



**Geophysical, Archaeological, and Architectural Investigations at
101 Ranch Historic District,
Ponca City vicinity, Kay County, Oklahoma**

Prepared by
URS Corporation
Dallas, Texas



Geophysical, Archaeological, and Architectural Investigations at 101 Ranch Historic District, Ponca City vicinity, Kay County, Oklahoma

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Abstract

On behalf of the Oklahoma Department of Transportation (ODOT), URS Corporation (URS) conducted a geophysical, archaeological, and historic structures survey of the National Register of Historic Places (NRHP) 101 Ranch Historic District near Ponca City, Oklahoma. The 2008 Memorandum of Agreement (MOA) between the Federal Highway Administration (FHWA), ODOT, and the Oklahoma State Historic Preservation Officer, stipulated that in order to mitigate the adverse effects of a bridge replacement on Oklahoma State Highway 156 (SH 156) over the Salt Fork of the Arkansas River, a survey be conducted to document the resources at the 101 Ranch. The SH 156 Bridge was determined to be a contributing member of the 101 Ranch National Register District.

The goals and objectives of the project were to:

- Provide a brief historic context regarding the 101 Ranch and buildings;
- Discuss field methodologies and research conducted;
- Conduct a pedestrian and geophysical survey of the main ranch headquarters to identify the remaining ruins;
- Photo document all ruins and draw plan maps of all ruins;
- Locate original roads/trails and sidewalks through the main headquarters areas;
- Identify buildings, roadways, and utilities associated with 101 Ranch; and
- Provide recommendations for further investigations.

The report will provide an inventory and complete plan map of detectable surface and subsurface features, including structural footprints or boundaries and pedestrian areas associated with the 101 Ranch District in the main ranch headquarters. This data will be used by ODOT for use in fulfilling their obligations stated in the MOA.

This report is divided into four sections. These sections include: introduction, which includes background history of the ranch; methodology, which outlines techniques used for background research and in the field; field research, which is the effort the team conducted while in the field; and the summary and recommendations, which provides the analysis of the findings and provides recommendations on further work.

The information provided in this document consists of the combined recommendations of the project team of geophysical consultants, archaeologists, and architectural historians. Recommendations are based on background research and field survey, as well as the consultants' knowledge and professional experience.

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Introduction

On behalf of the Oklahoma Department of Transportation (ODOT), URS Corporation (URS) conducted a geophysical, archaeological, and historic resources survey of the National Register listed, 101 Ranch Historic District near Ponca City, Kay County, Oklahoma in partial fulfillment of Stipulations I-1, a, b, and c; -2 and -9 a 2008 Memorandum of Agreement (MOA) between the Federal Highway Administration (FHWA), ODOT, and the Oklahoma State Historic Preservation Officer (SHPO), to mitigate the adverse effects of a bridge replacement on Oklahoma State Highway 156 (SH 156) over the Salt Fork of the Arkansas River. The bridge was previously determined to be a contributing resource to the 101 Ranch National Register of Historic Places District (NRHP).

The character of the 101 Ranch Historic District has changed significantly since its listing on the NRHP. Most of the standing structures present when the district was listed have since been lost or have greatly deteriorated due to fire, decay mechanisms, and the continued cutting and repeated flooding of the Salt Fork of the Arkansas River, leaving ruins and subsurface archeological features.

The goal of this project is to document what remains of the district, including archeological features, to assess the conditions of ruins and remaining structures, and provide recommendations for their preservation. An interdisciplinary approach was used to achieve this goal; this included utilizing the expertise of architectural historians and conservators, archeologists, geophysicists, and GIS analysts.

This project was done in conjunction with the geophysical, archaeological, and historic resources teams to identify and document all historic features associated with the 101 Ranch Historic District. A variety of methods for investigation were utilized to document surface level and buried historic-age foundations and structures associated with the ranch. Historic photographs and historic aerial and topographic maps of the 101 Ranch were reviewed in order to determine the approximate locations and layout of the camp structures in the survey area.

Physical Site Setting

The project area is within the Red Bed Plains geomorphic province, which occurs throughout central Oklahoma. It is characterized by red Permian shales and sandstones that have been weathered into gently rolling hills and flat plains (Curtis et al. 2008:8). Quaternary deposits border the major rivers and include clay, sand, silt, and gravel in the flood plains and terrace deposits (Johnson, 2008:6). The Salt

Fork of the Arkansas River is the principal perennial water course in the region and is straddled by the 101 Ranch Historic District. It begins in south Kansas and flows in a southeasterly direction through northern Oklahoma (Johnson and Luza, 2008:12). The river is prone to regular flooding which has resulted in a deposition of alluvium over much of the site area.

Hoagland (2008:17) indicates that this area of north-central Oklahoma consists primarily of tallgrass prairie vegetation. He further states (Hoagland 2008:17) that it intergrades with oak-hickory forests in the east and mixed grass eroded plans to the west. Forest and woodland vegetation readily replace tallgrass prairie following land abandonment and fire suppression. Predominant grasses are little bluestem, big bluestem, Indiangrass, and switchgrass. Associated species include lead plant, Indian plantain, prairie clover, heath aster, small panic grass, pallid coneflower, ashy sunflower, and Missouri goldenrod. Hoagland (2008:17) describes the vegetation community along the Salt Fork of the Arkansas River as bottomland forest. He reports (Hoagland 2008:17) that there is tremendous variation in the species present, with hackberry, red elm, sugarberry, and green ash commonly occurring.

The climate of the Southern Great Plains can be characterized as subarid to subhumid. The climate is highly variable and temperature changes can occur rapidly. It is not uncommon to have high summer temperatures above 100 and low winter temperatures in the teens. In the project area, the mean annual temperature is about 58 degrees. Rainfall mostly occurs in the spring months when Gulf air masses produce moisture in the region. The annual precipitation in the project area averages about 34-38 inches. This and other climatic information can be found in Johnson (2008: 18).

The 101 Ranch Historic District is situated approximately 13 miles southwest of Ponca City on Oklahoma SH 156 in Kay County. The ranch headquarters was built on the level floodplain and during the years of ranch operation, the site was mostly covered with grasses and agricultural fields. A scatter of cottonwood and hackberry trees occurred along the river bank and the southern area of the ranch where the River Camp was located. A scattering of ornamental trees was usually present around the house and store area. Since the ranching operation ceased, the site has become covered with alluvium up to 12" to 18" thick in some areas. Trees have also taken hold along the stream channel and a thick growth of trees and brush have covered the southern extent of the site. One major change to the landscape occurred in the early

1990s when the Salt Fork of the Arkansas River began cutting eastward and removed much of the northwest portion of the district. The 101 Ranch headquarters area comprising much of the Historic District is owned and managed by the 101 Ranch Old Timers (OTA). The portion of the District around the remains of the White House, 101 Ranch store, hotel, and power house is managed by the OTA and opened daily as a roadside park.

Background History

At its peak, the 101 Ranch was a 110,000+ acre cattle ranch that was established prior to Oklahoma statehood in Indian Territory. Colonel George Miller started the ranch in 1879 using land leased from the Ponca Indian tribe, with whom he became acquainted several years earlier. The 101 Ranch included facilities such as a school, general store, hotel, dairy, meat packing plant, and an oil refinery. Upon Colonel Miller's death in 1903, the ranch was transferred to his three sons: Joe, Zack, and George.

The brothers not only maintained the existing ranch, but expanded it to include the famous "101 Ranch Real Wild West Show." The show came to the national scene in 1907 and had cycles of success and decline until it closed in 1931. Due to personal tragedy, the ranch fell on hard times in the 1930s and 1940s, causing much of the land and property to be auctioned off and the buildings demolished.

By 1972, when the property was originally listed on the NRHP, a few buildings remained in the district. Since that time most of those buildings have been lost to fire or erosion due to cutting by the Salt Fork of the Arkansas River. Several buildings and features remain, including the foundations of the White House and the general store.

The 101 Ranch NRHP District is designated with the Smithsonian trinomial 34KA318, but the archaeological manifestation of the Ranch has never been assessed regarding its potential for contributing to the District. A recent 2010 survey recorded an area of the site to the northeast that was separately designated as 34KA374. However, 34KA374 is reportedly related to 34KA318. The boundary for site 34KA318 utilized for the current ODOT project is based on the original 1972 NRHP nomination form and a subsequent 1974 supplement. The NRHP District boundary is clearly too limited and does not capture all elements of the 101 Ranch Headquarters area comprising the NRHP District (Figure 1).

The project that initiated the current investigations was the removal of the 1924 modified Pratt through truss

bridge on SH 156 over the Salt Fork of the Arkansas River and modification to a historic road cut feature just west of the bridge that was the former ford and ferry road used in the early days of the Ranch. The removal of the bridge and the modifications to the old ford and ferry road have been determined an adverse effect to the NRHP/National Historic Landmark 101 Ranch District.

Figure 1: Topographic Aerial Map of 101 Ranch Historic District Boundary.

Source: 1968 Marland, OK 7.5-minute USGS Quad

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Methodology

A variety of methods for investigation were utilized to document surface level and buried historic-age foundations and structures associated with the Ranch. Historic photographs and historic aerial and topographic maps of the 101 Ranch were reviewed in order to determine the approximate locations and layout of the structures in the survey area. Geophysical, archaeological, and historic resources field efforts were used to identify and document historic features associated with the 101 Ranch headquarters (Figure 2).

Field investigations were conducted by URS archaeologists on March 26-28, 2011 and May 16-18, 2011 and URS architectural conservators/historians on May 13-18, 2011. In addition, a geophysical magnetometer and Ground Penetrating Radar (GPR) survey was conducted on May 16-19, 2011 by Archaeo-Physics, LLC as a sub-contractor to URS. The scope of work and interim report (Turner-Pearson et al. 2011; Appendix A) proposed that a variety of methods for investigation would be utilized to document surface level and buried historic-age foundations and structures associated with the Ranch, including:

- review of historic photographs and maps of the 101 Ranch, including historic aerial and topographic maps, in order to determine the approximate locations and layout of the camp structures in the survey area;
- geophysical magnetometer and GPR survey to help locate historic archaeological features at 101 Ranch; and
- areal/pedestrian surveys.

The photographs, maps, and other historic records were critical in determining the areas for which the archaeological survey and geophysical investigations would be conducted, although physical constraints also were considerations. For example, the historic documentation indicated areas where former buildings previously existed, but no longer retained surface expressions or were otherwise identifiable. The geophysical survey, therefore, focused on a large open area in the central area of the site complex. The archaeological survey was primarily employed in areas where physical constraints such as dense vegetation, sloping terrain, etc. precluded a practical application of the geophysical equipment.

Together, the archaeological survey and geophysical survey provided significant information about known, suspected, and unknown structures. Synthesized with the historic records and the fieldwork performed by the architectural conservators/historians, the

methodologies were complimentary and, in total, all yielded a much greater degree of information about the 101 Ranch than could have been gained through the application of any singular technique.

Standing Structure and Ruins Investigation Methodology

The preservation team was tasked to conduct two types of field work in order to complete investigations of the ranch. The first effort was to collect data about construction and alteration dates for all the structures, as well as collect the history of the 101 Ranch to gain a better understanding of the significance of the property. While conducting field work, the preservation team inventoried, assessed the conditions, and collected measurements of all standing structures and foundations which remain. Photographs were taken to document all standing structures and foundations, as well as document any maintenance concerns (Appendix C). Archival research was conducted at Marland's Grand Mansion in Ponca City, Oklahoma and Woolaroc Museum in Bartlesville, Oklahoma (Appendix D). While in the field, the team also spoke to several members of the 101 Ranch Old Timers Association in order to gain a better sense of their goals for the property.

Research continued upon returning to the URS-Dallas office. Examination of the archival photographs obtained from the museums and the Old Timers Association was done in order to gain a sense of the locations for buildings which no longer exist. Other information obtained from photographs were the changes in building designs and the materials. Through a combination of photographic analysis and primary/secondary research, an estimated chronology of construction dates was determined.

The standing structures and ruins field survey was conducted between May 13-18, 2011. The preservation team conducted a building inventory and assessment of all remaining buildings and foundations. Photographs were taken documenting the current state of the buildings and foundations, as well as any maintenance concerns.

Through examination of the archival photographs and known dates of construction, several phases of the Ranch's development were established to create the building chronology for discussion and mapping (Appendix E).

The first development phase is dated pre-1900. This phase includes the background history of the Miller

family, where they came from, and how they settled in Oklahoma. No maps or exhibits are associated with this phase. The next three phases, dating from 1900 to the 1920s, are set by the decade. Historic events that had an effect on ranch operations and changes to ranch buildings are dated through photographs, National Register nomination forms, as well as books written about the Ranch and family. These three phases have associated photographs and maps to show the evolution of the Ranch development.

From 1930-1949, a series of events, both manmade and environmental, led to the destruction of buildings throughout the ranch. These phases do not have associated maps and figures.

The final phase dates to post-1950, which is ultimately the end of the Miller legacy with the passing of Zack Miller. Events that occurred after 1950 include two building inventories with the 1972/1974 National Register of Historic Places nomination and the 1994 HABS/HAER documentation. This phase is illustrated by photographs taken of the buildings from the 1974 supplement to the original 1972 NRHP nomination, which are provided in this report. A map documenting buildings plotted in 1994 is also provided as an exhibit.

The current field effort determined the final phase for purposes of this report. The 2011 study documents standing structures as well as foundations, both visible and underground, found through archaeological and geophysical survey.

The second field effort was undertaken in order to conduct an evaluation and assessment for all standing structures, surface foundations, and buried foundations associated with the ranch. Data collected in the field included identifying character-defining elements and materials of each structure, identifying any deterioration that needs immediate attention, photographing all structures and foundations which still exist, and measuring standing structures and foundations (Appendix C). The data collected with this effort contributed to a maintenance plan, which is the next work phase following the current effort. The maintenance plan will provide the 101 Ranch a range of maintenance and rehabilitation options, a timeline that is forecast over a 20-year span, a checklist for each standing structure and foundation for annual inspections, and basic guidelines regarding treatment of standing structures, surface foundations, and buried foundations.

Archaeological Investigation Methodology

The URS archaeological team was tasked to investigate the river camp area on the west side of SH 156, and the school house and the grandstand area on the east side

of SH 156 using an intensive areal survey in order to locate structural foundations and other features associated with the Ranch. These features were recorded using a GPS with sub-meter accuracy which was synthesized into an overall site map.

A pedestrian survey was conducted in the river camp, school house, and grandstand sections to visibly inspect the project area. Landform anomalies, unusual vegetation or flora types, and/or historic age artifacts that might suggest the location of historic structures and features were noted in the field. All possible feature locations were investigated by shovel testing or scraping to determine if a feature was present, the type of feature, and the feature boundaries. Shovel test procedures were performed at appropriate but effective intervals across the surface of individual features to assess the depth, integrity, and extent of the cultural deposits at the features, and the approximate extent (area) of each feature. Survey transects were a minimum of 30 meters (m) apart and the ground surface was closely examined for artifacts and cultural remains. Shovel test placement and the number of shovel tests were based on the findings in the field at that time.

All arbitrary shovel tests (not conducted to trace a feature boundary) were a minimum of 30 x 30 centimeters (cm) in size and extended to an adequate depth to examine the stratigraphic sequence at each testing locale. Shovel test units did not exceed 100 cm in depth. Each shovel test was excavated in 10 cm arbitrary levels and all soil was screened through one-quarter-inch mesh hardware cloth. All shovel test coordinates were documented with sub-meter accurate GPS units and provided on maps to ODOT. All artifacts were observed and recorded, but were not collected.

Geophysical Investigation Methodology

Magnetic survey methods used in this investigation by Archaeo-Physics, LLC, were designed to rapidly produce a site-wide map of large-scale patterning and to identify areas of interest for further investigation. Rapid coverage of large areas was accomplished by the use of a global positioning system (GPS) for guidance and spatial control, and by lowering sample densities. The magnetic survey was performed using a Geometrics G858 cesium magnetometer. The instrument was used in gradiometer configuration, using two sensors separated by 0.75 m. A magnetic gradiometer is used to measure the difference, or gradient, between the sensors (although the individual output of both sensors is also recorded). While gradient measurements lack the absolute sensitivity of single-sensor measurements, they have the advantage of more precise spatial resolution, while suppressing geological phenomena

and minimizing the effects of ferrous metal and other high-amplitude “clutter.” The G858 magnetometer was integrated with a Trimble AG132 differential GPS, which provided spatial control. The GPS provided both survey guidance and locational data. Reconnaissance survey was performed by collecting data along parallel transects at spaced 2 m intervals. Data samples were recorded every 0.1 seconds (roughly 6-7 samples per linear meter) along each transect.

Reconnaissance survey data were downloaded from the G858 magnetometer to a portable computer. Download and initial processing were performed using Magmap 2000 software, which is provided by the manufacturer of the instrument. A “dstrip” function was applied to remove line-to-line striping due to directional bias resulting from zig-zag data collection. Using a spreadsheet, a highpass filter was created to suppress large-scale geological variation, which is not of archaeological interest. Highpass filtering also suppresses gradual diurnal variations in magnetic field strength, although it was necessary to match the values of adjacent blocks of data collected at different times prior to highpass filtering. This lowers the standard deviation of the data, enhancing the visibility of small, low contrast features, and also creates a map with zero mean. Anomalies are shown as positive or negative deviations from the local mean, allowing more intuitive interpretation. Processed data were exported to Surfer mapping software for interpolation (from scattered point data to 4 data points per m²) and graphic display.

For the electrical resistance survey, the instrument used was a Geoscan Research RM15 electrical resistance meter in twin-probe configuration. An MPX15 multiplexer was used to support the use of two sets of mobile probes mounted on a square frame, which collected two samples with each placement of the array. The spacing between the mobile probes of the PA5 twin probe array was 71 cm. The depth at which archaeological features can be detected is variable, but may be estimated as approximately equal to the probe spacing.

Resistance survey areas were divided into a series of 30 x 30 m squares or survey grids. The grids were measured on the ground with tapes and marked with wooden stakes. Geographic coordinates of representative grid corners in each survey area were recorded using differential GPS to georeference resistance survey results. Each grid was surveyed by taking a reading at regular intervals along regularly spaced transects. Data were collected at a sample density of 4 samples per m². The value and position of each data point was automatically recorded in digital format. Data were downloaded to a portable computer for storage and analysis. The report generated as a

result of the data collected through geophysical investigations is provided in Appendix B.

Geographic Information System Methodology

During the current field effort, the Geographic Information System (GIS) team collected data to aid the archaeology and preservation team with their field investigations. The GIS team was equipped with a Trimble Nomad GPS unit using a ProXT external antenna to improve accuracy in data collection in areas with dense vegetation. Using this equipment, each corner of existing standing structures and foundations were recorded as a point feature and the foundation as a whole was recorded as a polygon feature. The GIS team also used the GPS to record locations that could be important to the archaeological team. Upon returning to the URS Dallas office, the data collected by the GPS team was post-processed and imported into ESRI ArcGIS 9.3.

Using the data collected by the GPS unit along with historic photographs, the GIS team worked closely with the preservation team to estimate the locations and functions of historic structures. These standing structures and foundations were digitized in the ESRI ArcGIS 9.3 software. Results from these analyses were then categorized into chronological phases. Chronological phases were determined to be the best way to display the evolution of the structures and foundations at the 101 Ranch. These phases were based on historic photography and known dates of individual buildings. A map of each phase was then produced (Appendix E).

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History of 101 Ranch and the Miller Family

The history of 101 Ranch has been well documented through various publications, websites, and museums. Most documentation found focuses on the people associated with the ranch and activities that occurred on the ranch. The primary focus of this discussion is to tell the story of the ranch through the evolution the physical setting from the establishment of the ranch to present day. The primary source of information was historic photographs found at the Woolaroc Museum, Bartlesville, OK; Marland's Grand Home, Ponca City, OK; Oklahoma Research Center, Oklahoma City; National Cowboy and Western Heritage Museum, Oklahoma City; and the 101 Ranch Old Timers Association.

It is important to note that while 101 Ranch only operated for approximately 50 years, during that short time the Millers made a significant impact on farming, ranching, and the entertainment industry, shaping how people understood the Wild West. The following is a condensed history outlining the significance of the 101 Ranch Historic District and the impact the Millers had during the early 1900s.

Throughout the history, building names will be followed by a number in parenthesis. This number is associated with the phase maps found in Appendix A. In order to better track building locations where buildings were moved or replaced, several buildings have a number and a letter (for example, Miller Family Residence [1a] or [1b]; general store [2a], [2b], or [2c]). As stated previously, buildings with unknown location and function are labeled "Building No. X."

Pre-1900

Colonel George Washington Miller* was the patriarch of 101 Ranch. His beginnings started in Crab Orchard, Lincoln County, Kentucky. Colonel Miller was born in 1841 to George Miller and Almira Fish. In 1866, after being discharged in 1865 at the rank of sergeant in the Confederate Army, Colonel Miller married Mary Ann "Mollie" Carson in Louisville, Kentucky (Wallis 1999:31). They had a son, Wilkes Booth Miller, born in 1866. In 1868, Joseph Carson Miller was born in Crab Orchard.

Soon after the marriage of Colonel Miller and Mollie, he took over the full management of his grandfather's plantation in Crab Orchard, Kentucky upon his retirement. Colonel Miller had a difficult time running the plantation at the efficient level his grandfather did. This was due primarily to the outcome of the Civil War and the fact that the slaves that once worked the land were now free. Feeling defeated and hearing of new opportunities out west, particularly in California,

Colonel Miller sold his share of his grandfather's plantation and headed west with his family (Collings 1937: 5; Wallis 1999: 33).

Colonel Miller intended to travel across Missouri and follow the Arkansas-Indian Territory border and take a western route to the Pacific Coast. However, plans changed as he crossed the state and realized that the land in Missouri was perfect for a livestock ranch (Wallis 1999:50).

In the 1870, United States census, the Miller family lived in Newtonia, Newton County, Missouri. Colonel Miller, listed as "George," was listed as a grocer and his wife, Mary A. was listed as keeper of house. Wilkes B. (3, son), Joseph C. (2, son), John [Fish] (1 month, son), George W. Carson (20, grocer), and Perry Britton (20, farm laborer) were also listed as household members. John Fish only lived a short two years. In 1875, Alma Maynard Miller was born and Zachary Taylor (Zack) Miller was born 3 years later (USBC 1870; Ancestry.com).

Colonel Miller was an opportunist and began to trade for hogs, which he butchered for ham and bacon. He learned he could trade 50 pounds of bacon for a full-grown steer in Texas. In 1871, he headed to Texas with 20,000 pounds of bacon, giving him 400 head of cattle. With this successful run, Colonel Miller made it just south of Baxter Springs, Kansas and obtained permission from the Quapaw Indians to allow the cattle to graze on their land. This was the beginning of cattle ranching for Colonel George Miller (Collings 1937:6; Wallis 1999:66, 101).

Colonel Miller formed a partnership with Lee Kokernut who was well known in the cattle industry in Texas. Kokernut's brand was on many of the cattle arriving to Colonel Miller's ranch. This led to naming the first ranch "LK" Ranch. George also adopted Kokernut's brand as his own. George and his cattlemen made several trips to Texas trading for cattle and driving them back north to the ranch in Kansas (Collings 1937: 6).

As cattle ranching became more successful, Colonel Miller thought it was necessary to move his residence and headquarters nearer to the ranch. He sold his home and store in Newtonia, Missouri and left for Baxter Springs, Kansas in the fall of 1880 (Wallis 1999: 109).

According to the 1880 United States census, George W. Miller (age 37) and his wife Mollie A. Miller (age 32) lived in Baxter Springs, Kansas. Colonel Miller's occupation is listed as "deals in livestock" and he had

*Archival Research has not revealed how George Washington Miller received the honorary title of "Colonel."

three children: Joseph C. (age 12), Alma M. (age 6), and Zackary T. (age 2). Wilkes B. Miller is not listed in this census and is not listed in any others past his initial listing in 1870. Lavinia Rowe is also listed as a household member. Her role in the Miller family was the “cook servant.” In 1881, the youngest son, George Lee Miller was born in Baxter Springs, KS (USBC 1880; Ancestry.com).

It wasn't long before the “LK” Ranch was too small to accommodate all the cattle he had purchased, so George began to seek land elsewhere. Having established a relationship with the Indians, Colonel Miller was able to lease a total of 60,000 acres of grazing land owned by the Poncas in the Cherokee Outlet in northwest Oklahoma. Colonel Miller named one of the areas Deer Creek Ranch due to its proximity to Deer Creek while the other ranch nearer to the Salt Fork Ranch was named Salt Fork Creek. The Deer Creek Ranch had only a dugout for the cowboys to live in while on the ranch. The Salt Fork Creek Ranch, however, served as the headquarters of the ranching enterprise. This ranch had a three-room log house, a horse corral, a branding pen and chute, a log building to store corn, and a horse barn with a hay roof (Collings 1937:14; Wallis 1999:113). It should be noted that the location of the log house is on the south bank of the Salt Fork, and is not within the NRHP Historic District boundaries.

To be closer to his new ranches, Colonel Miller relocated the family to Winfield, Kansas in 1881 while Mollie and the children visited family in Crab Orchard, Kentucky. In Winfield, Colonel Miller purchased an impressive two-story brick house (Wallis 1999:119).

During this time, Colonel Miller still maintained his partnership with Lee Kokernut and in 1880, he purchased Kokernut's stock in the “LK” Ranch. In doing so, a new brand was established. This was the first time that the “101” brand was used. It is unknown as to the origins of “101” however, there are several theories. One explanation traces back to a cabaret in San Antonio, TX named “101,” which the cowboys like to frequent on stops during cattle drives. It is said that Colonel Miller branded the cattle and horses with “101” in order to keep the cowboys from seeking out the cabaret. Another explanation is that Colonel Miller purchased a small ranch named “Bar-O-Bar.” To change the brand, he simply turned the bars on end and changed it to “101” (Collings 1937:17).

The largest land run in Oklahoma occurred in September of 1893 upon the opening of the Cherokee Outlet. The Cherokee Outlet was a 60 mile wide tract of land in northern Oklahoma. This land was not assigned to any tribes, so that all tribes could use it. Land offices were set up in Orlando, Hennessey, Goodwin, and

Stillwater, Oklahoma; as well as Kiowa, Cameron, Caldwell, Hunnewell, and Arkansas City, Kansas. Over 100,000 speculators stood in lines for days to register and obtain land certificates (OHS 2011a).

