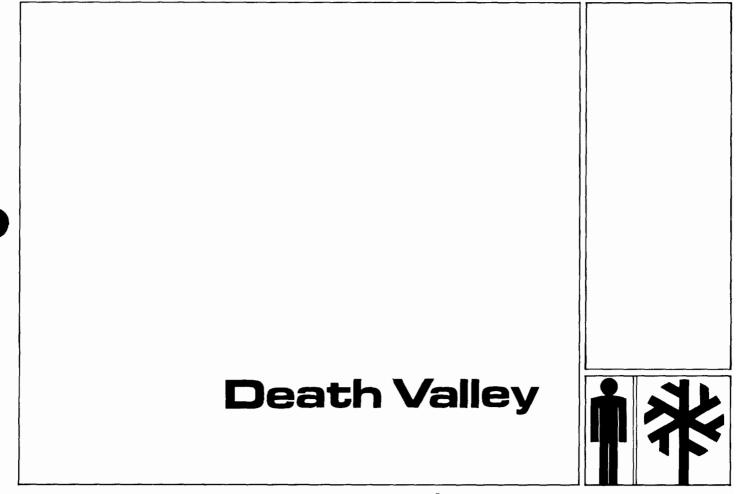
SCOTTYS CASTLE COOK HOUSE Historic Structure Report



National Monument/Arizona

B&W Scans 7.14.2005

O MIGHT

PLEASE RETURN TO: TECHNICAL INFORMATION CENTER DENVER SERVICE CENTER NATIONAL PARK SERVICE SCOTTYS CASTLE COOK HOUSE HISTORIC STRUCTURE REPORT

prepared by Susan Buchel, Museum Curator and Robert Haile, Maintenance Mechanic Death Valley National Monument

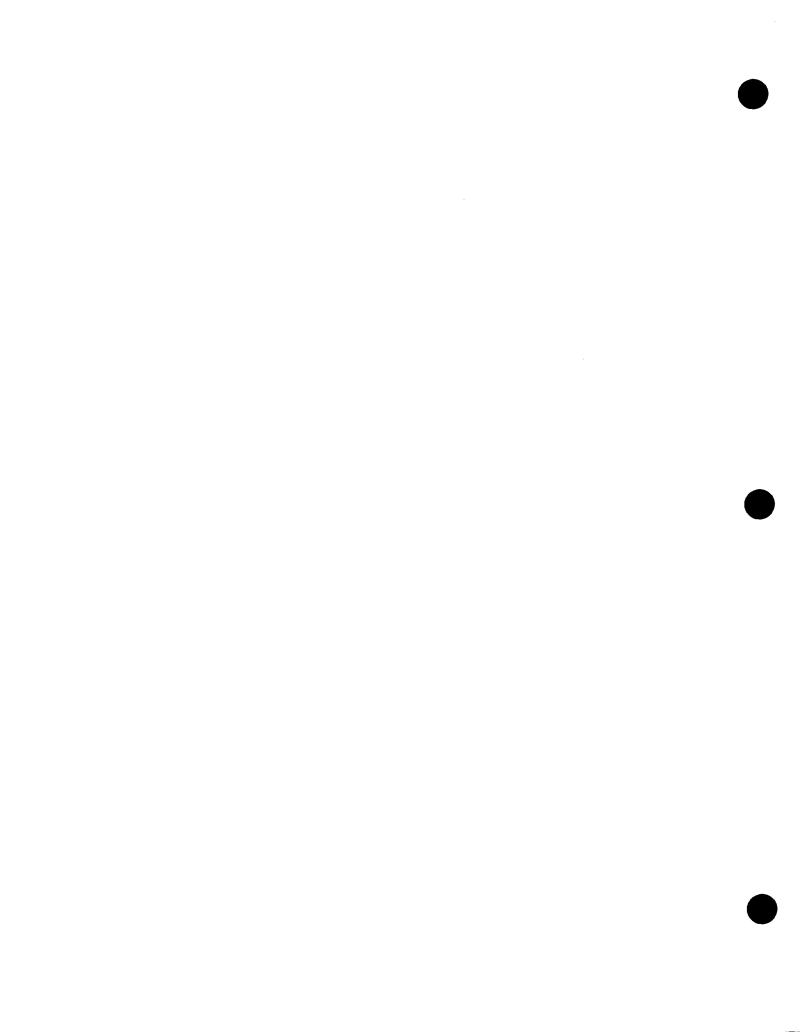
July, 1985



SCOTTYS CASTLE COOK HOUSE HISTORIC STRUCTURE REPORT

Contents

	Page
Administrative Data and Project Purpose	2
Archeological Data	4
Historical Data	6
Architectural Data	17
Existing Structural Conditions	20
Recommended Use and Treatment	22
Appendix A. Drawings and Historic Photographs	25
Appendix B. Historic Stucco Application: Technical Data	48
Appendix C. Evidence of Historic Furnishings	52
Biblicoraphy	54



ADMINISTRATIVE DATA AND PROJECT PURPOSE

Death Valley Scotty's Historic District, a National Register property within Death Valley National Monument, contains a number of structures that were built as a desert retreat for Walter Scott and his benefactor, Albert M. Johnson. The focus of this complex is the main residence, known as the Castle, with its Spanish-Moorish architecture. The peripheral buildings, complementing this Spanish style, were built to provide specific functions at the ranch. They include the Stables, Cook House, Gas House, Garage, Guest House, Chimes Tower, Power House, and Entrance Gate. Within the complex are also a few sheds of frame construction. A separate unit of the historic district is known as the Lower Vine Ranch, separated from the Castle by eight miles. This unit contains wood frame ranch structures in which Scotty resided in seclusion.

Current preservation and management needs at Scottys Castle require specific knowledge about the history and architecture of one of these structures, the Cook House. Although all the stuccoed Spanish-style structures in the district require stabilization and preservation treatment, the Cook House has become the focus of immediate attention. The failure of this building's stucco has been the most severe within the complex. Since it is an outbuilding, the Cook House would also provide the preservation craftsmen with a pilot project before attempting to correct similar stucco problems on the main Castle. Repair of this exterior finish requires technical information about the historic materials and application techniques as well as documentary information about the dates of building modifications.

The Park Service staff currently uses the Cook House as an administrative office. Given the many modifications to the building's interior, questions frequently arise whether a particular interior feature is "historic." Without specific historical information, the questions remain unanswered and the staff continues to work around protruding shelves, stoves, sinks and other kitchen equipment.

Lacking a general Historic Resource Study or a comprehensive Historic Structures Report for the district, the staff felt that the information currently needed about the Cook House could be obtained by developing a Historic Structure Report that focused on that structure alone. The report that follows is a synthesis of information found by

studying historical documents, photographs, and oral history transcripts; interviewing Castle employees; and observing current conditions.

Although the report focuses on that information which will facilitate current management actions, all available data about the Cook House has been presented, making this a comprehensive history of the structure. Managers should be able to answer future preservation questions about the Cook House by reading this report, or should at least be satisfied that the document contains a synthesis of all documentary materials available at the time of its writing.

The Cook House was included in Death Valley National Monument's List of Classified Structures in 1976 and given the LCS number of SC-6. A National Register nomination for the entire complex was prepared in 1976, and included the Cook House as one of the historic structures. The district, named the "Death Valley Scotty Historic District," was placed on the National Register in 1978.

The LCS form and National Register nomination have the building name spelled out "Cookhouse." Historic documents contain several variations of the name, but the most consistent and formal treatment was to divide the name into two words, "Cook House." This form is used throughout the report and should be used in all future references.

ARCHEOLOGICAL DATA

Grapevine Canyon, in which Scottys Castle lies, had been the winter home of native inhabitants for centuries before prospectors, homesteaders, and pleasure-seekers occupied the land. This native group, a band of Panamint Shoshones, centered their activities at Grapevine, but made an annual circuit into the mountains and down into Death Valley to use food sources as they became available. Following such a subsistence pattern, their possessions were few and served to aid in their food gathering activities. I

This annual migratory pattern was interrupted by the presence of prospectors and homesteaders. By the late nineteenth century, the Indians of Grapevine Canyon entered the mining economy during parts of the year, often to supply mining camps with wood or to drive wagons. Some families began small agricultural plots in the canyon and at Mesquite Spring, eight miles west.

Although the area immediately surrounding Scottys Castle was a prime location for these families, the evidence of their existence here has been eradicated by major construction activities. In building the Castle structures and planning for the landscape treatment, Albert Johnson employed graders, earth movers and power shovels to excavate and modify the contours of the grounds.

The Cook House sits on an incline within twenty feet of the base of a mountain. In constructing the building, crews had to manipulate the surrounding surface materials to a depth of about twenty-four inches. In addition, erosional materials are continually deposited along the uphill sides of the building in the form of runoff during thunderstorms or through the physical wearing of the rock above the structure.

Due to these conditions, the presence of archeological resources is highly unlikely in the area surrounding the Cook House.

End Notes

1. William Wallace and Edith Wallace, Ancient Peoples and Cultures of Death Valley National Monument, (Ramona, CA: Acoma Books, 1978).

2. Julian H. Steward, <u>Basin-Plateau Aboriginal Sociopoliti-cal Groups</u>. Smithsonian Institution Bureau of American Ethnology Bulletin 120 (Washington, D. C.: GPO, 1938).

HISTORICAL DATA

Mr. Albert Johnson, a wealthy Chicago businessman, began grubstaking Death Valley Scotty about 1904. Hoping to get full control of Scotty's mining interests, Johnson came to Death Valley for the first time in 1906 to see Scotty's mysterious gold mine. That he ever saw Scotty's mine is doubtful, but what he found was a winter climate that soothed his ailments, a companion who knew how to attract attention by telling a tall tale, and a landscape that provided a constant challenge.

A trip to Death Valley became an annual event for Mr. Johnson. He tried to get away from his busy life as the National Life Insurance Company's President for a month or two each winter. Invariably, Scott met him, mules ready, and the two headed out on an extended pack trip. Their travels centered around Grapevine Canyon and Grapevine Springs, one of Scott's favorite haunts in Death Valley. By 1915, Albert Johnson began to acquire ownership of the land in Grapevine Canyon by purchasing various peoples' interests in the only recorded claim made originally by Jacob Steininger in 1903. He also bought out several squatters' claims. By 1917 Johnson had full possession of the land in Grapevine Canyon.

Scott and Johnson used the shacks of the old Steininger Ranch as their headquarters, adding a few tent frames for extra storage area and sleeping space. Albert's wife, Bessie, began to accompany him on his Death Valley trips, once living space was available. Within a few years, however, Scott and the Johnsons decided to build more permanent structures in Grapevine Canyon.

Johnson hired F. W. Kropf as his construction supervisor, having met him on many trips to Deep Springs College north of Death Valley, where Kropf had been employed. Kropf began work in 1922, directing a half dozen men in the construction of wood frame and stucco buildings to replace the old tent frames.

They first built a large, two-story structure that housed two apartments on the second floor for the Johnsons and their friends. The first floor contained a storage area, cooking facilities and an apartment for Scott. While

this structure was being built, the crews ate meals prepared in one of the tent frames on the hill.

The second structure, east of the two-story apartment, was a single-story garage and workshop. This building had several additional rooms that became the new cooking and eating facility for the crew. On the hill near the old tentframe cook shack, the crews built the last structure to be added to the complex at this time. This building, which became the Cook House, was completed in 1924. Figure 1 in Appendix A shows the location of the three structures in Grapevine Canyon.

As finished in 1924, the Cook House was a rectangular structure with outside dimensions of 44'3" by 16'3" for a total of 723 sq. ft. It was divided into four rooms consisting of a dining room, kitchen, storage room and cook's quarters. The exterior of the building was given a stucco finish of one scratch and one brown coat, and the roof was covered with approximately three inches of portland cement mortar with a coating of asphalt. (Chapter 4 contains a more detailed description of this structure's architectural features. See also figures 2, 3, and 4).

Soon after finishing this building, Kropf was "let go." He had reportedly upset Mrs. Johnson at a religious service by suggesting that some other religious view be heard besides hers. It is uncertain whether his dismissal had been precipitated by this incident or by lack of work upon completion of the three ranch structures."

Shortly after the completion of these buildings, the Johnsons decided to build a more elaborate vacation complex in Death Valley, more in keeping with their personal tastes and wealth. By 1926, they had hired a friend, M. Roy Thompson, to serve as their construction supervisor and had retained the services of C. A. MacNeilledge of Los Angeles to redesign the existing structures and design several new facilities. Building began later that year. By this time, May of 1927, a Mr. Brown, one of the plasterers, moved into the west room because it was too hot for Mr. MacNeilledge's comfort when he visited.

The main building, which was to have the appearance of an eighteenth-century Spanish villa, was the focus of the initial work. Thompson and MacNeilledge hoped to have the major renovation of the two-story apartment building completed by the beginning of 1928. As activities increased to meet this schedule, additional living space was needed for the work crews. A temporary bunkhouse was built near the garage to increase the sleeping area. They also built a shed-like extension to the Cook House dining area to accommodate an additional six to eight men. The addition

extended the east wall of the Cook House approximately eight feet and featured rows of windows. The exterior walls and roof were covered with corrugated sheet metal. (see figures 5 and 6, and Chapter 4).

