

A STUDY OF THE PROCESS TO ADAPT
A KANSAS RANCH HOUSE SITE FOR USE AS
A BIOLOGICAL EDUCATIONAL RESEARCH CENTER

by
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B. A., University of Northern Iowa, 1972

A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

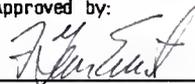
MASTER OF ARCHITECTURE

Department of Architecture

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1987

Approved by:



F. Gene Ernst
Major Professor

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Department of Architecture

XI

College of Architecture and Design
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MEMORANDUM

TO: Valerie Scholten

FROM: Lyn Norris-Baker

SUBJECT: Review of Proposed Research
Redevelopment Study of the Process to Adapt a
Kansas Ranch House Site for Use as a
Biological Educational Research Center

DATE: 28 February 1985

The members of the College of Architecture and Design Subcommittee of the Committee on Research Involving Human Subjects have expedited the review of your proposal. They have approved the conduct of the research according to the procedures you have described. Approval is effective this date. Any changes in procedures from those described in the application and the proposal must be approved through the College Subcommittee. Please remember that you are responsible for keeping the Subcommittee informed of your progress, any problems which arise, and the final completion of the project.

PREFACE

The Konza Prairie Research Natural Area is on land which was and still is tallgrass prairie land. After the time of the Indians, and several owners, it had become a Kansas cattle ranch by 1912. This land has never been converted to agricultural crop production. It has remained a good example of tallgrass prairie.¹ For this reason, this land was selected by The Nature Conservancy as part of its efforts at preserving natural diversity. The Nature Conservancy supplied the land to Kansas State University to use as an ecological research and education site. The original ranch buildings, which make up a portion of the existing physical facilities, were built in 1911 & 1912 and arranged for a cattle ranch owner's needs and are a part of the Konza Prairie Research Natural Area.

With the growing awareness of Konza Prairie Research Natural Area (KPRNA), on the part of the general public, more use is made of the existing facilities each year. These facilities are limited in scope and adaptability. The Konza Prairie management feels that scientists, students and visitors who use these facilities may find them rough and limited for their specific needs.² Konza Prairie office space is also limited.

Therefore, this study was undertaken to provide guidance to the owners and/or managers of the Study Area in a preservation oriented Adaptive Use Plan for the Ranch House within the Study Area on KPRNA.

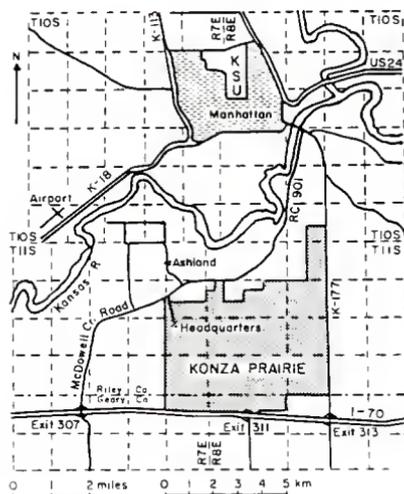
The Study has a four-part methodology consisting of: Documentation of the Site, Defining and Investigating the Diversified

Users of the Site, Development of a Preservation Program for the Ranch House, and the Development of Conceptual Use Plans for the Site.

The Study sought to enhance the environmental competence of those persons using the Ranch House. According to Steele, the enhancement of environmental competence is to strengthen: (a) a person's ability to be aware of the surrounding environment and its impact on him; and (b) his ability to use or change his settings to help him achieve his goals without inappropriately destroying the setting or reducing his sense of effectiveness or that of the people around him.³

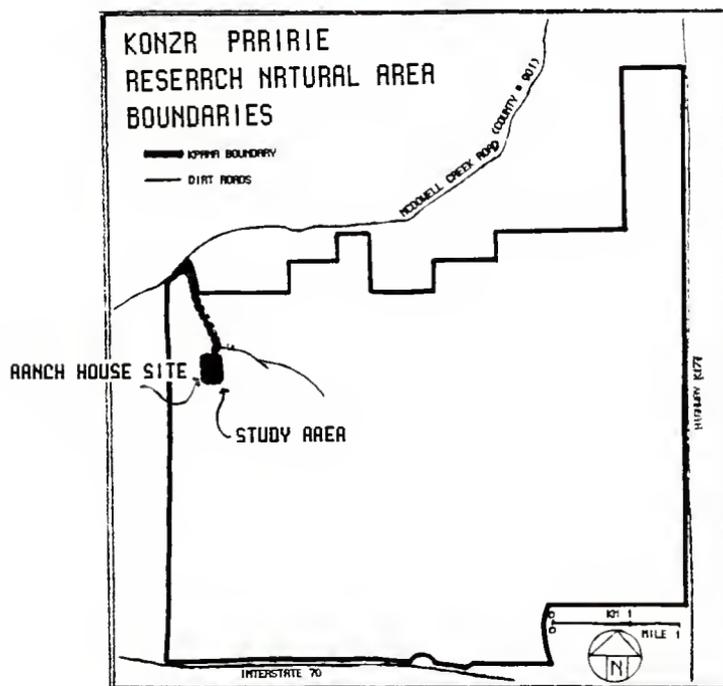
"Preservation is now recognized [1967] as only a part of a wider concern for the conservation of all natural and cultural resources and for the enhancement of the total environment."⁴ "In the years since 1966, as more historic preservation programs have developed, the federal government and the private sector have made inroads into educating the public about America's cultural heritage. There has been a parallel and even stronger awareness of and concern for the natural environment, a realization on the part of the American people that the elements of the environment - air, water, even the earth itself - are finite and that these resources demand wise stewardship. Americans are coming to see that the environment is a complex and fragile system vulnerable to complete destruction by the abuse of a single element."⁵ One of those [environmental] elements is its' man-made structures, of which it has been said, "..... that buildings are a part of our total environmental resources and that old buildings are nonrenewable resources."⁶

MAP I
 KONZA PRAIRIE RESEARCH NATURAL AREA
 LOCATION



Source: Division of Biology, Kansas State University. *Konza Prairie - The tallgrass laboratory*, Manhattan, Kansas: Konza Prairie Research Natural Area, 1984, back cover.

MAP II
 STUDY AREA BOUNDARIES WITHIN THE
 KONZA PRAIRIE BOUNDARIES



Source: Division of Biology, Kansas State University. *Konza Prairie - The tallgrass laboratory*, Manhattan, Kansas: Konza Prairie Research Natural Area, October 1980, centerfold.

NOTES
PREFACE

¹ *KONZA PRAIRIE Research Natural Area*, K.S.U.: Division of Biology, 494-58X-4031, n.d.

² *KONZA PRAIRIE Research Natural Area*

³ Fred I. Steele, *Physical Settings and Organization Development* (Reading Massachusetts: Addison-Wesley Publishing Company, 1973), p. 113.

⁴ Michael Middleton, "Perspective On Preservation," in *Preservation: Toward An Ethic in the 1980's*, ed. National Trust for Historic Preservation (Washington, D.C.: The Preservation Press, 1980), p.70.

⁵ National Trust for Historic Preservation in the United States, *America's Forgotten Architecture* eds. Tony P. Wrenn and Elizabeth D. Mulloy (New York: Pantheon Books, 1976), p. 33.

⁶ National Trust for Historic Preservation in the United States, p. 23.

ACKNOWLEDGEMENTS

My sincere appreciation is expressed to Lloyd Hulbert, Director of Konza Prairie Research Natural Area, his co-workers and staff for their help and co-operation in order for this study to take place on Konza Prairie. The information which so many of them shared regarding the Ranch House and its site was invaluable toward the study findings.

Thank you is extended to all of the people who co-operated in the questionnaire, who participated in the interview process, and who volunteered to join the program and design review teams.

A thank you is also extended to the Riley County Historical Society for their help in locating and supplying numerous articles regarding Chauncey P. Dewey and his ranch south of Manhattan, Kansas.

My gratefulness for the unbounded concern, friendship and help in writing this thesis is acknowledged for my advisors, Professor F. Gene Ernst, Assistant Professor Gwen Owens-Wilson, and Assistant Dean William Jahnke. My sincere appreciation is expressed to them for "handling the paperwork" for this thesis so efficiently.

Very special thank yous go to extraordinary friends, Gwen, Lyn, and Nancy, who helped me through the rough times and kept me "stepping along."

And most importantly of all, I want to thank my God, my husband Roger and children Keith and Jennifer, my parents and parents-in-law for their love and support while I was attaining this Master of Architecture degree. Through their backing and "push," I achieved a dream one step at a time, and conquered my self worth. As the saying goes, "Dream dreams that never were --- if you can dream it, you can do it," and I did!

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UNIT I

HISTORIC DOCUMENTATION OF THE STUDY AREA

INTRODUCTION - DOCUMENTATION METHODOLOGY

The documentation of the Dewey Ranch House (KPRNA's Headquarters Building) progressed in the following sequence.

The history of the house and the owner was gathered from a multiplicity of sources. Among the sources used were those recommended in the Technical Leaflets: *Local Historical Records: Programs for Historical Agencies*, and *The History of a House - how to trace it*.⁷; and Paula Stoner Reed in her article "Documenation of Historic Structures".⁸ The local historical records were located, appraised and surveyed for pertinent information. The findings of this research can be found in the documentation sections entitled Biographical Introduction to Chauncey P. Dewey, Acquisition of the Property, and Previous Uses of the Site.

The historical background for the period of the setting in which the house was constucted was established through many of the same sources as those used for the history of the house, and also a thorough search of the Manhattan Public Library and Kansas State University Library texts which dealt with Kansas history. The findings of this research can be found in the documentation section entitled Background Information Establishing the 1912 Context of the Study Area, Chapter II.

The building documentation was done via measurements, photographs, floor plans and physical analysis of the interior and exterior of the building. The evaluations presented in the documentation section were based upon the processes recommended by Nicholas L. Gianopoulos, P.E., in his article "Suggested Guidelines for the Structural Examination, Analysis and Evaluation of a Historic Structure" and by Tomas H. Spiers, Jr., AIA, in his article "Architectural Investigation and Analysis for Historic Structure Reports".⁹ Orin M. Bullock, Jr.'s book *The Restoration Manual*,¹⁰ and Harley J. McKee's book *Recording Historic Buildings*¹¹ were also referred to and followed regarding documentation processes. An assumption was made that these books and articles are currently the best available public written documentaion vehicles.

Using the proceeding written sources for the building documentation process, an Historical Structure Report, was developed and its presentation in entirety can be found in Historical Use Investigations, Chapter I.

NOTES
UNIT I
HISTORIC DOCUMENTATION OF THE STUDY AREA

INTRODUCTION - DOCUMENTATION METHODOLOGY

⁷ Bruce W. Dearstyne, "Local Historical Records: Programs for Historical Agencies," in *American Association for State and Local History, Technical Leaflet #121*, (Nashville, Tennessee: American Association for State and Local History, 1979), p. 7; Linda Ellsworth, "THE HISTORY OF A HOUSE how to trace it." *American Association for State and Local History, Technical Leaflet # 89*, (Nashville, Tennessee: American Association for State and Local History, 1976), p.p. 1-8.

⁸ Paula Stoner Reed, "Documentation of Historic Structures." *APT Bulletin*, Vol. XIV No. 4 (1982), pp. 18-22.

⁹ Nicholas L. Gianopoulos, P.E., "Suggested Guidelines for the Structural Examination, Analysis and Evaluation of a Historic Structure," *APT Bulletin*, Vol. XIV No. 4 (1982), pp. 27-28; Tomas H. Spiers, Jr., AIA, "Architectural Investigation and Analysis for Historic Structure Reports." *APT Bulletin*, Vol. XIV, No. 4, (1982), p. 23-26.

¹⁰ Orin M. Bullock, *The Restoration Manual* (Norwalk, Connecticut: Silvermine Publishers Incorporated, 1966), all pages.

¹¹ Harley J. McKee, *Recording Historic Buildings (Historic American Building Survey)* (Washington, D.C.: U.S. Government Printing Office, 1970), all pages.

CHAPTER I

HISTORICAL USE INVESTIGATIONS

BIOGRAPHICAL INTRODUCTION TO CHAUNCEY P. DEWEY

The Chauncey P. Dewey Ranch House is the subject of this Historical Structure Report.

The great land holdings of the Deweys was started by Chauncey Dewey's father, C. P. [Charles] Dewey, who made a fortune in real estate in Chicago, after the great Chicago fire. C. P. Dewey came to Kansas in 1885 and gathered together, parcel by parcel, thousands of acres of land in Riley and Geary Counties, and Cheyenne and Rawlings Counties in western Kansas.¹²



CHAUNCEY P. DEWEY

PLATE 1

Along with his huge land holdings, C. P. Dewey's contribution to the town of Manhattan was in the form of an ambitious building program within the Manhattan community. For many years, Chauncey was to carry on his father's legacy.

As Chauncey became of age he was placed in charge of the ranch in western Kansas, and his father stayed in the Manhattan area and Chicago.¹³ In 1903, Chauncey was involved in the last range war (The Dewey-Berry Source: *Topeka Capital - Journal* [Topeka, Kansas], 7 December 1958, p. 27A, n.c.

Feud), which took place near the western ranch headquarters. His father's death shortly thereafter, caused him to relocate to the Manhattan area ranch in Riley and Geary Counties in 1907.¹⁴ Chauncey was and continued to be a highly educated world-wide traveler, politician, and statesman.

In 1908, Chauncey was married to Elvira Millspaugh.¹⁵ The parcel of land on which the ranch house, for the ranch manager and cowboys, was built was purchased February 2, 1909.¹⁶ The ranch house, which was built in 1911 and 1912,¹⁷ is still in its natural setting of native tallgrass prairie. A stone barn, a wood-frame mansion for the owners, and a water reservoir/swimming pool were also erected for the Deweys in the ranch house site around the same time period.¹⁸

The ranch house reflects the Dewey self image. When neighboring ranches provided sod houses and barn accommodations for their hired help, Mr. Dewey provided a stone house with all of the "modern" conveniences. As time brought about additional household conveniences, those too were added to the building. As Clare Cooper writes in her article, The House as Symbol of the Self, "The House reflects how man sees himself."¹⁹ According to the French Philosopher Gaston Bachelard, "The house therefore nicely reflects how man sees himself, and the interiors and the exterior reveal to the public the self that we choose to display to others."²⁰ Mr. Dewey was self confident and purposeful, and the house facade and the interior design seem to have been selected so that they would reflect what he wished to present of his 'self' to his family, friends, and neighbors.

Therefore, the Dewey Ranch House building did accurately reflect the times, era, attitudes, moires of this cattle ranch owner and the people who worked for him during the time period of 1912.

ACQUISITION OF THE PROPERTY

The study area property came into Kansas State University's possession from the Dewey ownership through a series of purchases.

The Dewey Ranch south of Manhattan was sold by the Deweys on May 24, 1930 to Johnson and Clayton. Johnson and Clayton sold the ranch to George H. Davis on September 23, 1933. Davis sold the ranch to Frank R. McDermand III on March 12, 1957. McDermand sold the ranch to George McKnight on March 15, 1972. McKnight sold the ranch to the Nature Conservancy on January 20, 1977.²¹ The Nature Conservancy purchased the Dewey Ranch with funds donated by Katharine Ordway to be used as a Nature Research Area. The Nature Conservancy has provided this Nature Research Area to Kansas State University for ecological research at no expense to the state.

The ranch was well-managed for the past century, so the vegetation was in good condition when purchased for a research area by the Nature Conservancy.²² Katharine Ordway requested that an Indian name be given to the area. Konza is one of more than 100 variations in the spelling of the name of the American Indian tribe that lived in this area in the 1700s and perhaps earlier. Another spelling of the tribe's name is Kansas.²³ The

AERIAL PHOTOGRAPH OF THE STUDY AREA



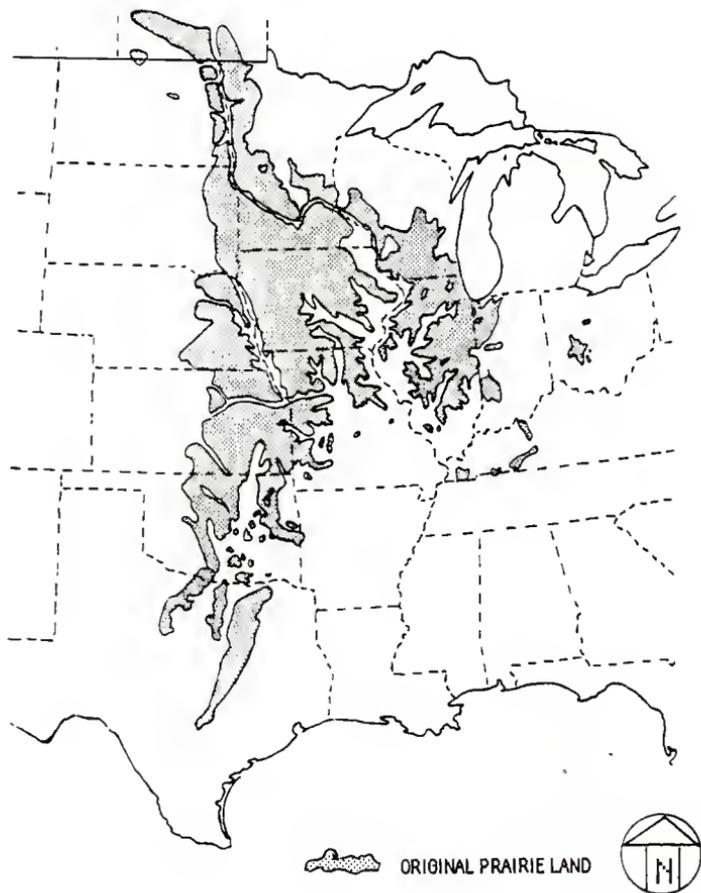
Source: Appraiser Office, Riley County Courthouse, Manhattan, Kansas.

Nature Conservancy purchased 371 hectares (916 acres) along Interstate 70 in December 1971, and added the remaining acres in 1977. Konza Prairie Research Natural Area is now over 31,000 acres. The Ranch House site was included in this second purchase of land. It is located in Riley County, Ashland Township, Northwestern quarter of Section 13, Town 11, Range 7.²⁴ A private approach road runs Southeasterly from McDowell Creek Road (Riley County Road #901), between U.S. Highway 24 and Interstate 70. (see PLATE II, p. 8)

PREVIOUS USES OF THE SITE

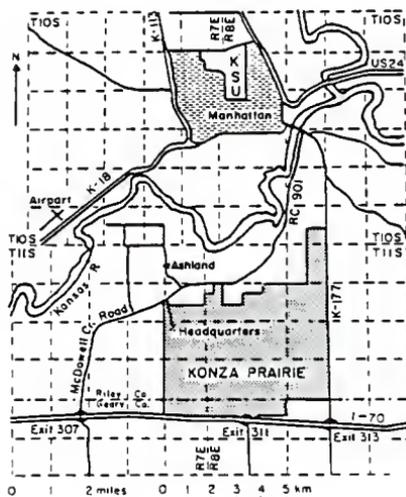
The Konza Indian Tribe used the tallgrass prairie land as their home until the mid 1800s. In the 1800s, settlers came to the Manhattan, Kansas, area more abundantly. These settlers were farmers and ranchers. Since the time of settlement by white men, the site has never been converted to agricultural crop production.²⁵ It has remained a good example of tallgrass prairie. Throughout the succession of owners and ranch managers, the site has remained much as it was originally. (see MAP III, p. 9 and MAP IV, p. 10)

The county assessment and tax records were searched to fix an actual construction date on the ranch house. It was built in 1912. Documentary evidence on the progress of the actual building is very sparse. The carpenter/builder hired to construct the stone barn and then the ranch house was Walter Burr and his hired men. One of the men hired for the stone work was an Italian stone mason, but no name was

ORIGINAL PRAIRIE LAND WITHIN
THE UNITED STATES

Source: Personal interview with Lloyd C. Hulbert, Director of Konza Prairie Research Natural Area, Riley County, Kansas, 28 June 1984, handout.

KONZA PRAIRIE RESEARCH NATURAL AREA
BOUNDARIES



Source: Division of Biology, Kansas State University. *Konza Prairie - The tallgrass laboratory*, Manhattan, Kansas: Konza Prairie Research Natural Area, 1984, back cover.

forthcoming from the memories of those people interviewed. The limestone for the ranch house and the barn was quarried about 100 yards south of the house site. The other materials used for the construction were purchased "in town." During the Dewey building years at the turn of the century, one of the businesses started in Manhattan by C. P. Dewey, was the lumber yard. It could be surmised that the other materials needed for the construction of the house and barn were requested from the Dewey's lumber business in town. (see PLANS I, II and III pp. 12, 13, and 14)

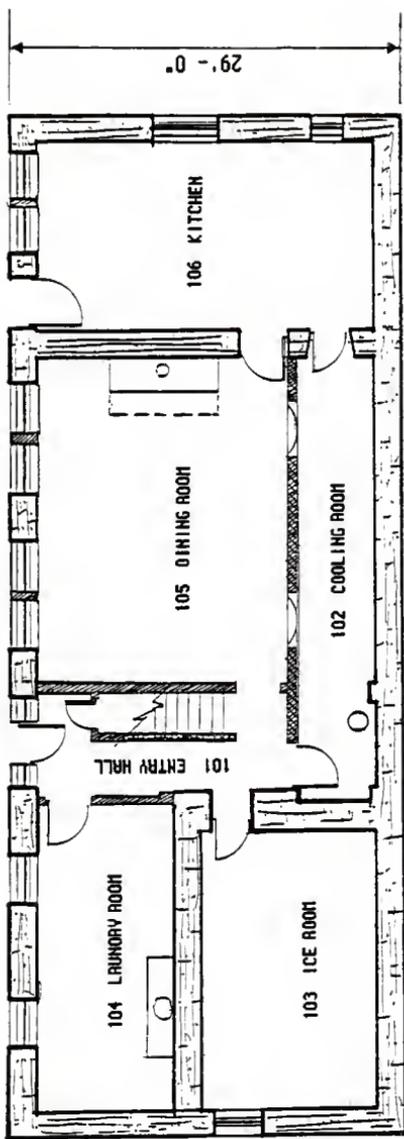
ALTERATIONS TO THE ORIGINAL CONSTRUCTION

Dates and descriptions of major alterations made to the building based on documentary evidence is scarce. The ranch managers and/or the owner of the ranch were responsible for the alterations which have occurred. They usually had one of the ranch hands adept at carpentry do the remodeling. Very few, if any, of the "improvements" were done by skilled craftsmen. The bathroom (104B), which Konza Prairie installed, is the only verifiable hired improvement made to the building.

Remodeling changes are apparent from the original interior context because of the change in materials used. No attempt was made to "blend in" the changes. After studying the detailing used throughout the house, changes become apparent. The sequence in which these changes occurred is however, more difficult. No sources were clear as to the specific sequence of the changes. Therefore, the changes will not be listed

PLAN 1

DEWEY RANCH HOUSE - FIRST FLOOR - 1912



HALLS

STONE

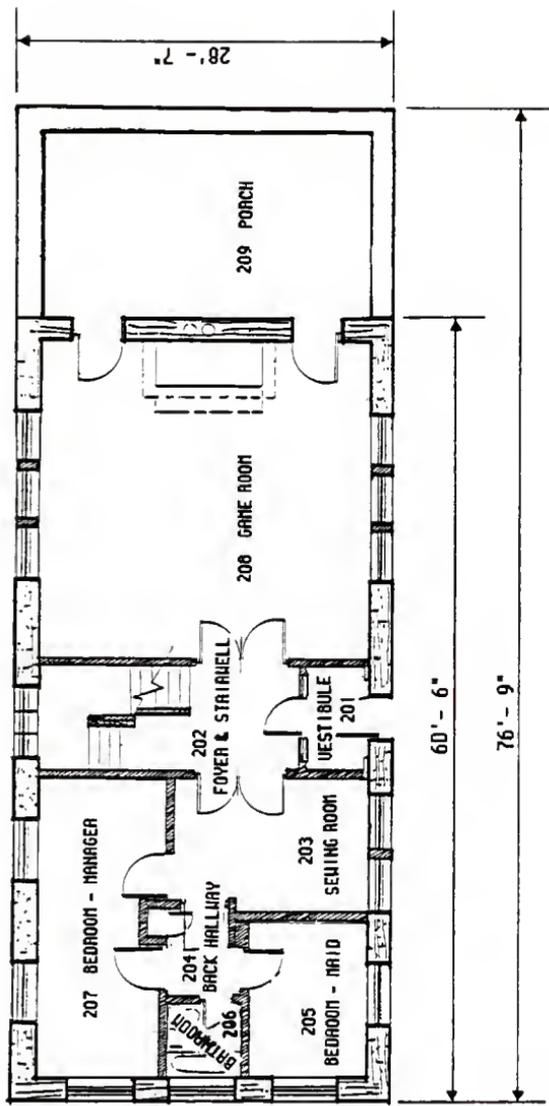
WOOD STUO, LATH & PLASTER

POURED CONCRETE



PLAN II

DEWEY RANCH HOUSE - SECOND FLOOR - 1912



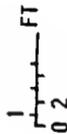
HALLS



STONE

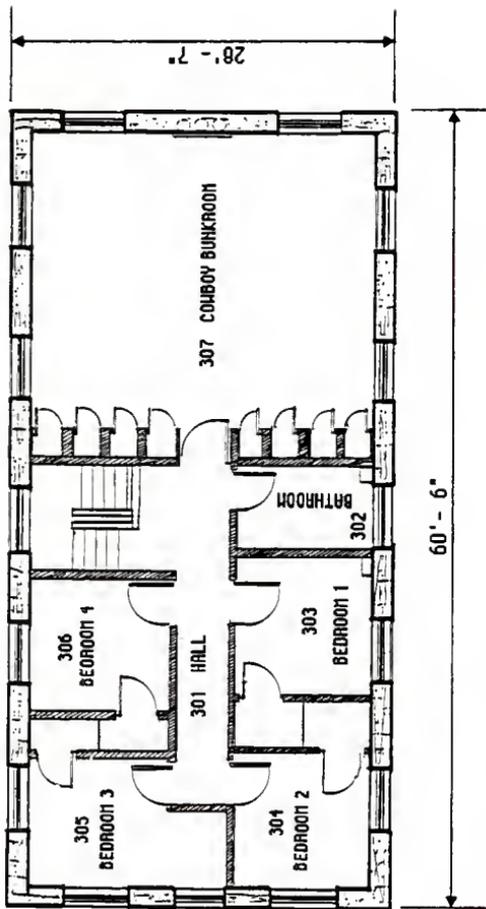


WOOD STUD, LATH & PLASTER



PLAN III

DEWEY RANCH HOUSE - THIRD FLOOR - 1912



chronologically, but will be listed by area in which they occur in the house. All of the rooms have been repainted from their original color. (see PLANS IV, V and VI, pp. 18, 19 and 20)

The first floor:

- The lighting fixtures in all of the areas except the entry-way, have been changed. The electricity in the house was from an engine driven generator on the property. A new fuse box was installed in 1946. Kansas Power and Light was granted a right of way across the land in 1964, at which time most of the fixtures were updated and continue to be of that period.
- 12" x 12" pressed-board ceiling tiles have been installed over the plaster ceilings in all of the areas, except in the laundry room (104) where a drop ceiling consisting of a metal grid with 2' x 2' metal panels and one fluorescent light has been installed.
- Paneling was applied to the North wall of the dining room (105), to all of the walls in the downstairs hall and landing area (101), to the stairwell between the first and second floors (101), to all of the walls in the ice room (103), and to all of the walls in the laundry room (104A).
- The cook stove was removed from the kitchen, and "modern" appliances and cupboards were installed (106).
- A stud wall finished with sheet rock was added to the laundry area (104).
- A modern bathroom was installed in the laundry room (104B).
- Two built-in cabinets were added in the laundry room (104A).

- Wall to wall carpeting was installed in the ice room (103).
- A window was installed where the hatch for the ice was located (103).
- A closet was partitioned off in the ice room (103).

The second floor (main floor):

- The only original light fixture is in the vestibule (201).
- 12" x 12" pressed-board ceiling tiles have been installed over the plaster ceilings in all of the areas, except in the sewing room (203) and back hall (204).
- Paneling was applied to all of the walls in the maid's bedroom (205) and all of the walls in the ranch manager's bedroom (207).
- When the paneling was applied to the walls in the aforementioned bedrooms (205 & 207), the carpenter sawed off the head of the window surround to be flush with the jamb.
- The woodwork in the sewing room (203), the back hall (204), and both of the bedrooms (205 & 207) has been painted.
- There are newer propane gas stoves in the game room (208) and the sewing room (203).
- An electric wall heating unit has been installed in the bathroom (206).
- The doorway leading from the sewing room (203) to the ranch manager's bedroom (207) has been transformed into the door for a closet and the space for the closet has been taken from the ranch manager's bedroom. Also, additional floor space was taken from the ranch manager's bedroom (207) to create a larger closet.

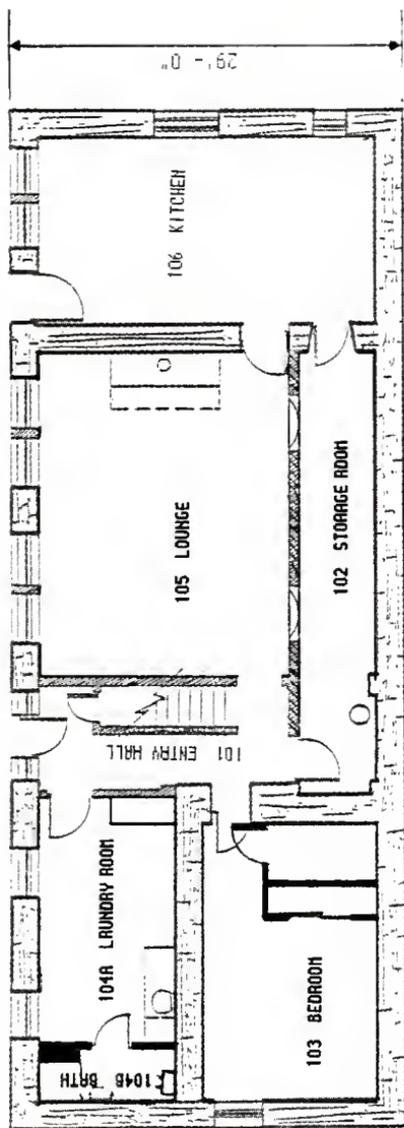
- The maid's bedroom (205) now has a built-in hanging clothes and drawer combination unit.

The third floor:

- The only original light fixture is in the upstairs hall and landing (301).
- 12" x 12" pressed-board ceiling tiles have been installed over the plaster ceilings in the cowboy bunk room (307) and the bathroom (302).
- The woodwork in bedrooms #2 & #3 (304 & 305) has been painted.
- Propane gas stoves have been installed in the cowboy bunk room (307), the bathroom (302), and bedroom #1 (302).
- Cabinetry above the cowboy bunk room closets (307) was added to enclose the exhaust ducts for the propane gas heaters.
- Plumbing fixtures were added to the bathroom (302), first the toilet and sink, and later a shower stall.
- The wood flooring in bedroom #3 (305) has been striped and only the stain has been re-applied to the room flooring and raw wood has remained as the closet flooring.
- A 2" x 4" wood stud wall with sheetrock finish was erected in the upstairs hall (301), just past the entries to bedrooms #1 & #4 (303 & 306). The woodwork for the door jamb and door is blond stained plain moulding.

PLAN IV

DEWEY RANCH HOUSE - FIRST FLOOR - 1984



WALLS



STONE



WOOD STUD, LATH & PLASTER



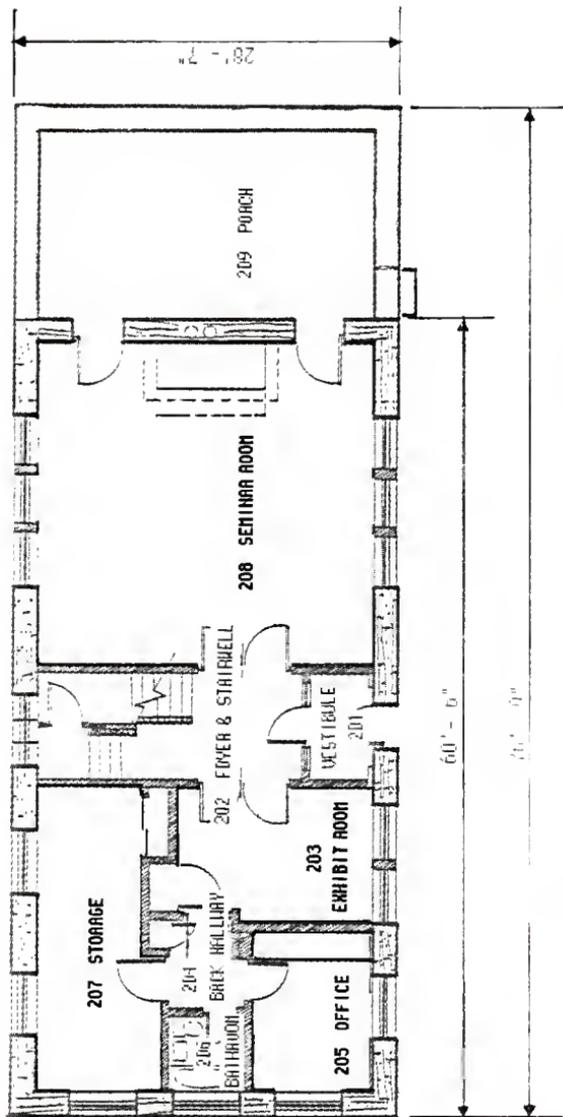
POURED CONCRETE

CHANGES



PLAN V

DEWEY RANCH HOUSE - SECOND FLOOR - 1984



CHANGES

STONE

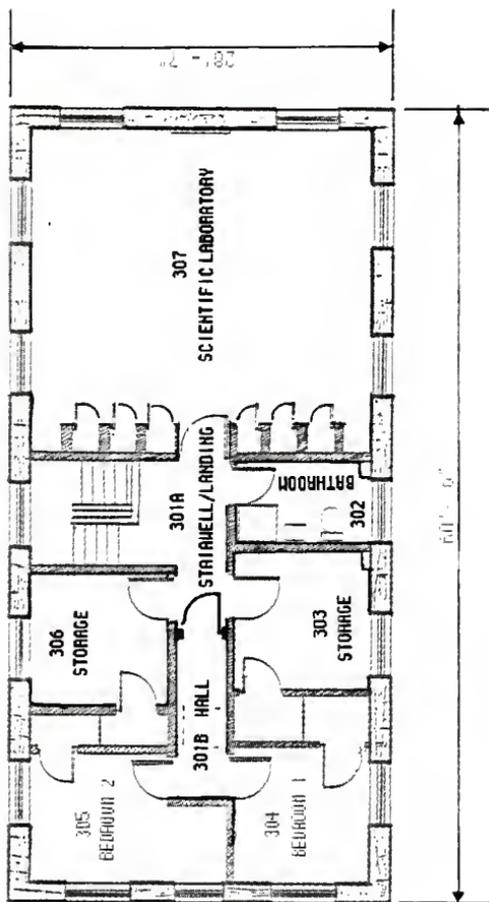
WALLS

WOOD STUD, LATH & PLASTER



PLAN VI

DEWEY RANCH HOUSE - THIRD FLOOR - 1984

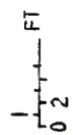


WALLS

STONE

WOOD STUD, LATH & PLASTER

CHANGES



SITE

The Chauncey P. Dewey Ranch was located where the Konza Prairie Research Natural Area exists today. Konza Prairie is approximately eight miles south of Manhattan, Kansas, just off of Riley County Road #901. The ranch house has an approach road eight-tenths mile in length from the county road.

The visual context in which the ranch house and adjacent buildings are located is best explored from the reservoir/pool which is on the high point of the site. The area surrounding the ranch house is open prairie land on all sides.

On the east side of the house is a limestone patio area lying between the kitchen entry-way (106) and the back hall entry-way (101), and extending out from the house approximately 20'. Just past this patio is a terraced garden. The terraced garden has four tiers, and these tiers are formed through the use of rough-cut limestone pieces embedded into the ground. To the south of the terraced garden are limestone slabs serving as steps which run the height of the terracing.

The original ranch house site also included a stone barn for horses and a water reservoir/swimming pool. The main house of wood frame was sold and removed from the property approximately twenty years ago. Other buildings which have been added to the site are five metal sheds for equipment storage, two metal sheds for animals, a house trailer, two small wood frame houses, one with a wood frame garage.

The stone horse barn and the water reservoir/swimming pool have not been changed in their appearance or construction since they were part

of the Dewey Ranch. The various ranch managers have used the barn for assorted breeds of animals and Konza is using the barn for the storage of equipment.

The stone horse barn was constructed in 1911 of the same quarried limestone of which the house is constructed. The barn is two stories in height and seven horse stalls long, approximately 100 feet. The second story is a large hay loft. The windows in the gable ends of the barn are double rope-hung sash with 6/6 lights. Pane size is approximately 8 1/2" x 10 1/2" with 1 1/4" muntins. The lintel and sill are of dressed limestone. The large arch facilitates the movement of the horses and the large equipment entering and leaving. The closure for the arch is a wooden door made of tongue and groove boards secured on the back with horizontal and diagonal bracing. Raising and lowering of this wooden door was accomplished by the use of a counterweight made of a long rope with a large boulder tied to it. The interior divisions of the barn are all of heavy timber construction.

The water reservoir/swimming pool is located approximately ninety yards west of the house at the top of the rise. It is constructed of the same quarried limestone as the house. The walls consist of a 24" base and 18" top and stand seven feet high, with the wall tops becoming flatter through the use of additional mortar. On the east side of the pool are limestone steps on the outside of the pool leading up to the flattened top surface and down again on the interior side of the pool area. The finished surface of the inside of the pool was concrete. The reservoir is located at the southern interior end of the pool and is self contained. The windmill adjacent to the southern exterior side of the pool pumps the water into the

reservoir and pool. The pool can no longer hold water because of the deterioration of the concrete lining. However, the windmill and reservoir still supply the water for the house and the pump in the front yard. The pump is located in the west yard, thirty-five feet directly west from the porch (209) and game room (208) juncture.

EXTERIOR

The three story house is rectangular in plan and is surmounted by a high, hipped roof from which three chimneys rise. The massive exterior walls are laid up in coursed rusticated limestone. The main facade, which faces west, is divided into five bays, the central bay containing the main entry.

The main facade is two stories in height, as the house is set into the side of a rise in the land.

A porch is attached to the southern side of the house on the main floor level, with a kitchen area below. The porch is the flat roof top of the kitchen. The railing around the outside perimeter of the porch is three feet in height and made of the rusticated limestone. The railing is also of the rusticated limestone and is in proportion to the massiveness of the house structure.