In order to secure land, which the Millers leased from the Poncas and Otoes in the Cherokee outlet on the Salt Fork River, Colonel Miller's eldest son Joe participated in the 1893 land rush. Upon the gun shot signal, Joe and thousands of others rushed the Cherokee Outlet. He rode his horse a full day to secure their land, which became what is today known as the 101 Ranch (Wallis 1999: 170).

In 1894, Joe married Elizabeth [Lizzie] Trosper at Lizzie's family home in Bethany, Louisiana (Collings 1937:192). Shortly after the wedding, Joe brought Lizzie to Winfield, Kansas to live in the Miller family home. Lizzie quickly adapted to the social lifestyle of Winfield and often accompanied Mollie to social events (Wallis 1999:192-194).

Buildings and their uses during this era

Miller Family Residence

Winfield remained the family's home for several years after establishing the ranch, while Colonel Miller, Joe, and Zack went to Oklahoma Territory with their hired hands. Along with a corral, a dug-out was constructed as the family residence and ranch headquarters on the south side of Salt Fork River using sod and brush and braced with lumber (Wallis 1999: 181). The exact location of the dug-out is unknown. Several photographs depicting a dug out were found; however, none were able to be verified as the original Miller family residence.

This dwelling and headquarters would remain for close to ten years until the Millers obtained a clear title on the land on the north bank of the Salt Fork (Wallis 1999:180-181).

1900s

By the turn of the twentieth century, Joe primarily resided at the ranch in Oklahoma and oversaw ranch activities from the dugout while Colonel Miller ran operations from the main residence located in Winfield (Wallis 1999:207).

The 1900 United States census reported that the George W. Miller family lived in Winfield, Kansas. At this time, household members were listed as George W. (head of household, stock dealer); Mary Miller (wife); Alma Miller (daughter); and John W. Jackson (servant) (USBC 1900).

Joe Miller was listed in the 1900 Census as living on the Ponca Reservation. He was listed as the head of the

household along with the following as household members: Lizzie T. (28, wife), Alice (2, daughter), George L. (21, brother), Pearl E. Bolton (23, servant/farm laborer), Bell Bolton (51, servant), James Hale (53, servant/farm laborer), J.S. Hale (28, servant/farm laborer), Daniel C. Hale (20, servant/farm laborer), John H. Hale (18, servant/farm laborer), John R. Jones (39, servant/cook), Mike Huse (38, servant/farm laborer), and Charles Rowker [Rowke] (31, servant/cook) (USBC 1900).

A 1900 article written by Joe Miller for *The Farmer's Voice* journal chronicled the success of the ranch to that point. He described what was a tough first year on the ranch in an attempt to successfully grow wheat using "the old style, and used the first kind of seed that came in [their] way." Noticing a difference in the yields of certain wheat though on similar land, the Millers determined that they should selectively plant only the best yielding seed types the next year. They continued with this process, and also imported other high-yield strains. At that time they were importing Red Russian wheat from Russia, and also planted Mammoth Red, and Frost-Proof May varieties. They alternated harvesting these varieties as well, which ensured that as one harvest was concluded, another variety would be cut. In the article, Joe stated that using their methods, they never yielded less than 32 bushels per acre (*The Farmers' Voice* 1900: 1098). An article in the Dallas Morning News that year reported that the Millers' was the largest wheat field in Oklahoma, and "one of the largest anywhere in the Southwest" with 9,000 acres in wheat production out of the 18,000-acre ranch. They owned 32 self-binders and three threshing units with six more on the way, as well as a planned 600-acre melon patch, the largest in the United States (DMN 1900).

By the time that Colonel George W. Miller died in 1903 at the age of 61, he had moved with his wife Mollie to the 101 Ranch. Upon his death, Molly placed the ranch into a family trust. Joe, Zack, and George Miller split the responsibility of running the ranch with Joe, the eldest, as the chair. Joe supervised the overall operations and farming, Zack controlled the livestock, and George took control of the finances (Wallis 1999: 214).

At the time of Colonel Miller's death, the ranch was a financial success. Colonel Miller paid the Ponca and Otoe Indians \$32,500 annual rent for his 50,000-acre ranch. The year before the ranch produced 13,000 acres of wheat, 3,000 acres in corn, and 3,000 in forage crops. The income totaled between \$400,000 and \$500,000. Spread across the ranch was \$33,000 worth of tools and machinery which were used by the 200 men employed by the ranch (Collings 1937: 28). Various accounts state that cattle kept on the ranch numbered

6,000 to 8,000 head on 25,000 acres in pasture, mules to cultivate the fields numbered 400 to 500, and that the ranch was 22 miles long and seven to eight miles wide (DMN 1903, NYT 1902). The Millers had also instituted double planting, wherein cow peas were sown between rows of cultivated corn; by the time the corn was harvested, the cow peas were ready as forage for cattle. After wheat was harvested, those fields were sown with kaffir corn. When that was partially grown, wheat seed was drilled underneath. The kaffir corn was then used as forage for cattle before the wheat was able to grow. Not only were the fields able to be used for twice their purpose, this process insured well fed, healthy cattle (NYT 1902). The Millers' primary interests at the time were selling seed corn and cattle, with the greatest profits from seed. The beginning of their interest in tourism was apparent as well. In 1903 the Dallas Morning News reported that a driver was employed full time to drive visitors from Bliss, Oklahoma to and from the ranch, and that while each visitor stayed as long as they wished, they were provided with meals, lodging, and a pony (DMN 1903). By 1906, 101 Ranch posted advertisements in such newspapers as the New York Times beckoning people to "Send your Son to Oklahoma to spend his vacation on the 101 Ranch" (NYT 1906a).

The brothers not only maintained the existing ranch, but soon expanded it to include the famous "101 Ranch Real Wild West Show." In 1904, Joe had travelled with Frank Greer of Guthrie, Oklahoma and others to St. Louis, Missouri to meet with the National Editorial Association (NEA) in hopes of bringing them to Guthrie for the association's meeting the following year. Joe promised that if they came, the ranch would put on a wild west show (Collings 1937: 142).

In June 1905, 101 Ranch hosted the first round-up and buffalo chase for the NEA meeting, which boasted 50,000 people in attendance including over 1,000 newspaper men, 500 cowboys, and between 2,000 and 5,000 Indians, depending on the account (DMN 1905a). This festival coincided with the allotment of Indian lands to the Poncas, and the severance of tribal relations; as the Dallas Morning News phrased it, "the passing of the cowboy and the welcome in his place of the plowboy" (DMN 1905b). The popularity of the performance encouraged the Miller brothers to take the show on the road. In May 1907 the inaugural performance of the 101 Wild West Show was staged at the Chicago Coliseum (NYT 1907). It later toured Mexico, Canada, and the rest of the United States (Wallis 1999: 257-258).

By the time that the first round-up was held at 101 Ranch, it was known as "the largest diversified farm and ranch in the United States" (Sterling 1905). Two

separate articles dating from the summer of 1905 detailed accounts of the early ranch operations. The articles by Stewart (1905) and Sterling (1905) noted that the ranch covered 87,000 acres (of which the Millers owned about 10,000). Now that the tribes were allotted land, the Millers could lease directly from individuals, or buy their land outright, which increased their holdings dramatically. Approximately 10,000 acres were cultivated in carefully selected wheat, their most profitable venture; 3,000 acres were dedicated to corn, alfalfa, oats, and rye. They also maintained a 20 acre truck farm where they grew 10 acres of potatoes, two acres of onions, and eight acres of other vegetables. The rest was left for pasture for the 3,000 head of cattle, 5,000 hogs, 300 work horses, 500 mules, several polo ponies, and 36 head of buffalo owned by the Millers and the 7,000 other head of cattle pasturing there. The Millers used 50 binders and up to six threshing machines to harvest, as well as over 90 farm wagons, 125 cultivators, and 12 mowing machines. Grain was hauled from the ranch in train cars to Bliss, along the Santa Fe Railroad spur that extended diagonally through their land. During harvest time, over 400 men worked on the ranch, up from the 150 men who worked year-round. The Millers also maintained 12,000 apple trees, 1,500 peach trees, 6,000 pecan trees, forest and timber trees including ash and sycamores, 50 acres of watermelons, 2,000 grapevines, and 325,000 mulberry and locust trees for fencing. "The idea of the ranch management planting trees [was] that they [were] making the ranch not for this year nor for the next, but for a long time in the future. The plan that its source of profit should be considerably extended and widened each year rather than to limit their operations mere to what can be gained through the efforts of the present" (Sterling 1905).

As profits from crops, livestock, and the Wild West show continued to increase the financial stability of the ranch, the brothers decided to explore other investment opportunities. In 1908, E.W. Marland moved to Oklahoma from Pennsylvania in hopes to turn his luck around after the oilman lost his investments in the Panic of 1907.

Born on May 8, 1874, Marland attended private and public schools in Tennessee and Pittsburgh and graduated with a law degree from the University of Michigan at age 19. As a young lawyer, he became involved in a series of coal and oil promotions, which made him small fortunes. In 1903, Marland married Mary Virginia Collins, the daughter of a Philadelphia court stenographer (OHS 2011b).

After a relative arranged a meeting with George Miller, Marland got a tour of the ranch land. Noticing that

there were some telltale signs of possible natural gas and oil, Marland convinced George to lease some ranch land to him; he also arranged for leases with the Ponca Indians to begin drilling for oil. After getting investors on board, the 101 Ranch Oil Company was born (OHS 2011b).

Buildings and their uses during this era

The 1900s period marked the first era of major construction at 101 Ranch (Appendix A, Phase 1 Map and Photographs). During this time, the ranch headquarters was moved from the dugout on the south side of the river to a location north of the river that is now designated as the 101 Ranch Historic District and is the subject of this study. The initial construction at this location included a new family residence (Building No. 1a), blacksmith shop (Building No. 2), general store (Building No. 3a), dining hall (Building No. 4), poultry house (Building No. 5), horse barn (Building No. 6), mule barn (Building No. 7), oat bin (Building No. 8), dairy barn (Building No. 9) power house (Building No. 10), seed storage (Building No. 11), and corn storage (Building No. 12) were built around the same time. Guests of the ranch stayed at the Riverside Camp (Building No. 13). The exact date of construction of these buildings is unknown, but a partial panoramic photograph shown in a June 1905 article in *The Weekly Northwestern Miller* journal shows these buildings. The article states that the men who worked the ranch stayed in three camps of worker housing (Building No. 14), one of which was a "bunk house" near the ranch house; this "bunk house" predated the hotel (Building No. 15), which is also sometimes called the bunk house; the location and description of the 1900s bunk house is not known. The article also makes mention of a large barn for farm implements (Sterling 1905). A 1905 *Country Gentleman* article mentions the corn seed storage building as well as "several commissary departments...located at different points about the ranch," horse and mule barns "about 180 feet long, each one having a driveway down the center [allowing for] wagons" to distribute feed into automatic troughs, a carpenter shop, a wheelwright shop and the aforementioned blacksmith shop (Cunniff 1906, Stuart 1905). With the exception of the buildings enumerated in this report and discussed below, the location and dates for the buildings mentioned in the articles have not been found.

Miller Family Residence

In 1903, a new family residence (Building No. 1a) was built on the 101 Ranch site. It is believed that the house was located south of the current White House. As shown in historic photographs (Figures 3 and 4; Appendix A, Phase 1 Map and Photographs A1-3), this

two and one-half-story wood framed house sat on what appears in photographs to be an elevated pier and beam foundation, with access to a cellar on the south through bulkhead doors.

The style of the house can best be described as vernacular, with wood siding painted white, and decorative elements from the Federal and Queen Anne styles. Ell-shaped in plan with a hip-and-gable roof (gable on the south and hip on the north), the primary façade was located on the east. The principal elements of this façade were the gabled ell, along with a gable on a projecting two-story bay with chamfered corners, and a projecting second story bay window.

A one-story, full-width porch followed the floor plan of the east façade, and had a hipped roof supported by tapering Doric columns. The elevated eastern porch was accessed by two sets of wooden stairs. These led to three doors into the house, which were presumably used to separate the public and private functions.

At the projecting bay on the eastern façade two large windows were located; on the second floor of the east façade, windows with wooden screens were located at the projecting bay and in the southern bay, and an elliptical window with leaded glass was located in the northern bay. At the gable ends of the ell and projecting bay, leaded glass Palladian and fanlight windows (respectively) were placed. Both of these gables also feature a moulded fascia; the projecting bay also had carved soffits with decorative brackets.

The southern façade was relatively plain, with two windows on the first and second floors, and a triple window with Federal style header at the gable end. The gable also featured dentils in the eave and a moulded fascia. The western façade was quite plain, with a full-length wooden porch with a hipped roof supported by tapering Doric columns. It appears that four doors led into the house on the west facade, and three windows were located on the first floor. Four windows were located on the second floor. The window types cannot be discerned from the available photograph. No historic photographs were located showing the north façade, but it is apparent that this façade featured the hip of the primary roof block.

Fireplaces appear to have been located at the intersection of the north-south block and the southern ell, and also at the northern end of the principal block of the house.

The house featured a system of waterworks for hot and cold water, a billiard room, music room, and an office at the rear with modern office equipment consisting of a roll-top desk, stenographer, and desk telephone (Sterling 1905).

On January 12, 1909 a fire started in the heating system in the basement and quickly engulfed the Miller house and within an hour it had burned to the ground. After everyone escaped the fire, George reentered the house to try to rescue his dog and salvage what he could. George exited with a trunk containing his mother's jewelry and some clothing, unfortunately his dog died in the fire (Wallis 1999: 336-337).

The approximate location of the building was determined through extensive analysis and comparison of photographs showing the structure in relation to other buildings with known locations (Figures 4 and 5; Appendix A, Phase 1 Map and Photographs A1-3) . Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 1a.

Blacksmith Shop

By August of 1902, a blacksmith shop (Building No. 2) was built (NYT 1902). The blacksmith shop was located to the northwest of the extant power house (Building No. 10). Originally, the blacksmith shop was a modest wood frame utility building with a large opening on the east façade (Figures 5 and 6; Appendix A, Phase 1 Map and Photographs A4, 19, 43, and 67).

Over the years, the Salt Fork of the Arkansas River has cut into the land which has removed much of the northwest portion of the headquarters district likely compromising the location of the building. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 2.

General Store and Dining Hall

Based on historic photographs the general store (Building No. 3a, Figures 7 and 8; Appendix A, Phase 1 Map and Photographs A1, 5-6) and dining hall (Building No. 4; Figures 9 and 10; Appendix A, Phase 1 Map and Photographs A1, 5-7) were located in front of the extant power house (Building No. 10). These two buildings (mentioned in the 1905 *Weekly Northwestern Miller* article) were joined by a third building to form a U-shape. The function of the third building is unknown. The dining hall and general store were one-story, rectangular, wood frame structures with a side gable roof. The general store was covered in lapped siding and had "STORE." painted on the south façade above a single two-over-two window. On the east façade was a wooden porch with a low wooden railing. Sufficient physical evidence was not found during the survey to prepare a plan map of Building Nos. 3a and 4.

The dining hall is only partially shown in the historic photographs, but was apparently a one-story, front-gabled building oriented to the south. The building was clad in vertical siding (possibly board and batten), and had a door on the west side of the south façade. The words "101 RANCH DINING HALL" was painted on the

south slab. Wooden stairs led to the door on the south side.

The unidentified building forming the base of the U-shape between the general store and the dining hall faced south. It was a one-story, rectangular wood frame building with a side-gabled roof and a central chimney. On the south façade, photos show a central entry door with one window of an unknown type to the west and a double four-light (probably hopper) window to the east.

Alterations seen through photographs are minor and primarily cosmetic. Early photographs of the buildings appear to have either a raw wood siding or a light white wash; later photographs show possibly red paint with white lettering to identify the buildings.

It is estimated that the second general store (Building No. 3b) was constructed around 1905. It was a white, one-story, rectangular wood frame structure that had a hipped roof. The building was oriented towards the east. This store can be seen in the 1915 panoramic photograph. "101 RANCH. GEN'L. STORE." is painted on at least two sides of the roof. The entry into the general store was on the east façade, which has a one-story, full-width porch with a shed roof (Figures 11 and 12; Appendix A, Phase 1 Map and Photographs A18-19).

Poultry House

By comparing photographs of the poultry house (Building No. 5; Figure 13), a group photograph of 101 Ranch cowgirls (Figure 14), and the 1915 panoramic photograph (Appendix A, Phase 1 Map and Photographs, A8, 19 and 43), the location of the building was identified. The one-story, poultry house was constructed of vertical wood plank siding with a wood shed roof and large, 40-light, fixed windows across the south façade. The exact size and shape of the poultry house is unknown, but it is clear that there were several sections. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 5.

Horse Barn, Mule Barn, and Oat Bin

The 1903 horse barn (Building No. 6) was a large, two-story building (Figures 15 and 16; Appendix A, Phase 1 Map and Photographs A1, 9, 19, 37-38, 43). Historic photographs indicate that the upper portion of the barn was a hay loft while the lower portion has large sliding doors on the west façade and the north façade. There is a four-over-four window on the lower portion and three two-over-two windows in the gable of the east façade, as well as a staircase leading up to a door. The north and south façades also had small two-over-two windows directly under the roof overhang. The west façade had a hay loft door in the gable, as well as a single entry door on the south side. The size of the horse barn is not known. Sufficient physical evidence

was not found during the survey to prepare a plan map of Building No. 6.

Facing the horse barn across a large dirt path was the mule barn (Building No. 7) and oat bin (Building No. 8). These barns were simple, one-story, wood frame buildings with front gables oriented east-west. The mule barn had a large double sliding door in the center of the east façade, as well as a smaller double swing door on the north portion of the east façade. Covered in vertical plants, the name "MULE BARN" and a horse shoe were painted on the east gable end. In the center of the ridge line is a large wood gabled vent. It is unclear whether there were openings on the north façade (Figures 17 and 18; Appendix A, Phase 1 Map and Photographs A1, 18-19, 37-38). Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 7.

There are no entries visible on photos of the oat bin, so it is presumed they are on the west façade, which the historic photographs do not show. The east façade of the oat bin had a wood hopper vent with the letter "H" painted on it. The words "OAT BIN" were painted on the façade. The oat bin was covered in horizontal lap siding (Figures 19 and 20; Appendix A, Phase 1 Map and Photographs A18-19). Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 8.

Dairy Barn

Located south of the mule barn (Building No. 7) and immediately adjacent to an unidentified building to the north was what is believed to be the dairy barn based on photographs of the time period (Building No. 9).

This barn was a one- and one-half-story wood framed barn oriented east-west, with a gambrel roof (Figures 21 and 22; Appendix A, Phase 1 Map and Photographs A10, 19, 37-38, and 43). The building was covered with horizontal lap siding, and the roof was of corrugated metal, with a projecting hay lift on the east side. A short gambrel roofed monitor at the roof ridge was of the same materials, and appears to have contained four window openings. The primary façade faced east, and featured a wide sliding double door, and a loft door in the upper half story. The north and south façades each contained 10 equidistant small openings with sliding wood covers. The size of these openings is not known. The south façade also contained a door at the eastern corner. A wooden silo was located near the southeast corner of the dairy barn. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 9.

Power House and Seed Storage

Located on the north side of the oat barn was the power house (Building No. 10) and seed storage

building (Building No. 11). As discussed later in the section on utilities at 101 Ranch, the type of power that was produced is unknown. The power house was a one-story rectangular brick building oriented to the east with a side-gabled, aluminum shingle roof. The east façade had a single entry door in the center that was flanked by two nine-light windows (Figures 23 and 24; Appendix A, Phase 1 Map and Photographs A11-12, 19, 43, 68, 77, 82-83; Appendix C).

Directly behind the power house was the seed storage building (Building No. 10). This was a two-story gabled building with a third story cross-gable on the south side (Figures 25 and 26; Appendix A, Phase 1 Map and Photographs A12, 18-19, and 43). Historic photographs clearly show that the southern two-thirds of the building was constructed of concrete block, with the third story portion possibly another construction type, which may have been wood frame covered with stamped metal siding made to look like masonry. The northern third of the building appears to be of wood frame construction with horizontal lap siding on the bottom half, with stamped metal siding made to look like masonry on the top half. The roof gables were both covered with metal shingles. A second third story gable perpendicular to, and slightly lower than, the first third-story gable was later constructed. It extended to approximately one-half the length of the building. The reason for multiple types of construction is most likely due to a desire to fireproof the portion of the building of concrete. There was a single entry on the east façade with a window immediately to the south. There was another window midway up on the northern portion and one in the upper gable of the east façade. The northern façade had a window with a hinged opening and a door on the upper portion used to load seed onto wagons below. The phrase "THE 101 RANCH SEED CORN" was painted on the south side of the lower gable. The foundation was concrete, and appears to be the same size and location of the current "Shower House." The shower house, which is discussed later, may have been built on the foundation of the seed storage building. The information leading to the theory that the shower house may have been built on the foundation of the seed storage building was found after the survey, and therefore, the foundation was not measured to develop a plan map of the foundation.

Corn Storage (Granary #3)

The corn storage building (Building No. 11) was a one-story wood frame with a side gabled, wood shingle roof oriented east-west (Figures 27 and 28; Appendix A, Phase 1 Map and Photographs A1 and 19). The building was labeled "GRANARY No. 3" on the east side façade and "SEED-CORN" on at least the south side of the roof. The building was clad in horizontal lap siding. The main façade was on the south side, which appears to have at

least one single entry door. It is unclear whether there were other entries. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 11.

Riverside Camp

The summer months were the busiest time for visitors to the ranch, and in order to accommodate the large crowds, cottages equipped with electricity were built on the north side of the Salt Fork River. This area of the ranch was referred to as the Riverside Camp. The camp area had a dining hall with culinary specialists and a clubhouse for indoor activities (Figures 29 and 30; Appendix A, Phase 1 Map and Photographs A13-14, 66, 77, 84-85).

The everyday operations of the ranch were open to visitors for observation. On occasion, visitors were allowed to participate in the round-ups, ride the prairies, and visit the Indians to watch performances, rites, and ceremonies. They also learned how to brand, dehorn, and ship cattle to the stockyards. Shooting rifles, handguns, and pistols at stationary and moving targets prepared them for hunts of coyote, prairie dogs, wild birds and other prairie animals (Collings 1937: 159-160).

A photograph with a caption "The 'Summer Camp' on Feb 14 1908" shows similar quarters as those in a pamphlet advertising "A VACATION ON THE 101 RANCH, BLISS, OKLA..." (Kay County Info n.d.). The cabins in the photograph and pamphlet appear to be very similar to the shotgun style worker housing described later. The pamphlet goes on to describe the camp as a "group of three-room cottages, set in a semi-circle in a shady elm grove on the banks of the picturesque Salt Fork river, three miles from the Santa Fe station of Bliss, Oklahoma." The exact date of the advertising pamphlet is unknown; although, based on the women's clothing in the photographs of the pamphlet, it is believed that the photographs were taken around the same time period dating to the early 1900s. The Riverside Camp area was identified through examination of period aerial photographs and investigated by archaeological survey ((Appendix A, Photographs A43 and A45)).

Located just north of the river on the west side of SH 156, cabins and a dining hall were scattered amongst the trees. In aerial photographs, the cabins appear to be long and one-room wide (Appendix A, Phase 1 Map and Photographs). As described by the archaeology team, the physical remains located in this area include a storm cellar and house footers, along with a limited quantity of historic artifacts. An intact concrete storm cellar measuring approximately 12 feet by 18 feet was located. It has a series of concrete steps over a distance of 8 feet leading down to the entrance. The roof of the structure is curved or arched. According to Joe Glaser of

the 101 Ranch Old Timers Association, a tornado came through Ponca City in 1912 and the storm cellar was presumably built for protection from this type of threat.

A concrete, brick, and rock exterior wall footing of a house was discovered in the southeast portion of the Riverside Camp (Appendix C).

The archaeology team attempted to locate the dining hall or club house that was used for the Riverside Camp through pedestrian survey. In historic aerials, it can be observed that a larger building sat on the south edge of the river camp complex. No evidence of any structure was found.

Worker Housing

Worker housing appears in photographs and aerial views beginning in the 1900s, and continued to be built and evolve throughout the years. The domestic structures found to have been constructed at 101 Ranch during this study were vernacular types and included “shotgun,” “hall-and-parlor,” “saddlebag,” and “side hallway” styles. These common types were influenced by the designs of larger houses, but built on a much smaller scale and with simplified details when present. With the rapid expansion of railroads throughout the country, including Oklahoma, pre-constructed components such as windows, doors, and roofing materials could be transported quickly and cost effectively for erection on site (McAlester and McAlester 1989:239, 263–287). This provided for worker housing that could be quickly built at 101 Ranch. For the purposes of this report, all worker housing is identified as Building No. 14. One worker house remains at 101 Ranch. This house, typically called the “foreman’s house,” is believed to have been built in the late 1900s or early 1910s. It is discussed in the 1910s section of this report. Sufficient physical evidence was not found during the survey to prepare a plan map of any worker housing except for the “foreman’s house.”

In the pamphlet for the Riverside Camp, it makes mention that workers had separate living quarters spread throughout the ranch grounds (Kay County Info n.d.). Two such quarters are visible near the dining hall and the Miller family residence. It is unknown which workers bunked in which type of quarters, but it is presumed that they stayed in lodging near where they did their work. Throughout various historic photographs, it appears that the worker housing were one of these four different plans; all simple in design (Figures 31 and 32; Appendix A, Phase 1 Map and Photographs A1, 15-17, 19, 43, 66, 69, 86-87).

Shotgun

The “shotgun” house type used for worker housing at 101 Ranch is characterized by a narrow, one-room-wide plan that became common in the United States, especially the rural south. It is thought to have originated in the West Indies and Africa. The shotgun style house, like other vernacular types of the period, was made popular in the United States largely as a result of the proliferation of railroads. While folk forms persisted throughout this era, materials and construction techniques were influenced by the newly available materials. As shown in historic photographs, the typical shotgun house at 101 Ranch was the gable front type with a shed roof front porch supported by turned wood columns, beneath which were one door and a window. Six-over-six windows were also present on the sides of the house, but were not evenly spaced. Board-and-batten siding covered the frame, and decorative eave brackets were present at some houses. Although archival research and photos do not indicate the type of framing used, balloon framing was common at this time (McAlester and McAlester 1989:89–90).

