from the area of greater hazard.

A one-hour separation between occupied areas and any storage occupancy is needed by code.

Exterior Walls

The code requires that the exterior walls and openings of buildings be limited or constructed of materials that have rated fire resistance capacities when the building is located within certain distances of the property lines.

There are no restrictions placed on the interior courtyard wall components of the Museum Complex because the distances between buildings exceed 20 feet.

The 1952 Addition to the Carson House contains windows that face onto the adjoining property. Some of these windows have been sealed, but it has not been determined if the components of the infill meet a fire code rating standard. The Uniform Building code does not allow any openings less than five feet to the property line and, therefore, these windows are in violation of the code.

All windows along the property line need to be removed and the window openings sealed with materials that will generate at least a one-hour fire rating. A two-hour fire assembly is recommended in this situation. This will protect the interiors of the building from fires that may be started on adjoining properties and provide an additional measure of security to the museum interiors.

Construction Type

The Uniform Building Code creates ratings of building construction types based on the components of the building and their relative fire resistance capacities. In

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addition the Code requires a certain rating and construction type based on the area of the occupancy.

The Kit Carson House and Museum would be considered a Type III (masonry construction) non-rated building, which means there is no additional fire rated materials applied to the structure of the roof.

Type III N ratings allow the following floor areas and building heights: 55 feet and/or two stories

Areas – Maximum on one floor - 12,000 s.f.

Total combined all floors - 24,000 s.f.

The total area of the Carson House and Museum has approximately 3885 gross s.f. and, therefore, easily meets this requirement.

Occupancy for Exit Capacity

The codes assign a general number of square feet of space to be used to calculate the number of people who are potentially going to be occupying the building at any one time. In the event of a fire or other hazard requiring immediate evacuation, a building must be able to serve the calculated "people" load without problems. The "people" loads are used to calculate the width of corridors exits and numbers of exits to remain safe.

All Interior Public Areas Associated with Museum Exhibits

30 S.F. per person

Generally when the "people" load of an area of the building exceeds 50 people in this type of occupancy, two exit paths from the building area are required. Because of the assumed lower occupancy factor and the practicality of a person being able to exit the museum buildings safely in the event of fire, this document has increased the threshold at which the Museum Foundation should strive for two exits to occupancy of 30 persons. Exits may be through other rooms as long as the exit paths are reasonable width, no less than three feet wide.

Arrangement of exits - In the event two exits are provided, the Code requires that the doors be

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separated within the building at a distance equal to $\frac{1}{2}$ of the measurement of the diagonal of the building.

If a new exit (alarmed) were installed in the Carson Room #4, the separation distance would be satisfactory to meet this code.

Doorways should be, of minimum, 3-0" width and open in the same direction of the path of travel while exiting, unless the room occupancy is fewer than 10. This is clearly a conflict with the nature of the Carson and Romero Houses in which the doors are a narrow 30" and the door heights are very low compared to normal. Because these restrictions cannot be easily corrected without destroying historic materials, this document recommends making sure that additional exits, closer than the minimum, be provided.

Exit Distance

The distance that a person is required to travel while exiting a building is a very important aspect of the building code analysis. The distance is set at a maximum of 150 feet of actual walking distance from a point farthest from an exit to a point immediately outside of the building. This is as measured along all points of travel, including along the line of a stair, if a stair is necessary as a component of the exit path.

The greatest distance for exiting in the building currently is approximately 91 feet. There are no perceived exit issues that would require the need for a sprinkler system or other fire suppression system.

Kit Carson Home and Museum Complex

Occupancy for Exit Capacity

Romero House and Museum Shop

Retail Space 420 s.f.	14 people
Storage 30 s.f.	1 person
Museum Space 512 s.f.	17 person

Total this building	32 people

Carson House and Additions

Museum Space			
1952 Addition	600 s.f.	20 people	
Carson Rm 1-4	1044 s.f.	35 people	
Storage	30 s.f.	1 person	

Total this building		56 people	

Exit Summary

There are sufficient exits to handle the current occupants within the Romero House and the Museum Shop.

The Carson House needs a second exit to be available for occupants to escape in the event the existing exit is blocked or the 1952 room is the site of a fire.

The current door into Room #1 or Room #3 could be used, if sufficient security alarm wiring is provided and simple exit hardware is installed. Because the door would be rated for less than 50 people (½ of the occupant load), it would not be required to have panic hardware. However, for security reasons this door would need to be fitted with alarms that sound in case the door is opened.

Exit Distance

The exit distance calculated is approximately 91 feet, which is under the maximum allowable without sprinklers.

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Other Code Issues

Potential problems associated with the Uniform Building Code were also noted in areas of door width, door height less than 6'8" and lack of appropriate exit signs and emergency lighting.

Exit signs are needed to direct persons to the areas of exit in the event of an emergency. In addition, emergency lighting is required to provide a non-building power source light source in the event power is cut off during an emergency.

General compliance to electrical services and distribution codes was not addressed in the study. The Life Safety Code would prefer that a disconnect be available and easily accessible to firefighters in the event it became necessary to shut off power. The current situation is that the power shutoff is accessible only through the adjoining property back gate.

Recommendations

The first priorities for corrections of code issues would be as follows:

- A. Provide a second exit out of the Carson House using existing fenestration. The hardware cannot require the use of keys or special devices and must be operable by persons with disabilities.
- B. Provide illuminated (Note: 24 volt power units available) exit lighting that indicates exit path and location of exit doors. Pendant-mounted units that are installed from the ceiling are available that would eliminate the installation of lighting on historic walls. Low-level exit signs near the floor adjacent to an exit door can also be considered. These are effective because, in the event of heavy smoke, exiting persons usually seek the clear air that remains near the floor.
- C. Provide emergency lighting. This lighting can be wired to include a remote transformer and power to an existing fixture so that obstructive emergency fixtures are not required.

American Disabilities Act

The American Disabilities Act is a civil rights set of laws that affect all public access buildings and publicly owned and operated buildings. Historic buildings are afforded a certain measure of leniency regarding A.D.A. issues, but they are not exempt from applications of the Act

The civil rights aspect of the Act can be viewed from the standpoint of equal opportunity and equal access to any building that provides services to the public. This is particularly important as the Act applies to the rights of employee that may need to access all parts of a building to perform the functions and duties of the position.

The Museum stewards are required under the Act to make “reasonable accommodation” for all persons with disabilities. Civil rights lawsuits have resulted in cases when accommodation for the public or for employment is refused. In the case of historic buildings, there are some elements of the Act that grant relief to 100 percent compliance of each aspect of the codes. However, a plan of reasonable accommodation for persons with disabilities must be readily implemented.

Museum Administration and Foundation Directors must be prepared to provide such accommodations and options for services and employment in such cases where changes to the building structure have been determined to have a negative affect on the historic character of the building.

Notable A.D.A. issues are summarized as follows:

The first priority in all structures is to establish a barrier free path for access from the street or parking area to the entrances. If the primary entrance is not accessible, every effort should be made to make it accessible. However, a secondary entrance can be provided if it is reasonable to expect a person with a disability to find and use such a secondary entrance. The sidewalk and street parking areas should be connected with a continuous, barrier-free path that is the shortest distance possible. No portion of the access path would have a lip or uneven surface ½” in height.

It would be a no-cost accessibility enhancement to apply to the Traffic Engineer for the Town of Taos for one or two accessibility parking spaces directly in front of the Carson House near the east access to the courtyard. There is already a sidewalk ramp there. This would serve the purpose of limiting cars (except ones with handicapped stickers) from parking in front of the building, which would also increase the visibility of the building most of the time. This may be done in concert with any public accessibility advocacy groups in Taos.

Restrooms available onsite are reasonably accessible with some small exceptions.

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Within the buildings there are obvious architectural barriers for persons with disabilities. The greatest barriers are elevation changes across doorways and into rooms that are not equipped with ramps. Doorways are low (as low as 5-6") and narrow (approximately 31") which subjects persons with impaired vision to dangerous conditions and limits access to persons with mobility impairments. This report does not recommend increasing the width or raising existing doorways. Door hardware is not accessible by persons with some disabilities.

Current technology in wheelchairs makes it possible to navigate 30" openings without too much difficulty. Overhead clearances need to be emphasized by staff, through signage and, possibly, padding, if necessary. The ADA plan may indicate that visitors with sight impairments will be escorted through the museum.

Most of these barriers can be "reasonably accommodated" without destruction of historic fabric. The easiest solutions are to encapsulate any existing threshold that is determined to be historic fabric. It has been determined that several heavy timber thresholds were installed in the 1950s to emulate historic doorways. These can be removed and transitions installed to accommodate wheelchairs. Museum planning for future exhibits and remodeling should also plan for removal of architectural barriers whenever possible.

Visual and audio disabilities must also be addressed in the planning for museum alarm and information devices. These are accommodated normally through installation of visual alarms along with the audio alarms and signal devices, when they are required. Signage throughout the building can be revised to include tactile (Braille text) along with normal room identifications or audiotape tours can be provided.

Care must be taken to design signage and signal equipment in such a manner that will not harm the historic character of the building.

Surfaces where persons will be using canes as guides for visual impairments or for access across sidewalks need to have hard and smooth surfaces. Flagstone, if used, should be set with joints that are close enough to infill with hardpack sand or mortar.

Alarms and signaling devices throughout the building should be visual and audio modes of alarm to accommodate persons with all sensory disabilities. Other accessibility issues revolve around museum exhibit display and signage that are not considered architectural barriers to be addressed in this report.

Changes in floor levels have not been fully accommodated with the exterior circulation plan and slightly sloping sidewalks, but this approach has provided additional accessibility to the museum.

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The proposed design modifications for Carson Room #4 (see drawings) will essentially turn the room into a continuous low angle ramp. This ramp will achieve the necessary grade changes required to transition from the higher elevation (approximately 14") of the 1952 connecting building north of Carson Room #4 to the additionally lower by seven inches, Carson Room #3. This treatment will remove a major barrier to access without damage to historic fabric and should be made a priority for near future remodeling projects.

Exhibit design poses another type of accessibility issue for the Museum Administration and Foundation. Reasonable accommodation must extend to the availability of alternate means of experiencing the public exhibits to persons with disabilities. If an exhibit or room is not accessible, there must be pictures, videos or other ways of viewing that exhibit if there is no other reasonable way of making the exhibit accessible. The test is always going to be the reasonableness factor, which will be judged by a jury of peers.

Other disabilities to be accommodated are persons with sight impairments and hearing impairments. The museum accessibility plan must have a reasonable method of providing access to all persons with sight and hearing impairments, which may include docent tours where exhibits are explained in sign language or through videos that are led by sign language interpreters. Audiotape tours could provide reasonable access to the exhibits by persons with sight impairments, but there are also architectural barriers that must be considered as well.

Plan for Accommodations

The recommendation of the consultant is that an ADA compliance plan should be prepared by the Museum Administration to include all departments and services contained within all facilities. It is important to include adapted resolutions that state where reasonable accommodation is not possible, alternate service options will be prepared and made available to employees and to the public.

In order to limit the liability of the Museum Foundation and Administration for consequences resulting from discrimination against persons with disabilities of any type, the A.D.A. plan should include a public participation component that recruits interested persons from the public who have given public testimony and also might serve on a permanent accessibility committee for the Museum.

Conditions Assessment

Carson Home and Museum Site

Introduction and Use Analysis

The public observer in at least three different aspects experiences the Carson Home and Museum Site. Each aspect changes the viewer's perception of the property greatly.

The Kit Carson Road public street view is that of the Carson House and Portal. This view retains much of the integrity of character and form of the 1912 through 1939 era of the structure. Streets and traffic that frame the setting are products of the modern era for which the observer needs to ignore the trappings, such as parking meters and SUV's.

The façade was recently enhanced through the restoration of the portal beams and posts. With that restoration came the removal of some signage and other clutter that distracted from the building. New signage that is removable and reversible but also attractive and useful for bringing in visitors is possible and should be encouraged.

The view from the adjacent properties to the north retains the image of the long and low form of the Romero House bermed into the earth. The 1958 addition is clearly differentiated as a separate era and has an even lower profile than the Romero House Rooms 1, 2 and 3. Paired with that image is the picture of evident problems with the site that emanates from the below grade aspect of a portion of the building and the damage that occurs due to poor drainage. Unfortunately recent agreements between the adjoining property owners and the Museum Foundation do not allow proper correction of some of the drainage issues. Architectural solutions will need to follow the solutions allowed under the negotiated agreements.

The experience of the compound as one enters the courtyard formed by the Carson House, the Romero House and the various additions thereto, changes one's image to that of an adobe hacienda with a landscaped hidden garden. Portals added in the early 1950s mask much of the historic fabric of the Carson House and part of the Romero House.

The outdoor space of the courtyard is not used as much as a person entering the courtyard experiences it. It is a contemplative passive experience, not an active one.

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Character-Defining Features

The concentration of this report is to unearth the character-defining features which will lead those who are stewards of the building to make decisions that will most effectively preserve, protect and interpret those features.

The open space formed by the various buildings is an important aspect of the historic interpretation and use of the property. The history of the property indicates that Carson had a shared-use relationship with the Romero House and, from time to time, with other properties adjacent to the Carson Home. The open space was the place of activity relating to gathering water, possibly to outdoor cooking and to activities related to keeping horses and livestock.

Access to the open space was via the *zaguan* created between the Carson Home and the adjoining property to the east. It is clear that the property was not originally a walled courtyard, as it is perceived today nor was it a passive garden space.