The roof has been covered in asbestos shingles, and was originally of wood shingles.²⁶ The three foot wide eave has deteriorated in at least fifty percent of the length required to wrap around the house. A gutter and downspout assemblage has been added to the house in years past, but

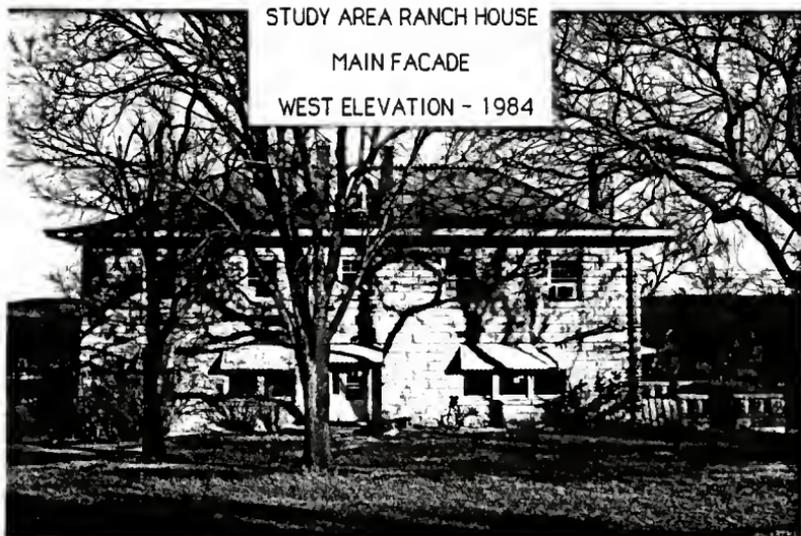
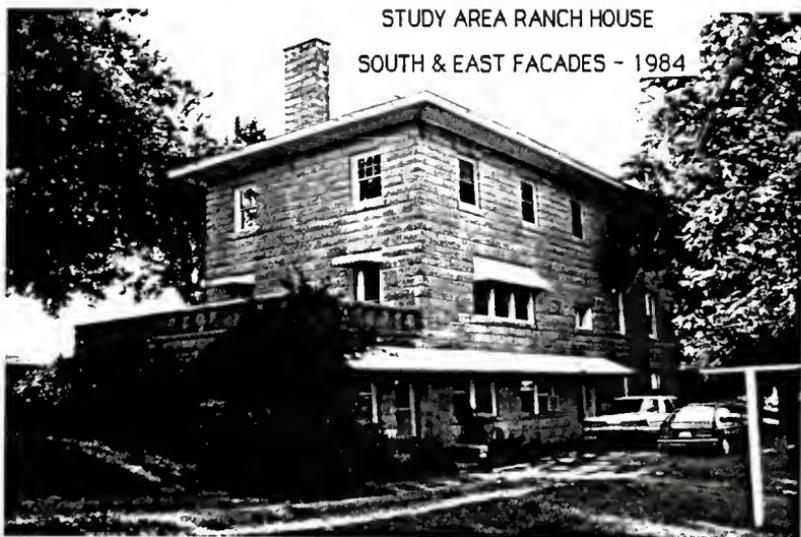


PLATE III B



Source: Personal Photograph

Source: Personal Photograph

currently is partially disconnected. Along the ridge line of the roof is the ridge cap, a vertically placed metal band, which has red-colored heart-shaped ornamentation. In the center of the slope of the roof on the main facade side, is a single dormer.

The dormer has three small 2/2 light windows placed side by side forming a clerestory. Above the windows the dormer face is covered with weatherboards which have been painted white. The roofing material was continued onto the hipped roof of the dormer.

The chimneys are of two types. There are two red brick chimneys along the slope of the roof on the front facade, just inside the exterior limestone wall, each flanking the dormer. Daylight can be seen through the top portions of the mortar, indicating the degree of deterioration of these structures. They also were built with an angle to their stature. The chimney on the left progressively moves 8" to the right as it proceeds up the three stories in height. The chimney on the right progressively moves 3" to the left as it proceeds up the three stories in height. This shift in the structure was built into the chimneys, but has not facilitated their survival. Between the lack of mortar in the top 1/4 of the height (especially in the left chimney) and the built-in angle of the base, the red brick chimneys are precariously remaining standing.

The third chimney is a group of three flues encased in a common rusticated limestone shell. This chimney is centered on the southern end of the main house. The southern side of the chimney is a portion of the exterior wall's stonework.

The original windows were all wooden double rope-hung sash with 6/1 lights. Pane size is approximately 8 1/2" x 10 1/2" with 1 1/4" muntins.

All of the windows have a dressed limestone lintel and sill. All of the window frames were originally constructed to accommodate a screen or storm window. Some of the windows had an aluminum awning installed above them, by the last owner.

The main entry door is 1 light of beveled glass/3 horizontal wooden panels. Above the door is a stationary glass transom, with the door and transom being flanked by stationary glass side lights, three on each side. Applied to the lintel of the door is the original wrought iron lamp. The top of the fixture (probably glass) is missing.

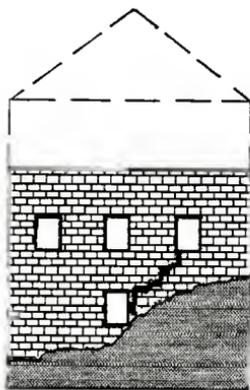
The rear elevation of the house becomes asymmetrical because of the kitchen projecting southward on the southern end. The kitchen has its own entry-way. The rest of the rear facade that faces easterly is nearly a mirror image of the front facade on the second and third levels. The exception being the center window on the second floor which is the same clerestory window that was used on the dormer. The first floor windows are placed proportionately in line with the above windows. The back entry-way is a mirror image of the front entry-way. Again, aluminum awnings have been added to some of the windows on the bottom two floors.

The North and South facades have the same basic elements as those discussed for the West and East facades. The most important features of the South facade are the porch and limestone chimney that have previously been discussed. The most important feature of the North facade is the existence and presence of the original screen windows on all of the windows.

CONDITION OF THE EXTERIOR LIMESTONE

The stages of deterioration located on the C. P. Dewey ranch house were: broken parts, deep cracks, internal cavities, and holes and gouges.

Broken parts and cracks. The broken parts were located on the North wall, middle floor, middle and far right windows. The middle window's sill had a crack $\frac{1}{8}$ inch wide and $\frac{1}{2}$ inches into the depth of the sill.



SETTLING CRACK ON NORTH
FACADE OF RANCH HOUSE

FIGURE 1

The right window had a settling crack which ran from the base of the structure up through the second floor window's sill. The sill was

Source: Personal drawing.

cracked at the point where the window casing fitted into the lower left corner of the stone opening. From there the crack continued on down two courses of stone following the joints. Then on the third course, the end of one of the stones, 2 1/2 inches in width, was cracked and has separated. The fourth course was split along the joint line. The fifth and sixth courses (along the bottom floor window) held deep cracks 2 to 3 inches from the window side.

Internal Cavity. A deep internal cavity was noted on the North facade, first floor, far left side, fourth course up from the bottom, and three feet in towards the center. The weather has eroded away an area 3" w x 1" h x 3/4" d. The limestone in this particular section of the rock is softer and more porous. The interesting feature with the center of this cavity was that it had become a projection outwards, because it was not being eroded.

Upon closer examination, this projection within the cavity had many particles visible on the surface which appeared to be sea shell pieces. These pin-head to 1/8 " diameter pieces had the luminescence which is found in shell matter. Shell particles also are very sturdy against corrosion efforts. If a sampling of this projectile conferred its components, that would explain why the weather had eroded the softer limestone, but had been futile in its attempts to erode the projectile's area, thus creating the projectile.

A funnel has been created within the wall surface, because of this selective wearing away. This funnel will fill with water, assist in the capillary action within the wall, freeze, and end up by creating a spalling situation.

Holes. This structure's surface has been besieged with small holes. They are the size of a straight pin's head. Some areas of the walls were in worse shape than other areas. These holes looked like poc marks.

Upon closer examination, the culprit for the holes was discovered. Trumpet-flower, a flowering vine, had been growing up the limestone blocks. Under the eaves large sections of dried and decaying vine were still present. Upon checking areas which would normally receive less exposure, (as, behind the drain pipe) it could be noted that these holes were filled with the vines clinging system. Small tendrils had grown into the porous limestone to gain better footing for the plant. When the plant was cut down, the tendrils were left inbedded in the walls. As the tendrils have decayed away, a small hole has been left in its place. There are thousands of these holes on all four sides of the building.

INTERIOR

The ranch house plan is from the early twentieth century and consists of a wide, central hall with rooms on either side. At the South end of the building, one large room is on each floor. At the North end of the building, multiple small rooms are on each floor. A small attic is reached from the mid-section of the building on the third floor.

Based upon the detailed identification of materials undertaken through the process of a room-by-room survey, certain conclusions can be

drawn regarding alterations to the original construction of the building. The following elements are common to several of the rooms found on the three floors of the house.

The flooring materials of the second and third stories are of 3" in width tongue-and-groove pine boards, which are all running in a north-south direction, and were stained dark brown and then varnished.

The flooring material of the first story is a concrete slab, over which 9" x 9" linoleum tiles have been laid. The exception to this is the pantry/fruit cellar which has no applied flooring, and the ice room which has the same wood flooring applied to the concrete slab as the upper two stories, over which a broadloom carpet has been installed.

The original finish applied to the stone walls consists of a concrete mixture applied as a cement stucco directly to the masonry, with a finish coat of plaster. The interior partitions are of lath and plaster on the second and third floors, and of limestone or poured concrete on the first floor. All of the original walls were then painted with a wash of dark green. At some subsequent period of time, most the walls were painted a cream color, and then a mint green color. The kitchen and one bedroom on the third floor were the only rooms which have received multiple coats of various colors of paint. None of the rooms have been wallpapered.

All ceilings are of plaster on lath which were painted a cream color.

Throughout the house, the windows are double rope-hung sash with 6/1 lights. Pane size on the top is approximately 8 1/2" x 10 1/2" with 1 1/4"

PLATE IV A
ORIGINAL 1912 WOODWORK



PLATE IV B
REMODELED WOODWORK 1984



Source: Personal Photograph

Source: Personal Photograph

muntins. All the original windows, except the double one in the kitchen, are set in paneled recesses with window seats. The double kitchen window has only a wooden sill.

The original woodwork elements consist of the windows and surrounds, the doors and jambs, and the baseboards. The woodwork throughout the house was of pine boards stained a dark brown and then varnished. The woodwork on the third floor was one shade lighter in tone than the rest of the house. The first and third floors have cove moulding at the window heads and plain jambs, sills, and aprons. The second story (main floor) has egg-and-dart moulding at the heads of the windows and plain jambs, sills, and aprons. The doors are all five-paneled pine, with a glass transom above. The newel posts for the entire staircase also have the egg-and-dart moulding at the top with cove moulding near the base. The balusters are plain squared 2" x 2"s with two per tread. The treads are the worn originals. The handrails are molded in shape. The 8" in height baseboard has 1/4 round moulding at its base.

The following room descriptions enumerate some of the more important features found in the house. Please see the 1912 floor plans for the specific room locations, pp. 12, 13 and 14. The rooms on the plans are numbered consecutively for each floor.

The first floor contained five rooms, a stairwell with landing, and an entry-way.

101 The stairwell wall is the only wood lathe and plaster wall on the first floor. It separates the stairs and landing from the dining room.

102 The cooling room has various walls.²⁷ The West wall is the limestone foundation of the house, to which has been directly applied a rough concrete finish that only partially covers the limestone. Wood wedges can be seen periodically between the stones. The North and South walls are the limestone partition walls that are 24" thick. They too have the concrete finish, but more care was taken in its application. The East wall is of poured concrete. 1" x 10" boards were laid horizontally and the concrete was poured into the form. The door jambs and the frame work for the shelving units in the dining room were part of the original pouring form. The hole in the wall for the heater was added at a later date as the concrete has been chopped away for the opening.

103 The ice room was a storage room for blocks of ice.²⁸ This room is located in a corner of the house and so naturally has two walls which are two feet thick for insulation. The other two (south and east) partition walls were also built of limestone with a two foot thickness. The only window in the room is 3'6" in width x 2'6" in height, and is placed at the exterior's ground level (approximately 5' high off the interior's floor level). The original covering for the ice hatch is missing and has been replaced by a 1960's sliding window.

104 The laundry room is still being used for that purpose.

104A The original sink is being used, but a 1940's cabinet was built to enclose the base.

104B The shower, sink and toilet, and the partition wall of 2" x 4" studs with a wallboard finish was added by Konza Prairie in 1982.

105 The dining room has a large limestone, floor to ceiling, fireplace with limestone mantel on the south wall. The stones for the fireplace are of the same shaping as the walls of the house, as this is part of the South exterior wall for the upper floors. The two foot thickness for the wall not only served as a foundation wall for the upper floors, but also as a fire-guard between the kitchen and the rest of the house. The hearth is the concrete slab which has remained uncovered. The West wall is the poured concrete wall of the pantry. A propane gas heater has been installed in the center of this wall. On the dining room side the wall has a plaster finish. On either side of the heater are two built-in open shelving units 4'3" in width x 3'6" in height. They were probably used for display of the china and the service-ware.

106 The kitchen has a separate entry door on the east side. The kitchen now has "modern" appliances and 1950's cabinets. Originally the cook stove was on the north wall. Evidence of the stove pipe cut-out is still apparent via the buldge in the patched plaster work on both the kitchen and the dining room sides of the wall. The stove pipe went through this wall from the kitchen and then turned upward and paralleled the limestone chimney stack up to the second floor where it cut into the stack. Buldging plaster was again the tell-tale sign of the joining.

The second floor (main floor) contained six rooms, a stairwell and landing/foyer, and an entry-way.

201 The entry-way was an air-lock vestibule. The original lighting fixture is made of brass and is a protective grid covering the light bulb.

202 The foyer area is the large reception area.

Rooms 203 - 207 are entered through double five-paneled wooden doors on the North side of the foyer and then passage through the sewing room.

203 The sewing room was used by the ladies as both a sewing room and parlor.²⁹ Originally it had a doorway leading directly to the ranch manager's bedroom and a doorway which lead to the back hall for the maid's room. The doorway leading to the manager's bedroom has been converted into the sewing room closet entry. Evidence of the door jamb and moulding can be seen through a trellis affair on the manager bedroom's wall. The original transom above the door has been removed and a wooden grill work has been installed.

204 The back hall still has its original closet.

205 The small bedroom was the maid's bedroom.³⁰ It had no closet. In the 1950's built-in hanging and drawer units were installed on the south wall.

206 The bathroom is original with the house. It was a gravitational fed water system, and this ranch house had inside running water when it was built. The fixtures have not been altered.

207 The large bedroom was for the ranch manager and his wife.³¹ It had a small closet. A later manager remodeled the room and began using it as an office. Paneling was applied to the walls and the closet was enlarged and sliding doors were hung. The original door was located and found to be propped against the wall. Konza Prairie has been using the room for equipment storage since approximately 1980.

208 The game room was originally used by the cowboys as an "entertainment center."³² It is quite large, open and airy, and is entered through double five-paneled wooden doors on the South side of the foyer. On the South wall is a fireplace which is made of the same limestone as the fireplace on the first floor and the house walls. The pine wood mantel is a solid 4" thick board wrapping the three room-side walls of the stack and is supported by heavy-set pine wood brackets. Above the mantel, the chimney stack has been finished with plaster and then painted the color of the walls. Both the East and West walls each have three windows placed side by side, offering pleasant views of the landscape. Konza Prairie is currently using the game room as a seminar room in which to show slides and give talks about the prairie. The permanent change they made in the room was the addition of the viewing screen for the slides hanging above the mantel. On the South wall to each side of the fireplace are doors which lead out onto the porch.

COWBOY'S CLOSETS

ROOM 307

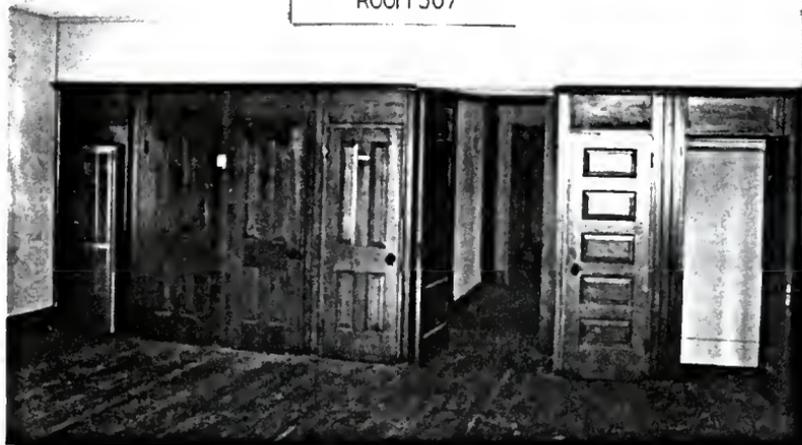


PLATE V B

GAME ROOM - SEMINAR AREA

ROOM 208



Source: Personal Photograph

Source: Personal Photograph

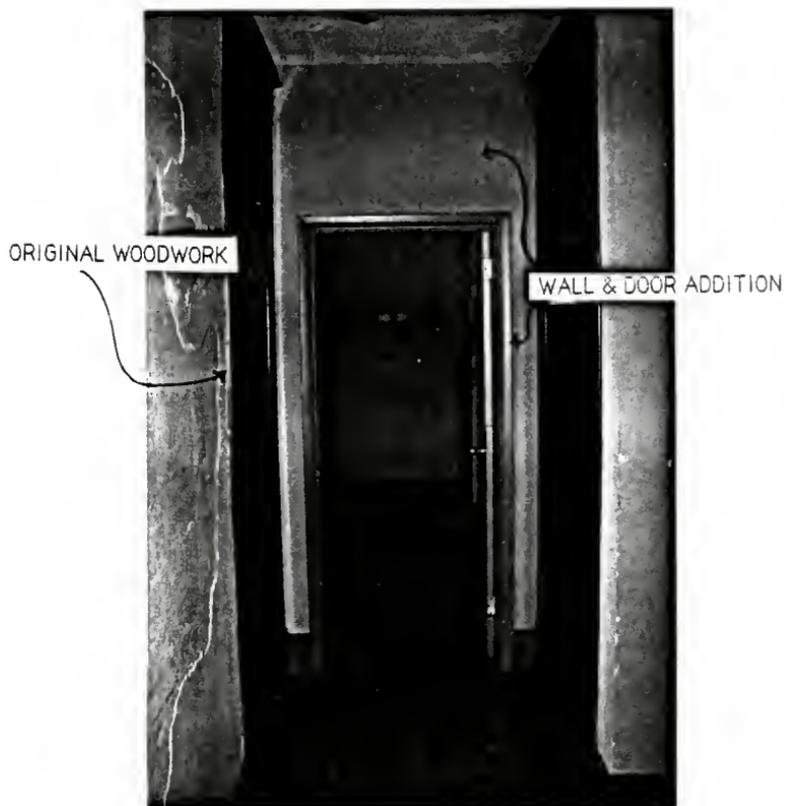
209 The porch has always been the flat-topped roof for the kitchen below. The roofing material used on it was tar paper with tar as the sealer. The railing was built from limestone which matches the house. This roof has a very faint slant, and no drainage system provisions. Each time it rains, water is accumulated on the porch and has caused excessive damage in the kitchen below. Konza Prairie has placed new tar paper and tar on the porch to stop the water flow into the kitchen and prohibited anyone from walking on the porch; but, it has not made drainage provisions from the porch area. Granted none of the owners have destroyed the porches historical integrity through reconstruction; but, to carry on with the poor detailing will continue to provide the water problem in the kitchen.

The third floor contained six rooms and a stairwell and landing.

301 The stairwell and landing provided the hallway which lead from the stairway to the various rooms. There is an original light fixture in the middle of the ceiling of this area. It is the same fixture as is found in the vestibule (201) on the second floor. The third floor hall alteration (PLATE 6) is mid-way in the hall leading to bedrooms #2 and #3 (304 and 305).

302 This bathroom has the original sink and toilet from the time of its installation. However, the running water to the third floor was not

THIRD FLOOR HALL ALTERATION



part of the original construction. The plumbing pipes for the fixtures are outside of the plaster walls, and run down the second floor's (main floor) vestibule's south wall. If this plumbing were original, it would have been placed in the wall cavity as was the other plumbing. The shower stall is fiberglass and was added by the last ranch manager.

303, 304, 305, & 306 -- Bedrooms #1, #2, #3, #4 were used as guest bedrooms.³³ The ceiling, walls, flooring, and woodwork have all been previously discussed. No original lighting fixtures remain. The original wall configurations for room space and closet space are intact.

303 Bedroom #1 has a propane gas stove (not original) which is vented into the northern red brick chimney. The chimney is inset into the room and at that point near the ceiling, there is water damage on the plaster from the deteriorated chimney mortar. The other basic elements in this room have already been discussed.

304 Bedroom #2 is as it was originally except for the lighting fixture previously discussed, and painted woodwork. The other basic elements in this room have already been discussed.

305 Bedroom #3 has been painted several additional times, as noted previously. The last two colors were not only painted on the walls, but also painted on all of the woodwork in the room. The flooring in the room has been striped and re-stained but no sealer was applied again. The closet flooring was striped and then left as raw wood. The other basic elements in this room have already been discussed.

306 Bedroom #4 is as it was originally, except for the lighting fixture which has been changed. The other basic elements in this room have already been discussed.

307 The cowboy bunk room was a large open area for several single beds.³⁴ Along the North wall were individual closets for the cowboys. The closet doors on the two sides of the room are different in styling. Determination could not be made if the two sets of closets were constructed at different times or if they were intentionally built with different panel configurations in the doors. The hardware on both sets is original and identical, as well as the frame work surrounding the doors is identically constructed and stained. Propane gas heaters have been introduced into the far easterly and far westerly closets. The area above the closets was enclosed at the time of the heater installation, in order to camouflage the duct work to the southern red brick chimney.

INTERNAL SYSTEMS

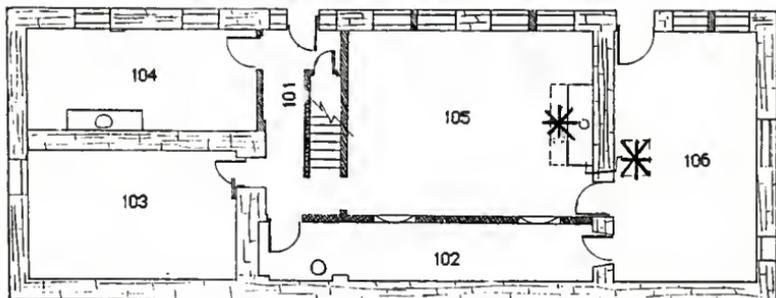
HEATING

The existing propane gas heaters were installed in the 1940s. The house was originally heated by wood burning stoves located in the game room (208) and sewing room (203), by the cook stove in the kitchen (106), and by two stone fireplaces (208 & 105).³⁵ The third floor received minimal heat, while the attic was unheated. The stove positions are indicated by the symbol * on the heating plans, p. 43.

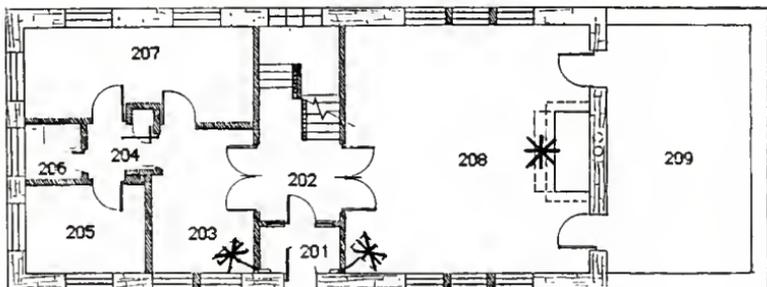
PLAN VII

HEATING

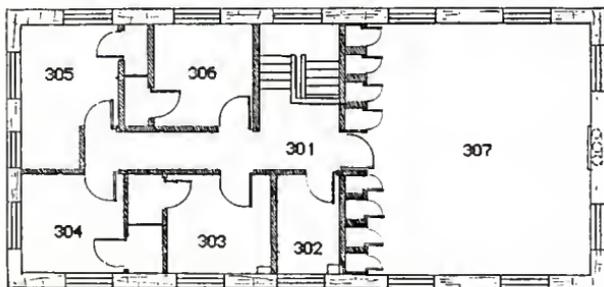
DEMEY RANCH HOUSE - FIRST FLOOR - 1912



DEMEY RANCH HOUSE - SECOND FLOOR - 1912



DEMEY RANCH HOUSE - THIRD FLOOR - 1912



* HEATING

SOURCE: PERSONAL DRAWING.

The wood stoves in 208 & 203 have been replaced with propane gas heaters and are vented into their respective flues. The cook stove in 106 is gone and first floor supplementary propane gas heaters have been installed in the dining room (105) and the ice room (103). Additional propane gas heaters have been installed in the bunk room (307), the third floor bathroom (302), and bedroom #1 (303). Supplementary duct work has been added in 307.

ELECTRICAL

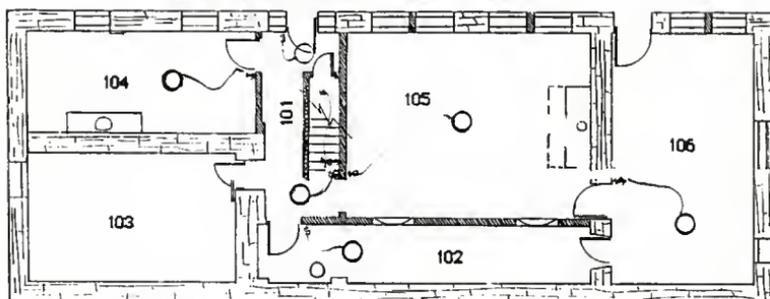
* The existing electrical system is 110 volts, with supplemental 220 wiring having been added by KPRNA to accommodate a window air conditioner on the third floor.³⁶

The major source of artificial lighting in the building is from incandescent fixtures in the center of each area. These are indicated by the symbol O on the lighting plans, p. 45. The exact fixtures were discussed in the documentation of each interior space.

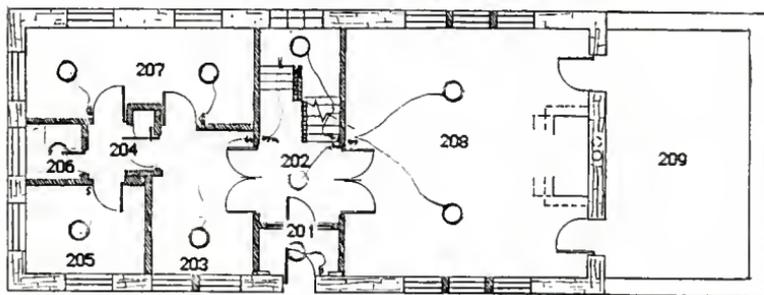
PLAN VIII

LIGHTING

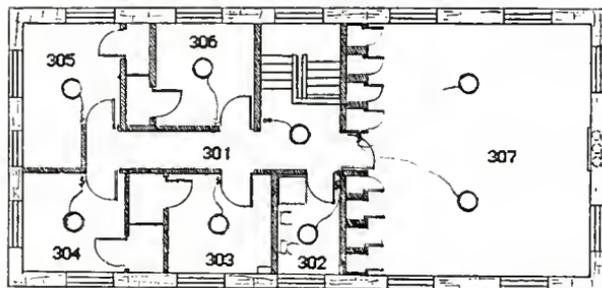
DEMEY RANCH HOUSE - FIRST FLOOR - 1912



DEMEY RANCH HOUSE - SECOND FLOOR - 1912



DEMEY RANCH HOUSE - THIRD FLOOR - 1912



○ LIGHTING

SOURCE: PERSONAL DRAWING.

NOTES
CHAPTER I
HISTORICAL USE INVESTIGATIONS

¹² *Konza Prairie - The tallgrass laboratory*, (Manhattan, Kansas: Konza Prairie Research Natural Area, Division of Biology, Kansas State University, 1984), n. pag.; *Konza Prairie - The tallgrass laboratory*, (Manhattan, Kansas: Konza Prairie Research Natural Area, Division of Biology, Kansas State University, 1980), n. pag.

¹³ *Topeka Capital* [Topeka, Kansas], 10 February 1918, n.p., n.c.

¹⁴ *Topeka Capital*, 10 February 1918.

¹⁵ Frank Farmer, "New Turn for Kansas Historic Dewey Ranch," *American Hereford Journal*, July 1972, p. 676.

¹⁶ Deeds Office, Riley County Courthouse, Manhattan, Kansas.

¹⁷ Appraiser Office, Riley County Courthouse, Manhattan, Kansas; *Konza Prairie - The tallgrass laboratory*, 1980 and 1984.

¹⁸ Farmer, p. 676.

¹⁹ Clare Cooper, "The House As Symbol of the Self," *Designing for Human Behavior: Architecture and the Behavioral Sciences*, Jon Lang, et al, eds., (Stroudsburg, Pennsylvania: Dowden, Hutchinson and Ross, Inc., 1974), pp. 130 & 136.

²⁰ Cooper, p. 131.

²¹ Deeds Office.

²² *Konza Prairie - The tallgrass laboratory*, 1980 and 1984.

²³ *Konza Prairie - The tallgrass laboratory*, 1980 and 1984.

²⁴ Appraiser Office.

25 Personal interview with Lloyd C. Hulbert, Director of Konza Prairie Research Natural Area, Riley County, Kansas, 28 June 1984.

26 Hulbert, interview.

27 Personal interview with Jean C. Dallas, Director/Curator of the Riley County Historical Museum, Manhattan, Kansas, 22 May 1985.

28 Hulbert, interview.

29 Hulbert, interview; Edna Williams, [Tour Director for the Riley County Historical Society], *Docent Script for the Dewey Ranch House* [compiled from interviews with people directly associated with the Dewey Ranch staff], (Manhattan, Kansas: Riley County Historical Museum, 1980). pp. 1-2.

30 Williams, Docent Script.

31 Williams, Docent Script.

32 Williams, Docent Script; Hulbert, interview.

33 Williams, Docent Script; Hulbert, interview; Personal interview with Glenn M. Busset, retired State Extension Agent for the State of Kansas, 20 May 1985.

34 Williams, Docent Script; Hulbert, interview; Busset interview.

35 Busset, interview.

36 Hulbert, interview.

CHAPTER II

BACKGROUND INFORMATION ESTABLISHING THE 1912 CONTEXT OF THE STUDY AREA

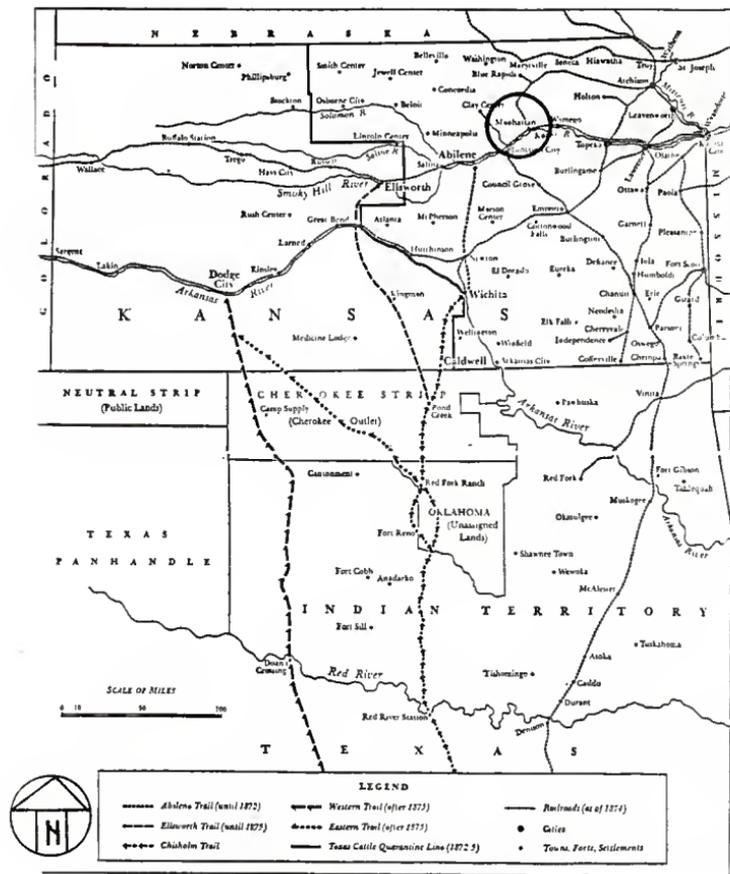
Local history is an exploration of the relative totality of "what happened" in a certain locality over a given period of time. Through the investigation of the historical documents available discussing Riley County and its neighboring areas, the following narratives can be established as representative of the era of the times in which the Dewey Ranch was established, built, and used. Understanding of the Dewey Ranch structures is built upon their physical history and then set into a larger cultural history in order to understand the individual and collective motivation behind building decision making.³⁷

The following narratives are provided so that the reader might become familiar with the life-style which was prevalent in the center of the Great Plains from shortly before the turn of the twentieth century until approximately 1920 A.D.. The daily lives of the farmers and ranchers in Kansas reflected those styles and the value systems by which they lived. Vast changes in society and the every day life of the people were occurring rapidly. The people learned to deal with these changes, as will be noted further on.

Through the late 1800's the prairie land remained an untamed wilderness. Pioneers were arriving daily and learning to cope with this

CATTLE DRIVE TRAILS

MID-1870'S



Source: Dykstra, Robert R. *The Cattle Towns*. New York: Alfred A Knopf, 1968, p. 8-9.

INDIANS RETURNING TO THE RESERVATION 1864



RETURNING TO THE RESERVATION (1864).

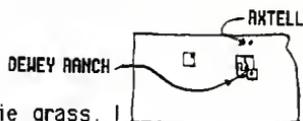
Mr. W. W. Ross, Indian agent, and Capt. Ed. Krapp, to quiet the alarmed settlers, went to their camp on the head of South Branch, and, explaining the situation to the chiefs, induced them to return to the deserted villages on the Pottawatomie reserve.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 29.

unfamiliar world and way of living, since the prairie was unlike the developed and mechanized world of the eastern part of the United States. By the turn of the century little had changed in the pioneers world, except that the population of the area had quickly expanded. Then during the early nineteen hundreds, many inventions and improvements occurred. By 1920, the living conditions of the people in the prairie land communities had changed and improved. The way of life on local farms and ranches in the area also reflected those improved living conditions.

The history of a community is the story of the people. The family information and photographs were excerpted from the various volumes noted in the text and supplied for the readers understanding of the culture in which the Dewey Ranch House was erected and used.

Claude B. Thummel recalls in his book regarding the family farm in Axtell, Kansas:



The land was largely prairie grass. I remember as a small boy seeing patch after patch of the prairie sod turned over to become grain fields. When the farm was finally sold in 1902, the southwest quarter still remained as prairie grass reenforced by bluegrass grown from seed which Father had broadcast along the creek and lower parts of the land from horseback.³⁸ (PLATE VIII A)

WHERE WAGONS PASSED ON THE PRAIRIE



The treeless flat prairie land of Kansas, still shows the wagon wheel ruts.

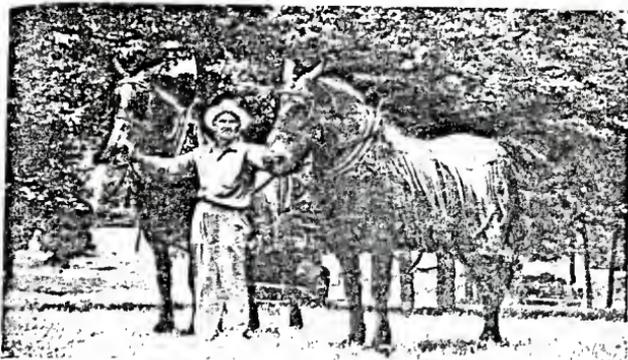
Photo by Henry F. Schmidt

WHERE WAGONS PASSED

Wagon wheel ruts made years ago on old Santa Fe Trail, but now overgrown with grass. In distance is newly paved Santa Fe Trail. Beyond is Santa Fe Railroad and beyond that Arkansas River.—Photographed near Dodge City.

PLATE VIII B

A FARMER AND HIS TEAM OF HORSES

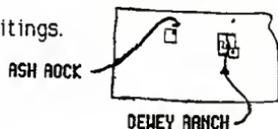


A Farmer and His Team of Horses. In earlier times farmers took great pride in their horses. Now there are few horses on farms.

Source: Isely, Bliss, and W. M. Richards. *Four Centuries in Kansas*. Wichita, Kansas: The Mc Cormick-Mathers Company, 1936, p. 100.

Source: Isely, Bliss, and W. M. Richards. *The Kansas Story*. Oklahoma City, Oklahoma: Harlow Publishing Corporation, 1961, p. 309.

Leo E. Oliva, an historian and member of the Ash Rock community, researched and compiled a book about Ash Rock Township, Rooks County, Kansas, encompassing the end of the 1800's and the beginning of the 1900's. The following are excerpts from his writings.



Food (even into the turn of the century)

The food the pioneers ate was mostly provided and prepared by the household. So-called "store-bought" items were few and usually included flour, coffee, sugar, baking powder, and occasionally canned fruits and vegetables. Meat was supplied by hunting game, including fowl, rabbits, and deer, while the domestic meat supply was usually salt pork. Not much beef was eaten by pioneer families, although they had milk and cream from one or more milch cows. Chickens supplied eggs and sometimes a baked chicken or chicken and noodles. Probably the staple food was corn, for which there were hundred of ways of preparation from corn on the cob to hominy, with ground corn meal used for corn bread. A garden supplied fresh vegetables, including potatoes, onions, carrots, beans, rhubarb, cucumbers, cabbage, squash, and pumpkin. Sometimes families gathered wild plums or berries. Sugar was scarce and major substitutes were molasses and honey. Since coffee also had to

be purchased and was often scarce, wheat, barley, rye, peas, and other vegetables were roasted, ground, and used as substitutes.³⁹

Major methods of preservation were salting and drying. Some items could be kept frozen during winter months. Dairy products were often kept cool during the summer by lowering them down a well in a bucket. The most popular dishes of early settlers appear to have been pancakes (flapjacks), soda biscuits, gravy, salt pork, and corn bread.⁴⁰

Farming

It should be noted that the plowing of great expanses of the prairie grasses contributed to wind and water erosion,⁴¹

Farm power was provided by people and animals, mostly horses and a few mules. Equipment was small and required much labor. (PLATE VIII B) Two technological developments of major importance to sod-house settlers were barbed wire and windmills. Fencing was a big problem where there were no trees, and barbed

wire was often used first to fence cattle out of cultivated areas and later to fence them in on private property. The windmill made possible the use of a natural resource, the proverbial Kansas wind, to bring underground water to the surface for livestock and household uses. Before a family had a windmill, they either hauled water or pulled it from a well with a bucket and rope. ⁴²

Women

The life of the farmer's wife was usually more difficult than that of the farmer. One pioneer remarked that "plains travel and frontier life are peculiarly severe on women and oxen." When women came to Ash Rock they were not greeted with many favorable circumstances. Many noted the perpetual winds, absence of water, absence of trees, extreme heat in summer, and constant problems with mice and rats that infested the walls of soddies. Many women were saddened because they had left behind fine homes and furniture, flowers and gardens, only to face the problems of life in a crowded soddy, even though that was supposed to be a temporary existence.

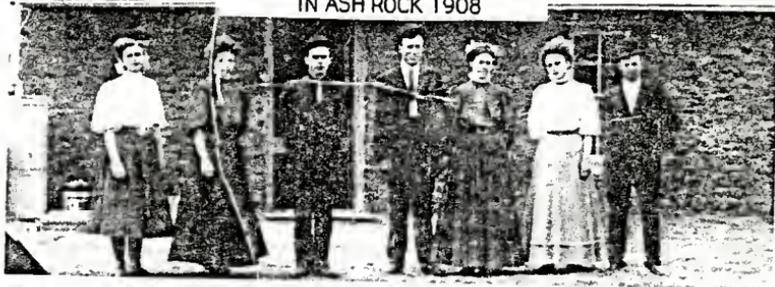
SOD HOUSE SURROUNDED BY
OPEN PRAIRIE 1908



Wilford Macy farmstead, NW¼ 13-6-16, showing the sod house he built in 1908 and lived in, with his family, until a frame house was built nearby in 1915 or 1916. As noted in Chapter II, where another view of this soddy was shown, this was the last sod house to be used in Ash Rock.