Saddlebag

As shown in historic photographs, the double-pen or “saddlebag” house type used for worker housing at the 101 Ranch was a two-room wide side-gabled wood frame house with a central chimney. A window was located on each of the side façades. Two doors led into separate living quarters on the front façade, which also featured a porch with a shed roof that spanned from door to door. No windows are seen on the front façade. Houses shown in historic photographs of the ranch are clad in horizontal lap siding. Typical saddlebag houses of this period are balloon frame, and would also have been easily transported by rail for on-site construction (Gordon 1992:124; McAlester and McAlester 1989:80-84).

Hall and Parlor

Another type of worker housing used at the 101 Ranch was the hall-and-parlor plan. This housing type was a simple rectangular building with a side-gabled roof. The front façade of the typical hall-and-parlor house was usually three bays wide with a central door that opened into a hall. While no foundations of these houses were located at the 101 Ranch site, they often measured 30 to 34 feet long and were 18 to 20 feet deep; floor plans consisted of the hall, eating and living space, and a parlor or bedroom (the latter being more likely at 101 Ranch). Hall-and-parlor houses of this period were constructed of light frame walls, and the building components were easily transported by rail, leading to

this types commonality. While Historic photographs of the hall-and-parlor houses at the 101 Ranch show that these were one story in height, they featured a side-gabled roof with a rear or side ell, and a full-width front porch. It appears that chimneys were located at the intersection of the main block of the house and the rear (or side) ell (Gordon 1992:125; McAlester and McAlester 1989:94).

Side Hall

The largest of the worker housing types at 101 Ranch was the side hall type. Although archival research could not confirm who lived in any one house type, these houses may have been used for workers with families, or with greater status. Side hall houses are typically one room wide with a side hall, and are one or two rooms deep. The entrance door is to the right or left of the front façade, which has two or three bays (Gordon 1992:126; McAlester and McAlester 1989:90). Archival photos of 101 Ranch show that these side halls houses had a front gable and half-width gable front porch. The Main and porch roofs had exposed rafter tails. The porch roof was supported by plain square columns. The frame was clad with horizontal lap siding, and the front façade featured a triple window with simple wood trim and hinged screens.

Grand Stands

The original grandstands had been constructed by 1905. These structures were described in a newspaper account of the first NEA meeting. The article described them as being one and a quarter mile grandstands surrounding the exhibition arena (DMN 1905b). The location of the 1905 grandstands is unknown and no early photographs of this structure were found.

Utilities

As noted in historical accounts of 101 Ranch as well as primary sources and historic photographs, energy plants furnished the Miller family residence and other buildings across the ranch with electricity, hot and cold running water, steam heat, and hot and cold ventilation (Wallis 1999: 338). The Riverside Camp pamphlet advertises electricity to the cottages (Kay County Info n.d.). In addition, a telephone system with 35 miles of long distance wire extended to each foreman by 1902 (NYT 1902). While these accounts show that utilities were present, they do not describe how the power was generated. Several types of buried utility lines including steel water pipes originally linked to the water tanks on the silos, as well as possible electrical, gas, and petroleum lines were identified during the subsurface investigations (Appendix B).

Fencing, Roads, and Paths

The historic photographs of 101 Ranch show an evolution not only of buildings and their location, but also an evolution in the types and locations of fences, roads, and paths for workers and the public, for ranch equipment, and for livestock.

Fence types included wood rail fencing, cable fencing, barbed wire fencing, and later, wrought iron fencing used at the Miller family residence (Figure 33; Appendix A, Phase 1-5 Map and Photographs, various). Fences were often expanded or altered based on the changing functions of ranch land, so definitive placement of fencing at any one time period is difficult to ascertain.

Roads and paths also evolved as ranch functions changed. The roads and paths during this time period were dirt, and most remained so, with the exception of the most public areas (Figure 34; Appendix A, Phase 1-5 Maps and Photographs).

It should be noted that further discussions of fences, roads, and paths are not provided since they regularly evolved, with the exception of the introduction of concrete paving in the 1910s. Appendix A, Phase 1-5 Maps and Photographs show this evolution. Historic photographs referenced in each section also show fencing in any given location.



Building No. 1a: Ranch Headquarters, built circa 1903



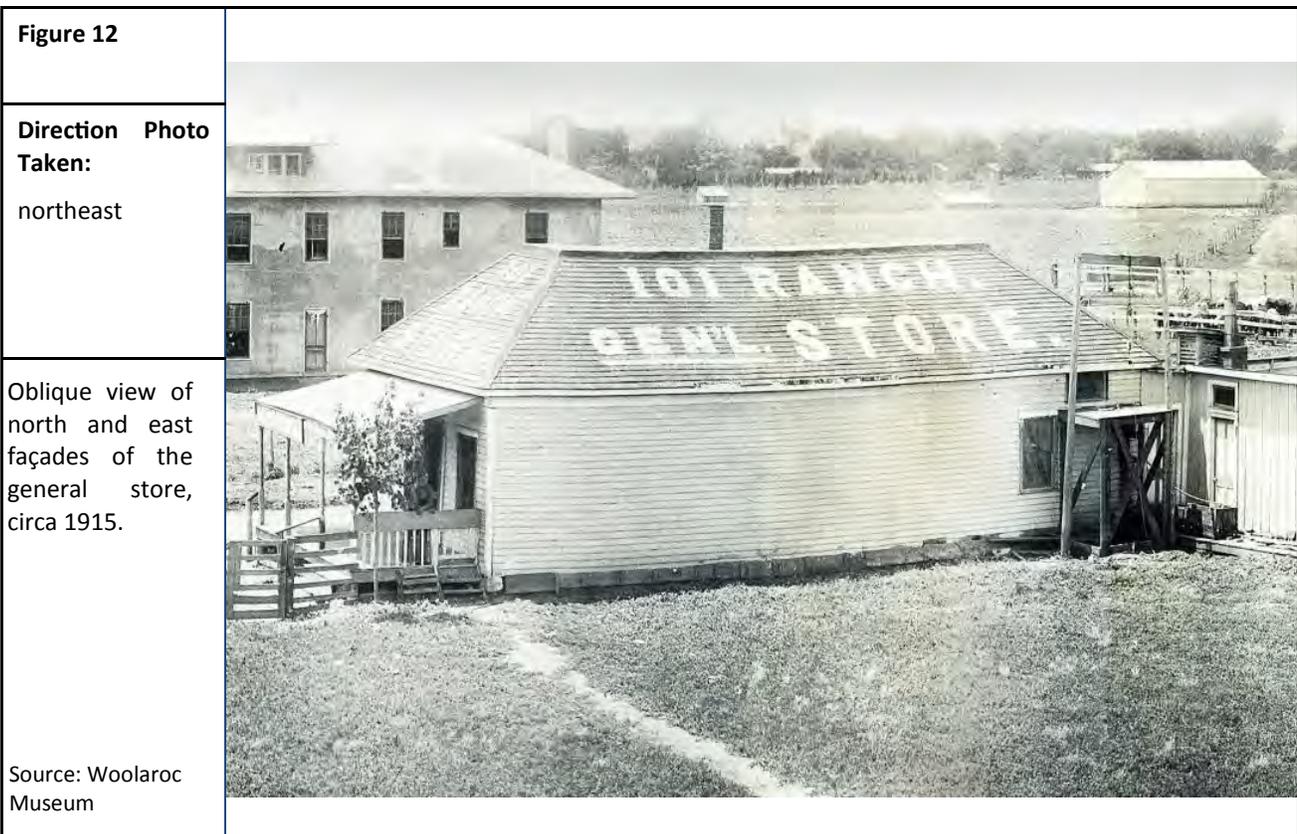
Building No. 2: Blacksmith Shop, built circa 1903



Building No. 3a: General Store, built circa 1903



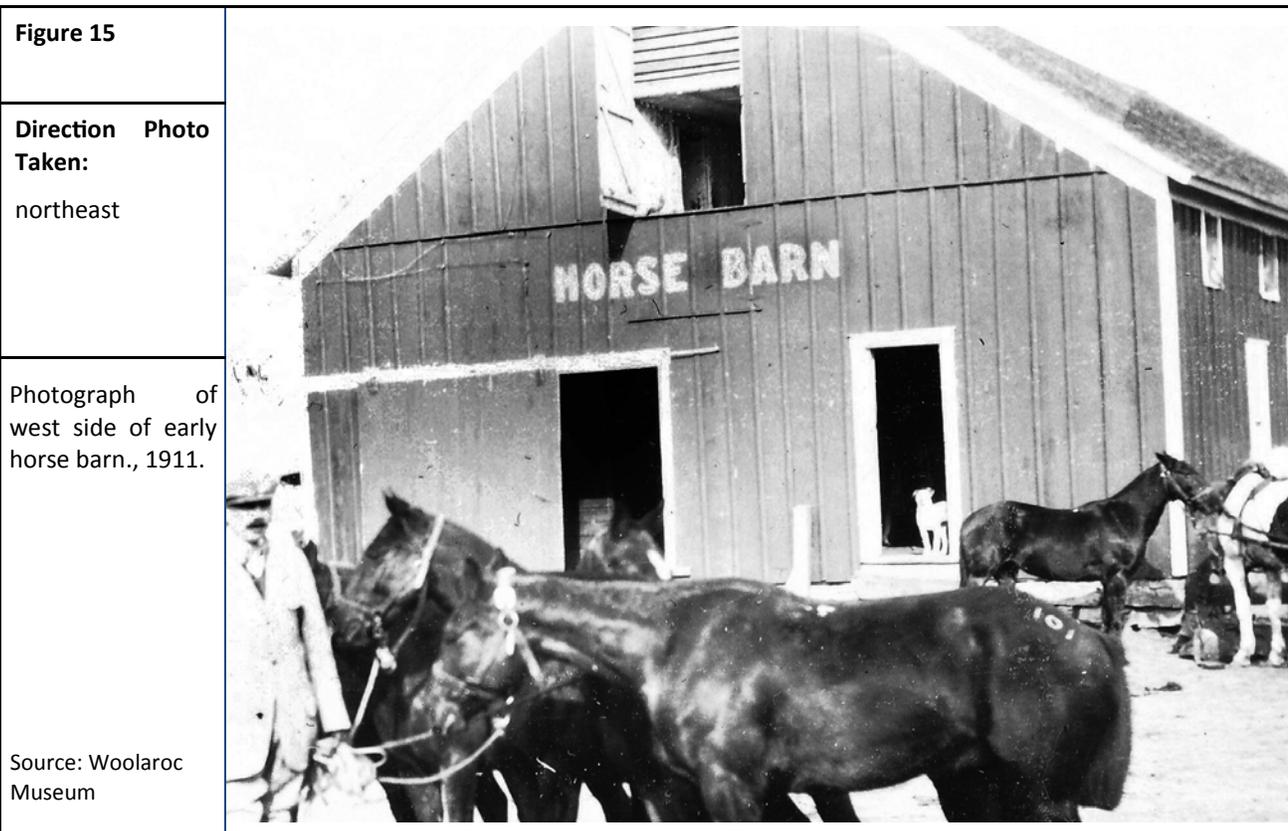
Building No. 4a: Dining Hall, built circa 1903



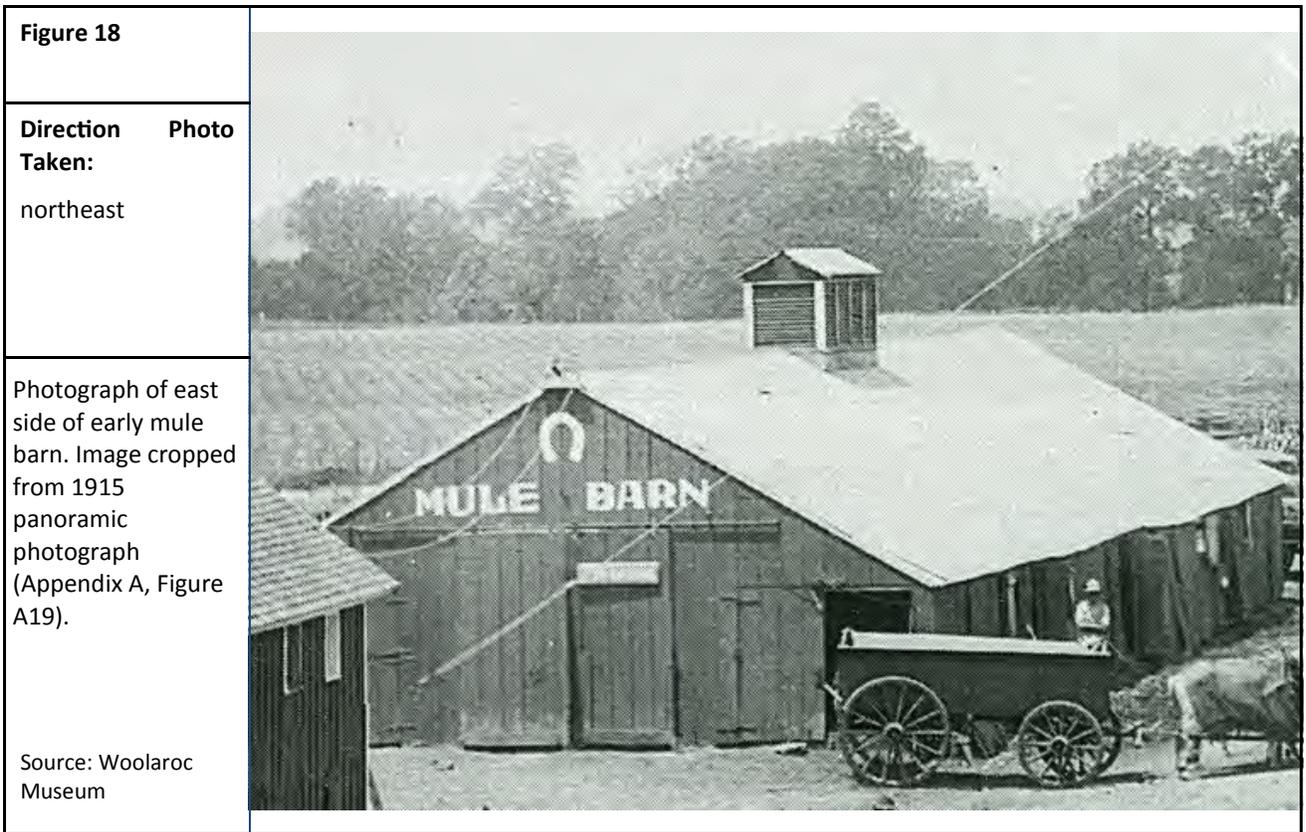
Building No. 3b: General Store, built circa 1905



Building No. 5: Poultry House, built circa 1903



Building No. 6a: Horse Barn, built circa 1903



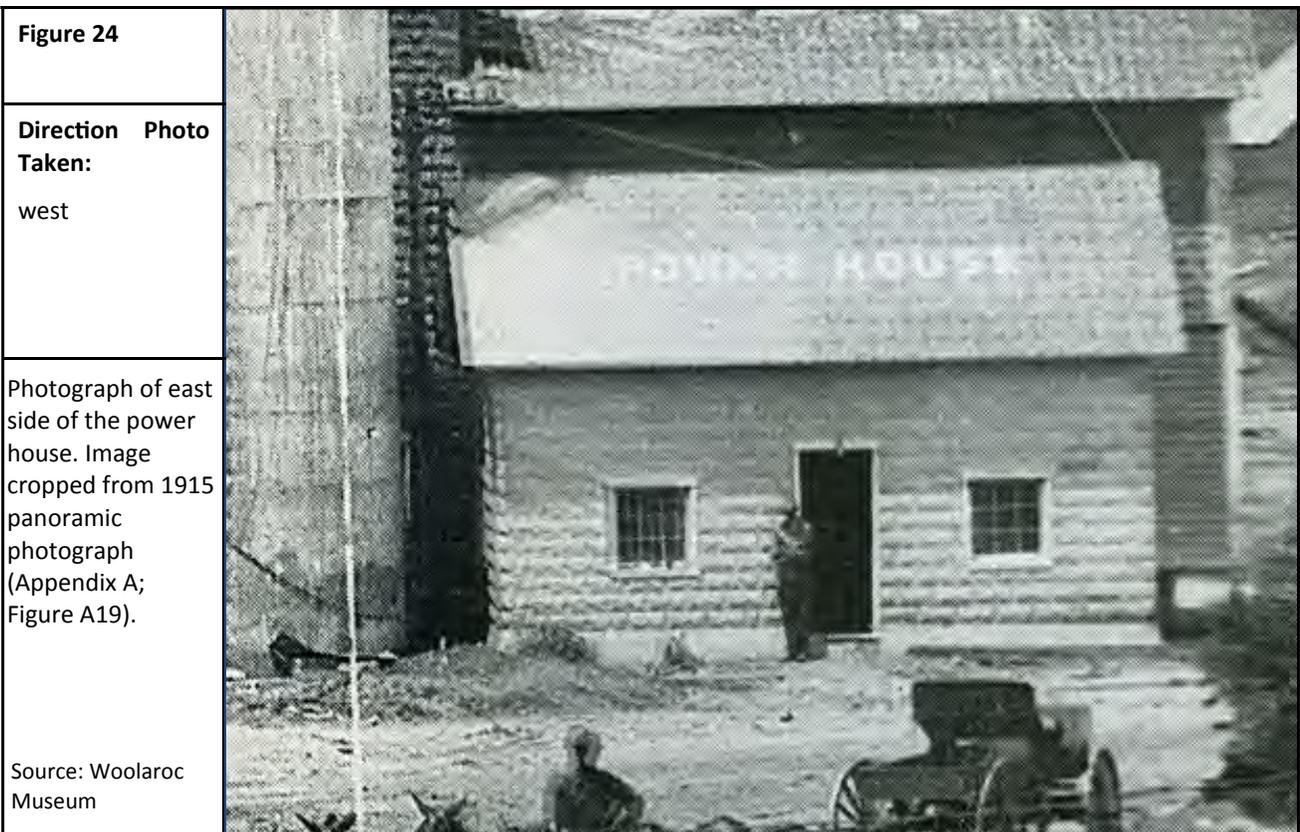
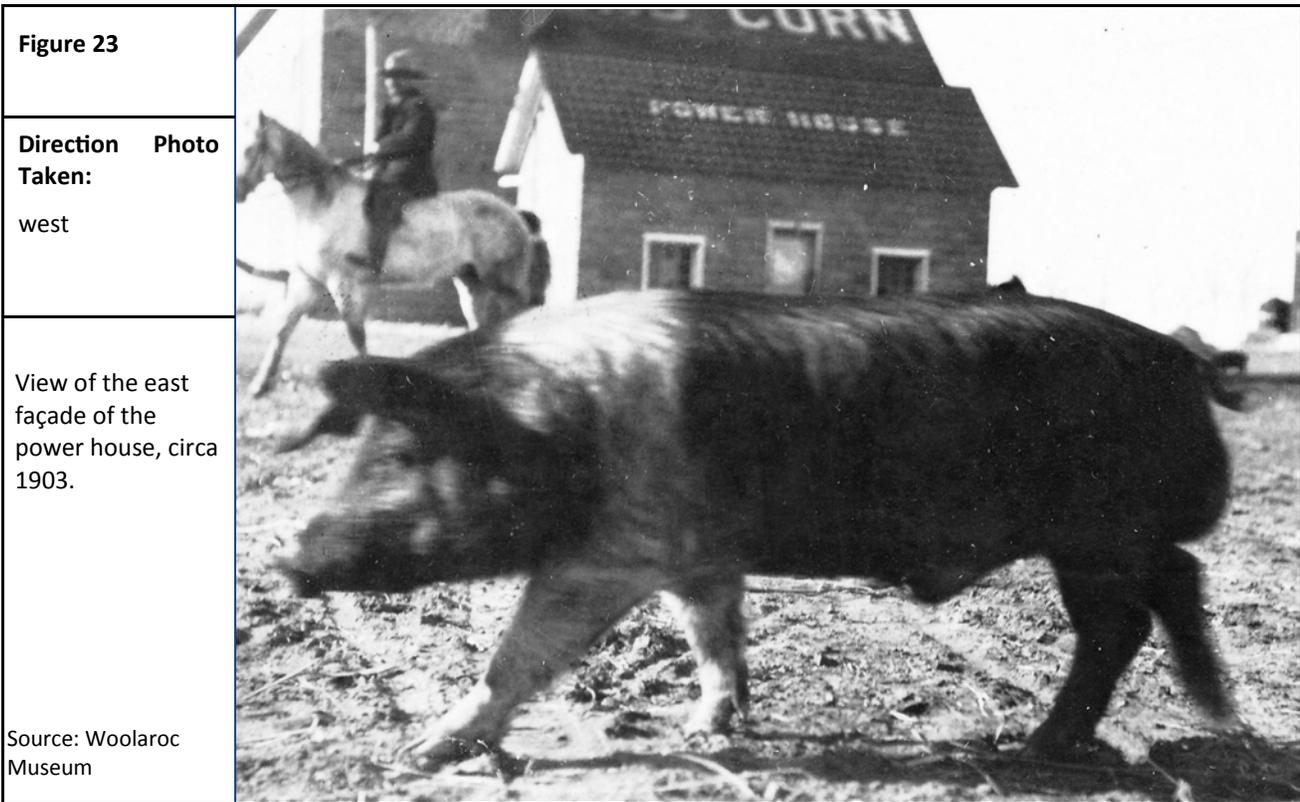
Building No. 7: Mule Barn, built circa 1903



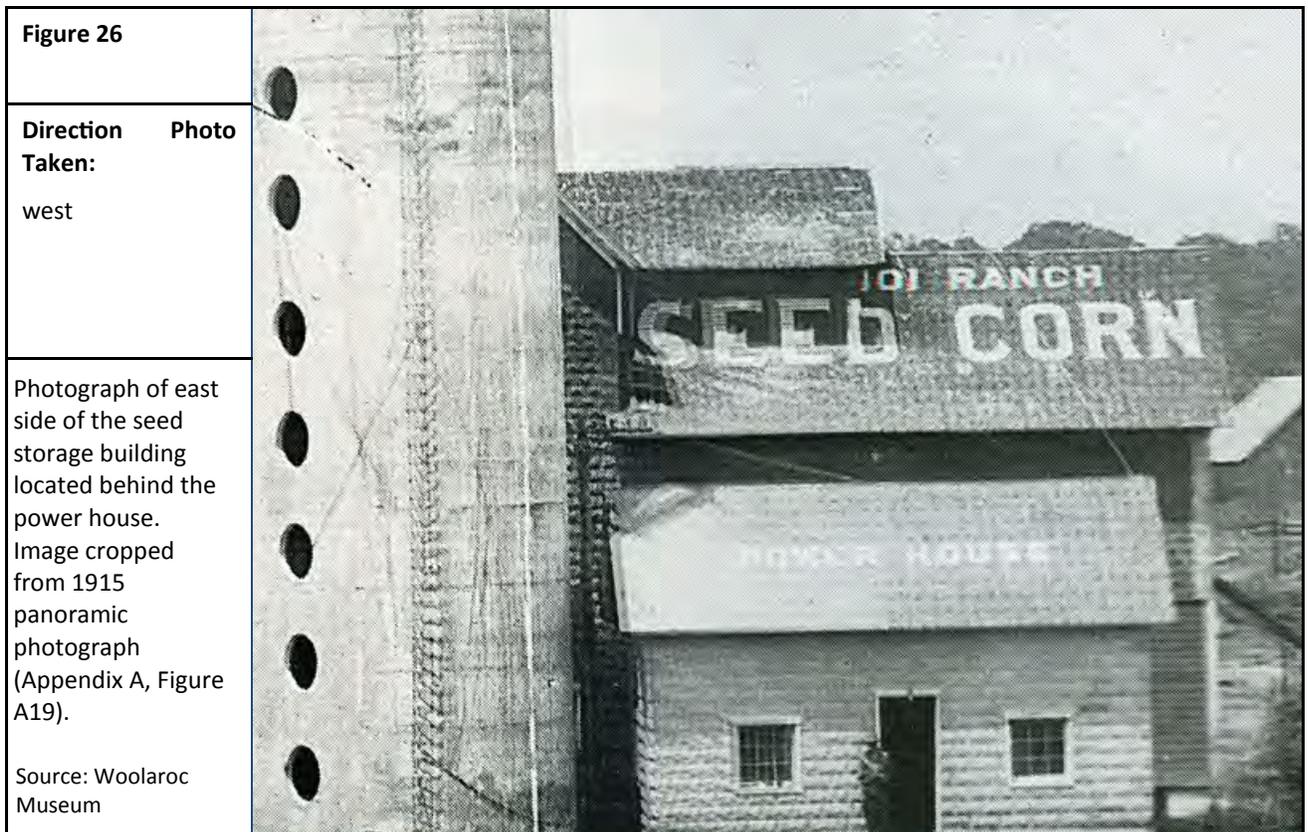
Building No. 8: Oat Bin, built circa 1903



Building No. 9: Dairy Barn, built circa 1903



Building No. 10: Power House, built circa 1903



Building No. 11: Seed Storage, built circa 1903



Building No. 12: Corn Storage, built circa 1903

<p>Figure 29</p>	
<p>Direction Photo Taken: unknown</p>	
<p>Overview photograph showing the Riverside Camp, date unknown.</p> <p>Source: 101 advertisement</p>	

<p>Figure 30</p>	
<p>Direction Photo Taken: northeast</p>	
<p>View of housing at the Riverside Camp, date unknown.</p> <p>Source: 101 advertisement</p>	

Building No. 13: Riverside Camp, built circa 1903



Building No. 14: Representative Worker Housing, built circa 1903



101 Ranch Fence and Path

1910s

Between 1910 and 1920, many changes occurred not only on 101 Ranch, but also throughout the nation and world. In 1911, E. W. Marland succeeded in striking oil after drilling on the allotment owned by Ponca member Willie-Cries-for-War, which the Millers leased. This was after several years of failed drilling attempts. Upon the discovery of the Willie-Cries-for-War well, Ponca Chief White Eagle told Marland (who despite losing two fortunes went on to become a Congressman from 1932 to 1935 and Governor of Oklahoma from 1935 to 1939 [NYT 1941]), "It will mean great trouble for me, for my people, and for you" (Wallis 1999: 330). Running-After-Arrow, a Ponca elder, made the statement "Uh-h, no good, no good. Beautiful country all die now. Cattle die. Ponies die. No good, no good. Beautiful country soon gone" (Glasscock 1938: 277; Wallis 1999: 329). The words spoken by both Chief White Eagle and Running-After-Arrows could later be viewed as a curse on the land and on the ranch.

This oil find was enough to expand drilling throughout 101 Ranch. The 101 Ranch Oil Company dissolved and became known as Marland Oil Company, which was later incorporated into Continental Oil Company (better known today as Conoco) (Glasscock 1938: 277-279).