Additions to the historic buildings in the form of infill between buildings, which purposely create a courtyard space, certainly have a precedent in northern New Mexico. It is not altogether a negative impact to have defined the space with structures. Additions of portals on the north face of the Carson Home and over portions of the Romero property provide some protection to pedestrian and museum visitors, but also mask and unify the many faces of the Carson Home and Museum into a single 1950s façade.

The masking of historic features and character-defining forms is further aggravated by the addition of cedar post fences that provide some measure of museum security. Additions to the museum compound have a clear place in the history of the buildings. Future plans regarding traffic flow into and around the museums should attempt to emphasize, clearly recognize and differentiate the forms and details of the more historic buildings in order for the casual observer to “read” the history of the buildings.

The reversal of some of these identified negative aspects is not impossible. It requires a possible rethinking of the museum visitor traffic flow to best enhance the visitor experience while at the same time allowing the buildings to be interpreted in their best and most original character. All proposals for development of the site should take into account the important aspect of the central open space as an active people and work-oriented open space. Further infill or additions into the space would be strongly discouraged under the recommendations of this report. The positive aspect of the situation is that the basic form and character of the open space between the Romero and Carson Houses is recoverable.

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Drainage Offsite

Drainage issues are important aspects of site maintenance that must remain a high priority for sustaining the museum buildings.

Roof water drainage problems have been shaping forces in the history of the buildings. It is clear that the problem with drainage was one of the initial problems that spelled the demise of the Carson House. Failure to maintain the roof drainage system from the time of Carson and Joesfa's departure in 1868 to the late 1800s resulted in failure of the roof structure. Remodeling in 1912 attempted to resolve some of these issues by redirecting water away from the north side of the building, to the east and west. The water was not allowed to be unceremoniously dumped onto the adjoining properties but was redirected via roofline gutters to the south and the public street. This is the basic plan of water removal for a large proportion of the drained roof water. Photos from the early 20th century show gutters and stilt-like struts supporting roof gutters attempting to conduct water to the street. (See also roof drainage plan and runoff calculations)

The Romero House may have been drained at one time to the south side of the building when the building was not part of a courtyard plan. There is little evidence of that possibility at this time. The drainage plan established in the early part of the 20th century is to deposit all roof water from the Romero House onto the north side of the building. However, this drainage pattern has occurred not without consequences to neighborly relationships. Until recently the relationship between the Museum Foundation and the neighbors to the west and east have not been such that would allow free access to the north side of the Romero House for appropriate maintenance of the building and the site drainage issues. This relationship has recently been secured through a signed agreement that will allow the continued drainage of water onto the north off-site property to the extent that it currently exists, but no additional water is to be directed in that direction. In addition, the agreement allows proper access for maintenance of the buildings and will allow limited adjustment of grades to slope earth away from the building and thus improve the drainage situation. It will not, however, allow the Museum to construct French drains or a seepage pit at some distance away from the Romero House walls in order to prevent water deposited from the roof to be directed in a safe manner away from the building. The next best preferred method of dealing with the runoff from existing structures will be the subject of further roof design studies.

Northern climates in New Mexico are not kind to buildings that have drainage plans requiring sole use of water flow to the north side of the structure. Due to lack of water collection devices or ponding areas and freezing temperatures, building walls, foundations and roof details adjacent to gutters are susceptible to the effects of ice damming and the destructive forces of freeze and thaw of ice crystals on the surface and in the cavities where water seeks to travel.

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Gutters have been installed on the north side to direct the water to some extent, but these elements of the roof are failing. Failed gutter systems are sometimes more destructive than no system at all, as the gutters tend to concentrate water in heavy streams and then deposit it in a more destructive manner.

In addition to water that is deposited from roof areas there is an additional threat to the buildings from water that is directed toward the adobe walls from the surrounding site, which is not properly sloped away from the buildings or is trapped by poor construction details and poor planning. Site water on the east side of the Romero House is directed into an areaway that is reported to have a drain. This pocket of space was created by the construction of restrooms in the early 1990s, which blocked pedestrian access and created a low area with a high maintenance drainage problem.

Water from the roof and other sources on the site is able to inundate the earth and support growth of vegetation adjacent to the fragile adobe and rock walls. Roots associated with trees and shrubs tend to provide additional pathways for moisture and infestation by insects to the below grade wall and foundation areas.

Plant materials, in general, tend to help the soil retain moisture by preventing evaporation and transpiration of surface moisture to the air. The longer moisture stays in the earth adjacent to a building, the better chance that water has to “choose” to enter the building.

As a reaction to failing sections of the north walls, a *contra pared* (concrete apron wall adjacent to the building) was constructed along the face of the Romero House. This intervention is a common reaction to problems with moisture in adobe buildings, but is an ill-advised solution. Concrete aprons tend to hold moisture against the already fragile adobe walls. Ground water is being attracted up into the wall via capillary action and water is inevitably soaked into the wall through cracks or interior roof leaks. Moisture soaked into the adobe walls cannot escape to the exterior with the encapsulation of concrete. This trapped moisture tends to accumulate and eventually cause greater damage.

On the west side of the 1952 addition and the Carson Rooms #3 and #4, roof water has been directed away from the buildings via gutters and scuppers with some success. Water that falls on the site or is deposited adjacent to the west walls of the museum compound from adjacent offsite buildings continues to be detrimental to the buildings. Currently there are known moisture problems in the southwest corner of the Carson Room #3. This moisture is a direct result of water running adjacent to the building and being trapped against the exterior of the southwest corner. The sidewalk and driveway entrance to the property on the west forms a barrier that prevents water from flowing freely to the street. Other wall damage along the west side of Carson Room #3 is evident, which has resulted from moisture seeping in adjacent to the north wall, possibly from the courtyard.

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The interior courtyard and flow of water into the area manifests another drainage problem. Drainage from the west courtyard portal and 1952 addition, plus the water from the Carson House north wall portal, is deposited via scuppers to the courtyard.

There are sufficient soils and drainage area to absorb this water. However, grades within the landscape garden are equal or slightly higher than the west sidewalks, which results in overflow of water into the portal areas. Water has found its way to areas adjacent to the exterior walls, and damage to adobe walls in the Carson Home has been observed. Recent exploration of the interiors of the Carson Room #3 indicates that moisture from the landscape courtyard has infiltrated to the northeast wall of the Carson House adobe walls. Concrete sidewalks and cement stucco have prevented this moisture from being evaporated and thus the moisture soaks into the wall. High moisture contents from these problems could eventually cause failure of the adobe walls.

Recommendations:

- A.** Remove and replace all gutters systems on the roofs to accommodate the additional roof areas and maximum rainfall intensities for Taos. (See roof plan and rain fall intensity calculations)
- B.** Repair missing sections of gutter and downspouts that conduct water to the street.
- C.** Remove and replace section of sidewalk that is holding moisture against the southwest corner of the Carson House Room #3. Consider replacement of the entire sidewalk along the face of the Carson Home with a wood boardwalk.
- D.** Protect the areaway east of the Romero House with a retaining wall and provide positive drainage out of the areaway or provide an easily maintainable pump or other drain to conduct water out. Consider an addition to the Romero 1958 addition that will cover this entire piece of vacant land and redirect the roof runoff water over this area to a safe disposal site within the courtyard or storm sewer system.
- E.** If so allowed by the maintenance agreement, remove the concrete apron against the north wall of the Romero House in a manner that carefully considers the fact that the adobe wall is probably very fragile. Make appropriate repairs to the foundation and to the adobe wall. Install a non-permanent bentonite clay barrier approximately 4" below the surface of the regraded soils to create a natural water resistant barrier for water near the base of the building.

The following recommendations are primary stabilization and rehabilitation interventions that should be implemented along with other primary projects.

- F. Consider a direct piping system that directs roof water runoff from the north side of the house to a) site on the interior courtyard. In the courtyard construct a large seepage pit approximately eight feet in diameter and at least ten feet deep, filled with 4" to 6" diameter rock encased in a filter fabric. It is assumed that a sufficient size seepage pit will slowly "leak" water back into the existing underground stream beds and well systems thus recharging the aquifer and conducting the excess water away from the adobe walls and foundations. **(A deep 6 x 6 x 8 foot French drain on the north side of the building is preferred but may not be possible due to adjoining property owners)**

- G. If a north sloping roof and drainage system on the north side is not possible..

The plan recommends that the Owners redesign the Romero House roof slopes (non historic pocket roof elements) to slope to the south inward into the courtyard spaces. This will allow the courtyard drainage system described above to be fed directly from the roof scuppers or canales and, thus, avoid the complications and problems associated with an internal, "through the building" drainage pipe system. Every attempt should be made to design the roof in such a manner that preserves the character and feel of the long and low Romero House profile that was lost when the pocket roof was installed sloping the roof to the north.

- H. Re-slope all grades adjacent to all of the buildings, portals and sidewalks to slope away from the walls and direct all water to areas that can safely absorb or conduct water underground to areas that do not endanger any other buildings. Lower grades in courtyard, if necessary, and concentrate water flows as far away from the structure as possible. A courtyard drain seepage pit should be considered to assure safe disposal of surface and runoff water. Reduce or eliminate landscape planting in the courtyard to a minimum. This will reduce the negative affects from watering of landscape materials in this high, arid climate and assist in the returning of the courtyard to a context that is in character with the period of significance.
- I. Remove all vegetation from sites near adobe walls and poison soils, if allowable.

Roofing and Drainage Configuration

The basic need for the museum buildings is to maintain the roofing systems in a waterproof condition rather than to restore or rehabilitate the roofs as a matter of meeting a preservation standard. The roof drainage configurations, for the most part, have worked well to protect the interiors. In the early Carson House rehabilitation of 1911, the roof slope was reversed from a sloping earthen-fill that directed water to the south over the portal to an east-west slope created with a pocket roof structure. The new roof system was hidden behind a “modified Pueblo Revival” parapet, which has been slightly altered and is more curvilinear in its current configuration but, for the most part, was the same as it is found today.

The roof over the Romero House was also an earthen-fill that directed water to the north. This roof was also amended in design to have a dimensional lumber pocket roof that was more steeply pitched and continued to direct the water to the north of the building.

The changes had the positive effect of keeping the interiors of the structures free of water issues for a long period of time. The roofs overall slope greater than the industry standard of $\frac{1}{4}$ " per foot, and the water is carried out beyond the face of the adobe walls by at least 12". The water drainage created by roof runoff has been previously discussed in the section on site drainage. Summarized herein, it can be said that the roof drainage design does not stop by keeping the interiors dry.

Roofing systems were not invasively tested, but it is generally acknowledged that the roofing is a built-up felt system with a 90-lb mineral-surface felt wearing layer. There appears to be at least two generations of roofing that have been accomplished over the years. The roofing systems over the Carson Home and 1952 addition are approximately 7 years old and can be considered serviceable with proper maintenance. The roofing over the Romero House is approximately 15 years old and in need of replacement.

Electrical conduit penetrations through the roof have been installed throughout the museum complex. The need for upgrading of electrical lighting dictates that the best access for new power is via the roof. In general, multiple roof penetrations create both a leak and high maintenance factor for the roofing.

A goal should be to locate all wiring below the roofing layers or provide access and conduits to provide systems below the roofing layer in the future and during any remodeling projects. There is little or no added insulation to any of the roof areas, except for the possibility of added insulation over the bookstore.

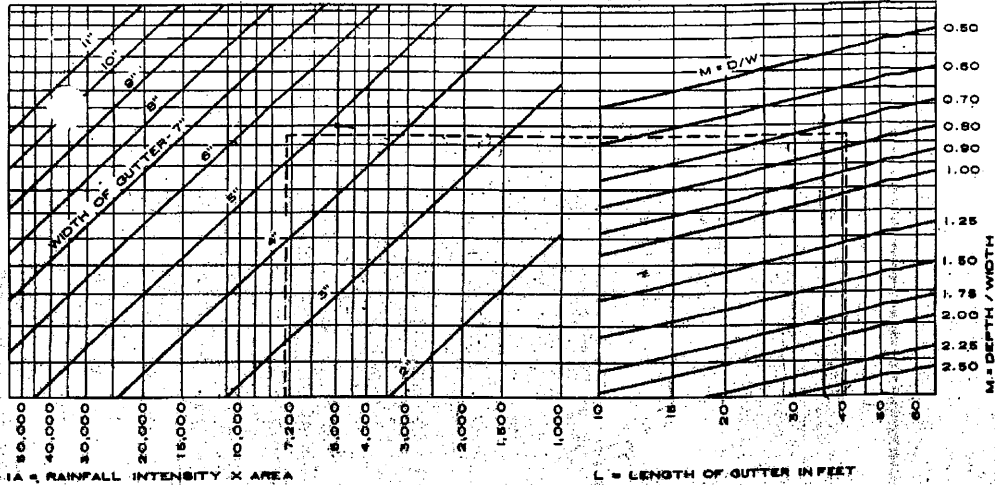
Earth-fill over most of the Carson and Romero House provides some insulative qualities, but also is an extreme detriment to the minimal structure and to the “museum aspect” of the building use, which precludes having artifacts in a

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situation that might result in damage due to infiltration of fine dust and dirt. In addition, earth-fill roofing has the ability to support the infestation of insects. Infestations of any type are a detriment to the historic fabric and to the potential museum exhibits. The visitor does not gain an enhanced vision of the buildings that have earth roofs unless an extreme measure is taken to illustrate this feature. It is the opinion of the Historic Structure Report that the earth-fills should be documented, and even sifted, if there is a potential for cultural artifacts being found. Otherwise the earth-fills should be removed from the roof structural systems as a matter of life and safety, as well as a matter of detriment to museum artifacts.