PLATE IX B

LAST SOD HOUSE CONSTRUCTED
IN ASH ROCK 1908



Wilford Macy sod house, the last soddy to be constructed in Ash Rock, was built in 1908 and served as the home for Wilford and Sarah Vanderlip Macy until 1916. It was located on NW¼ 13-6-16. Note the shingle roof. Those in the photograph, left to right: Geneva Bodine, Edith Bodine, Willie Vanderlip, Wilford Macy, Sarah Vanderlip Macy, Mabel Bodine Vanderlip, and Oscar Vanderlip. Another photograph of this soddy may be found in Chapter IX.

Source: Oliva, Leo E. *Ash Rock and the Stone Church*. Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983, p. 88.

Source: Oliva, Leo E. *Ash Rock and the Stone Church*. Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983, p. 14.

Many longed to leave and go back home, and some did. Those who stayed and survived became stronger; they carved a life out of the prairie and reared their children to take over the land. ⁴³ (PLATES IX A and IX B)

Education

One thing almost all parents wanted for their children was a good education. Pioneer parents were almost universally concerned about the education of their children. That was a part of the idealism of the sod-house frontier; the children should learn more and thereby have a better life than the parents knew. Learning was seen as the hope of the next generation, and that heritage was still evident in 1983. ⁴⁴

Fuel and Energy

Another problem faced in the late nineteenth century, was the supply of fuel and energy. Early settlers had to provide all their fuel; there were no power companies. Traditionally, pioneers in America had burned wood for cooking and heating, but there were few trees on the Great Plains. What timber there was was soon used up by the first settlers.

When the railroads reached nearby towns, coal could be purchased even though that required a cash outlay. Meanwhile, substitutes had to be found. Pioneer families burned twisted grass, corn cobs, corn stalks, even corn on the cob. They also burned buffalo and cow chips. ⁴⁵

Fuel for heating and cooking was only one of the problems. Lighting was another. There were no electric lights, no flashlights, no propane lamps. In summer months lights were not so important, for people scheduled their hours so they slept while it was dark, but winter months brought need for artificial lighting. Homemade candles were commonly used, made of tallow and a wick and formed either by a mold or by dipping. A recent invention, the kerosene lamp, made its appearance shortly before the settlement of the area, and it was considered a great improvement in spite of its smell, sooty chimneys, and the fact that the petroleum product, commonly called "coal oil," had to be purchased. ⁴⁶

Energy for farm work came from muscles - human and other animals. The age of steam power came a little later to the

farms, and the internal combustion engine was applied to agriculture after the turn of the century. Thus, during the early years, both farming and house work required huge amounts of labor, but such energy required little capital outlay; it was cheap. Because it [farm and ranch work] took much time as well as energy, travel was limited. People seldom went to town, and seldom visited neighbors over two miles away.⁴⁷

Nature

Pioneer farmers faced the problems of nature with varying degrees of success. A combination of winds, droughts, prairie fires, blizzards, and other natural phenomena drove some settlers off the land. Those who stayed, faced the hardships and survived, developed a tenacious self-reliance and individualism as well as a mood of optimism.

Beginning of the Twentieth Century

Inventions and Improvements

The sod-house era passed quickly in Ash Rock Township, and the latter years of the nineteenth century witnessed the building of

PLATE X A
PRAIRIE RESIDENCE AND
FARM BUILDINGS 1901

60



RESIDENCE AND FARM BUILDINGS OF MR. J. M. BISBEY, Pavilion, 1901

PLATE X B
LIMESTONE HOUSE 1901



RESIDENCE OF MR. ALBERT DIEBALL, NEAR ALMA, 1901

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 283.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 300.

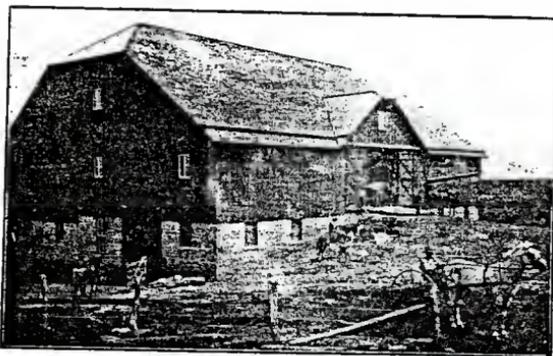
PLATE XI A
WOODFRAME HOUSE

61



RESIDENCE OF MR. M. W. JANES, near Willard.

PLATE XI B
SOD BARN



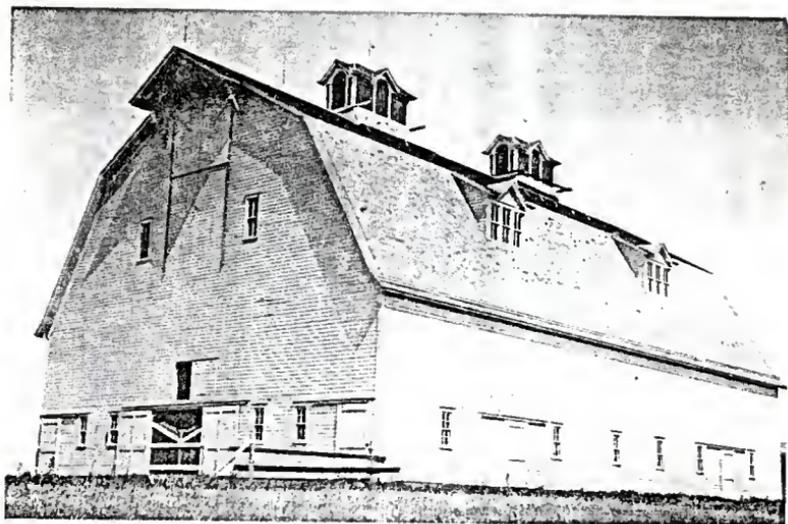
MR. M. W. JANES'S BARN, near Willard.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 314.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 314.

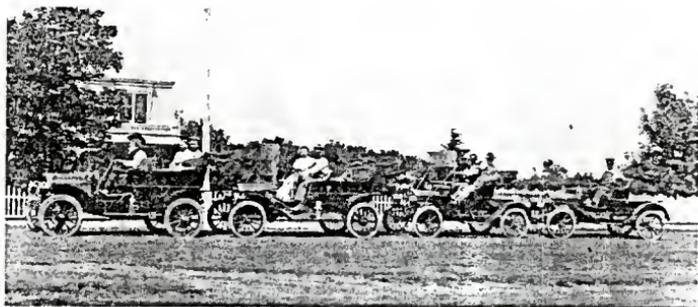
frame houses, fencing of the land, construction of roads, increasing amount of land under cultivation, as well as the development of schools already discussed. The community received rural mail delivery and telephone service in 1904. Steam-powered agricultural machinery entered the scene, and after 1900 the internal-combustion engine was adapted to tractors, trucks, and automobiles.⁴⁸ (PLATES X A, X B, XI A and XI B)

These new inventions came slowly at first, but the second and third decades of the twentieth century saw a virtual revolution in transportation and farming practices. i.e.: The Thomas barn, believed to have been the largest barn in Kansas at the time it was built, was constructed, 1910-1912, primarily as a horse barn at a cost of approximately \$8,000. It has long been one of the famous landmarks in Ash Rock Township.William Ulysses Grant Thomas,, had acquired a considerable amount of land over the years and required the services of many work horses. His old barn was really nothing but a shed, much too small for all the horses he used by 1912,



Source: Oliva, Leo E. *Ash Rock and the Stone Church*. Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983, p. 14.

THE AUTOMOBILE CAME TO ASH ROCK



At the same time roads were being built and farm equipment was changing the way people farmed, the automobile came to Ash Rock. The above photo was taken at the Julius Gravenhorst home about 1910. The front car has Julius Gravenhorst at the wheel with his wife and daughter, Helene and Nellie, in the back seat. The second car contains George and Alice Gravenhorst. The third contains driver Arthur Koontz (his car) and Billie Cobble, and the fourth car was owned and driven by Carl Gravenhorst.

Source: Oliva, Leo E. *Ash Rock and the Stone Church*. Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983, p. 98.

and it had no loft, only an arched roof. When he built a new one, he wanted a barn that his horse herd would not outgrow. He could not foresee that within ten or twenty years the tractor would replace the horse.⁴⁹ (PLATE XII)

At the same time the roads were being built and farm equipment was changing the way people farmed, the automobile came⁵⁰ The automobile revolutionized travel just as the tractor changed agriculture. It was to have farreaching social consequences.⁵¹ (PLATE XIII)

In addition to improvements in buildings, farm equipment, and roads, Ash Rock Township received free rural mail delivery and telephone service in 1904. Prior to that time the residents had to call at a post office for mail.⁵²

The Woodston Mutual Telephone Company began service in the summer of 1904, and the party lines (and patrons on each) were printed⁵³

Since the homes of the people had improved structurally, so too had the facilities offered within and/or adjacent to the house. Thummel goes on to give an example:

Among winter tasks was that of putting up ice. Not every farm had an ice house [For

PLATE XIV
PUTTING UP ICE

66



Among winter tasks was that of putting up ice. Not every farm had an ice house, but A. L. Bonebrake did. These two photos show A. L. Bonebrake, Billie Macy, Ephraim Wiren, J. A. Bonebrake, and an unidentified man cutting ice on the pond north of A. L. Bonebrake's house. The ice was hauled in wagons to the ice house (a pit dug into the ground with a roof over it) where it was packed in straw. The blocks were also packed with chopped ice so there were no air holes. About four feet of straw for insulation was packed on all sides of the ice, which would keep through the following summer.

Source: Oliva, Leo E. *Ash Rock and the Stone Church*. Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983, p. 113.

those farms that did have an ice house -] The ice was hauled in wagons to the ice house (a pit dug into the ground with a roof over it) where it was packed in straw. The blocks were also packed with chopped ice so there were no air holes. About four feet of straw for insulation was packed on all sides of the ice, which would keep through the following summer.⁵⁴ (PLATE XIV)

Early Twentieth Century Improved

Conditions and Prosperity

Just as those pioneer settlers had hoped when they came to Ash Rock in the 1870s and 1880s, that the community would soon have facilities and services as good as or better than [those] they had left to settle in a frontier area, the community enjoyed conditions in the early twentieth century that could no longer be called "primitive" or "backward." An Ash Rock contributor to the *Woodston Weekly Echo*, January 25, 1906, declared that "We really believe that Ash Rock Township can truthfully boast of having better roads, telephones, and mail facilities than any other township in the county."⁵⁵

Conditions continued to improve into the 1920s, and a degree of prosperity unknown before and for some time after was enjoyed during the early years of the new century well into the 1920s. It was the time when those who had stayed on the land and stuck it out during the rough times saw some rewards for their hard work and determination.⁵⁶

The Dewey household was also in a time of prosperity, as was discussed in the Historical Use Investigations, Chapter I. Not only was a wood frame structure provided for the family, but a stone structure was provided for the hired help, namely the cowboys of the ranch, the ranch manager, and the maid/cook. An assumption will be made that the lives of the people on the Dewey ranch had been much like those of the people described by Thummel in his writings.

Matt Thomson reproduces in his book *Early History of Wabaunsee County, Kansas*, many articles and photographs taken from various publications of the newspaper in Alma, Kansas, 1901. The following excerpts are from those citations:

Wealth in Cattle Chapter



.....Besides boasting of as fertile valleys as are to be found anywhere it is true that many

thousands of cattle roam over our hills and fatten on the nutritious grasses thereon - requiring little or no attention from their owners. The result [of this]..... is seen in the number of our people employed in the cattle business, who, a few years ago, had never entertained a thought of acquiring a fortune, or even a competency, through the medium of the cattle industry." ⁵⁷ (PLATES XV A, XV B, XVI A, XVI B and XVII B)

How the Old Pioneer Lived Chapter:

Yet these hardships [struggle for life, food, shelter, clothing] were not without their compensations. If the viands [foods] were few the appetite was good and digestion was never impaired by partaking of a mutiplicity of dishes, such breakfast delicacies as mush and milk - often with the milk wanting [were served]. ⁵⁸

These [pioneer housewives] never dreamed that it was a hardship to wear old clothes, when - there were no callers, or if so, all met on a common level - the one being no better apparelled than the other. ⁵⁹

PLATE XV A
HERD OF HEREFORDS

70



HERD OF HEREFORDS, FOWLER'S RANCH, Maple Hill.

PLATE XV B
HEREFORDS NEAR STREAM

Waterways on the prairie
are marked by developed foliage.



RURAL SCENE ON THE FOWLER RANCH, Maple Hill.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 368.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 368.

PLATE XVI A
VISITORS AT THE RANCH



VISITORS AT THE ALLENDORPH RANCH.

* Cattle herds can be seen to the horizon's edge on the sparse and mildly sloping terrain of Eastern Kansas.

PLATE XVI B
CATTLE ROUND-UP
ON THE PRAIRIE



SCENE ON DAVIS BROS. RANCH, NEAR ALMA.

*

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 366.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 366.

PLATE XVII A
COWBOYS OUT FOR A ROUND-UP



The treeless flat prairie land of Kansas.

PLATE XVII B
1898 COWBOYS NEAR A WOODFRAME
HOUSE ON THE PRAIRIE



SCENE AT DAVIS BROS.' RANCH, 1898.

Sparse trees planted around homestead buildings provide respite from the Kansas wind and sun.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 365.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*.
Manhattan, Kansas: Ag Press, 1973, p. 339.

The old pioneer will tell you truly that there were no hardships in the early days that would embitter the cup of happiness as do the trials of today. If there was isolation, there was, also, contentment. If of luxuries there was a dearth, no canker of debt-worm followed in the wake of the few that were the more heartily enjoyed by reason of that scarcity.⁶⁰

The pioneer's strong arm and earnest endeavor laid the foundation upon which was builded the happy home⁶¹

From succeeding chapters in Thomson's book, the following highlights are presented.

An article from the Alma paper about a *Mr. A. S. Allendorph* was informative as to how his cattle business grew and multiplied around the turn of the century. The article states:

The land was all open prairie but the second year [of Mr. Allendorph's cattle business] seven sections [of prairie land] were fenced and 4,000 head [of cattle were] secured at \$1.75,⁶²

Another article from the Alma paper was descriptive about the daily life on a cattle ranch. *Scene on Davis Bros.' Ranch* relates:

An every day occurrence on the range in the fall when the boys "out for a round up" have bunched the cattle preparatory to cutting out - the one task being but preliminary to the other. The round up means work. It means long rides over hill and dale and vigilant search through clumps of bushes and in cozy nooks for the widely scattered remnants of the herd. In pleasant weather it is agreeable employment, but when the threatening clouds lower and the vivid lightning plays on the tips of the long horns the thought that wells up is 'the dearest spot on earth is home' - a thought that is usually dispelled by the first, bright rays of the summer's sunshine.⁶³ (PLATES XVI B, XVII A and XVII B)

An additional side-light to ranch life comes from the article *Visitors at the Ranch*, from the Alma paper.

A visit at the ranch from the ladies is to the cowboy like an oasis in the desert. Their coming means a break in the monotony of everyday life on the range; it means an array of tempting viands at the noon hour to which the boys are hardly accustomed, to say nothing of the bright rays of sunshine for which old Sol is in nowise responsible.⁶⁴ (PLATE XVIII A)

COWBOYS ON A CATTLE DRIVE



23. Rare photo of cowboys camped near a cattle town. This group lounges on the Cherokee Strip below Caldwell in the mid-1880's.

PLATE XVIII B

POYNTZ AVENUE

MANHATTAN, KANSAS

1866



"Government train" is a horse drawn wagon train passing along the dirt road of Poyntz Ave., the main street of Manhattan, Kansas.

POYNTZ AVENUE, MANHATTAN, 1866.

A government train on the way to Fort Leavenworth—taking forage.

Source: Dykstra, Robert R. *The Cattle Towns*. New York: Alfred A. Knopf, 1968, plate 23.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*. Manhattan, Kansas: Ag Press, 1973, p. 301.

The following are antidotes taken from *The Kansas Story* by Bliss Isely and W. Marvin Richards, to be used by the reader as background information for the times being referred to in the text of this paper.

- When the people realized that the old West had passed away and that no land could be had in Kansas except by buying it, prices of farms and city lots began to rise at once.⁶⁵ (PLATE XVIII B)

Changes in Health Requirements

- The common drinking cup was in use in public places everywhere. In 1904 parents were urged to provide school children with separate cups so that one child with a contagious disease would not spread it to another. In 1909 common cups on railroad trains was forbidden in Kansas.⁶⁶ On ranches and farms a bucket was filled with drinking water from the hand pump out-of-doors, and a common ladle was used for dipping and drinking. The Dewey hand pump is located west from the front side of the house (front yard).

- In approximately 1915, the Kansas legislature passed laws to protect the purity of food and water, and strengthened the quarantine laws for the protection of the public during epidemics.⁶⁷

Inventions

- The period from 1890 to 1920 was marked by new inventions. Every year saw some new implement in the field to lighten work. It was during this time that the disk harrow, disk plow, lister-drill, tractors and combines came into common use.⁶⁸

- Windmills began to appear in Kansas around the turn of the century. They were built on a hill where the notorious Kansas wind blew. They averaged six feet in diameter and were designed to pump water for the home and the farmyard.⁶⁹

- In 1900 a few automobiles could be seen on the Kansas roads. Men with horses did not like automobiles. In the twenty-year period of 1900-1920, automobiles and trucks almost completely supplanted horse-drawn vehicles on the roads of Kansas.⁷⁰

- The coming of motor cars brought a demand for better roads. (PLATE XIX A)

- Very few railroads were built in Kansas after 1890. The two most important railroads in Kansas were the Santa Fe and the Kansas City, Mexico, and Orient. The K.C.M.O. was built only in part.⁷¹ Part of the Dewey Ranch is on undeveloped K.C.M.O. land.

- Pioneering in airplanes was occurring between 1908 and 1928. Clyde Cessna organized the Cessna Aircraft Company in Wichita and flew at county fairs.⁷²

Occupations of Kansas Residents

- From the early days of statehood (1880) up to the close of World War I (1915) farmers in Kansas grew horses and mules for sale, to be used for carriages, to draw wagons and work farms, and for riding.

POOR ROADS

(A HORSE PULLING A CAR)

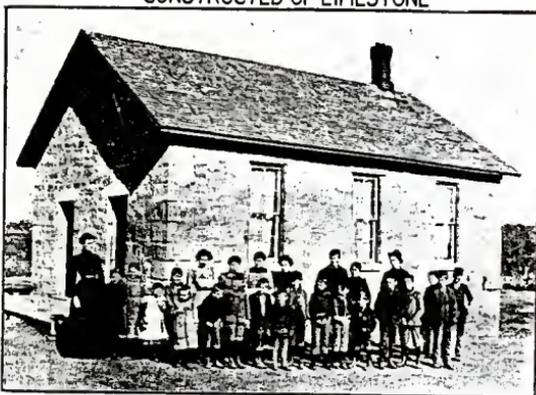
In the Time of Poor Roads. Scenes such as this were common in Kansas before the development of a state highway system.



PLATE XIX B

THE "MILL" SCHOOL

CONSTRUCTED OF LIMESTONE



THE "MILL" SCHOOL.
District No. 59, near Paxico.

Source: Isely, Bliss, and W. M. Richards. *The Kansas Story*. Oklahoma City, Oklahoma: Harlow Publishing Corporation, 1961, p. 312.

Source: Thomson, Matt. *Early History of Wabaunsee County, Kansas*. Manhattan, Kansas: Ag Press, 1973, p. 204.

Kansas riding horses were preferred for the United States cavalry. Fort Riley became the chief cavalry training school of the army, partly because Kansas provided the horses. ⁷³

- Beginning in 1912, each county in the state provided advice of an agricultural expert to the farmers known as the county farm agent. ⁷⁴

- From 1905 to 1914 was the organizational and transitional period of the clubs for boys and girls known as 4-H clubs. The clubs promote good citizenship and interest boys and girls in better farming and homemaking techniques. ⁷⁵

Discoveries

- From approximately 1890 to 1917 coal, oil, natural gas, helium gas, volcanic ash, and salt were discovered in Kansas and efforts to mine, drill, and pump these discoveries were occurring. ⁷⁶

- The natural building materials of stone (limestone), clay for brick and tile, cement and gypsum had been discovered by the pioneers and were now being utilized abundantly for buildings. ⁷⁷

Schools

- The improvement of schools began in 1890 with better school buildings, and continued when in 1903 the attendance laws were strengthened so that all children from seven to sixteen years of age were required to attend school at least five months a year, or until they had

graduated from the eighth grade. Consolidation of the one room schools into graded school districts was gradually achieved from 1900 to 1920 as the development of improved roads continued. ⁷⁸ (PLATE XIX B)

- Between 1900 and 1915, laws were passed to help build high schools and the programs which they offered. ⁷⁹

- The first junior high school plan was adopted in 1913, and the first junior college plan in 1923. ⁸⁰

Livestock

- Two fifths of all Kansas is pasture for livestock. As the wild animals decreased in numbers, the cattlemen began growing cattle. Great stretches of bluestem mixed with other prairie grasses extended north and south over the Flint Hills. This is the largest pasture region in America where the rainfall exceeds thirty inches a year. ⁸¹

Thus in 1912, when the Dewey Ranch House was built, the people of Kansas and those in Riley County were still in an evolution process. The people living then were children and grandchildren of the Kansas Territory pioneers. They had grown up under a system of hard work with few frills. The land in Kansas had been abundant and the farmers and ranchers who lived in Riley County realized and utilized their land's potential. Progressive improvements were rapidly occurring from 1900 to 1920 both locally and nationally.

The Dewey Ranch, during the 1911-1912 era, should be documented and preserved as a reflection of those times. "America's built agrarian environment is essentially a product of the nature of its crops and the geographical locations and cultural backgrounds of it's farmers, [ranchers, builders, and residents] Ranching in the West and Southwest called for bunkhouses for cowhands and corrals, blacksmith shops, and tackle sheds for the care of the horses," Wrenn states.⁸² He goes on to say, "No matter where agricultural buildings were located, the major elements of their form were shaped by their use."⁸³ Without places such as the Dewey Ranch House kept in 1912 context, the general public will not be able to begin to understand nor comprehend the attitudes, living conditions, and life-styles of the managers and cowboys who helped to run the large cattle ranches found in the Flint Hills at the turn of the twentieth century. Greiff also feels, "We must seek a greater appreciation and understanding of the many cultures and styles that have formed the American cultural heritage" ⁸⁴ Wrenn goes on to say, "If American farm structures continue to diminish or disappear, we will have lost another irreplaceable reminder of our heritage."⁸⁵

Our heritage includes those changes previously discussed, that were occurring so rapidly during this era, and are now taken for granted and accepted as "the way of life."

NOTES
CHAPTER 2
BACKGROUND INFORMATION ESTABLISHING
THE 1912 CONTEXT OF THE STUDY AREA

³⁷ Thomas C. Hubka, *Big House, Little House, Back House, Barn* (Hanover and London: University Press of New England, 1984), p. XI.

³⁸ Claude B. Thummel, *A Kansas Traveler* (Manhattan, Kansas: Ag Press, n.d.), p. 11.

³⁹ Leo E. Oliva, *Ash Rock and the Stone Church* (Woodston, Kansas: The Sons and Daughters of Ash Rock, 1983), p. 14.

⁴⁰ Oliva, p. 14.

⁴¹ Oliva, p. 15.

⁴² Oliva, p. 15.

⁴³ Oliva, p. 15.

⁴⁴ Oliva, p. 16.

⁴⁵ Oliva, p. 16.

⁴⁶ Oliva, p. 17.

⁴⁷ Oliva, p. 17.

⁴⁸ Oliva, p. 86.

⁴⁹ Oliva, pp. 86 & 97.

⁵⁰ Oliva, p. 110.

⁵¹ Oliva, p. 111.

⁵² Oliva, p. 111.

⁵³ Oliva, p. 111.

- 54 Oliva, p. 113.
- 55 Oliva, p. 112.
- 56 Oliva, p. 113.
- 57 Matt Thomson, *Early History of Wabaunsee County, Kansas*
(Manhattan, Kansas: Ag Press, 1973), p. 27.
- 58 Thomson, pp. 42-43.
- 59 Thomson, p. 43.
- 60 Thomson, p. 43.
- 61 Thomson, p. 43.
- 62 Thomson, p. 221.
- 63 Thomson, p. 356.
- 64 Thomson, p. 357.
- 65 Bliss Isely and W. Marvin Richards, *The Kansas Story*
(Oklahoma City, Oklahoma: Harlow Publishing Corp., 1961), p. 287.
- 66 Isely, *Kansas Story*, p. 300.
- 67 Isely, *Kansas Story*, p. 301.
- 68 Isely, *Kansas Story*, pp. 307-308.
- 69 Isely, *Kansas Story*, p. 311.
- 70 Isely, *Kansas Story*, p. 312.
- 71 Isely, *Kansas Story*, p. 313.
- 72 Isely, *Kansas Story*, p. 314.
- 73 Isely, *Kansas Story*, p. 309.
- 74 Isely, *Kansas Story*, p. 310.
- 75 Isely, *Kansas Story*, p. 310.
- 76 Isely, *Kansas Story*, pp. 315-321.
- 77 Isely, *Kansas Story*, pp. 321-322.

78 Isely, *Kansas Story*, p. 323.

79 Isely, *Kansas Story*, pp. 324-325.

80 Isely, *Kansas Story*, p. 325.

81 Isely, *Kansas Story*, pp. 341-342.

82 National Trust for Historic Preservation in the United States,
p. 88.

83 National Trust for Historic Preservation in the United States,
p. 92.

84 Constance M. Greiff, *LOST AMERICA From the Atlantic to
the Mississippi* (Princeton: The Pyne Press, 1971), p. VIII.

85 National Trust for Historic Preservation in the United States,
p. 86.

DOCUMENTATION CONCLUSIONS

The historical significance of the ranch house is determined by whom and in what way the ranch house was originally used. Cowboys on the Dewey Ranch had a more elegant life-style as Dewey employees than many neighboring families who owned their own place (homestead or land). The ranch owners house, for the family when in residence, was separate from the accommodations supplied for the workers.

Though living in Kansas, these cowboys participated in an unusual way of life. On the Dewey Ranch, the cowboys had a stone house which was built for their use. The ranch manager shared this house with his workers. These hired people had their own cook/housekeeper. The second floor of the house had what they called a game room for the cowboys to use for entertainment activities. Their sleeping quarters were in the bunk room located on the third floor. The ranch manager had his own sleeping quarters located on the second floor. A common dining room was shared by those people living in the stone house. An ice room and laundry room were available on the interior of the building for the cook/housekeeper. Homes of the period in Kansas were rarely constructed for the hired help with such fine accommodations. Even rarer has been the opportunity to preserve a house such as this one that has had so few changes done to it over the years.

The Dewey Ranch House has survived with much of its twentieth century building fabric intact. Though the house has been extensively remodeled in the last 20-30 years, the original plan configuration has had only two minor changes. Also, a great deal of the original construction

materials are still intact underneath the remodeling materials.

On the prairie in Kansas, sod had been the staple building material for buildings since settlement began because wood was so scarce. Then the people realized the potential of the natural stone in the area and utilized the natural stone for their buildings. The stone was an inexpensive building material, for the stone could often be quarried on the owners own property. Only the wealthier people could afford the wood frame buildings, for the lumber had to be shipped into the area. That is why the buildings for the hired help and the animals would have been made of stone, and the owners house was wood frame.

The interior of the stone house boasted of nice woodwork, the latest of facilities (i.e.: running water, ice room), and fine accommodations for the hired help.

The uniqueness of the building both in architectural style and life-style uses provide the basis for the historical significance of the Dewey Ranch House.

UNIT II

USER INVESTIGATION

INTRODUCTION - USER INVESTIGATION METHODOLOGY

A Konza Prairie Research Natural Area User is a person whom works on or visits this area. The person may do scientific research on the prairie itself, give guided tours of the prairie and/or house and barn, visit the Study Area, or do office, shop or maintenance work in conjunction with the prairie and/or Study areas.

An assumption was made for this investigation that the Konza Prairie Users had the ability to determine their needs and wants, and would be able to explain those needs and wants effectively and coherently.

For the evaluation of the physical facilities in the Study Area, the intention was to gather information and data from a sample of the users of Konza Prairie.⁶⁶ A questionnaire was developed for the Users which dealt with the User respondents connection to Konza Prairie, how often they used the Study Area, for what purposes they used the Study Area, what roles they felt Konza Prairie should be involved in, what facilities they would like to see offered at the site in an ideal situation both temporarily and permanently, what they needed for their day-to-day functioning at the Headquarters Building (Ranch House), what they needed for their occasional/temporary use at the Headquarters Building, how much time

they spent at Konza Prairie, with what facilities were they the least satisfied, which facilities in the Headquarters Building would they use if they were available, how would they like to see the headquarters building be used in the future, and which uses did they feel could co-exist in the Headquarters Building. (see APPENDIX D)

After development, the questionnaire was pretested and revised appropriately. Varied user backgrounds became apparent, so the questionnaire was then sent to all recorded users of the Konza Prairie Headquarters Building within the past three years. Administrators, faculty, students, classified personnel, scientists, volunteer workers, and guest and visitors were included. A total of 182 questionnaires were sent out and 90 were returned, for a response rate of fifty percent.

Sent along with the questionnaire was a card which the respondents could return separately if they wished to participate in an interview, and/or the program review of the questionnaire findings and subsequent adaptive use proposals, and/or be included in the final design review. Nearly thirty-three percent of the questionnaire respondents indicated that they would like to participate in an interview, and/or the program review and/or design review. Twenty-eight respondents indicated they would participate in the interviews, and twenty-six in the program and design reviews.

These reviews had been planned to acquaint the users of the Ranch House with the design options available to them, to effectively review the developed design, and to verify if the design did meet the Program

Criteria. However, upon completion of the Program Criteria, it became apparent that the Historical Use Investigations and the User Investigations and Analysis had narrowed the design options considerably. Verification that the developed Design(s) does meet the needs of all of the users of the Study Area will only be available after the design has been implemented and use of the planned facilities has taken place. So, the program and design reviews were negated and eliminated from the Study.

The questionnaire was followed by interviews with selected Key Respondents from the returned cards and the Director of Konza Prairie. The interviews established the respondents exact relationship to Konza Prairie, how they were using the Study Area, what equipment was needed by them for their personal professional pursuit(s), and what thoughts they would like to embellish upon in addition to their anonymous questionnaire answers. Twenty interviews were held, with each user category represented.

The general visiting public to the Study Area was accounted for and participated in the evaluation of the facilities by the investigator's use of environmental behavior observations and physical traces. The investigator was an observer during the environmental behavior observation of the visiting public. The elements in the observation were:

Who was doing what with whom?

In what relationship, in what context, and where?

The observations and the visiting public's physical traces were documented through the use of photographs found in Chapter V, Environmental Observations of the Visiting Public.

A Design Program for the Study Area was then developed regarding the user's needs and wants. The discussion of the user needs and wants and the conclusions drawn from the user investigations follows.

This study sought to understand the particular nature of man-environment studies and the methodological problems involved in investigating the relationships between the physical setting and the people and activities it accommodates.⁸⁷

NOTES
UNIT II
INTRODUCTION - USER INVESTIGATION
METHODOLOGY

86 John Zeisel, *Inquiry by Design: Tools for environment-behavior research* (Monterey, California: Brooks/Cole, 1981), all pages.

87 Jon Lang, et al, eds., *Designing for Human Behavior: Architecture and the Behavioral Sciences* (Stroudsburg, Pennsylvania: Dowden, Hutchinson and Ross, Inc., 1974), p. 223.

CHAPTER III

DISCUSSION OF THE QUESTIONNAIRE RESULTS

The following is a discussion of the questionnaire results tabulations and the implications which those tabulations support. An assumption will be made that where the respondents choose not to answer: (1) they did not want to answer, or (2) the selection was of no consequence to them. The analysis will be based on the responses which were received and tallied. The researcher has no way of "mind reading" those people whom chose not to return the questionnaire or elected not to respond to particular questions for whatever their reasons.

The user questionnaire was sent to 182 people who met the user criteria definition stated in the section on User Investigation. A total of ninety questionnaires were returned to the investigator for a fifty percent return rate. Twenty returned questionnaires were not answered for a variety of reasons which fell into the following categories:

- 3 deceased respondents
- 6 no forwarding address
- 4 visited Konza Prairie, but not the Headquarters Building
- 7 visit too infrequently to feel qualified to contribute to the study
- 1 declined to answer.

A total of seventy answered questionnaires were recieved on which to base the analysis of the Study Area. In Question *1, the respondents selected their key role in dealing with the Konza Prairie Research Natural

Area, the Study Area, and the Headquarters Building/Ranch House. The following breakdown of categories and the number of respondents in each are as follows:

- 0 KSU Administrator
- 11 KSU Faculty
- 10 KSU Undergraduate Student
- 3 KSU Graduate Student
- 2 KSU Classified Personnel
- 16 Visiting Scientist
- 2 Visiting Faculty
- 0 Visiting Undergraduate Student
- 2 Visiting Graduate Student
- 1 Visiting Classified Personnel
- 6 Volunteer Worker
- 18 Guest or Visitor
- 4 Research Associate
- 3 Student Laborer

Question #2 - On the average, how many times per week (or month) do you use or visit the Konza Prairie during the course of a year?

The respondents answers were split toward the two ends of the spectrum of answers offered. Frequent usage of the area or very infrequent usage were the two extremes. *Almost Daily, 2-3 Times*

Per Week, and *Once Per Week* received nearly even scoring and approximately one-third of the scores. *2-3 Times Per Month*, *Once Per Month*, and *Several Times Per Year* either had no scoring or had only a few scores. *Once Per Year* and *Only On Selected Visits* received approximately two-thirds of the scores. It should be noted that the *Only On Selected Visits* respondents were asked to indicate the length(s) of time they spent at Konza Prairie. The answers varied from one day to five months. The number of respondents answering a short length of time was 14, and an extended period of time 11. The exact scorings are in APPENDIX D, Questionnaire Totals.

The respondent categories ranked in the following groups for the usage frequency of the Study Area.

Frequently Use/Visit: Research Associates

Infrequently Use/Visit: Visiting Scientist

Visiting Faculty

Visiting Graduate Student

Visiting Classified Personnel

Volunteer Worker

Guest or Visitor

Diversified Use/Visit: KSU Faculty

(both Frequent and KSU Student

Infrequent) KSU Classified Personnel

Student Laborer/Employee

Clearly the scoring indicated that the planning for the Study Area should accommodate both the daily user and the infrequent user.

Question #3 - For what purposes do you use Konza Prairie?

The diversity of purpose of use was indicated by the scattering of user responses. This was expected to happen between the user categories (i.e.: Volunteer Worker vs. Researcher). However, this diversity also occurred within each user category, with the exception being the Visiting Graduate Student whose sole purpose for using Konza Prairie was for Scientific Research.

User categories in which there was a major thrust(s) of purpose are indicated below. These users also had multiple and varied supporting (secondary) purposes of use for the Study Area, which indicates an overlapping of purpose amongst the diversified users.

Research Associate: Scientific Research,

Maintenance of KPRNA

Student Laborer/Employee: Maintenance of KPRNA

KSU Faculty: Scientific Research

KSU Student: Scientific Research, Scientific Exhibition,
Maintenance of KPRNA, Helping with Visiting Public

Visiting Scientist: Scientific Research, Conservation of
Natural Grasslands/Prairies, Scientific Education

Visiting Faculty: Scientific Research, Conservation of the
Natural Grasslands/Prairies

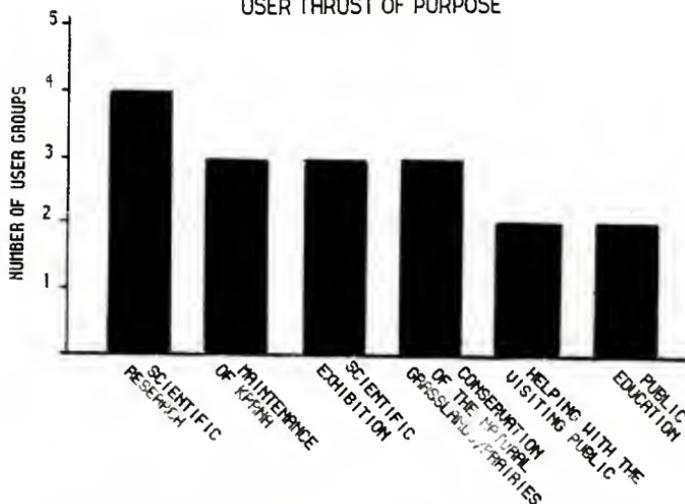
Visiting Classified Personnel: Scientific Education

Volunteer Worker: Helping with the Visiting Public, Public
Education

Guest/Visitor: Guest or Visitor, Conservation of the Natural
Grasslands/Prairies, Public Education

FIGURE II

USER THRUST OF PURPOSE



In analyzing the combined totals, a discussion of the choice rankings is appropriate. Scientific Research and Guest/Visitor were the most important purposes of use. Ranking second were: Public Education, Maintenance of KPRNA, and Conservation of Natural Grasslands/Prairie. Ranking third were: Scientific Education, Helping with the Visiting Public, and Cultural Exhibition. Ranking fourth was Scientific Exhibition. (see APPENDIX F, Questionnaire Totals)

In planning for the Study Area, care must be taken to plan facilities which accommodate the purpose and reason why the user is on/at Konza Prairie initially.

Source: Questionnaire *3 responses.

Question #4 - In which role(s) do you feel Konza Prairie should be involved?

The role involvement for Konza Prairie is multifaceted, and great diversity is found between those facets. However, all of the users of Konza Prairie, though coming to use Konza Prairie for diversified purposes, are in general agreement as to the roles in which they feel Konza Prairie Research Natural Area should be involved, and the use priority those roles should be given.

The rank order of the roles was as follows:

1st: Scientific Research, Conservation of Natural

Grasslands/Prairie

2nd: Scientific Education

3rd: Maintenance of Konza Prairie

4th: Public Scientific Education

5th: Public Cultural Education

6th: Helping with the Visiting Public

7th: Office and/or clerical tasks, Guest or Visitor

Each individual user category tally reflected the aforementioned pattern for Konza Prairie role involvement. The diversified users were adamant as to the singular reason for Konza Prairie's existence - the prairie, and the support of it. The questionnaire respondents were asked to explain why they felt this way. Their responses are in APPENDIX G, Questionnaire Respondent Quotations.

The other role involvements of the Users were seen as secondary and supplementary to their initial involvements. The planning for the multifaceted roles of Konza Prairie Users should reflect the preceding priorities; keeping in mind that all seven rankings should be addressed and accommodated in the planning procedure.

Question #5 - What facilities would you like to see offered in an ideal situation, either temporarily or permanently, at Konza Prairie Headquarters?

By using the hypothetical opportunities of an ideal situation, the respondents were allowed to "dream aloud". This "dreaming" brought out many additional respondent recommendations to the Headquarters Building/Ranch House facilities this questionnaire explored.

The facilities which received only permanent rankings were: An Approach Road to the Konza Prairie Headquarters Building and/or adjacent facilities, Restroom Facilities for Konza Prairie Personnel, Housing for a Resident Manager, and an Office. The remaining suggested facilities received split responses between the temporary response choice and the permanent response choice. Eighteen additional facilities were suggested by the respondents. (see APPENDIX F, Questionnaire Totals)

The respondents overwhelmingly preferred permanent accommodations on all of the facilities. However, an interesting note of reflection arises, in that all respondents, except the students, would like to see their selected facilities be of a permanent nature. The KSU

Undergraduate and Graduate, the Visiting Graduate, and the Student Laborer/Employee all were split on the question of temporary vs. permanent.