National and international affairs would have an effect on the operations of the ranch and the 101 Wild West Show. The Mexican Revolution began in November of 1910. As aggression toward the Mexican government's Federales forces escalated, the United States' involvement became imminent in order to protect the border towns. Revolutionary Pancho Villa raided Columbus, New Mexico on March 9, 1916. This led the United States to authorize General John J. Pershing to retaliate. Invasions from either side occurred all along the Texas-Mexico border (Overfelt 2011; Collings 1937: 34).

Fighting between Mexican Federales and Villa's revolutionary forces escalated and Villa gained the upper hand. Zack and his cattlemen were intrigued by the fighting and went to Presidio, Texas, which is the American town across the Rio Grande from where the fighting occurred. The Federales forces located in Presidio were predominantly a cavalry unit, consisting of a large number of horses and mules, and artillery that were to be surrendered to Pancho Villa, or would be brought across the border when the Federales escaped Villa and fled to the United States for safety.

Zack wired Joe regarding the situation. Seeing an opportunity to invest in the livestock that would be arriving to the United States, Joe traveled to Presidio. Since the war was not between the Mexico and the United States, the Federales articles could not be

considered spoils; however, they were treated as imports and subject to customs. The Mexican consul agreed to sell the articles as long as the purchaser could pay all the customs duties. The Miller brothers made an offer of \$45,000, which the consul accepted. Their purchase included 3,600 head of horses, mules, and pack burros; saddles and bridles; transport wagons and harnesses; artillery and battery wagons; carbines, revolvers and sabers; and ammunition. The stock was divided between pastures in Texas controlled by the 101 Ranch, and the rest was delivered to the ranch headquarters in Oklahoma (Collings 1937: 34).

While the Mexican Revolution was occurring in North America, conflict was occurring in Europe and Asia. The 1914 assassination of Archduke Franz Ferdinand sparked the violence that led to World War I. At the beginning, President Woodrow Wilson declared a position of neutrality. By the end of 1916, President Wilson began taking action to enter into the war. At that time, oil explorations on the 101 Ranch were becoming more successful and George and Zack had wanted to turn their focus back to the operation of the ranch instead of the Wild West show, yet Joe continued with the show for a short while, having partnered with Buffalo Bill Cody that year. The 1916 Wild West Show season toured through Europe and England. While performing in England, the British Army commandeered all the stock and equipment for use in World War I. Until the end of the war, the Wild West show was put on hold (Kay County Info n.d.; Wallis 1999: 423).

On April 6, 1917 the United States declared war on Germany. Many ranch hands left in order to volunteer for the United States Army and 101 Ranch became a main supplier of crops and stock for United States military (Collings 1937: 182).

Despite the events of World War I, the ranch was still profitable. To help with the shortage of help from the men leaving to fight, Joe Miller arranged to bring Austrian Prisoners of War (POWs) to the ranch to help with the farming and ranching. After the war, many of the POWs remained in the area or continued to work on the ranch (Wallis 1999:468).

The year 1918 brought sadness to the Millers and the 101 Ranch family. The matriarch of the family passed away at the age of 71. On her death bed, Mollie brought her sons together to work out recent discrepancies regarding ranch operations and the Wild West show. Mollie had removed Joe from her will due to his love affair with Bessie Herberg, a world champion cowgirl with the Wild West show. He made a verbal commitment to his mother that he would end his relations with her at once. For the most part, he was true to his word, only visiting Bessie on occasion before she moved on and wed another man (Wallis 1999: 464).

Buildings and their uses during this era

The 1974 NRHP nomination form lists the café, monkey house, foreman's house, chicken house, dairy barn, horse barn, and cattle barn with construction dates of around 1918. However, photographic analysis and newspaper research shows that the dairy barn, horse barn, cattle barn, and foreman's house were constructed at an earlier date (Cunniff 1906; Sterling 1905; Stuart 1905). Appendix A Phase 2 Maps and photographs show the ranch at this period.

Miller Family Residence

After the fire at the 1903 ranch headquarters, work on a new family house began in February 1910 (Building No. 1b). The new family residence (known as the White House) was modeled after the antebellum mansions of Kentucky (Figures 35 and 36; Appendix A, Phase 2 Map and Photographs 18-26, 43, 66, 77-81; Appendix C). The two-and-one-half-story, seventeen room house was primarily built of reinforced concrete with an asbestos roof. Only the flooring, doors, and ornamental woodwork could burn in a fire. Energy plants furnished the house with electricity, hot and cold running water, steam heat, and hot and cold ventilation (Wallis 1999: 338).

Based on historic photographs and physical evidence, the White House was located within a two-foot-high reinforced concrete wall topped with four-foot-high wrought iron fencing; at the end of each wall segment are seven feet and one foot six inch square columns. The fence has been restored using the original wrought iron, which has been recovered by the 101 Ranch Old Timers Association. The house was surrounded on three sides by a driveway, still extant. A circular drive leads from the roadway under a porte-cochère that was located on the east side of the house. On the rear of the house, the driveway leads to a thirty feet by thirty feet concrete pad where a garage once stood north of the house. The south drive curves to one of the ranch roads.

The White House was generally square in plan and rested on an elevated reinforced concrete porch over a concrete basement. These elements are still extant. Access to the basement was provided through large openings on each façade where the basement walls extend upwards to form a low railing for the first floor of the porch. This wall was curved at each corner. Access was also provided by a concrete stair that extends from the first floor into the basement. The basement walls are constructed of grooved hollow clay tile masonry units covered by stucco, as well as reinforced concrete.

The style of the house can be described as vernacular with Neoclassical details. A cross-gabled roof featuring

a pediment was located at the south façade. The primary façade was on the south, and most of the historic photographs found of the White House show this side. No historic photographs have been located showing the north façade. The south façade was symmetrical, with a full-height inset porch supported by six tapering Ionic columns. Physical evidence consisting of "scars" in the concrete remnants at the north façade indicates that these columns were also present on the north side. At the first and second story, a reinforced concrete wall with a concrete cap formed a low railing. Concrete steps with low concrete cheek walls (still extant), lead from the ground to the elevated entrance. The porch roof was an extension of the primary gable on the upper half-story, and a curved void in the gable end provided a protected porch roof for the rooms of that level. The pedimented gable featured boxed eaves and a dentiled cornice that wrapped the house on the south, east, and west façades.

At the first story was a central double door with sidelights and rectangular leaded glass transoms in plain wood frames. Large windows that appear to be one-over-one with a leaded glass upper sash and plain wood frames flanked the door on the first floor. On the second floor, a single central entry door with a plain wood frame led to the second story porch. Two one-over-one windows flanked the door, and larger one-over-one windows were located directly above those on the first floor. Beams spanning north-south and connecting to the porch columns through the south wall are evident at the ceilings of the first and second floor porches. As previously described, the upper half-story porch was identified by a curved void. The rooms of this level opened onto the protected porch from the north; it appears that there were two centrally located one-over-one windows flanked by two doors in the south wall; windows were also located in the east and west rooms that faced onto the porch.

At the east and west façades, steps from the ground (still extant) led to a projecting one-story porch supported by Doric columns. An extension of the east porch formed a porte-cochère; several historic photos show cars parked beneath the porte-cochère. Historic photographs do not fully show the west façade, but the east façade is clear. The first floor fenestration of the east façade is difficult to discern from historic photographs, but it appears that at least one, if not more than one door was located on the first floor; regardless, four original openings are clear. The second story of the east façade showed three original openings. It is not clear if these were all windows, or if one was a door. The second story of the east façade contained two centrally located windows, and a window at both the north and south sides. The upper half-story pedimented gables were smaller on the east

and west façades, beneath both of which were three closely-spaced windows. A brick chimney was located on the east façade at the southeast corner of the half-story gable end. Evidence on the first floor showing the footprint of a stove or fireplace hearth is consistent with this placement. The hearth measures approximately six feet by two feet. A historic photograph shows that a second chimney was located near the center of the west side of the north façade, but no physical evidence was found.

A few changes to the house occurred over the years, which can be seen in historic photographs. Shortly after construction the house was photographed in a ca. 1915 panoramic photograph of the ranch. In this photograph the porch is fully open on both the first and second, as well as the upper half-story. Over the next few decades, the east side of the south porch and the upper half-story porch were enclosed. Next, the center and west sides of the second story porch were enclosed. Around this same time the north side of the east porch was enclosed. The presence of hexagonal floor tile on the first floor slab as well as a water pipe extending from the floor into the basement indicates the enclosure may have been for a kitchen. The exact dates of these alterations are unknown. There are few historic pictures showing the north side of the house, so alterations on this façade are unknown.

Related to the White House, but not directly connected to it was an arbor constructed of, what appears to be in historic photographs, reinforced concrete Ionic columns. An open lattice roof shows vegetation growing on the arbor, which appears to have led west from the west porch down a dirt path to a ranch road.

Hotel

As more tourists visited the ranch during the summer months and annual round-ups, there was a demand for better accommodations. To meet this need, the hotel (commonly referred to as the bunkhouse) was built around 1912 (Building No. 15). Not only was the hotel used for visitors, but in the off season ranch hands and performers used the building as lodging. The hotel was a symmetrical, rectangular, stucco-clad building measuring approximately 25 feet by 90 feet (Figures 37 and 38; Appendix A, Phase 2 Map and Photographs A19, 27-29, 66, 70, 77, 88-89; Appendix C). It was two stories tall, plus an attic, and was oriented toward the east. The roof was hipped, with wide overhanging eaves. Three-light windows or vents (also with hipped roofs with overhanging eaves) projected from the ridge at the east, south, and north roof slopes. Brick chimneys projected from the roof at the southeastern section of the roof, and another chimney was centrally located on the west façade and projected through the roof eave.

The east façade featured a stuccoed full-width porch supported by arches on each side. A wide overhang provided shelter beyond the porch roof. The projecting walls of the porch created a low railing for a second story balcony.

Photographs of the east façade show the first floor in the shadow of the porch, so it is difficult to determine its fenestration pattern. However, it appears that there was possibly a central door flanked by at least one window on each side. The second story of the east façade had a central door to the balcony, with one window on each side.

The south façade had one central door with two windows to the right, and three to the left. The farthest window to the right, nearest the porch, was a double window creating a square. Six windows were located in the second story.

The north façade is partially obscured in historic photographs depicting this side (Figure 38). It is clear, however, that there were seven openings on the first floor. On the second floor eight windows were present.

At the west façade of the hotel was one-story, full-width screened in porch with a shed roof. The fenestration on the rear façade is unclear in photos, but there were clearly two windows flanking the chimney on the second story.

Silos

Silos are used in agriculture to store grain and feed for animals. There are several silos seen in photographs scattered through out the ranch grounds (Appendix A, Phase 2 Map and Photographs A18-19, 37-38, 43-45, and 66); these were typically located next to a barn (Building No. 16). Many of these appeared to be wood or metal and are not longer extant (Figure 39).

A large silo located adjacent to the power house and corn seed storage was constructed in the early 1910s, and remains at the site. It appears that the large silo once had a cistern or water tank on its upper portion where it is crenelated (Figure 40). A 1914 bulletin issued by the Agricultural Experiment Station in Stillwater, Oklahoma on silo construction (Figure 41) pictures this particular silo and describes the methods used by the Oklahoma Concrete Silo Company of Oklahoma City in its construction to instruct others (Bray and Forrester 1914).

The round silo was constructed of reinforced concrete with reinforcing steel bands. The silo has a 12 foot 6 inch exterior diameter and is approximately 50 feet tall with a crenelated top. Seven three-foot-high elliptical openings on the southeastern side extended from approximately two feet up from the ground to a height of approximately 40 feet. These provided access to the

interior for placing or removing grain. A covered wooden ladder extended the height of these openings, which once also had wooden plugs. The upper part of the ladder remains. Also remaining is a second wooden ladder extending from the top of the first ladder to the top of the silo.

Also still extant is a smaller concrete silo, which is located immediately south of the larger one. This silo is the same construction type, but is only approximately 20 feet high. A 6-foot steel door frame (the door is missing) leads into the silo on the east side, where there is also a concrete pad on the ground measuring approximately 8 feet wide by 12 feet long. Opposite the doorway on the west side is a single elliptical opening for access to grain. The top is also crenelated.

General Store

In 1918, Joe Miller decided to build a larger general store. This was a challenge due to the fact that many of the ranch hands were overseas fighting in World War I. The Austrian POWs that he had brought to the ranch helped build the new general store (Wallis 1999:468). The store provided provisions to employees, but also provided to the public fresh meat, produce, and dairy goods that were produced on the ranch. Visitors to the round-up could stop in and purchase old west memorabilia to remember their trip. The General Store took both the Federal dollar, but also monetary notes and coins produced on the ranch in exchange for goods (Wallis 1999:468).

The new general store (Building No. 3c) was larger and more impressive than the original wood frame store (Figures 42 and 43; Appendix A, Phase 2 Map and Photographs A30-36, 66, 77, 90-91; Appendix C). The POWs constructed a two-story, rectangular, stucco-clad frame building with a projecting arched porch on the east façade. The building was arranged with three bays. The north side of the first floor housed the store in the northern bay; the ranch office, possibly a bank, and a vault were in the south bay. It is not known how the second floor was used.

The new general store was 60 feet 8 inches wide and 97 feet 3 inches long (including the porch), and faced east toward SH 156 as the last store had. The front porch extended the full width of the east façade and was supported by four 2-foot arches in the east and one arch on both the north and south. An extension of the porch walls formed a low railing for a second story balcony. The east façade had a double entry door with sidelights and a four-light transom on the north side of the south bay. Another double entry door with a two-light transom at the south side of the north bay led into the store. A large window was located between the two doors, and small windows were located in the upper

part of the wall at the far north and south sides. On the upper story of the east façade, two single doors with transoms and wooden screens opened from the central bay to the balcony. Immediately flanking each door was a one-over-one window. In both the south and north bays was a pair of one-over-one windows. Above these windows were signs in relief reading "OFFICE" on the south and "STORE" on the north. In the center at the parapet was "101" within a circle in relief, with the date "1918" above, which remained throughout the years.

The south façade featured, from east to west: a one-over-one window, a projecting brick fireplace, a one-over-one window, a small hopper window, a bay window with a hipped roof, a single light door with transom, a one-over-one window, and at the far west end a double wood door with six lights in each leaf. The upper story featured, from east to west: a one-over one window, the brick chimney, another one-over-one window, four paired one-over-one windows, and at the far west end a final one-over-one window.

On the north façade, from east to west were: six two-light windows located at the upper portion of the first floor where on the interior, this allowed for shelving below the window line; a double door with a transom on axis with the one on the south; and a low two-light window. At the upper story were five pairs of one-over one windows. A stove pipe projected from the center of the façade on the interior wall (Figure 44). The roof was flat, with a stepped parapet on the north and south, a flat parapet on the west, and a decorative stepped parapet on the east façade facing SH 156.

Changes were made with a two-story stucco-clad addition to the rear of the general store. The foundation that is seen today is smaller than the actual footprint of the store; from the back of the existing foundation, the store extended approximately another 10-12 feet, which can be seen in photographic evidence. The exact purpose and construction date of the addition is unknown. Sometime in the 1920s, a crude one-story, wooden addition was also constructed. It was around this time that the area to the east of the store was paved and a concrete gas pump island with two pumps was installed. The two pumps were supplied with gasoline produced on the ranch. Pump attendants provided full service to automobiles that were fueled. The General Store and gas pumps not only served the employees and ranch hands, but visitors to the ranch and the surrounding community.

Dining Hall (Café)

The café (Building No. 4b) replaced the dining hall around 1918. It can best be described as Spanish revival style. The one story frame building was square in plan

and covered with stucco; it had a hipped roof with wide overhanging eaves covered in clay tiles. Two roof vents were located on the ridge, and also had hipped roofs with clay tiles (Figures 44 and 45; Appendix A, Phase 2 Map and Photographs A37-38, 43-44, 71). The sidewalks leading up to and around the café were concrete. There was a double entry with six-light doors on the east façade with the word “CAFÉ” painted on the lights of the transom. A pair of double hung, 15 over 15 wood sash windows flanked the entry. The south façade had a 15 over 15 wood sash window at the east side of the wall, and a single door with a transom and a wooden screen at the west. Photos of the west and north facades were not found. One photograph of the interior was found at Marland’s Grand Mansion, showing tables covered in white cloth and two wood counters, one with stools at the western end of the large dining room. The ceiling appears to be a pressed tin in a linked pattern. In this photograph a kitchen ell appears to have been constructed (Figure 46). Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 4b.

Privy

Located next to the café was a privy (Building No. 17). The privy is similar in design to the café, having a stucco façade and a hipped clay tile roof, but was constructed after the café. It is a one-story, rectangular building with two single entry wooden doors at the corners of the east façade (Figures 46 and 47; Appendix A, Phase 2 Map and Photographs A37-38). In a photograph taken from the porch of the ranch headquarters, signs above the two doors read “MEN” and “WOMEN.” There appear to be two single pane windows towards the center of the east façade and one on the north façade. It is unknown if there are windows or doors on the south and west façade. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 17; it should be noted, however, that remote sensing data showed that there was a concentration of anomalies in this area, possibly indicating the presence of the privy.

Cattle Barn Complex

The cattle barn complex (Building No. 18) refers to the creamery, cattle barn, and dairy (as well as the later machine shop, which is discussed in the 1930s section) (Figure 48; Appendix A, Phase 2 Map and Photographs A39-41, 43-45, 66, 72, 77, 92-95; Appendix C).

Creamery

The creamery was a very large T-shaped barn that was covered in stucco (Figure 49). The “tail” block of the T-shape was approximately 40 feet by 40 feet and was oriented to the east. This block was two stories in

height with a front gable roof with exposed rafter tails. A vent was centrally located in the ridge, and a masonry chimney projected from the roof at the center of the north side. The east façade of this block had a pent roof with wood brackets at the center of the first floor above the six-light entry door. Nine-light hopper windows with screens flanked the door. Three of these windows were also located on the second story of this façade. The north façade of this block of the creamery also had nine-light hopper windows: one at the east and two pairs in the center; a door was located at the west end near the intersection of the two building blocks. Three six-light hopper windows were located in the upper story. The south façade appears to have had the same fenestration pattern as the north.

The “top” block of the T-shape of the creamery was the principal block, and measured approximately 40 feet deep and 120 feet long. It was two stories high with a side gabled roof; a side gabled monitor above that extended the entire length. Historic photos show that the east façade of this block contained three pairs of six-light hopper windows in the first floor only. The north and south facades had a central barn door flanked by two pairs of what are presumed to be six-light hopper windows. The second story had an opening to a hay loft. Single six-light hopper windows also ran the length of the east façade of the monitor. The north façade of the monitor appeared to contain windows, but the type is not clear. The south façade of the monitor had one window. Vents were located at the north and south ends of the monitor ridge. No historic photographs were found of the west façade. A one story addition to the south side of the east façade was made at an unknown date. This addition contained an entry door and two paired windows.

Cattle Barn

The cattle barn (still extant) is a one-story, L-shaped barn with a gambrel wood shingled roof. Each leg of the L-shape measured approximately 65 feet long and 25 feet wide. The walls of the cattle barn were wood frame with horizontal and diagonal planks covered with chicken wire and stucco.

The east-west block of the L-shape of the cattle barn provided shelter and feeding for cattle through the open south façade of this block. While the south façade is distinguished only by the four columns supporting the roof, the north façade was a solid wall pierced by four window openings. The east façade of this block contained one large hinged door.

The east façade of the north-south block has a wide wooden door at the south end and two window openings. The south façade has one window opening

on the east and one door on the west side at ground level and one window opening near the roof. The west façade has four window openings.

Within the L-shape space outside of the cattle barn is a concrete trough measuring approximately 16 feet by 4 feet.

At some point, possibly in the 1930s during the farm resettlement period discussed later, the creamery was demolished and two of the roof vents were placed on the roof of the cattle barn. One vent was placed at the center of the ridge of each block of the building.

Photographs show that the west side of the creamery and the east side of the cattle barn are adjoining, however, it is likely that there was a small walkway between the barns.

Dairy

The dairy (still extant) is a two-story, rectangular barn. Like the cattle barn, it has a wood shingle gambrel roof and stucco walls. The dairy measures approximately 35 feet wide and 70 feet long. The east façade of the dairy has a single opening in the upper story. The south façade is arranged, from west to east: window, door, window, window. The north façade is arranged, from east to west: window, window, door, window. The east façade is now obscured by the addition of a later machine shop, but historic photographs show one window at the upper part of the wall. Like the cattle barn, one metal vent from the demolished creamery was placed at the center of the ridge of the dairy.

Hog Barn Complex

There were four buildings in the southwest portion of the ranch grounds that are believed to be hog barns and shelters, forming a complex (Building No. 19). They begin to appear in photographs that date to the late 1910s. The complex consisted of four distinct buildings, each apparently having separate functions. The first is what appears in photographs to be consistent with a swine feeding floor/swine unit; it is a very low building oriented east-west and was approximately 280 feet long (Figure 50; Appendix A, Phase 2 Map and Photographs A42-45, 66, 77, 96-100; Appendix C). It is similar to plans for a swine unit/feeding floors issued by the University of Maryland Department of Agricultural Engineering in 1960 and 1965 showing ways of typical construction methods (University of Maryland 1960; University of Maryland 1965). No physical evidence was found of this building during the survey.

South of the swine unit was another building that is consistent in plan with a sow and pig nursery or farrowing house (Figure 50). This rectangular building, oriented north-south, was one story in height and had a half monitor roof. The concrete floor was scored in a

diamond pattern. The south façade had one large door. Individual pens extended from both the east and west facades for access to the outdoors. The building is similar to those in plans for a sow and pig nursery issued by the Midwest Plan service in 1978 and a farrowing unit issued by the University of Maryland in 1947 (Midwest Plan Service 1978; University of Maryland 1947). Portions of the foundation were found during the survey, as noted in a plan drawing of the partial hog barn complex (Appendix C).

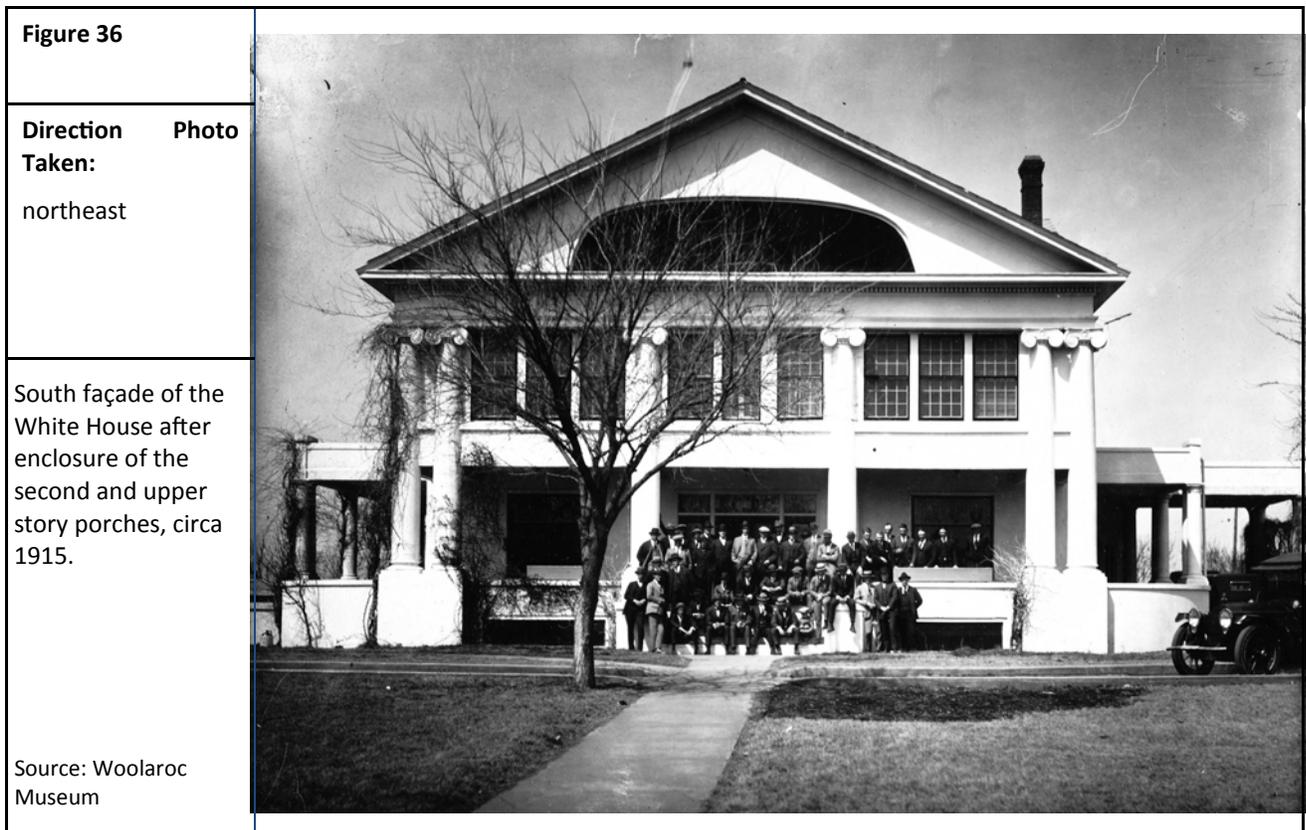
East of the farrowing unit/nursery was another building that may have also been a farrowing house (Figure 50). It is similar to a 1934 plan of a farrowing house issued by Purdue University and the United States Department of Agriculture (Purdue University 1934). The building is a one story rectangular with a gable roof. It is oriented east-west. It is only partially visible in historic photographs, but appeared to have windows closer to the eave on the south side, and had either skylights or vents on the roof. There appears to have been a vent at the roof ridge. The floor was concrete. Portions of the foundation were found during the survey, as noted in a plan drawing of the partial hog barn complex (Appendix C).

The fourth and final building in the complex was a one story rectangular building with a gable roof, oriented east-west (Figure 51). Only the western gable end is clearly shown in a historic photo. In this image, a grain chute is extended from the single opening in the upper part of the western wall. This barn may have held feed for hogs, as the swine unit/feeding floor was located directly adjacent. No physical evidence was found of this building during the survey.