A 1928 photograph (fig. 6) of the workers standing beside the Cook House shows that the building retained the original stucco finish that did not match the new finish of the Spanish-style buildings on the site, which by now had come to be known as "Scottys Castle." Mr. Johnson wrote Thompson that he eventually wanted the outside of the Garage and the Cook House stuccoed in the pattern of the Castle.

A big bell, taken from the ghost town of Rhyolite, had been placed on the ground at the southeastern corner of the building, perhaps to call the men to meals.

With the major work on the main Castle structure completed and work progressing well on the Guest House, MacNeilledge finished the drawings for the other outbuildings: the Stables, Chimes Tower, Garage, and Cook House. Thompson had the Cook House plans in hand by April of 1929 (fig. 13). Before work could begin on the Cook House, a temporary box-like "eating shed" was constructed behind the northwest corner of the Cook House.

By mid-May, Thompson could report to Johnson that the "Cook House is being rebuilt rapidly." By June it was the only major structure on the grounds remaining to be plastered, but its walls had been insulated with a material called "insulex" and lathed in preparation for finishing. Crews laid the roof tile at this time. 12 (fig.11)

By October the men were taking meals in the newly-remodeled and expanded Cook House, and the cook had returned to the west bedroom. They found the "temporary shed" useful for storage and quarters so they left it standing upon completion of the Cook House project (fig. 12). 13

In planning the Cook House remodeling project, MacNeilledge did not include space for the compressor of the new refrigeration unit. When the Kelvinator representative came to the Castle in September of 1929 to install the new refrigerators in the Castle and Cook House, he could not complete the job. Thompson had to quickly add a "doghouse" extension to the cold storage room, which Mr. Brown was plastering by March of 1930.14

When completed, this 1929 Cook House remodeling project added a larger integral dining porch, an open shade porch, a cold storage box and a bathroom with water closet and lavatory. This added 500 square feet to the original structure, for a total of 1223 square feet of useable

space. 15 (see Chapter 4 for more architectural information)

MacNeilledge and the landscape architect, Dewey Kruckeberg, planned the landscape treatment for the area south of the Cook House and east of the Castle in early 1930. They terraced the hillside with native rock and transplanted seven olive trees and three palms to this location. 16

The building did not have a good ventilation system, it appears, for Thompson had trouble keeping his cooking crews very long. He related to Mr. Johnson:

Have had to make another complete change in cook house crew while you have been away. Present crew seem well satisfied, but the heat gets most of them in time. 17

By 1930, Death Valley was becoming something of a tourist attraction. A new road had been built in the valley, connecting Furnace Creek and Scottys Castle. Mr. Johnson, possibly concerned about operational costs, asked Thompson to keep track of visitors to the Castle, noting those who ate at the Cook House. Thompson reported that an average of forty to fifty people stopped each day. The Castle seemed to be the main reason travellers drove through the Valley. None of the visitors ate meals at the Castle at that time, except the lucky few who Scott personally invited in. 18

By 1931, travel had increased. Word had gotten out that one could now drive to the "Castle" built by the famous Death Valley Scotty. Mr. Thompson wrote:

Scotty left today for the south so as to get away from all these tourists as he says they have been running him ragged. It seems that when the public knows he is here they come up in droves. Both hotels in the Valley admit that practically every guest coming to Death Valley comes primarily to see Scotty and his Castle. These are the first things they ask about when they arrive. 19

During the first two weeks of January, while Scotty was in residence, Thompson reported that the cook had served 149 meals to visitors. He promised Johnson that while Scotty was away they would serve no meals to visitors except in an emergency. He warned Johnson, however, that when Scott was present "it is a stock phrase of his to say Well, Thompson, you better take these birds up and feed them at the cookhouse." 20

By 1931, the affects of the depression began to be felt

at the Death Valley Ranch. Johnson's personal fortune had been greatly diminished by the failures of the businesses in which he had invested heavily. By 1931, he felt forced to follow the national trend of reducing his workers' salaries and limiting the scale of his Death Valley Ranch operation. He felt that the best way to reorganize his crew would be to close down the entire operation. He would then be free to rehire fewer workers at a lower rate of pay. He ordered Thompson to close the Ranch operation temporarily in February of 1931. When they started the operation again a few weeks later, it was on a much smaller scale to wrap up a few projects. By August, construction had halted with the ranch plans about eighty percent complete. 22

The depression, however, had not yet slowed the traffic to this new attraction in Death Valley by 1931. About 100 visitors a day drove through the Grapevine Canyon during a holiday in February of that year. Since the Cook House had been closed down along with the rest of the Death Valley Ranch operation, no meals were served.²³

In the Spring of 1931, Scotty moved down to the cabin Johnson had built for him at the Lower Vine Ranch. He made appearances at the Castle nearly every day, often taking his evening meal with the Johnsons.

Johnson maintained only a household staff numbering a half dozen at the Death Valley Ranch through most of the 1930s, since legal problems, as well as his financial setback, kept work on the Castle project at a standstill. An error in an 1885 survey of the Death Valley area threatened his ownership of Scottys Castle. He was forced to appeal to Congress to rectify the problem. The issue was finally resolved in 1935 after Congress ordered a patent issued to him for the correct land description containing Scottys Castle. 24

About this time the Johnsons moved from Chicago to enjoy semi-retirement in California. They purchased a home in Hollywood, but began to spend most of their time at the Castle, returning to Southern California for short periods. They found that the public still clamored to see their desert home made famous by Death Valley Scotty. In 1934 they gave in to continual pressure to open the interior of their home to the public and Bessie Johnson began to give informal tours of the main Castle and Annex. A young houseguest, Linda Nelson, helped Mrs. Johnson by showing the guests the second floor of the structure. Visitation varied from about 30 people on busy holiday weekends to no visitors for several days during the summer.

These visitors, unlike those earlier, were not invited to join the Johnsons for dinner. The Johnsons' meals were

private affairs with only Scotty, Linda, and Mr. Johnson's geologist, Kenneth Newell, joining them in the Castle dining room. The Johnsons' meals were also prepared in the main house kitchen.

The use of the Cook House during the years between 1934 and 1937 is not known for certain. The staff ate separately, either in the Cook House or in the kitchen of the main house. Their meals could also have been prepared in either location. The two houseboys on the staff probably lived in the living area within the Cook House. 25

The Cook House, therefore, appears to have been used very little during this period. Meals were most likely prepared in the main Castle kitchen for both the Johnsons and their staff. The mid-1930s was a more casual and intimate period at the Castle - despite the occasional visitors.

At the end of the decade, still enjoying semiretirement and having resolved some of their business difficulties, the Johnsons decided to open the Castle to the
public on a more structured basis. In 1938 they hired Mr.
and Mrs. Cadogan (the daughter and son-in-law of a close
friend) to provide guided tours and collect a small fee.
They also increased the household staff by hiring up to 14
Filipino houseboys and a Chinese cook. In order to make the
complex have a more finished look, a small work force was
also hired. 26

Accounts differ as to where meals were prepared and eaten at this time. Mrs. Cadogan remembered that the cooking was all done in the Castle kitchen. The staff ate in a location apart from the Johnsons or the guests, but she did not state exactly where - possibly the dining area of the Cook House. Miss Liddecoat, a family friend who visited the Castle in the 1930s, remembered that the staff, numbering at least a dozen, ate in the Cook House, but she did not mention where the food was prepared. Lloyd Davey, a maintenance employee from 1941 to 1944, recalled "everyone" eating in the Cook House. He probably meant all the staff. 27

The temporary shed behind the Cook House had become a useful space, so the work crew revamped this building into a more permanent annex as one of their projects. Photographs date this work to the period between 1937 and 1939, while Mrs. Cadogan recalled that she and her husband lived in this back room for the duration of their stay at the Castle, from 1938 to 1940. These pieces of evidence date the completion of the annex to 1937 or 1938.²⁸

From the appearance of the stucco, the bathroom was remodelled at the same time to provide access from inside as

well as through an exterior door. The lavatory was moved from the east to the north wall to allow for the interior door, necessitating the relocation of the exterior door to the west wall.

At some undetermined point, the storeroom of the Cook House was expanded one more time by extending the north and west walls. The exterior stucco of this addition differs from any of the earlier or later finish work in both quality and color, indicating that the modification was made some time between 1938 and Mr. Johnson's death in 1948.

The coming of World War II, the death of Mrs. Johnson in 1943, and Mr. Johnson's failing health aborted their plans to make Scottys Castle a public showplace. Mr. Johnson visited his desert retreat rarely after 1944. The Castle once again fell into a quiet period, with only a caretaking staff in residence.

A couple, watching the Castle for a few weeks in May of 1945 while the managers were on vacation, recalled that the cook, Rosamond, lived in the Cook House. During this particular period, no one else was around, staff or visitors, except Mr. Johnson. Mr. Johnson ate his meals with the caretakers and the cook in the Castle dining room, taking breakfast in his bedroom. 30

Mr. Johnson had made provision for the maintenance of Scottys Castle after his death through the creation of the Gospel Foundation of California. This organization was deeded the Castle as part of the Johnson Estate, with the mandate to use the Johnson resources to forward charitable works. Along the line of the Johnsons' idea of the late 1930s, the Foundation managed the Castle as a tourist attraction. They provided guided tours and soon offered meals, lodging and souvenirs.

Shortly after reactivating the visitor services at the Castle, the Gospel Foundation found that modifications were necessary in order to use the Cook House for all food preparation and service. Finding the kitchen too crowded for both cooking and dishwashing, they removed the sink from this middle room and installed it or a replacement in the expanded storeroom.

The Cook House chill box also proved too small for their needs in feeding visitors and staff. First they tried to reactivate the refrigerator room in the Annex of the Castle, but found it too inefficient to transport food between the Castle and the Cook House when preparing meals. They converted the former cook's bedroom of the Cook House into a refrigerated room, increasing the storage capacity by 48 square feet over the original chill box. The old chill

box's refrigeration unit and interior wall were removed, and the space used for storage.

Within a short time, the Foundation also connected the Cook House and the improved "annex" behind it by building a breezeway from the storeroom, adding a doorway on the south side of the annex. This allowed employees to move freely between the annex and the kitchen without having to go outside the buildings. 31

During the operation of the Castle by the Gospel Foundation, the staff ate their meals in the newly-attached Cook House annex. All cooking for the complex was done at the Cook House. None of the rooms at this time were used as quarters.

During the first few years of Gospel Foundation management, it appears that guests were fed in the formal dining room of the Castle.³² Visitation to the Castle increased steadily in the early 1950s. The managers of the Gospel Foundation found that they needed more space to feed the overnight guests, and moved this function back to the Cook House dining room. About 1953, they increased the size of the Cook House dining area by removing the walls dividing the dining room from the dining porch and the sun porch, and enclosing the sun porch.³³

Eventually the Gospel Foundation found that they needed all available living space to house their staff as visitation continued to increase after Scotty's death in 1955. By the early 1960s, they had discontinued offering overnight accommodations, maintaining only a snack bar for daytime visitors. They built an addition onto the Gas House near the Castle tour gate to serve as a serving area for the snack bar. The Cook House was then only used for the preparation and serving of staff meals.³⁴

In 1970, the Gospel Foundation of California sold Scottys Castle to the National Park Service. The operation of the Castle, except major repair, was contracted to a concessioner, the National Park Concession, until government staffing could be provided. This organization gave the Castle tours, maintained the facilities, and operated the snack bar and gift shop. They prepared visitor snacks, including baked goods, and staff meals in the Cook House kitchen. The staff ate in the annex, while the public ate in the snack bar addition to the Gas House.

The National Park Service took over the maintenance and tour functions at Scottys Castle in 1973. The contract to provide visitor meals and operate a gift shop was awarded to Trans-world Airline Services, Inc. (TWA) that same year. TWA used the Cook House to prepare food and provide meals for

their staff just as the National Park Concession had. Rather than using the lower snack bar, however, they fed the visitors in the Cook House dining room during their first operating season.

By the second season, a trailer had been brought in and set up at the picnic area. Here the visitors were served snacks. Some foods, like sandwiches, were made up ahead of time in the Cook House kitchen. The staff continued to be fed in the Cook House until their quarters in the Garage/Motel building were remodeled into convenience apartments in 1976. From that point on, only visiting TWA officials or employees on temporary assignment to the Castle were fed in the kitchen of the Cook House.

The National Park Service staff also moved into the dining room and the annex of the Cook House in 1977 to avoid using rooms within the main Castle building. In order to accommodate both the Park Service and TWA in different rooms of the Cook House building, the kitchen was made accessible to the TWA staff by way of the breezeway while the NPS staff entered the annex and dining room by separate doors.