The most problematic element of the roof and drainage systems for the entire museum is the disposal of the water once it has left the roof. The gutter systems provided on the east and west sides of the Carson House are necessarily carried out to the south side of the building where the water can be disposed of in the public streets. Historic photos for the early 1920s show the various systems for supporting the drainage system were, at best, awkward. The calculations for the capacity of discharge of roof water was calculated using a standard for northern New Mexico of 5"/hour rainfall intensity for a period of 10 minutes. Discharge capacities of the gutter systems are shown on the roof plans attached to this report and a chart republished from the Architectural Graphic Standards (Ramsey and Sleeper) Sixth edition is included herein.

WIDTH OF RECTANGULAR GUTTERS FOR GIVEN ROOF AREAS AND RAINFALL INTENSITIES



NOTE:
The terms "leader," "conductor," and "downspout" all mean the same thing.

SAMPLE PROBLEM:

To size rectangular gutter for a building 120 x 30 ft. located in New-York City. This building has a flat roof with a raised roof edge on three sides. A gutter is to be located on one of the 120 ft. sides. So that each section of gutter will not exceed 50 ft., three downspouts will be used with 2 gutter expansion joints. The area to be drained by each

section of gutter will be 1200 sq. ft., the rainfall intensity from map below is 6 in., the length of each gutter section is 40 ft., and the ratio of gutter depth to width is 0.75. On chart above find the vertical line representing L = 40. Proceed vertically along this line to its intersection with the oblique line representing M = 0.75. Pass horizontally

to the left to intersect the vertical line representing IA = 7200. The point of intersection between the oblique line representing gutter widths of 6 and 8 in. The required width of gutter is, therefore, 6 in. and its depth need be only 4 1/2 in.

DESIGN AREAS FOR PITCHED ROOFS

PITCH	FACTOR
LEVEL TO 3 IN./FT.	1.00
4 TO 5 "/FT.	1.05
6 TO 7 "/FT.	1.10
8 TO 9 "/FT.	1.20
12 IN./FT.	1.30

NOTE: When a roof is sloped neither the plan nor actual area should be used in sizing drainage. Multiply the plan area by the factor shown above to obtain design area.

INFLUENCE OF GUTTER SHAPE ON DESIGN

1. RECTANGULAR GUTTERS:

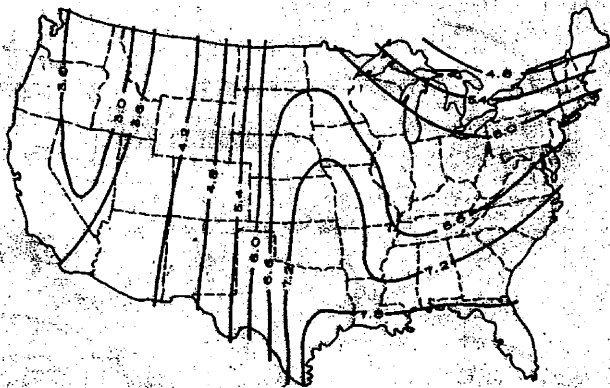
Use graph at top of page.

2. IRREGULAR SHAPES:

Determine equivalent rectangular size and use same method.

3. SEMICIRCULAR GUTTERS:

First size downspout from tables below. Then use gutter 1 inch larger in diameter.



RAINFALL INTENSITY MAP

NOTE:

Map shows hourly rainfall in inches for 5 minute periods to be expected once in 10 yrs. Tornadoes have gone twice as high in some areas. For important work see local records.

Lawrence W. Cobb, AIA; Columbia, South Carolina

DOWNSPOUT CAPACITY

INTENSITY IN IN./HR. LASTING 5 MIN.	SQ. FT. ROOF/ SQ. IN. DOWN-SPOUT
2	600
3	400
4	300
5	240
6	200
7	175
8	150
9	130
10	120
11	110

DOWNSPOUT SIZES

TYPE	AREA SQ. IN.	NOM. SIZE IN.	ACT. SIZE IN.
	7.07	3	3
PLAIN ROUND	12.57	4	4
	19.63	5	5
	28.27	6	6
	38.57	8	8
CORR. ROUND	11.04	3	4
	17.72	4	5
	25.97	5	6
CORR. RECT.	3.80	2	1 1/2 x 2 1/2
	7.73	3	2 1/2 x 3 1/2
	11.70	4	3 1/2 x 4 1/2
	18.75	5	4 1/2 x 6
	3.84	2	1 1/2 x 2 1/2
PLAIN RECT.	6.00	3	2 x 3
	12.00	4	3 x 4
	20.00	5	3 1/2 x 4 1/2
	24.00	6	4 x 6

GENERAL NOTES:

Most gutters are run level for appearance. However, a slope of 1/16 in. per foot is desirable for drainage.

For residential work allow 100 sq. ft. of roof area per 1 sq. in. of downspout.

In general the capacities of the standard residential sheet metal gutters and downspouts are insufficient to carry the water that could be introduced from the roof runoff.

Water disposal along the north sides of the Romero House and Bookstore have the added component that the neighbor objects to water being disposed onto the adjacent property. The walls at that side of the building are adobe and susceptible to water damage and the natural grade is approximately two feet above the interior floors.

North side gutters and drainage elements are damaged, undersized and generally ineffective. In colder climates, such as Taos, the freezing that takes place within the water-carrying elements are particularly problematic. Once frozen, the operation of the water-carrying element stops and the weight for the element becomes usually far greater than the supporting fasteners ability to carry them. Failure is inevitable unless closely monitored and maintained at all times to be free of ice, debris and clogs from other sources.

The best design for drainage systems would require maximizing the water-carrying capacity of the elements, assuring that the elements are protected from freezing and disposal of the runoff is accomplished in a manner that guarantees that it will not do damage to walls or foundations.

The west slope of the Carson House is additionally required to carry the runoff from the Carson Room #4. The amount of water introduced to the gutter is far more than the 3" x 4" residential gutter currently installed is designed to carry. This gutter could easily be upsized to 6" x 6" to accomplish the runoff conditions anticipated there.

The Romero House roof carries the water beyond the face of the walls, which is a very good design. However, because the overhang is less than 18 inches (approximately 10"), the water falls in a manner that endangers the base of the adobe walls (basal erosion) and does not have a clear path to slope away from the buildings. In the past, significant quantities of vegetation, trees and grass have been allowed to thrive on the runoff water. Roots from these plant materials are invasive and threaten the stability of the adobe walls.

In order to improve the conditions in the courtyard near the public restrooms, a gutter was recently introduced to carry water from the restrooms to the commercial building portal. This water eventually joins the runoff from the commercial building and is carried via a metal gutter along the portal south to be deposited into the street.

A large quantity of water is thereby introduced in the gutter from the portal and from the back portions of the east commercial structure. The gutter is currently undersized to carry this load.

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1952 Addition and Portal Details:

The design for water runoff and disposal of these roof areas was initiated in the early 1950s and was a clever, but less than maintenance-free design, that provides a "Pueblo Revival" style parapet to a portal while also provides drainage slots below the parapet elements. The runoff passed through these narrow slots and over a small overhang then onto the ground.

This design requires that the drainage slots remain free of debris and ice throughout all seasons to be effective. The design additionally introduces water around the parapet supports, which are less than 2" high and spaced approximately 30" apart. There is no 100% effective means of roofing or re-roofing this condition well.

The recommendations section will address possible solutions. In any scenario it is necessary to create sufficient drainage areas to absorb all excess water. At this time the level of the interior patio is approximately equal to the concrete sidewalks around the edges, which introduces water onto the top of the concrete and possibly holds water below the concrete, which could cause deterioration to the walls adjacent to the sidewalks.

The overall design of the portals is one that masks historic fabric and is obtrusive to the historic character of the courtyards. Short-term solutions for improving the drainage from the portals and 1952 addition may be overshadowed by the recommendation to remove the elements entirely.

Recommendations:

1. Re-roof all buildings within the next three-four years using a high performance single-ply torch-on system or four-ply roof traditional built-up system with a mineral surface top surface.
2. During all re-roofing projects inspect layers of underlying roofing and do not exceed three layers total. Inspect decking to the extent possible and make repairs to decking necessary to meet code requirements and a design live load of at least 35 lbs/s.f.
3. In the event that access to the "pocket" or envelope is available, the roof design should include adding sufficient conduits to carry current electrical devices and future communications, security or other wiring throughout the museum. The roof is the most available common path for linking all rooms. It is essential to take advantage of the opportunity to provide for the future during roof installations.
4. At the Romero House there are substantial structural issues that will require removal of the roofing and the pocket roofing structure entirely. It is

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recommended that the roof slope be reversed to slope the roof over Rooms 1, 2 and 3 to the south and to make appropriate design decisions to collect and to dispose of water in the courtyard. The design for the “new” pocket roof should be as unobtrusive as possible to maintain the integrity of the Romero House, but should be of sufficient slope to be effective in keeping the interiors dry and the fragile adobe walls protected.

5. Remove earthen-fills over all roof areas where and when accessible. The earthen-fills support possibility of biohazards, insect infestation and impose excessive loads on the structure. In the event that these soils become wet, there could be a catastrophic failure.
6. Enhance the carrying capacity of the pocket roof structures that provide slope to all roofs at the Museum. Design calculations should be conducted to assure carrying capacity to meet live loads for the area, plus possible future deadloads from rooftop mechanical equipment.
7. Add insulation, wherever possible, to the pocket spaces if lighting or other hazard does not prevent the installation of at least R-40 insulation value over 100% of the ceiling of heated areas or add insulation in the form of ridged or spray foam over the roof surfaces to gain appropriate insulation, slope and coverage of electrical devices.
8. Install upsized 6" x 6" 20-gauge metal gutters to the west side of the Carson House and to the north side of the Romero House. The commercial building should also be fitted with upsized gutters if this project is within the scope of the Museum to accomplish.
9. Downspouts from the east and west of the Carson House should be installed at the face of the Carson House and taken below the sidewalk to deposit water into the street. Access to the under sidewalk trench or drain should be provided for maintenance.
10. All gutters and downspouts should be fitted with commercial grade heating equipment to monitor temperatures, prevent freezing and assure continuous flow of roof runoff.
11. Carefully inspect and maintain the roof drainage details over the portals and the 1952 addition to assure that they remain free flowing. If the portals are not removed, consideration should be made to installing traditional canales that are at least 12" wide to conduct water off of these roof areas. While canales are not maintenance free, they do provide a more positive and free flowing design, if correctly designed, than the narrow slot design currently in place.

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Environmental Hazards and Protections

Summary

Assessments

This report does not presume to have tested and assessed all possible environmental hazards that might be found within the structures and on the site.

The approach that is frequently required in assessments is that the Owner must assume that a hazard exists until such time that the lack of the hazard can be determined. This is a conservative approach that has merit in order to protect health of employees and the public.

The use of the property as a public facility under the ownership of a private non-profit foundation evokes necessarily the need to assess the potential of environmental problems as they may affect occupants, workers and staff in its current use. It is the duty of the Foundation and those responsible for directing contractors or workers who may be exposed, to take appropriate precautions.

The common areas of concern to staff and maintenance workers or outside contractors employed to work on the structure would be the presence of asbestos and lead.

Radon, which can be of a concern, would be of importance if the property were to be continuously used as a residence. Exposures to the public and to staff are limited and do not have primary concern in this facility. If the nature of the occupancy should change to portions of the property being used for residential purposes, a simple radon testing procedure should be conducted to assess the possible exposure to this naturally occurring radioactive gas common to northern New Mexico.

Lead

An assessment was made of the paints on the exterior and interior of the structure in order to identify possible lead bearing coatings. Lead is found most typically in paints applied before 1978. Potential exposure to visitors and staff is extremely limited; however, there is a potential that persons who are cutting, sawing, sanding or handling a portion of the structure or antique furniture that contains lead in the paint or in the soils near previously lead-bearing surfaces could be exposed to lead through contact, inhalation or ingestion. Flaking and dusty lead-bearing paints that are subject to contact by visitors and staff is also a concern.

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Results of the lead assessment indicate that there are some lead-bearing paint layers on both the interior and exterior of the Carson and Romero Houses. The most prevalent hazard is found in paint that is flaking and dusting, of which there are few. Layers of lead-based paint that are over-painted with non-lead bearing paint layers are not of concern except to those who may at some time be required to cut, sand or disturb the lead-bearing layers. (See door and window schedules with results of tests indicating where positive samples were found.) It requires very sophisticated testing to isolate suspected lead-bearing paint layers. These tests only show that one or more of the layers tested in the site indicate lead was present.

There is no requirement under current Federal or State environmental laws to remove lead-bearing paint layers on properties that are not used for residential occupancies. **It is required** under the EPA that workers are informed about the potential hazards that they might be exposed to in working in and around hazardous materials.

Asbestos

Asbestos is a very fine particle naturally occurring mineral that has been used in the manufacture of some building products. There are not any conclusive tests to show that exposure to asbestos by contact or ingestion is a direct cause of disease.