Worker Housing: "Foreman's House"

There is one remaining worker house at 101 Ranch. This is commonly known as the "foreman's house" (Building No. 14). It is located east of the former location of the cider mill (Appendix A, Phase 2 Map; Appendix C). The building appears in a ca. 1915 panoramic photograph, as well as a ca. 1925 birds eye view. In these photographs, the house is a rectangular house with a hipped roof with wide overhanging eaves. The fenestration pattern cannot be discerned from these photographs, but a shed roof porch extends approximately one-third the length of the east façade at the north side. Based on current conditions the house evolved over the years. The aforementioned porch was enclosed and the east façade was added onto to form a kitchen addition. The roof was extended to cover the enclosure/addition. A hipped roof addition was made to the west façade. This is apparent from the visible intersection of the primary roof block and the roof of the addition. The dates of these alterations are not known.

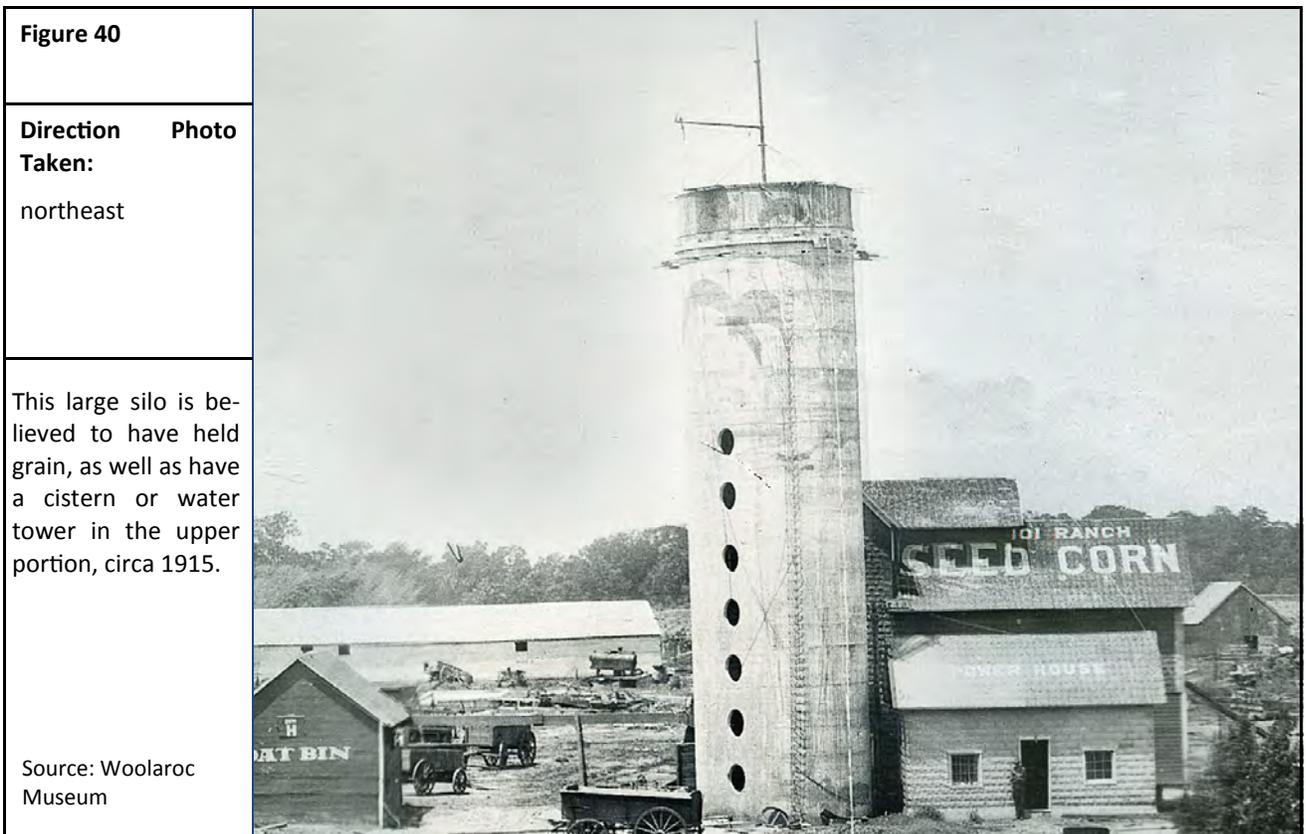
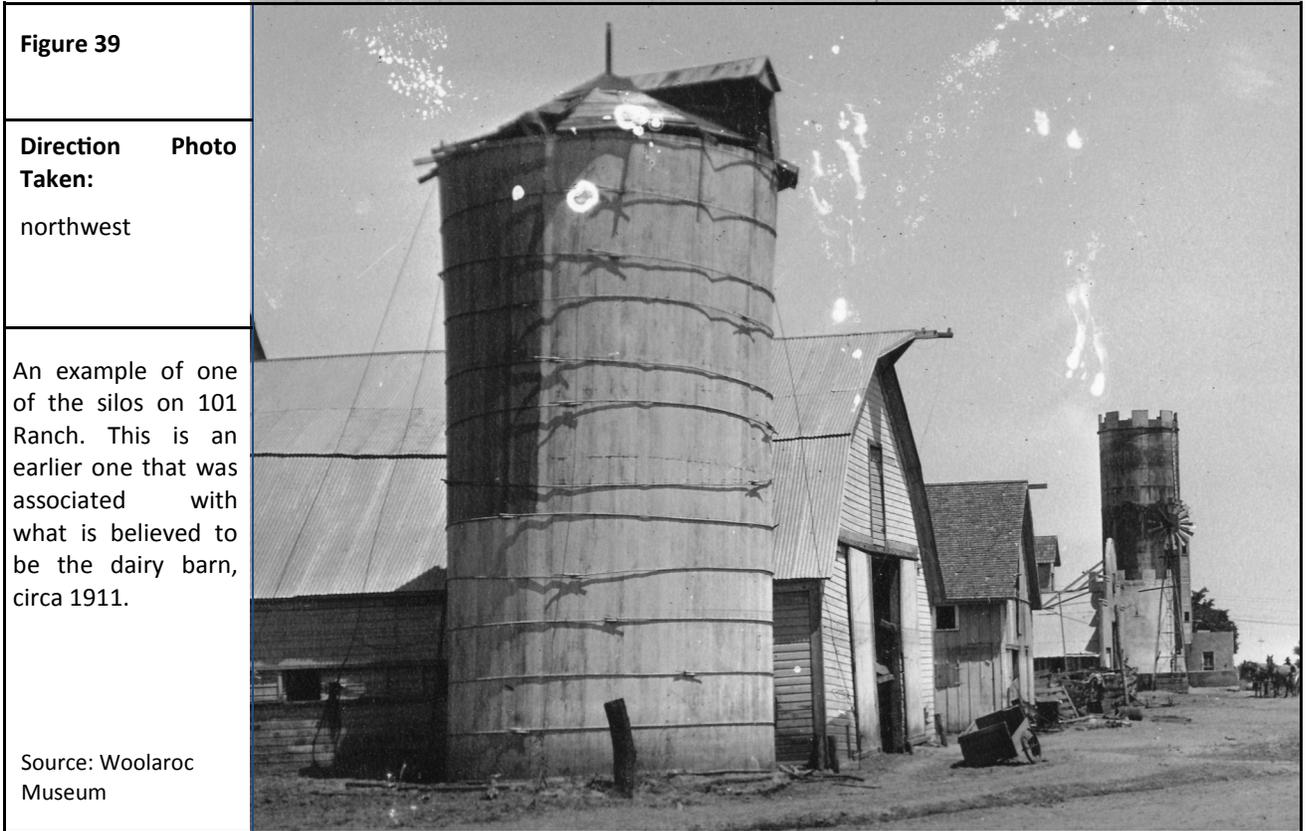
Currently, the house is approximately 30 feet by 40 feet (Appendix C). It is covered with numerous materials, including wood lap siding, painted plywood, and stucco. The east façade currently contains one door and one window (boarded over) on the south side and two windows (one boarded over) on the north side. The south façade contains one window in the original block, and one door and one window in the west addition block. The west façade contains one window on the north side and one opening (boarded over) on the south. The north façade contains two windows in the original block, and two in the west addition block.



Building No. 1b: Ranch Headquarters, built circa 1910



Building No. 15: Hotel, built circa 1912



Building No. 16: Example Ranch Silos, built circa 1903 (top); circa 1905 (bottom)

Figure 41

Direction Photo Taken:

northwest

The 101 Ranch water tower and silo was documented in *Silos in Oklahoma*, Bulletin No. 101, July 1914.

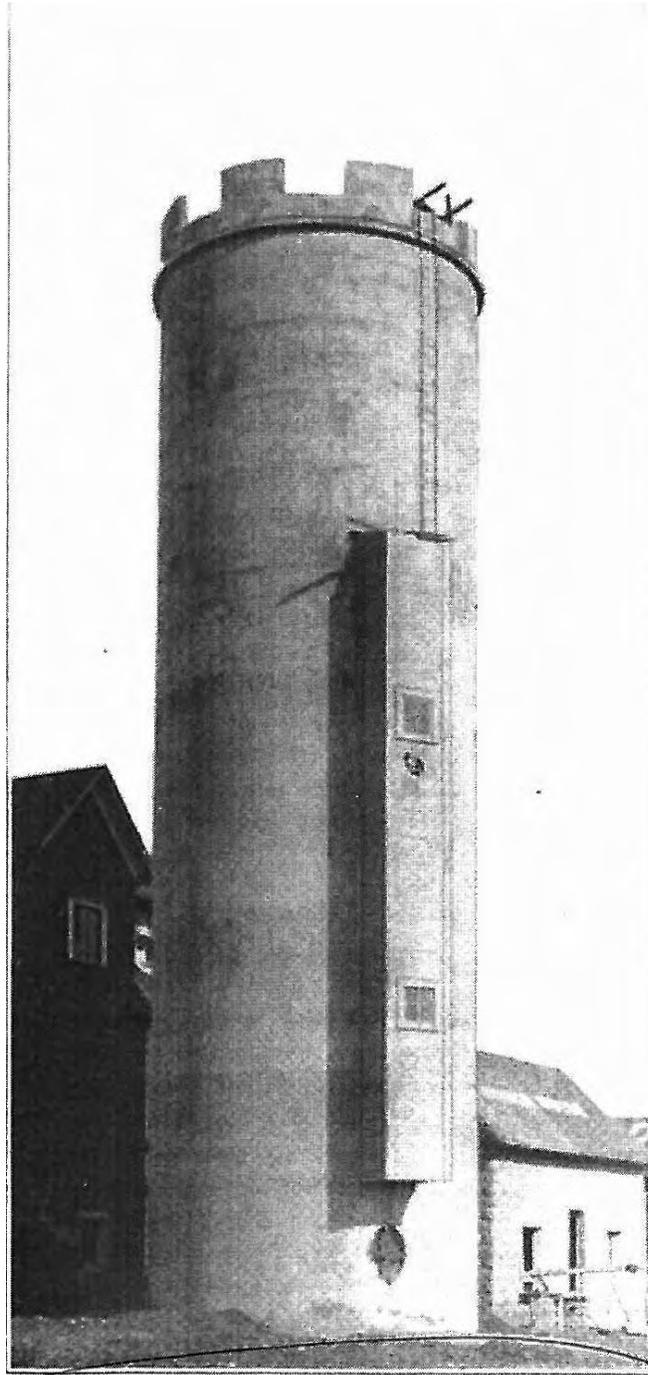
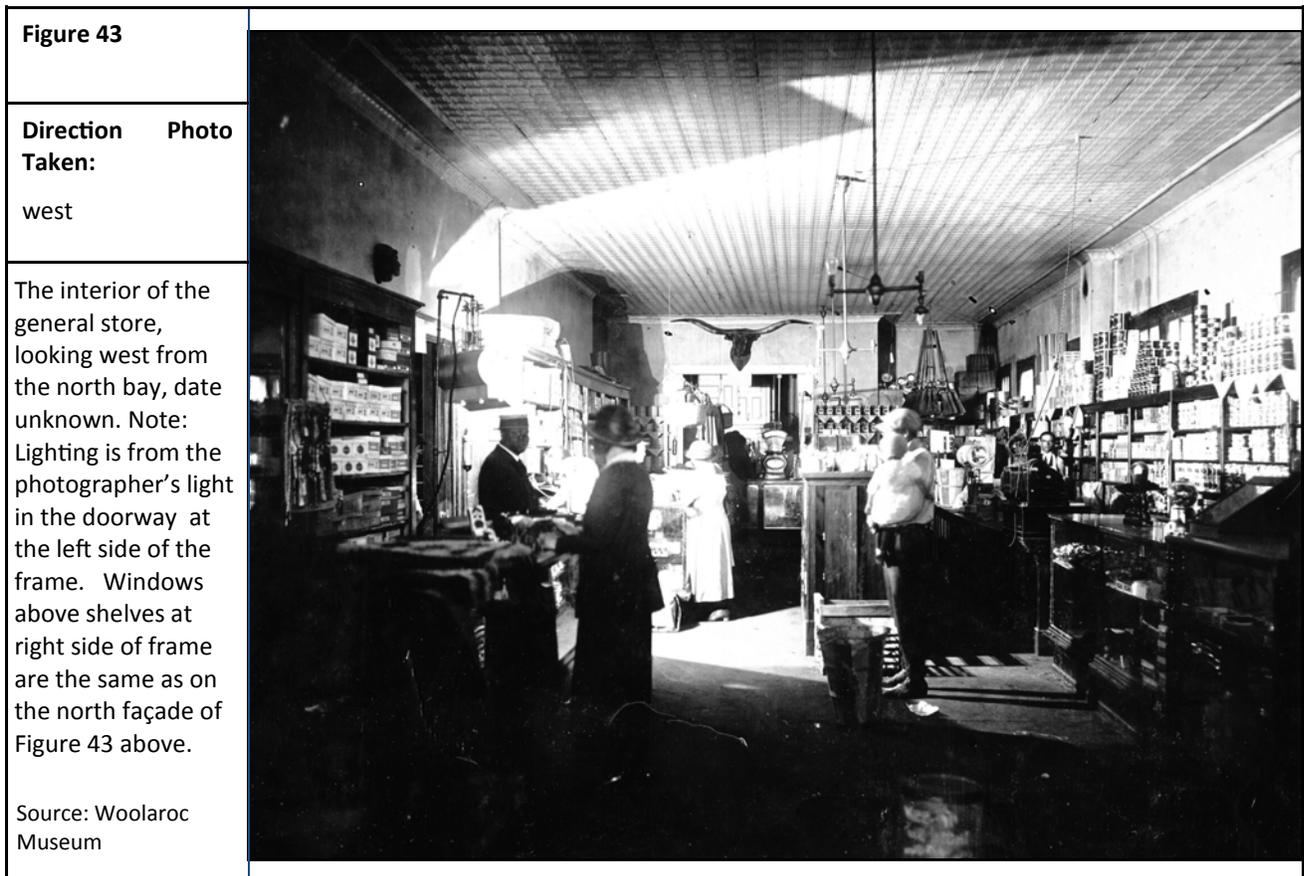


Figure 45—Water tower and Silo of reinforced concrete. The original of this was recently erected on Miller Brothers' 101 Ranch in Kay county, Oklahoma, by Oklahoma Concrete Silo Company, Oklahoma City (Polk System, see Figure 39)

Source: *Silos in Oklahoma*, 1914



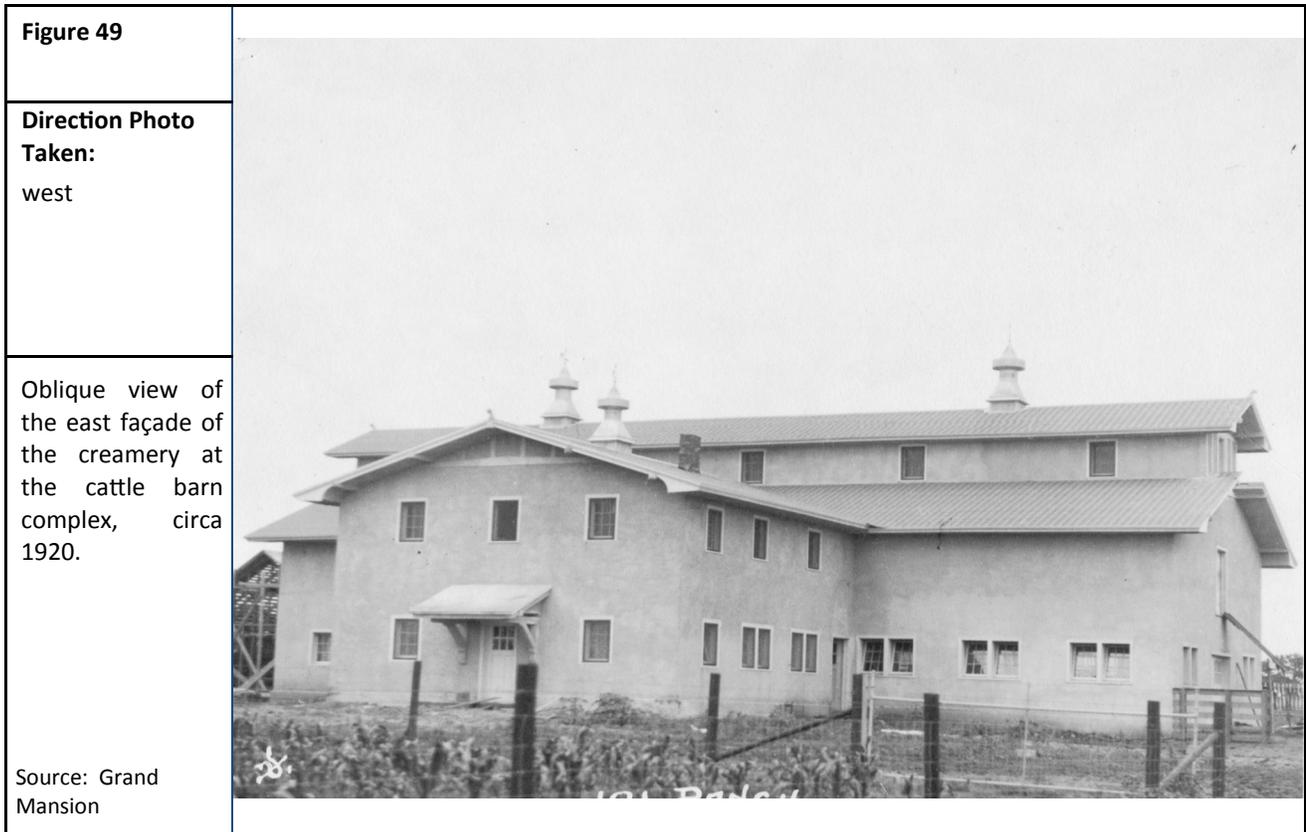
Building No. 3c: General Store, built circa 1918



Building No. 4b: Dining Hall, built circa 1918



Building No. 17: Privy, built circa 1918



Building No. 18: Cattle Barn Complex, built circa 1912



Building No. 19: Hog Barn Complex, built circa 1915

1920s

Joe Miller organized the Cherokee Strip Cow Punchers Association (CSCPA) in 1920. Membership was limited to working cowboys and others associated with the cattle industry in the Cherokee Strip during the time period from 1874 to 1893. Joe was president until his death, when Zack filled the position. He also held this position until his death (Wallis 1999: 494-495).

One of the more significant events at the ranch occurred in 1923, when the Salt Fork River flooded the ranch and resulted in the construction of a permanent bridge across the river. This bridge was determined to be a contributing element to the NRHP Historic District; and its replacement resulted in the creation of this study.

With the close of World War I, the 101 Ranch Wild West Show resumed in 1924 and began touring throughout the United States and to Europe in 1925. On March 20, 1926, Joe Miller was listed on a passenger list as having arrived to New York from Cherbourg, France on the S.S. Berengaria (Ancestry.com 2011). Although no other names recognized from the 101 Ranch were found on the passenger list, it is likely that Joe was returning from the European tour of the Wild West Show. For the new run of the show, the Millers had purchased the Walter L. Main Circus, and so the Wild West show from then on featured exotic animals, which along with the rest of the show would winter at the 101 Ranch to be seen by thousands of visitors. The mid 1920s also brought the film industry to the 101 Ranch, and 101 Ranch Wild West show performers such as Hoot Gibson, Tom Mix, Buck Jones, William Desmond Taylor and Bill Pickett made appearances in these films (Shirley 1963).

The Wild West Show and film production put 101 Ranch further into the national spotlight, but Joe Miller maintained the tradition of extensive farming and ranching on the ranch as well. Joe Miller had an interest in experiments with hybrid plant and animal life at the ranch. He hoped to develop an experiment station on the ranch that would benefit Oklahoma and the southwest. Crop experimentation also occurred at the ranch, as previously described, which created improved species of corn which was more tolerant of extreme weather conditions. Improved walnut, apple, and pecan trees were also developed. A 1926 New York Times article describes how the ranch had become an agricultural experiment station and model stock farm, and that the State Agricultural and Mechanical College required its students to spend two weeks per year at the ranch studying the experiments being conducted. The article also describes the ranch as having the largest herd of Holsteins, Herefords, and shorthorn cattle in the United States, and its own

varieties of persimmons, pecans, and mulberries as well as being the largest commercial apple orchard in the state (NYT 1926). It is important to note that the Hatch Act of 1887 (revised 1955) established and funded agricultural experiment stations to increase production and knowledge; it was followed by the Smith-Lever Act of 1914, which created the Cooperative Extension Service and provided a means for researchers to get the information gathered at the experiment stations to farmers (OAES 2011). This was not a new idea for 101 Ranch, however, as the Millers had been conducting experimentation from the earliest days of the ranch.

The late 1920s was the beginning of the end of the 101 Ranch dynasty. On October 21, 1927, Joe Miller died of carbon dioxide poisoning (NYT 1927a). A year and a half later, George Miller died at the age of 49 due to a fatal car wreck while returning home after visiting with friends early that evening (DMN 1929).

Buildings and their uses during this era

Changes to the landscape of 101 Ranch during this time period was a direct result of the expansion of the Millers' enterprises, and the built environment demonstrates this. Appendix A Phase 3 Maps and photographs show the ranch at this period.

Meat Packing Plant

During the early 1920s a meat packing plant (Building No. 20) was built east of the hog barn complex (Figures 52 and 53; Appendix A, Phase 3 Map and Photographs 37-38, 43-44, 46-47, 66, 77, 101-103). The plant appears in photos taken during the 1923 flood. The meat packing industry employed men that were responsible for slaughtering, packing, and distributing meat products. Each day the plant would process up to a hundred hogs and fifty cattle. The meat products were sold on the ranch, as well as delivered within a radius of 100 miles (Oklahoma Today 1963). Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 20.

The meat packing plant consisted of three primary adjoining rectangular buildings oriented north-south, with several additions or extensions. The eastern building was the tannery, and this building originally was a two-story masonry building; comparing the size of the building to the elephant barn (whose dimensions are known), both of which are shown in a post 1925 birdseye view of the ranch, the tannery appears to be approximately 100 feet long and 50 feet wide. The building had a gambrel roof with a central chimney. The east façade had 17 sash windows at the first floor and the words "101 RANCH PACKING HOUSE & TANNERY." painted on upper part of the wall. The south façade had a central wide door with two flanking

windows on the first floor and a hay loft-type opening above. There may have also been windows at the upper story of the south façade. Both the central and western buildings of the meat packing plant were front gable buildings, approximately 25 to 30 feet wide. Both had central doors on the south façade with one window flanking each side. The north façade of the central building had a large double door with one window flanking each side. The north façade of the western building had at least one window, and access to a loft door at the upper portion of the building through an exterior elevated wood deck with a ladder. An approximately 30-foot-long front gable extension was located at the northwest corner of the western building. Its function is not known. This building had a blank north façade and a large double entry door on the east façade.

On January 3, 1925, a gas explosion in the drying room of the tannery portion of the meat packing plant caused approximately \$50,000 in damage. The fire became too much for the ranch to handle and the Ponca City fire department was called in to aid in protecting the nearby buildings and helping to contain the flames. It was reported that this was the second fire within a week's time (Kay County Info n.d.). A circa 1925 birdseye view of the ranch clearly shows the damage to the building (Figure 53).

After the 1925 fire the meat packing plant was altered (Figure 53). The tannery, having suffered the most damage, was demolished and a smaller shed roof structure, about 25 feet wide and 100 feet long, was built in its place adjacent to the central building. The roofs of the remaining central and western buildings had their roofs replaced; a long monitor roof was added to the central building, and a small monitor was added to the south side of the west building. Photos of the west façade after the fire show that the western building also had a shed roof addition with three gable vents. This façade had eight openings; they are partially obscured in the one historic photograph showing this façade, so it is not clear which are doors and windows. Extending from the northern gable extension mentioned above was a wooden gabled building oriented east-west. Its function is not known. A small square masonry addition was made near the southwest corner of the building after the fire. A smoke stack extends from the flat roof. This may have been for smoking meat, or for isolating a fire from the main block of the building. Sufficient physical evidence was not found during the survey to prepare a plan map of the meat packing plant.

School House

Working on the ranch and performing for the Wild West show was a family affair for some. It is believed

that the school house was built for the children living on the ranch around the beginning of the 1920s (Building No. 21). The school house can be seen in photographs of the first truss bridge, which was replaced in 1924 (Figure 54; Appendix A, Phase 3 Map and Photographs A45, 48-51, 66, 77, 104-106). The school house was located east of SH 156 just north of the Salt Fork River bridge. It faced west; a storm cellar and cistern or well were located just northeast of the school house. A gabled shed with an unknown function (possibly a privy), is shown to be southeast of the school house. Approximate relationships and dimensions of the schoolhouse, cistern, and storm cellar are shown in Appendix C.

From the photographs, it appears that the school was a one story, square, wood frame building with a pyramidal roof. Photographs clearly show a porch on a raised pier and beam foundation, but the schoolhouse itself may have been raised above a concrete slab, as a partial slab was identified during the survey. The school measured approximately 20 feet by 30 feet. It was clad in horizontal drop siding. It is unknown whether the school house was a large open room or was divided into several smaller rooms for the different age groups. The front (west) façade of the school house featured a prominent projecting porch with a shed roof supported by square columns (Figure 55). A solid drop siding railing wrapped the porch, excepting a set of centrally located wood steps. There was a central wood door with a one-light transom. There was a window to the south of the door; others may have been present, but are not shown in photographs. The south facade featured five adjoining sash windows.; other facades are not pictured (Figure 54).