In order to provide all concession functions under one roof and remove the non-historic snack bar trailer from the site, the entire concession operation was moved to the Garage/Motel unit in 1980, eliminating the need for any space in the Cook House by TWA. 35

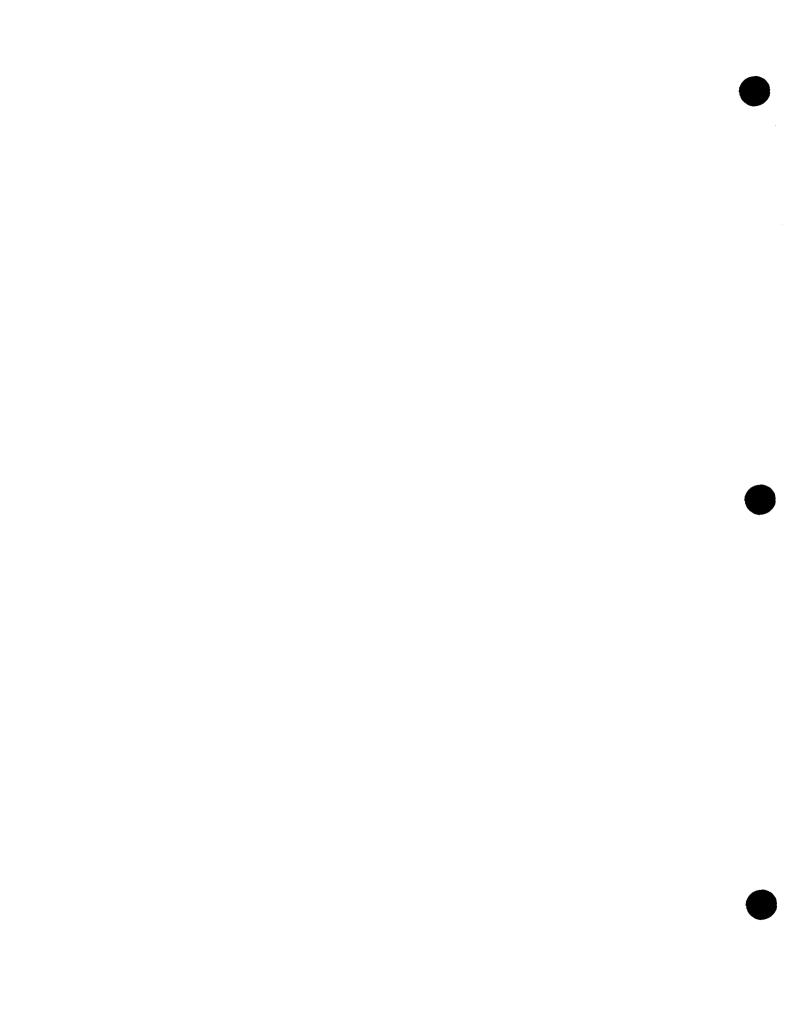
The National Park Service began to use the vacated kitchen as office space once TWA moved to the Garage/Motel. At the present time the Unit Manager, Interpretive Specialist, Administrative Technician, Lead Park Technician and Maintenance Mechanic Foreman have their offices in the Cook House.

Summary

The Castle's Cook House saw its greatest use during the peirod of castle construction from 1924-1931, as the place to prepare food for and feed the employees and visitors wandering in. It enjoyed a second burst of activity about 1938 when the Johnsons again increased their staff as the Johnsons opened the Castle to the public commercially. This use was shortlived (1938-1941). When the Gospel Foundation of California took over operation, the Cook House again was used to prepare food for and feed employees and guests (1948-1970). The National Park Service and its concessioners have used the Cook House for food preparation and serving as well as office space. The building's cyclic use reflects the overall history of the site but is not the focus of the story.

- 1. Milton Kropf, Interview with Steve Harrison, typescript, 1980.
- 2. Dorothy Shally and William Bolton, Scotty's Castle (Yosemite, Calif.: Flying Spur Press, 1973), 9. Kropf interview.
- 3. Photo F-7561. C. A. MacNeilledge, architecutral drawing, "Addition to the Cook House, Death Valley Ranch," 17 January 1929, revised 16 April 1929, Death Valley Museum Collection, uncataloged. Drawing shows original construction and 1929 additions.
- 4. Kropf interview.
- 5. Shally and Bolton, 11. M. Roy Thompson (MRT) to A.M. Johnson (AMJ), letter 11 May 1927, A. M. Johnson Papers, MSS 5.
- 6. C. A. MacNeilledge (CAM) to AMJ, letter 11 October 1927.
- 7. Photos, Cat. No. 17874, 17875.
- 8. AMJ to MRT, letter 21 February 1927, MSS 5. Photo Cat. No. 17874.
- 9. Photo Cat. No. 17875.
- 10. MRT to AMJ, letter 24 April, 1 May and 5 May 1929, Death Valley Ranch Papers, MSS 7.
- 11. MRT to AMJ, letter 11 May 1929, MSS 7.
- 12. MRT to AMJ, letter 19 May and 6 June 1929, MSS 7. Photo F-7512.
- 13. MRT to AMJ, letter, 1 April 1930, MSS 5.
- 14. MRT to AMJ, letter 25 March and 1 April 1930, MSS 5.
- 15. C. A. MacNeilledge, architectural drawing.
- 16. MRT to AMJ, letter 19 February 1930, MSS 5.
- 17. MRT to AMJ, letter 27 January 1930.
- 18. MRT to AMJ, letter 30 March 1930 and AMJ to MRT, letter 17 January 1930.
- MRT to AMJ, letter 16 January 1931.
- 20. Ibid.

- 21. MRT to AMJ, letter 22 February 1931.
- 22. Shally and Bolton, 10. Various letters, 1931, MSS 5
- 23. MRT to AMJ, letter 22 February 1931, MSS 5.
- 24. Shally and Bolton, 10.
- 25. Linda Nelson Ewing, interview with Susan Buchel, April 1985 and 29 May 1985. Personalities Collection, Vol 2, Scottys Castle Reference Library.
- 26. Shally and Bolton, 23. Edith Giles Barcus, interview with Susan Buchel 8 February 1984. Personalities Collection, Vol. 2, Scottys Castle Reference Library.
- 27. Barcus interview. Mary Liddecoat, interview with Susan Buchel 12 February 1983, Personalities Collection, Vol 1. Scottys Castle Reference Library. Lloyd Davey, interview with Steve Harrison, typescript, 1980.
- 28. Barcus interview. Photo F-3225.
- 29. Bob Haile observation.
- 30. Don Coughlin, interview 7 May 1984, Personalities Collection, Vol. 2.
- 31. Mary Liddecoat, telephone interviews with Susan Buchel, 15 January and 20 February 1985.
- 32. Alfred Spadoni, interview 24 May 1983, Personalities Collection, Vol. 1.
- 33. Liddecoat telephone interviews.
- 34. Ibid.
- 35. Don Creech, interview with Susan Buchel, 21 February 1985.



ARCHITECTURAL DATA

1924 Original Construction:

The original rectangular structure consisted of a total of 723 sq. ft. with outside dimensions of 44'6"x 16'3", divided into four rooms consisting of a dining room, kitchen, storage room and cook's quarters. The foundation was a monolithic concrete footing/slab combination. The walls were 2x4 framed, with metal lath and an exterior portland cement stucco finish of one scratch coat and a brown coat. A conventional lime plaster constituted the interior finish. The doors were of a stile and rail design with recessed panels, and the windows were casement, single lite, wood sash, with wood frame and sill. There were two sashes per window.

The roof was constructed of 2x4 rafters on 16" centers with a pitch of 1-1/2" in 12" from the center, terminating at parapet walls with roof drains. The roof finish consisted of metal lath with 3" of portland cement mortar, and a coating of asphalt.

Figure 2 in Appendix A illustrates the floor plan of the Cook House as constructed in 1924.

Reference: Figures 3, 4, 5, 6.

1927 Modification:

This modification added an 8'x16' temporary dining porch to the northeast corner of the building. Constructed of wood framing with perimeter windows and shed roof, all exterior surfaces were covered with corrugated metal.

Figure 7, Appendix A, shows the Cook House floor plan as modified in 1927.

References: Figures 5, 6.

1929 Renovation:

This major renovation included the construction of a 15'9"xll' integral dining porch to replace the temporary

dining porch. A 21'x8' open shade porch at the southeast corner and a 9'x7'6" chill box along the north wall (with a 3'6"x4' "doghouse" for the refrigerator components) were also added. A 4'6"x6'6" bathroom with a water closet and lavatory was added on the northwest corner of the building. These additions increased the size of the Cook House by 500 sq. ft.

The interior of the dining room was modified during this renovation. A small fireplace was added to the southwest corner of the room. By replacing an existing window on the north wall with french doors, interior access to the dining porch was achieved.

The general appearance of the building was changed by removing the flat ceiling in the dining room and replacing it with an "open beam" ceiling, the elevation and design of which carried into the new dining porch. A new roof was constructed over the existing roof. The design now featured a central gable roof with a pitch of 4" in 12" and four shed roofs covering the sun porch, doghouse, cook's quarters and bathroom. The new gable roof consisted of 2x6 rafters on 16" centers with solid 1x6 sheathing and 30 lb. felt. The shed roofs followed the same construction, except that 2x8 rafters were used. The entire roof was covered with Spanish tile laid with a random exposure.

All exterior stucco was removed to facilitate the pouring of "insulex," a water-activated insulating foam, in the walls. The stucco removal also accommodated the tying in of new additions. The new foundations and wall framing was similar to the original, except in the dining porch where the walls consisted of sliding and fixed wood sash windows behind vertical spindles on 7" centers, resting on a 12" thick by 30" high framed wall.

The exterior walls were covered with expanded metal lath covered with a portland cement scratch coat and brown coat. Over these were two commercially packaged stucco finish coats. The first finish coat consisted of a medium brown layer, 3/8" thick, scratched vertically. A creamcolored stucco was daubed on while the previous coat was still tempered, creating an uneven blending of colors and stucco to give a "weathered adobe" effect.

The floor plan of this 1929 project is Figure 8, Appendix A.

References: Figures 9, 10, 11, 12, 13.

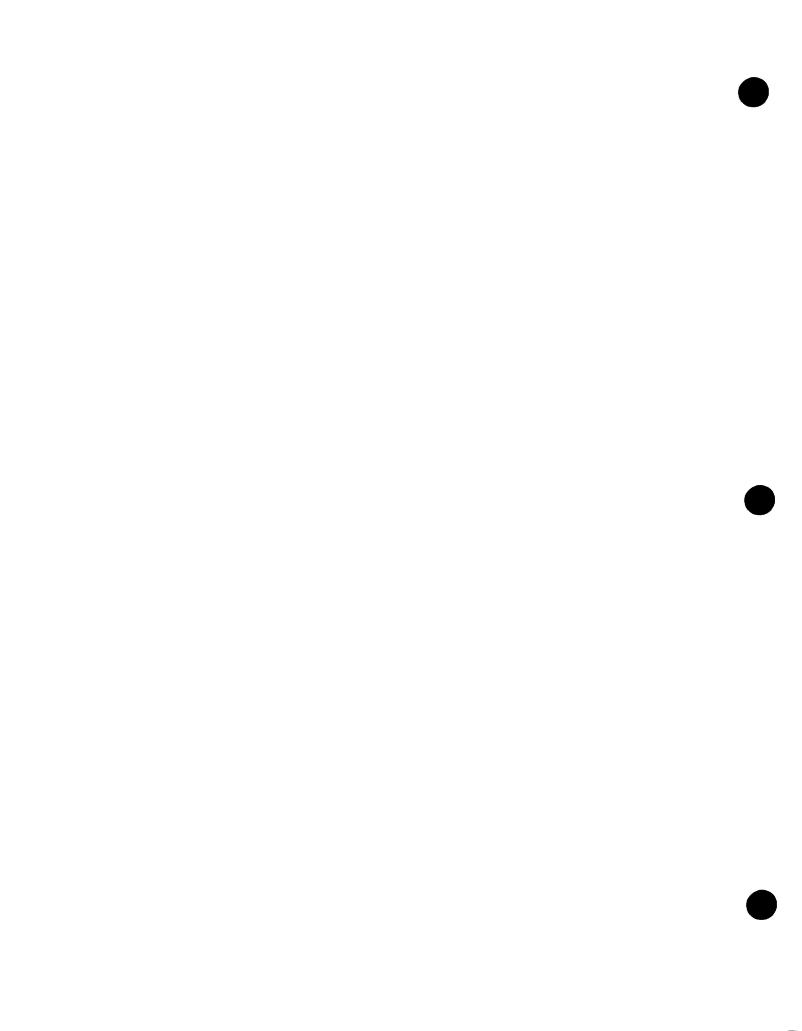
1938 Annex Construction:

This modification added a 23'6"x17' annex that had a concrete footing/slab foundation and 2x6 framed walls with stuccoed exterior and plastered interior applied to expanded metal lath over 1x6 diagonal sheathing on the exterior. The low-pitched roof was constructed of 2x4 rafters on 16" centers, terminating at parapet walls with roof drains. The roof was finished with red 90 lb. granular surface rolled roofing. Due to fire damage to the east wall and roof in the 1950s, a second roof was added, resting on top of the parapet walls and constructed of 2x4 rafters with 3/4" plywood sheathing, also covered with 90 lb. granular surface rolled roofing.

The two coat stucco finish on this structure differs from the 1929 stucco in color and application technique. The base coat is more gray and the vertical scratches are further apart. The top, or "bloth" coat is lighter, and apparently was retempered during application, since the surface in some areas is coarse and brushes off easily.

Figure 15 shows the Cook House floor plan with the annex added.

Reference: Observation by Bob Haile, 1985. Mary Liddecoat telephone interview, 15 February 1985.



EXISTING STRUCTURAL CONDITIONS

Stucco finish

Main Cook House Structure: The stucco is in generally poor condition with the exception of the south wall, fronting the kitchen and chill box rooms. The stucco on the remaining walls has suffered damage due to several factors: (1) excessive moisture in the walls (due to improper placement of evaporative coolers, the improper watering of adjacent plants, and accumulation of water-retaining erosional debris against the building), (2) physical contact with equipment, (3) possible building movement. (see figures 16 through 19)

Cook House Annex: The stucco on this building is of a very poor quality but remains basically intact other than the east wall which sustained fire damage sometime during the Gospel Foundation period (figure 22). This wall was repaired with extremely poor-quality materials and workmanship. The stucco colors and technique on this building remain to be duplicated before any treatment can be made.