The major concern of OSHA and the EPA is related to persons involved in the manufacturing or processing of asbestos where particles are inhaled. There are also concerns for potential negative health consequences to those who inhale "free" asbestos during removal, disposal or working with asbestos containing products.

Testing of potential asbestos containing materials within the structure is outside the scope of work of the HSR. Common asbestos coating materials for which workers should take precautions include the following:

Window glazing putty	1935-1978
Vinyl tiles	1950 to present
Vinyl sheet goods backing felts	
And/or the adhesives used to glue down flooring	1950 to present
Acoustic ceiling products	Unknown
Mechanical pipe and duct insulation wrap	1910 to present
Asbestos cement piping	1930 to present
Some Portland cement/silicate plasters	1935-1978

The property does contain some, if not all, of these potential asbestos containing building materials. Unless fully determined to be non-asbestos containing, staff and contract workers should be advised of the potential and every precaution taken not to disturb these materials.

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If less than 1% of the surface area is disturbed of any potential asbestos containing materials, it is not required to evoke all EPA guidelines and procedures.

It is important to take note that local state and national laws regulate the handling, removal, transportation and disposal of asbestos products. In the event that quantities of materials suspected of containing asbestos are being planned for disturbance or removal, it is important that environmental specialists be consulted for further advice on this subject.

Biohazard

Potentially all earth structures contain materials and conditions that could support the growth of mildew, fungus, molds and/or bacteria that have negative health effects on humans. The conditions are building materials that contain voids where moisture and air can be trapped to support growth of these living organisms. Usually exposure to moisture comes from the soils surrounding the structure or from leaks in roofing systems. Toxic forms of plant organisms commonly found in soils and in the air are very rare; however, animal waste sources for bacteria and disease is very common in New Mexico.

The most recent examples of airborne biohazards in buildings causing potential problems are related to mechanical cooling systems that use water chillers to cool air. New Mexico has experienced cycles of bacteria and virus diseases that are carried by mice and/or thrive on the urine and dropping of rodents who have access to buildings.

The Carson Home and Museum Compound has very simple and unsophisticated mechanical heating systems with no cooling systems (except for an evaporative cooler in the bookstore), which possess virtually no threat for airborne hazards.

The potential for biohazard issues at the structure are most likely to occur in places where the public does not have access; although it is possible that a virus or bacteria infestation could be borne on dust or small clay particles falling from the earthen roof areas. In the event that evidence of green, black or white molds can be found on any building surface or rodent droppings are found in crawl spaces or in the earthen-fills above existing ceiling areas, necessary precautions should be taken to remove the contaminated materials (usually chlorine bleach is effective) and to take precautions for occupants and workers involved in the project. The abatement project should also remove the conditions, which cause the environment that supported the growth of the organism. In most cases tracing the source of moisture and removing sources of access for rodents is sufficient.

Suspect moisture sources are:

- Roof leaks or other leaks in and around windows, doors or building cracks
- Poor runoff and soaking of earth structures
- High ground water levels causing earth structure to become damp or wood floor structures to take on excess moisture (Ventilation of under floor crawl spaces is especially important to reduce potential moisture problems)
- Landscaping sprinkler systems and/or uncontrolled water drainage near the building
- Cooking or uses of boiled water to add moisture to the NM dry climates
- Showers or other use of hot water that produces moderate volumes of steam
- Evaporative cooling systems (leaks in piping trays and dirty evaporative pads)
- Room or mechanical system humidifiers

Sites where excess moisture can be identified prior to finding organisms are listed but not limited to the following:

- Places where paint has blistered or peeled
- Sites on walls or floors where rugs, furniture or paintings have not been moved for long periods of time, especially on cool north walls.
- Crawl spaces under wood floors where the earth is closer than 18 inches to the structural elements.
- Access for rodents can be very small cracks or holes around structural members protruding from walls, roof penetrations and flashings not properly sealed, air vents not protected by substantial wire cloth, or access via space between hard plasters and adobe walls where varmints tunnel up from below to the roof cavities.

Water testing

A simple water testing procedure was conducted on water taken from the tap in the employee restroom. Water for the property is delivered via underground pipes from the Taos Municipal Water supply system. The only significant test result was the total hardness measured to be approximately 200 parts per million in total hardness, which is approximately four times the preferred hardness of 50 PPM.

Testing for lead, pesticides, nitrites and nitrates, iron, chlorine and ph levels were all found to be within normal and acceptable levels.

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Water Test Desired Values
EPA maximum contaminant levels
Or guideline standards

<u>Water Test</u>	<u>Desired Values</u>
Lead	Below 15 ppb
Pesticides (atrazine/simazine)	Below 3 ppb atrazine Below 4 ppb simazine
Nitrite Nitrogen	Below 1.0 ppm
Nitrate Nitrogen	Below 10.0 ppm
Iron (Fe ²⁺ /Fe ³⁺)	Below 0.3 ppm
Total Chlorine	Below 4 ppm
pH	6.5 to 8.5
Total Hardness	50 ppm or less

Electro-Magnetic Fields

The building was generally combed for high readings for microwave, electro-magnetic waves and other electro-magnetic fields. High levels of magnetic fields were found in those areas within two-three feet of the electrical meter, the service entrance panels and other areas where high amperage (over 50 amps) of current were flowing. No microwave energy was detected. There are no standards for exposure to magnetic fields. However, it would not be recommended that workers be stationed or housed in rooms immediately adjacent to these devices.

Conditions Assessment

Romero House and Additions

Use Analysis

The Romero House is not clearly recognizable or interpreted from the exterior as an historic building separate from the Carson House due to the substantial alterations and reconstruction that has taken place. The interiors provide space for the museum bookstore and changing interpretive exhibits. Recently discontinued, Room #3 was interpreted as a trading post, which provided an authentic presentation of goods that would have been available in a Taos general store in the Carson era.

It is anticipated that the spaces will continue to be used as the Museum Shop to generate revenues from museum visitors and for shoppers wanting solely to browse the shop. The Romero House west two rooms will be used for interpretive exhibits and displays.

Character-Defining Features and Assessments

The building consists of a long and low, single file, Pueblo Revival style structure consisting of three rooms, which were part of the original Romero House. A roofing event took place in several of the rooms in 1855, which may be the date of construction. The house has gone through several iterations of rebuilding in the original footprint and was, at one time, five rooms wide. There are three rooms that retain the most historic fabric.

An addition was placed on the east end of the original structure in 1958 in order to replace lost room elements #4 and #5 and to provide space for museum activities. Other additions included a partial portal that connects the westernmost room to the west wing of the Carson House and 1952 additions. Alterations have taken place to the façade of the Romero Room #1 and Romero Room #3 in which 1950s doors were replaced with interpretative hand hewn stile and rail doors with slab panels to emulate a “mountain man” era doorway. Documentation was not used to create these façade changes.

The Romero House structure and additions is not evaluated in either the nomination to the National Register or in the 1975/1978 listing to the National Landmarks Commission as a non-contributing structure.

Note: In case a structure is not evaluated, it is to be assumed the building is eligible for the National Register until it is determined through an accurate survey that indicates the structure is no longer eligible.

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The building retains the character of the long, single-file structure that came and went from that edge of the property during the Carson Era and during the 1912 Carson Rehabilitation period of 1912 to 1927. It is important that a structure defining the north side of the Carson House and museum property is in place. However, through additions, remodeling and masking with portals, there is limited historic fabric remaining. The house does allow the museum the opportunity for quality interpretation of the various vocabularies of architectural materials.

Finishes in the building vary with age but are consistent in the vocabulary of Pueblo and Pueblo Revival architecture. For purposes of this report, rooms (see plan) will be named as follows:

Easternmost room	=	1958 addition	
Public entrance space	=	Romero Room	#1
Center room	=	Romero Room	#2
Western room	=	Romero Room	#3

The east and south walls of the 1958 addition are constructed of concrete block with cement stucco finishes on the exterior and sand-textured gypsum plaster on the interior painted white.

The north wall of the 1958 addition remains a mixture of adobe and concrete block over rubble rock foundations. The north face of the Romero House has been rendered in adobe plaster. This is a modern era intervention, but authentic in its character and application. The mud plaster is in fair to poor condition.

The north and part of the eastern wall has been negatively affected by the lack of proper drainage on the north side of the building. The property on that side of the building is not on property owned by the Masonic Lodge or the Museum Foundation. Problems with moisture entry have caused damage to the north wall of all rooms and to untested structural members below the floors in the first original room and in the 1958 addition. There are ongoing moisture penetration issues that need to be addressed from the outside of the building.

The walls of Rooms #1, #2 and #3 of the Romero House measure 20" thick, being assemblies of doublewide adobes and plaster finishes. The adobes are smaller than normal 10" wide units and thus the approximate 18" width of the adobe. Interior faces have been rendered in layers of clay mud plaster coats and, later, with renderings of gypsum leveling layers and washes of light greenish white and, finally, coated with latex white paint.

Room #3 has been carefully taken back to the original adobe surfaces and replastered with smooth coatings of adobe mud plaster. The mud plastering is of extremely good quality and very well demonstrates the typical methods of finishing adobe walls. Rock foundations found on the north side of the room have been

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exposed and left to illustrate the use of stone in early adobe architecture foundations.

Ceilings:

Ceilings of the 1958 addition are smaller 7" tip diameter – 8" butt diameter vigas spaced approximately 30" o.c. with 8" rough-sawn Pine planks for decking. The ceiling deck height is 9'-6" from the finished floors.

Ceilings and roof support structure of the Romero Rooms #1, #2 and #3 have been structurally weakened though inappropriate loads imposed by additions of sloping earth-fills and, later, the pocket roof structure that slopes the roof to the north.

A sampling of vigas in these rooms has been dated via dendrochronology with cutting dates of remarkably old dates. (Circa 1798-1856). Vigas are less uniform than in new spaces in the compound with sizes that vary from 8 to 9" diameter tips to 10 to 12" diameter butt ends.

Spacings of the vigas are approximately 29" o.c. with decking that varies from room to room.

Room #1 decking appears to have been back cut and reinstalled from the interior after ceiling or roof work was accomplished. The planks are 11.5" wide by 1.25" thick Pine boards that show the large 52" diameter circular saw marks of an early motor-driven (possibly steam) circular saw.

There are several areas of the ceiling that have been repaired with plywood or the decking has been screwed back into place with surface screws diagonally placed into the vigas.

Decking in Romero Room #2 and #3 vary from 10" wide planks to 12.5" wide planks that are 1.5" thick. The decking has failed in several places along with some of the vigas. Patches have taken place where stovepipe penetrations have been removed, and the decking shows stains and signs of deterioration due to infiltrated water and salt stains from leaching earth-fills above the ceiling decks.

The ceilings of Rooms #2 and #3 are covered with as much as 12" of dirt, which imposes a tremendous load on the structure. The dirt is both a structural, health and exhibit hazard. It may be essential to interpret and display the technique and components of the original earthen roof fill. However, due to the hazards, it is not contemplated that retaining the earthen-fill is a good preservation concept for this building.

Two vigas have failed and are supported on "timber struts" in Romero Room #2 and at least three vigas have failed and are being less than satisfactorily supported by scabs of lumber on each side of all members in the Room #1.

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Floors:

Floors are a combination of ages and stylistic interpretations of unfinished Pine planks over wooden joists or sleepers set into earth.

The 1958 addition flooring consists of 5.5" T&G Fir wood decking with a medium stain. Romero Room #1 has a random length, random width wood flooring of 3.5", 5.5" and 7.5" width planks face-nailed and installed running east to west. There are several areas of surface defects and structural soft spots indicating a failure of the supporting wood joist below. In addition, there are areas that are repaired with tin plates nailed to the face of the flooring. The tin repair does not detract from the overall ambience of the floors and, in some ways, adds to the character by interpreting the standard way of making such repairs. Obviously, structurally deteriorated areas need to be repaired.

These floors may have been stained at some time but are currently unfinished and very dry.

Romero House Room #2 flooring is a uniform 5.5" x 1" nominal thickness T&G Fir flooring that is unfinished. Approximately half of the floor has been interpreted with a section of mud flooring. This is a museum installation, not original, but does show the visitor the durability and feel of an earth floor system. This is not historic fabric related to the period of significance from the 1912 Carson House remodeling, but is a curiosity of the 1950s museum exhibit design.

Romero Room #3 was rehabilitated within the past two years, which included replacement of the flooring with a uniform 7.5" x 1" thick Pine planks placed over 4"x6" treated wood sleepers.

The floorings in the Romero House have a character and feel that relate best to the late 1800s and early 1900s history of the house, but the most original floors are in poor condition. It is reasonable to assume that a general rehabilitation of the Romero Rooms #1 and #2 will include replacement or restoration efforts for the floors depending on the interpretative decisions and significant dates established by the Museum Foundation for this work. There are several areas of the floor that are in poor condition and have structural inadequacies that need to be addressed as a matter of health and safety.

Floors in the Romero House near the door from Room #1 to Room #2 show signs of sagging and surface deterioration that will need to be repaired soon. Romero Room #1 has several iterations of flooring as evidenced by varying widths and species of flooring materials.

There are some "patches" that are accomplished using flattened tin covers nailed over holes or other defects. This is a very common "folk" treatment for floor repairs

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that has some charm and authenticity that is not objectionable, if the patch can be maintained in a manner that does not create a hazard.

Windows and Doors

A window schedule has been developed for all portions of the Museum. The window in Romero Room #2 remains as the one window retaining the most historic fabric in this area of the Museum.