The cellar (still extant) was rectangular and built of concrete. It measures approximately 10 feet wide by 15 feet long on the outside surface dimension, with an interior dimension of 7 feet high by 7 feet wide. A sheet metal door at grade level on the southeast corner of the cellar led down concrete stairs into the space. At the far western end of the cellar was a coal stove. Above grade, a rectangular concrete vent ventilated the stove; an iron pipe extended from the center of the slightly barrel-vaulted roof. Historic photographs do not show the cellar.

East of the cellar is a well or cistern (still extant). While the depth is not known, the above-grade portion of the structure consists of a conical brick lip, approximately 19 inches in height and 4 feet in diameter. It is covered with a concrete slurry. Historic photographs do not show the cistern.

Round-up Arena

Not only did the Miller Brothers have a worldwide traveling show, but a permanent grandstand on the

ranch. The show was visited by several hundred spectators each year, and the Ranch constructed new grandstands to replace the original ones during the early 1920s to accommodate the large crowds during show times. The covered grandstands were L-shaped and located in the southwest corner of an arena (Building No. 22); surrounding the entire arena was a wood and metal fence (Figures 56 and 57; Appendix A, Phase 3 Map and Photographs 45, 52-59, 66, 77, 107-110). The grandstands measured approximately 18 feet wide by 400 feet long on the north-south leg of the L-shape, and 18 feet wide by 300 feet long on the east-west leg (Appendix C).

The 101 Ranch round-up arena was located on the east side of SH 156. The only portions of the grandstand footings which are visible today are located on the south end of the area where the grandstands were located. The west side of the grandstands was discovered during the archaeological investigation. The footings consist of three rows of 6 inch wide concrete in which the grandstands rested.

Cider Works and Canning Factory

The cider mill (Building No. 23) is a two-story, corrugated metal building that was located on the south side of the ranch northeast of the meat packing plant (Figures 58 and 59; Appendix A, Phase 3 Map and Photographs 43-44, 60-63). The building was rectangular in plan and was oriented east-west. Its measurements are not known, but it may have been as large as 25 feet wide and 50 feet long. The east façade was symmetrical, with a central wooden door with one two-over-two window flanking each side. Three four-over-four windows were located in the upper story. The words "Cider Works & Canning Factory" are painted on the east façade. The symmetrical north and south façades had two large wooden swing doors flanked by six two-over-two windows on the lower level and the upper level had four four-over-four dormer windows with gable roofs. Only the upper portion of the west façade was visible in historic photographs found. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 23.

Curing House and Circus Barn

The "elephant barn," as it has been commonly called, was located southwest of the Foreman's House and northeast of the creamery (Building No. 24). The building is a one and one-half story rectangular building with a gambrel roof. Oriented north-south, it measured approximately 54 feet wide and 106 feet long (Figures 60 and 61; Appendix A, Phase 3 Map and Photographs A44, 64, 66, 77, 111-112; Appendix C). It was constructed of brick masonry, with corrugated metal gable ends and roof. The floor slab (still extant) is

concrete. Four iron rings in a line spanning 20 feet 8 inches are still present in the southeast portion of the floor. These rings are said to have been for the elephants' restraining chains. Projecting from the ridge are five equidistant brick chimneys and three metal vents at the south side. In one historic photograph taken during the 1923 flood, which shows the north façade, it does not appear to have any entries but did have a shed roof addition. The west façade had five openings, but whether these were windows or doors is not clear. The south side featured two large double swing doors and five openings in the gable ends.

One historic photograph clearly depicts the south and west facades of this building, and several aerial and bird's eye views show it. This photographic evidence, as well as a 1924 article in the *Daily Oklahoman* instead points to a different original use for the "elephant barn." The article states that the building was built in 1921 as a sweet potato curing house, but in 1924 was adapted to be the "winter headquarters for the menagerie which the Miller brothers secured recently in purchasing the Walter L. Main circus and within its walls there [were] housed elephants, lions, tigers, monkeys, a Russian wild boar and other wild animals... [and] In arranging the sweet potato house for the animals, the seven elephants have the front of the building; large iron rings have been cemented to the floor and to these the big beasts are fastened with leg chains... [A lion cage has] been erected inside the sweet potato house..." (*Daily Oklahoman* 1924). Another historic photograph shows workers at the south façade with a wagon loaded with bushels of fruit or vegetables, which may have come from the large field directly adjacent to the east side of the building (and appears to have been planted with tomato plants or a similar plant type). Empty bushel baskets are stacked on the southwest corner of the building. Also showing that this was originally a curing house is the five brick chimneys and three metal vents protruding from the roof. It is not known if curing operations permanently ceased in 1924 or if it was alternated seasonally with use as an exotic animal barn.

Round Barn

In an aerial photograph dated circa 1938, a round barn (Building No. 25) is located between the horse and mule barns (Figure 62; Appendix A, Phase 3 Map and Photograph A45). The function of this building is unknown, but has been referred to as the winter circus training barn or show barn by members of the 101 Ranch Old Timer's Association.

No historic photographs have been found showing the round barn except for a 1923 photograph taken during the flood, which only shows the roof (Figure 63). An aerial photograph from 1938 shows it, but no details

can be discerned except that it appears to have been approximately 50 feet in diameter and had a central portion of the roof, which had a central vent and may have been higher. Sufficient physical evidence was not found during the survey to prepare a plan map of Building No. 25.

Exotic Animals

Housing for the exotic animals held at 101 Ranch was also provided (Building No. 26). These shelters are shown in Appendix A, Phase 3 Map and Photographs A45, 66, 75, 77, 113-116. One of these was shelter for Tony the Bear, the Millers' 300 pound captive black bear, which was usually kept chained next to the general store. People would offer him a soda or sweetened water, which he would gladly accept grabbing the bottle with both paws. It is said that Tony dug a den under the sidewalk that connected the general store and the hotel. Eventually a bear den was built in front of the hotel for Tony. The den may have been constructed by the time a ca. 1925 birds eye photograph was taken, but this cannot be confirmed (Appendix C). Tony passed away in 1931 after becoming ill and suffering from a kidney infection. His den (still extant) is a rectangular river rock shelter, approximately 3 feet by 3 feet, with a slightly vaulted roof. It has a square opening on the south, and stands approximately 24 inches high. No historic photographs of the bear den were located during archival research.

Located on the east side of SH 156 was the exhibition building, commonly called the "monkey cage" (Appendix C). This structure is also often referred to as the jail for drunken cowboys; however, no source was found to verify this dual use. The monkey cage was a one-story brick and stucco building. No historic photographs of the monkey cage were found, but a 1972 photograph shows the building prior to its collapsed state seen today. The stucco over brick building was rectangular, measuring 18 feet 4 inches wide by 32 feet 2 inches long. A large rectangular area on the west side was open to visitors through a central doorway. An elevated room to the east, measuring 10 feet 7 inches deep and 3 feet up from grade, was separated by iron bars (still extant). The west façade featured a large opening flanking each side of the door. A decorative stepped parapet with rectangular relief area (possibly for a sign) decorated the top. This parapet is similar to that of the market (Building No. 27).

There is another feature that is believed to have been present around this time. An "alligator pit," which measured approximately six feet across and one foot deep was located between the general store and the hotel. Due to the size, it is possible that only a few baby alligators or perhaps turtles were held in the pond

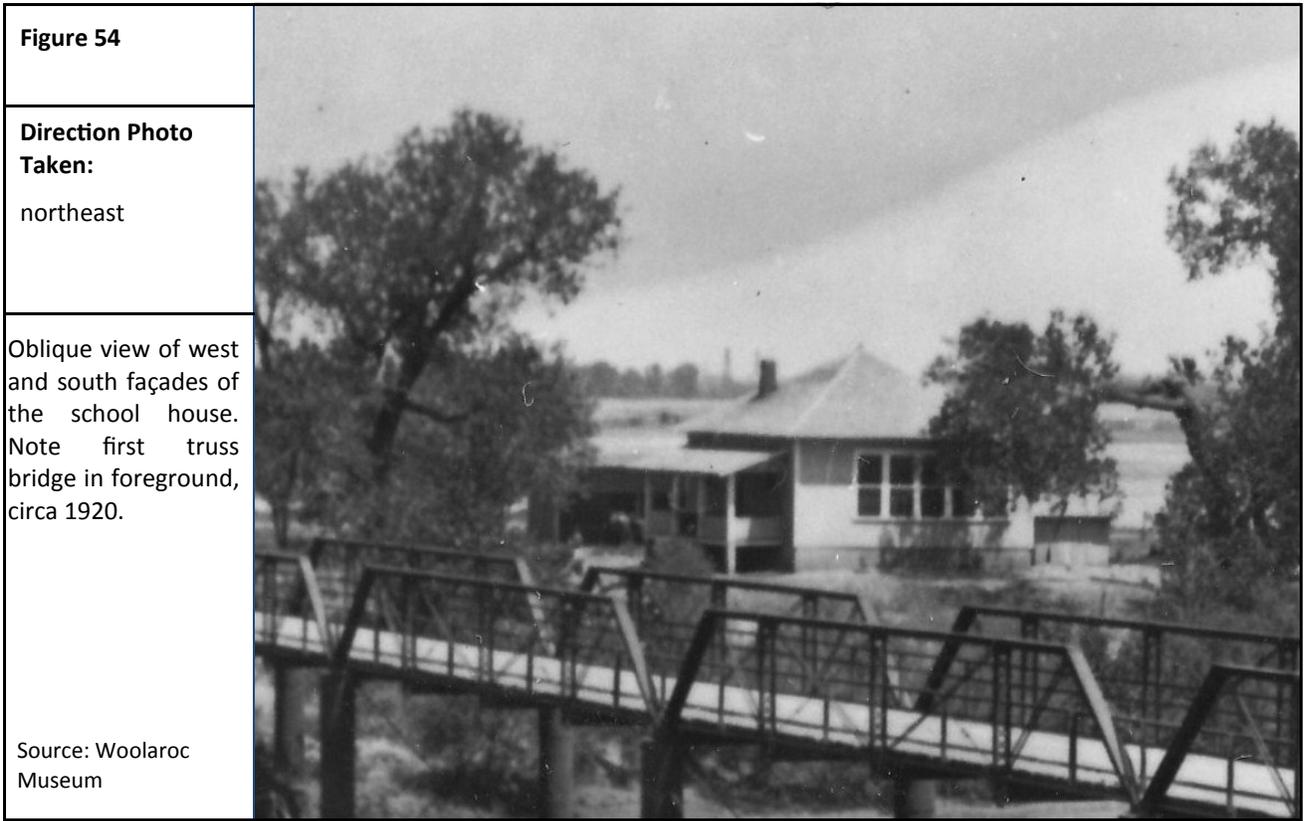
feature. No photographs or reference to an alligator pit were found during archival research.

Market/BBQ restaurant

The market (Building No. 27) appears in an aerial photograph that dates to circa 1925 (Appendix A, Phase 3 Map and Photographs A45 and 65). It was used as a market, as well as a BBQ restaurant. The market was located immediately north of the monkey cage on the east side of SH 156. The style of the building resembled many of the other buildings around the ranch. It was a one-story, rectangular, three-bay, stucco Spanish revival style building with a full width front porch supported by three arches on the west and one on both the north and south sides. A decorative stepped parapet extended from the porch walls and contained signage (Figures 64 and 65). The west façade had two double entry doors, one at either end of the central bay. Paired sash windows were located in the north and south bays. One window was located in the east side of the north façade. No historic photographs showing the south or east facades were found of the market.



Building No. 20: Meat Packing Plant, built circa 1915



Building No. 21: School House, built circa 1920

Figure 56

Direction Photo Taken:
southeast

View of round-up arena from the White House, circa 1925.

Source: Woolaroc Museum

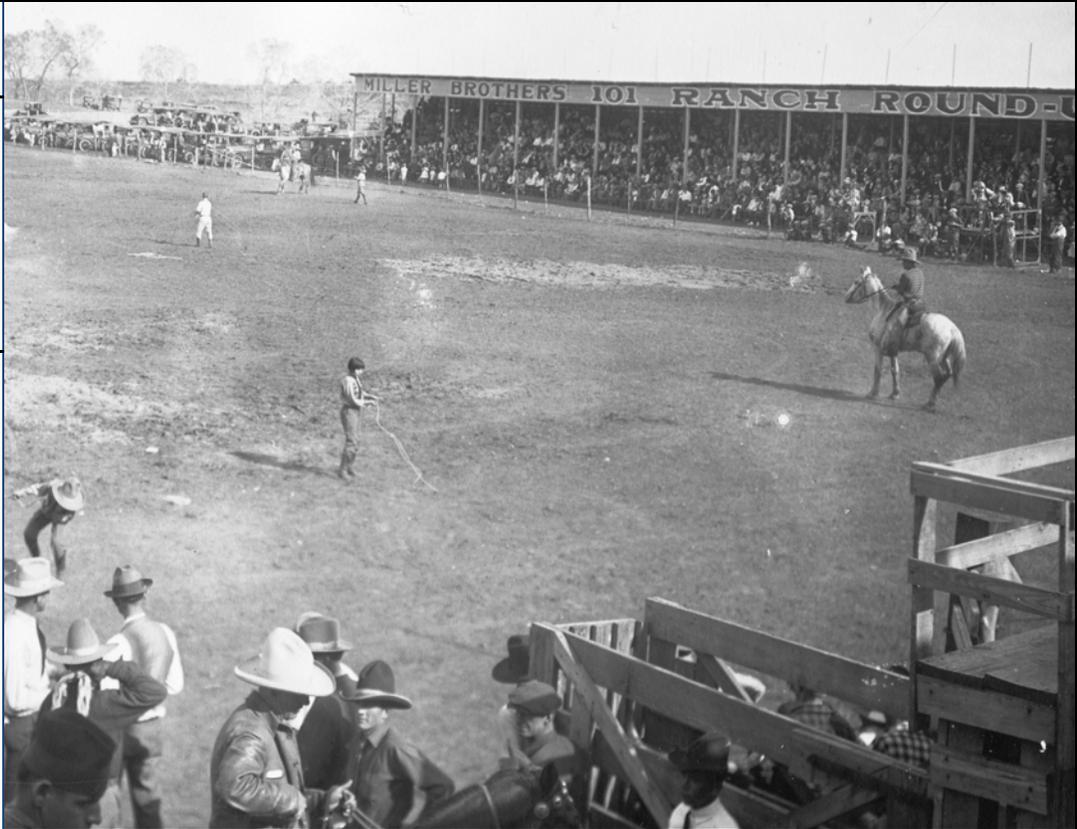


Figure 57

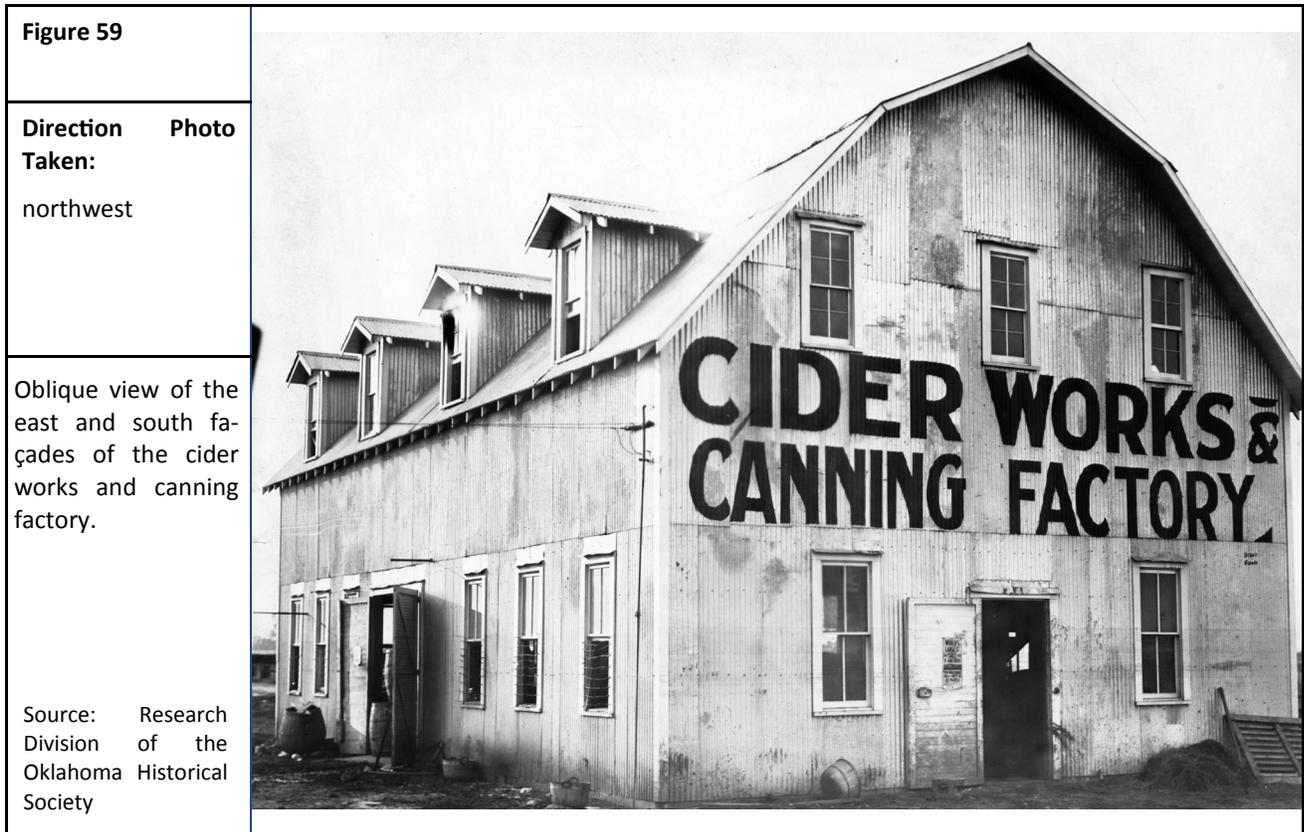
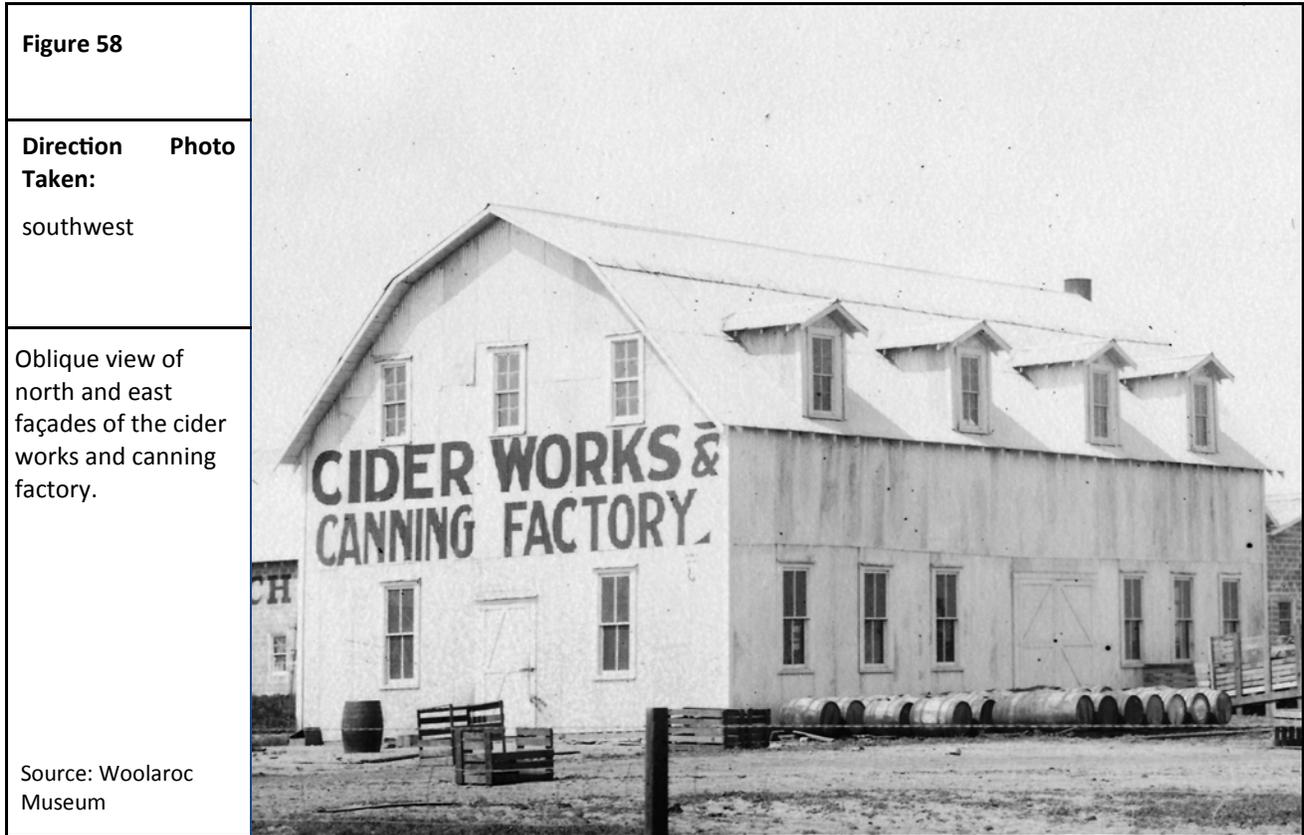
Direction Photo Taken:
southeast

View toward north-south leg of the round-up arena, circa 1925.

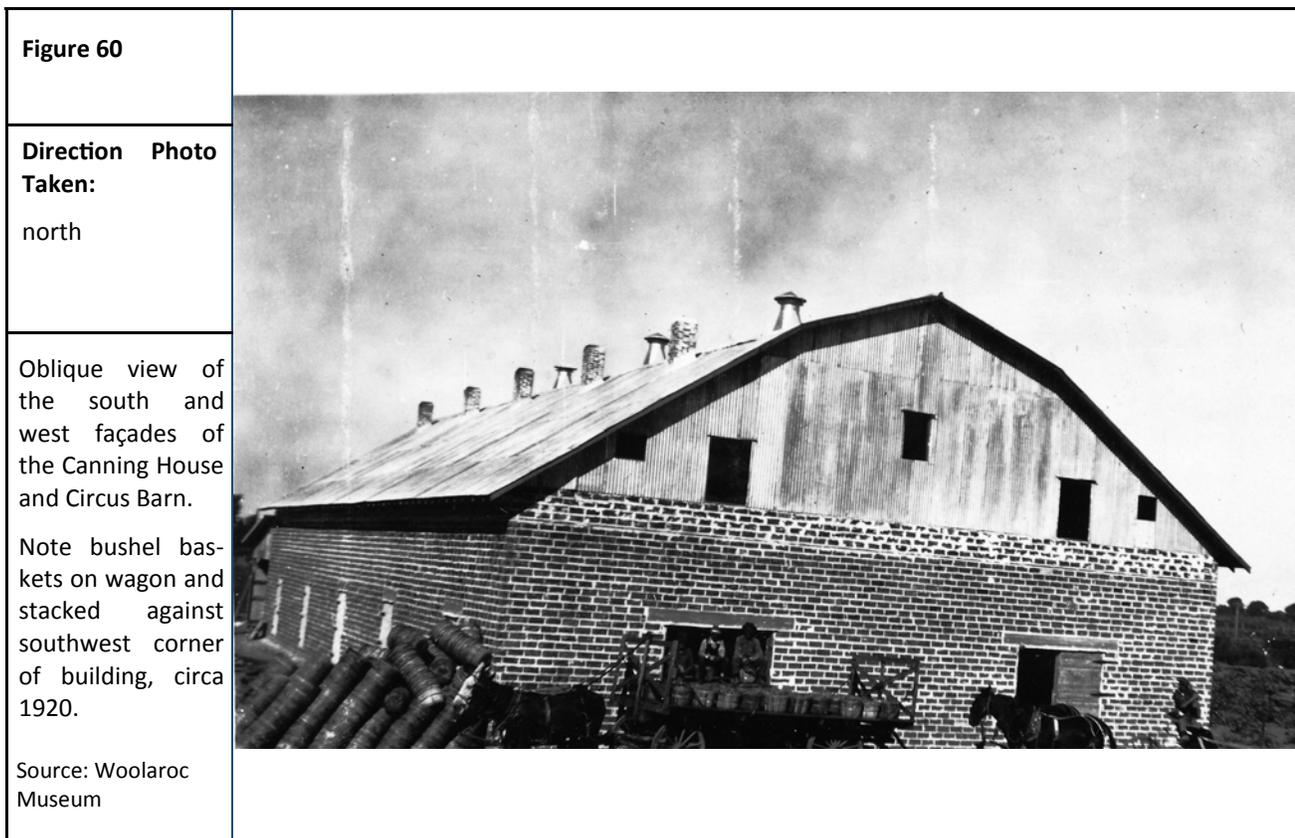
Source: Woolaroc Museum



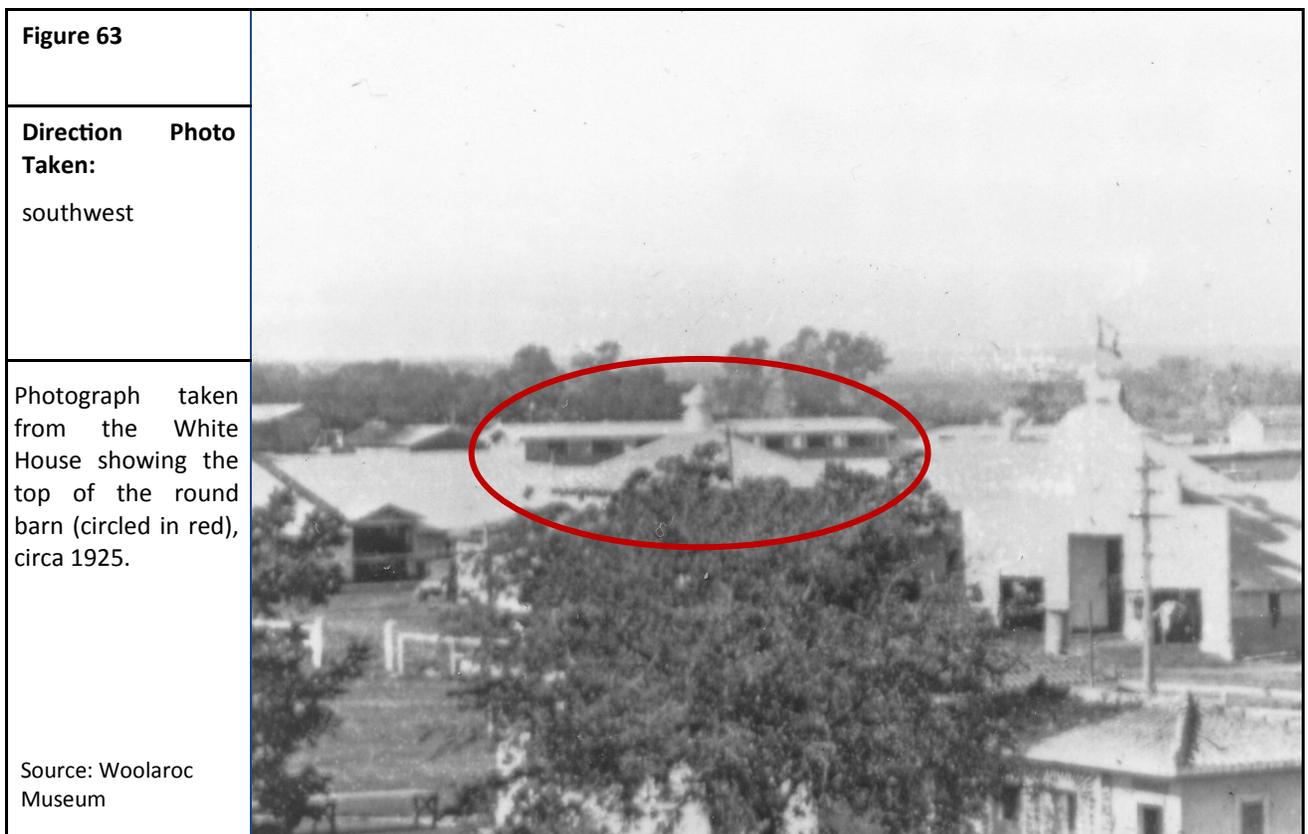
Building No. 22: Round Up Arena, built circa 1925



Building No. 23: Cider Works and Canning Factory, built circa 1925



Building No. 24: Curing House and Circus Barn, built circa 1925



Building No. 25: Round Barn, built circa 1925



Building No. 27: Market/Bar-B-Q Restaurant, built circa 1925

1930s

After taking a few years off, Zack took the 101 Ranch Wild West Show on the road again in 1930. The next few years were unstable, with financial and legal issues, not to mention the Great Depression that unsettled the nation. The decline of the ranch and the Wild West Show took a toll on Zack's physical and emotional health (Wallis 1999: 511-512).