Redwood and related millwork

All exterior wood surfaces (including doors, windows, structural and decorative timbers and millwork) have sustained deterioration in the form of drying, splitting, discoloring, or rotting. This damage has been due primarily to environmental conditions.

Water damage on interior walls indicates that the building at one time experienced roof leakage. Since no additional damage has occurred in recent years, the problem was obviously corrected earlier.

Tilework

While the Cook House roof tiles remain generally intact, numerous pieces along the roof lines are broken, allowing the structural elements to show through.

Interior Surfaces

Both the Gospel Foundation and the National Park Service staffs have modified and/or damaged numerous interior features. The Gospel Foundation added swamp coolers to the kitchen, annex and dining rooms by cutting holes in the walls. They added a gas heater to the annex room. Interior wood surfaces were treated with linseed oil, although the original finish was probably similar to that in the main Castle.

The National Park Service staff altered the swamp cooler hole in the annex, and replastered the filled-in space. The annex was given a false ceiling of acoustical tile and fluorescent lighting. Nearly all plastered surfaces were covered with latex paint. A gas heater and fluorescent lighting were added to the kitchen. The entire building was rewired in 1980. The chill box was made inoperative during the wiring project. Woodwork in the dining room was gouged and nail holes were enlarged when it was improperly removed and replaced during the project.

The Park Service removed the severely deteriorated east door and made a replacement, using hardware found on the site but not original to that particular door. A door to the annex entryway was added by the Park Service.

Both organizations have installed several racks, shelves and cabinets on the wall surfaces. Electrical and telephone runways, outlets and switches have been surface-mounted.

Structural Elements

Though not thoroughly investigated, the foundation and framework appear to be structurally sound.

RECOMMENDED USE AND TREATMENT

Future Use of the Castle Cook House

The historical section of this report substantiates that the Cook House has basically served its original purpose throughout its history. It has been used as the primary meal preparation and serving area for the Castle staff and visiting public, while two of the rooms have also served at various times as employee's quarters. These two functions, while necessary to the operation of the Death Valley Ranch, are not the primary focus of interpretation. The lack of furnishings (see Appendix C), or knowledge of their type and placement, and lack of information about the historic operation of the Cook House hamper detailed interpretation of the building's interior. The National Park Service will, therefore, interpret the Cook House from the exterior only, using the self-guiding tour of the Castle grounds as the primary media.

The exterior features of the structure will be maintained to preserve its historic appearance. According to NPS-28, this includes additions or alternations made to the structure through time which "have significance in their own right." By the evidence presented in this report, the historic period for the structures at Scottys Castle will be considered to encompass Scotty's lifetime. Therefore, the 1938 annex and alterations made by the Gospel Foundation prior to 1954 will be treated as part of the historic appearance.

The interior of the Cook House, while not crucial to the interpretation of the site, contains space that can easily be adapted for use by the Park Service Staff. The staff has used this building for offices since 1977, and it is recommended that this adaptive use be continued. In using the structure, the staff will take care to maintain the interior features to the standards set forth in NPS-28 for adaptively used historic structures. According to NPS-28,

The distinguishing qualities or character of a structure and its environment must not be destroyed. Historic material or distinctive architectural features are not to be altered or

removed.

The Castle Staff interprets this statement to mean that all structural features will be preserved. The equipment, shelving, and cabinets added to the structure at unknown times, however, can be removed if needed, once photographs have been taken to document their type, color, size and location.

Preservation Treatment Recommended

Stucco surfaces: The south wall, fronting the kitchen and chill box rooms, can be retained with minor repairs, providing an excellent example of the original historic fabric. The remaining surfaces of the main structure, having sustained major deterioration (figures 16 - 19) will have to be removed, including the expanded metal lath. New lath will be applied, and the surfaces will be restucceed, using the techniques described in appendix C. The annex stucco can be left intact with the exception of the east wall and the south wall between the west corner and window (figures 20 - 22). The material covering these two areas will also need to be removed and restucced.

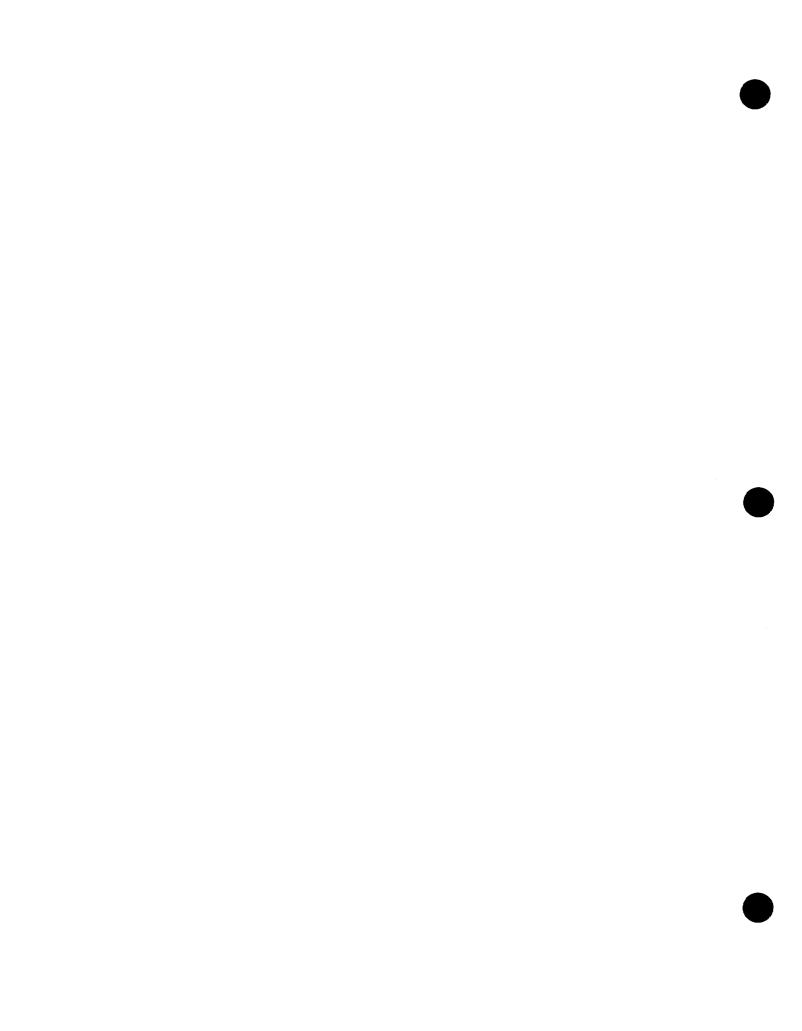
Wood features: The Castle staff has submitted a proposal to study the historict finish used on the Castle's redwood features and to develop the treatment currently needed to preserve this material. Preservation treatment of the Cook House woodwork should follow the guidelines developed at that time. This project is described in Project Statement C-05, "Maintain Exterior Surfaces, Scottys Castle" of Death Valley's Natural and Cultural Resource Management Program and 10-238 package no. 373.

Tilework: Broken roof tiles will be replaced with like materials. Newly-installed tiles will be unobtrusively marked "NPS" and dated.

Drainage: In 1984, the Castle staff received permission to reestablish drainage behind and around the Cook House. This work removed erosional debris from the Cook House perimeter to a depth of about twelve inches. Maintenance of this surface level will have to be programmed and accomplished on a cyclic basis to keep drainage away from the building.

Swamp coolers: Lack of proper maintenance has allowed water to leak from the coolers and permeate the adjacent stucco surfaces. Castle staff will carry out a preventive maintenance program to eliminate this cause of deterioration. At the current time, the swamp coolers will continue

to be used to provide for employee comfort. Staff will look into the installation of a central air unit which could eventually eliminate the need for the surface-mounted coolers in the kitchen and annex.



Appendix A. DRAWINGS AND HISTORIC PHOTOGRAPHS

Figure 1. Albert Johnson's Death Valley Ranch, ca. 1924. Cook House at far right on hill. Photographer unknown.

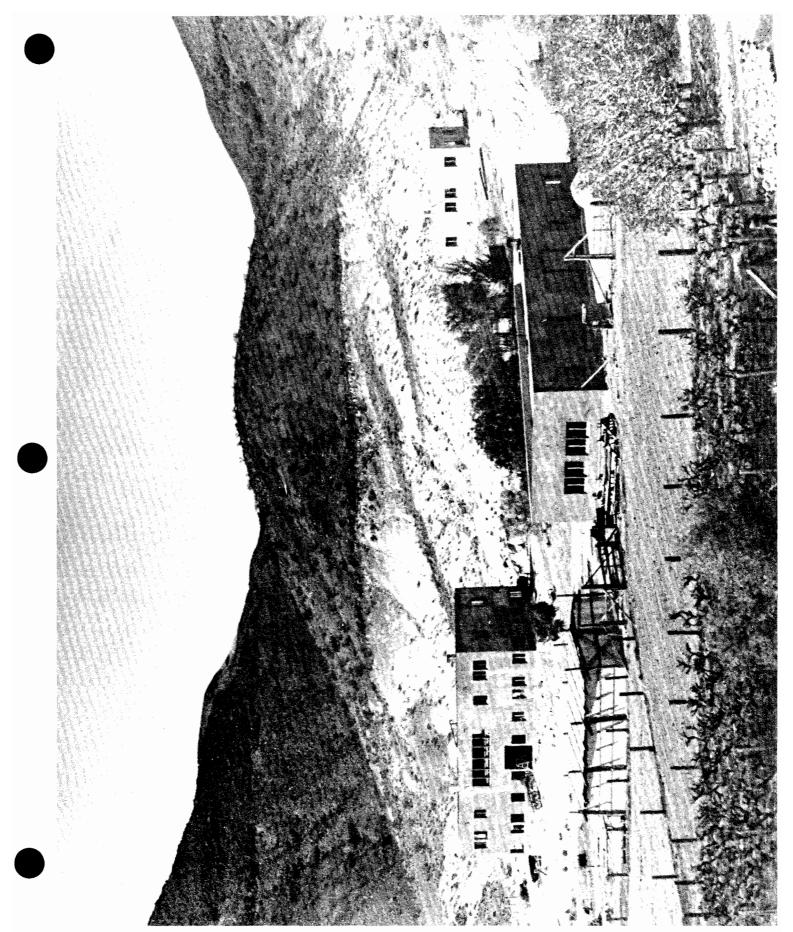
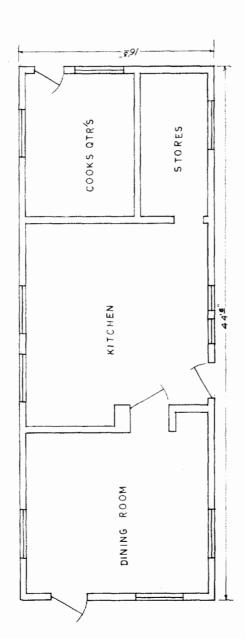


Figure 1

Figure 2. Floor plan of Cook House as built in 1924. (reduced) Robert Haile, 1985.



COOK HOUSE 1924 ORIGINAL SCALE: 1/4"* 1'

Figure 3. Cook House nearing completion, ca. 1924. Photographer unknown.

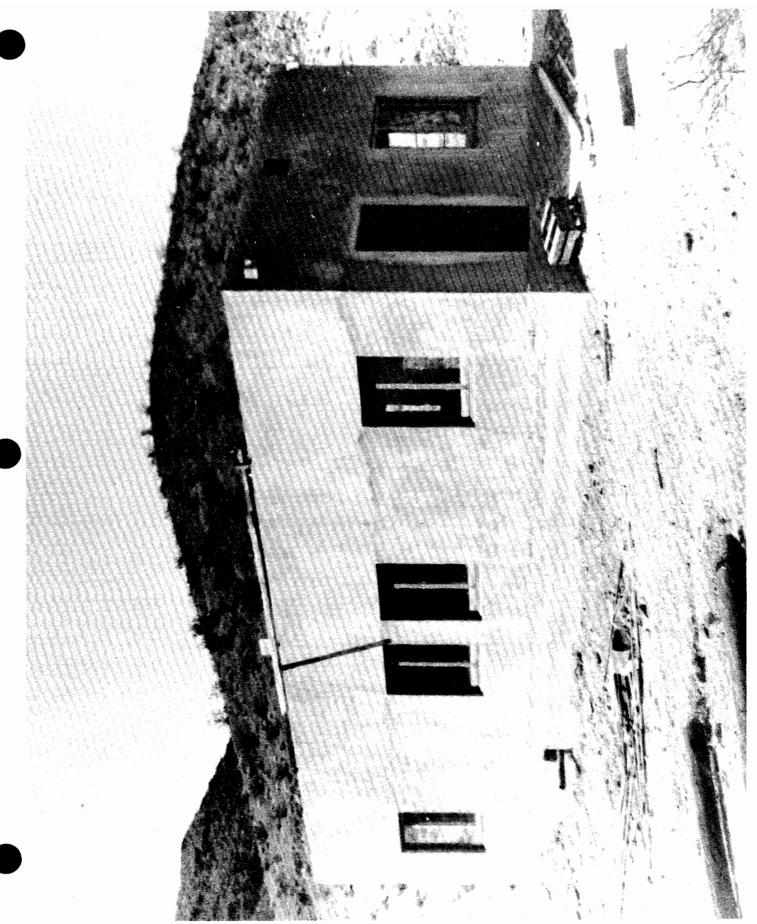


Figure 3

Figure 4. Cook House during Castle construction, 6 Feb 1927. M. Roy Thompson photo.