One metal sash window remains from the 1958 addition but has been infilled and altered. Doorways to the 1958 addition were covered by the addition of restrooms on the south side of the building in the early 1990s.

The doorways to Romero Room #1 and to Room #3 were remodeled in the 1990s to replicate a heavy wood plank door with leather hinges from the Carson era.

Fireplaces:

Romero House Room #1 has a replicated non-traditional kiva fireplace that is freestanding on the north wall of the room. A small wing wall was erected to terminate the curved form of the fireplace and hearth. Examples of this type of "freestanding" kiva have been found in Acoma and Taos Pueblos.

There is a replicated fireplace in Romero Room #3 that represents one of the many Pueblo Revival fireplace styles found in New Mexico. Located on the southeast corner of the room, it is fitted with a gas log unit, which is the only source of heat for the room. There was sufficient evidence that a fireplace was previously located on this wall when it was discovered that the adobe wall was burned in a pattern of a flue in this corner.

It is likely that there was a fireplace in each of the rooms for heating purposes at one time.

Structural Assessment

Assessment of the structural capabilities and reliability of the structural components is limited to a visual inspection of the components and to calculations of the bearing capacity of the observable roof components.

Viga and roof decking calculations were conducted using a modest 1000 lbs/si Fb capacity in bending stress for Ponderosa Pine or Lodge Pole Pine of unknown grade. (Normal would be 1200-1400 lb/si)

Loads estimated consist of known dead loads including the pocket roof installed in the 1912 rehabilitation and observable structural components plus a dead load

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factor of approximately 35 lbs per s.f. imposed on the roof in a uniform manner. This would mean the structure is expected to resist without failure or yield a deep snow or rain water load of up to 2-6" feet of snow. The load capacity of the pocket roof was not observed and not calculated.

1958 Room

Structurally the supporting vigas and decking are sufficient to carry the load imposed. The north wall should be monitored continuously for signs of failure due to moisture intrusion. Due to problems gaining legal access to the back of the building during the development of the assessment, core samples of the adobe wall were not taken. Moisture will continue to be a problem with a potential collapse threat until such time that appropriate measures are taken to correct the surface drainage and to protect the wall with a subsurface drainage system.

Romero House Room #1

The assessment of these rooms indicates that the structure is adequate in this space. The roof system is constructed with the familiar wide planks placed of large diameter vigas, which have been dated to have cutting dates from 1798 to 1856. The ceilings retain the most historic character and feeling of the Romero House. However, they are in poor condition.

Roofing interventions should take advantage of the opportunity to remove the earth-fill over this area and to provide sufficient conduit and conductors for the roofing, communications and security systems.

Romero House Rooms #2 and #3 - The roof structure in these rooms are structurally very unstable. Semi-permanent shoring has been provided to support failing members in Room #2. However, additional shoring needs to be immediately provided in Room #3.

An invasive inspection of the timbers should be conducted to assess the viability of the vigas. However, it is clear that many elements have been altered in these structures and that retaining structural timbers that are in a state of failure may not be in the best interest of the Museum to delay emergency interventions on the roof structure.

Environmental/Hazardous Concerns

No hazardous materials of chemical or biological origins were identified in this study. See the schedule of lead paint found in analysis of door and window finishes.

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Utilities and Mechanicals

Heating is provided via a gas-fired, forced-air furnace located within the Romero 1958 addition and in the 1952 addition. It is not clear that adequate fresh air supply is provided for this unit. Flue gases are properly vented to the outside via a 4" chimney through the roof.

There is one small toilet room provided mostly for staff. The public is encouraged to use the public toilets, which are reasonably accessible to persons with disabilities.

Central cooling is not provided in this space. Archival documents, artifacts storage and exhibits are extremely limited which lessens the need for sophisticated temperature or sensitive climate control.

Lighting in the space is via surface-mounted, incandescent lamp, track fixtures and fluorescent lighting, which is adequate for the purposes intended. Greater use of lower wattage, longer life halogen lamps would reduce heat output and electrical power usage.

Recommendations:

- A. Remove dirt placed over Romero House roof structure and replace with an appropriate lighter-weight material that will re-establish the roof drainage slopes. It may be appropriate to sift the earthen-fill dirt as it is removed and before it is taken offsite. Oversight by an archaeologist would be required to assess any cultural artifacts found. Objects would be out of context but objects found may provide insight into the context of the site since most roof fill dirt is excavated very near the buildings for which it is to be used.

The dirt is an element of the overall construction that is of interest to the persons documenting the building and of mild interest to those who may be touring the structure. If possible it would be appropriate to either replicate a section through the roof in a display or, in recognition that visitors have an inherent fascination with adobe construction methods and means, a window to the past section could be retained in the ceiling in some way making the structure visible.

Proper protections need to be taken to assure that dirt is retained totally within the ceiling structure and not allowed to be deposited onto exhibits or carried into the air.

- B. The original structural beams (vigas) are not adequate to carry the imposed loads and live loads required by current codes. For health and

safety reasons alone the dirt should be removed, vigas replaced or structurally enhanced, if possible.

New structural members should be closely matched to the original members for tree species, size, shape and finish. Reuse as much of the ceiling decking materials as possible. Replace ceiling elements to match original.

Rebuild sloping roof system with a slope that closely matches the original slope in order to preserve the "known" building profile. Design the new roof structure to clear span the full width of the Romero House and to support a minimum of 30 lbs per s.f. live load.

- C. Reverse the slope of the roof to conduct water to the south side and courtyard. See roof drainage section of this report.
- D. Control of the water from the 1958 addition east of the Romero House is a critical intervention that is primary to the stabilization of the structure and key to rehabilitation of the building as a whole.
- E. Provide a continuous 6" deep, metal drain gutter at the edge of the building to more directly conduct water off of the 1958 building and as far away from the north wall as possible.
- D. Finishes on the exterior and interiors of the north wall should remain "transparent" to moisture. Transparency in adobe construction refers to the quality of the material to show moisture problems within the wall. This would mean that cement plasters or other finishes and furniture that mask ongoing moisture problems should be removed.

Venting of the floor space to the interior of the building, if not to the exterior, would be useful for continuing air circulation and removing moisture-laden air where it may migrate into floor structure cavities. Power venting may be considered if ongoing problems persist.

- F. If the current space heaters and fireplace "gas logs" are to remain, provide adequate fresh air for combustion to the furnace, whether via ducts to the exterior or through additional roof top penetrations to the extent possible. Provide adequate ventilation for the gas logs using outside air inlets and assure that the venting of the products of combustion is being adequately carried to the building exterior. This may require upsizing of the current vent pipes.

It is recommended that a long-term heating system plan be designed that will include either a single central boiler or two boilers for each

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segment of the Museum compound with distribution piping that will provide under floor radiant heat distribution throughout all buildings.

Current technologies will allow direct burial of heat tubing in earthen floors and under wood joist floor systems. In addition, flooring is available that will allow direct applications over concrete slabs with radiant coils mended therein. All systems and modern technologies should be implemented to assure a safe, dry and even temperature heating system throughout the buildings.

Air conditioning is not considered as a primary importance in the museum spaces. The current evaporative cooling system located in the museum shop can be maintained as the sole source for cooling in the buildings.

- G. An onsite and easily accessible power disconnect should be provided for purposes of fire protection. In case of fire it is usual and customary for a central disconnect to be accessible to the fire department in order to shut off power that might be feeding a current fire or to prevent dangerous electric shock exposure to firefighters and occupants during a fire.
- H. See recommendations for security and alarms systems.

Maintenance Check List

- a) Monitor roof drainage patterns two times per year or more to determine if water is being conducted away from the building on all sides. Correct drainage to flow away from walls on all sides.
- b) Remove landscaping that tends to trap moisture against walls of adobe structures. Landscaping against an adobe structure tends to “invite” people to water inappropriately and cause damage to fragile wall surfaces and structural substrates.
- c) Monitor interiors for signs of water seepage due to ice damming on north side of building or other roof defect.
- d) Remove leaves and debris from gutters and downspouts, and assure free flow of water off of roof areas and away from structure.
- e) Inspect building for possible sites where small animals and insects may be entering the structure or roof cavities. Close and screen off all access points for birds, varmints and insects to the best extent possible
- f) Make necessary spot painting, penetrating oil sealant or protective coating system to all exposed wood surfaces on an annual basis. Caulk and seal any point where water, insects, and/or cold air can enter through joints, cracks and other wall penetrations.
- g) Re-apply exterior finishes in areas of heavy erosion of exterior plaster system on an annual basis.

Conditions Assessment

Carson House and Additions

Introduction and Use Analysis

The Carson House, as viewed from the public street, has the look and feel of a freestanding, independent dwelling structure. It has been incorporated through additions of rooms and portals into a single building type as it is experienced from the interior courtyard. The exterior street façade retains much of the character and feeling that the Carson House presented to the public in 1912.

Remodeling of the roof parapets in 1927 and the late 1930s has given the structure more of a Pueblo Revival profile. The structure does not fully retain the character from the Carson era (1843 to 1868), due to the substantial changes in the façade after the death of both Josefa and Kit Carson.

The interiors were originally configured for use for single-family residential use, which was adapted for apartments and a small business in the early 20th century. The Carson House interiors were altered to be an interpretative exhibit of Kit Carson's house in the 1950s.

It can be anticipated that the three primary rooms that encompass the original Carson House will continue in their three-room configuration and continue to be used for museum and interpretative "house museum" spaces in the future. Recent efforts of the Museum directors and staff are to implement rehabilitation projects that present interior finishes and furnishings that concentrate on being faithful to the period of significance from the Carson era through the 1927 remodeling. Through this Historic Structure Report the Museum is striving to learn more about this period.

Carson House Room #4, which results from a pre-1950s major remodeling with addition, will also be used for exhibit and other demonstrations with a public museum purpose. This space provides a reasonable place to make transitions in floor height to accommodate wheel chair access to the Carson House.

It is schematically conceivable that all necessary accommodations for code and for access to the building by persons with disabilities can be made without major alterations to existing historic fabric.

Character-Defining Features

The building presents itself as a long and high profile, single-level Pueblo Revival style structure that consists of three major rooms, which were part of the original Carson House. Prominent on the south façade is the single slope portal, which provides a deep shadow line and cooling protection for the occupants throughout the history of the house. The curvilinear mission style parapet with rounded stucco edges (circa 1930s) distinguishes itself on the streetscape.

For purposes of this report rooms (see plan) will be named as follows:

Easternmost room	=	Carson House #1
Center room	=	Carson House #2
Westernmost room	=	Carson House #3
Addition to the north of Carson #3	=	Carson House #4

The distinctive character of the building is not because the original three-room structure is grand or imposing through a high degree of decoration. The house stands out because the structure has the simplicity and austerity of a residential structure that has an austere non-commercial presence. The simplicity of the structure contrasts itself against the more stylistic manifestations of Taos Pueblo Revival architecture, which line the nearby streets surrounding the Carson House.

Significant exterior wood cornice and trim features attributed to end of the Carson era were “apparently” documented in an etching made in 1868. (See attached drawing) Although not documented via physical evidence or photographs, it is reasonable to believe that there was some truth in the artist’s eye and in the interpretation on paper.

The house was very poorly maintained for the last half of the 19th century and, after several early 20th century remodeling efforts, the rendering is the only evidence of that ornamentation. A major remodeling took place in 1912, which was necessary to save the building from being lost but also changed the roofline and the fenestrations. The stabilization and rehabilitation treatments imposed in 1912 preserved the structure as it was possibly before the Carson era to a simple austere façade and portal.

The exterior treatments at that time resulted in the installation of a revised roof shape with slopes changed from a simple single-slope, pitched shed to the south to a split two-way pitch to the east and west as a drainage plan. Substantial window and door changes were manifested at that time in order to assemble the building into a multi-family, two or three-apartment use.

Exterior mud plaster was retained in the 1912 renovation but was hard plastered in the 1920s and again in the 1950s. Photos taken prior to the 1912 remodeling show a

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prominent white mud plaster or gypsum plaster coating under the portal, which was not carried through to the post-1912 treatments. A white wash or white plaster "dado" treatment is evident in the 1940s photos, but was again reversed in the 1950s to a monotone façade.

The portal is a significant feature that through documentation and dendrochronology appears to be a history element with original features that can be dated to at least the 1850s. This element was recently restored through careful methods and means under the supervision of the National Park Service and a Historic Preservation Architect. It retains much of the original fabric with the decorative features added in the 1950s having been removed.

Room #4 of the Carson House has most of its history in relationship to the occupancy of the west end of the Carson House for a leather shop in the late 1940s and later moved to the addition placed on the north of the Carson Room #4 in the 1950s. The room appears on several deeds from 1890s to 1908 as either a partial room, a small shed or, at one time, associated with the property that adjoins to the west. It has few character-defining features from the significant time period except the very thick adobe walls, which indicates it was rebuilt on footings or remnants of walls that were associated with the earlier history of the Carson House. It is noted here that despite the existence of this room in some form, most deeds did not mention a fourth room or an additional viga in official deed transfers.