The percentage of those wanting a facility, either temporarily or permanently, to be offered ran from thirty-eight percent to seventy-eight percent of the total respondents. The respondent choice percentages were as follows:

Entrance Sign	65%
Approach Road	50%
Designated Visitor Parking	60%
Information Center	68%
Scientific Exhibits for Visitors	78%
Cultural Exhibits for Visitors	58%
Seminar/Lecture Facilities	71%
Restroom Facilities for Visitors	76%
Full-scaled Scientific Laboratory	44%
Holding Area for Samples	49%
Housing for Visiting Scientists	60%
Restroom Facilities for Konza Prairie Personnel	60%
Housing for a Resident Manager	53%
Office	38%

The additional facilities suggested by the respondents held a wide diversity which ran from Native Plant Seed Sales to additional types of exhibits to Historic Pictures and Narrative of the Dewey Ranch.

In planning towards an ideal situation, those wants discussed in *Question #5* should be compared and assessed to the needs of the users which are discussed in the following question - *Question #6*.

***Question #6** - What do/[did] you need for your day-to-day functioning at the Headquarters Building?*

The responses to the Daily Needs question were scattered over the entire totals chart. This was not surprising, but rather supported the expectation of diversified needs for different groups of users. There was no clearly defined need amongst the users, but rather a multiplicity of needs, which overlapped from user category to user category.

Facility need(s) requirements were dependent upon and reflective of the respondent's purpose(s) of Konza Prairie usage. The researcher/scientist user (faculty, student, visiting) concentrated on the facilities which supported their work, i.e.: scientific laboratory, holding area for samples, equipment storage, housing for visiting scientist, and restroom facilities for personnel. The Guest/Visitor, Volunteer Worker, Visiting Faculty, and Visiting Classified Personnel tended to concentrate on the signage, road, parking, and information group of needs, and then on the multiple exhibits and seminar/lecture facilities, and lastly on restroom facilities. All of the user visitor categories reflected a basic need for readily available signage, parking, and information before they were able to continue on with their intended purpose for coming to KPRNA.

In planning for the daily needs of the users of Konza Prairie, the wide diversity of the users must be acknowledged. Each user group has their basic needs. However, those needs often overlap another user group, and so mutual support of each others needs will need to occur. Those facilities which accommodate a wider span of user groups should be dealt with and met/acquired first.

Question #7 - What do/[did] you need for your occasional/temporary use?

The responses to the Occasional/Temporary Need question were scattered over the entire totals chart. This, too, was not surprising, but rather supported again the expectation of diversified needs for different groups users. What was made apparent, however, was the swing of the scientific related community to the needs of the visiting community. The ranking of the scientific facilities dropped dramatically in the Occasional Usage Question #7, and the use of designated parking, exhibits, and seminar/lecture facilities were ranked much higher than they were in the Daily Needs Question #6. (see FIGURE III)

The two groups which stayed constant in both the Ideal Situation Question #5 and the Need Day-to-day Question #6 were the Research Associates and the Visiting Graduate Students. This observance leads to the conjecture that these two groups use/see Konza Prairie only in the singular scientific light. This hypothesis is supported by Question #3, in which these two groups indicated that their only purposes of use of the Konza Prairie were for scientific research and the maintenance of the prairie. All other user groups changed their needs. (see FIGURE IV)

Occasional/Temporary facility need(s) requirements were dependent upon and reflective of the respondents purpose(s) of Konza Prairie usage. When the respondents intended use changed, so did their requirements in the facilities needed (Need Day-to-day Question #6 vs. Need Occasionally/Temporarily Question #7).

QUESTION #3

TOTAL RANKING OF USERS

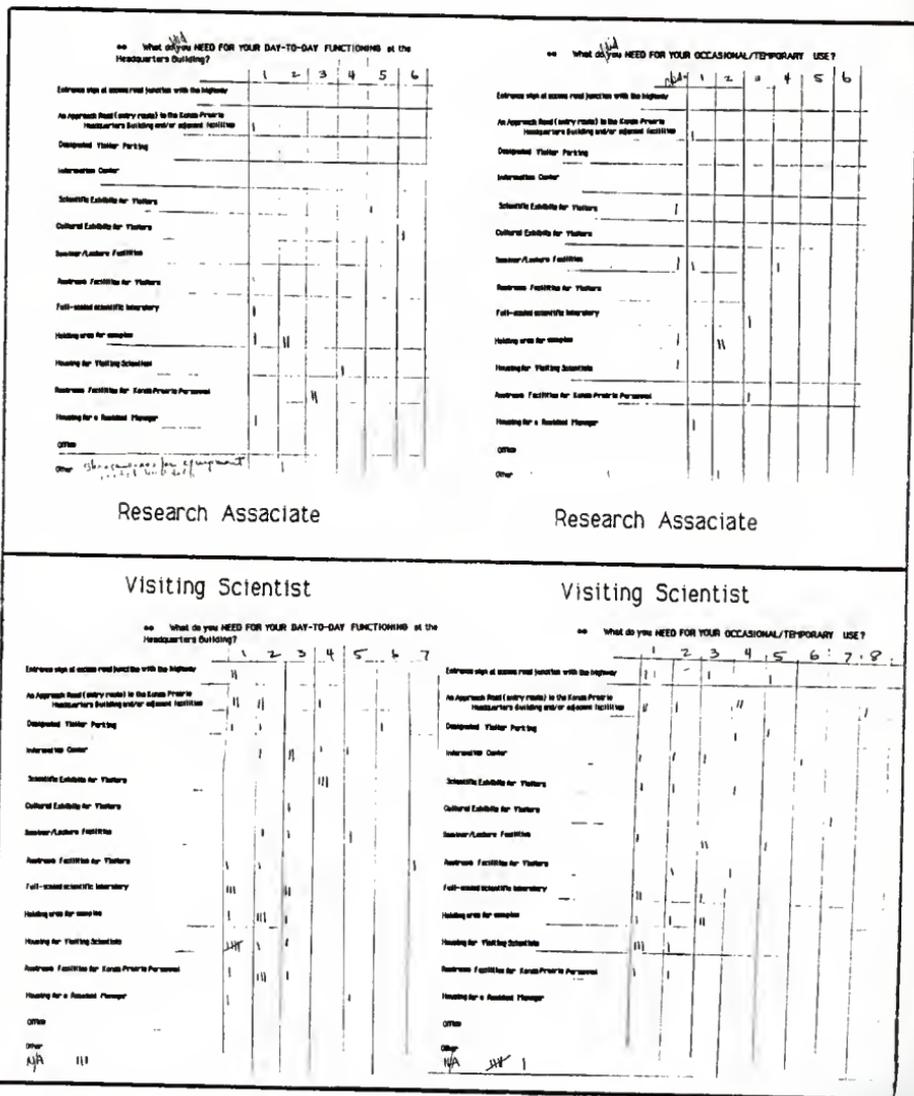
N/A

•• For what purposes do you use Konza Prairie?

	CKS	1	2	3	4	5	6	7	8	9
— Scientific Education										
— Scientific Research										
— Helping with the visiting public										
— Public Education										
— Cultural Exhibition										
— Scientific Exhibition										
— Helping with the maintenance of Konza Prairie										
— Conservation of Natural Grasslands / Prairie in general										
— Office and/or clerical tasks										
— Guest or Visitor										
— Other										
— Other - GEOLOGY & SOILS STUDY										
— PHOTOGRAPHY										

Source: Questionnaire #3 responses.

QUESTION #6 & #7 USER COMPARISON



Source: Questionnaire #6 & #7 responses.

In planning for the occasional/temporary usage by all respondents, visitor related facilities need to be available, for all but one category of user responded that they do indeed have a need for these facilities.

***Question #8** - During a typical day at Konza Prairie, what would be the number of hours that you currently spend at the following activities?*

The totals for this question reflected not only the diversified usage of the Study Area, but also the limited number of hours spent by any one user group at the Study Area. (see APPENDIX F, Questionnaire Respondent Totals, Question #8)

The categories of Research Out on the Prairie, Maintenance of the Prairie, Working with the Machinery/Equipment, and Utilizing Housing for Visiting Scientists reflected the majority of the time spent at Konza Prairie. All of the other facility choices were being utilized by the respondents under four hours per day, with the mean being $\approx 1 \frac{1}{2}$ hours per day. The facility choices being utilized reflected the respondent's user category, i.e.: Volunteer Worker - information center and exhibits, Guest/Visitor - touring. Only the Visiting Scientist user category had a diversification to their daily routine.

Question #8 totals show the number of hours spent by a user group at an activity. In planning for the Study Area, the total number of hours spent at an activity must be weighed against the costs for a project to improve the facilities for that activity. So, question #9 was asked.

*Question *9 - How would you expect your typical day to change if the facilities you use were improved?*

Only twenty-two percent of the respondents answered this question. Of those responding, fifty percent stated that their typical day's use of the facilities would remain the same with an additional twenty-five percent stating no significant change. However, twenty-five percent of those responding to the question felt that improved facilities would improve the efficiency of man hours per task.

An observation will be made at this point, that the primary use of the Konza Prairie Research Natural Area is for prairie research which occurs on the prairie, and not within the Study Area. Most activities which occur within the Study Area are supplementary to the ongoing prairie research. Thus, a very low response to Question *9 can be accounted for in the response totals, because the majority of the time spent within the Study Area, established in Question *8, is minimal.

*Question *10 - Are there any facilities with which you are the least satisfied?*

The respondents answers to the Least Satisfied With Which Facilities question ranged all over the total sheet, with a variety of rankings being received by all facility categories. The individual facility tallies primarily reflected the user's main concerns and interests, with some indications going beyond the user's assumed scope of interest.

However, in the final tally there were clusters of rankings achieved. The users indicated they were the least satisfied with Scientific Exhibits for Visitors, Cultural Exhibits for Visitors, Restroom Facilities for Visitors, Full-scaled Laboratory, Housing for Visiting Scientists, and the write-in category of the Historic House and Barn. Ranking second were: Designated Visitor Parking, Information Center, and the Restroom Facilities for Konza Prairie Personnel. Ranking third was: the Seminar/Lecture Facilities.

This question did receive the most active participation in providing rankings on the part of the respondents. To quote several of the respondents and paraphrase many others in their comments, "Everything is of poor quality or inadequate service.", would best lend an understanding to the scope of the problem with which this question and questionnaire was dealing. In developing the conceptual design for the Study Area, this dilemma of "where to start" was present.

***Question #11** - If the following facilities were available at Konza Prairie Headquarters, which would you use?*

On Question #11, there was a great deal of response in all facility categories from the respondents. Those categories of facilities which were ranked first are the following: Entrance Sign, An Approach Road, Information Center, and Scientific Exhibits for Visitors. Those ranking second were: Cultural Exhibits for Visitors, Full-scaled Laboratory, Holding Area for Samples, Housing for Visiting Scientists, and Restroom

Facilities for Konza Prairie Personnel. Those ranking third were: Designated Visitor Parking, Seminar/Lecture Facilities, and Restroom Facilities for Visitors. (see APPENDIX F, Questionnaire Respondent Totals, Question #11)

The other categories of Housing for a Resident Manager and Office received nominal ranking. This outcome was understandable, as those areas are used by only a select group(s) of the total users participating in this questionnaire. Other suggested facilities which were written in by the respondents included: Garage, Maintenance/Equipment Shops, Model Staging Area, Insectory, Hiking Trails, and Herbarium with Photo References.

An assumption will be made in the planning process that the respondents who indicated they would "use" a facility if it were available, will indeed use that facility. This assumption is supported by Question #5 (See Offered Permanently), Question #6 (Need Day-to-day), and Question #7 (Need Occasionally/Temporarily), where every respondent category had ranking curves which reflected the same respondent priorities in the facilities as those priorities reflected here in Question #11.

i.e.: A facility with a higher frequency rate on the Offer Permanently, Question #5, was also higher in frequency rate and ranking on the Use Question #11.

i.e.: A facility with a higher frequency rate combined with a more important ranking on the Use, Question #11, had those same characteristics on the two Need Questions #6 & #7.

Another planning assumption, which is supported by the Question #11 results, will be made that those respondents who replied to the questionnaire do have their primary use facilities and their secondary use facilities, as seen in the cross-over of respondents in their responses to Questions #6 & #7. (see FIGURE III) Respondent support for facilities beyond their immediate personal needs was indicated by the responses to Use Question #11 compared to the responses in Need Questions #6 & #7. In summary, if the facility were indeed at/or near the Headquarters Building/Ranch House, the majority of the respondents would make occasional (secondary) use of the facility.

The only respondent category which does not support the previous assumption is the Visiting Graduate Student user category. According to the results of the questionnaire, this user group comes to Konza Prairie to do research, and in the process would utilize a laboratory, a holding area for samples, and housing; and showed no other interest in any other additional facilities being available to them.

Question #12 - Given the historical significance of the building and farmstead -- ideally, how would you like to see the Konza Prairie Headquarters Building (Dewey Ranch House) and farmyard used?

The respondents were overwhelmingly in favor of restoring a portion of the house for exhibits and adaptively using the rest of the house for KPRNA's needs. The ratio was 3:1 to restore a portion of the house for a

cultural exhibit and adapt the rest of the building to KPRNA's needs vs. restore the whole house as an exhibit. The ratio was 4:1 to restore a portion of the house for a cultural exhibit and adapt the rest of the building to KPRNA's needs vs. using all of the building for KPRNA's needs. If the two responses that dealt with restoring all or part of the building were added together, the ratio becomes 6:1 to restore vs. using all of the building for KPRNA's needs.

The Volunteer Worker was the only category of user who, as a majority, sought restoring the entire house. The Visiting Graduate Student was the only category of user who totally supported using all of the building exclusively for KPRNA's needs. The KSU Faculty was the only category of user who was evenly divided between the three choices. All other categories of users were overwhelmingly in favor of restoring a portion of the house for exhibits and adaptively using the rest of the house for KPRNA's needs.

In planning the use of the Study Area (Headquarters Building/Ranch House and Farmyard), the results of the responses in Question #12 should be regarded. Having a Cultural Exhibit within the Study Area is also supported by the interest expressed by the respondents in a Cultural Exhibit in the other questions of: See Offered in an Ideal Situation Question #5, Least Satisfied Question #9, and Facilities were Available Which Would You Use Question #10. In those Questions #5, #9, & #10, Cultural Exhibit ranked high in the respondents priorities.

Question #13 - Check all of the items which, in your opinion, could CO-EXIST within the Headquarters Building/Ranch House.

All of the respondent user categories were in agreement on Question #13. Each respondent user category had the same facility choices receiving the most or the least checks indicating the responding user's opinion on this question. The facility choices receiving a low score tally were: Full-scaled Scientific Laboratory, Holding Area for Samples, Office, and Housing for a Resident Manager. All of the other facility choices received strong support from the users.

The co-existive use planning of the Headquarters Building/Ranch House will need to keep in mind the facilities which are needed by the users, and those facilities which the users feel would work in conjunction with oneanother.

Interviews with Key Respondents helped to clarify the equipment needed for the various facility choices, and why the user selections were accordingly made. The interviews are discussed in the next section.

In conclusion, the question of how to best use the Study Area (Ranch House and Farmyard) was a multifaceted problem.

The visiting users of the Konza Prairie Research Natural Area would like to have their needs met, but are supportive of the reason for which KPRNA now exists, and yet feel that their needs should be addressed in conjunction with the prairie research needs.

The scientific community, though their foremost concern is the prairie and the scientific research being done there, do on occasion deal with the supporting and external factors and facilities relating to KPRNA and it's users, i.e.: exhibits.

CHAPTER IV

INTERVIEWS WITH KEY QUESTIONNAIRE RESPONDENTS

The interviews were done on a volunteer basis. Questionnaire respondents volunteered to be interviewed and key representatives of each user category were selected from the 18% of those people willing to participate in the interview process. (182 people were surveyed, 32 people were willing to be interviewed) Diversified views were of course present and those view points were established in the interview and dealt with in detail. Selected portions of the interviews are included in the Program Criteria, as confirmation of facility detailing. For example: a laboratory can not be planned without an understanding of the equipment needed, it's uses, sizes, etc..

The questionnaire proposed hypothetical questions with some hypothetical facility answers and some currently available facility answers. The answers covered the now existant facilities and possible future facilities. The repondents were also allowed to add their own choices to the list of possible answers.

The Key Respondent Interviews were used to facilitate the interpreting of the results of the questionnaire. The respondents were asked to state their connection with the Konza Prairie, and to clarify what their title meant in relation to KPRNA. The respondents were then asked to clarify how they use the Konza Prairie in greater detail.

Continued explanation by the respondents for the way in which the Key Respondent used Konza Prairie, was solicited. They were asked to specify the equipment they would need there, and to describe it.

As Lang feels: "..... the assessment of attitudes, preferences, and opinions have particular utility for the design-oriented person involved in programming and evaluation of the designed environment. Attitudes are inferred from what a person says about an object, from the way he feels about it, and from the way he says he will behave toward it." ⁸⁸

The Key Respondents were also asked to relate how they felt the Study Area should be used, and what facilities should be available to the users at the Headquarters Building/Ranch House and/or within the Study Area. Their remarks, opinions, suggestions were recorded, and edited. There were many points which were common amongst the Key Respondents. The interviews reflected with greater detail, the general consensus of the questionnaire findings.

NOTES
CHAPTER IV
INTERVIEWS WITH KEY QUESTIONNAIRE
RESPONDENTS

⁸⁸ Lang, p. 234.

CHAPTER V

ENVIRONMENTAL OBSERVATIONS OF THE VISITING PUBLIC

"The relics of old time are monuments because they recall, not this or that named and famous personage or group, but the whole life with all its associations of some period or place of which the interest is in the past," states G. Baldwin Brown.⁸⁹

"..... a great many things contribute to particular settings. The size of areas, the arrangement of those areas and the relative placement of things to one another; thus, things: structures, air, light, humidity, and properties of those things: temperature, color, textures, arrangements all influence the quality or relevance of a setting for the people who use it," Steele feels.⁹⁰

The visiting public felt comfortable and relaxed on Konza Prairie's Visitors Day in September 1984. Driving up the dirt approach road seemed to set the pace of the visitors for their stay at the Ranch House and nearby site (Study Area), and it welcomed them to the realities of ranch life in the country. The weather was pleasant, and the people strolled around the Study Area with an easy-going air about themselves. The comments being expressed by the visitors were ones of interest in the displays, realizing the vastness, beauty, and wonderment of the Flint Hills prairie, and seeing and hearing about the ranch house/farmyard buildings and their previous uses. The atmosphere which enveloped the Study Area was one of accommodation on the part of the visitors, as they inhabited the temporary facilities which were supplied for that day; as no formal visitor center,

information center, seminar/lecture room, parking lot, tour information exists permanently. The inconveniences of the wind, heat and dust, the front yard hand pump with furnished paper cups for the drinking fountain, and the port-a-potties were all taken in stride by the visitors. (see PLATES XX A, XX B, XXI A, XXI B, XXII A, XXII B, XXIII A, XXIII B, XXIV A, XXIV B)

Konza Prairie did have this effect on its visitors - as Steele comments: "We are all someplace all the time, and without even trying. But being there and being aware of the impact that the place is having on us are two different things, and the awareness lags far behind the being."⁹¹

Because it is familiar, many communities and decision makers fail to see the importance of what is around them.⁹² The visitors on Visitor's Day were experiencing the ensemble of ordinary features which constitute an extraordinary rich exhibit of the course and character of the prairie and ranch life.⁹³

As felt by Wrenn, "Just as an appreciation of America depends on the understanding that the sum is infinitely greater than any one of its parts, so one's enjoyment of a community or a neighborhood depends on viewing it in its proper setting and in its totality."⁹⁴ The visitors did view the ranch house and the surrounding buildings in the prairie context in which they are set. From their attitudes and actions it can be stated that they did grow to more fully appreciate the prairie and the prairie ranch life.

PLATE XX A
VISITOR'S DAY
SEPTEMBER 1984

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PLATE XX B
VISITOR PARKING
Cars in mowed hay field.



Source: Personal Photograph.

Source: Personal Photograph.

INFORMATION CENTER



Saw horse table in the machine shop.

PLATE XXI B

TOUR ARRANGEMENTS



Sit on the grass waiting area for the hay ride.



Tour guide facilities located on a bench adjacent to the Stone Barn door.

Source: Personal Photograph.

Source: Personal Photograph.

PLATE XXII A
EXHIBIT BUILDING

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PLATE XXII B
EXHIBIT FACILITIES



Source: Personal Photograph.

Source: Personal Photograph.

PLATE XXIII A
DRINKING "FOUNTAIN"

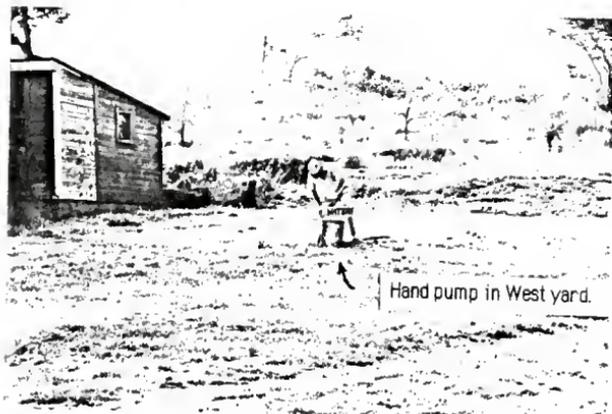
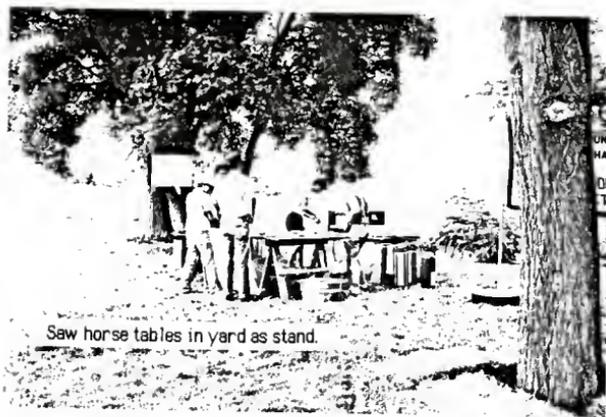


PLATE XXIII B
REFRESHMENT STAND



Source: Personal Photograph.

Source: Personal Photograph.

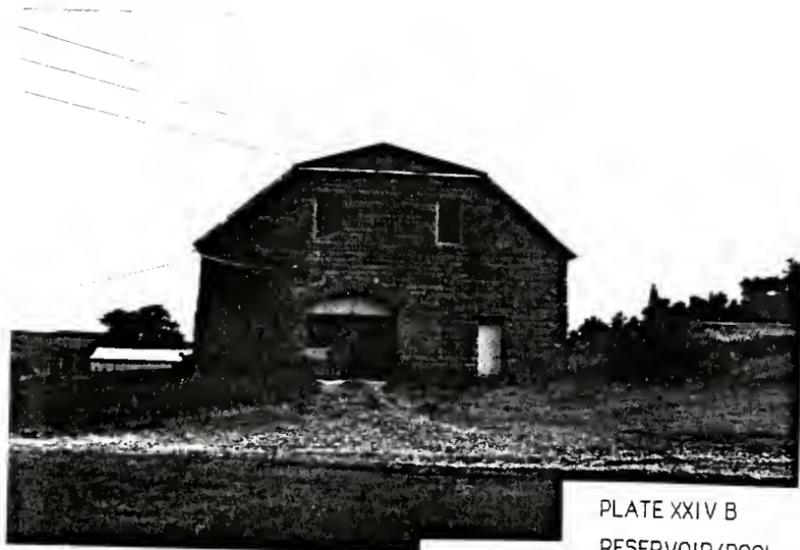


PLATE XXIV B
RESERVOIR/POOL



North interior view (Swimming pool portion)

Source: Personal Photograph.

Source: Personal Photograph.



South interior view (Reservoir portion)

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CHAPTER V
ENVIRONMENTAL OBSERVATIONS
OF THE VISITING PUBLIC

⁸⁹ Nathan Weinberg, *Preservation in American Towns and Cities* (Boulder, Colorado: Westview Press, 1979), pp. 2-3.

⁹⁰ Steele, p. 10.

⁹¹ Steele, p. VI.

⁹² National Trust for Historic Preservation in the United States, p. 11.

⁹³ D. W. Meinig, ed., *The Interpretation of Ordinary Landscapes Geographical Essays* (New York: Oxford University Press, 1979), pp. 1-2.

⁹⁴ National Trust for Historic Preservation in the United States, p. 194.

UNIT III

PRESERVATION PROGRAM FOR THE STUDY AREA

INTRODUCTION

"Programming is broadly defined as the process of preparing a plan, or developing a system, for actions to be taken towards achieving a goal. Programming can also include defining and setting the goals. In programming for preservation of a historic structure - whether the project involves restoration, rehabilitation or adaptive use, or a combination thereof - many factors must be considered," according to McCarthy.⁹⁵ Amongst those factors which McCarthy discussed are:

- Proposed use of the facility,
- Economics of undertaking the proposed or programmed actions,
- Budget for the work,
- Interpretation of the preserved structure,
- Historical and architectural significance,
- Existing conditions and
- Scope of work required for proposed design and actual preservation construction.

According to McCarthy, "Of vital importance is that the building, structure or site have a functional use benefiting all concerned parties. It is necessary in order to define or to determine the specific use or uses for a preserved facility, to review all aspects so as to provide the most economically feasible program for a single or multi-purpose usage."⁹⁶

To facilitate defining and determining the specific use or uses for the Study Area, the questionnaire and respondent interviews were undertaken, developed, totaled and analyzed. The determinations from those results for the use of the Study Area will be discussed in this section, as part of the program.

The historical significance of the Study Area has been established in the documentation of the Study Area, Chapters I and II. McCarthy feels that, "History lends itself to period exhibits and furnishings, museum interpretation and wide public interest and visitation." ⁹⁷ This public interest, that McCarthy speaks of, was found relating to the Study Area, and was supported by the User Investigation, Questionnaire Results, and Respondent Interview Summary section's analyses.

The original and existing structures of the Ranch House have been established in the Historical Use Investigations found in Chapter I. The existing conditions of the structures are discussed in the Analysis of Existing Conditions found in Chapter VII. According to McCarthy: "Existing conditions determined through architectural and structural investigation and analysis, may effect use and always effect the budget and the final scope of work required to carry out the program for the project." ⁹⁸ McCarthy goes on to say that, "Existing conditions will largely determine the quantity of the work required. Just as important, however, is the quality of work needed which is often a function of use. Both quantity and quality are independent variable cost factors to be considered in the budget and the program." ⁹⁹

The final element of the programming process was the preparation of the Design Development. The Design Development states the overall goals of the program. The proposed scope of work for adaptive use of the study area includes both a Long-Term Plan and an Interim Use Plan, both of which have interrelated factors. ¹⁰⁰

"One final item regarding [a preservation] program is that priorities or sequences of work must be established with particular attention to requirements for immediate intervention for stabilization and safety, that is, arresting further deterioration and taking all necessary steps to assure that highest priority is given to correcting conditions which might be hazardous to those who will eventually carry out the programmed work."¹⁰¹

"The final program for preservation is an integral part of the Historic Structure Report and should reference and relate to all other elements or sections of the report."¹⁰²

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UNIT III
PRESERVATION PROGRAM
FOR THE STUDY AREA

INTRODUCTION

95 Thomas H. McCarthy, "Programming For Preservation," *APT Bulletin*, Vol. XIV No. 4 (1982), p. 47.

96 McCarthy, p. 47.

97 McCarthy, p. 48.

98 McCarthy, p. 48.

99 McCarthy, p. 48.

100 McCarthy, p. 48.

101 McCarthy, p. 48.

102 McCarthy, p. 48.

CHAPTER VI

PROGRAM CRITERIA

DEFINING AND DETERMINING THE SPECIFIC USE(S) OF THE STUDY AREA

The specific use conclusions, forthcoming in the Respondent User Information Analysis to be Used in the Development of the Conceptual Design Plan(s), are supported by the analysis formed in the Discussion of the Questionnaire Results, Chapter III. Extensive Questionnaire Result explanations will not be additionally written out here, as they can be found in the Discussion of the Questionnaire Results chapter. However, the source(s) supporting the specific use conclusions drawn are referenced.

The Study Area has been divided into elemental sections, for clarity of discussion in the Design Development Plan(s) found in Unit IV, which are the following: the Ranch House, the Site, the Stone Barn, Information Acquisition, the Approach Road, the Scientific Laboratory - Simple, the Parking, the Resident Manager's and Caretaker's Housings, the Machine Shop, the Laboratory Trailer, the Grounds, the Reservoir/Pool, the Machine Sheds East of the Ranch House, and the Lean-to Sheds West of the Stone Barn. The preceding divisions of the Study Area were addressed individually or collaboratively, whichever was the most pertinent to the specific use conclusions.

THE RESPONDENT USER INFORMATION ANALYSIS USED IN THE DEVELOPMENT OF THE DESIGN PLAN(S)

The Study Area is used in many diversified ways by both daily users and the infrequent user. (Question #2) Some of the specific needs and wants of each user group may have to be met through a combination facility(s) which is structured to accommodate the needs and wants of several user groups. For this reason, co-operation between user groups will be necessary in order for the facilities to meet the specific demands placed upon them by each user group. Some of the facilities may have to accommodate dual roles of use. Those facilities which accommodate a wider span of user groups should be dealt with and met/acquired first. (Question #6)

The facilities which could be available and used simultaneously and/or in conjunction with one another are the Entrance Sign, an Approach Road, Designated Visitor Parking, Information Center, Scientific and Cultural Exhibits for Visitors, Seminar/Lecture Facilities, Restroom Facilities for Visitors, Housing for Visiting Scientists, Restroom Facilities for Konza Prairie Personnel, Holding Area for Samples, and an Office. These facilities were felt to be necessary in the Study Area by the majority of the respondents. (Question #7)

The respondents would also like to have a full-scaled scientific laboratory, and housing for a resident Manager. However, these wants and

needs may or may not fit into the existing physical structures within the Study Area. If these needs and wants did not fit within the existing physical structures, suggestions needed to be made for the location and type of future structures.

According to the respondent users, each user category had a major thrust of purpose in their use of the Study Area; but, they also had multiple and varied supporting (secondary) purposes of use for the Study Area, which indicated an overlapping of purpose of use amongst the diversified respondent users. (Question #3) According to the questionnaire tallies on Question #3, the facilities in the Study Area should be planned for Scientific Research and Guest/Visitor firstly. Secondly: Public Education, Maintenance of KPRNA, and Conservation of Natural Grasslands/Prairie. Thirdly: Scientific Education, Helping with the Visiting Public, and Cultural Exhibition. Fourthly: Scientific Exhibition. Question #6 (Need Day-to-day) and Question #7 (Need Occasionally) supported the conclusions drawn in Question #3 (Purpose of Use).

Since the primary use of the Konza Prairie Research Natural Area is for prairie research which occurs on the prairie, and not within the Study Area, most of the activities which occur within the Study Area are supplementary to the ongoing prairie research. (Question #9) This conclusion is supported by the total number of hours spent by the respondent users in activities other than those occurring on the prairie in comparison to the number of hours spent in activities found in and related to the Study Area. (Question #8)

In planning for the Study Area, the total number of respondent users and their total number of hours spent at a defined activity must be weighed against the costs for a project to improve the facilities for that activity. The expenditures for KPRNA's foremost objectives, the research on the prairie (i.e.: scientific and maintenance personnel and equipment), should be dealt with separately from those expenditures which supplement and support the very reasons Konza Prairie exists (i.e.: exhibit).

In the analysis of Question #11 in the Discussion of the Questionnaire Results, Chapter III, two assumptions were made regarding the respondent users. These assumptions were made to clarify the answers to the question "If the following facilities were available at Konza Prairie Headquarters, which would you use?" Those two assumptions should be taken into account when planning the conceptual design. The assumptions were: (1) The respondents who indicated they would "use" a facility if it were available, will indeed use that facility; (2) Those respondents who replied to the questionnaire do have their primary use facilities and their secondary use facilities; but that there is respondent support for facilities beyond their immediate personal needs - primary use. (The supporting discussion for these assumptions can be found in Question #11, Chapter III, analysis.)

Therefore, the respondent priorities for facilities indicated in Question #11 support the priorities previously established in Questions #5, #6 and #7 analyses. The facility priorities are as follows: first - Entrance Sign, Approach Road, Information Center, and Scientific Exhibits

for Visitors; second - Cultural Exhibits for Visitors, Full-scaled Laboratory, Holding Area for Samples, Housing for Visiting Scientists, and Restroom Facilities for Konza Prairie Personnel; third: Designated Visitor Parking, Seminar/Lecture Facilities, and Restroom Facilities for Visitors. These priorities in facilities were kept in mind as the Conceptual Design Plan(s) evolved.

The respondent's, as a total and as individual groups, opinions on the questionnaire supported all the facility choices co-existing within the Ranch House except for Full-scaled Scientific Laboratory, Holding Area for Samples, Office, and Housing for a Resident Manager. An assumption was made that the respondents are aware of the complexities of their equipment within their needs. They were asked in the interviews to elaborate on the definitive scope of their respondent user group's equipment. Their responses were summarized in the Interviews with Key Questionnaire Respondents, Chapter IV. These definitive equipment scopes were taken into account in the design planning of the facilities in order to establish equipment and approximate square footage needs of a given facility. Accommodations for those facilities which are needed in the approximate location of the Study Area, but which cannot feasibly be accommodated within the Ranch House were also provided for in the Design Plan(s).

In planning for the future use of the Study Area, especially the Ranch House, the historical perspective of the Study Area and the user wants and needs will need to be combined in such a way as to facilitate

the optimum use of the building(s) in the Study Area. The majority of users of the Study Area were in favor of restoring a portion(s) of the house for exhibits and adaptively using the rest of the house for KPRNA's needs. (Question #12)

As both Melnich and Wagner feel, "..... preservation is an attitude towards the physical environment."¹⁰³ For that reason the program scope of work was based upon the historical research, documentation, physical architectural and structural analysis, and the needs of the users of the Study Area. Those facilities which could be accommodated in the building were assimilated from the key respondent interviews which stated the criteria of the individual facility needs. Selected portions of the interviews are included in this Program Criteria, as confirmation of facility detailing requirements.

The key respondent interviews related the following information and criteria. Included are the pros and cons which the interviewees and questionnaire respondents sought to make known to the investigator. Their comments included both quantity and quality sequences of information which was then used in the Design. The following is a discussion of the requirements for the facilities in the Study Area.

OVERALL FACILITIES

KPRNA is a research station with many different types of possible research objectives, and several currently being done there. Since the

foremost reason KPRNA was established is research regarding the prairie, isolation of the research areas must be retained. Control over the research plots can be maintained via distance between researchers and visitors. KPRNA management is concerned with the dilemma of education in the board sense vs. KPRNA becoming a tourist attraction. A tourist attraction has many potential hidden and built-in problems which KPRNA seeks to avoid. Yet KPRNA feels that education of fellow scientists and lay people is necessary.

The facilities should reflect the most efficient use of the Study Area. Combination areas (i.e.: scientific and visiting need uses could share an area; seminar/lecture with exhibits, holding area with lab) would be acceptable to the respondents and interviewees.

Handicapped accessibility to all three floors is optional.

Custodial care and physical plant maintenance of the Study Area was not assumed to occur nor to be available, even though the property is being leased by the University from the Nature Conservancy. Low maintenance facility recommendations were made whenever possible because, according to an interviewee, "The trash cans are not emptied by the custodial staff of the University. If the building were on campus it would be a different thing. There are some limits as to how the physical plant and custodial care views the buildings on Konza Prairie."

SEMINAR/LECTURE FACILITY(S)

The Seminar/Lecture Facility needed to serve several purposes of use. The presentation of ideas and data to: Visiting groups of Scientists,

Class Lectures, Public Lectures, Club Meetings (i.e.: Kansas Animalogical Society, Kansas Wildlife Society), and Workshops could be expected to take place within this facility.

To accommodate the proceeding groups of users, the facility needed to seat 50 - 100 people comfortably, though not necessarily luxuriously. A large open area was occasionally needed, as were smaller more intimate settings. The area(s) needs to be flexible, so that large or small groups can be accommodated sufficiently. Flexibility can be achieved through the use of movable folding tables and armless, movable folding chairs.

The equipment needed in the seminar/lecture facility needs to be simple and easy for anyone to use. Those items requested by the users to be available were: blackboard, bulletin board, slide and movie screen and projectors. A loud speaker system / sound system was felt to be optional, and not required for the size of audience anticipated. Acoustical control was requested, but left optional.

FULL-SCALED SCIENTIFIC LABORATORY

The respondents felt that a full-scaled laboratory would be convenient to have at KPRNA, but it would not be critical. With the KSU campus laboratories less than ten miles away, and the individual home laboratories just as close to KPRNA, the researchers indicated that they would not be changing their ways of doing their scientific research. Samples would continue to be gathered and returned to their own laboratory facilities. Even the Visiting Scientists who would have the greatest immediate need for a convenient complex laboratory, indicated

that they would continue to send home their specimen samples for complex analyzation. The ease with which the return of specimens to home labs could be accomplished is however directly related to the type of research being done (i.e.: mammals compared to aquatic). A full-scaled laboratory would minimize handling time of the specimen samples.

Each researcher has his own specialized laboratory set-ups to answer his particular research questions. Though specialized equipment could be provided for individual researchers at KPRNA, there were several reasons enumerated by the interviewees, why this would be impractical to do so.

- * For each question the scientist wants to answer, there are specific and specialized equipment needs. Therefore, it is difficult to predict everyones individual research needs in equipment, and for the equipment to meet more than one individual's requirements.

- * Setting up laboratories is expensive. It could become very costly for KPRNA to try to provide individual research equipment needs for all scientists using KPRNA for assorted research projects, especially if the scientist was at KPRNA for only a short term. According to the questionnaire responses, most visiting scientists came for time spans of a few days to the length of the summer, with most not intending to return again for additional research; and the KSU scientists indicated they would prefer to return to their personal labs.

- * The scientific community felt that the duplication of KSU equipment was not necessary. (i.e.: autoanalyzer - analyzes concentrations of a number of elements in a sample)

- * Trained personnel are required to run the equipment (i.e.: scanning electron microscope). Highly specialized equipment should be kept to a minimum, as wages for potential additional trained personnel to run the specialized equipment, would require additional funding.

- * A program for long-term maintenance of equipment at KPRNA would need to be established and funded. The potential problems with additional equipment could be minimized by supplying minimal equipment at the KPRNA proper.

- * A long-term maintenance program of the equipment would not only include new parts for broken pieces, but the facility would need to have environmental controls such as: sound conditioning, stabilized heating and cooling, and be dust free (detection levels can be measured in parts per billion).

SIMPLE SCIENTIFIC LABORATORY

The respondents felt that a Simple Laboratory providing minimal services would serve their needs at KPRNA sufficiently. Therefore, the economics of supplying a laboratory (personnel and equipment) would be

minimal and the long-term maintenance would be less of a potential problem than would be a full-scaled laboratory.