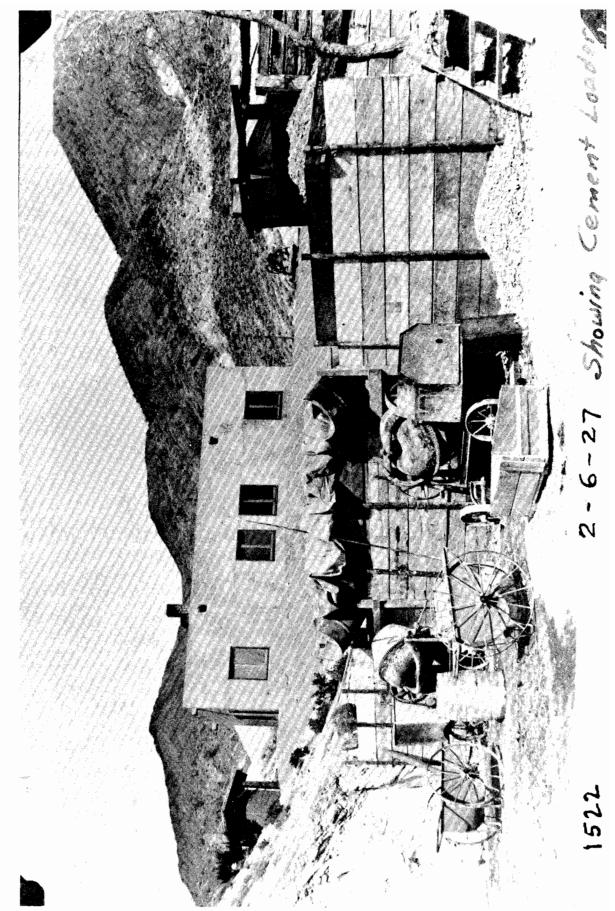


Figure 4

Figure 5. Cook House with dining room extension of sheetmetal, ca. 1928. Rhyolite school bell in foreground. Daggett photo.

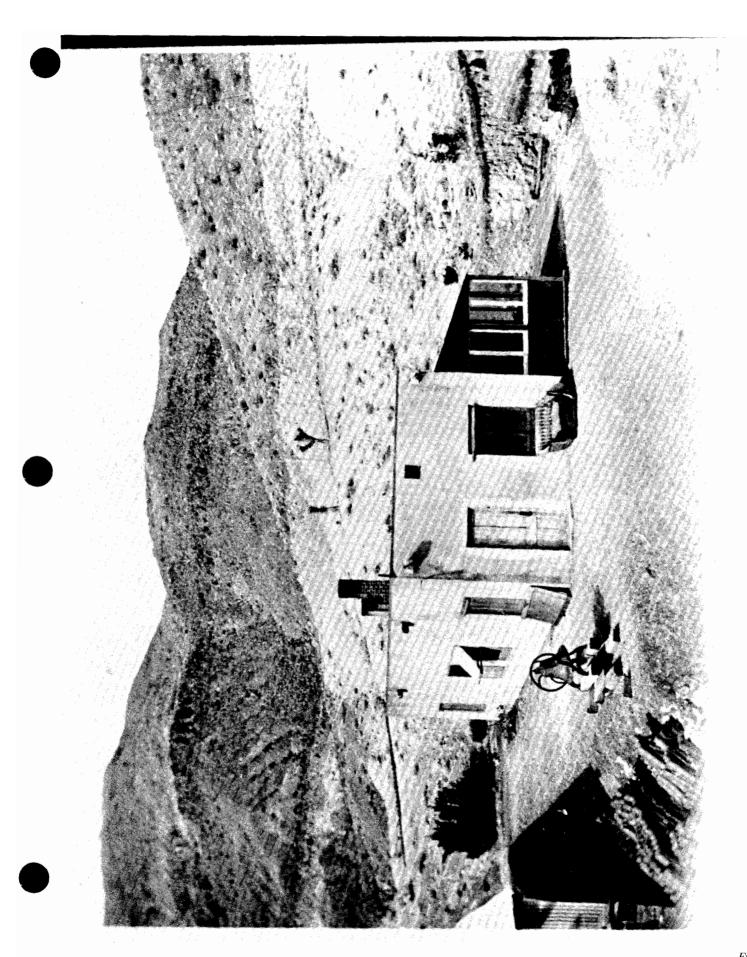


Figure 6. Castle construction workers in front of east wall of Cook House, ca. 1928. Daggett photo.



Figure 6

Figure 7. Floor plan of the Cook House with the temporary eating porch addition (reduced). Robert Haile, 1985.

Figure 8. Floor Plan of Cook House after the 1929 remodeling (reduced). Robert Haile, 1985.

Figure 9. Cook House remodeling project showing temporary eating shed at far right. M. Roy Thompson photo.

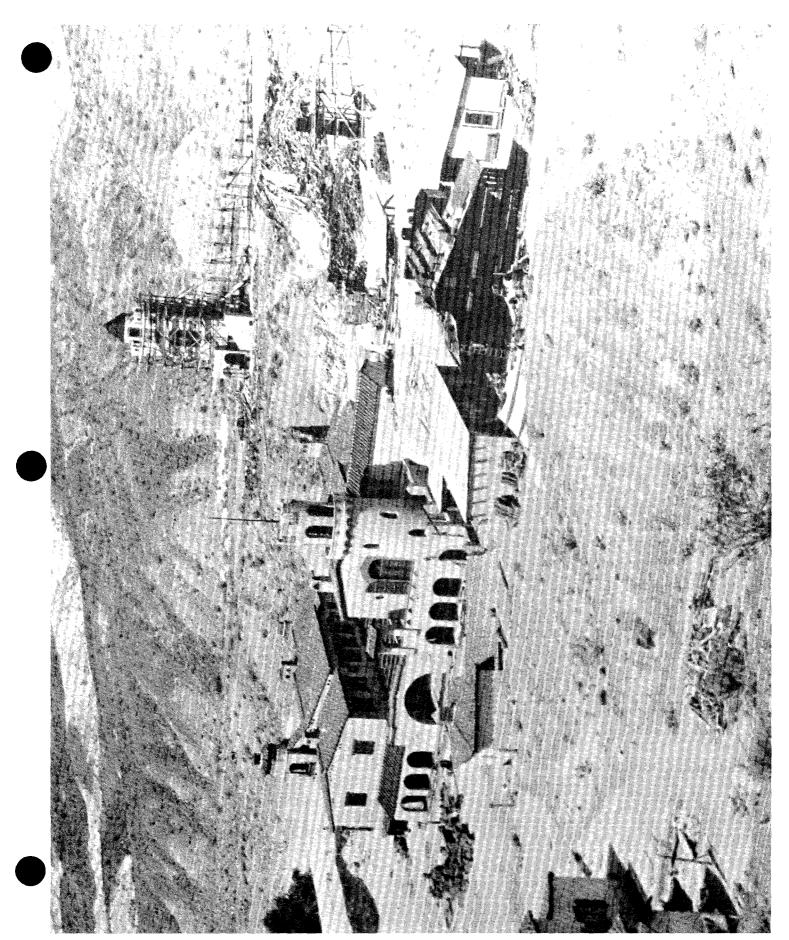


Figure 9

Figure 10. Cook House remodeling, at left. Showing insulex in walls. M. Roy Thompson photo.

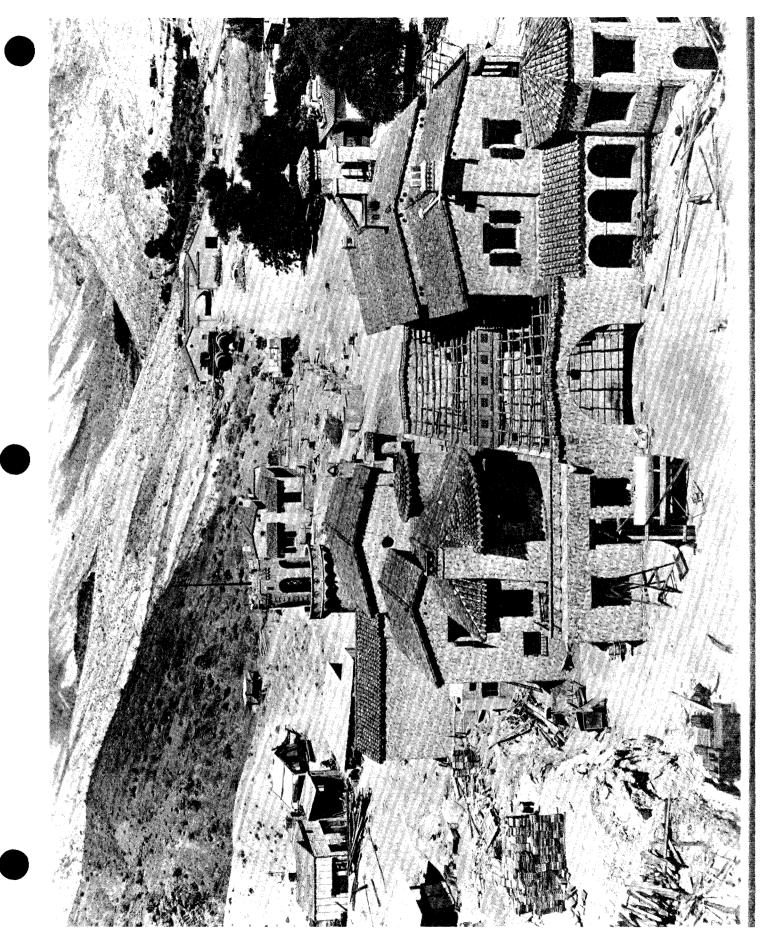


Figure 10

Figure 11. Cook House remodeling, 14 Jun 1929. M. Roy Thompson photo.

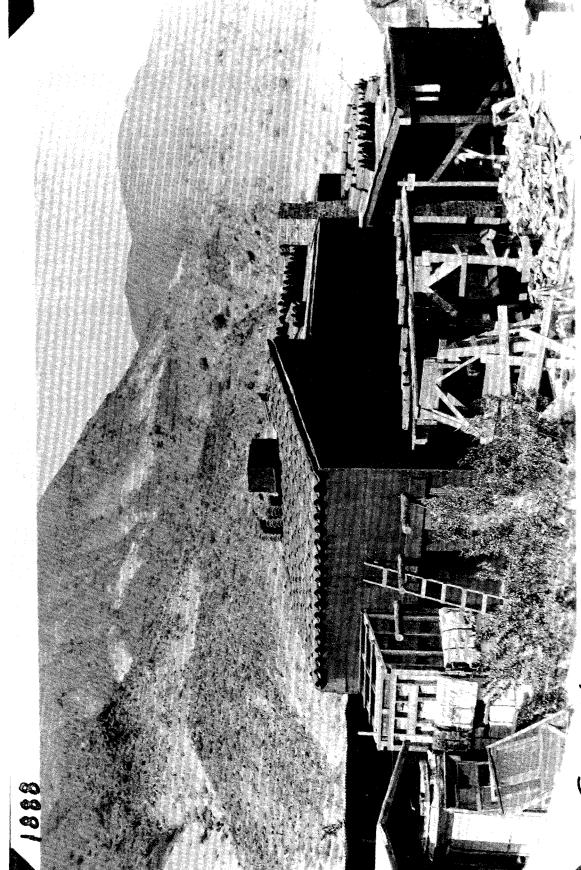
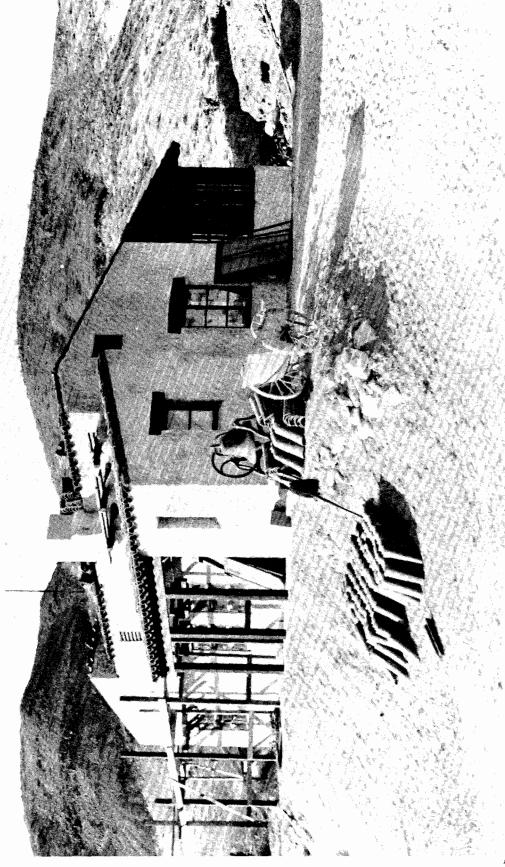


Figure 12. Cook House, remodeling project nearing completion. M. Roy Thompson photo.