During the 1931 run of the Wild West Show, 400 show employees who were owed approximately \$28,000 in back wages held a strike in Washington, D.C. The show had gone broke two weeks prior while under lease to the Western Show Company, Inc. The employees demanded that a receiver sell the property to pay W. E. Rice, the successor trustee of the Miller Brothers 101 Ranch Trust (NYT 1931a). Through an injunction, an outside crew of workers loaded the show for transportation back to the ranch (NYT 1931c).

In March 1932, the financial difficulties of the ranch resulting from a decline in oil and stock prices and the closure of the Wild West show led to the foreclosure of the ranch to pay mortgages on the land and property. Zack Miller attempted to halt an auction of his possessions as representatives of the receiver's attorneys entered the house after months of litigation. Discharging a shotgun into the floor of his bedroom, the men fled; the auction of the livestock, circus animals, farm implements, and other personal property proceeded. Zack maintained that the White House was subject to a homestead exemption (NYT 1932a). Zack Miller was arraigned on a charge of assault with a dangerous weapon for the standoff, posting \$15,000 bail. During the arraignment Miller's attorney, former Governor Henry Johnson, arranged for the postponement of a fourth foreclosure suit to attempt negotiations with the Reconstruction Finance Corporation and to stave off foreclosure of a \$170,000 loan from a life insurance company (NYT 1932b).

Financial problems had become so desperate by July 1932 that the New York Times reported that imprisoned gangster Al Capone and his brother Ralph had considered buying the 101 Ranch (NYT 1932d).

At the close of 1932, all but the White House and a quarter section of the 101 Ranch was divided into leases by the receiver of the property (NYT 1932e). In 1932, the Federal government purchased approximately 8,000 acres of ranch land for a resettlement project.

Finally in 1935, a Federal Judge ruled that after two years of receivership, the 101 Ranch no longer belonged to Zack Miller. The remaining 17,000 acres of the ranch were foreclosed (NYT 1935). The remainder of Zack's possessions was auctioned off in 1936; with

the money from the auction a foreclosure on the White House was stalled, but not prevented. In March 1937 Zack left the house for the last time (Wallis 1999:514-515).

With the auctioning off of the buildings and the resettlement of displaced farmers, many of the ranch buildings were demolished for their materials (Wallis 1999: 515). Appendix A Phase 3 Maps and photographs show the ranch at this period.

1940s

An unsuccessful attempt was made by local citizens to preserve the 101 White House and surrounding grounds as a state park in the years leading up to World War II (Wallis 1999: 515). In 1941 the land was sold to the Federal Farm Security Administration and was divided into 34 farms. In 1943, the Federal Farm Security Administration sold the remaining 101 Ranch buildings for \$500 to a salvage company. The White House and several other buildings were partially or completely razed. Other barns were probably demolished by new land owners and used as salvage for new barns and outbuildings (Wallis 1999: 515).

In 1946, Zack was able to purchase back the general store and operated the store while residing on the second floor. He even attempted to re-enter show business, appearing in Wild West shows from 1945 to 1949. Zack lived in the general store until 1951 when he moved in with his youngest daughter at Valley Mills near Waco, Texas (Shirley 1963, Wallis 1999:516).

Buildings and their uses during this era

Only one building is believed to have been constructed during the 1940s. Appendix A Phase 4 Maps and photographs show the ranch at this period.

Machine Shop

During the 1940s many buildings were demolished, as noted above. One of the buildings that was demolished was the creamery building in the Cattle Barn Complex (Building No. 18); which was demolished after the aerial photograph taken in 1938 (Appendix A; Phase 3 Map, Phase 5 Map and Photographs A92-93 and 95). Built on part of the foundation of the creamery was a building that has commonly been referred to as a "machine shop" (still extant) that is connected at the south end to the east side of the dairy. Its function cannot be confirmed as a machine shop. This building is a one-story gable roof building oriented north-south. It may have been built in two separate stages. The north end of the building is a concrete block structure covered in stucco, with trusses supporting the roof. Three steel hopper windows are present on both the east and west facades of this segment. A two panel sliding door provides entry

in to the north façade. The south end (connected to the dairy) has wood frame walls covered in corrugated metal panels and rafters supporting the roof. One steel hopper window is located in the southern segment on the east façade just north of the dairy barn. The south end of the building has one large opening and a single steel door on the east side. The roof has common purlins covered with corrugated metal spanning the entire length, which indicates that the entire roof was replaced at some point. On the interior of the building, an interior cement block wall covered in stucco spans in the east-west direction; this wall was originally the exterior wall of the northern segment of the building. No historic photographs have been found of the machine shop.

1950s to 2000

Zack Miller died on January 3, 1952 at the age of 74 in Waco, Texas (NYT 1952). Zack had been in the hospital for six weeks suffering from cancer of the liver. According to his daughter, Zack had been ill since the summer before when he was trampled by donkeys while loading them into a trailer. His body was transported back to Ponca City, Oklahoma and buried on Cowboy Hill. The CSCPA disbanded in 1958 (Kay County Info 2011).

In 1959 and again in 1961, the Oklahoma State Legislature tried to appropriate funds to purchase and rebuild the 101 Ranch site, but the measure died in Congress due to lack of State funds (Kay County Info 2011).

In 1968, the 101 Ranch Old Timers Association (OTA) was organized as a revival of the CSCPA (OTA 2011).

The 101 Ranch museum was established at the Ponca City Cultural Center (now Marland's Grand Home, located in the E.W. Marland residence) in 1971 by the Old Timers Association. The museum holds collections of 101 Ranch memorabilia, photographs, posters, and saddles (OTA 2011).

By 1972, when the 101 Ranch property was originally listed on the NRHP, a few buildings remained in the district. Zack T. Miller, Jr., lived in the General Store (National Park Service 1972). A 1974 supplement to the NRHP nomination contained photographs of the extant structures and foundations (Figures 26-35). Since that time, most of those buildings have been lost to fire or erosion due to cutting by the Salt Fork River. In 1975, the 101 Ranch was designated a National Historic Landmark.

In 1976, the OTA was able to acquire 72 acres of the 101 Ranch headquarters land from a private owner. Funds obtained matched a grant from the Oklahoma State Historical Society. The original goal was to restore and preserve the remaining buildings; however the blacksmith shop and other buildings had been lost due

to flooding of the Salt Fork River (OTA 2011).

On September 22, 1987 the general store burned down due to suspected arson (Kay County Info 2011).

In 1994, Oklahoma State University Landscape Architecture students conducted HABS/HAER documentation, creating a map layout, as well as measured drawings and elevations (NPS 1994).

Buildings and their uses during this era

Only one building is believed to have been constructed during this phase. Appendix A Phase 5 Maps and photographs show the ranch at the time this report was written.

Shower House

A building known as the "shower house" was added near the silos and power house during the 1950s (Appendix A Photograph A83). It is not a contributing element to the NRHP Historic District. However, as previously described, this building may have been built on the foundation of the seed storage building (Building No. 11). The shower house is a rectangular concrete block building with a stucco finish. The roof is missing, as are the door and window glazing; two partial and one complete walls remain; two metal awning window frames and sash are still present. No historic photographs of the shower building were found during archival research.

Results of Field Efforts

In 2010, ODOT contracted with URS to perform an archaeological survey and a historic resources survey. This was designed to not only to locate and identify various buildings and structures, but also result in an assessment of these components and their ability to contribute important information to the 101 Ranch NRHP Historic District.

The archaeological survey utilized both geophysical and pedestrian survey methodologies. In conjunction, the historic resources survey identified the location of buildings that are no longer standing through historic photographs and aerial maps. The use of multiple and complimentary methodologies has yielded a more complete understanding of the overall site complex than could have been obtained singularly.

Standing Structures and Ruins Survey

A building inventory of remaining structures and foundations was conducted in order to determine construction and alteration dates for the structures as well as to better understand the history and significance of the 101 Ranch. This included taking GPS coordinates of each resource and verifying measurements with measuring tape, verifying measurements previously taken for the 1994 HABS documentation, and preparing measured drawings of select resources and photographing resources (Appendices A and C). Archival research was conducted at Marland's Grand Mansion in Ponca City, Oklahoma and Woolaroc Museum in Bartlesville, Oklahoma. In addition, members of the 101 Ranch Old Timers Association who joined the preservation team in the field were interviewed for their knowledge of the history of the ranch. Desktop research was conducted using numerous on-line resources and historic newspapers once the field effort and archival research was conducted.

After primary and secondary research was completed, analyses of historic photographs and maps were conducted to date, locate resources, and document any changes or modifications to the resources. These analyses were used to establish a chronology of the construction of the ranch and develop the phases identified in the current document. Maps and photographs of the chronological phases are presented in Appendix A. Measured drawings prepared during the field effort are presented in Appendix C. The building inventory and description of each documented resource is as follows.

White House

Based on historic photographs, the White House was located within a 2' high reinforced concrete with 4' high wrought iron and at the end of each wall segment are 7' tall and 1 ½' square columns. The fence has been restored using the original wrought iron, which has been recovered by the 101 Ranch Old Timers Association. The house was surrounded on three sides by a driveway. A circular drive leads from the roadway under a porte-cochère on the east side of the house. On the rear of the house, the driveway leads to where a garage once stood. The south drive curves to one of the ranch roadways.

Across the north and south façade of the house were six large Ionic columns that span the height of the first and second floor. On the east and west façades are smaller Doric columns on either side of the steps and porte-cochère. There is an interior chimney on the east side of the house, which has a ghost mark on the first floor remains.

A few changes to the house occurred over the years, which can be seen in photographic evidence. Shortly after construction the house was photographed in the large panoramic photograph. In this photograph the porch is fully open on both the first and second floor, as well as the attic. Over the next few decades, the north side of the east porch and the upper porch and attic were enclosed. The exact dates of alterations is unknown, but was documented in various photographs. There are few existing pictures where the north side of the house is not fully visible, so alterations on the north façade are unknown. However it appears that the north façade was enclosed possibly around the same time as the addition of the room on the lower porch.

All that remains of the White House are the first floor slab, basement, and foundation. The dimensions of the house are roughly 73 feet by 52 feet. The foundation and floor slab are constructed of reinforced concrete. There are no windows or doors that presently remain. In the northeast corner of the first floor, remnants of black and white octagonal tile flooring are visible, which may have been the kitchen or bathroom location. Parallel grooves in the top of the first floor slab may be indicators of furring strips for a wood floor. The family vault remains on the first floor.

The basement is divided into three sections. Soil covers the floor of the basement, and it is not known whether this is the floor surface, or soil that has washed over another (possible concrete) floor. Since there are no

windows or doors to offer protection from the elements, leaves and branches cover the basement floor. There are also large pieces of debris scattered throughout the basement.

Overall, the White House foundation is in poor condition. Much of deterioration is caused by the exposure to the elements and lack of maintenance.

Maintenance Conditions

- On the northwest corner, two trees are immediately adjacent to the foundation. The trees are not only compromising the integrity of the foundation, but also the sidewalk around the foundation.
- On the exterior portion of the foundation, areas have been patched where the stucco has deteriorated.
- Cracks in the stucco occur around the perimeter of the foundation. Due to its uniformity and placement, this may be a result of flood waters.
- A large portion of the wraparound porch floor has collapsed primarily due to exposure to the elements, as well as lack of maintenance. Due to the collapsed porch, rebar has been left exposed.
- A considerable amount of soiling has occurred on the concrete due to exposure of the elements. Vegetation is growing in areas of the first floor where concrete has broken and in the areas of the porch where the concrete has collapsed.
- In the northeast corner of the foundation, the octagonal ceramic tile has severe cracks throughout. This is partially due to exposure to the elements, but also vandals attempting to remove the tile.
- The basement floor is covered with debris, vegetation, and concrete.
- In the basement, patches of plaster covering have separated from the masonry block walls.
- Much of the concrete on the basement walls and ceiling is spalling, which has left rebar exposed. This could be caused from flooding, which occurs annually.
- Soiling has occurred on the basement walls from flood waters and ground water leaching up walls. This condition will not only cause algae growth, but also mold and fungus.
- The wrought iron on the perimeter fence has recently been replaced and is in good condition. However, cracks have developed in several areas

near anchor points of the fence posts.

General Store

Originally, the general store at this location was a white wood frame structure that had a hipped roof. In 1918, Joe Miller decided to build a larger general store. This was a challenge due to the fact that many of the ranch hands were overseas fighting in World War I. Joe enlisted the help from an acquaintance on the east coast. Austrian Prisoners of War were brought in from the east to not only help build the new larger general store, but also help with the farming and ranching.

Examination of historic period photographs indicates that changes were made to the rear of the general store, although the exact purpose of the addition is unclear. The foundation that is seen today is smaller than the actual footprint of the store. From the back of the existing foundation, the store extended approximately another 10-12 feet which can be seen in photographic evidence. Sometime in the 1920s, a crude wooden addition was constructed at the rear of the store.

The only changes to the façade of the building was signage on the lower half. The 101 Miller Ranch medallion in the center of the parapet and the embossed "Office" and "Store" remained the same throughout the years.

The store provided provisions to employees, but also provided to the public fresh meat, produce, and dairy goods that were produced on the ranch. Visitors to the round-up could stop in and purchase old west memorabilia to remember their trip. The general store took both the Federal dollar, but also monetary notes and coins produced on the ranch in exchange for goods.

In the early 1920s, the grounds in front of the store were paved and a gas pump island was installed. The two pumps were supplied with gasoline produced on the ranch. Pump attendants provided full service to automobiles that were fueled.

The general store and gas pumps not only served the employees and ranch hands, but visitors to the ranch and the surrounding community.

In the mid-1980s, the general store burned down. All that stands is the vault and two partial pillars of the front porch. Photographs indicate the vault was actually just past the center of the building and in fact the foundation should extend another 8-10 feet.

The walls of the bank, office, general store, stairwell, and back room are visible in the foundation. Remnants of the red and white octagonal tile floor are visible in the hall way and room that was probably the bank.

The foundation of the general store is in poor condition. Much of deterioration is caused by the exposure to the elements.

Maintenance Conditions

- Large river rock was used as aggregate in the concrete forms of the pillars. It appears that the pillars were constructed by placing the large river rock in the forms and then filling them with a concrete mix. Over time the concrete eroded away, leaving the rock and rebar exposed.
- Cracks in the foundation have been patched with an unsympathetic mortar mix. Large sections of concrete have broken and now have soil and vegetation in its place.
- Across the front of the porch are patches of tar. This could be remnants from the fire that occurred in September 1987.
- Remnants of the octagonal floor tile and glazed fireplace hearth are intact although areas have been damaged by vandals attempting to remove the tiles. Bricks from the fireplace lay in rubble.
- The vault remains intact but has unsympathetic patchwork on the east and south sides. Large cracks have formed around the whole structure and pieces of rebar protrude from the west side. The original stucco layer remains on the south side of the vault, but has several cracks forming. In the upper left and lower right corners of the south wall, patches have broken off. Unsympathetic fill with mortar have been applied on the lower cracks. The top of the vault has vegetation and rubble from the second floor.
- At the rear of the foundation, a metal pipe is visible beneath the foundation. There is a break along the pipe angling towards the front corner of the vault. The portion that is visible shows signs of corrosion being exposed to the elements.
- In several areas, the ground has eroded under the foundation. Rain and/or flood waters are a possible cause of this.

Power House and Silos

The Power House, two silos, and granary were constructed at different times. Through archival photographs, the Power House and Corn Seed Storage were built circa 1905. The Power House originally was a rectangular structure with a center door flanked by a window on either side. The Corn Seed Storage was located directly west of the Power House. It appears that the Corn Seed building was expanded on the second floor by using various materials.

The large grain silo was constructed circa 1914 immediately south of the Power House and was equipped with a cistern or water tower on its upper portion. Shortly after the large silo was constructed, the smaller silo was built.

Adjacent to the Power House and silos is a shower house, which was constructed after the ranch operations ceased. It is estimated that the shower house may have been added in the 1950s.

In comparison between historic photographs and field assessment, changes have been made to the design of the Power House. The window on the south side of the east façade was converted into an entry and the window on the north side was blocked in using concrete blocks. The south façade window has been blocked in using concrete block, while the north façade has an enlarged opening. The west façade is based strictly on field assessment due to lack of photo documentation on that façade. It is probable that the west façade was a solid wall and the current openings were added at a later time. It is unknown as to the reason for these changes, but there may have been a change in building's usage from the Power House.

The large and small silos are constructed of reinforced concrete and with crenellation detailing on the top. The large silo had a ladder on the side, which is partially still intact. Both silos are currently empty.

The adjacent shower house is a rectangular concrete block building with a stucco finish. The roof is missing, as are the door and window glazing, two partial and one complete wall remain; two metal awning window frames and sash are still present. It should be noted that this building is not within the period of significance of the NRHP Historic District, and has been in the process of being dismantled by the 101 Ranch Old Timers Association.

Maintenance Conditions

Power House

- The Power House roof retains the original metal shingles. Damaged shingles from the east side have been replaced with shingles on the west side. However, the replacement shingles on the west side are unsympathetic to the design.
- Cracks have occurred on the areas where openings have been altered.
- On the interior, the south side of the ceiling has a large hole, which reveals damaged trusses.
- The drain on the south side is clogged.
- The interior plaster is deteriorating leaving concrete block and metal reinforcement exposed.

Silos

- The large silo has severe bands of spalling around the perimeter.
- Rebar is left exposed where concrete has deteriorated.
- Delamination has occurred throughout the whole silo, but especially in the areas where the concrete has failed.
- The original ladder is deteriorating. From the ground level, it appears that there is dry rot.
- The small silo has similar spalling and delamination as the large silo.
- Soiling has occurred near the base of the silo.
- Unsympathetic patchwork has been done on the perimeter of the silo.
- Bullet or pellet gun holes are on the left corner of the small silo.

Shower House

- The shower house walls are in poor condition, with areas of spalled concrete and numerous cracks. One wall and portions of two other walls have been dismantled.
- The roof is missing, as are the glazing and door.
- The foundation slab is present.

Cattle Barn Complex

Through the examination of historic photographs, several changes to the Cattle Barn Complex can be documented through the years. The exact date of construction is unknown, however it is believed that they were constructed in the early 1920s based on aerial photographs. Originally, the creamery was a very, large T-shaped barn that was covered in stucco. It appears in photographs that the west side of the creamery and the east side of the cattle barn are adjoining, however, it is likely that there was a small walkway between the barns. The large dairy barn was built later.

The Cattle Barn Complex is in poor condition. The site was difficult to access due to the overgrown vegetation. The Cattle Barn is L-shaped with plaster stucco siding and wood shake shingles on a hipped roof. A large metal vent is on the south wing of the barn. The Creamery has been replaced with a smaller, one-story rectangular barn. The Creamery has stucco over concrete block walls with a corrugated metal gable roof. The Dairy Barn is a large, two-story rectangular

barn with a wood shake shingle on a hipped gable roof. The Creamery and Dairy Barn are attached by a corrugated metal addition.

Maintenance Conditions

Cattle Barn

- The primary maintenance concern of the Cattle Barn is the collapsed roof. The weight of the roof falling is causing the walls to collapse.
- Large cracks in the plaster have formed in the walls. On the east façade, there are holes that have been knocked out in the wall.
- There is significant overgrowth of vegetation surrounding the Cattle Barn, which could also play a factor in weighing the walls down.

Dairy Barn

- Due to overgrowth of vegetation and inaccessibility, the Dairy Barn was not fully accessed from the interior. However, visual inspection of the exterior indicates there is damage to the wood shake shingles of the roof.
- A tree on the south façade is causing plaster to crack, as well as the branches tearing shingles off.
- Heavy vegetation on the west and north façade is also damaging the siding and eaves of the roof.

Creamery

- The Creamery has a significant amount of vegetative growth surrounding the barn. Cracks have formed in the plaster stucco at the joints of the concrete blocks.
- The corrugated metal roofing is damaged. Rust has corroded the corrugated metal causing holes and gaps in the roof. In several areas, the edge of the roof is bent or broken exposing the wood frame of the barn.
- The foundation of the original creamery is still visible, however, it is covered with vegetation.
- There are cracks and areas where concrete has deteriorated in this foundation.
- The foundation on the east side is heavily covered in vegetation, as well as fencing debris, metal tubing, and barrels.

Worker's Housing

Located east of the former location of the cider mill (Appendix A, Phase 2 Map; Appendix C). The building appears in a ca. 1915 panoramic photograph, as well as

a ca. 1925 birds eye view. In these photograph, the house is a rectangular house with a hipped roof with wide overhanging eaves. The fenestration pattern cannot be discerned from these photographs, but a shed roof porch extends approximately one-third the length of the east façade at the north side. Based on current conditions the house evolved over the years. The aforementioned porch was enclosed and the east façade was added onto to form a kitchen addition. The roof was extended to cover the enclosure/addition. A hipped roof addition was made to the west façade. This is apparent from the visible intersection of the primary roof block and the roof of the addition. The dates of these alterations are not known.

Currently, the house is approximately 30 feet by 40 feet (Appendix C). It is covered with numerous materials, including wood lap siding, painted plywood, and stucco. The east façade currently contains one door and one window (boarded over) on the south side and two windows (one boarded over) on the north side. The south façade contains one window in the original block, and one door and one window in the west addition block. The west façade contains one window on the north side and one opening (boarded over) on the south. The north façade contains two windows in the original block, and two in the west addition block.

Maintenance Conditions

- Dry rot is rampant on the house. The lower portions of the siding, window and door frames, eaves and overhangs, and the roof.
- Several window openings are board-up with plywood, however, several have no covering.
- Cracks are visible in the center section of the south façade.
- The floorboards on the interior are dry, cracked, and in several areas are entirely missing.
- Water damage has occurred on the walls and floors in rooms where window openings are missing.
- Vandals have punched walls out in a room on the north side of the house.
- The kitchen windows has several bullet holes through it.
- The ceiling plaster in several areas has fallen.

Bunk House

By 1912, the Bunk House (also referred to as the Hotel) was constructed. It was a symmetrical, two-story, stucco building with a hip roof and full width front porch with a balcony above. The rear of the bunk house

also had a one-story frame full width porch at the rear with a shed roof.

All that remains of the Bunk House/Hotel is the foundation. The slab is roughly 25 ft by 90 ft.

Maintenance Conditions

- Concrete has spalled and broken in several areas.
- Concrete is shifting or parting on the west side of the foundation slab.
- Tree trunks grew into or through the foundation. (Note: these trees have since been cut down).
- Vegetation is growing in cracks and areas where walls once were.
- Due to flood waters, silt has filled in becoming level to the foundation.

Curing House and Circus Barn

The “elephant barn,” as it has been commonly called, was built as a curing house for sweet potatoes and other crops (Building No. 24). Located southwest of the Foreman’s House and northeast of the creamery, it was built in 1921 (*Daily Oklahoman* 1924). The building is a one and one-half story rectangular building with a gambrel roof. Oriented north-south, it measured approximately 54 feet wide and 106 feet long (Figures 60 and 61; Appendix A, Phase 3 Map and Photographs A44, 64, 66, 77, 111-112; Appendix C). It was constructed of brick masonry, with corrugated metal gable ends and roof. The floor slab (still extant) is concrete. Four iron rings in a line spanning 20 feet 8 inches are still present in the southeast portion of the floor. These rings are said to have been for the elephants’ restraining chains. Projecting from the ridge are five equidistant brick chimneys and three metal vents at the south side. In one historic photograph taken during the 1923 flood, which shows the north façade, it does not appear to have any entries but did have a shed roof addition. The west façade had five openings, but whether these were windows or doors is not clear. The south side featured two large double swing doors and five openings in the gable ends.

All that remains of the Elephant Barn is the foundation. The foundation slab is roughly 106 ft. by 54 ft. There are 4 large chain links that are still attached to the slab on the south side of the slab.

Maintenance Conditions

- Fencing debris is stored on the north side of the slab.
- Cracks have occurred on the foundation.

- Concrete has spalled and broken in several areas.
- Vegetation is growing around the chain links and in cracks of the foundation.

Hog Barns and Meat Packing Plant

Archival research failed to locate any historic photos of the hog barns and meat packing plant to provide details about these buildings. The barn does appear in aerial photographs by 1925.