A Simple Laboratory was defined by the scientists as providing the following:

- * Wet labs with running water (i.e.: wash glassware to maintain pure instruments, rather than hauling glassware back and forth to the KSU campus or a home lab)
- * Electricity
- * Bench top space
- * Simple analytical techniques (i.e.: a soil sample's Ph factor)
- * Portable balances

Discussed during the interviews were items which would enhance the quality of the Simple Laboratory. The area need not be large, but should be subdividable for various investigators. Separate rooms or areas for individual researchers, not one large commonly shared area, would facilitate organization amongst the researchers. These areas would not necessarily be assigned to individuals for long periods of time, but rather for specific time increments for specific current studies.

A sorting area would be beneficial in expediting the acquired samples to their appropriate groups. Also, improving the quality of the Simple Laboratory would be an office area in which a personal micro computer could be installed so that data could be feed directly into the KSU main frame computer.

HOLDING AREA FOR SAMPLES

The Holding Area for Samples would be a short-term storage area for scientifically collected materials. It should provide separate cabinets for the holding of plants, the holding of insects, and for various collections which may come about with future research projects. These cabinets would need to be appropriately sized and with controls suitable for the animals/plants being stored.

The scientists also pointed out that the Holding Area should not be within the house. If any of the collected specimens were to escape their confinement, they could pose danger to those people within the house or cause damage to the house itself (i.e.: insects, rodents). This holding area should be a covered area, preferably protected from the weather.

STORAGE FOR RESEARCH EQUIPMENT AND SPECIMENS

Only a minimal amount of storage for research equipment and specimens is required by the researchers according to the scientific interviewees. This storage area for equipment would entail an area large enough to hold bottles for insects and fish, traps for mammals, and similar sized items which visiting scientists might require for their research.

Mounted insects and botanical specimens used for sample specimen verification should also be located at KPRNA (as opposed to only the current KSU campus location). These could be in an area only inhabited by the researchers, or they could be part of a scientific exhibit. These specimens are not to be confused with the archival specimens which

should continue to be stored at the KSU campus facility. These specimens would aid the researchers in the immediate identification of their samples, so that analyzation of the specimen might continue forthwith.

KPRNA PRAIRIE GRASS EXHIBITS

The KPRNA Prairie Grass Exhibits would include such displays as: *current and past research projects on KPRNA, *burning exhibits, *specimen boards for the prairie grass, and *all with supplementary maps, diagrams, and/or photographs. These exhibits need tabletop display space and bulletin boards.

SMALL MAMMAL EXHIBITS

The display needs of the small mammal exhibits would include a display case for mounted or museum specimens, with some of the mammals in life-like poses. The museum voucher specimens relative to the research being done on Konza Prairie would not be on exhibit, but rather be kept in the archival storage area on the KSU campus. No live animals would be kept permanently on display, as daily maintenance of the animals and their lodgings would be required. The mammal exhibits would need to be set up in such a way as to facilitate the long-term minimal maintenance of the displays.

The opinion of the scientific interviewees was that a mammal display case should be: *shallow, *approximately fifty linear feet, *placed floor to ceiling along a wall, *with a glass front for viewing but

preventing touching of the specimens, *with a wood surround which would be aesthetically compatible with the surroundings, (i.e.: the display case in Ackert Hall).

The environmental conditions within the display units and/or within the exhibit area should be favorable to the continued long-term maintenance of the specimens.

BOTANICAL AND HERBARIUM EXHIBITS

The Botanical and Herbarium Exhibits were requested by the respondent users. Though the prairie grasses are on display, there are many other plants that grow naturally on the prairie. Therefore, they too should be acknowledged by the KPRNA governing board via a display with specimens and/or photographs, and all of it labeled both in technical scientific terminology and laymen's terminology. A display case(s) and display flip boards would be required to house the dried plants with their photographs and labels. Then these displays could also be used by this group of researchers as a means of verifying their field specimens.

CULTURAL EXHIBITS

All of the respondent user categories, except the visiting scientists, supported the inclusion of a Cultural Exhibit within the Study Area. The Study Area is a large homestead with historic significance, and possessing uniqueness in the architectural structures. Therefore, there should be places within the Study Area to convey these messages to all users of the Study Area.

Accurate historical information should be available to the users regarding the homestead. This information could be conveyed through the use of exhibits, which would be placed in the structures and around the Study Area. The areas of the structures which would best help to convey those messages would be, for instance, the rooms in the house which were established in the Historical Use Investigations, as being the most historically and structurally important to and within the Study Area.

These areas within the house and barn should be returned to a condition realitive to what the structures were in 1912-1920, including the swimming pool/reservoir area, which was also unique in its era. These areas could be set up in such a way as to depict "the way life was on the ranch," with photographs, sparse furnishings, and descriptive written narrative on display.

MISCELLANEOUS EXHIBITS

Additional exhibits which could be forthcoming, since research has or is being done on KPRNA regarding the topics are: *Indian History*, *Geological History*, and *Archeological Survey Specimens*. These future exhibits should be allowed for in the apportioning of the usable spaces within the Study Area. Enclosed display cases of various sizes would be used, with supporting bulletin boards and/or picture hanging accommodations available.

PUBLIC ASSISTANCE FACILITIES

Signage. All user visiting categories and the volunteer workers made notes to the investigator in their questionnaires that the signage for

KPRNA was inadequate. Throughout the questionnaire, comments were made to the effect that the signage needed to be expanded. Included in the suggestions were: labels on the facilities, directions to get to specific facilities and areas, how to gain permission for accessing specific areas and whom to contact to do so, and the frequency of allowable visiting (i.e.: days and/or times that KPRNA could be accessed). These user groups will need to be provided functional and dependable way-finding methods within the Study Area; because they actually use the Study Area as much or more than the scientific community, according to the responses to Question #8.

Approach Road to and within the Study Area. The approach Road to and within the Study Area could be redirected slightly or kept on its present course according to those interviewed. The present course takes the driver across a small creek by way of a low bridge. In the spring during the rainy season, this creek has a tendency to overflow the bridge, which then slows traffic considerably. According to the daily users, at this point in time it is a minor problem. However, if more vehicular traffic were to occur on the road with its present course, it could become a major problem, at which time the roadway would need to be redirected to a higher ground level. The roadway can continue to be two lane, as that would be sufficient for the traffic flow on it now and expected in the future.

The roadway can continue to be gravel or it can have a hard surface applied to it. The cost of such a long roadway, with minimal traffic may not warrant such a costly expenditure. Also, as visitors enter the Study

Area, the gravel road's dust helps to establish the "aura" of the time period in which the cultural displays are transfixed.

Parking. The parking area for the visitors and the workers on KPRNA will need to be within a reasonable walking distance of the Ranch House, Stone Barn, and Machine Sheds. The majority of the activities occurring within the Study Area, do so at or near these facilities. The size of the parking area should accommodate at least twenty-five vehicles. An additional vehicular overflow area for special occasions, i.e.: Visitor's Day, should be indicated in location and size. The surface structure of the parking area need not be of a permanent nature, i.e.: blacktop, but could be a gravel bed defined with stone or railroad ties.

Information Center. The respondents and interviewees were of the opinion that the Information Center needed to be a place for the gathering and dispensing of information, rather than a complex office arrangement.

The information which would need to be dispensed in a reliable and easy fashion was: *Rules and Regulations of the KPRNA, *Whom to notify regarding admittance onto the prairie and into the Study Area, *Posted hours for researchers and/or visitors, *Parking location(s), *Restroom location(s), *Scientific opportunities for visitors within the Study Area, *Cultural opportunities for visitors within the Study Area, *Educational Brochures available with (1) scientific information about the prairie, and with (2) an accurate historical summary of the era in which the stone

ranch house and stone barn were built, the original owners, and the original usage of the house and barn structures, and *Guided Tour information regarding the Study Area and the Prairie Land.

Restrooms. The public or semi-public restrooms for KPRNA are all currently located within the Study Area. The respondents feel this is reasonable, since the prairie lands are so extensive it would be hard to locate them at precisely the area they would be needed. Also, the restrooms do have to be maintained.

Therefore, the restrooms should continue to be within the Study Area. The current restrooms are located within the Ranch House. Limited access is available to the house, as it is kept locked at all times. The LTER researchers, the Manager, the Director, and other assorted workers have keys to enter the building. All other people remain locked out.

This dilemma was a point of contention that arose during the answering of the questionnaire. Though the facilities for the visitors and one day scientists are primitive in the Study Area, these people have adjusted to their crudeness. However, the lack of private accessible restroom facilities was not agreeable to many of the respondents.

Since the management of KPRNA needs to continue to maintain a locked door policy for the buildings, perhaps portable service maintained facilities could be provided within the Study Area during the high use months of April through September, until such time as the future scientific laboratory facilities become available (see Site Analysis - Simple Scientific Laboratory found in Chapter VIII).

HOUSING FOR VISITING SCIENTISTS

The housing for Visiting Scientists would be for short-term stays by researchers of both sexes. Separate and/or dual sleeping spaces need to be provided for six researchers. The researchers can share common kitchen, and bathroom facilities. Previously, the past visiting scientists felt this arrangement was somewhat impersonal, however, they felt the convenience of location outweighed the "boarding house" effect of the facilities.

Any future facilities should be planned in such a way as to alleviate some of the bad connotations the ranch house has received. One element about the ranch house that was continually brought out by the visiting scientist respondents in the questionnaire was that the ranch house was damp, moldy and dirty. Strong feelings were expressed regarding these problems. If any of the Study Area buildings are to continue to be used for housing, it is the feeling of the respondents that KPRNA should make a more refined effort on the visiting communities behalf.

These facilities have been offered by KPRNA as a helpful gesture on their part to alleviate some of the expenses for the researchers while doing research away from their home base. For this, the researchers were thankful. However, basic cleanliness in those facilities was sought. Perhaps this is a direct reflection on the problem of no defined custodial and physical care.

HOUSING FOR A RESIDENT MANAGER

The housing for a Resident Manager of the KPRNA is currently not sufficient, according to the local interviewees. They feel this housing

situation should be a high priority goal, as immediate dramatic improvement is needed.

This housing facility may or may not be located within the Study Area. In either case, the future complete design of the facility should take into consideration the era in which the ranch was developed and originally used. The design for this facility should be compatible, appropriate and sensitive to the original ranch house period (1910-1915). The designs and specific plans for the future development of this housing should be a single family dwelling of moderate size for a Resident Manager.

CARETAKER FOR THE VISITOR CENTER

The Caretaker for the Visitor Center would be a person who would have several duties. They would consist of: writing brochures, getting the exhibits assembled, updating the exhibits, maintaining the exhibits, lecturing at places such as the Audubon Society and various area club meetings, and in general assisting the visiting public within the Study Area. This assistance would aid in the control of visitors within the Study Area, and also provide them with an informed interpretation of the prairie grasses and what constitutes a prairie. Several of the Interviewees used the term "Naturalist" to describe such a person/position.

The Caretaker should live within easy access to the Ranch House, for visual and public assistance control measures. A Graduate Research Assistant could provide the necessary time and interest involvement required for this position, and be supplied lodging within the Study Area as part of the GRA grant.

OFFICE(S)

The KPRNA office should continue to remain on the KSU campus until such time as the Scientific Laboratory is built. The LAB building could then also provide office space for the Director, a secretary, the Resident Manager, and other positions deemed necessary by the governing board of KPRNA.

The "Naturalist/Caretaker" should have an office in the Ranch House, since this is where the Naturalist would be performing the majority of his employment duties.

According to McCarthy, "Architectural significance is mostly appreciated from the outside -"¹⁰⁴ Therefore, the exterior of the stone house should continue to be maintained in a restoration oriented manner. (see GLOSSARY terminology) Existing conditions which need specific immediate attention and those conditions which are part of an ongoing maintenance program, all need to be planned and accomplished using restoration methods. Those conditions to be dealt with are elaborated on in the Analysis of Existing Conditions, Chapter VIII, and are supplemented with the Documentation of the Ranch House, Chapter I.

The most historically significant portions of the stone house in the Study Area (Ranch House) should undergo museum-level restoration. According to the historical research and structural analysis done, and the perceived impression of the users, those most significant portions of the house would be the Cowboy Bunk Room *307, the Game Room (Seminar

Room) #208, the Ice Room #103, and the Dining Room #105. The restoration should be to the date of 1912 A.D., or shortly after the building was completed and occupancy occurred.

Concealed lighting and environmental control (i.e.: heating, air conditioning) appropriate for the uses may need to be introduced into the building. Those factors which the lighting and environmental controls must take into account are: historical and structural integrity of the building, diversified use(s) of the various rooms, exhibit contents within specific areas (i.e.: historic furniture and fabric, plant and animal specimens), and personnel and visiting public use of the facilities.

The remaining portions of the Ranch House should be restored, and where necessary to meet the needs of the users, adaptive use may need to occur. For both the restored and the adaptively used areas, materials, finishes and colors which were original to the house should be used wherever possible.

NOTES
CHAPTER VI
PROGRAM CRITERIA

¹⁰³ Robert Melnick, and Richard Wagner, "Preservation Education: Guidelines and Implementation of a Program," *APT Bulletin*, Vol. XI No. 2 (1979), p. 53.

¹⁰⁴ McCarthy, p. 48.

CHAPTER VII

ANALYSIS OF EXISTING CONDITIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION

INTRODUCTION

"..... Now [is the] time to take a closer look at some of the details largely responsible for determining the character or "flavor" of a building - whether it be good, bad, or indifferent - and to examine some of the choices available when they are to be replaced or altered in any way," stated Stephen.¹⁰⁵

According to Greiff, "Preservation does not mean an end to change and progress. It does mean the imposition of certain conditions on the process of change."¹⁰⁶ "[For] although architects may be the only designers in the sense that they are consciously shaping the end result, in point of fact, any decision that affects the usefulness or the appearance of a building - no matter who makes it - is a design decision," Stephen also stated.¹⁰⁷ Stephen continued on to say, "..... Good design makes the most of whatever money is available - whether it be large or small - and is therefore certainly no luxury item. Good design is good economics from everyone's point of view"¹⁰⁸

As Stephen pointed out, "Although the design factor may be only a part of the whole process of getting something built, it is of the same importance as the tip of an iceberg, being the part which is normally seen and which, to the outside world, represents the whole "¹⁰⁹

Also, Wrenn felt: "Buildings, like people, need care. If care is constant, if maintenance is carried out, the capacity for a long and productive life remains."¹¹⁰

Those items preceded by an asterisk * in the analysis sections should be looked upon as high priority goals. The remaining goals would be long-range. To accomplish those goals, the following points should be kept in mind by KPRNA. They are according to Stephen: "..... The choice of materials, textures, and colors is among the most important decisions in establishing the basic character of the house, and in fact, more rehabilitation jobs are spoiled by the use of inappropriate and fake materials than for any other reason."¹¹¹

The historical significance of the Ranch House is determined by how it was originally used. Cowboys on cattle ranches were infrequently treated with such fine accommodations from their employer. Though living in Kansas, these cowboys participated in an unusual way of life. Their bunk room is rarely found in homes of the period that have been preserved. For these reasons, the future repair and maintenance work must be carefully programmed and delineated so that the 1900 appearance and the original use of some of the rooms in the building is maintained. In addition to the planned exhibits by KPRNA, a cultural exhibit of this buildings inhabitant's life style could be maintained.

To fully comprehend the significance of the Ranch House, its relationship to the other buildings and the landscape must be continued. The existing remaining original outbuildings should continue to be preserved to protect the ambience of the house. As Konza Prairie

develops its interpretive program for visitors about the prairie grasses, etc., emphasis should also be placed on the Ranch House and its site.

The Ranch House has survived with much of its twentieth century building fabric intact. Though the house has been extensively remodeled in the last 20-30 years, the original plan configuration has had only two minor changes. Also, the remodeling materials have been applied over the original parts. These modifications should be reversed as part of an ongoing maintenance program. A long range maintenance and repair program will help to insure that maximum results are achieved within the Konza Prairie's limited budget.

EXTERIOR BUILDING

The asbestos roof is new, but when the time comes for replacement, it should be replaced with the original roofing fabric, wood shingles.

- * The two red brick chimneys will need to be rebuilt from the roof line upward using a portland cement/lime mortar that has been content and color matched to the existing original mortar. Application should be in the same manner as the original.
- * The gutters and downspouts need to be re-joined to the eaves and replaced where broken and/or missing.
- * The eaves are in a very deteriorated state from dry rot caused by a bad roof. Some of the eave boards should be filled with epoxy, while in

other areas, where the entire fabric of the board is missing, new boards will have to be installed.

The stages of stone deterioration were: broken parts, deep cracks, internal cavities, and holes and gouges. The deep cracks and separations will need to be filled with a color matched high lime content mortar mix, and the broken parts repaired and set back into the wall or replaced with new stonework cut from the original limestone bed south of the house. The funnel discussed and any additional funnels found on the wall surface should be filled. If this funnel is not filled, it will assist in the capillary action within the wall, freeze, and end up by creating a spalling situation. Funnel shaped internal cavities will need to be filled under pressure.

The multitude of small holes on the surface of the limestone will hold water which will eventually begin to erode the surface structure of the limestone blocks. Spalling will result from the freezing and expanding of the surface area. This has already begun along the East side of the house, near the center of the first floor, underneath the window sill. By cutting back the vines from the exterior facades of the house, Konza Prairie has already helped the situation by increasing the stonework's ability to dry out quickly. Because of the extensiveness of the pin-head sized holes, surface treatment would result in the total covering over of the original building fabric. As long as the vines are kept from the surface of the stone, the air circulation on the surface of the wall should be sufficient in sustaining the stonework from further deterioration.¹¹²

* The settling crack on the North facade was caused by a bearing failure of the internal wood supporting structure. Termites had infested

many of the wood joists between the first and second floors. The beams in and near this corner of the house were damaged. Epoxy will need to be introduced into these beams in order for them to gain back their supporting ability. Then the crack in the foundation will need to be filled.¹¹³

* A drainage system for the porch (kitchen roof) needs to be respectfully applied to the stonework. A drainage pipe or downspout could be mounted on the Southeast corner of the porch, where the natural slant of the roof brings the water, and have a small opening made in the stonework base which would allow the water to flow through, out, and away.

* All windows should have their screen and storm windows on them in the appropriate season. The missing ones should be replaced with comparable ones to the original. They should be built of wood and with the same number and size of lights and muntins. If the missing storm windows were on the current single pane windows, the insulation properties for heating would be increased. The one aluminum combination window should be removed, the window cleaned of the dryer exhaust lint, and a replication of the original storm window should be mounted.

The aluminum combination storm doors installed at the two back-entry doors should be removed for accurate historical exterior appearance. Storm and screen doors like the one on the front door should be installed.

The original lighting fixture over the front door should be revitalized and used for outdoor porch lighting. Currently there is no supplementary lighting in this area.

- * The inappropriate aluminum awnings should be removed from the windows and all anchoring holes filled with appropriately colored high lime mortar mix.

INTERIOR BUILDING

- * The floor joists need to be checked for the amount of damage done by the termites. If epoxy is needed for additional structural stability, it should be introduced into the wood. However, epoxy will only stabilize the compression loading and not any bending of the joists. Significant termite damage may require the installation of new joists ("sisters") alongside the existing joists.¹¹⁴

- * The roof rafters need to be checked for deterioration from the excessive moisture penetration when the old roof was still in place. New structural members may need to be introduced.

The two remaining original lighting fixtures should be retained, and the added paint removed from the brass finish of the second floor vestibule fixture. Suitable and appropriate fixtures should be installed at the ceiling mounts in the other rooms.

The incompatible pressed-board ceiling tiles and the dropped ceiling of glass and metal grid system should be removed and the ceiling plaster restored throughout the house, except in the HVAC designated areas (see Chapter VIII, HVAC section). The technique of salvaging the ceilings¹¹⁵ would be to use plastic washers to secure sound, but perhaps sagging plaster to the wood lath. Then remove the damaged area of plaster and undercut the edges. Next patch the area that has lost its plaster. Lastly put on a new finish coat to the cleaned and repaired ceiling. The ceilings should be checked to find their original finish. Given the age of the house, it will probably be calcimine.

The various types of paneling that have been applied to the wall surfaces should be removed and the original concrete and plaster walls saved and repaired. Secure the sound but perhaps sagging plaster to the wood lath of the interior partitions or the limestone exterior walls. Remove any loose or crumbling areas. Patch the larger areas by undercutting the remaining plaster edge, inset a wire mesh to the lath if necessary, and apply the plaster. On the interior side of the limestone walls, concrete would be applied to the stonework, followed by a finish coat of plaster. For the plaster which is still secure but water stained (i.e. 303), the surface can usually be sealed with pigmented shellac or alcohol primer to prevent the stain from bleeding through new paint. However, for the effloresced plaster (i.e. 106), wire-brush the surface and then seal it with pigmented shellac.

* Begin by fixing the plaster on the uncovered walls first.

* The modernized kitchen and bathrooms will need to be kept as they are, rather than returned to their original state. Konza Prairie does have need for these facilities on an on-going basis for serving the scientists and visitors who come to this exhibit/research building.

The Ice Room should be returned to its original condition of four limestone faced walls, concrete slab floor, plaster ceiling and ice hatch. The room could be used, even in this manner, as an exhibiting room with a cultural flair to its interior appointments.

* All painted woodwork should be stripped of the applied paint, and the stained and varnished surface restored. The woodwork, which has been disfigured by sawing to ease in the application of modern paneling, should be replaced where necessary to bring the mouldings back to their original configuration.

* The wall configurations should be returned to the original ones.

The doorway that was closed to create a closet between the sewing room and the manager's bedroom (203 & 207) should be re-opened. Not only would the original plan configuration be restored, but it would facilitate easier visitor movement in that portion of the house. A pattern of movement creating a circle could then be established by Konza Prairie for visitor traffic management between exhibits.

The hallway partition added in the third floor hall (301) needs to be removed. Not only is it disruptive visually to the integrity of that area, but it also hampers user traffic flow within that hallway.

The additional cabinetry in the maid's room (205) should be removed, but Konza Prairie may need to leave this feature because of the lack of storage facilities on this floor.

- * The wood flooring in bedroom #3 (305) should be restored as closely as possible to its original look through the use of appropriate stain and sealer.

INTERNAL SYSTEMS

HVAC

The small propane gas heaters and their duct work should be removed. They are (1) not in keeping with the architectural integrity of the house, (2) potentially a dangerous fire hazard to the interior fabric of the building, and (3) not successful in heating large air volumes. Though the introduction of other types of heating would also be destructive to the architectural integrity of the building, these would not be as great of a fire hazard, and would be more successful in the heating of large air volumes quickly.

The use of passive solar heating would be the least destructive to the building fabric. The limestone, though not exceptionally high in R value, is acceptable and does act as a holding medium for the heat gained from the sun. The heat gained in the stone surfaces would be transferred to the interior spaces.

A passive solar system for the house would offer a system which would maintain a uniform environment in the house, but would need to be

supplemented to be comfortable for human occupancy in the winter and to preserve the structure itself. However, the building is used mainly in the spring, summer and fall by Konza Prairie, for visitors and scientists who are viewing and working with the prairie land.

* A forced air system would be recommended to be installed in the ranch house. Further discussion regarding the selection of a forced air system for the Ranch House can be found in Unit IV - Design Development, Chapter VIII - Long-Term Use Plan for the Study Area, section - HVAC.

HVAC SUPPORT SYSTEMS

* The storm windows which are of the original fabric should be replaced on the windows. Where no original storm window is available, replications of the originals should be installed. The original storm window installation track is still in good condition on all of the windows. This second glazing of glass would help tremendously in counteracting the glass heat loss.

* The chimney flues should be closed and a fire-back could be used at the two fireplaces for further prevention of heat loss.

* Doors and windows should have their drafts stopped. (i.e. The game room/porch doors have over an inch of open air space at the base.)

ELECTRICAL

* All of the wiring within the building should be replaced if it is in a deteriorated condition, so that the safety of the building is assured. The wiring should be advanced from 110 to 220 volts only in areas of the house where it is deemed necessary for specific electrical requirements, i.e., room 104 for a dryer. The higher voltage is unnecessary for most electrical needs within this building, and would promote a dangerous electrical supply when not being utilized sufficiently.¹¹⁷ When any rewiring is done it should include the 110 grounded installation and outlets.

The outlets should be kept to a minimum, located in out of the way places, and placed strategically for use. Prospective exhibits containing lighting would then be accommodated, but safely.

FIRE DETECTION SYSTEM

* Konza Prairie needs to have installed in the house a fire detection system. The fire detection system could consist of ionization detectors that would need to be installed to protect each space in the house.¹¹⁸ An alarm system should be set up so that if one of the detectors were to go off, KPRNA personnel and/or the closest fire station would be alerted.

The reservoir/pool should be cleaned out and started up again. This water resource would be invaluable to fire fighters in an emergency

situation. The stone exterior structure of the house is relatively safe from fire; however, the interior spaces are not inherently safe. Additionally, this fire fighting resource could be needed for one of the other outbuildings or houses located near the reservoir/pool.

Also, from an historical standpoint, the working wind mill and reservoir would be unique. A diagram of how the water system worked for the house could also be on exhibit, with the water being pumped used for services which would not require a sanitary water supply

NOTES
CHAPTER VII
ANALYSIS OF THE EXISTING
CONDITIONS

- 105 George Stephen, *Remodeling Old Houses Without Destroying Their Character* (New York: Alfred A. Knopf, 1982), p. 80.
- 106 Greiff, p. 11.
- 107 Stephen, p. 13.
- 108 Stephen, pp. 14-15.
- 109 Stephen, p. 16.
- 110 Wrenn, p. 208.
- 111 Stephen, p. 59.
- 112 Douglas Wasama, Notes from Preservation Technology class lectures, Fall 1984.
- 113 Wasama, notes.
- 114 Wasama, notes.
- 115 Wasama, notes.
- 116 Poore, Wall Restoration, n.p.
- 117 William Jahnke, Notes from Environmental Systems I, Spring 1984.
- 118 Jahnke, notes.

UNIT IV

DESIGN DEVELOPMENT

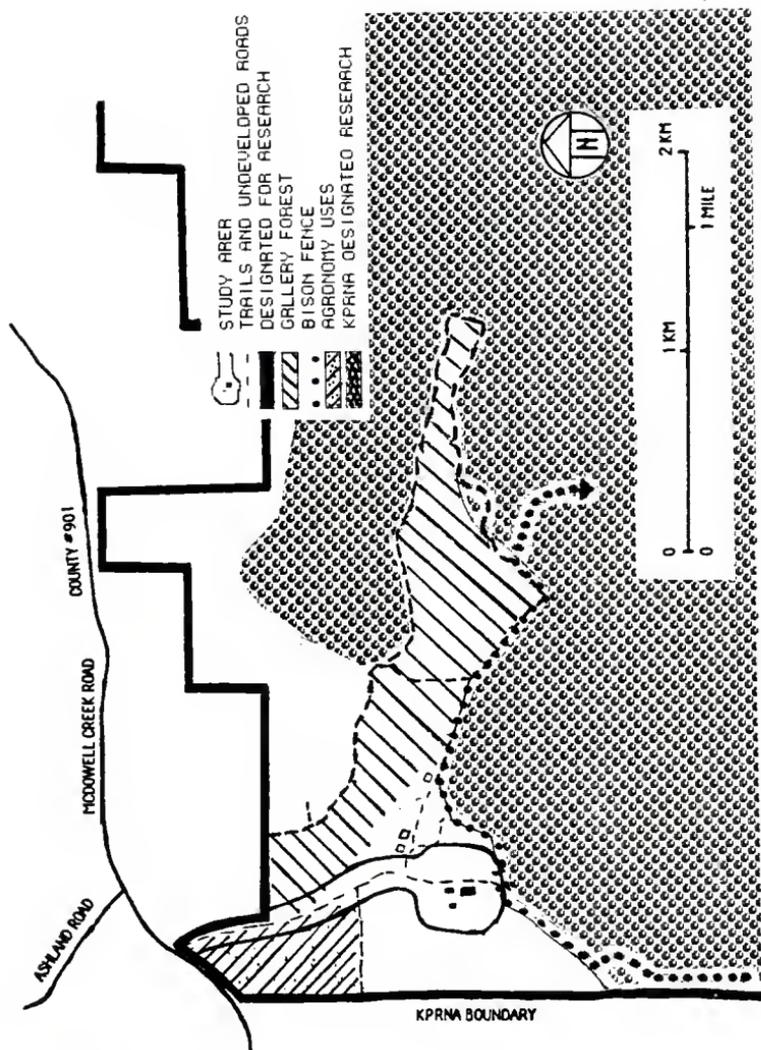
INTRODUCTION

Two plans evolved in this design thesis: a Long-Term Plan for the Konza Prairie Research-Visitor-Administrative Center, and an Interim Use Plan for the Ranch House and its adjacent physical facilities.

The Long-Term Plan provides future guidance for the Study Area development, as funds become available. The Long-Term Plan should be dealt with in terms of a step by step process of development. The plans and designs set forth here have been arranged so that (1) the buildings and site within the Study Area are changed as little as possible from the present point; (2) the valuable research that is being done on the larger KPRNA scene is not intruded upon; (3) the historical integrity of the Study Area remains secure; and (4) the needs of the diversified users can be met effectively.

The Long-Term Plan is a Master Plan for the future development of the Study Area. Site analysis occurred when it was determined that all of the required activities would not fit into the existing Ranch House structure. Site development recommendations grew out of the development/user need issues.

CURRENT USES OF THE NORTHWEST
CORNER OF KPRNA



Source: Personal drawing.

CHAPTER VIII

LONG-TERM USE PLAN FOR THE STUDY AREA

ADAPTIVE USE OF THE RANCH HOUSE

"..... A building must continue to justify itself on more than artistic grounds - especially so in America. It must continue, in some way, to be functional if it is to survive," Greiff states.¹¹⁹ David Poinsett also feels, "This [survival] is the putting of historically and architecturally valuable sites and buildings to economically viable uses."¹²⁰

By focusing on Adaptive Use, many of the needs of the users of the Study Area can be met in the Ranch House; however, some critical needs can not be met in the house. These are the Scientific Laboratory, the Resident Manager's Housing, and an Informational Area.

Through the site analysis, the various building site proposals for these unmet critical needs are discussed.

Throughout the design process, the changes within the Study Area were dealt with in a discriminatory manner. The plans are set forth in such a way so as to eliminate waste of manpower and money. The funds for these KPRNA projects are limited, therefore, design plans were assembled so that changes could be made for the present use, but would lend themselves to the future plans as well.

From the Long-Term Plan an Interim Use Plan for the Ranch House was developed. It sets forth ways in which facility compromises could be

made to accommodate most of the needs of the users, semi-effectively, until such time as the Long-Term Use Plans can be brought into existence.

A LONG-TERM USE PLAN FOR THE STUDY AREA

The Long-Term Use Plan for the Study Area explains the development of the Konza Prairie Research-Visitor-Administrative Center. The room numbers will be referred to in this section to assist the reader. Long-Term Use Plan room titles will be used. New titles for rooms will be used where applicable. The symbol ● designates the proposals themselves. The symbol Δ designates any unusual observations incurred and/or any proposal justification.

The following section on Ranch House Usage is a summary of the proposed use of the various areas within the Ranch House. Floor plans showing these proposals can be found on pages 168, 169 and 170.

RANCH HOUSE USAGE

FIRST FLOOR AREAS:

101 Main East Entry

- Main entry for the Konza Prairie Research-Visitor-Administrative Center.
 - Δ Closest entry from the visitor parking area.
 - Δ Handicapped access to the restrooms and the seminar room.

102 Storage Room

- Provide a runway for the first floor HVAC duct work.
 - △ The fewest alterations are required to the building fabric on the first floor.
- Storage area provided for the folding chairs and tables which will be used in the seminar/lecture and reception areas.
 - △ These chairs and tables should be housed upon the carts which are structured by their manufacturer to store quantities of chairs or tables in a neat, orderly and condense way.
 - △ This storage location is convenient to the seminar/lecture room.

103 Furnace Room/Ice Room

- Utilize the storage and closet area as a furnace room for a forced air system.
- Remove the propane gas heater from the room.
- Maintain the remaining Ice Room as an exhibit.
 - △ Though historically significant, a portion of the Ice Room will need to be sacrificed to accommodate the HVAC required in the program.
 - △ The portion not used for the HVAC furnaces #1 and #2 should be restored to the Ice Room's original look by removing the carpet and wall material alterations.
 - △ A diagram with explanation could be present to explain how the room and the refrigeration system for the household

worked, indicting the water runoff system provided for the room.

104 Public Restrooms

- Men and women's restrooms.
- Both restrooms would provide handicapped access.
 - △ Remove existing lockers, washer and dryer, and fixtures for use in the scientific laboratory's personnel restroom and lockers facility.

105 Seminar/Lecture: Small groups (under 50)

- △ Two exits are available for emergencies. One through the access door to the seminar room into the hall 101 and out the main entry. The other through a posted emergency exit which would take people through the kitchen 106 and out its entry door.
- Slide/movie screen on the North wall.
 - △ Grounded 110 duplex outlet for the projector.
 - △ Lighting is easier to control because there are fewer windows than upstairs.
 - △ The architectural integrity of this space is less inhibited with window alterations than would be room *208, the large room on the second floor.
 - △ Mini-blinds fabricated from wood should be used, as they work well, are easy to maintain, are easily adjustable, and would blend into the paneling currently in the room.
- Folding chairs and folding tables for diversified usage.

- Δ Reception preparation to occur in the adjoining room 106, with service to guests occurring in 105.
- Carpet the floor for acoustical aid.
 - Δ The carpet should be applied over the linoleum tile which was laid over the original concrete floor.
- Remove the propane gas heater from the room.

106 Kitchen

- Reception preparation area.
 - Δ Private entry is available through the kitchen's outside entry door for those using the kitchen area.
- Vending machines for snacks could be housed.
- Small table(s) with chairs.
 - Δ A dining area provided for the upstairs dormitory guests.
 - Δ Entry from the other parts of the house (i.e.: dormitory guests) to the kitchen area with a seminar or conference in session would be gained by going through the storage area 102.

SECOND FLOOR AREAS:

201 Vestibule

- Handicapped access to the second floor exhibits.
- Pipes should be wrapped and enclosed inconspicuously.
 - Δ Pipes have been added to the structure since it was erected, but which will continue to be needed in the servicing of the third floor bathroom.

202 Foyer and stairwell

- Serve as an pass-thru flow center.
 - △ Facilitate activities occurring on the second floor, and to service between floor pedestrian traffic.

203, 205, 207, 208 Exhibits

- The rooms will feature specialized topics which are associated with the prairie. i.e.: Indian, Geological, Scientific Studies both biological and animal, KPRNA.
 - △ As stated by an Interviewee: "A display oriented towards a layman should be able to be made regarding all aspects of the research which is being conducted on the Konza Prairie. If the justification for the research cannot be shown, why should public funding be continued for that aspect of the research?"

203 Exhibit

- Remove the propane gas heater from the room.

205 Exhibit

- △ The architectural integrity of the walls and woodwork should be returned.
 - The current paneling should be removed and the plaster walls underneath repaired.
 - The damaged woodwork of the door and window surrounds should be replaced.
 - Removal of the paint from the stained woodwork should occur.

- The 1940's built-in cupboards should be left for storage of the KPRNA brochures and printed material.

207 Exhibit

- △ The architectural integrity of the walls and woodwork should be returned.
 - The current paneling should be removed and the plaster walls underneath repaired.
 - The damaged woodwork of the door and window surrounds should be replaced.
 - The paint from the stained woodwork should be removed.
 - The 1940's built-in closet should be left to house the return air duct for the second floor, and then use the remaining closet area for KPRNA exhibit/brochure storage.
 - The false closet back should be removed and the doorway between rooms 203 and 207 reopened.
 - △ Visitor circulation between the exhibition rooms would be enhanced.

208 Exhibit

- Remove the propane gas heater from the room.

204 Back Hall

- The area should be left as a hallway.
 - △ Provide for traffic flow to the northern most rooms on the second floor.
- Transformation of the hall closet into a supply air duct for the second floor furnace should occur.

206 Restroom

- Women's Restroom
 - △ Visitor restroom.
 - △ Dormitory guest restroom and bathing facilities.

209 Kitchen Roof

- No general access to this area should be allowed.
 - △ The critical maintenance factors associated with this type of roof system.
- The northeastern corner of the roof will need to serve as a pathway for the emergency exit in the exhibit room 208.

THIRD FLOOR AREAS:**301 Stairwell, Landing and Hallway**

- The added partition in the hallway should be removed.
 - △ The circulation of guests/visitors is not obstructed.
 - △ The architectural integrity of the hall area is returned.

302 Restroom

- Men's Restroom
 - △ Visitor restroom.
 - △ Dormitory guest restroom and bathing facilities.
- Removal of the propane gas heater should occur.

303 Small Meeting Room

- A round table with chairs for conferences should be provided.

- The closet should be used as a cloak room for the conferees.
- Removal of the propane gas heater should occur.

304 & 305 Guest Bedrooms

- Dormitory style overnight accommodations.
 - △ Bed, dresser, table/desk, chair would be the furnishings.
- Strip the paint from the stained and varnished woodwork.
- Reapply the finish to the floor in room 305.

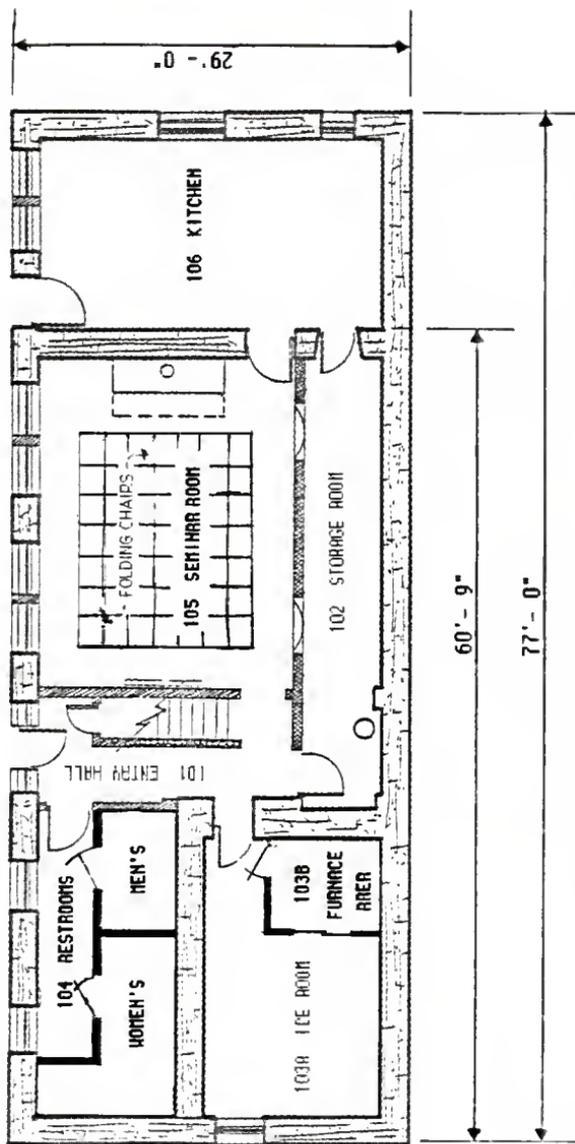
306 Office

- Provide a Caretaker/Naturalist office with desk, chair(s), files, and office equipment.
 - △ A Naturalist is a person whose responsibilities would include: the exhibit co-ordination, preparation, and maintainance; and giving prairie tours and talks to visitors.
 - △ From these windows, the Naturalist could have visual control over much of the Study Area.
 - △ The office area would be near to the guest areas for better control over the guest areas.
 - △ A computer hook-up to the KSU main frame could be available in this controlled access room.