7151

Figure 13. Architectural Drawing by C. A. MacNeilledge, "Alteration to the Cook House, Death Valley Ranch, Johnson and Scott, California." 1929. Two pages. (reduced)

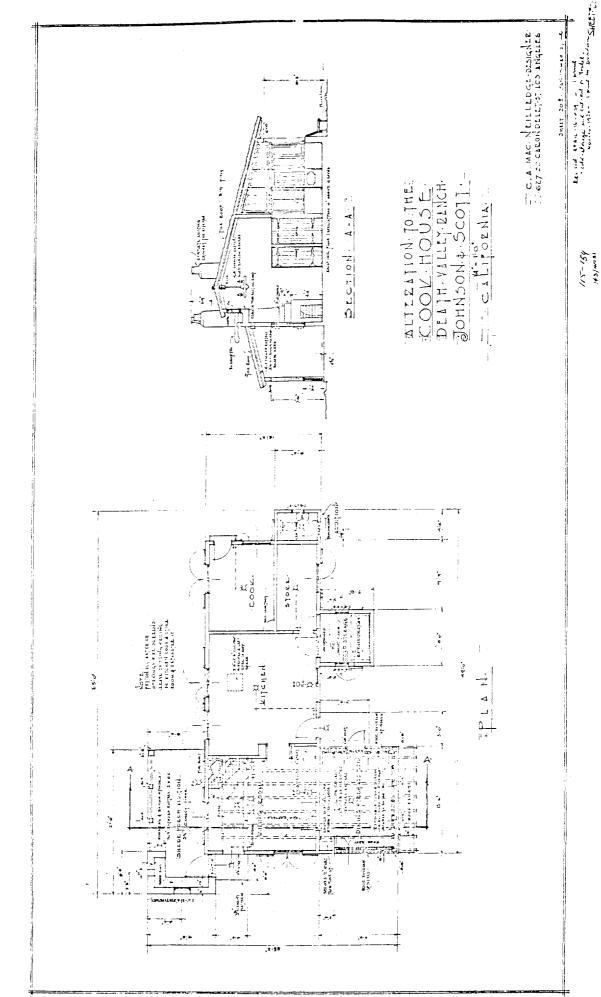
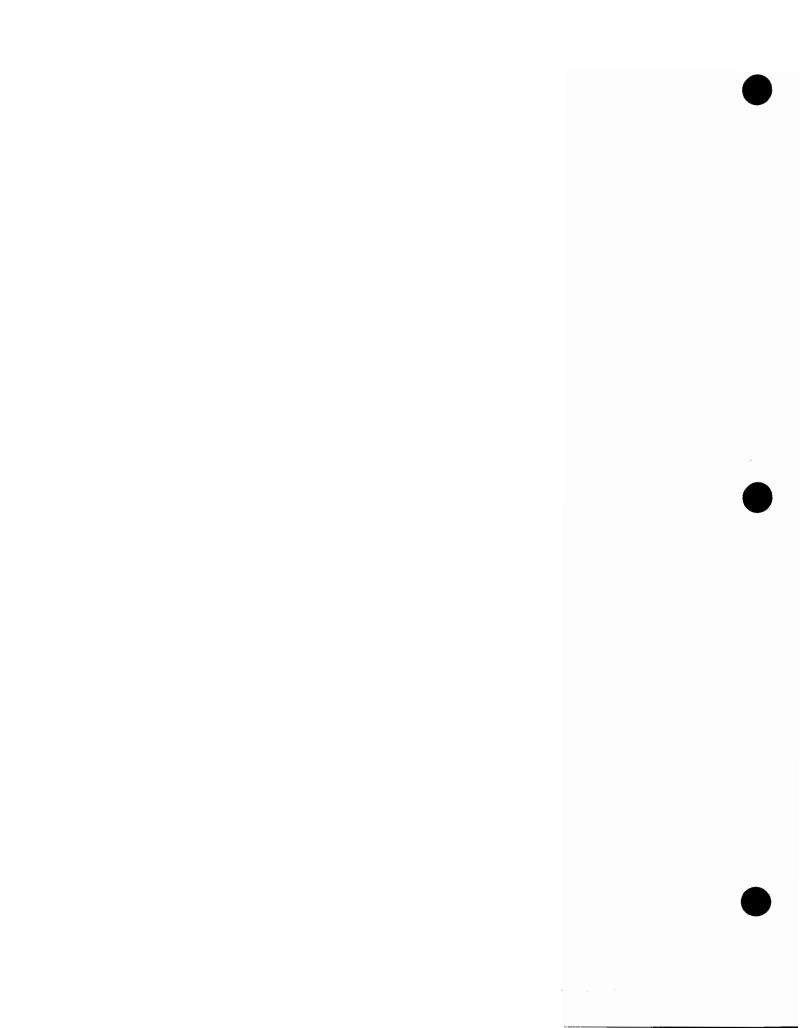
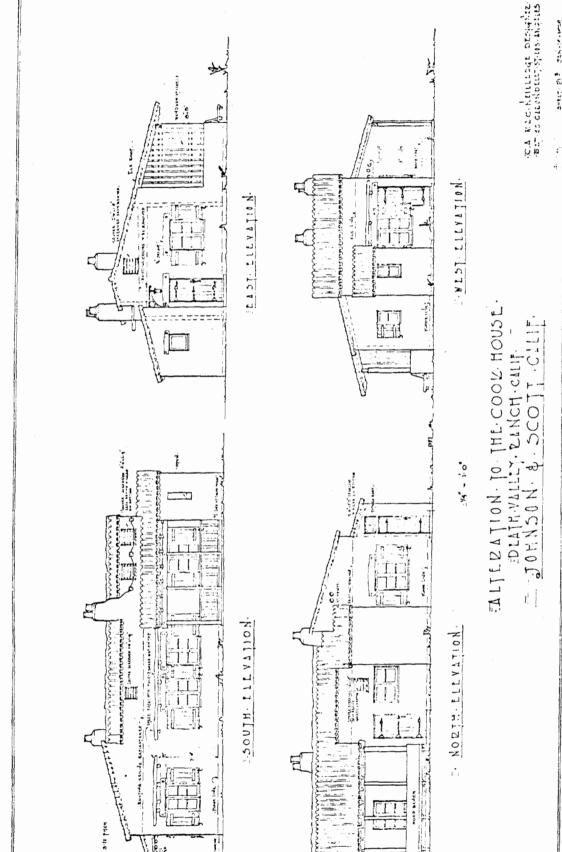


Figure 13





Exercise - apout a want - 1 court

114-154 112/4031

Figure $1\ddot{3}$

Figure 14. Scottys Castle, showing temporary eating shed, ca. 1933. Photographer unknown.

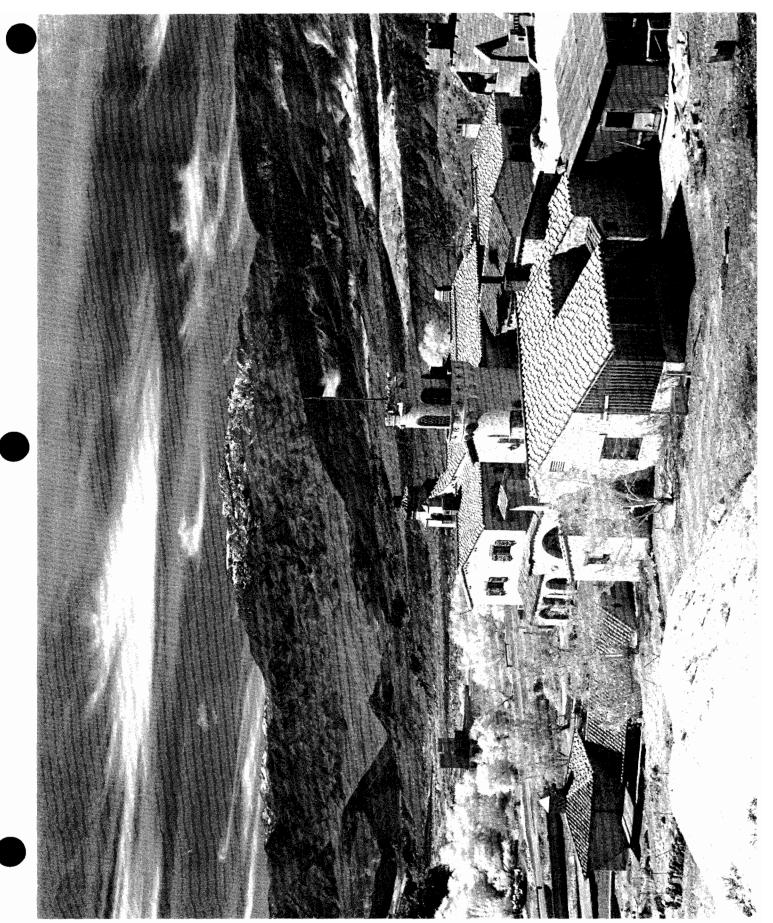


Figure 14

Figure 15. Floor plan of Cook House as currently used (reduced). Robert Haile, 1985.

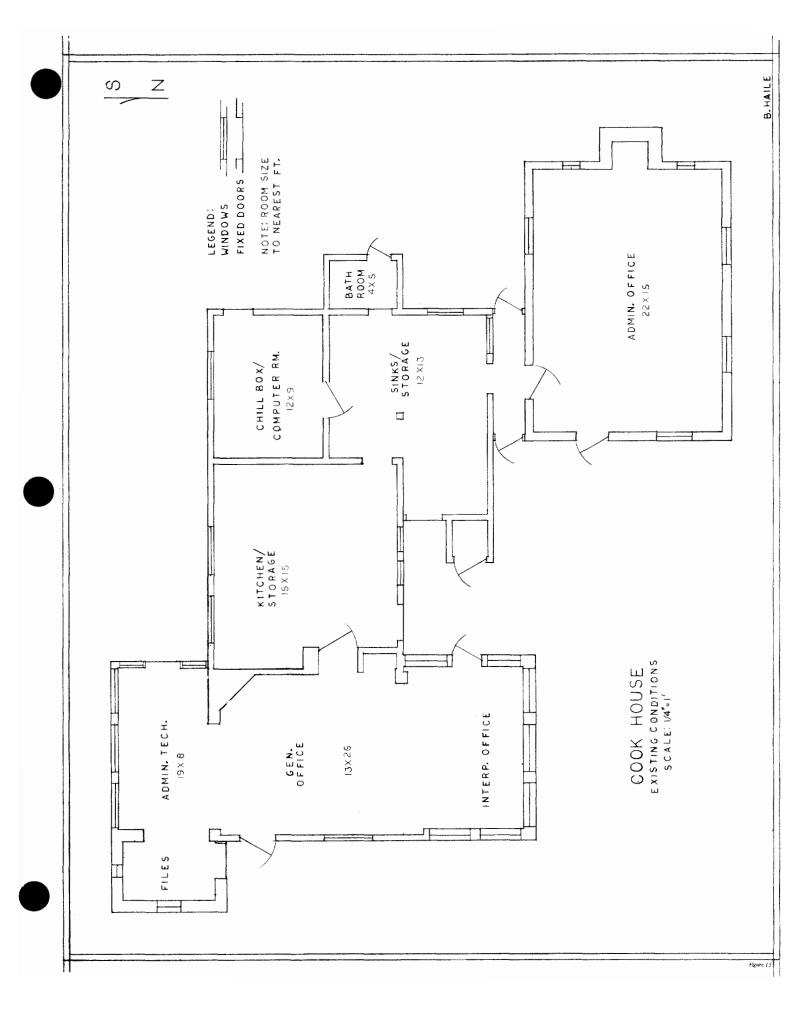


Figure 16. Southeast corner of Cook House, showing separation of stucco from metal lath. M. Lawrence photo, 1985.

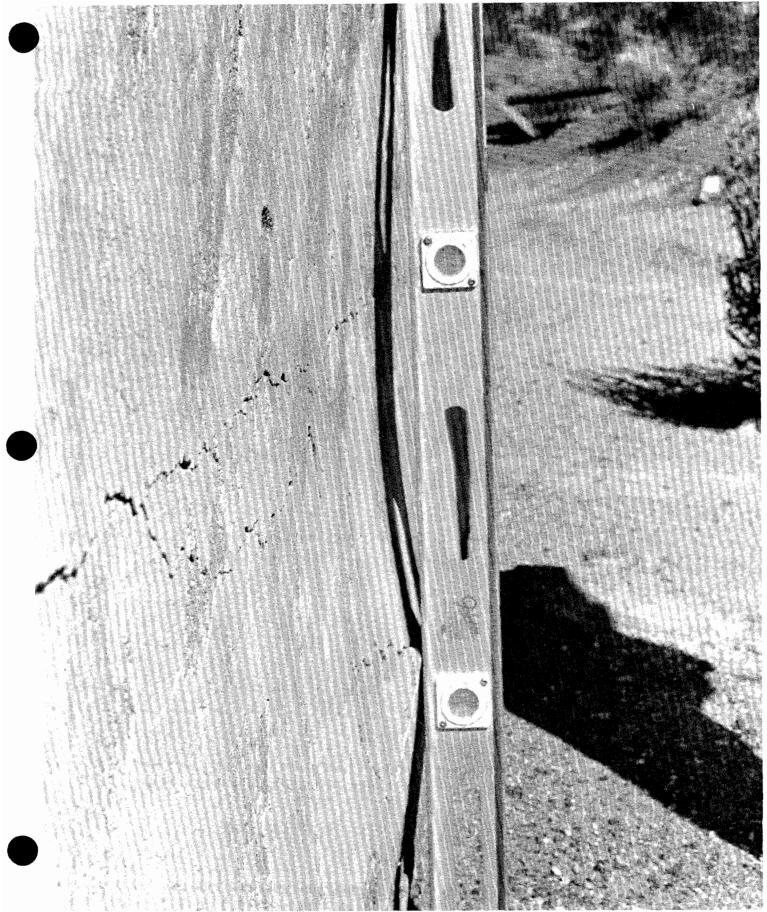


Figure 16

Figure 17. Southeast corner of Cook House, horizontal failure. M. Lawrence photo, 1985.