Double hung wood windows with simple flat wood trim boards were installed in each of the three original rooms in 1912. Windows installed in Carson Room #2 and #3 are six over six lite design, while the windows installed in Carson Room #1 are taller nine over nine lite units that may have been relocated from another structure. Carson Room #2 north side was fitted with a mullied pair of double hung windows that are two over two design similar to the Romero House units. All windows are set midway into the deep (22") adobe wall and fully lined and cased with wood on both the interior and exterior. Window sashes have been fixed and the exterior faces fitted with impact resistant glazing in order to assist building security. With some accommodation for security, these windows can all be reasonably rehabilitated. The wood finishes were, for the most part, unpainted originally but have been painted out of a need to maintain wood in the high, dry climate of Taos and to "decorate" the building. The current scheme of blue painted window sashes with medium blue trim and casework is the result of a 1950s painting scheme. (See window and door schedules provided for this report.)

In the Carson Room #4 there is a large 6'0 x 5'0" fixed steel sash 1950s window. Facing east the window provides significant light into the room, which is a detriment for museum exhibition space in general. Before the addition in 1952 to the north end of the Carson Room #4, there was an operable steel sash window on the north face of the room with an awning.

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Doors to the exterior were limited to the original two known south side openings into Carson Room #1 and Carson Room #3. The doorways were also fitted with wood liner jambs and simple wood trim boards on both interior and exterior faces of the wall.

Very little clues exist as to the 1912 south façade door designs. Photos generally obscure the doors with people or dark shadows. Photo #G4-205 from the Taos Historic Museum Archive indicates that the pre-restoration configuration of the door into Carson Room #3 was possibly a double door that was about 42 inches wide. In the same photo, the doors appear to be stile and rail raised panel door designs.

The current door leaves are shop built (verses manufactured) slab doors made up of T&G materials that date from the mid-20th century. These doors do not relate directly to the period of significance from 1912 to 1927. The door into Carson Room #3 relates to the remodeling and use of the Rooms #3 & #4 as a leather shop.

There is a door opening that has been closed off in Carson Room #4. The clear glass transom remains. This door was added as part of the leather shop and later as one of the first entrances to the Carson Museums. There is no historic fabric associated with the opening at this time.

Sidewalk

The portal sidewalk was hard packed mud through most of its life in the 1800s. A wood boardwalk appears in a photo that is not dated but can be attributed to before 1892 by examination of photos. The boardwalk was not in photos from 1908 and was not replaced in the 1912 rehabilitation. There appears to have been a hard surface walk that provided access from the east side of the building and traversed the muddy shoulder of the road to the street. It is not clear if this was stone, wood or concrete. A hard surface treatment, probably concrete, appears in subsequent photos as well. The sidewalk, as currently configured, has some negative impact on the building by encapsulating the south wall foundation, which prevents moisture from transpiring to the air. Moisture problems in the southwest corner can be attributed partly to the lack of drainage out of the offsite, west side yard. Moisture is gathering below grade and being tapped by the concrete sidewalk. This condition needs to be corrected. Replacement of the sidewalk at Kit Carson Street may be necessary to investigate water problems and provide drainage to footings.

Recommendations - Exterior Features

Treatments of the exterior should retain the simple unadorned nature of the building as it was remodeled in 1912. The curvilinear parapet was not part of the 1912 design but shows a history of the development of the parapet design for this property. Signage of all types including directional signs, security signs and signs for

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identification of the property should be carefully designed to be early removable and reversible in order to maintain. Creative use of temporary banners, flags and other devices that are less architectural should be explored with the understanding that local preservation standards may frown on some of these solutions.

Portal beams should be stained to a more uniform color to preserve and protect the wood. It is consistent with preservation philosophy that the new wood is distinguished and identifiable in contrast with more historic fabric. Drainage gutters need to be extended and completed so that water does not stand on top of recently restored wood.

Sidewalks should be removed along the front of the Carson House and the possibility of a French drain installation should be explored to remove any excess moisture from the foundations and adobe walls. The design of the replacement sidewalk should assure positive drainage and provide for the possibility of some type of foundation or wall venting. Boardwalks or other removable and reversible sidewalk treatment should be considered, if the Town of Taos will allow that type of construction for public walkways.

The stucco that has been placed over the adobe walls is in reasonably good condition and, while it is not the best treatment for the adobe walls, it should not be removed unless further moisture problems are identified within the walls. It is critical to serve and maintain the integrity of the stucco especially along the upper parapets. Parapet cap treatments and repair of any cracks allowing moisture into the walls must be repaired on an emergency basis. The wall areas under the portal on the south side should be considered for replacement by way of a mud plaster treatment with a "Tierra Blanca" rendering similar to photos from the late 1890s.

The drainage along the west side of the Carson House must be monitored for positive drainage. This area is not owned or managed by the Museum so this will require some negotiation and tactful persuasion. The positive drainage out of this area is necessary for the long life of both buildings. The condition can be initially resolved by cutting a drain path for water trapped behind the gate area to flow easily to the street. This cut can be a swale or a trench that uses a steel trench drain cover.

Windows and doors should be returned to a color scheme that reflects the 1912 rehabilitation. Colors of the doors, windows, sash and trim were dark. Much of the trim has been replaced and provides no information as to original colors. Further examination of the historic fabric needs to take place before deciding on a color.

Security glazing will probably continue to be required on the exterior sashes. The detail may be revised to allow them to be removed with a special tool or interior release, which would allow regular cleaning and repainting of the wood windows

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Doors are scheduled for reuse in a more active way in the museum's schemes for traffic flow. The current mid-20th century doors should be replaced with doors more appropriate for the modern codes and more closely resembling the stile and rail, raised panel door designs of the 1912 era.

Doors can be either dark stained or dark tone painted to match the windows.

Interiors

The Carson house is described throughout the deeds starting in 1843 as containing 21 or 22 vigas and, in almost all, is described as having three rooms.

The three rooms remain non-subdivided and have 20 vigas and a place where the 21st viga would most likely have been located. The rooms retain much of the character and feel of the 1912 era. The characteristic volume and architectural vocabulary of the ceiling structure remains close to what is understood of the Carson era use of the building.

Exploration of the interior finishes in Carson Room #3 was the only space where a more invasive examination of walls finishes was available. This examination indicated that there were no other openings placed between Room #2 and Room #3.

Ceilings were, at one time, believed to have been raised during the 1912 rehabilitation. Further examination of the finishes at and above the viga bearing line indicates the viga locations are at or near the original location, which is approximately 9'-4" above the original finished floors. Historic wall finishes extend up past the bearing level to the ceiling deck. Some vigas were replaced in the 1912 rehabilitation. Reportedly one of the ceilings had collapsed by the time the property was finally purchased by the Masonic Lodge. A structural analysis of the vigas and decking indicates that the sizes of the members are suitable for the current loads. The condition of the members, where they can be observed, is good.

Inventory of Ceiling Materials as Follows:

Carson Rm #1	8 vigas	at approx. 33" o.c.	7" tip 9.5" butt diameter
	w/8" T&G Pine decking		
Carson Rm #2	7 vigas	at aprox. 30" o.c.	7" tip 9.5" butt diameter
	w/12" rough-sawn Pine		
Carson Rm #3	7 vigas	at approx. 35" o.c.	8" tip 10.5" butt diameter
	w/8" T&G Pine decking		
Carson Rm #4	double 2 x 8 joists	28" o.c. placed 9'8" above FF	
	Prepared for finished ceiling to be attached to bottom of structure		

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Floors are stained, finished Fir T&G, smooth-sawn boards in each room. The sizes of the materials reflect the period when they were installed. Wide plank wood floors may have been installed in the 1912 remodeling. However, the current floors are attributed to the 1927 and 1950s remodeling, which included the additional trim of simple painted, wood baseboards.

None of the flooring finishes used prior to 1927 was found to be in evidence. It is assumed that prior to the Carson era dirt floors were in use and later wide-plank, hand-sawn wood planks were installed on wood sleepers that were sunk into the earth. Further evidence of those floors should be determined through invasive investigations before making decisions to return to flooring other than the existing wood.

Wood floors are in relatively good condition on the surface. However, there are some structural failures taking place in the underlayment (sleepers) that need to be addressed for safety and durability of the existing floors. Settlement and soft spots are usually found around the edges of the house where moisture has entered the "crawl space" and deteriorated the wood members placed on the damp earth.

Inventory of Flooring:

Carson Rm #1 remodeling	3" to 3 ¼" wide T&G Fir flooring	attributed to 1950s
Carson Rm #2 remodeling	5 1/2" wide T & G Fir flooring	attributed to 1927
Carson Rm #3 remodeling	5 1/2" wide T & G Fir flooring	attributed to 1927
Carson Rm #4 design	Concrete slab with vinyl asbestos tile 9" x 9" beige patterned design	

Wall finishes

Wall finishes throughout consist of several interventions of natural clay renderings that were placed on the walls over 1" thick adobe mud plaster (possibly a leveling course) and a ½" layer of the whitish mud plaster with straw that is common at the Taos Pueblo.

Several thin layers of Tierra Blanca, a fine clay rendering *Alisa* (smooth coat) were applied throughout the life of the interiors. From two to six layers have been identified.

Also found in Carson Room #3 is a very light blue micaceous clay wash (thickness under 1/64") that was found to have been applied to the west and north walls. There are several Native American artisans who use blue mineral paints for decorating native crafts, but it is rare to find the blue clay in a residential structure.

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Reports have been made that document veins of blue clay near the Ft. Burgwin Research Center east and north of Taos and in the foothills south of Taos at the end of Stakeout Road.

Significant is that the interior finishes have not been totally stripped or encapsulated with modern plastering techniques. Examination of several layers of the wall finishes indicates that there were attempts to match the light blue clay finish with a paint layer at one time.

Layers of paint also include an antique yellow and, most recently, several layers of white paint.

A small picture rail molding at approximately 9-0" high was installed during the 1927 remodeling. The molding and baseboards are in good condition and have been painted the 1950s light blue color found on most of the interior wood.

Fireplaces

There are two fireplaces that are associated with the period of significance of the house located in Carson Room #1 and Carson Room #3. The fireplace in Room #1 has an unlined adobe chimney. Both fireplaces are traditional designed fireboxes approximately 2-4" wide and 2-6" deep placed on a hearth that is raised above the finished floors approximately 8". The breasts of the fireplaces are flat, angular, "eastern"-looking designs with relatively small plaster mantles rather than the Pueblo Revival beehive design.

These units are being used as the main heating devices for the house by being retrofitted with gas logs and conventional metal flues venting to the outside above the room.

In the 1950s interpretative remodeling for use of the Carson House as a permanent Carson Museum, a nonfunctional cooking fireplace exhibit was installed in the northwest corner of Carson Room #2. The exhibit is large and obtrusive to the scale of the room. No documentation is available to determine the appropriateness of this exhibit at this time. Before it is removed, altered or interpreted in another manner, further invasive investigation of the areas under the floor needs to be conducted. There is a metal chimney flue hole in the approximate center of Carson Room #2, assumed to be that of an early 20th century wood stove.

Recommendations - Interior Features

The Carson House preservation recommendations need to be coordinated closely with the interpretative goals of the Museum. The purpose of the museum is to present, with reasonable accuracy, the life and time of the Carson era. The appropriate preservation approach to the building is to remain within the 1912

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Masonic Lodge remodeling era due to the lack of information and impracticality to return to a pre-1912 configuration of doors, windows, roofline or other documented features. The current plan for the museum is to initiate a room-by-room rehabilitation project based on the Historic Structure Report recommendations.

Roof structural elements and ceiling materials are in sufficiently good condition that the only treatment needed, other than patching at obvious holes, is to provide annual maintenance treatments of turpentine and oil.

Wall treatments can be restored to the original Tierra Blanca finishes throughout the Rooms #1 through #3. In the event, as in Carson Room #3, a special treatment such as the blue micaceous wash is in evidence, care should be taken to determine the era in which this treatment can be attributed. Wall treatments attributed to the Carson era, if reconstructed, should be carefully identified as museum exhibit treatments.

The flooring throughout the Carson House is functional, but some structural repair is called for if the floors are to be continued in use. Especially in the public access areas, floors need to be structurally sound for imposed loads of over 50 lbs per s.f. There will be a requirement to either encapsulate thresholds or remove them to achieve a higher degree of accessibility in the public spaces. In recent remodeling it was determined that the 4" x 10" slab used for the transition between rooms was installed over dimensional sawn lumber, which indicates that they were replacements, in 1912 or 1927. It would be prudent to take the opportunity to further explore the historic finishes below the current wood floors when making structural repairs.

If, in the opinion of the Museum administration and directors, the floors should be returned to a documented historic material prior to the 1912 era, the current flooring and its structural components need to be thoroughly documented through sampling and photographs prior to installing an earthen floor or rough plank floor. New work should be date marked and the exhibit should be identified as interpretatively different than the door and window treatments.

Fireplaces may be continued to be used as gas logs and primary heating equipment if fitted with outside ventilation and with properly sized and vented flue piping. Fireplaces are not functional as wood burning appliances without substantial upgrades and alterations to the flues.

Structural Assessment

Assessment of the structural capabilities and reliability of the structural components is limited to a visual inspection of the components and to calculations of the bearing capacity of the observable roof components.

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There are not signs of major settlement or structural failure of the soils or foundations of the Carson House. Hard plaster coatings over adobe can effectively mask weaknesses in adobe bricks due to high moisture content and sometimes lead to catastrophic failure. Failures due to ground or internal settlements usually transmit cracks either horizontally or diagonally through the stucco layers. No major cracking has been recorded. Dampness has been recorded in the southwest and northeast corners of the Carson Room #3. These areas were discussed in the exterior treatments section of this report. Trapped moisture or ongoing exposure to water from roof runoff or ground water can destroy the integrity of adobe very quickly. Moisture contents of over 20% in soil samples are an indication that the adobe soils in the wall could be in a state of reaching liquid limit and massive slumping.