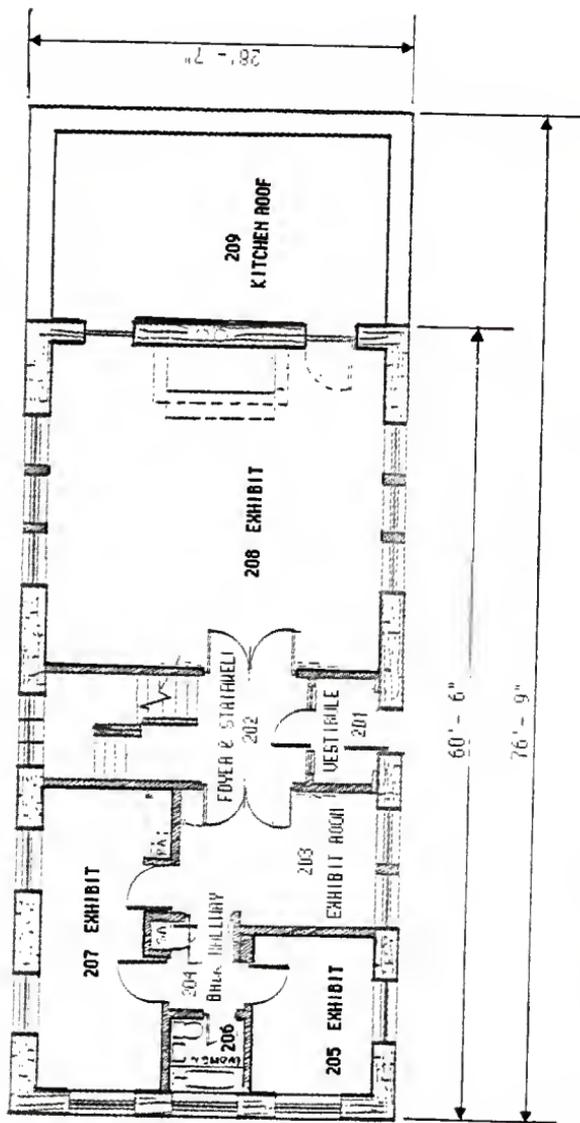
307 Cultural Exhibit - Cowboy Bunk Room

- △ Restore the architectural integrity of the lockers.
 - Display the cowboy lockers.
 - Removal of the added-on cabinetry and venting which is above

PLAN IX
RANCH HOUSE LONG-TERM USE - FIRST FLOOR

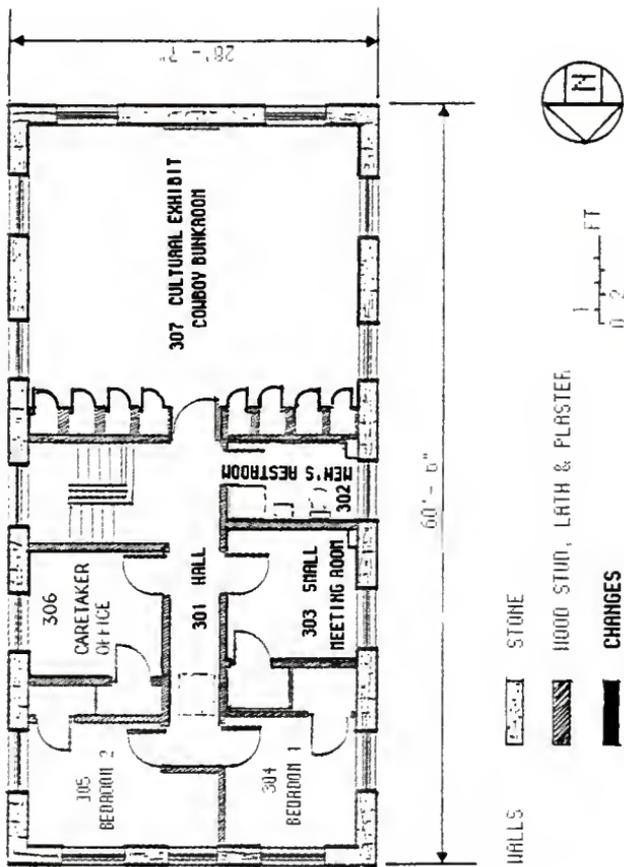


PLAN X
 RANCH HOUSE LONG-TERM USE - SECOND FLOOR



PLAN XI

RANCH HOUSE LONG-TERM USE - THIRD FLOOR



the lockers and the propane gas heaters from within the end lockers should occur.

- Exhibit memorabilia and/or furnishings which would depict the life style of the 1912 inhabitants should be displayed in this exhibit room.

MECHANICAL SYSTEMS

The addition of space heating, cooling and electrical mechanical systems to the Ranch House was necessary. They were planned so that the least structural and visual interference would occur within the Ranch House. The architectural and historical integrity and the needs of the users of the Ranch House were dealt with simultaneously. The mechanical systems plans are presented to provide assistance in the understanding of the mechanical systems recommendations. (see FIGURE V and PLANS XII, XIII and XIV, pp. 173-176)

* A forced air system would be recommended to be installed in the Ranch House. This system could be fueled with electricity, propane gas, or solar energy.¹²¹ Each fuel has its merits and drawbacks. Propane gas is the fuel recommended to be used at this time. Propane gas is less costly than electricity, is currently present at the Ranch House, and does not require the additional monetary investments in equipment and space as do the solar energy components (storage tanks and solar collectors). (If at a future date, a solar support system could be achieved for the entire complex of buildings within the Study Area, then this fuel source might be

reconsidered. However, the supporting solar collectors and storage tanks would need to be placed in such a way so as not to disrupt the historical ambiance of the Study Area, i.e.: shrubbery)

Additionally, this forced air system could be set up to cool air for the summer time.¹²² In the summer, the house remains cool (if the windows remain closed according to past occupants), so supplementary cooling would not be mandatory. However, if large groups of people are in confined spaces, ventilation, air circulation, and some additional cooling requirements need to be met. Therefore, the recommendation would be to install an air cooled condenser as part of the forced air system.

Each floor within the house should be equipped with the systems just discussed, allowing for individual floor regulation of the heating/cooling. Therefore, the thermostats of the three furnaces could be kept at a level which would maintain running water on all levels at all times with the individualized floors being heated/cooled additionally for specific functions.

Room supply vents could even be opened or closed for additional regulation, though care must be exercised in the monitoring of changing vent outputs. Damage could be done to an area if these vents were allowed to be opened or closed at will and then not reestablished.

The conceptual diagrams (PLANS XII, XIII and XIV) for the placement of the furnaces and their duct work give a pictorial description of the proposed assemledge. The placement of the mechanical parts was done so that the least structural disfigurations to the building would occur. This system provides for adequate heating/cooling on a supplemental basis, but is not intended to provide heating/cooling for permanent human occupancy.

HVAC

(Heating, Ventilation, and Cooling)

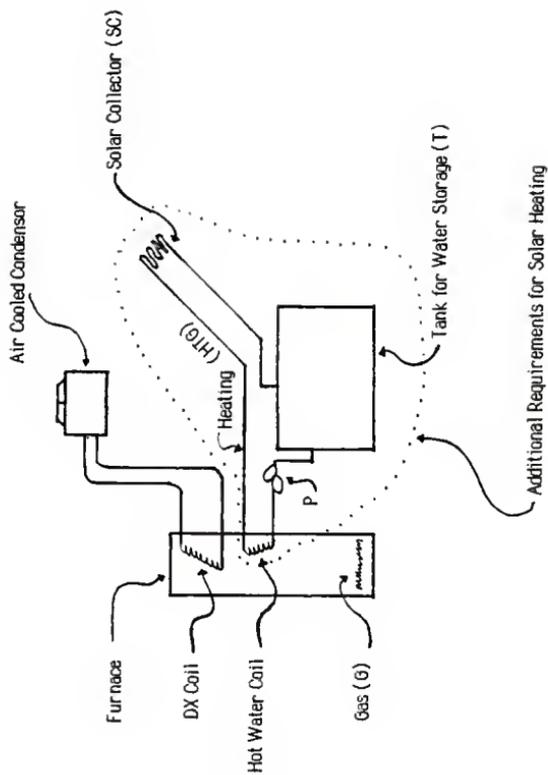
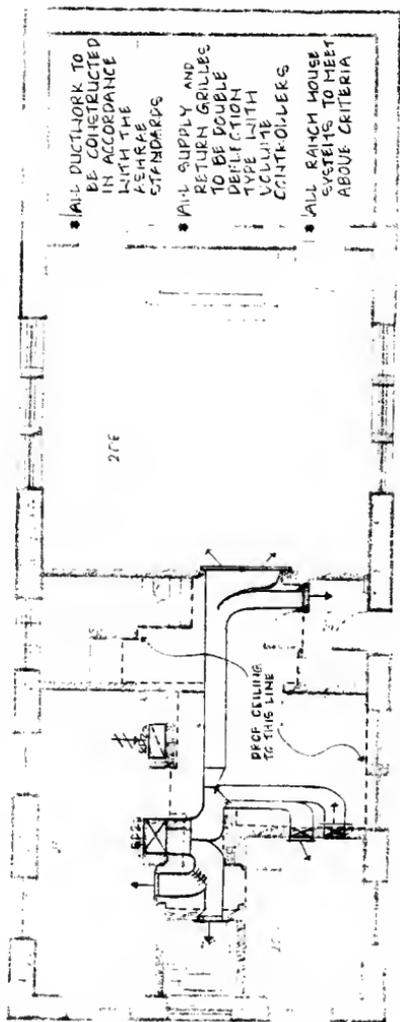


FIGURE 5

Three Systems as Above are Required for the Ranch House - One Per Floor

PLAN XIII

HVAC - LONG-TERM USE PLAN - SECOND FLOOR



(HEATING, VENTILATION, AIR CONDITIONING)



"Few old buildings were ever heated in winter to what would today be considered acceptable comfort levels. None of them was ever cooled with refrigerated air - though many old buildings in areas of long, intense summers were designed for maximum shading and effective ventilation. Thus almost any old building which is being recycled today, for whatever use, will almost certainly require the insertion of mechanical systems aimed at increased comfort, amenity, and safety," Fitch stated.¹²³ However, old buildings have a visual identity which must be preserved and celebrated rather than concealed. A new use of the structure or portion of it should be inserted into the "old container" with the minimum visual dislocation.¹²⁴

According to Fitch, "Once the decision has been made to introduce such systems into old buildings, a number of questions must be faced: aesthetic, structural, and economic."¹²⁵ The ultimate use of the recycled building is the critical factor.

In most cases of adaptive use, modifications of interiors is necessary. But because the interior surfaces of such structures are valuable historically (because they are original to the building), they should be cared for rather than replaced. The painted or papered plaster, paneling, marbleizing and so on, are not reproducible, so a minimum of disruption should occur to the interior building fabric.

SITE ANALYSIS

INTRODUCTION

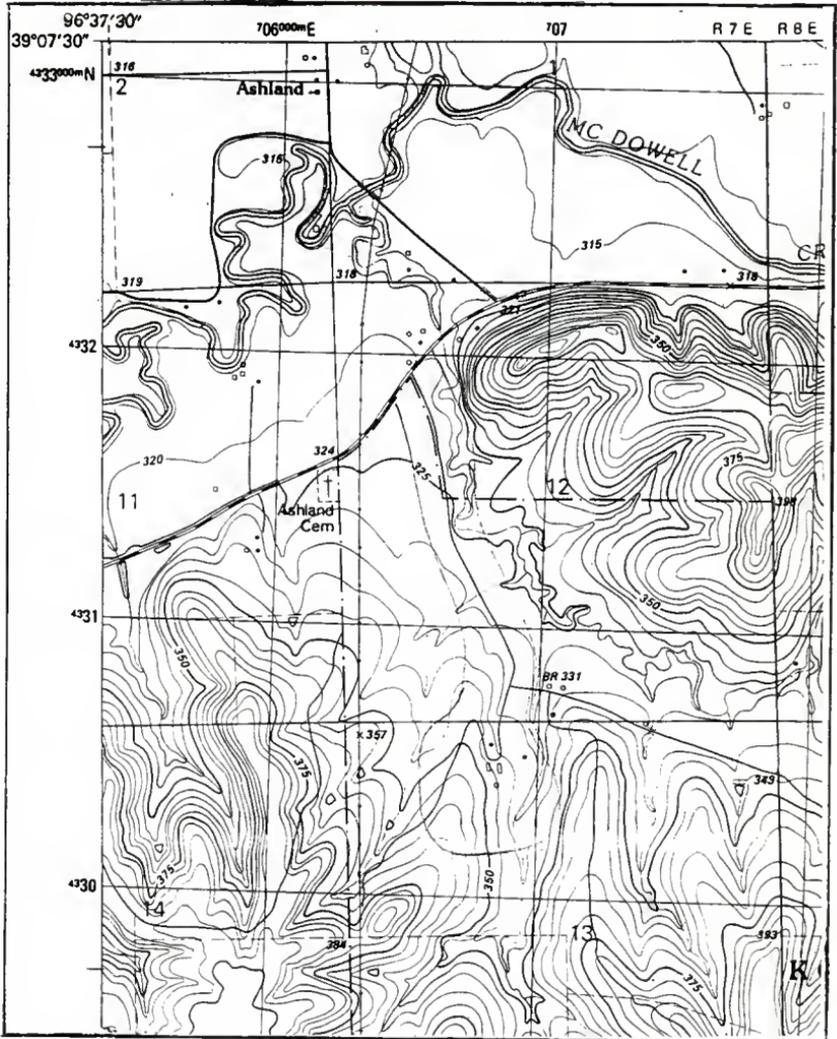
The Study Area Topography Map - Long-Term Use Conclusions (MAP IX, p. 180) shows the various site proposals for: the Resident Manager's Housing, the Scientific Laboratory and Parking, the Information Area, and the Caretaker's Residence.

The positive and negative aspects of each site have been considered. Elements which were weighed in the selection of the best location for each facility needed were: * the location of each proposed facility in relationship to the other fixed building locations (i.e.: the Ranch House and Stone Barn), * the proximity to the entrance to the Study Area along with the approach road, * the topography of the land, * the historical integrity of the Study Area, * the historical integrity of the original ranch buildings, and * the type of activity which would be occurring in or near the facility.

The questionnaire answers established the activity needs. The interviews were used to establish the reasons why the various other supporting facilities were felt to be inadequate by the users for these activity needs. The interviews established the parameters of the activity requirements.

The following is a discussion of the various site proposals, and why the specific choices were made for the future controlled site planning.

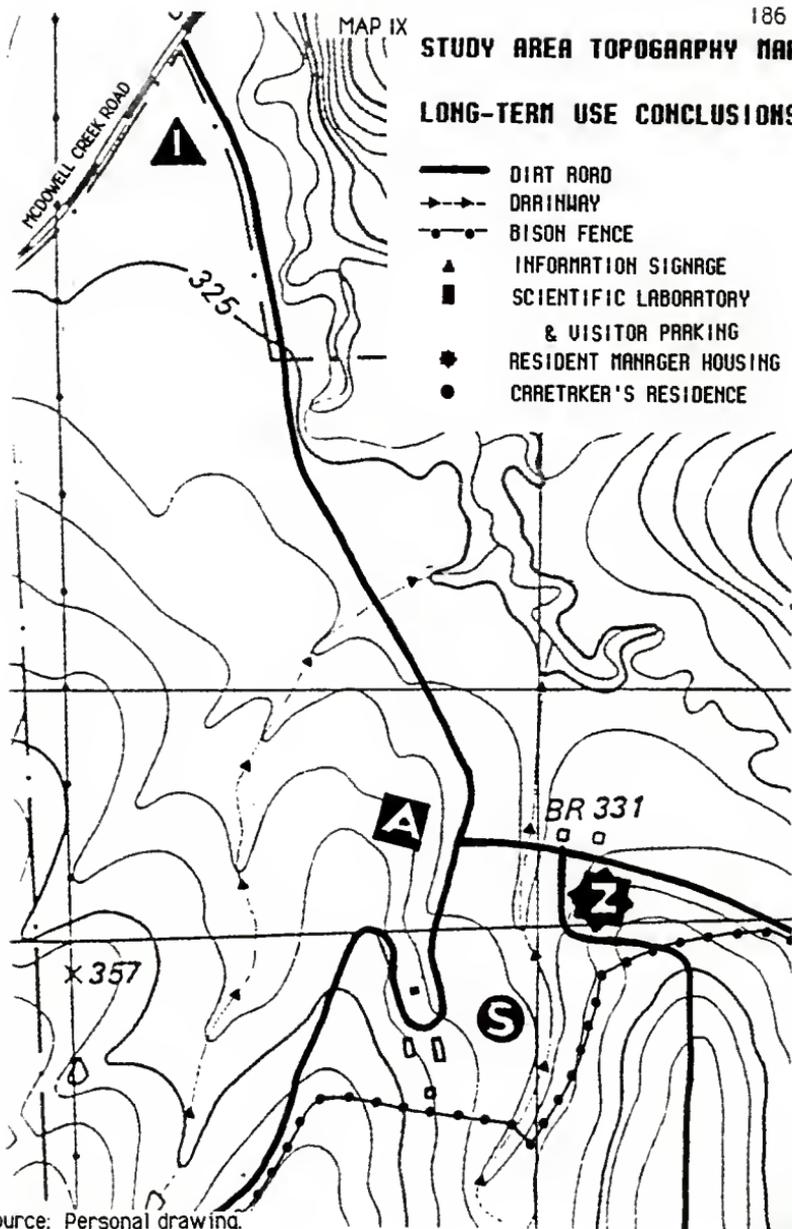
SITE TOPOGRAPHY OF THE STUDY AREA



Source: United States Department of the Interior Geological Survey. State of Kansas. *Swede Creek Quadrangle, Kansas, 7.5 Minute Series (Topographic)*, 1982 map.

STUDY AREA TOPOGRAPHY MAP

LONG-TERM USE CONCLUSIONS



Source: Personal drawing.

STONE BARN

Though the barn has not been discussed previously, the historical significance of it also can not be overlooked. It is part and parcel of the original ranch homestead. Support of the significance and the value of the large stone horse barn came in the questionnaire answers. Questionnaire respondents felt that the stone house (Ranch House) and stone barn should both be dealt with consecutively.

Originally the Stone Barn was used as a horse barn. It was one of the largest in the area, and could house up to fifty horses, with their tack and gear, and their hay for the winter in the upstairs hay loft. The Deweys used the Stone Barn in the winter, to stable the Ice Horses used for their summertime ice delivery business in Chicago. These horses were shipped by rail each spring and fall between Manhattan and Chicago.¹²⁶ In later years beginning about 1915, the Stone Barn stabled the horses being raised for the Calvary at Fort Riley.¹²⁷

Currently the Stone Barn is being used for the storage of equipment (i.e.: one stall holds many traps). Presently the researchers store much of their research equipment in the stalls. Though it tends to have an untidy look, this type of storage was requested in the questionnaire responses and the interviews. The hay loft is being utilized for a field mouse study.

Therefore, since the Stone Barn was originally used for the housing of animals and the storage of equipment, it is recommended that that use continue to occur.

The large areas of the barn could be used for public assemblies, and has been in the past. However, this use presents a large problem between

historical integrity and the addition of structural elements for the building to offer health, safety and fire protections adequately to the public.

Granted that an occasional Square Dance occurred in the Hay Loft, but to change the structure sufficiently to meet the requirements for a public gathering today is not warranted. The Study Area is also a part of a larger research designated area. Therefore, picnics and dances, and large public meetings (i.e.: 150 -200 people) should not be occurring within the Study Area.

General maintenance of the structure should occur and be timely for the preservation of the structure.

INFORMATION ACQUISITION

Signage for KPRNA falls into two categories. Those informational needs of the public from Interstate 70 and Manhattan, and those informational needs from the entrance to the Study Area inward.

Since the questionnaire respondents voiced a clear opinion on the lack of adequate signage in both categories of informational access, information acquisition has been addressed.

The signage from Interstate 70 and Manhattan needs to be expanded. For people (i.e.: conferees and visiting scientists) coming from outside the local area, the Konza Prairie location is not definitive, except on the map which is published by KPRNA on their informational brochure. If a Konza

Prairie seeker does not have access to a KPRNA brochure, routing becomes extremely difficult. KPRNA should confer with the State and/or County offices which deal with road signage.

The signage at the beginning of the approach road also needs to be expanded. Currently the existing sign tells what Konza Prairie Research Natural Area is about, and it only faces to the North. Coming from the South, there is no indicator to the driver that they have indeed reached their destination. Additional turn signage needs to be provided from both the northern and the southern directions.

A small hut type building should be erected at the beginning of the approach road to symbolize a guard house. This would be the place to have the information which specifically enumerates the rules and regulations of KPRNA, and why those regulations must be responded to by the general public (scientific and lay people alike).

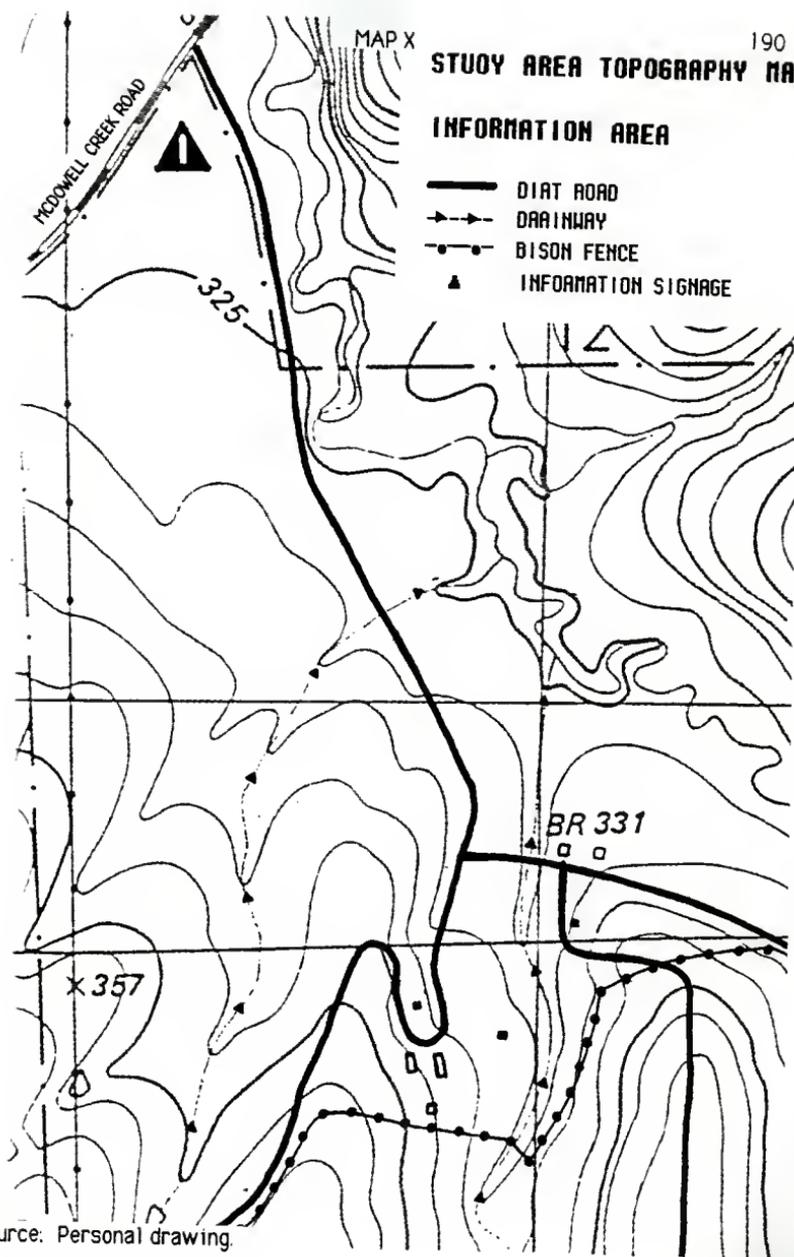
Along with the regulations should be information which would assist the newcomers in adjusting to those rules. These points need to be specifically outlined on the adjoining signage and in the brochure: * whom to contact regarding the Prairie Research or the Homestead, * where and how to contact the person in charge, * the hours the Homestead is open to the public (or whether it is not open at all), * how to make arrangements to view the homestead buildings, a sample of the prairie, or the exhibits which are available within the Study Area.

A well-designed weather shielded box for the distribution of Konza Prairie Research Natural Area Brochures should also be a part of the

STUDY AREA TOPOGRAPHY MAP

INFORMATION AREA

- DIRT ROAD
- - -> DRAINWAY
- BISON FENCE
- ▲ INFORMATION SIGNAGE



Source: Personal drawing.

Informational Guard House. The brochure distribution box could be structured in such a way that the public could help themselves to the printed matter.

Additional unobtrusive signs along the roadway and pathways should designate the buildings within the Study Area. These are especially important from the Parking Area near the LAB to the Ranch House where most traffic will be pedestrian foot traffic.

For further discussion on Information Acquisition, the Program Criteria, Chapter VI, Respondent User Information Analysis - Public Assistance Facilities - Signage, and Information Center sections may be consulted.

APPROACH ROAD

The Approach Road from the McDowell Creek Road south to the Homestead is currently a very slender two lane dirt road. It should be widened to sufficiently accommodate two lanes of vehicular traffic from the McDowell Creek Road to the parking area of the LAB building (LAB is discussed further on in the text of this section).

Additionally, suitable changes should be made to the low-water creek bridge which is presently crossed to gain access to the homestead buildings. The need to be able to cross this creek will continue, as the road and the creek run perpendicular to each other. Therefore, a higher

crossing surface for the creek should be introduced when the roadway is widened.

The road need not be a hard surfaced roadway, but should be a packed dirt roadway with gravel surface. This surface structure would be: * in keeping with the context of the area, both historically and currently, * be sufficient for the use the approach road receives, and * be less costly for construction.

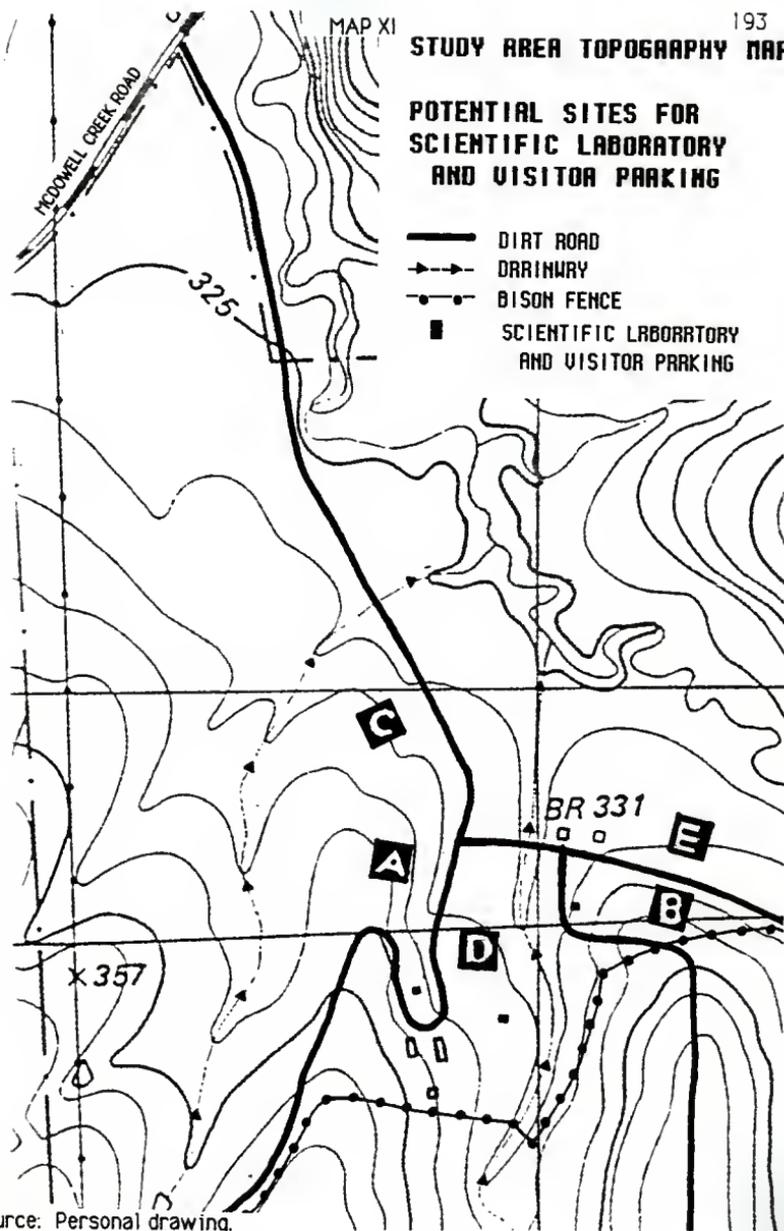
For further discussion on the Approach Road, the Program Criteria, Chapter VI, Respondent User Information Analysis - Public Assistance Facilities - Approach Road to and within the Study Area section may be consulted.

SCIENTIFIC LABORATORY - SIMPLE

The activities and needs to be incorporated within the Simple Scientific Laboratory have already been discussed in the following sections: Program Criteria, Chapter VI, Respondent User Information Analysis - Simple Scientific Laboratory, Holding Area for Samples, Storage for Research Specimens, and Public Assistance Facilities - Parking, and Restrooms.

The size of the structure would be of moderate size, including: *6-8 scientific study rooms each approximately 12' x 12'; *holding areas for several days specimen collections for each of the 4-10 researchers; *display and/or storage for verification sample specimens; *an office

STUDY AREA TOPOGRAPHY MAP

POTENTIAL SITES FOR
SCIENTIFIC LABORATORY
AND VISITOR PARKING

Source: Personal drawing.

with a computer terminal hookup, *the men's and women's locker rooms, and *offices for the KPRNA Director and Resident Manager.

The exterior of the scientific laboratory structure should be compatible in design with the Ranch House and Stone Barn, the original buildings within the Study Area. The exterior should support an harmonious appearance with the other historical structures in the Study Area, with the interior being modernly appointed and equipped for the needs of the researchers.

The location of the structure will be dealt with in detail here in the Site Analysis section. Various sites have been noted on the Study Area Topography MAP XI. Reference to the sites will be by the affixed indicators on the map.

The Simple Scientific Laboratory has five site possibilities within the Study Area. Factors which were addressed in the selection of the various sites were: *size of the structure, *topography of the Study Area, *drainways within the Study Area, *existing structures, *previously existing structures, *historical ambiance of the Study Area, *accessibility to the structure from within the Study Area, and *potential problems of public traffic gaining vehicular and visual access to the remaining research areas.

Sites A and B for the Simple Scientific Laboratory Building (LAB) are earth sheltered structures. They offer: *energy conservation for heating and cooling, *environmental controls which are easier to maintain, and * less obstruction into the historic elements of the Study Area.

Additional points for Site A are: * visual control of the site by the manager, * approximate location of a previously existing structure within the homestead (Family Wood Frame House), * elimination of unnecessary traffic circulation beyond the Study Area, and * accessible parking for incoming scientists and visitors, with a footpath supplied between the Parking/LAB area and the Ranch House/Stone Barn areas.

Points regarding Site B are: * visual contact by the manager with the site would be minimal, * parking for visitors would be too far away from the Ranch House for convenient walking accessibility, and * potential problems could easily occur with the public traffic gaining vehicular and visual access to the research areas further down the road.

Sites C, D, E for the LAB are above ground. They are relatively open and clear for building; but heating, cooling, and environmental control requirements would be greater above ground. For these and additional reasons unique to each site stated below, Sites C, D, and E were all rejected.

Site C because: * historical ambiance for the approach road to the Study Area would be impaired, and * parking for visitors would be too far away from the Ranch House for convenient walking accessibility.

Site D because: * the easterly edge of the site is on the flood plane of a drainway, and * the historical ambiance of the homestead and the house view to the east (where the public entrance is to the house) would be obstructed.

Site E because: * visual contact by the manager with the site would be minimal, * parking for visitors would be too far away from the

homestead for convenient walking accessibility, * potential problems could easily occur with the public traffic gaining vehicular and visual access to the research areas further down the road.

Therefore, Site A was selected as the best location for the LAB.

PARKING

The personnel and visitor parking in the Study Area should occur in conjunction with the LAB site. This would keep the vehicular and pedestrian traffic to a minimum within the Study Area and help to prevent that traffic from extending into the designated research areas.

A designed porthole should be erected on the approach road just after the turn for the entrance to the designated parking area. A stone post should be located on each side of the road and one at a mid-point in the road. On the mid-point stone post should be signage which would indicate that only personnel, and people with permission could proceed further up the access approach road, with all others directed to circle into and stop in the designated parking area.

The criteria for the designated parking area are discussed in the Program Criteria, Chapter VI, Respondent User Information Analysis - Public Assistance Facilities - Parking section.

RESIDENT MANAGER HOUSING and CARETAKER'S RESIDENCE

The Resident Manager Housing and the Caretaker's Residence will be either one and the same person, or two people, depending upon the KPRNA governing board. If only one position is provided for, then the need for only one housing unit arises. Conversely, two positions - two housing needs.

Therefore, discussion will occur here for both housing needs.

RESIDENT MANAGER HOUSING

There are three potential sites for the Resident Manager's Housing, Sites X, Y, and Z. These have been noted on the Study Area Topography MAP XII. Reference to the sites will be by the affixed indicators on the map.

Factors which were addressed in the selection of the various sites were: *privacy for the Resident Manager, *controlled environment for public access to the area, *are public and family compatible activities, *ability for the Resident Manager to have visual contact with all buildings and areas within the Study Area, *size of the structure, *topography of the Study Area, *drainways within the Study Area, *existing structures, *previously existing structures, *historical ambiance of the Study Area, and *accessibility to the structure from within the Study Area.

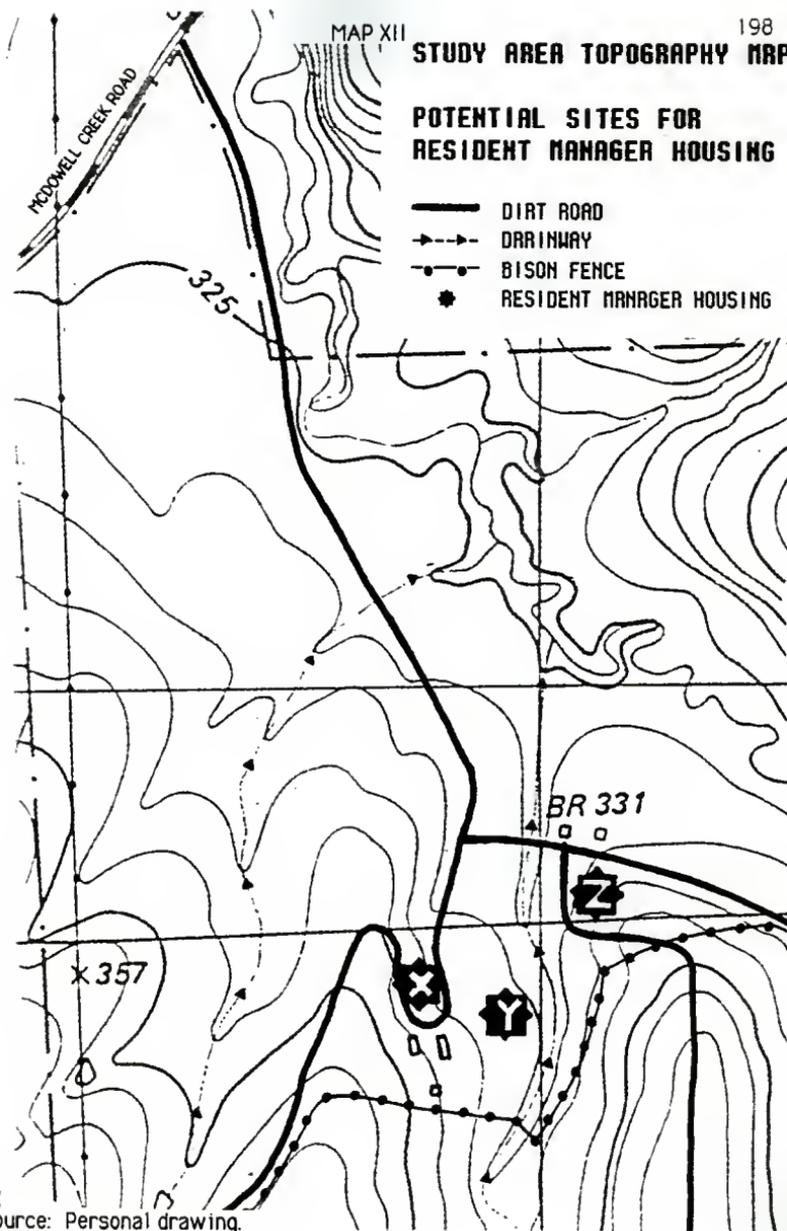
Site X is the current Ranch House, or portion thereof. Though meeting most of the considered factors in the selection process, it

MAP XII

STUDY AREA TOPOGRAPHY MAP

POTENTIAL SITES FOR
RESIDENT MANAGER HOUSING

- DIRT ROAD
- - -> DRAINWAY
- BISON FENCE
- * RESIDENT MANAGER HOUSING



Source: Personal drawing.

positively does not meet the * controlled environment for public or private access to the area, nor the * compatible public and family issues and activities. Examples which can be cited as occurring in most family interactions are: - the risk of strangers coming and going only a few feet away from where family members are interacting, - family members wanting to enjoy the out-of-doors in the spring, summer, or fall and a conference occurring in the building only a few feet away, - children playing and/or fighting coupled with a conference in progress in the same building. Thus, Site X is not compatible with the remainder of the building's uses, and so it was eliminated from consideration.

Site Y is the existing wood frame house just across the driveway from the Ranch House. This site offers semi-privacy for the Resident Manager and family, and a semi-controlled environment from public access to the site. The size of the structure is acceptable, as well as the topography, the drainways, the existing structure relationship, the historical ambiance, and the accessibility to the site.

However, visual contact with all buildings and areas within the Study Area is not met. The entry way, the information area, the approach road, and the selected site for the LAB can not be seen from this area. These are the areas which will receive much of the "public" traffic and so it is paramount that the Resident Manager does have at least visual control of the areas.

Site Z is the area where the current trailer for the Resident Manager is placed and to the East of the exact trailer location. Site Z meets all of

the criteria for the Resident Manager's housing. Therefore, Site Z was selected as the best location for a permanent dwelling to be erected for the Resident Manager.