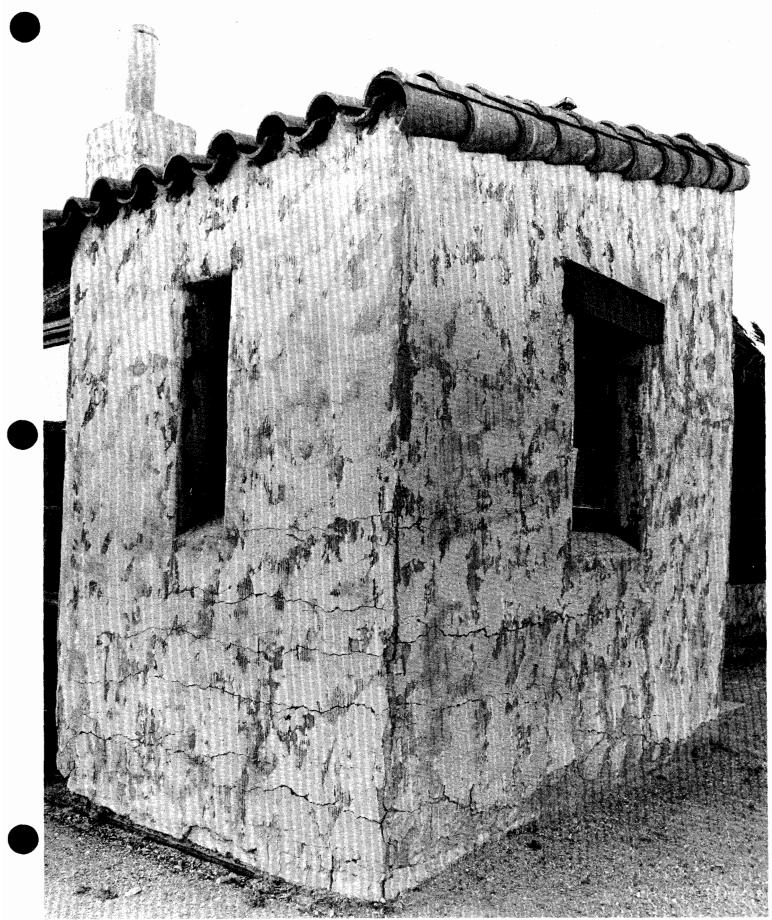


Figure 17

Figure 18. Stucco failure on northeast corner of Cook House. M. Lawrence photo, 1985.

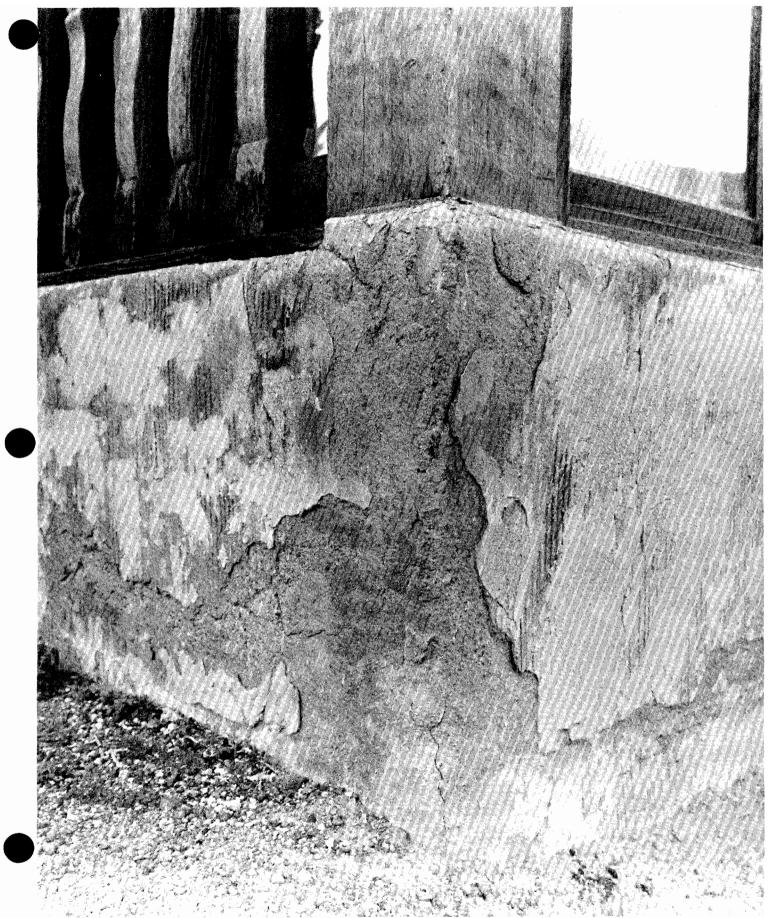


Figure 19. East wall of Cook House showing stucco damage below swamp cooler. M. Lawrence photo.

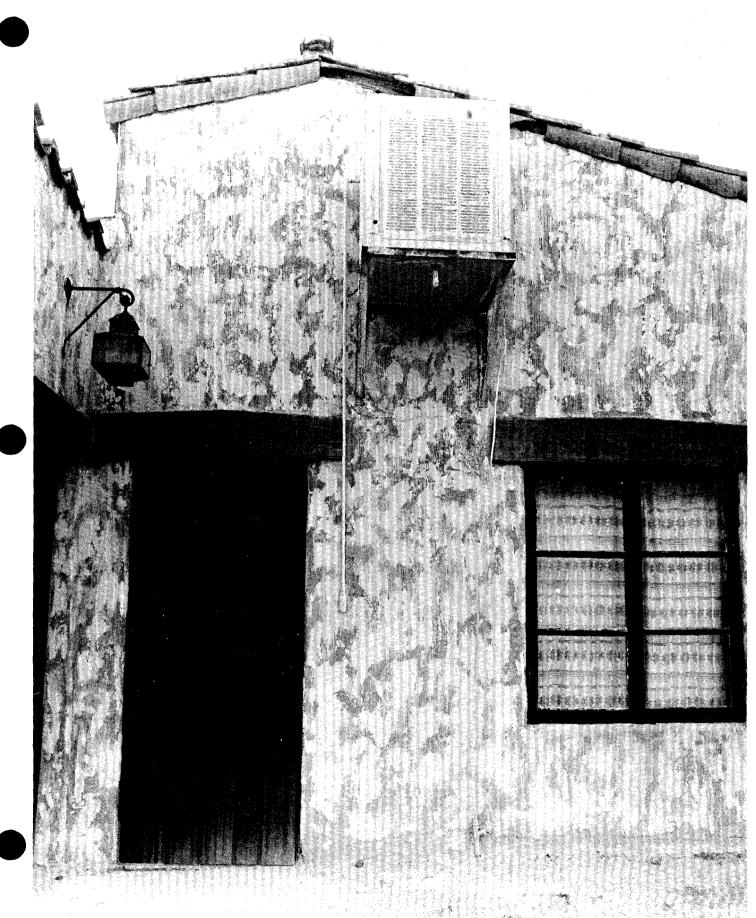


Figure 20. East wall of Cook House Annex, showing repair patches (ca. 1955) and plywood placed over areas of stucco loss (1983). M. Lawrence, 1985.

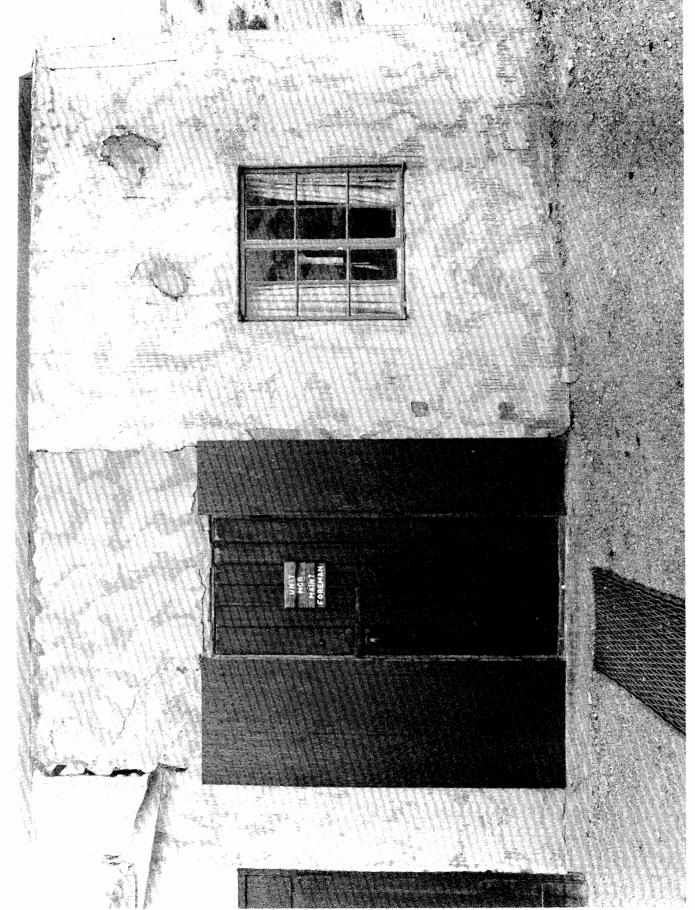


Figure 21. South Wall of Annex to Cook House. M. Lawrence photo, 1985.

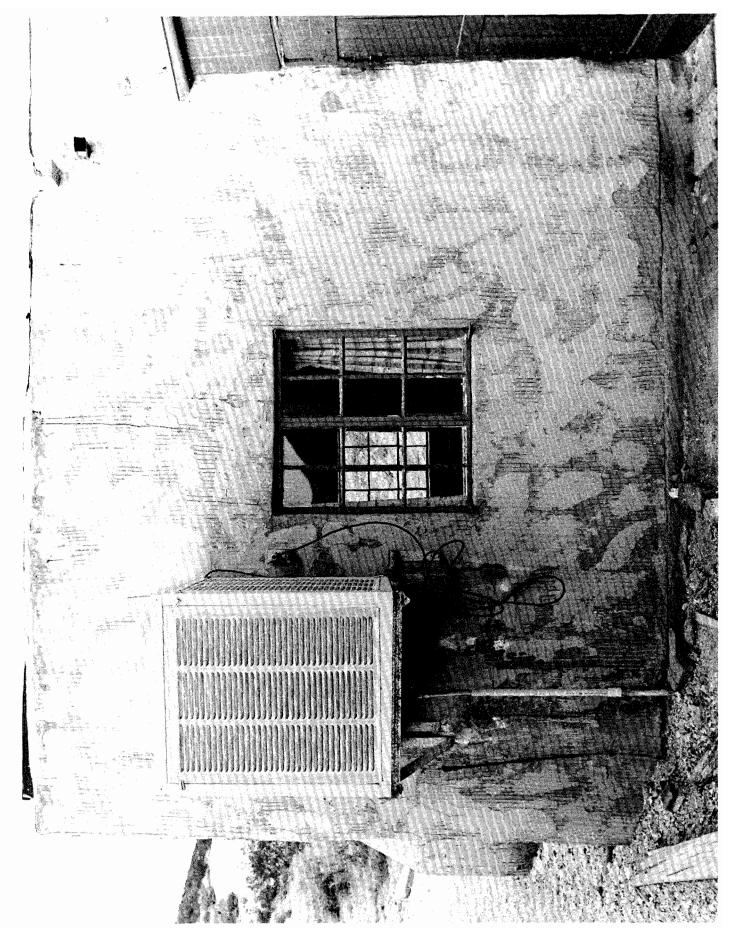


Figure 21

Figure 22. Close up of Figure 21, showing failed stucco under swamp cooler, south wall of Cook House Annex. M. Lawrence photo, 1985.