Viga and roof decking calculations were conducted using a minimal 1000 lbs/si F_b capacity in bending stress for Ponderosa Pine of unknown grade. (Normal would be 1200-1400 lb/si)

Loads estimated consist of known dead loads including the pocket roof installed in the 1912 rehabilitation and observable structural components plus a dead load factor of approximately 35 lbs per s.f. imposed on the roof in a uniform manner. This would mean the structure is expected to resist without failure or yield a deep snow or rain water load of up to 2-6" feet of snow. The load capacity of the pocket roof was not observed and not calculated.

Results of the Structural Calculations were as Follows:

Carson Rooms #1, #2 and #3

Vigas are marginal to carry the loads assumed. Do not add weight to these structural members through hanging objects from them or stacking construction materials on the roof. In the event of a re-roofing project, it would be advisable to make a thorough physical inspection of the pocket roof structure and make any recommended reinforcements to the vigas and/or to the pocket roof structure at that time. Re-roofing materials should not be stacked in concentrated areas over these vigas.

Carson Room #3-The decking span is greater than recommended for typical construction codes against the east wall. However, the imposed live loads are being carried for the most part by the vigas and the pocket roof system, which has relieved the loads imposed on the decking.

This is a site that is possibly where a viga is missing from the "counts" found in most deeds. In the event that the roof system was ever opened up, a project to replace the missing viga could be considered.

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Carson Room #4-The currently exposed double 2 x 8 joists are spanning almost 17 feet, which exceeds code of that size member. A calculation of the potential loads for the members indicates that they are suitable for an imposed live load of 30 lbs per s.f. Since the members are easily enhanced, it is recommended that the existing blocking be removed and an additional "sistered" 2x8 member be added to reinforce the existing structure. Centerline solid blocking should be installed to stiffen the centerline of the structure.

Floors: If it is determined that the wood floors are to be retained, the floorboards should be removed and salvaged for reuse. Sleepers should be installed adjacent to original support members, which are chemically treated for water and fungus resistance and 4" x 6" minimal spaced at no more than 24" o.c. The original historic floor materials can then be reinstalled and refinished carefully.

Environmental/Hazardous Concerns

Hazardous materials related to ground contamination or biological origins were outside of the scope of work in this report. See Appendix of this report for general cautions and care to be taken while dealing with historic buildings. An analysis of paint samples for lead bearing layers and water testing was accomplished. Specific results are found in this report. Generally staff and construction workers should be aware that many of the painted surfaces contain at least one layer of paint with lead content. Sanding, cutting or working painted surfaces containing lead paint should be accomplished with proper protections. Stripping or other encapsulation treatments are not indicated as long as the building remains in museum use.

Utilities, Lighting and Mechanicals

See Romero House recommendations for new boiler system.
No cooling is provided in the Carson House.

Recommendation: Adequate fresh air for combustion to the gas appliances should be maintained at all times to the current gas log units. Carbon monoxide monitors should be installed in each room to detect any problems with proper ventilation.

Open flame gas heat adds moisture to the room air, which is not necessarily a problem unless humidity levels above 50% are achieved. In the high dry climate of Taos, it is unlikely that this will be a problem in the heating season. The design of displays for artifacts and environmentally sensitive materials should consider the elementary nature of heating and lack of humidity controls in the building.

Central heating and cooling systems are not recommended for this building.

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Lighting

Lighting in the Carson House has been purposely limited to single surface-mounted flood lamps to reduce the distracting effect of modern lighting within the Carson spaces. Use of the spaces is generally during daylight hours and the need for high-level lighting is limited to dark winter afternoons and cloudy days.

Electrical power is available within the Carson rooms via reasonably modern wiring and conductors that have been channeled into the adobe walls. For the purpose of maintenance and the aforementioned carbon monoxide detectors, this modern convenience should be maintained and hidden by exhibits.

Security and fire alarm systems have been provided throughout the house. The system consists of minimal hard-wired devices that include motion and contact detectors at doors and windows. Alarms are set after hours and monitored by a local security firm. (See Security System section.)

Lighting: M-16 halogen, wide-angle flood lamp fixtures would improve lighting quality and color rendition within the Carson spaces. Canopy-mounted or small tracks would be less obtrusive visually than the current reflector floodlights. Lighting within display cases or in exhibits can be designed to provide low-level ambient light along pathways. (See recommendations for code upgrades that include additional exit path and emergency room lighting minimally required to meet safety codes)

Security: More sophisticated systems and the ability to expand the alarm system to zones for individual cases or artifacts has been addressed in this report under a separate heading. An emergency exit door is recommended for the Carson Room #3, which will require additional wiring.

Door and Window Assessment

Historic, Interpretative and Utility Features

The doors and windows at the Kit Carson House and Museum have been kept in relatively good repair throughout the use as a museum. There are good examples of utilitarian plank doors from the leather shop in Carson Room #3 and in the passages between Room #1 and #2 are two good examples of simple "gate" style 1" thick doors probably added in the early 1900s.

There are also a few 1920-1940s stile and rail panel doors in the Romero House as well as two heavy "mountain man" interpretive doors at Romero House Room #1 entry and Romero House Rm #3 exit to courtyard.

None of the doors could be documented as being historically tied to the Carson era. The remodeling that took place in 1911 probably removed historic fabric at that time, due to the extreme poor condition of the building when purchased in 1908.

The doors, for the most part, are in serviceable condition and can be made to be more weather tight and more secure, if necessary. The treatment plan for maintenance or for restoration would call for reuse of doors whenever possible. Fenestration within the Romero House and the Carson House should remain in the current locations unless further evidence is found to support relocation or additional openings.

The treatment for doors would be to retain existing doors in the openings where they are found. If a clear width of 32" is needed for minimal ADA compliance, it may be necessary to remove doors in the Carson House and place them as fixed exhibits or use them in another manner.

The overall emergency exit plan for the building would require that at least one door out of the Carson House be made into part of an exit path. The Carson Room #3, Leather Shop door from 1949 (estimated) is wide enough to accommodate an exit door. The recommendation would be to remove and rehabilitate the door for use as an emergency exit. Occupancy would not require the door to be fitted with a panic bar, but regular operative hardware would be necessary with a security-type signaling device to be activated when the door is opened.

Thresholds within the Carson House are a series of heavy timber 4" to 6" thick, 10-inch wide planks set over dimensional lumber anchored into whatever foundation there is. These thresholds vary in height above the wood floors. For the most part it must be assumed that these thresholds are probably not original fabric due to the discovery (See Maintenance Notes Appendix) of dimensional lumber below the sills.

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The supporting dimensional lumber is placed approximately 3" above the original earthen floors. Widening of doors to improve accessibility (at this point not deemed necessary) with this type of sill construction will require removal of both the supporting lumber and threshold.

If it is necessary to remove or relocate these doorways and thresholds, careful documentation needs to take place. Removal or plastering in the rooms would expose the possibility that some of these doors are relocated from the center of the wall locations. In Carson Room #3 no evidence was found to document alternate locations of doorways. The location of historic doorways in other rooms cannot be verified until further invasive investigation takes place. If earthen floors are installed to replace the wood floors, where appropriate, these wood thresholds should be restored to the original location at the level of the earthen floor.

As an alternate to resolving the grade differential across the threshold, the original historic fabric may be encapsulated with a very small ramp on both sides to protect these materials.

The door currently entering the 1952 addition is a ½-glass residential type stile and rail door. This door will be left in its current location for use as an auxiliary access from the courtyard in special situations and for maintenance. For additional energy conservation and security purposes the glass panels can be fitted with an additional interior security and insulative glazing panel. Weather stripping is needed on all exterior doors.

Door heights in the Carson House are very low (5'-6"). The height of doorways could be hazardous to persons with disabilities and, in the event of a fire, problematic for firefighters. However, these door heights are very character defining to the nature of architecture of the time and of Carson as a short person. Code enforcement officers will need to accept the exceptions under the UBC for historic buildings with the alternative exit paths (reopening of door to exterior in Room #4.) being created to protect health and welfare of occupants. Warnings need to be posted at all low doorways (less than 6'-8").

Windows

The windows throughout the museum are in fair to good condition and could be rehabilitated without difficulty. For the purposes of the operations of the museum it may be best that the steel sash windows located in the Carson Room #3 and the 1952 addition be reduced in size to eliminate excess natural light into exhibit spaces. This would also increase exhibit wall space.

Metal sash, high sill windows in the room facing west do not meet codes for penetrations along property lines. These windows pose a threat for security and fire safety, both for the adjoining property and for the museum. It is recommended that

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all these windows be infilled, as several have already, to eliminate the identified problems. Infill should have a two-hour minimum fire resistance rating.

As part of any alterations to the 1950s additions there should be adequate documentation in the form of photos and drawings to have as a re-do for the Masonic Lodge construction at the site. These buildings were present at the beginning and, through the Masonic involvement at the Museum, served as support structures and have undergone several alterations over the years.

The two double-hung windows in the Romero House with deep-set window seats and simple flat trim serve as good sources for south light into the exhibit spaces. There has been no clear interpretative intent for the restoration of the Romero House. It retains much of the feeling and character of the original 15-viga houses in scale and some of the finishes. However, floor finishes, doors and windows have been altered or removed.

There is no compelling historic preservation force to replace the current windows. These units can remain part of the early 1900s "life" of the house. The units should receive adequate maintenance and rehabilitation including paint on a regular basis. If necessary an interior storm sash can be installed to improve energy and security interests at those openings.

Windows in the Carson House are similar to the Romero House in that they represent the 1911 remodeling with very few alterations since that time. If the preservation philosophy for the Carson House were to interpret the interiors and fenestration more in character with the Carson 1843-1868 era, this window would need to be altered to conform to the documentation available. Unfortunately the current information is sketchy and lies in some not very clear photos.

If the interiors were to be interpreted as pre-1911, remodeling the window (not recommended) should also be changed to reflect that era. The current image that one takes away from a visit to the Carson House is that the rooms are, and were, charming and almost elegant Victorian spaces. The photos from the late 1890s indicate that, while the rooms were certainly in better shape in the late 1860s, the house, including the doors and windows, was probably less than elegant and more utilitarian.

Doors and windows that are painted now should remain painted. A color analysis has been done to determine the most appropriate historic colors for the interior doors and windows. While color changes are typical for doors and windows over the lifetime of a building, it is important to keep within a range of tones and colors if that was an important element in interpreting the spaces as part of the historic use of the building. It would be acceptable to use the most appropriate historic colors, if possible. In general, the most original exterior door and window treatments were natural finished, stained, wood. The exterior wood trim and sash appear to remain

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unfinished or dark-stained through 1940 and only one layer of light blue 1950s era paint was found on exterior window sashes.

See attached drawings with notes.

Security Systems Review

Kit Carson Home and Museum

The Kit Carson Home and Museum has a minimal security and alarm system designed to prevent after-hours break-in. Collections of original materials within the museum are minimal; nonetheless, valuable exhibits are on display, which are not easily replaced. It is outside the scope of this report to assess museum policy for exhibits or security policy. This section discusses the current systems and makes recommendations for possible upgrades to the security devices and wiring thereto in order to assist the museum in planning.

Rough in for future security devices and providing appropriate conduits or hard wiring for future systems can be accomplished during each intervention or room restoration. Local private security forces in Taos under a contract are monitoring current systems. The security devices installed onsite were installed by New Mexico Securities Systems of Taos and are maintained by that company on an as needed basis.

The system is a small commercial style hard-wired, low-voltage, continuously monitored system that depends heavily on motion detectors for activation.

Fire and smoke detection devices are not included in the current system design. Residential style, battery-operated smoke detectors are located throughout the buildings. However, all rooms are not furnished with detectors. Currently the detectors have been removed due to false alarms. The units were over seven years old and nearing the end of their useful life. New units are being installed, but they are not tied to the central signaling panel.

Carbon dioxide alert devices are not provided within the central alarm or separately in the current alarm designs.

A single entry keypad is located in the Romero House Room #1 which is activated by the staff in charge at the reception and museum shop desk.

Additional zones and devices could be added to the current system.

Assessment of Current Systems:

The current system provides minimal security for the museum complex, which is vulnerable to incidences of break-in or vandalism due to non-secure courtyard and easy access to the rooftops from the north side of the buildings. Rooftops offer access to many buildings on the block in addition to all of the Carson Home and Museum buildings. Rooftop access can lead to interior access through skylights,

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mechanical equipment or other fenestration. In addition, much of the electrical power provided to the interiors is located on the roof and, therefore, vulnerable to vandalism.

No security cameras or devices that monitor exhibit items or display cases are installed in the current system. However, the security patrol contract calls for periodic walk-through and door checks to monitor exterior spaces.

At this time it would be a correct statement to say that the security system has reached the end of its useful life and a complete new system design and installation would be a timely exercise. The new design would strive to work closely with the administration and staff to coordinate current display and exhibit designs and to make the future system flexible enough to allow modification and portability without causing negative impacts to historic fabric throughout all buildings. With the promise of a higher level of security, it is conceivable that a selection of traveling exhibits from other museums throughout the county may be made available for display in the Carson Home and Museum compound. Changing exhibits and more dynamic displays should result in greater local visitorship and support during low tourist seasons.

The new system should be modular and upgradeable to the extent that once designed, increased revenues may allow the system could be expanded.