CARETAKER'S RESIDENCE

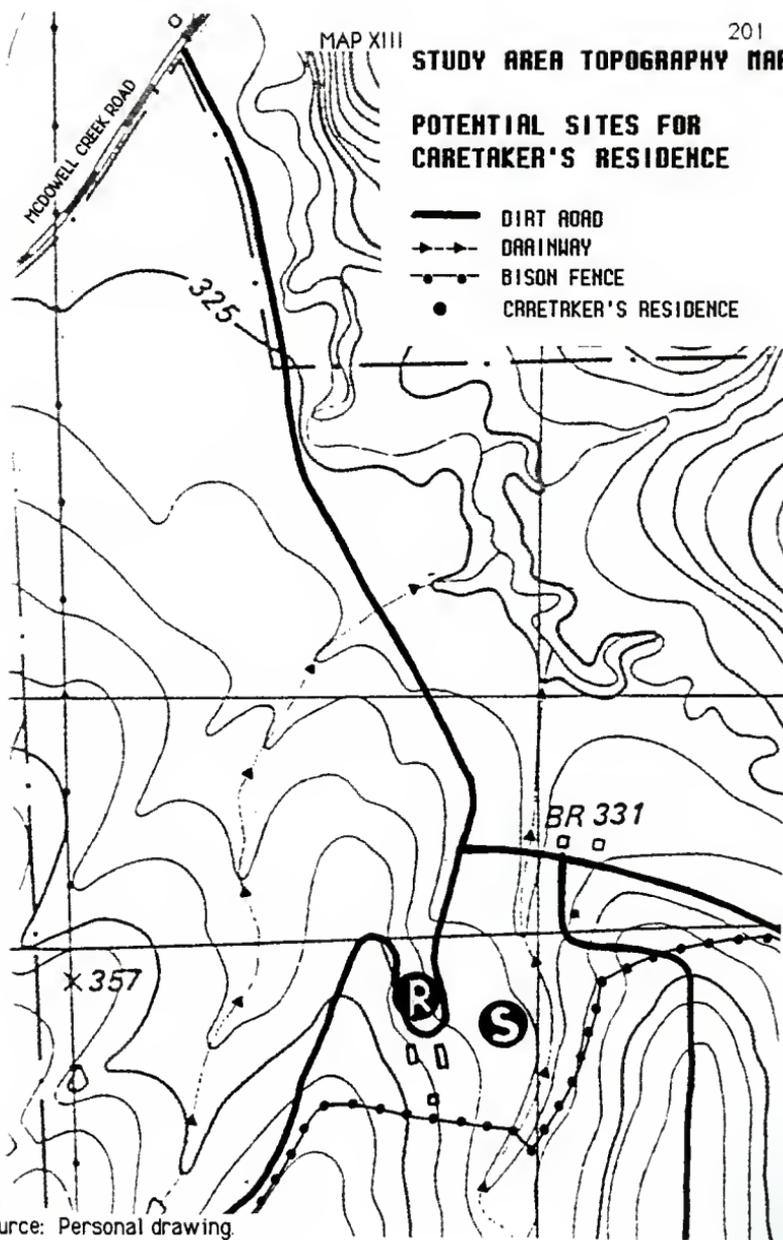
The Caretaker's Residence should possess visual and audible control over the Ranch House area, as the people the "Naturalist" Caretaker will be dealing with will flow to and from the Ranch House almost exclusively. Convenience to the house for "quick tours" and "explanations" of the Konza Prairie Research Natural Area and the Historic Ranch Homestead is critical.

Additionally, the same criteria used for the site selection for the Resident Manager should also be taken into consideration, though it need not be weighed as heavily in the final decision.

There were two sites available for the Caretaker's Residence, Sites R and S. These have been noted on the Study Area Topography MAP XIII. Reference to the sites will be by the affixed indicators on the map. Site R being the existing Ranch House or part thereof, and Site S being the existing wood frame house across the driveway from the Ranch House. Site S was selected as meeting the criteria for the Caretaker's Residence the best.

MAP XIII
STUDY AREA TOPOGRAPHY MAP
**POTENTIAL SITES FOR
 CARETAKER'S RESIDENCE**

-  DIRT ROAD
-  DRAINWAY
-  BISON FENCE
-  CARETAKER'S RESIDENCE



Source: Personal drawing.

MACHINE SHOP

The Machine Shop is, according to the users, not adequate in size or facilities. The space needed is approximately six times that which is now being utilized. There is however within the Study Area a three sided steel shed with a roof which would meet the size requirements of the machine shop.

The interviewees would like to have the fourth side put onto the shed so that insulation, electricity, and plumbing could be added to the structure. The plumbing facilities could then be available to all researchers at Konza during a regular working day, alleviating the "locked out" situation which currently exists because the Ranch House provides the only restroom facilities ON KPRNA. Columbian Steeltank Co., Kansas City, Missouri, which manufactured the original building, could be contacted for the necessary components for the addition.

The structure would offer an easier to reach location for equipment, facilities in which a large piece of equipment could be serviced more efficiently and effectively, and offer restroom facilities to those people working on the prairie who currently do not have access to a bathroom.

The current Machine Shop should then be utilized for the storage of smaller research equipment. Some research equipment which is now being stored in the house, should then be transferred to this building, and open up the rooms in the house for the exhibits.

LABORATORY TRAILER

The Laboratory Trailer is currently being used as a simple dry laboratory. It offers a tabletop for sorting and counting. Running water was never hooked up to it, so it has never been utilized effectively according to the interviewees.

At such time as the Simple Scientific Laboratory is erected, this trailer should be disposed of. It not only denotes a "tacky" appearance to the Study Area, but also does not serve the needs for which it was intended.

METAL LEAN-TOS

Additionally, the metal lean-tos, just west of the Stone Barn, which were added in later private ownership days should be removed. Since KPRNA is a research site, it is not using these structures.

GROUNDS/LANDSCAPE

The grounds for the Study Area should remain much the way they are currently. As Meinig relates, "..... Landscapes [are] symbolic as expressions of cultural values, social behavior, and individual actions worked upon particular localities over a span of time."²⁸ Lush landscaping within the Study Area would not depict the true 1912 setting

of the ranch on the open prairie. Care should be taken not to artificially introduce species of plants which are not native to the area. The only exception(s) to this being plants which the Deweys introduced to the Study Area during their years on the Ranch. An example would be the Kings Ranch Blue Stem grass from Texas which Dewey imported for the Ranch House's front yard (to the west of the house).¹²⁹ It is a prairie grass variety which naturally grows only a few inches tall. This grass replaced the Blue Gamma, a native buffalo grass which grows in the area, but also grows to be several feet tall.

On the East side of the Ranch House, was a tiered rock, herb and flower garden. The current garden area still possesses some of the original plant species, according to Dave Sampson.¹³⁰ They have become overgrown and almost indistinguishable.

The garden area should be carefully cleaned out and the plant species in it examined by professionals in the fields of Horticulture and/or Botany. This would be an example of how different organizations could work together to form a viable preservation/exhibition network for the enhancement of the Study Area.

Different prairie plant species could also be maintained in this garden, or in an area nearby to the house, which would offer the visitor a view of the plant species found on the prairie without having to progress into the prairie itself.

"The basic principle is this: that all landscape has cultural meaning, no matter how ordinary that landscape may be," Meinig stated.¹³¹ As felt by Fitch, "The whole 360° field of view - river, farmlands,

forests, and hills - is an integral part of the artifact. It is therefore quite as important to preserve the essential integrity of this circumambient environmental frame as it is to preserve the mansion and its content. Experientially, they are one continuous seamless fabric, extending from the hearthrug right out to the horizon."¹³²

NOTES
CHAPTER VIII
LONG-TERM USE PLAN
FOR THE STUDY AREA

119 Greiff, p. 1.

120 David Poinsett, "What is Historic Preservation?" *Readings in Historic Preservation Why? What? How?* ed. Norman Williams, Jr., et al (New Brunswick, New Jersey: Center for Urban Policy Research, 1983), p. 61.

121 Jahnke, notes.

122 Jahnke, notes.

123 James Marston Fitch, *Historic Preservation: Curatorial Management of the Built World* (New York: McGraw-Hill Book Company, 1982), p. 255.

124 Fitch, p. 44.

125 Fitch, p. 257.

126 Dallas, 22 May 1985; Hulbert, 28 June 1984.

127 Dallas, 22 May 1985.

128 Meinig, p. 6.

129 Personal interview with Dave Sampson, Shop Foreman and Farmer II for the Konza Prairie Research Natural Area, Riley County, Kansas, 20 May 1985.

130 Sampson interview.

131 Meinig, p. 6.

132 Fitch, p. 349.

CHAPTER IX

INTERIM USE PLAN FOR THE STUDY AREA

Unless specifically noted here, the Ranch House room usages remain the same for both the Long-Term and the Interim Use Plans.

104 KPRNA Personnel Restroom, Shower, Lockers

- The present facilities should be retained.
 - △ The washroom was "modernized" with bathroom and shower facilities (104B) by KPRNA.
- Lockers should be provided along the west and south walls.
 - △ Lockers would allow for the storage of personal hygiene gear of the researchers.

(106 Kitchen)

106A Kitchen Area

- Minimal guest cooking. i.e.: making coffee for a conference.

106B Wet Laboratory

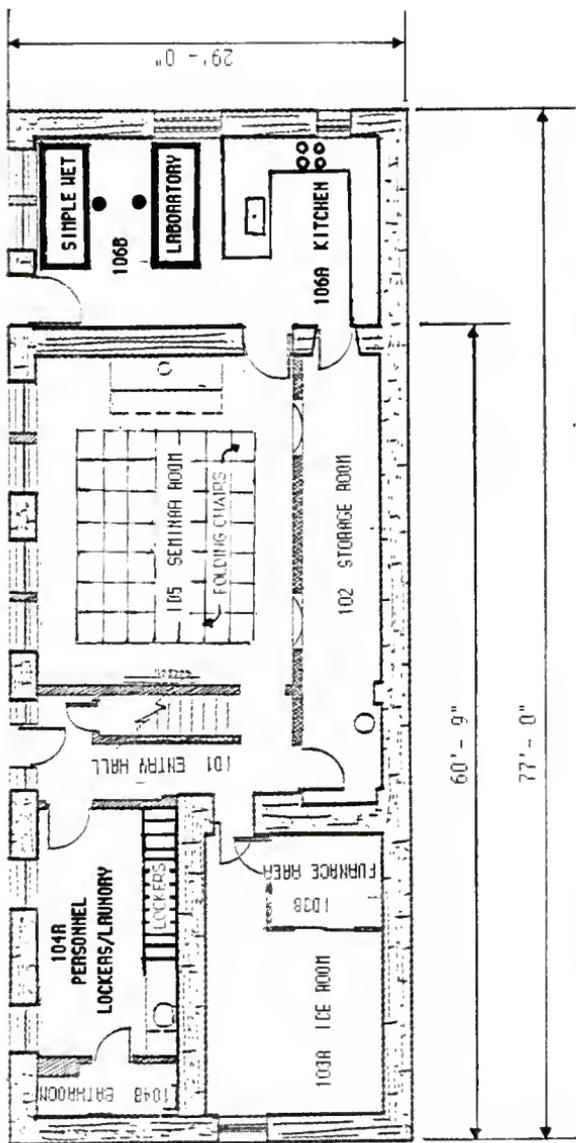
- Two table surfaces 4' x 10' with stools should be provided.
- Simple facilities should be provided which include:
balances, running water, electricity, etc., as noted in the Program Criteria, Chapter VI, Respondent User Information Analysis - Simple Scientific Laboratory section.

The remaining facilities discussed in the Long-Term Use Plan will not be discussed individually in the Interim Use Plan, but will be discussed collectively.

These facilities will continue to be used as they are currently being used, until such time as the Long-Term Use Plan for each facility can be implemented. The shifting of activities in the Study Area will be an on-going activity until all of the Long-Term Use Plan has been accomplished.

PLAN XV

RANCH HOUSE INTERIM USE - FIRST FLOOR



CHANGES IN ROOM

STONE

WOOD STUD, LATH & PLASTER

WALLS

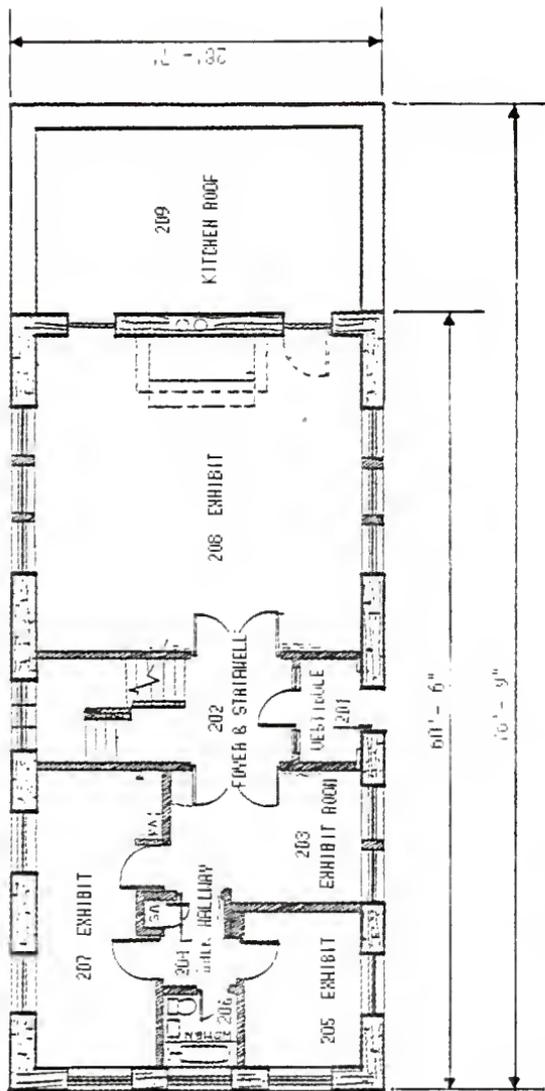
1000 STUD, LATH & PLASTER

POURED CONCRETE



PLAN XUI

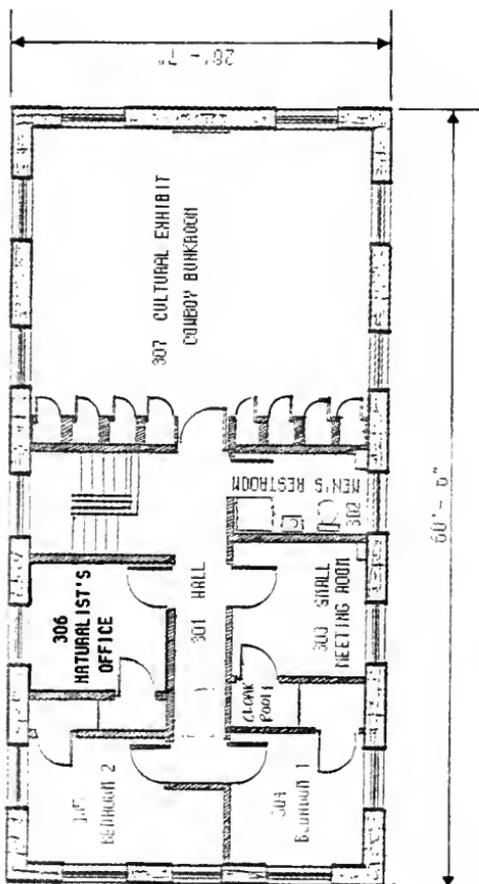
RANCH HOUSE INTERIM USE - SECOND FLOOR



NO CHANGES FROM THE LONG-TERM PLAN

PLAN XVII

RANCH HOUSE INTERIM USE - THIRD FLOOR



HALLS

STONE

WOOD STUD, LATH & PLASTER

CHANGES



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UNIT V

CONCLUSIONS

A Study of the Process To Adapt A Kansas Ranch House Site For Use As A Biological Educational Research Center resulted from: (1) a preservable building (Ranch House) and its companion structures (Stone Barn and Reservoir/Pool), being representative of a passing way of life within the cattle ranch era of Kansas; and, (2) the stewardship of KPRNA consisting of ownership (Nature Conservancy) and management (KSU) by non-profit organizations for ecological research of the prairie lands that surround those structures (Study Area).

That the structures within the Study Area would be used was predestined. How that use would occur, and in what manner was open for discussion amongst the decision makers for the property, when this study was selected.

Therefore, this study was undertaken, with the intention being guidance in a preservation oriented Adaptive Use Plan for the structure(s). This study assists the planners and decision makers in: (1) recognizing the historical significance of the property, (2) gathering environmental behavior information regarding the users of the property, (3) assimilating the environmental behavior information and historical structural elements into a program for design, (4) conceptualizing the design(s), and (5) implying a strategy for the implementation of the Long-Term Plan design.

The results of the questionnaire used in the study made apparent that though the Users of the Study Area come to the Study Area for diversified purposes, they all support the Prairie Grass Long-Term Research Program which is in progress. (See Chapter III) At no time was there an indication that the Study Area should have general public access (i.e.: tourist attraction), but instead that it should continue to have controlled access. Controlled frequent access for both large and small groups was sought.

Additionally, the scientific community uses the support facilities within the Study Area as much as the lay visitors and people interested in history. (See Chapter III)

This study set up a "format" for an open discussion to occur amongst these Users which can go beyond each groups own specific needs. At that point in time, the Users themselves will become aware of the overlapping of interests within the spectrum of avenues available to them at this site. (This has already begun to happen with greater frequency since the Questionnaire was released, according to persons who participated in the Interview process.)

By tapping the mutual support within the User Groups, continued cooperation amongst these Users should become a viable opportunity for Konza Prairie development. There is the realization that not everyone wants their life conditioned by the integrity of what is beautiful and irreplaceable, but in order for one to find ways to live a modern life in old spaces, sacrifices must flow in both directions.¹³³

The Ranch House can be the hub of a usable and workable Biological Educational Research Center while at the same time respecting the

historical aspects of the Study Area. For this to be achieved, the Long-Term Plan must be implemented. The Interim Use Plan was intended to aid KPRNA in achieving the Long-Term Plan in phases and not as a substitute for the Long-Term Plan. The shifting of activity sites over a period of time would allow for the implementation of the Long-Term Plan on the limited budget with which KPRNA has been provided. All recommended physical changes and/or additions were planned so that they could become part of the implementation of the Long-Term Plan. Thus negating duplicate or short-lived expenditures which are then avoidable.

Through the course of the Interviews, it became apparent that there were peripheral groups of people who had an intense interest in the Study Area. These people not only belong to organized groups, but also were what could be called informed visitors. There was a great willingness to help with the implementation and followthrough for the needs of a Biological-Educational-Research Center at KPRNA. There appears to be knowledgeable expertise available from a wide variety of sources. Examples of the sources include: Glenn M. Busset, a retired State Extension Agent, adept at planning fund raising activities and co-ordinating volunteer workers,¹³⁴ and the Riley County Historical Society, whose leadership and members are willing to lend exhibit cases and give docent talks about the history of the Ranch House, Stone Barn and Reservoir/Pool.¹³⁵

Individuals are also willing to lend a helping hand and give of their time. As Stan Koehn, a volunteer worker, related in his interview, "The beauty of the prairie captures one's soul. The first time I came to

Manhattan via K177 I was exposed to the wonderments of the open prairie and the Flint Hills. It was early morning, and the awesome beauty was breathtaking. After I was at KSU I learned about Konza Prairie and the research going on there. It was then that I decided to help out occasionally at Konza Prairie. The work they [the scientists] are doing there is worthwhile and greatly needed. I understand now because I help out there, but others need to become aware of the importance of the research. I'm know there are others like me who help out there. Each time I go to the prairie, the beauty nourishes and refreshes me. I hope that I don't have to move from the area when I'm done with school. I'll miss the prairie and all it has to offer me."¹³⁶

A recommendation is thus made that it would behoove the Biology Department of KSU to develop a working relationship with outside parties who have come forward and who are willing to offer expertise in their fields of interest, physical labor, funding resources, and equipment to aid in the establishment and followup needs of the non-research oriented activities sought by the Users within the Study Area.

There are many users of the Konza Prairie Research Natural Area and the Study Area. These users were separated into basic user groups for this study, examples being Volunteer Worker, Research Associate, KSU Faculty, etc. The user groups delineated themselves into two groups, they being scientific research oriented (i.e.: Research Associate, KSU Faculty, Visiting Graduate Students, etc.) and non-research oriented (i.e. Volunteer Worker, Classified Personnel, etc.).

This study established that the user groups have definitive needs within the Study Area and the non-study area (prairie). The needs within the non-study area are scientific, and the needs within the Study Area are primarily non-scientific. Diversified leadership for the varied programs is needed. It is recommended that KPRNA take advantage of the potential volunteers and donors so readily available in the area to fill those needs. If a potential volunteer/donor is well educated regarding KPRNA, and called upon by KPRNA for specific participation in a project, these "leaders" for the non-research oriented activities could be found. KPRNA must channel individual interest and potential financial support to specific projects.

The recommendation is also proposed that the Board of Directors for Konza Prairie Research Natural Area be enlarged to include diversified leadership involvement, thus forming alliances with other causes. Examples of positions, which would enable the decision makers for the non-research activities to be more widely effective, would be an Architect, a member of the County Extension Agency, and a Riley County Historical Society representative.

Priorities for development have been established and discussed in the units titled: User Investigation, Preservation Program for the Study Area, and Design Development. Through the use of goal setting, KPRNA could accomplish these tasks by the phasing of the priorities until the complete Long-Term Plan has been accomplished.

There also remain areas for future study which are an outgrowth of this study. Those most apparent are: an economic feasibility study - entailing a complete budget for the implementation of the Long-Term Plan and a thorough investigation of the financial resources available to KPRNA beyond their Long-Term Ecological Research Grants (LTER) and their Kansas State University Budget; and an investigation of the diversified resources available to KPRNA which might include volunteer people from many occupations with specialized interests, and donations of time and money.

NOTES
UNIT V
CONCLUSIONS

133 John T. Kirk, *The Impecunious House Restorer* (New York: Alfred A. Knopf, 1984), p. XIII.

134 Busset, interview.

135 Williams, interview; Dallas, interview, 22 May 1985.

136 Personal interview with Stan Koehn, Volunteer Worker for Konza Prairie Research Natural Area, Riley County, Kansas, 10 March 1985.

APPENDIX A
NATIONAL HISTORIC PRESERVATION
ACT OF 1966

Recommendations from the Special Committee on Historic Preservation included. "To carry out the goals of historic preservation a comprehensive national plan of action is imperative. Such a plan will encourage, improve and reinforce public and private leadership."¹³⁷ Therefore, portions of the National Historic Preservation Act of 1966 are included in this study.

National Historic Preservation Act of 1966, as amended:¹³⁸

Section 1b(2-4) [Purpose of the Act]

- (2) the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people;
- (3) historic properties significant to the Nation's heritage are being lost or substantially altered, often inadvertently, with increasing frequency;
- (4) the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans;

Section 2 (1&5)

- (1) use measures, including financial and technical assistance, to foster conditions under which our modern society and our prehistoric and historic

resources can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations;

(5) encourage the public and private preservation and utilization of all usable elements of the Nation's historic built environments;

APPENDIX B

The Secretary of the Interior's
Standards for Rehabilitation
and Guidelines for
Rehabilitating Historic Buildings (Revised 1983)

U.S. Department of the Interior
National Park Service
Preservation Assistance Division
Washington, D.C. 139

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising Federal agencies on the preservation of historic properties listed or eligible for listing in the National Register of Historic Places. In partial fulfillment of this responsibility, the Secretary of the Interior's Standards for Historic Preservation Projects have been developed to direct work undertaken on historic buildings.

Initially used by the Secretary of the Interior in determining the applicability of proposed project work on registered properties within the Historic Preservation Fund grant-in-aid program, the Standards for Historic Preservation Projects have received extensive testing over the years—more than 6,000 acquisition and development projects were approved for a variety of work treatments. In addition, the Standards have been used by Federal agencies in carrying out their historic preservation responsibilities for properties in Federal ownership or control; and by State and local officials in the review of both Federal and nonfederal rehabilitation proposals. They have also been adopted by a number of historic district and planning commissions across the country.

The Standards for Rehabilitation (36 CFR 67) comprise that section of the overall historic preservation project standards addressing the most prevalent treatment today: Rehabilitation. "Rehabilitation" is defined as the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.

The Standards for Rehabilitation are as follows:

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

In the past several years, the most frequent use of the Secretary's "Standards for Rehabilitation" has been to determine if a rehabilitation project qualifies as a "certified rehabilitation" pursuant to the Tax Reform Act of 1976, the Revenue Act of 1978, and the Economic Recovery Tax Act of 1981, as amended. The Secretary is required by law to certify rehabilitations that are "consistent with the historic character of the structure or the district in which it is located." The Standards are used to evaluate whether the historic character of a building is preserved in the process of rehabilitation. Between 1976 and 1982 over 5,000 projects were reviewed and approved under the Preservation Tax Incentives program.

As stated in the definition, the treatment "Rehabilitation" assumes that at least some repair or alteration of the historic building will need to take place in order to provide for an efficient contemporary use; however these repairs and alterations must not damage or destroy the materials and features—including their finishes—that are important in defining the building's historic character.

In terms of specific project work, preservation of the building and its historic character is based on the assumption that (1) the historic materials and features and their unique craftsmanship are of primary importance and that (2), in consequence they will be retained, protected, and repaired in the process of rehabilitation to the greatest extent possible, not removed and replaced with materials and features which appear to be historic, but which are—in fact—new.

To best achieve these preservation goals, a two-part evaluation needs to be applied by qualified historic preservation professionals for each project as follows: first, a particular property's materials and features which are important in defining its historic character should be identified. Examples may include a building's walls, cornice, window sash and frames and roof; rooms, hallways, stairs, and mantels; or a site's walkways, fences, and gardens. The second part of the evaluation should consist of assessing the potential impact of the work necessary to make possible an efficient contemporary use. A basic assumption in this process is that the historic character of each property is unique and therefore proposed rehabilitation work will necessarily have a different effect on each property; in other words, what may be acceptable for one project may be unacceptable for another. However, the requirement set forth in the definition of "Rehabilitation" is always the same for every project: those portions and features of the property which are significant to its historic, architectural, and cultural values must be preserved in the process of rehabilitation. To accomplish this, all ten of the Secretary of the Interior's "Standards for Rehabilitation" must be met.

GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

The Guidelines were initially developed in 1977 to help property owners, developers, and Federal managers apply the Secretary of the Interior's "Standards for Rehabilitation" during the project planning stage by providing general design and technical recommendations. Unlike the Standards, the Guidelines are not codified as program requirements. Together with the "Standards for Rehabilitation" they provide a model process for owners, developers, and federal agency managers to follow.

It should be noted at the outset that the Guidelines are intended to assist in applying the Standards to projects generally; consequently, they are not meant to give case-specific advice or address exceptions or rare instances. For example, they cannot tell an owner or developer which features of their own historic building are important in defining the historic character and must be preserved—although examples are provided in each section—or which features could be altered, if necessary, for the new use. This kind of careful case-by-case decisionmaking is best accomplished by seeking assistance from qualified historic preservation professionals in the planning stage of the project. Such professionals include architects, architectural historians, historians, archeologists, and others who are skilled in the preservation, rehabilitation, and restoration of historic properties.

The Guidelines pertain to historic buildings of all sizes, materials, occupancy, and construction types; and apply to interior and exterior work as well as new exterior additions. Those approaches, treatments, and techniques that are consistent with the Secretary of the Interior's "Standards for Rehabilitation" are listed in the "Recommended" column on the left; those approaches, treatments, and techniques which could adversely affect a building's historic character are listed in the "Not Recommended" column on the right.

To provide clear and consistent guidance for owners, developers, and federal agency managers to follow, the "Recommended" courses of action in each section are listed in order of historic preservation concerns so that a rehabilitation project may be successfully planned and completed—one that, first, assures the preservation of a building's important or "character-defining" architectural materials and features and, second, makes possible an efficient contemporary use. Rehabilitation guidance in each section begins with protection and maintenance, that work which should be maximized in every project to enhance overall preservation goals. Next, where some deterioration is present, repair of the building's historic materials and features is recommended. Finally, when deterioration is so extensive that repair is not possible, the most problematic area of work is considered: replacement of historic materials and features with new materials.

To further guide the owner and developer in planning a successful rehabilitation project, those complex design issues dealing with new use requirements such as alterations and additions are highlighted at the end of each section to underscore the need for particular sensitivity in these areas.

Identify, Retain, and Preserve

The guidance that is basic to the treatment of all historic buildings—**identifying, retaining, and preserving** the form and detailing of those architectural materials and features that are important in defining the historic character— is always listed first in the "Recommended" column. The parallel "Not Recommended" column lists the types of actions that are most apt to cause the diminution or even loss of the building's historic character. It should be remembered, however, that such loss of character is just as often caused by the cumulative effect of a series of actions that would seem to be minor interventions. Thus, the guidance in all of the "Not Recommended" columns must be viewed in that larger context, e.g., for the total impact on a historic building.

Protect and Maintain

After identifying those materials and features that are important and must be retained in the process of rehabilitation work, then **protecting and maintaining** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, protective plywood, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair

Next, when the physical condition of character-defining materials and features warrants additional work **repairing** is recommended. Guidance for the repair of historic materials such as masonry, wood, and architectural metals again begins with the least degree of intervention possible such as patching, piecing-in, solicing, consolidating, or otherwise reinforcing or upgrading them according to recognized preservation methods. Repairing also includes the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing parts of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute material is acceptable if the form and design as well as the substitute material itself convey the visual appearance of the remaining parts of the feature and finish.

Replace

Following repair in the hierarchy, guidance is provided for replacing an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair (for example, an exterior cornice; an interior staircase; or a complete porch or storefront). If the essential form and detailing are still evident so that the physical evidence can be used to re-establish the feature as an integral part of the rehabilitation project, then its replacement is appropriate. Like the guidance for repair, the preferred option is always replacement of the

entire feature in kind, that is, with the same material. Because this approach may not always be technically or economically feasible, provisions are made to consider the use of a compatible substitute material.

It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature under certain well-defined circumstances, they never recommend removal and replacement with new material of a feature that—although damaged or deteriorated—could reasonably be repaired and thus preserved.

Design for Missing Historic Features

When an entire interior or exterior feature is missing (for example, an entrance, or cast iron facade; or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting the historical appearance. Where an important architectural feature is missing, its recovery is always recommended in the guidelines as the first or preferred, course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desirable to re-establish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a second acceptable option for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created.

Alterations/Additions to Historic Buildings

Some exterior and interior alterations to the historic building are generally needed to assure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site; cutting new entrances or windows on secondary elevations; inserting an additional floor; installing an entirely new mechanical system; or creating an atrium or light well. Alterations may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character.

The construction of an exterior addition to a historic building may seem to be essential for the new use, but it is emphasized in the guidelines that such new additions should be avoided, if possible, and considered only after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alternative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed.

Additions to historic buildings are referenced within specific sections of the guidelines such as Site, Roof, Structural Systems, etc., but are also considered in more detail in a separate section, **NEW ADDITIONS TO HISTORIC BUILDINGS.**

Health and Safety Code Requirements; Energy Retrofitting

These sections of the rehabilitation guidance address work done to meet health and safety code requirements (for example, providing barrier-free access to historic buildings); or retrofitting measures to conserve energy (for example, installing solar collectors in an unobtrusive location on the site). Although this work is quite often an important aspect of rehabilitation projects, it is usually not part of the overall process of protecting or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features in the process of rehabilitation work to meet code and energy requirements.

Specific information on rehabilitation and preservation technology may be obtained by writing to the National Park Service, at the addresses listed below:

Preservation Assistance Division
National Park Service
Department of the Interior
Washington, D.C. 20240

Preservation Services Division
Southeast Regional Office
National Park Service
75 Spring St. SW., Room 1140
Atlanta, GA 30303

National Historic Preservation
Programs
Western Regional Office
National Park Service
450 Golden Gate Ave.
Box 36063
San Francisco, CA 94102

Office of Cultural Programs
Mid-Atlantic Regional Office
National Park Service
143 S. Third St.
Philadelphia, PA 19106

Division of Cultural Resources
Rocky Mountain Regional Office
National Park Service
655 Parfet St.
P.O. Box 25287
Denver, CO 80225

Cultural Resources Division
Alaska Regional Office
National Park Service
2525 Gambell St.
Anchorage, AK 99503

APPENDIX C

XIV N° 4 1982

ARCHITECTURAL INVESTIGATION AND ANALYSIS FOR
HISTORIC STRUCTURE REPORTS

Tomas H. Spiers, Jr., AIA* 140

Introduction and Overview

Architectural investigation and analysis for Historic Structure Reports is basically a process consisting of a number of related, and usually sequential, actions which build upon one another. The investigation and the analysis are not separate but integrated. The analysis is inherent in the process of investigations.

The actions or steps in an architectural investigation include:

1. Making a physical inventory of the building; that is, determining what the building is by identifying its elements.
2. Determining the building or structure's condition. This includes assessing the condition or integrity of the basic structure of the building, as well as its fabric — the materials of its body which give it form — and its finishes.
3. Identifying the building's historic characteristics, i.e., those particular features which makes it historic or unique.
4. Identifying modifications and additions since the structure was originally built, including clues as to its date of original construction and determining the sequence and date of any modifications and additions.
5. Recording architectural findings by means of measured drawings, photographs and written narratives or taping notes which describe the building, its condition, historical characteristics, and other information upon which conclusions regarding dating or sequence of construction can be based.
6. And finally, presenting the findings and conclusions in a usable form for planning future work.

The process can be divided into two phases; field work at the site and office work. Obviously, there are certain items which must be done in the field, the inventory for example. The condition survey is another item

which must be done on the spot. In regards to recording the building, most of the work, but not all of it, must be done in the field.

In the office, the process of recording the building is completed by preparation of final measured drawings and reports — often leading to further analysis and laboratory tests of materials samples — and the preparation for presentation of the data that has been obtained in the field from the investigation and analysis.

Since architectural investigation and analysis is a process, the best way to explain it is to "walk through" a hypothetical example. It should be noted that the details of the process depend on the type, size, age, complexity and, to a certain extent, the location of the particular building or structure.

Preparation for Field Work

The first basic rule for field work is never to go alone. Even though the particular building to be investigated may be in good condition, may be occupied, or is only a small structure, make it a rule never to make an architectural investigation alone. A team of three (3) persons is optimum. Most often the team consists of the principal investigator, usually an architect, an assistant experienced in taking measurements of existing building, and a drafter who is interested in working with older buildings.

In addition to the basic rule of never going alone for a number of obvious reasons which include not only safety, and the fact that three or more pairs of eyes are much more observant than one, there are a number of helpful ancillary rules to observe. These include:

- Wear old clothes and stout shoes, never sneakers. More than one field investigation has been suspended because someone fell through a floor or stepped on a nail and had to be rushed to a hospital for a tetanus shot.

*Tomas H. Spiers, Jr. is a practicing preservation architect and the American Editor of the *APT Bulletin*.

- Prepare a plan of attack, working out a sequence of doing things so that when arriving at the site time won't be lost deciding what to do first.
- Make sure that all the equipment and materials needed for field work are assembled and ready for use, particularly if the building being investigated is more than an hour's drive from the office. There is nothing worse than being 100 miles away from a source of supply and not having needed items. A list of things usually needed on a field investigation include the following:
 - A clipboard with pads, including both lined pads and graph paper and lots of sharp pencils.
 - A portable drafting board, paper and drafting tools.
 - Cameras — two are best; a polaroid with color film for instant photography and a single lens reflex (SLR) 35mm camera with lots of both black and white and color film for prints and slides.
 - A portable cassette tape recorder including extra tapes and batteries.
 - Tape measures. Usually a 50 foot tape and a 16 foot tape. Also, take a couple of folding rules for short measurements.
 - Flashlights or lanterns. In many buildings there never was any electrical power or it has been turned off.
 - Tools for making removals, including items such as a hammer, crowbar, chisels, screwdriver and anything else that might be needed.
 - Room inventory forms; pre-prepared forms are very handy for noting down information.¹
 - A profile gauge for taking profile of moldings.
 - A level, as elevations can be deceiving and most buildings are not usually square or level.
 - Callophane baggies, use the zip-lock type, for samples. And don't forget stick-on labels for identifying the samples.

For serious technical analysis on site, such as paint deterioration analysis or chromochronology², additional equipment is needed. Often, it is easier to do such analysis on site rather than to bring samples back to the office. In such a case, equipment would include a microscope — a binocular zoom lens type which magnifies from 10 to 30 power is the one most used by professionals³; Munsell Color Books, scalpels and tweezers for taking samples and, of course, containers for bringing back samples for checking later. The black cylindrical containers which 35mm film comes in make good sample containers. Take along a bag of cotton balls for packing the samples. Again, don't forget stick-on labels for identifying the paint samples by location. When working indoors — food or spot lights — or a bright portable lamp with a self-contained power source will be needed.

At the Site

If this is the first site visit to the building or structure, prepare sketch plans of all the floors and assign numbers to each individual room as all other steps in the process will refer to this. The plan need not be in scale or proportion as long as it shows all needed information. In assigning room numbers most investigators use a "B"

prefix for basement rooms, a "100" series for first floor, a "200" series for the second floor and so on. Usually start in the front, at the point in which one enters the building and go in a clockwise direction in numbering the rooms. For example, the front hall might be room 101, the first room to the left 102, and so on. However, any pattern can be set and rooms numbered in a manner which clearly delineates all spaces.

The reason for preparing the sketch plans — don't worry about elevations at this point — and numbering spaces is that it sets up a system for making the inventory in the field.

The normal sequence of inventory is to write out, or dictate into a tape recorder, a general description of the building. This is followed with a detailed description of the exterior, starting with the principal facade and moving around the building. Facades are usually identified by the closest cardinal points: north, east, south and west.

Then move into the interior and either using a tape recorder or prepared forms go by floors, room by room from the bottom up. If the building consists of a main block with a number of wings or additions, do the main block first and then go to the wings or additions. The items to be included or recorded are discussed in more detail below.

After finishing the interior inventory, make a similar inventory of the systems. These include structural systems, mechanical systems such as heating and plumbing, and if there is any, electrical, and then others, such as vertical transportation (elevators) in a multi-story building. While recording what exists, record its condition at the same time.

There are a number of publications which will be helpful in making an inventory of a building. These include: Harley McKee's *Recording Historic Buildings*⁵ and Orin Bullock's *The Restoration Manual*⁶. Also, there have been many articles published in the *APT Bulletin* over the last fourteen years which refer to architectural inventories and investigations, as well as analysis⁷.

Start by recording on tape or in narrative form a general description of the building. This includes its overall form and style which might be a New England Saltbox, a Pennsylvania Farmhouse or a Georgian Mansion. Note its size, the number of stories, and its general appearance. For example, a typical description might be a "two-story Federal Style Pennsylvania Farmhouse, built of brick, with three bays (windows or doors), about 40 feet — with a gable roof."⁸ This immediately gives one a mental picture of the building.

Then, go around all elevations of the house, again with a tape recorder or writing pad noting details. These might be such things as the brick color, type of bond, the color and thickness of mortar joints, type of windows, the number of lites, the types of doors — whether they are solid or glazed and the swing — and any porches that might be present. Also identify any features which give the building its historical character, such as cornice moldings, window shutters or door frame side lights, or a brick water table.

For recording interior spaces and systems use of the room inventory form for notes rather than a tape recorder saves transcribing recorded data at a later date.

It is usual to combine the architectural or technical description with comments on the observed conditions. These include such things as stone deterioration, spalled brick, missing mortar, rusted gutters, warped or deteriorated wood, loose shutters and other readily apparent items. Detail determination of conditions usually require more than a visual inspection. For example, peeling paint on a window frame may indicate a high moisture content in the wood. To determine the exact percentage will require testing with a moisture meter.

Whether using the tape recorder or a room inventory form, always note clues as to dating. These include things such as the style of the building, the window configuration, and specific details of hardware, moldings, nails, and other items.

The next, or a concurrent, step is to take and record measurements to prepare measured drawings. Recording these on graph paper helps to get the proportions and scale approximately correct⁹. One basic rule in taking measurements is always to take cumulative or running dimensions, not sequential. For example, across an elevation or within a room, start with zero in a corner and the first door opening may start, say at 3'-6" and end at 5'-10" and so on. This makes it much easier for layout and drafting later on. Record dimensions only to the closest 1/4 or 1/2 inch. It is impossible to draft any closer than that except for doing large scale details.