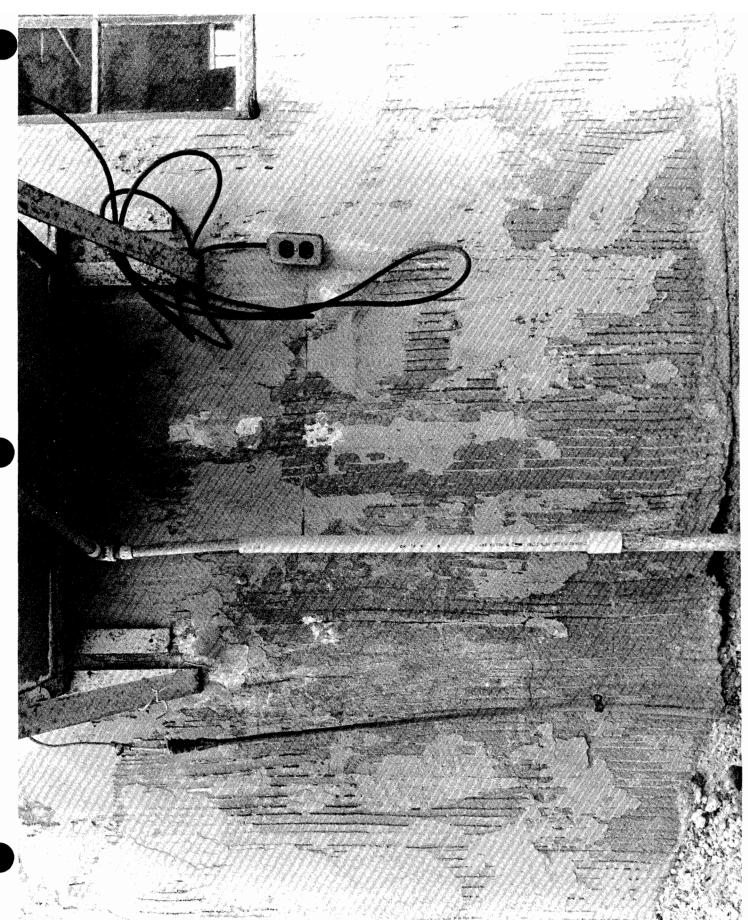
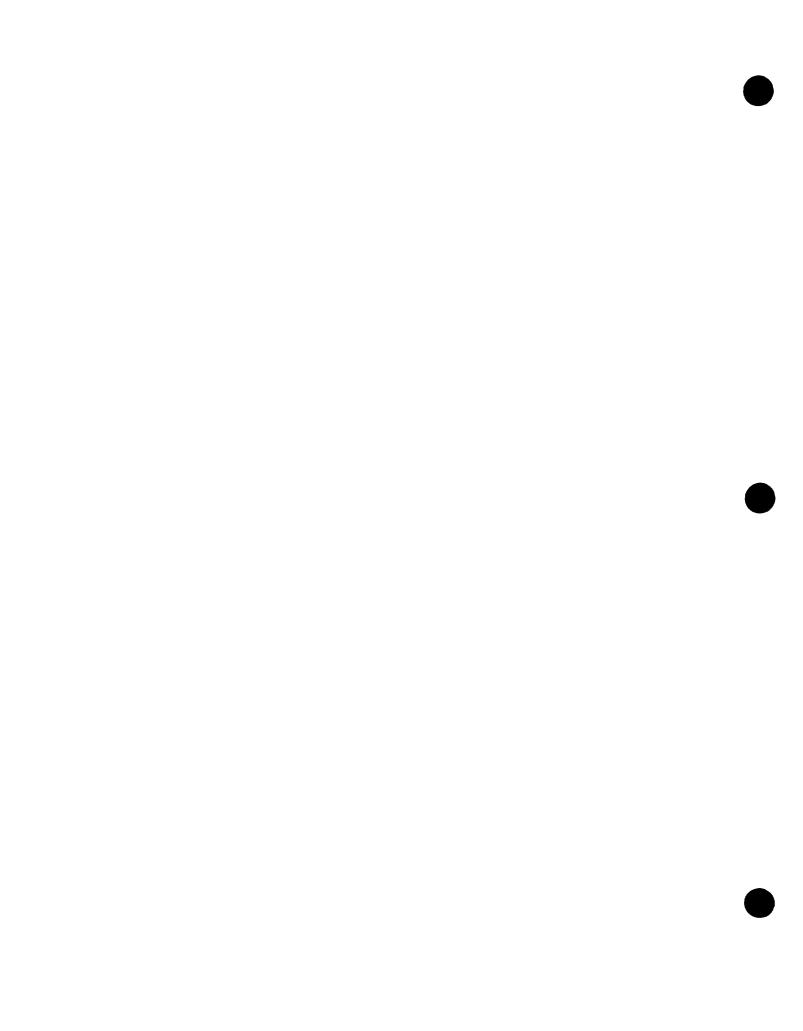


Figure 22



Appendix B: HISTORIC STUCCO APPLICATION; TECHNICAL DATA

By March, 1985, the research to ascertain historic materials and stucco application technique of the 1929 renovation includes (1) a scratch, brown and finish coat constituent analysis, (2) a first attempt at color duplication with further research and development taking place by L. M Scofield Co. of Los Angeles, and (3) the development of two test panels.

The test panels consist of 4'x6' 2x4 frames with expanded metal lath. The scratch and brown coats are of a l part no.II portland cement, 1 part lime, and 3 parts local screened aggregate mixture. The finish coats are composed of 1 part white portland cement, 1 part lime, and 3 parts no. 20 silica sand, with the pigment percentage formula to be based on a 96 lb. sack of white cement.

All finish coat components are thoroughly mixed dry, then the maximum recommended amount of clean water is added. The finish base coat is applied 1/4"-3/8" thick, covering approximately 20 sq. ft or less, depending on by environmental drying conditions. The surface is scratched vertically using a scarifier with round tines, spaced approximately 3/8" apart. While this coat is will well tempered, the top or "blotch" coat is applied, brushing the entire surface with clean, soft, wet brush and then working the surface with a clean trowel to obtain a smooth, tight, glazed surface on the top coat which will generate a moderate blending of colors around the edges.

The lab report evaluating the chemical constituents of the stucco follows this narrative. 921 Kingfisher Drive • San Jose, California 95125 • (408) 448-5221

9 August 1983

Death Valley National Monument P.O. Box 569 Death Valley, CA 92328

Attn: Mr. John B. May

Re: Evaluation of Stucco Sample
Castle Structure, Death Valley Monument, CA
Order No. PX 8130-3-0524

In accordance with your written request of 28 July 1983, a section of stucco was analyzed by petrographic (microscopic) and chemical methods. The stucco specimen reportedly was obtained from the above referenced structure which was constructed during the latter part of the 1920's. The objectives of these analyses were to provide information relative to the identification and proportions of the materials used in the stucco mix.

Test Methods

Portions of the stucco specimen were cut with a lapidary saw, polished, and examined with a stereomicroscope. A thin section (a slice of concrete mounted on a glass slide and reduced to 25 µm) was prepared from one of the polished pieces and examined with a polarizing light microscope to determine paste and aggregate mineralogy. Estimated cement to sand ratios were based on comparison to reference stucco specimens. Cement to sand ratios were also determined chemically by the CaO versanate titration method. In this method the total CaO content of the scratch and brown coatings were determined. Aggregate contribution to the total CaO was assumed to be negligible, based on the results of the petrographic examination. All CaO was, therefore, assumed to be from the cementitious materials (lime and cement). Lime or portland cement contents could not be determined separately due to the extensive carbonation of the paste.

Petrographic Examination

1. The specimen consisted of four coatings: two finish coats, one brown, and one scratch coat. The finish coatings each measured approximately 1/16 in. thick. The brown and scratch coats measured 5/8 in. and 1/4 in., respectively. A white coating adhered to the back face of the scratch coating was not included in this evaluation.

- Paste within both finish coats was fairly hard. The top (last) finish coat was light brown. The first finish coat was medium brown. Both coatings were well bonded to each other. Approximately 15% of the aggregates were sheared on freshly broken surfaces indicating moderately weak strength. The paste within the scratch and brown coats was medium gray and hard. Aggregate shear was nearly 90% indicating a high strength stucco. No cracks were observed in any of the coatings.
- 3. Cement to sand ratio for all coatings was estimated to be 1:3 parts by volume.
- 4. Aggregates within the finish coats consisted primarily of quartz with minor amounts of feldspars. Maximum size aggregate was approximately 0.5-0.75 mm. Aggregates within the scratch and brown coats consisted of a wide variety of aggregates including: basalt, quartz, feldspars, rhyolites, quartzite, volcanic glass, and minor amounts of limestone. Maximum size aggregate was approximately 3 mm.
- 5. The paste within the finish coatings contained white (no iron) unhydrated portland cement particles. Finely divided crystals of altered hydrated lime crystals appeared to be in the paste. Hydrated lime or pigment contents could not be determined petrographically. Unhydrated cement within the scratch and brown coatings appeared to be composed of a low iron and high alumina portland cement. The presence of hydrated lime could not be determined due to the carbonation of the paste.

Chemical Analysis

Results of the chemical analysis were as follows:

Scratch & brown coatings

CaO, % by wt. Cement(1):Sand Ratio

1:3.15

(1) Cementitious Materials

Conclusions

- 1. The two finish coatings appeared to be composed of white portland cement, hydrated lime, and quartz sand. Cement to sand ratio in these coatings was estimated to be 1:3. Each finish coating measured 1/16 in. thick.
- 2. The scratch and brown coatings appeared to be composed of a low iron portland cement and a natural sand. The presence of a hydrated lime content could not be determined microscopically. Estimated cement to sand ratio was 1:3. Scratch and brown coatings measured 1/4 in. and 5/8 in., respectively.

3. Chemically determined cement to sand ratio of the scratch and brown coatings was 1:3.15 which correlated well with the microscopic estimate.

Recommendations

 To produce stucco mixes similar to the submitted stucco specimen, the following materials and proportions are recommended based on the results of the petrographic examination, chemical analyses, and current industry guidelines.

Coating	Portland Cement	Cement, Parts by Volume	Lime. Parts by Volume	Vol. of Agg. per cem. + lime
Scratch & Brown	Type I or II (low iron)	. 1	0-3/4	3
Finish Coat	White	1	3/4-1 1/2	3

- Color (pigment) of the finish coat should be determined experimentally in conjunction with the above recommended mix.
- 3. Please see the attached copy of ASTM C-926, "Application of Portland Cement Plaster", for further information.

Should any questions arise concerning the findings of this report, please contact the undersigned.

Respectfully Submitted,

MICRO-CHEM LABORATORIES

Robert C. O'Neill Petrographer

Robert M. Kumagai

Chemist

Appendix C: EVIDENCE OF HISTORIC FURNISHINGS

While the interior of the main Castle building served as the subject for frequent photographers, no such documentation exists for the Cook House. Likewise, letters, drawings, and invoices give valuable and detailed information about the type and arrangement of the Castle furnishings, but only scant mention is made of the furniture and equipment installed in the Cook House. The museum collection at Scottys Castle contains thousands of pieces of furniture, but only a few of these were used inside this outbuilding on the hill.

The only extant information about the furnishings during the time that the Johnsons vacationed at the Castle is found in one letter between M. Roy Thompson and Mr. Johnson. Thomspon reported that new dishes were purchased from the Union hardware and Metal Co. of Los Angeles in November of 1930 to replace the worn out set in the Cook House. 1

While the Gospel Foundation operated the Castle, the staff dining area was furnished with wooden tables. The table tops had an inset of vinyl floor tile. The Johnsons had shipped these tables from Chicago to Mrs. Johnson's family home at Walnut Creek when the Johnsons relocated to California. The Foundation moved the tables from this location to the Castle. In Chicago, Mrs. Johnson had belonged to a charitable women's organization that furnished inexpensive meals for working women. These tables had furnished that dining area. A dozen of these tables are still located at the Castle, only one will be retained in the museum collection for reference.

The Gospel Foundation first used long tables and benches in the guest dining room, but these were found to be awkward for the guests. They purchased smaller tables and wooden chairs with white upholstered backs and seats. Twenty of these chairs can still be found on the Castle site; one will be cataloged into the museum collection for reference.

NPS-28, Cultural Resource Guideline, recommends that a historic structure not be furnished for display unless the structure is of primary interpretive significance, the furnishings are well documented as to their type and arrangement, and those furnishings can be acquired. Given the scant information about the furnishings of the Cook House.

the lack of knowledge about their arrangement, and the minor role the Cook House played in the overall story of Scottys Castle, an interior furnishing project is not feasible.

End Notes

- 1. 9 January 1931, MSS 5
- 2. Mary Liddecoat, Interview with Susan Buchel, 17 March 1983, typescript, Scottys Castle Reference Library.
- 3. Mary Liddecoat, telephone interview, 15 January 1985.

BIBLIOGRAPHY

- Barcus, Edith Giles. Interview with Susan Buchel. 1984. Personalities Collection, Vol. 2. Scottys Castle Reference Library.
- Coughlin, Don. Interview. 1980. Personalities Collection, Vol 2. Scottys Castle Reference Library.
- Creech, Don. Interview with Susan Buchel. 21 Feb 1985.
- Death Valley National Monument. Museum Collection.
- Death Valley National Monument. Photograph Collection.
- Death Valley Ranch Papers, 1925-1932. MSS 7. Scottys Castle Reference Library.
- Ewing, Linda Nelson. Interview with Susan Buchel. April and 29 May 1985.
- Kropf, Milton. Interview with Steve Harrison. Typescript. 1980. Scottys Castle Reference Library.
- Liddecoat, Mary. Telephone Interview with Susan Buchel. 15 Jan 1985 and 20 Feb 1985.
- Liddecoat, Mary. Interview with Susan Buchel. Typescript. 1983. Scottys Castle Reference Library.
- Shally, Dorothy and William Bolton. <u>Scottys Castle</u>. Yosemite, Calif.: Flying Spur Press. 1973.
- Spadoni, Alfred. Interview. 1983. Personalities Collection, Vol 1. Scottys Castle Reference Library.
- Steward, Julian H. <u>Basin-Plateau Aboriginal Socio-political</u>
 <u>Groups</u>. Smithsonian Institute. Bureau of American
 Ethnology. Bulletin 120. Washington, D. C.: GPO. 1938.
- Wallace, William and Edith. Ancient Peoples and Cultures of Death Valley National Monument. Ramona, Calif.: Acoma Books. 1978.