Kit Carson Home and Museum Compound Security and Alarm System

Invitation to Bid

The following design criteria has been submitted to several alarm and security system companies in Taos and Santa Fe for budget estimates:

Alarm and security system contractor shall furnish and install all materials, labor equipment, tools and materials necessary for a complete operation system based on verified field survey and review of conditions found there. The description provided herein is schematic in nature and does not intentionally exclude all secondary operations or materials necessary to complete the project. The contractor shall pay patching of surfaces disturbed in the process of installation.

Install new multi-station, multi-zone alarm digital panel reusing existing dedicated telephone line for notification.

Install hard-wired, low voltage entry keypad at two locations, one at the Romero House Room #1 entry and one at the Carson House Room #3 entry.

Provide minimum of nine state-of-the-art adjustable motion detectors and 10 smoke and rate-of-rise fire alarm devices throughout the museum complex, one per room plus extra smoke and fire device at storage room in 1958 addition.

Provide one future door contact alarm device rough in at courtyard *zaguan*.

Provide four pull-station-activated fire alarm devices at major fire exit pathways.

Provide four wireless receivers/transmitters for exhibit rooms that will active any number of remote devices within the room or cases to be zoned separately for activation during all hours.

Additive alternate: Design, furnish and install a medium resolution video camera security system that can be monitored and taped from a central location within the structure as follows:

- 10 ea. Video cameras, fixed-angle type, mounted on stems hung from ceilings
- 3 ea. Video camera, exterior, weatherproof devices or covers for courtyard
- 2 ea Videotape record and play machines slow speed

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Security station monitors, one for exterior and two for interior, to be mounted in central location selected by museum staff. Controls for automatic switching from camera views and manual override and switching as necessary from central station.

Phased Work Plans

Kit Carson Home and Museum

Project Planning

Project planning must follow a logical path based on the assumption that there will always be a limited amount of project implementation monies available.

That logical path is to be determined by those who have the power to budget and implement projects, hopefully using the Historic Structure Report as a guide for planning. The beginning task for the decision-making bodies is first to have a common vision of what are the goals and mission of the property as a museum and as an historic structure.

Simply stated but realistically, this is a difficult decision that requires 100% participation by those that own the structure, those that oversee and manage the Museum and those user groups that might be helpful in bringing outside thoughts into the process.

Before implementation of the preservation plan, is the logical and necessary step of finalizing the legal foundations and agreements that underlie the ongoing operations and decision process for making near- and long-term decisions. Leases, maintenance agreements, easements and other documents that provide sound support for the next millennium of stewardship of the structure need to be in place.

The phased preservation plans presented herein assumes that the structure will indeed continue to be used as a museum and interpretive exhibit facility dedicated mostly to the Preservation of the Kit Carson Home. The Kit Carson Home will always be the magnet that brings visitors into the museum. The preservation approach for the Carson Home may differ slightly from other structures onsite. The basic philosophical approach for the preservation plan is that the Carson House and much of the surrounding grounds (what little there are) should follow a higher form of rehabilitation, (a strict preservation approach is not possible due to a lack of documentation and impracticality of reversing implementations from the early 20th century) that takes into account the “exhibit reconstruction” that previously occurred throughout the house.

Preservation approach in the other structures should be a rehabilitation approach that preserves as much historic fabric as possible and removes interventions that have a negative impact on the historic structures and reinforces the interpretation of the Romero House and secondary Carson Home additions in as much as possible in character and feeling as it may have appeared in 1912 through 1927.

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This date is chosen, not without deliberation, because of the significant efforts of the Masonic Lodge brothers in their stewardship efforts. Acquisition and rehabilitation of the property from 1908 to 1912 was key to the fact that the structure is available for us to visit and enjoy today. The preservation plan does not want to ignore or minimize the substantial effort in the 1950s, again, by the Masonic Lodge, to commit much of their efforts to creating a museum dedicated to Kit Carson. However, some of the 1950s present false sense of history to the museum observer.

Establishment of the museum was a seminal event for maintaining the spirit of Kit Carson and preserved once again much of historic fabric at both structures.

Museum operations conducted within an historic structure are always difficult because many of the efforts to operate a clean, efficient and modern museum for which people are willing to visit regularly and pay an entrance fee, are symptoms in conflict with the purist preservation philosophy. An example would be that in creating a kitchen exhibit, a curator may very well reconstruct with best efforts those elements that would best illustrate and demonstrate what it was like to cook over an open fire in a fireplace designed specifically for preparation of food. An historic preservationist may frown on reconstruction of features that were accomplished without specific archaeological, photo or written documentation to support the reconstruction.

Both efforts could be viewed as correct, but within the framework of decision-making in the future we would hope to have a clear focus for the structure and exhibits that are parallel and not competing.

Project Phasing

Projects recommended herein are assumed to be phased in a logical construction order and also in order of priority considerations. Health, safety and emergency projects necessary for the integrity of the structure are identified in the initial phases.

Reaching a higher level of compliance to accessibility laws and implementation of exhibit design that are major interior projects are identified along with other code reinforcement corrective measures. Implementation of long-term exhibit design goals is shown for later phases.

The cost estimates assume as projects are implemented that involve roofing or exterior finishes, appropriate additional insulation will be added to increase energy efficiency of the structures and to allow space for running future electrical and communications conduits, since the roof is the easiest path for access throughout the various structures.

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Project Budget Estimates

Projects identified within each phase have been developed through the use of consulting with companies who have recently performed projects of similar scope, standard cost estimating books and estimates developed by architect from past experience.

Basic Construction Costs: This is a raw number that includes the basic costs to the contractor for accomplishing the work including building permit and supervision typical for projects of the size generated in the report.

Overhead: A market mark-up of 15% has been applied to cover the indirect costs to the contractor for operating the company during the project.

Profit: A 10% profit mark-up has been applied to the overall cost of the work.

Gross Receipts Tax: Taxes that would be paid to the contractor as reimbursement for New Mexico Gross Receipts Taxes paid under the contract is added to the overall project cost.

Design and Administration Fees

Standard professional fees for design and administration of simple to complex restoration projects can range from 8% to 15% of the total construction costs.

The fees assumed for the phases recommended herein were calculated at 10% of the total construction costs with estimated direct costs of reimbursable expense of \$200. Gross Receipts Taxes would be reimbursed to the professional for NM Taxes due under the contract. Taxes have been included in the estimated project budgets.

The expected services under this cost item would be for the architect to provide drawings and specifications sufficient to obtain a building permit and to outline the scope of work satisfactorily so that the governing authorities will have adequate information to approve the proposed treatments and design. In addition the professional services would include enough administrative costs to assist the owner in obtaining bids and providing contract administration during the construction.

The fees shown herein would not provide for continuous onsite inspection and oversight of any project, although that service could be made available from most professional firms. It is not anticipated that level of oversight would be required.

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Escalation

The most difficult cost item to predict for any project is the cost of doing the work in the future. It is assumed that the initial projects will be accomplished in a timely manner and, therefore, minimal escalation costs are included herein sufficient for those projects.

For each year from the date of this report an escalation rate of 3% has been added to the cost of the project to account for escalation of materials, labor and overhead costs.

This is a modest amount but enough for today's economy. Project budgets should be adjusted for actual conditions before final budgeting for any particular budget year to include projects recommended herein.

The final costs for all projects will depend on market conditions, interest rates, wage rate restrictions and specific design documents prepared for the purpose of bidding.

Kit Carson House and Museum -Work Plan		
	When	Cost
Phase I - Scope of Work - Historic Portal Restoration		
Stabilize portal and protect the public for repair of historic portal beam at south face of Carson House		
Make appropriate treatment interventions, repair, replace and Dutchman repairs of beam and posts and reinstall.	Project Completed	Costs approx. \$60 per s.f.
Re-roof portal.	2001	
Phase II - Scope of Work -		
Stabilize Romero House roof 1-2-3 Roof and Wall Structure- Drainage improvements		
Sub-Project A		
Protect interiors and remove existing sloped roof deck		
Remove dirt over entire roof structure		
Remove decking & vigas, retain materials that can be reused.		
Install continuous wood bond beam (or concrete, if necessary, to meet codes)		
Repair or replace, if necessary, 9 vigas known to be cracked or undersized for current spans.		
Repair and/or replace deck as necessary. Decking shall be like and kind or rehabilitate and patch existing preferred.		
Replace or reinforce existing sloped roofing members and decking (lower high end aspect of building, if possible)		
Provide necessary wiring and empty conduits for electrical services, communications and security systems within the roof structure.		
Install new roofing, single-ply brie or equivalent mineral surface roofing with over-sized gutter and downspouts with heat tape.		
Phase II – Sub-Project A Budget Estimate	Base cost	\$42,705
	O& P plus tax	\$14,118
	Design and admin	\$6,200
Total		\$63,023

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Phase II - Scope of Work - continued		
Drainage improvements		
Sub- Project B		
Install Courtyard drains with seepage pits. 6 x 6 by 10 feet deep-filled with gravel and lined with landscape fabric		
Remove <i>contra pared</i> (concrete apron) on north wall. Repair foundation wall stone and adobe, as necessary		
French drain along 86 feet of Romero north property line		
Perforated drain to drain with solid line to seepage pit – Offsite, if possible, or carried into courtyard for internal drain		
Re-slope grade to drain away from building protect with bentonite layer – poison soils below – Construct retaining wall “dike” across opening where potential flooding takes place east end, 2 feet above grade-4 feet below grade		
Repair mud plaster on north side when work is accomplished.		
Remove and replace sidewalk at southwest corner of Carson Home to provide appropriate drainage to west alleyway		
Provide courtyard landscape and drainage improvements		
Phase II – Sub-Project B Budget Estimate	Base cost	\$23,934
	O& P plus tax	\$8,360
	Design and admin	\$3,830
		\$36,124
Total of Phase II Budget Estimate		\$99,147.00

Phase IV - Scope of Work -		
	2-3 years	
Continue with Exterior Repairs and Rehabilitation for Protection of Structure.		
Repair of structural cracks and installation of exterior insulation on CMU exteriors walls.		
Re-stucco exterior areas – 1952 addition facing offsite and other areas that are not under portals.		
Provide treatment to all exposed exterior wood posts, beams, doors and natural finished wood.		
Close windows where necessary to meet code and for future exhibit design (steel sash at 1952 addition)		
Rehabilitate floors in Romero House Rooms #1-2		
Phase IV – Budget Estimate	Base cost	\$21,181
	O& P plus tax	\$7,337
	Design and admin	\$3,388
	Escalation	\$2,118
Total		\$34,024

Phase V - Scope of Work -		
	3-4 year	
Site Development – and Related Exterior Repairs		
Upgrade electrical service to 200 amp service (to museum only) minimum 240 v three phase, if available – redistribute underground to all locations - remove power pole		
Remove 1953 portals on face of Kit Carson - 1952 addition and – Romero House		
Repair courtyard finishes and install landscape enhancements - boardwalk		
Make modifications to 1952 building for new atrium entry		
Construct atrium transition room		
Re-roof remaining structures after installation of appropriate electrical upgrades in roof, add insulation.		
Phase V – Budget Estimate	Base cost	\$86,318
	O& P plus tax	\$29,917
	Design and admin	\$12,586
	Escalation	\$11,572
Total		\$140,393

*Electrical upgrades includes security system upgrades, rough-in

Kit Carson Home – Historic Structures Report

Taos Historic Museums - National Park Service Partnership
 Dale F. Zinn, Architect Consultant

Recommended Preservation and Rehabilitation Interventions

Kit Carson Home and Museum

First Priority Stabilization and Rehabilitation

1. Preserve Kit Carson Street Portal structure.
2. Stabilize and reconstruct Romero House roof structure.
3. Establish positive drainage from all sides of building and courtyard, plus dispose of water in appropriate manner.
4. ADA Access and Code Issues relating to exit path signage and alarm systems.

Recommended Treatments and Rehabilitation Projects

1. Rehabilitate interior finishes based on Museum exhibit goals and mission.
 - a. Return wall finishes to appropriate clay plaster coatings as documented with room-by-room invasive research
 - b. Rehabilitate wood floors and support structure and/or restore floors to earthen floors, if appropriate.
2. Upgrade security system and integrate smoke and fire alert systems to central reporting system.
3. Upgrade lighting to high efficiency color corrected indirect and unobtrusive fixtures.
4. Rehabilitate windows
5. Accomplish exterior rehabilitation – repair cracks and stucco, reconfigure portals and museum long-range exhibit design. Reroof entire building not roofed in Romero House roof rehabilitation
6. Upgrade electrical service entrance for 200-amp service to museum and remove overhead lighting pole.

Kit Carson Home – Historic Structures Report

Maintenance Check list

(See also separate maintenance checklist binder)

The Treatments are recommended in three categories as follows:

1. First Priority Stabilization Projects

These are projects that, if not accomplished within a reasonable amount of time, will result in permanent deterioration of building components. The integrity of the building is eminently threatened, if no action is taken.

2. Recommended Rehabilitation Treatments

Identified under category two are those that need to be addressed in a program of planned rehabilitation and restoration to maintain the building in a manner that continues to allow the structure to be used as a functional part of the Museum compound and retains the historic integrity of space, form and materials associated with the character-defining features.

3. Maintenance Check List Items

The items identified herein are those maintenance measures that are no cost or low in cost that, if done on a regular schedule, will prevent failure of major building components over the life of the building.