Concurrently with taking measurements, take photographs. When taking exterior elevations, if possible get the whole elevation in one picture. Use polaroid shots for immediate use and mark on the back with a felt-tip pen the view, the date, etc., and other comments that are pertinent. Then go around again and take slides or black and white photographs using a wide angle lens, particularly of the exterior. For interior photographs try to take four photographs of each space, standing in opposite corners so as to get at least two walls and make sure to get a portion of the floor and the ceiling. Then photograph details. A zoom or telephoto lens helps with these¹⁰.

On an average project, say a house, the investigator may end up with anywhere from 100 to 150 photographs. On a large project there could be as many as 500 photographs. Using the 35mm, 36 exposure black and white or color prints, or transparencies is most economical. Polaroid photos are very expensive, so use those sparingly.

At this point field work is almost completed. The next thing to do, unless the building site is close to the office (over and back in 10 or 15 minutes), is to prepare draft, that is, not final measured drawings. If time allows try to prepare both plans and elevations at the site. This is the reason for having a portable drafting board along. No matter how careful or complete one is in taking measurements, there is always some critical dimension missing, like floor to floor or window sill heights.

Next, while still at the site, try to get as much information as possible for dating the original construction

and for identifying modifications and additions to the original construction. Often this requires some removals. Note that the structural systems and the materials of the basic structure provide some of the best clues to dating and identifying changes. Hand hewn beams in the basement or flattened logs with bark still on the round portion used as rafters predate sawn lumber. Notched construction or pinned or pegged construction, depending on the type of structure, predates construction where joists are toenailed into headers. Whipped or pitsawn lumber, where the saw marks are vertical, usually predates circular sawn lumber where the marks are curved. Hand forged nails predate cut nails which predate wire nails. There is an excellent pamphlet by Lee Nelson on nails¹¹.

Back to removals. Often the structure is not visible and portions of the wall or ceiling finishes must be removed. This should be done very carefully and in as small an area as possible. Also, all removals should be photographed before and after. In addition, save samples of the plaster, mortar, nails, or anything that is removed. Put them in the baggies and label them for further analysis.

With practice one can become skillful at identifying original materials and systems and those added at a later date and get a feel for dating them. There have been many articles concerning dating published in the *APT Bulletin*¹².

This, in general, completes field work. In general, because very few architectural investigations have been made where it was not necessary to make a follow-up visit for something missing, or to confirm an item of analysis.

Depending on the size of the building, it takes two to five days in the field to do a thorough investigation and analysis.

Office Analysis

As the final architectural description is written, the final measured drawings prepared and the hundreds of photographs reviewed two broad categories of data will become apparent. These are the facts and the assumptions which require further confirmation.

The assumptions will usually involve dates and sequences of construction. Laboratory analyses of the material samples taken in the field such as mortar, paint, wallpaper, nails, wood and so on will help resolve some of the assumptions as well as reference to and comparison with the historical research and documentation regarding the structure.

If the budget can afford it (and it should) don't hesitate to use consultants for analysis and technical research for help in resolving these items. One of the advantages of APT membership is access to the APT members referral service which will assist in contacting persons with the skills required. Architectural analysis is a matter of training, experience and judgment, but if one accepts a definition of analysis — in this case architectural analysis of a historic building — to be a detailed examination of the structure made in order to under-

stand its nature or determine its essential features, then the analysis is inherent in the investigation. That is, in the process and in the presentation of the results of the investigation. Preparation of measured drawings is, in fact, one of the best forms of analysis of a historic building as many experienced preservation architects have noted.

Presentation of Results

Primarily, the presentation will be in verbal form, a precise written narrative of findings and conclusions supported visually by drawings and photographs. In general, the narrative portion of the "Architectural Analysis" — which is itself only one section or element of a complete Historic Structure Report¹² should include the following items:

1. An introduction noting the dates when the architectural investigations were carried out (important for future reference), together with a brief description, or listing, of the approach or methods used in the investigation (e.g., visual inspection only, measured drawings prepared, samples taken, removals made, and so on) to be expanded upon in subsequent subsections.
2. A general description of the building noting style, size, form, features, general materials and other items discussed earlier in this article.
3. A detailed narrative describing as precisely as possible all the elements, materials and finishes and their condition, starting with the exterior then progressing to the interior and finally to the systems. For example, exterior descriptions would cover foundations, walls, windows and doors, porches, roof, chimneys, trim, gutters, downspouts and other items visible from the outside. Interior items include floors, bases, walls, ceilings, trim — both materials and finishes. Systems to be described include structural, heating, plumbing, electrical and others as applicable.
4. A detailed description of removals noting what was removed, where and what data was discovered.
5. A description or listing of any site tests made (e.g., moisture content) or samples taken for further analysis such as paint, mortar or plaster.
6. A chronology of additions and alterations with clues as to dating thereof based on the physical architectural investigation. A discussion of the reasoning or logic by which the chronology was developed should be included. The data presented should be coordinated with and related to the "Historic Analysis"¹³ and any supporting documentary evidence.
7. A brief summary of the investigation and analysis such as: "Based on the architectural investigation and analysis, it can be concluded that the building as it exists at present closely reflects its original appearance and condition. A great majority of the existing fabric is original."

Or more likely:

"... this building has been altered or added at least three, and perhaps more, times. Very little of the original fabric remains and that which does is badly deteriorated."

Graphics for the "Architectural Analysis" section such as reduced copies of measured drawings, key plans, sketches of details or molding profiles, and current photographs can be in an appendix to the section or interspersed throughout the text. All photographs should be captioned and referenced in the text as applicable.

In conclusion it must be noted that content and form of the presentation of the results of an architectural investigation and analysis can and does vary greatly depending on the investigator as well as the client for whom the Historic Structure Report is being prepared¹⁴. Thoroughness and clarity are the most important items.

Footnotes

1. Room Inventory Forms should include the following: Room number and name — usually its functional use — space for a small sketch or key plan and adequate space to fill in data regarding removal, and demolition made as required, and materials, finish and condition of floor, walls, ceilings, windows, doors, stairs, closets, lireplaces, trim and millwork, heating, plumbing and electrical.
2. See Carole L. Perrault, "Techniques Employed at the North Atlantic Historic Preservation Center for the Sampling and Analysis of Historic Architectural Paints and Finishes," *Bulletin of the Association for Preservation Technology*, Vol. X, No. 2, 1978, pp. 6-46.
3. See article by Frank S. Welsh, "Paint Analysis", in this issue.
4. Carole Perrault's article cited above includes an excellent system for identifying paint samples.
5. Hailey J. McKee, *Recording Historic Buildings*, Washington, D.C., Historic American Buildings Survey, 1970.
6. Orin M. Bullock, Jr., *The Restoration Manual*, Norwalk, Conn., Silvermead Publishers, Inc., 1966 (also available in paperback).
7. See APT Publications Brochure available from APT, P.O. Box 3487, Station D, Ottawa, Ontario, Canada K1P 5W6.
8. The Historic American Buildings Survey, "Field Instructions for Measured Drawings" and the HABS "Field Note Book" are excellent references. For more information contact HABS/HAER, National Park Service, U.S. Department of the Interior, Washington, O. C. 20240.
9. See article by Jeff Oean, "Photographing Historic Buildings", in this issue.
10. American Association for State and Local History Technical Letter 48, "History News", Vol. 24, No. 11, November 1968, *Nail Chronology As An Aid to Daring Old Buildings*. Reprints are available from AASLH, 708 Berry Road, Nashville, TN 37204.
11. See APT Publications Brochure cited above.
12. See first article in this issue.
13. See article by Paula Stoner Reed, "Documentation of Historic Structures", in this issue.
14. Most state and federal agencies, such as the General Services Administration and the National Park Service have their own requirements and guidelines for Historic Structure Reports. See article by Randall J. Ballas, "Evolution of Historic Structure Reports and Historic Structure Preservation Guides of the U.S. National Park Service", in this issue.

APPENDIX D

PHOENIX PARK: A PROCESS FOR DEVELOPING USER BASED DESIGN

Dorothy I. Butterfield

Housing Research and Development Program
University of Illinois

ABSTRACT

User Based Design has received a great deal of attention the last several years. However, little has been written about the specific steps in a process which will help practicing architects and landscape architects to generate such design.

This paper discusses a realistic approach to this process and the steps necessary to produce a conceptual design based upon user information. The process includes: identification of the user, gathering and assessing of available information, generation of new information, development of design criteria, development of a conceptual plan, and finally, the testing of this plan against the design criteria. Phoenix Park, a neighborhood park for lower income, primarily black, residents will be used to illustrate the process. Phoenix Park has been approved for development and the first phase of this project will be completed by August, 1984. Hopefully, the documentation of the process used to develop the design of Phoenix Park will be of help to those practicing architects and landscape architects who wish to incorporate behavioral information into their designs. 141

APPENDIX E

College of Architecture and Design
211 Seaton Hall, Box 9 - 6
Kansas State University
Manhattan, Kansas 66506

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March 21, 1985

Dear User of the Konza Prairie Research Natural Area:

Enclosed please find a questionnaire which I am using to gather facts, opinions and insights into the current use and possible further adaptation of the Konza Prairie Headquarters Building.

I am a graduate student in the Master of Architecture program at Kansas State University, with an emphasis in Historic Preservation. My thesis deals with the Headquarters Building (Dewey Ranch House) on Konza Prairie, and it includes investigating the current and possible future needs, wants, and uses for which the building could be utilized, and then designing viable preservation oriented adaptive use alternatives for the structure.

Since you are using and/or have used the Konza Prairie Headquarters Building/Dewey Ranch House, I feel you have a valuable and necessary insight into the positive and negative aspects of this building's facilities. For this reason, I am asking you to contribute to the building's evaluation by filling out the enclosed questionnaire and returning it to me in the enclosed envelope. Though your participation in this questionnaire may not benefit you directly and/or immediately, it will help in planning for the needs of the future users of KPRNA's Headquarters Building.

The questionnaire deals with the Headquarters Building/Ranch House and its immediate environment; but it will not deal with the surrounding grasslands, the research being conducted on those grasslands, or the supporting outbuildings/equipment utilized for that research. Your responses on the questionnaire will be kept anonymous. You may choose not to answer any of the questions if you wish. If you have any questions about the questionnaire, please contact me at (913) 539-0888.

If you would desire to further contribute to the designing process for the Headquarters Building/Ranch House, please indicate your willingness to be interviewed and/or to evaluate the proposed design program on the attached sheet.

Please accept my sincere THANKS for your help and consideration.

Sincerely,

Valerie D. Scholten

Encl.

PLEASE RETURN BY APRIL 1, 1985

..... below placed on a separate postcard.....

(FRONT SIDE)

Please return to: Valerie D. Scholten
 @ College of Architecture and Design
 211 Seaton Hall, Box G - 6
 Kansas State University
 Manhattan, Kansas 66506

(BACK SIDE)

- Would you participate in an interview in March 1985 to further explain your feelings about the Konza Prairie Headquarters Building and its useage?
- Would you be willing to contribute to the design process used in formulating a future adaptive use proposal for the Konza Prairie Headquarters Building by evaluating a design (evaluations will take place in Seaton Hall once in April and once in May)?

Please check the appropriate boxes >>>

- INTERVIEW
- EVALUATE THE DESIGN
- BOTH OF THE ABOVE

Thank you for your generous help!

Your Name: _____, Title _____

Phone Number: _____

Street Address or P.O. Box No.: _____

City or Town: _____

State and Zip Code: _____

KONZA PRAIRIE HEADQUARTERS BUILDING / DEWEY RANCH HOUSE

#1 ●● Your connection with Konza Prairie is:

- KSU Administrator
 - KSU Faculty
 - KSU Student
 - KSU Classified Personnel

 - Visiting Scientist
 - Visiting Faculty
 - Visiting Student
 - Visiting Classified Personnel

 - Volunteer Worker (i.e.: Visitor's Day Tour Guide)
 - Guest or Visitor

 - Other (please explain) _____
-

#2 ●● On the average, how many times per week (or month) do you use or visit the Konza Prairie during the course of a year?

- almost DAILY
- 2 - 3 times per WEEK
- once per WEEK
- 2 - 3 times per MONTH
- once per MONTH
- several times per YEAR
- once per YEAR
- only on SELECTED VISITS (i.e.: You are from out of town, worked daily at Konza Prairie for a predetermined amount of time, and returned home.)

● If you checked only on selected visits, please indicate:

Period of time at Konza Prairie. (i.e.: one week, one month, etc.)

#3 ●● For what purposes do you use Konza Prairie?

Rank in order as many choices as are applicable with #1 being the most important purpose and succeeding numbers being less important. Do not number those choices which, in your opinion, are not important purposes for Konza Prairie involvement.

- Scientific Education
- Scientific Research
- Helping with the visiting public
- Public Education
- Cultural Exhibition
- Scientific Exhibition
- Helping with the maintenance of Konza Prairie
- Conservation of Natural Grasslands / Prairie in general
- Office and/or clerical tasks
- Guest or Visitor
- Other (please explain) _____
- Other (please explain) _____

#4 ●● In which role(s) do you feel Konza Prairie should be involved?

Rank in order as many choices as are applicable with #1 being the most important role and succeeding numbers being less important. Do not number those choices which, in your opinion, are not important roles for Konza Prairie.

- Scientific Education
- Scientific Research
- Helping with the visiting public
- Public Scientific Education
- Public Cultural Education
- Helping with the maintenance of Konza Prairie
- Conservation of Natural Grasslands / Prairie in general
- Office and/or clerical tasks
- Guest or Visitor
- Other (please explain) _____
- Other (please explain) _____

Please, Explain WHY you feel this way.

QUESTIONNAIRE FOR
 KONZA PRAIRIE HEADQUARTERS BUILDING / DEWEY RANCH HOUSE
 page 3

- #5 ●● What facilities would you like to SEE OFFERED IN AN IDEAL SITUATION, either temporarily or permanently, at Konza Prairie Headquarters?

Check your choices. (i.e.: Temporarily - Visitor's Day Banners;
 Permanently - Welcome to KPRNA Sign)

Temporarily	Permanently	
<input type="checkbox"/>	<input type="checkbox"/>	Entrance sign at access road junction with the highway
<input type="checkbox"/>	<input type="checkbox"/>	An Approach Road (entry route) to the Konza Prairie Headquarters Building and/or adjacent facilities
<input type="checkbox"/>	<input type="checkbox"/>	Designated Visitor Parking
<input type="checkbox"/>	<input type="checkbox"/>	Information Center
<input type="checkbox"/>	<input type="checkbox"/>	Scientific Exhibits for Visitors
<input type="checkbox"/>	<input type="checkbox"/>	Cultural Exhibits for Visitors
<input type="checkbox"/>	<input type="checkbox"/>	Seminar/Lecture Facilities
<input type="checkbox"/>	<input type="checkbox"/>	Restroom Facilities for Visitors
<input type="checkbox"/>	<input type="checkbox"/>	Full-scaled scientific laboratory
<input type="checkbox"/>	<input type="checkbox"/>	Holding area for samples
<input type="checkbox"/>	<input type="checkbox"/>	Housing for Visiting Scientists
<input type="checkbox"/>	<input type="checkbox"/>	Restroom Facilities for Konza Prairie Personnel
<input type="checkbox"/>	<input type="checkbox"/>	Housing for a Resident Manager
<input type="checkbox"/>	<input type="checkbox"/>	Office
<input type="checkbox"/>	<input type="checkbox"/>	Other (please explain) _____
<input type="checkbox"/>	<input type="checkbox"/>	Other (please explain) _____

- #6 ●● What do you NEED FOR YOUR DAY-TO-DAY FUNCTIONING at the Headquarters Building?

Rank in order as many choices as are applicable with #1 being the most used and/or important and succeeding numbers being the least used. Number only those choices which you feel are needed.

- _____ Entrance sign at access road junction with the highway
- _____ An Approach Road (entry route) to the Konza Prairie Headquarters Building and/or adjacent facilities
- _____ Designated Visitor Parking
- _____ Information Center
- _____ Scientific Exhibits for Visitors
- _____ Cultural Exhibits for Visitors
- _____ Seminar/Lecture Facilities
- _____ Restroom Facilities for Visitors
- _____ Full-scaled scientific laboratory
- _____ Holding area for samples
- _____ Housing for Visiting Scientists
- _____ Restroom Facilities for Konza Prairie Personnel
- _____ Housing for a Resident Manager
- _____ Office
- _____ Other (please explain) _____
- _____ Other (please explain) _____

QUESTIONNAIRE FOR
 KONZA PRAIRIE HEADQUARTERS BUILDING / DEWEY RANCH HOUSE
 page 4

#7 ●● What do you NEED FOR YOUR OCCASIONAL/TEMPORARY USE?

Rank in order as many choices as are applicable with #1 being the most used and/or important and succeeding numbers being the least used.
Number only those choices which you feel are needed.

- Entrance sign at access road junction with the highway
- An Approach Road (entry route) to the Konza Prairie Headquarters Building and/or adjacent facilities
- Designated Visitor Parking
- Information Center
- Scientific Exhibits for Visitors
- Cultural Exhibits for Visitors
- Seminar/Lecture Facilities
- Restroom Facilities for Visitors
- Full-scaled scientific laboratory
- Holding area for samples
- Housing for Visiting Scientists
- Restroom Facilities for Konza Prairie Personnel
- Housing for a Resident Manager
- Office
- Other (please explain) _____
- Other (please explain) _____

#8 ●● During a typical day at Konza Prairie, what would be the number of hours that you currently spend at the following activities?

Hours per Day

- Setting up and/or maintaining an informational center
- Setting up and/or maintaining exhibits for visitors
- Conducting seminars/lectures
- Doing research out on the prairie
- Utilizing a holding area for samples
- Conducting research in the scientific laboratory
- Working in the machinery/equipment storage/maintenance facilities
- Doing prairie maintenance
- Utilizing housing for Visiting Scientists
- Checking KPRNA for vandalism, etc.
- Office clerical work
- Other (please explain) _____
- Other (please explain) _____

#9 ●● How would you expect your typical day to change if the facilities you use were improved?

Please explain

QUESTIONNAIRE FOR
 KONZA PRAIRIE HEADQUARTERS BUILDING / DEWEY RANCH HOUSE
 page 5

- #10 ●● Are there any facilities with which you are the LEAST SATISFIED ?

Rank in order as many choices as are applicable with #1 being the least satisfactory. Do not number those choices with which you are satisfied.
 Please explain your reasons for being unsatisfied.

continue on back of page if needed

- Entrance sign at access road junction with the highway _____
 An Approach Road (entry route) to the Konza Prairie Headquarters
 Building and/or adjacent facilities _____
 Designated Visitor Parking _____
 Information Center _____
 Scientific Exhibits for Visitors _____
 Cultural Exhibits for Visitors _____
 Seminar/Lecture Facilities _____
 Restroom Facilities for Visitors _____
 Full-scaled scientific laboratory _____
 Holding area for samples _____
 Housing for Visiting Scientists _____
 Restroom Facilities for Konza Prairie Personnel _____
 Housing for a Resident Manager _____
 Office _____
 Other (please explain) _____
 Other (please explain) _____

- #11 ●● If the following FACILITIES WERE AVAILABLE at Konza Prairie Headquarters, WHICH WOULD YOU USE ?

Rank in order as many choices as are applicable, with #1 being the most used and following numbers being less important. Do not number those choices which you will not use.

- Entrance sign at access road junction with the highway _____
 An Approach Road (entry route) to the Konza Prairie Headquarters
 Building and/or adjacent facilities _____
 Designated Visitor Parking _____
 Information Center _____
 Scientific Exhibit(s) for Visitors _____
 Cultural Exhibit(s) for Visitors _____
 Seminar/Lecture Facilities _____
 Restroom Facilities for Visitors _____
 Full-scaled scientific laboratory _____
 Holding area for samples _____
 Housing for Visiting Scientists _____
 Restroom Facilities for Konza Prairie Personnel _____
 Housing for a Resident Manager _____
 Office _____
 Other (please explain) _____
 Other (please explain) _____

#12 ●● Given the historical significance of the building and farmstead -- Ideally, how would you like to see the Konza Prairie Headquarters Building (Dewey Ranch House) and farmyard used?

- Restore the house to its turn of the century form to provide a cultural exhibit of ranchhand life-style as part of the KPRNA exhibits?
- Restore only a portion of the house for a cultural exhibit and adaptively use the rest of the house for KPRNA's needs?
- All of the KPRNA Headquarters Building (Dewey Ranch House) should be used for only KPRNA's needs?

#13 ●● Check all of the items which, in your opinion, could **CO-EXIST** within the Headquarters Building/Ranch House.

- Cultural Exhibit of ranchhand life-style around 1915 for the Visitors
- Scientific Education
- Scientific Research
- Full-scaled scientific laboratory
- Holding area for samples
- Information Center
- Seminar/Lecture Facilities
- Scientific Exhibits for Visitors
- Office/clerical
- Housing for Visiting Scientists
- Housing for a Resident Manager
- Restroom Facilities for Visitors
- Restroom Facilities for Personnel
- Other (please explain) _____
- Other (please explain) _____

- All of the above
- None of the above

QUESTIONNAIRE TOTALS

QUESTION #1

** Your connection with Kanza Prairie is:

<input type="checkbox"/> KSU Administrator	
<input type="checkbox"/> KSU Faculty	4HT 4HT I
<input type="checkbox"/> KSU Student	4HT 4HT UNDERGRAD III GRAD
<input type="checkbox"/> KSU Classified Personnel	II
<input type="checkbox"/> Visiting Scientist	4HT 4HT 4HT I
<input type="checkbox"/> Visiting Faculty	II
<input type="checkbox"/> Visiting Student	II GRAD
<input type="checkbox"/> Visiting Classified Personnel	I
<input type="checkbox"/> Volunteer Worker	4HT I
<input type="checkbox"/> Guest or Visitor	4HT 4HT 4HT III
<input type="checkbox"/> Other (please explain)	IIII RESEARCH ASSOCIATE II STUDENT LABORER

QUESTION #2

•• On the average, how many times per week (or month) do you use or visit the Konza Prairie during the course of a year? N/A

- almost DAILY JHT III
- 2 - 3 times per WEEK JHT IIII
- once per WEEK JHT
- 2 - 3 times per MONTH I
- once per MONTH
- several times per YEAR JHT III
- once per YEAR JHT JHT JHT IIII
- only on SELECTED VISITS JHT JHT JHT JHT JHT I

• If you checked only on selected visits, please indicate:

Period of time at Konza Prairie. (i.e. one week, one month, etc.)

ONE DAY JHT JHT
 3 hours II
 4 hours II
 WEEKEND SPRING & FALL II
 1-2 MONTHS II
 DAILY FOR VARIOUS PERIODS OF TIME II
 2-5 hrs/wk for 3 MONTHS I

DAILY - SUMMER (S, J, A) III
 1 WEEK I
 1-2 MONTHS I
 6 Wks / yr.

QUESTION #5

** What facilities would you like to see offered in an IDEAL SITUATION, either temporarily or permanently, at Konza Prairie Headquarters?

	Temporarily	Permanently
Entrance sign at access road junction with the highway		
An Approach Road (entry route) to the Konza Prairie Headquarters Building and/or adjacent facilities		
Designated Visitor Parking		
Information Center		
Scientific Exhibits for Visitors		
Cultural Exhibits for Visitors		
Seminar/Lecture Facilities		
Restroom Facilities for Visitors		
Full-sized scientific laboratory		
Holding area for samples		
Housing for Visiting Scientists		
Restroom Facilities for Konza Prairie Personnel		
Housing for a Resident Manager		
Other		

Other - OVER

QUESTION #5
continued

Diorama Exhibit showing vast bison herd and other prairie creatures	I
Mounted Prairie Animals	I
Indian Exhibit	I
Perennial Garden of Native Plants	I
Caretaker for Visitor Center	II
Holding Area for Equipment	I
Snack Bar	I
Native Plant Seed Sales	I
Display of Current Konza Activities	I
Display of KPRNA Long Range Plans	I
Konza Research - Personnel and Areas	I
Meeting Room Facility	I
Hiking Trail	II
Mini Visitor Center	I
Guided Tours	I
Larger Shop for Vehicle/Equipment Maintenance	I
Storage Area for Large Scale Research Projects	I
Historic Pictures and Narrative of Dewey Ranch	I

QUESTION #8

QUESTION #9

•• During a typical day at Konza Prairie, what would be the number of hours that you currently spend at the following activities?
Hours per Day

N/A

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QUESTION # 10

•• Are there any facilities with which you are the LEAST SATISFIED? N/A ^{4HT 4HT 1} 4HT 4HT 4HT 4HT 4HT

CXS 1 2 3 4 5 6 7 8

Entrance sign at access road junction with the highway II I I I I

An Approach Road (entry roads) to the Kona Prairie
Therapists' building and/or adjacent facilities II I I I

Dedicated Visitor Parking II II III I I

Information Center II II II I I

Scientific Exhibits for Visitors III 4HT I I I

Cultural Exhibits for Visitors II 4HT II I I

Seminar/lecture facilities II I I 4HT I I

Restroom facilities for Visitors II 4HT I II I I

Full-scaled scientific laboratory I 4HT II

Holding area for samples I I I I

Housing for Visiting Scientists I III 4HT I I I

Restroom facilities for Kona Prairie Personnel I II III I

Housing for a Resident Manager I I

Office I

Other: HISTORIC HOUSE & BARN III I I
KONA STAFF
PUBLIC VIEWING I

QUESTION #11

•• If the following FACILITIES, WERE AVAILABLE at Konza Prairie Headquarters, WHICH WOULD YOU USE?

	C.K.S.								
	1	2	3	4	5	6	7	8	
Entrance sign at access road/junction with the highway	III	III	I	I	I	II	II	II	IIA IIIA IIIB
An Approach Road (entry route) to the Konza Prairie Headquarters Building and/or adjacent facilities	III	III	III	I	I	II	II	II	
Dedicated Visitor Parking	II	I	III	III	III	I	II	I	
Information Center	III	III	III	III	III	III	III	III	
Scientific Exhibits for Visitors	III	III	III	III	III	III	III	III	
Cultural Exhibits for Visitors	III	III	III	III	III	III	III	III	
Seminar/Lecture Facilities	III	III	III	III	III	III	III	III	
Restroom Facilities for Visitors	III	III	III	III	III	III	III	III	
Full-scaled scientific laboratory	II	III							
Holding area for samples	III	III	III	III	III	III	III	III	
Housing for Visiting Scientists	I	II	III	III	III	III	III	III	
Restroom Facilities for Konza Prairie Personnel	II	III							
Housing for a Resident Manager	I	II	III	III	III	III	III	III	
Office	I	II	III	III	III	III	III	III	
Other	II	III							

Other
 SHOW STAGING AREA
 OFFICE
 VISITOR CENTER
 INFORMATION CENTER
 RESTROOMS
 PHOTO REFERENCE

QUESTION #12

•• Given the historical significance of the building and farmstead -- Ideally, how would you like to see the Konza Prairie Headquarters Building (Dewey Ranch House) and farmyard used? N/A III

4, 5, 6, 7, 8 1, 2, 3 NO
CULTURAL CULTURAL
REFERENCES REFERENCES

TOTAL
ANSWERS

Restore the house to its turn of the century form to provide a cultural exhibit of ranchhand life-style as part of the KPRNA exhibits? III I III II

Restore only a portion of the house for a cultural exhibit and adaptively use the rest of the house for KPRNA's needs? III III III III III III III III III III

All of the KPRNA Headquarters Building (Dewey Ranch House) should be used for only KPRNA's needs? III II I III III III

KEEP STRUCTURE AS MUCH THE SAME AS POSSIBLE BUT NOT INCLUDE CULTURAL EXHIBITS I I

QUESTION #13

<input type="checkbox"/> All of the above <input type="checkbox"/> None of the above	** Check all of the items which, in your opinion, could CO-EXIST within the Headquarters Building/Branch House	N/A
<input type="checkbox"/>	Cultural Exhibit of French-Indo-Chinese style around 1915 for the Visitors	42
<input type="checkbox"/>	Scientific Education	46
<input type="checkbox"/>	Scientific Research	42
<input type="checkbox"/>	Full-scaled scientific laboratory	18
<input type="checkbox"/>	Holding areas for samples	22
<input type="checkbox"/>	Information Center	48
<input type="checkbox"/>	Seminar/Lecture Facilities	55
<input type="checkbox"/>	Scientific Exhibits for Visitors	50
<input type="checkbox"/>	Office/chemical	25
<input type="checkbox"/>	Housing for Visiting Scientists	36
<input type="checkbox"/>	Housing for a Resident Manager	15
<input type="checkbox"/>	Restroom Facilities for Visitors	49
<input type="checkbox"/>	Restroom Facilities for Personnel	41
<input type="checkbox"/>	Other - SHOW/ER	1

APPENDIX G
QUESTIONNAIRE RESPONDENT
QUOTATIONS

The following are quotations from the respondent explanations to their answers in Question #4 of the Questionnaire -- In which role(s) do you feel Konza Prairie should be involved? Please explain WHY you feel this way.

KSU Faculty:

- "It's a very attractive Outdoor Laboratory that has so much to offer. I see Konza as having Multi-purpose function."
- "Konza Prairie Research Natural Area (KPRNA) is a research facility for ecologists studying the dynamics of a prairie ecosystem."
- "I feel research and education are the Key roles Konza should push."
- "Research is #1 because it is essential for the other uses and because we are a research institution."

Research Associates:

- "The area has been set aside to study and maintain the tallgrass prairie ecosystem. I think public involvement should be minimal."
- "Research and Education are the reasons Konza exists."
- "Konza is a research natural area, so science comes first. The site can have value to others in many ways for educational purposes, but only if they do not interfere with research."

KSU Students:

- "Since Konza is a research area, I would like to see the buildings used primarily as a place for scientists to conduct research and stay when visiting. I also, think it could be used as a place to educate the public about ongoing research."
- "As a researcher in the area of ecology, I feel Konza should [be] utilized primarily for research and its conservation is required for this."
- "Konza Prairie is a research site and not open to [the] public except on special occasions such as visitors day."
- "It is too rare a site to be just for public but the public needs to be educated to preserve areas like Konza."
- "KPRNA has been obtained so we can approximate the conditions of tallgrass prairie therefore let's use it for such."
- "This is the premier site for tallgrass prairie research in the world so it is important that no other activities hinder this mission or opportunity."
- "For #'s 2-7 to occur [research, education, public], #1 [conservation of natural grasslands/prairie] has to [occur] in the 1st place. And more importantly, I think the prairie should have the right to retain its integrity -- that it should be preserved. By preserving the prairie, we can continue to try to understand it, how it affects us & we affect it, & spread this understanding so that we all can learn to be better stewards of the earth."
- "I feel the priority is to preserve the prairie and do Scientific Education & Research upon it. Having visitors & conducting tours is definitely important but must be conducted on a controlled basis."
- "The understanding of the prairie through scientific research is necessary before other decisions can be evaluated."
- "Konza prairie is very unique and must not be lost; also a great deal can be learned from it."
- "Konza is a unique research area and is an invaluable source for gaining knowledge of native grasslands."

Visiting Scientists:

- "The site is unique as a research site, and is also a unique and beautiful natural area: maintaining these qualities should guide all other site use."
- "We need more information on the best Conservation methods in maintaining our Prairie grasslands."
- "The major purpose is scientific, but a greater cordiality to the public should be encouraged."
- "Research and education are the primary goals, and [/?/?] on conservation of the prairie, thus they are the roles Konza should be involved with."
- "Must be conserved to be useful."
- "Konza prairie was preserved primarily to save a large tallgrass prairie and use it for research on prairie ecology."
- "1 & 2 & 3 are about equal [maintenance of Konza Prairie, scientific education, scientific research]; research and education are needed for maintenance of the Prairie."
- "As a unique landmark it stands out as a representative of the prairie ecosystem which [is] quickly disappearing."
- "It was established for research, and education, maintenance, and conservation follow naturally from the presence and activity of researchers."

Visiting Faculty:

- "The area should be 1st concerned with research and 2nd with interpretive work for the public."
- "My training / familiarity with the purposes of Konza and the way in which it has been run and [I have] some ideas on how it should change."

Visiting Graduate Student:

- "I feel scientific research is the most important[,] but without education of the public[,] areas like Konza Prairie can't exist in the future[;] therefore education would bring about the conservation of natural grasslands."

Volunteer Workers:

- "Conservation of the prairie is most important or else there won't be a natural area in which to do scientific research. Every person who steps foot on the Konza should be aware of their responsibilities to help maintain the prairie, whether it is a researcher, maintenance personnel or visitor. These responsibilities need to be stated very directly and strictly enforced. Education on the scientific attitude and the public is important. Knowledge needs to be shared with students, colleges, faculty members and the public should be aware of the benefits and beauty of Konza."
- "The prairie should be preserved but at the same time Research can be done and even a section could be a working ranch."
- "There are many purposes of scientific nature. Our interest is in [the] history of the ranch since 1855."

Student Laborer/Employees:

- "Conservation and maintenance of natural grassland is required before good scientific data can be obtained. It would be nice to have the ranch house open to the public for scientific education - and a nature trail away from research areas."

Guest or Visitor:

- "Someday, I hope we can have public interpretation at another Kansas location - not relying on Konza to fulfill both research and public needs - they are not always compatible. However, I do want the public to have a sampling of information on why Konza exists - in hopes the general public can be persuaded to support a tallgrass prairie national preserve."

- "The public has a need and desire to understand [the] past involved with the prairies of Kansas."
- "The Konza Prairie is a unique prairie laboratory where I feel new and important facts regarding the ecology of this area can be discovered. A certain amount of public education can be achieved as well."
- "The area is an outstanding prairie preserve close to KSU."
- "The most important role is scientific research, since there are few natural prairies left to do such research."
- "Preservation of a representative ecosystem with visitation for developing perception and understanding without destroying the resource seems to me to be what the program should be all about."
- "Education and research of scarce natural area is primary."
- "To help [the] general public (including myself) to expose themselves to the tallgrass prairie in its 'natural' form."
- "I feel we have a responsibility to maintain as much of our natural environment as possible."
- "I think it is vital to conserve the prairie and to continue ongoing research."
- "We have little original native prairie left!"
- "It is a unique piece of land set aside and managed in this use, is it not?"
- "Our land has been exploited and wasted through greed and ignorance. The research done on the Konza Prairie should help dispel ignorance."

NOTES
APPENDICES

137 Special Committee on Historic Preservation, *With Heritage So Rich* (Washington, D.C. The Preservation Press, 1983), p. 194

138 Special Committee on Historic Preservation, pp. 200-201

139 Gary L. Hume and Kay D. Weeks, *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (Washington, D.C. US Department of the Interior National Park Service Preservation Assistance Division, Revised 1983), cover and pp. 5-11.

140 Spiers, p. 23-26.

141 Dorothy I. Butterfield, "Phoenix Park. A Process for Developing User Based Design" *EDRA 15 1984 Proceedings*, (Washington, D.C.: EDRA, Inc. 1984), p. 309.

GLOSSARY

Due to the increased activity within the preservation field, a broader and more precise nomenclature has been established. This was done to accommodate both the widened scope of the field and the various types and levels of intervention available for the structure. This terminology reflects levels of intervention which are based on increasing radicality.

The following terminology and their definitions are presented to clarify the meanings of the nomenclature used within this study. This terminology is taken from James Marston Fitch's book, *Historic Preservation: Curatorial Management of the Built World*.

Preservation

Preservation is the maintenance of the artifact in the same physical condition as when it was received by the curatorial agency. Nothing is added to or subtracted from the aesthetic corpus of the artifact. Any interventions necessary to preserve its physical integrity (e.g., protection against fire, theft, or intrusion; heating, cooling, lighting) are to be cosmetically unobtrusive. (i.e.: FDR Home, Hyde Park, New York)

Restoration

Restoration is the process of returning the artifact to the physical condition in which it would have been at some previous stage of its morphological development. The precise stage is determined either by historical association or aesthetic integrity. (i.e.: Mount Vernon)

Conservation and Consolidation

Conservation and Consolidation are the physical intervention of the actual fabric of the building to ensure its continued structural integrity (i.e., fumigation against termites, Royal Palace, Honolulu)

Reconstitution

Reconstitution is a more radical version of Conservation and Consolidation, in which the building can be saved only by piece-by-piece reassembly, either in situ or on a new site. (i.e., Old State Capitol, Springfield, Illinois)

Adaptive Use

Adaptive Use is often the only economic way in which old buildings can be saved, by adapting them to the requirements of new tenants. This can involve any or all of the forementioned levels of intervention. (i.e., Old City Hall, Boston, Massachusetts)

Reconstruction

Reconstruction is the re-creation of vanished buildings on their original site. The reconstructed building acts as the tangible, three-dimensional surrogate of the original structure, its physical form being established by archaeological, archival, and literary evidence. (i.e., Williamsburg)

Replication

Replication is the construction of an exact copy of a still-standing building on a site removed from the prototype. In other words, the replica coexists with the original. (Plimoth Plantation, Plymouth, Massachusetts)

NOTES
GLOSSARY

142 Fitch, pp. 46-47

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A STUDY OF THE PROCESS TO ADAPT
A KANSAS RANCH HOUSE SITE FOR USE AS
A BIOLOGICAL EDUCATIONAL RESEARCH CENTER

by

VALERIE DAWN HARPER SCHOLTEN

B.A., University of Northern Iowa, 1972

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the
requirements for the degree

MASTER OF ARCHITECTURE

Department of Architecture

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1987

A Study of the Process To Adapt a Kansas Ranch House Site For Use As A Biological Educational Research Center resulted from the combination of the following: a preservable building and its companion structures being representative of a passing way of life within the cattle ranch era of Kansas (1912); and, the property being owned and operated by non-profit organizations interested in the ecological research of the prairie lands that surround those structures.

Use of the structures by the present owners was inevitable; so, the study was undertaken to provide guidance to the owners in a preservation oriented Adaptive Use Plan for those structures.

The Study has a four part methodology consisting of: Documentation of the Site, Defining and Investigating the Diversified Users of the Site, Development of a Preservation Program for the Ranch House, and the Development of Conceptual Use Plans for the Site.

The uniqueness of the buildings both in architectural style and life-style uses provided the basis for the historical significance of the Ranch House Site. A Historic Structure Report was completed for the Ranch House to document and establish its' historic significance.

After the Users of the Study Area were defined, a questionnaire was developed to investigate: who the users were; what was their connection to the Study Area; and, why, when, where, and how they used the Study Area. The questionnaire was followed by the use of interviews with selected respondents.

Development of an Adaptive Use Program for the Ranch House combined User Need Analysis with the Analysis of the Existing Structure Conditions to provide a detailed listing of goals to be achieved regarding preservation, rehabilitation and/or adaptive use of the building.

Development of the Conceptual Plans: Long-Term Use and Interim Use, were founded on the User Based Design process and the historically significant aspects of the Site.

The conclusions reached from the investigations were: *1. The Users of the Study Area come to the site for diversified purposes, and yet they all support the Prairie Grass Long-Term Research Program which is in progress., *2. The scientific community uses the support facilities (non-research oriented) within the Study Area as much as the lay visitors., *3. The Ranch House can be the hub of a usable and workable Biological Educational Research Center while at the same time respecting the historical aspects of the Study Area., *4. The Long-Term Use Plan must be implemented to achieve the preservation oriented adaptive use of the Study Area., *5. Interested, knowledgeable, expertise from a wide variety of sources became apparent because of this Study's occurrence, and should be utilized in the implementation and followthrough for the non-research oriented needs of the Biological Educational Research Center.

Priorities and goals were established and discussed for the Long-Term Use Plan implementation. The effectiveness of this study can be confirmed when the User Based Long-Term Conceptual Design has been implemented and utilization by the diversified users of the site has occurred.