The Hog Barns and Meat Packing Plant are located in the horse pasture on the southeast side of the site. All that is left of the buildings are foundations, which are overgrown with brush and vegetation.

Stalls of the large Hog Barn are still visible through the brush. Wood and metal remnants of the building are still present laying on the foundation.

The diamond patterned stamped in the concrete floor is visible on the smaller Hog Barn foundation.

Maintenance Conditions

- Concrete has spalled and broken in several areas.
- Vegetation is growing in cracks and areas where walls once were.
- Trees have grown through the foundation of the meat packing plant.

Monkey Cage

Located on the east side of SH 156, the Monkey Cage is often referred to as the jail. The construction date is unknown, but it appears in an aerial map dated circa 1925.

The shell of the Monkey Cage is all that remains today. The layout of the Monkey Cage is still visible. There was a large, rectangular open area at the entrance. The cage was located at the back of the building. Concrete blocks were on three sides with a wrought iron gate across the front. The cage was elevated approximately 3 feet in height.

At present time, the north, south, and east façades are rubble. The roof is missing, as is the upper portion of the west façade.

Maintenance Conditions

- Rubble from the walls and roof is surrounding the structure.
- The southwest corner of the building is pulling away from the front façade and leaning against a fence post.

Bear Den

Tony the Bear was famous at the 101 Ranch. He was usually chained up by the general store where employees and visitors could treat him to a soda. When trying to find shelter, Tony burrowed under the sidewalk leading to the Bunk house. In lieu of constantly repairing the sidewalk, a den was built for him to seek shelter.

The Bear Den is approximately 3 feet by 3 feet with an opening on the south side. The den is constructed of river rock and sealed with a Portland cement coating. The interior is open with a dirt floor.

Maintenance Conditions

- There is mortar loss in several areas of the den.
- The Portland cement is unsympathetic to the den and potentially damaging to surrounding material.
- Stones are missing from the lower east side of the den.

Alligator Pit

It was explained during field investigations that the pit was used to show alligators. There are no pictures showing the pit in use.

The Alligator Pit is a shallow concrete pit on the south east corner of the general store foundation. The edge of the pit is painted white.

Maintenance Conditions

- Soil has settled in the bottom of the pit, as well as vegetation.
- Cracks have occurred around the interior of the pit.
- Portland cement has been used to fill cracks in concrete.

School House

The School House provided an education for children of performers and employees of 101 Ranch. A few historic photographs were found showing the School House. Located just north of the river on the east side of SH 156, it was a small, wood frame building with an entry on the west façade.

Portions of the School House foundation remain visible near the river. A large slab can be seen on the southeast corner, as well as foundation walls on the west façade.

Maintenance Conditions

- Concrete has spalled and broken in several areas.

- Vegetation is growing in cracks and over portions of foundation.
- Trees have grown through the foundation.

School House Cellar

No background information is known pertaining to the storm cellar at the School House.

The Storm Cellar by the School House has a narrow stairwell leading into cellar. It is constructed of reinforced concrete and approximately 6 ft by 6 ft by 12 ft. There is a wood stove at the rear of the cellar.

Maintenance Conditions

- Concrete has spalled and broken in several areas.
- Cracks are in several areas around the cellar.
- The property owner recently cleared out debris and vegetation caused by flood waters.

Riverside Camp

The Riverside Camp area provided cabins for visitors who preferred not to stay in the Bunk House/Hotel. Located just north of the river, on the west side of SH 156, cabins and a dining hall were scattered amongst the trees. Few historic photographs were located of the area. In aerial photographs, the cabins appear to be long and one-room wide.

The foundation of a structure located in the summer camp area was uncovered during archaeological investigations. It is a large foundation with only pieces of the exterior wall exposed. On the northeast wall, there is a large square concrete and brick pad, which may have been part of a fireplace. Remnants of concrete, brick, and metal are found scattered around the site.

Maintenance Conditions

- Areas of the foundation that were uncovered during archaeological investigations were left exposed.
- Trees, brush, and vegetative overgrowth surround the area.
- Areas of foundation, which were already exposed are cracked or spalling.

Riverside Camp Cellar

In the Riverside Camp area, a large, concrete storm cellar was discovered during archaeological investigations. No background information is known pertaining to the storm cellar.

Maintenance Conditions

- Cracks have occurred throughout the concrete structure.
- Concrete has spalled and broken in several areas.
- Vegetation is growing in the interior of the cellar.

Round-up Arena Grandstands

The 101 Ranch is famous for their Wild West Show. Not only did they have a worldwide traveling show, but a permanent grandstand on the ranch. The foundations found were constructed in the early 1920s to hold the seating. The covered grandstands were L-shaped in the southwest corner of the arena. Surrounding the entire arena was a wood and metal fence.

The 101 Miller Ranch Round-up Arena is located on the east side of State Highway 156. Only a portion of the grandstand foundation is visible on south side. The west side was discovered during the archaeological investigation.

The foundation consists of three rows of 6 inch wide concrete in which the grandstands rested. There are a few areas where trees have matured. The portion of the grandstand that is still visible is in fair condition.

It is believed that portions of the original cable and hog wire fence is present fronting the east end of the southern grandstand.

Maintenance Conditions

- Areas of the foundation that were uncovered during archaeological investigations were recovered to protect the remains.
- Portions of hog wire fence are falling down and one portion is completely surrounded by a tree.
- The metal fence posts on the far east end of the arena are slightly corroded, but overall in fair condition.

Archaeological Resource Survey

The “below ground” or archaeological investigations utilized two different methodologies and also focused upon different areas. The first of these consisted of a geophysical investigation while the second utilized a more traditional archaeological survey. The geophysical work was situated in a large open area where historic photographic documentation indicated numerous structures were previously situated, but for which no physical remains were present. The intent was, therefore, to utilize a technological application that would efficiently identify anomalies representing the likely location of aspects of the site no longer visible. The archaeological survey took place in areas where physical constraints such as dense vegetation precluded the practical use of geophysical equipment.

The geophysical investigation consisted of a low-resolution reconnaissance survey of over 25 acres of the ranch area north of the summer camp and west of the White House using a GPS-guided magnetometer system, which was followed by high-resolution electrical resistance survey of selected areas. Geophysical fieldwork was conducted on May 16-19, 2011 by Archaeo-Physics, LLC under the direction of Geoffrey Jones. The following information is directly drawn from their report of investigations.

The results of the surveys show extensive patterning apparently associated with the historic occupation of the site. Detected features range from potential building foundations and possible smaller features (e.g. privies) to an extensive water distribution system. Although subsurface testing has not been performed, several visible foundations and diagnostic patterning of certain feature types support initial interpretations.

The archaeological survey was conducted over two field sessions in order to take advantage of the low vegetation present in the early spring months. During the episode of the first survey, conducted in March 2011, the ground was covered with low grasses in a woodland area of young and mature trees. A moderate amount of leaf debris covered the ground. Overall, the conditions allowed for good visibility to view exposed foundations. The second field session occurred in May 2011.

Three separate areas were subjected to the archaeological survey. These include the area of the Riverside Camp, the Round-Up Grandstands, and the School House (Figure 3). The survey was conducted at 15 m intervals with much of the areas surveyed at 5 m intervals. Shovel tests were judgmentally placed by evaluating the conditions in the field such as distance from roads, concentration of artifacts observed on the surface, and changes in topography. Within the Riverside Camp, there were small push piles or burrowing animal

back dirt piles approximately 1-2 m in diameter providing greater indication of the subsurface potential.

GEOPHYSICAL SURVEYS

The results of geophysical surveys of archaeological sites are presented graphically. This is done because anomalies of cultural origin are generally recognized by their pattern, rather than by their numeric values alone. When rendered graphically, we can better recognize cultural and natural patterns and visualize the physical phenomena causing the detected anomalies.

Interpretation of survey data must be a cooperative process involving historians, geophysicists, and archaeologists that are familiar with the specific cultural context of the site being studied. An understanding of the geological context of the survey area is also very important, and consultation with a geomorphologist can be important in understanding survey results.

Two types of geophysical investigation were performed, including low-resolution reconnaissance survey of a large portion of the site using a GPS-guided magnetometer system followed by high-resolution electrical resistance survey of selected areas. The areas investigated with each of these instruments are illustrated in Figure 66 below.

In areas that have been surveyed with more than one type of instrument, as in the high-resolution survey areas at the 101 Ranch site, the results of the different surveys should be carefully compared. Correlations between data sets (or lack of correlation) can be as important as either data set by itself to our interpretation of the site. These potential correlations are enhanced through high contrast and low contrast presentations in subsequent figures showing magnetic survey results (cf. Figures 67 and 68).

The interpretations offered in this report are to be considered preliminary. Review by archaeologists familiar with the cultural context of the site and the range of expected feature types and intra-site patterning may result in different or elaborated interpretation. Verification or refutation of preliminary interpretations and insights gained into feature composition and geology can allow revised or elaborated interpretations, and do so with greater confidence.

MAGNETIC SURVEY RESULTS

Magnetic survey results are presented in Figures 67 and 68, and interpreted in Figure 69.

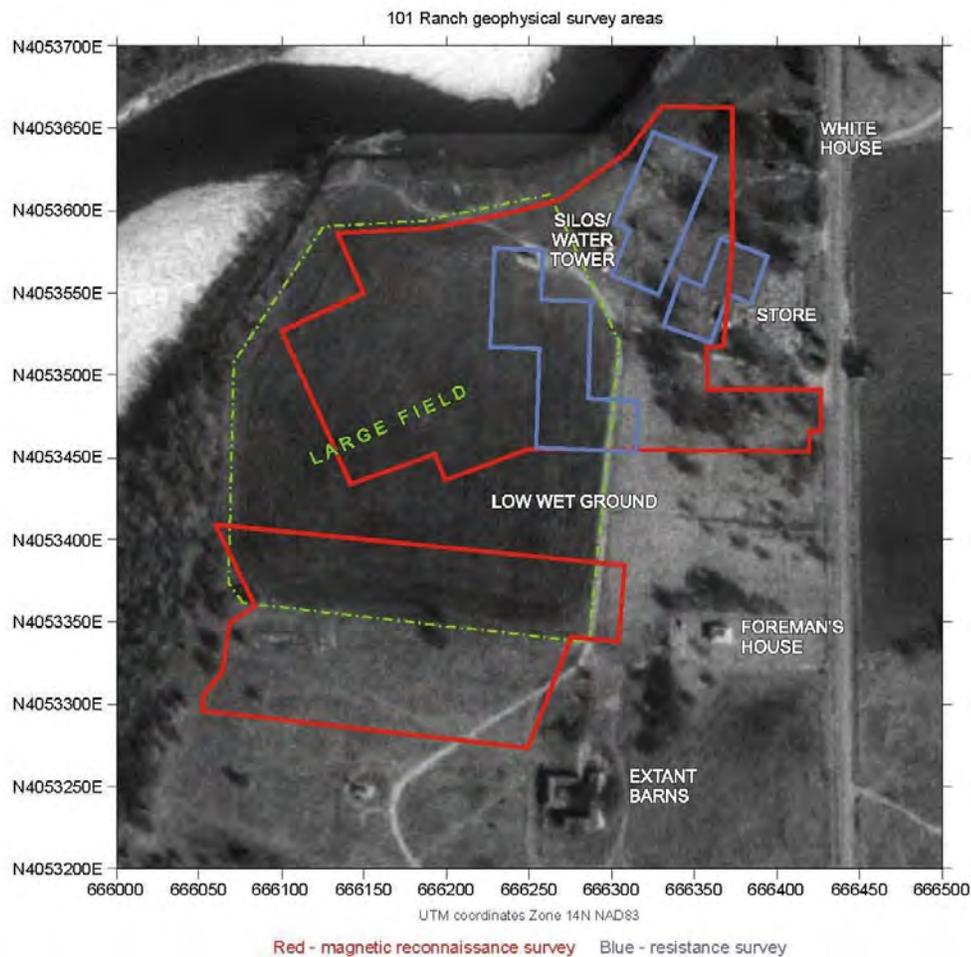


Figure 66: Areas investigated with the GPS-guided magnetometer (red) and high-resolution electrical resistance survey (blue) at 101 Ranch Historic District.

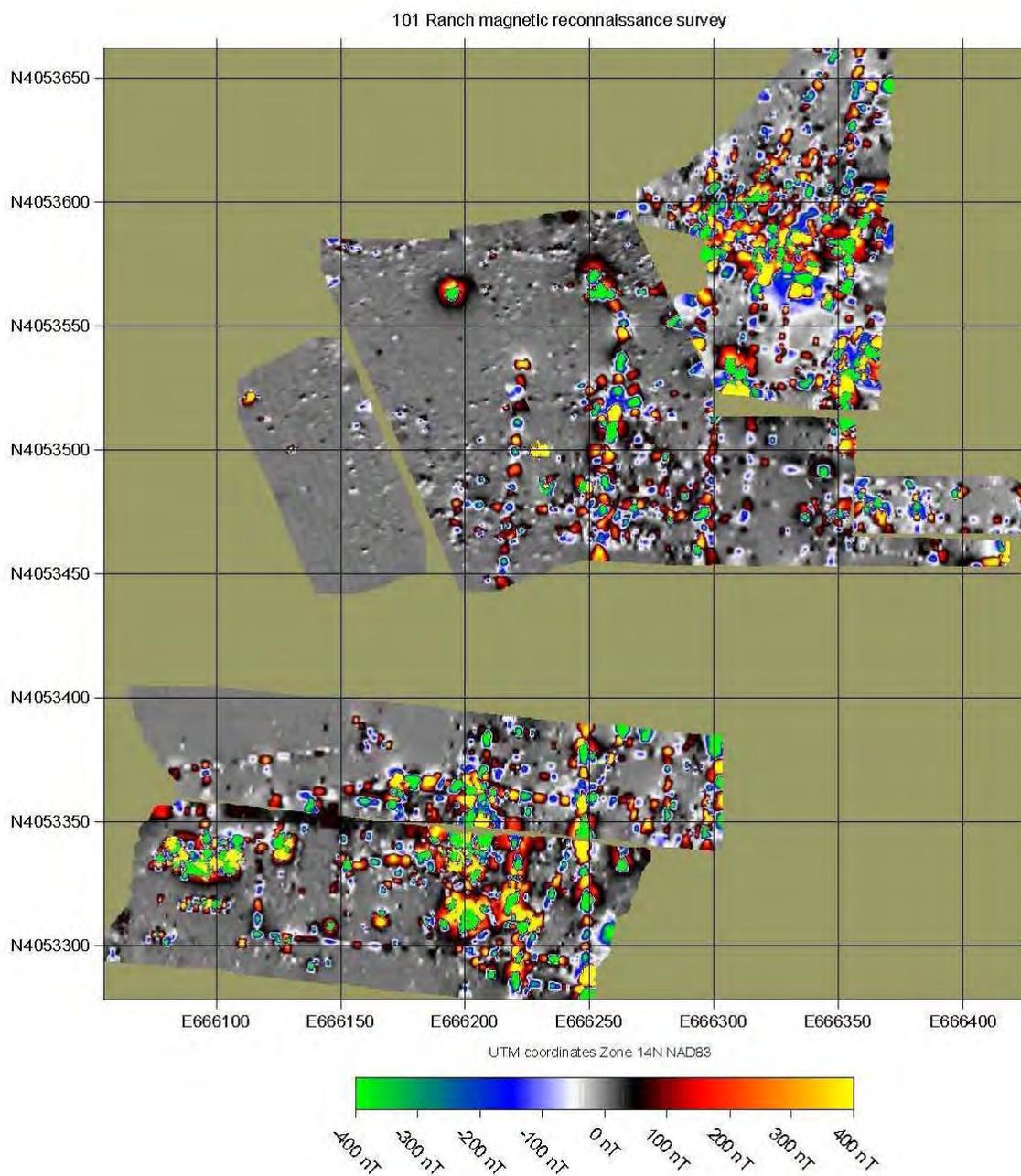


Figure 67: Magnetic survey results (high contrast): The natural magnetic background is relatively uniform, expressed as values near zero (medium gray) in this plot. Positive and negative deviations from the mean can generally be assumed to be cultural. In general this dataset is dominated by ferrous metal, which occurs in great quantities. Ferrous metal objects are typically expressed as bipolar anomalies - having both positive and negative poles - which are pervasive throughout much of the area surveyed. Ferrous metal (iron and steel) is very highly magnetic, and can be assumed to be the source of most of the variance in the colored range of the scale, although fired brick architecture is another possible source. Weaker anomalies in the white-gray-black range of the scale may be caused by smaller masses of metal, especially if the anomalies are spatially small. If these weak anomalies are larger and more diffuse, they may be caused by organic enrichment, soil disturbance, non-reinforced concrete, or a variety of cultural and natural phenomena. This type of subtle variance is difficult to distinguish in this dataset, which is dominated by very high amplitude “clutter” caused by ferrous metal. Another source of magnetic anomalies can be burned materials, including rock and soil. Anomalies caused by burning can vary in strength from very weak to relatively strong.

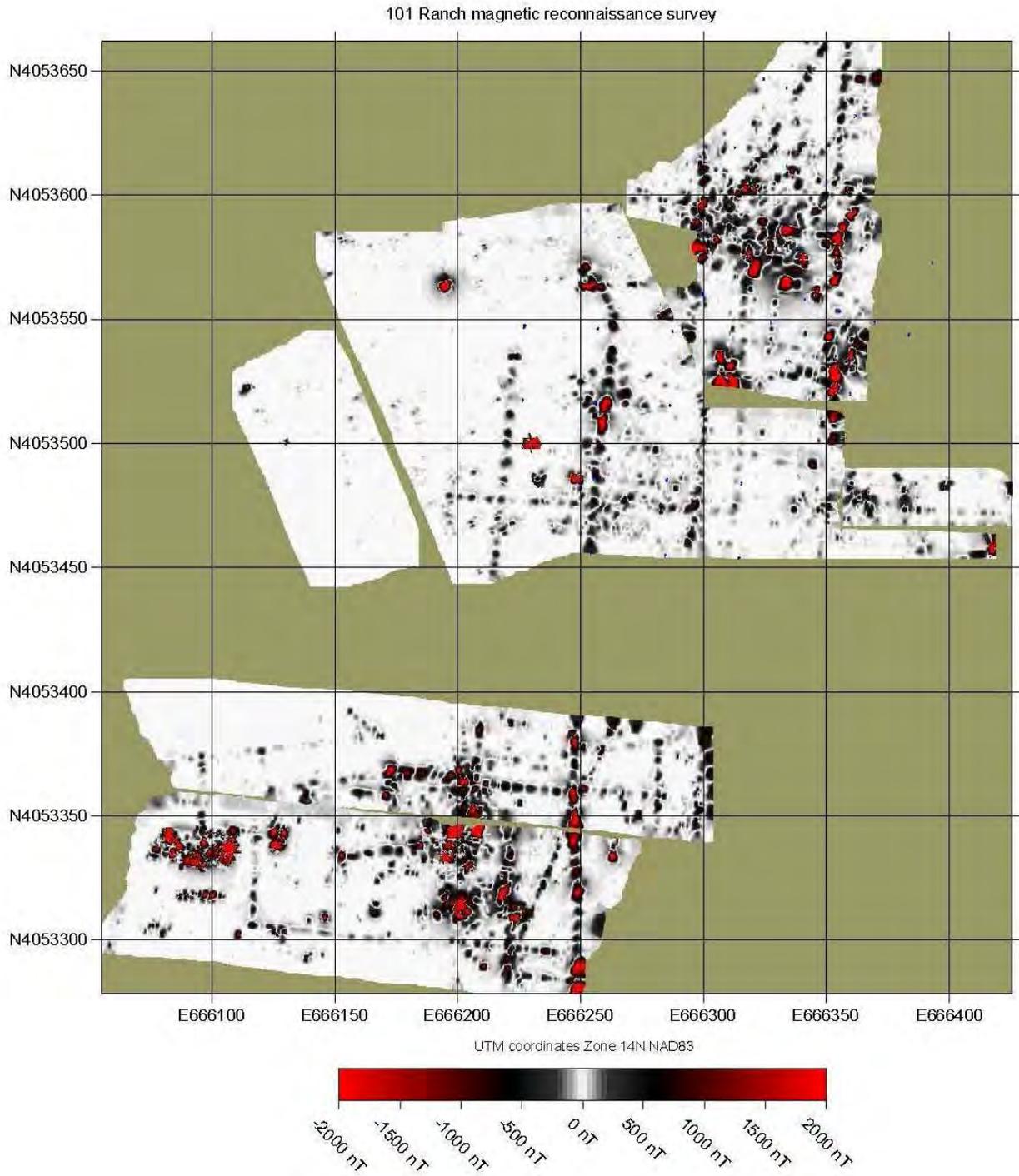


Figure 68: Magnetic survey results (low contrast): In this alternate plot, rendered in lower contrast with a simplified color scale, high-amplitude patterning can be more easily distinguished. In particular, the linear patterning of steel pipes is apparent. In this plot, positive and negative values are not distinguished, as both are almost certainly caused by ferrous metal in the range that is displayed.

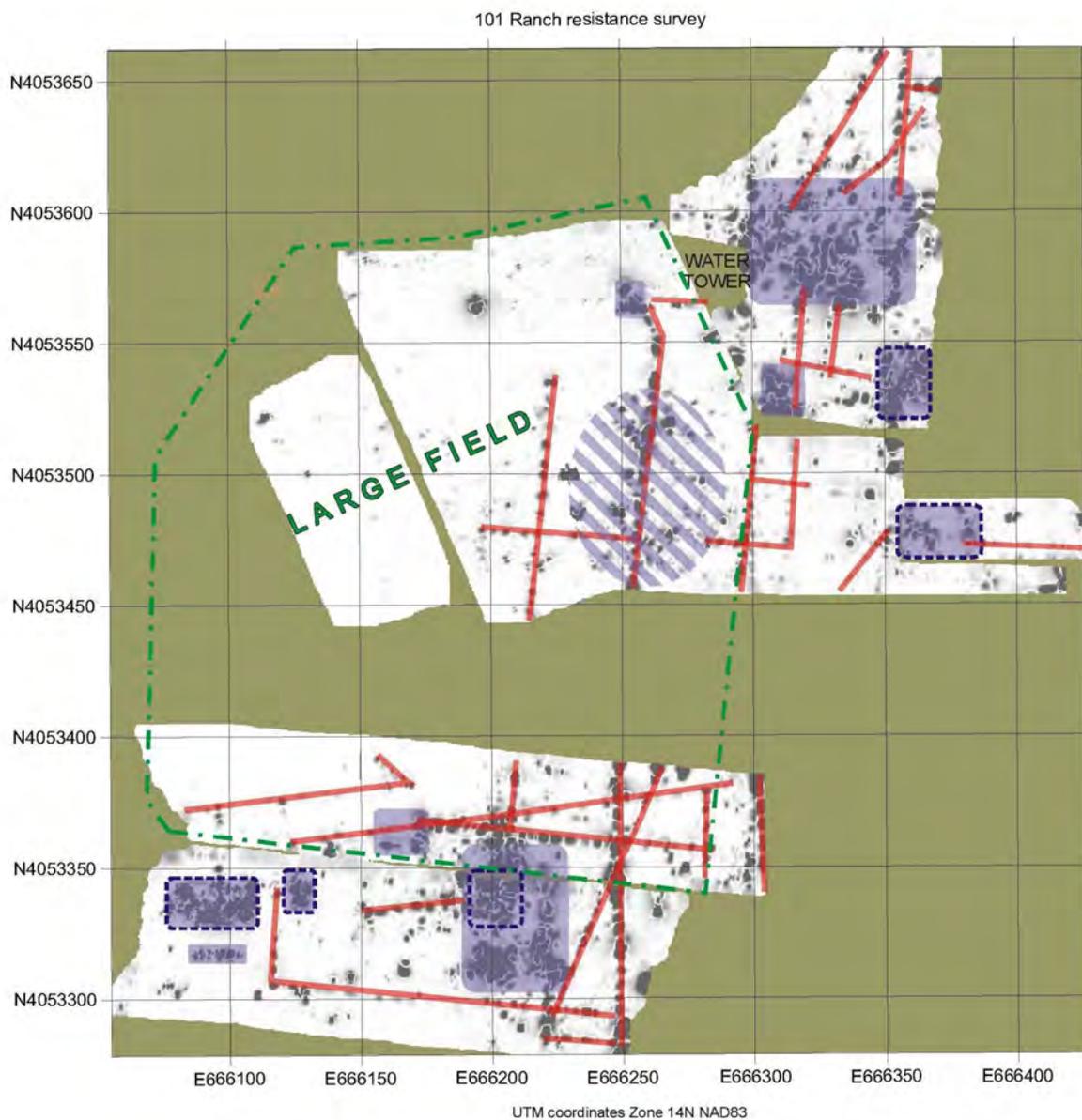


Figure 69: Interpretations of magnetic survey data: Red lines indicate steel pipes. These are quite distinctive and can be identified with high confidence. Some of these are undoubtedly part of a water distribution system centered on the water tower/silos, but some may also function as sewer, drain, or petroleum pipes. Stronger anomalies tend to indicate larger pipes, although depth is also a factor in anomaly strength, with deeper anomalies tending to appear weaker and more diffuse. These are an excellent indicator of the location of buildings and facilities.

Blue shading indicates suspected structures, groups of structures, dumps, or activity areas. Strong magnetic fields in these areas may be caused by ferrous metal debris or structural elements, brick architecture, or burning. Hatched blue fill indicates a sparser and less defined concentration of anomalies; dashed blue outlines indicate exposed foundations or slabs within the magnetic survey area. This patterning is more concentrated and more coherent outside of the area labeled “large field,” although historical records and the presence of pipes indicate that a number of structures were present in this area. It is suggested that foundations in this field were removed, perhaps to as part of reclamation for agricultural use.

Other anomalies with less distinct patterning that are not indicated here might also express features or artifacts of interest. Both strong and weak anomalies are potentially interesting, although in this case weakly magnetic phenomena are largely obscured by the ubiquity of ferrous metal. Modern and natural phenomena should also be considered as possible anomaly sources, including those marked here as suspected archaeological patterning.

RESISTANCE SURVEY RESULTS

Electrical resistance survey results are presented in Figure 70 and interpreted in Figure 71. In Figures 68 and 69, the resistance survey areas are presented in their actual positions and orientation relative to the UTM grid system.

Resistance survey was conducted in three separate areas, each with its own coordinate system. Figures 70-74 present the resistance survey areas in the context of their unique coordinate system and absolute color scales. UTM coordinates of representative grid corners are given in these figures.

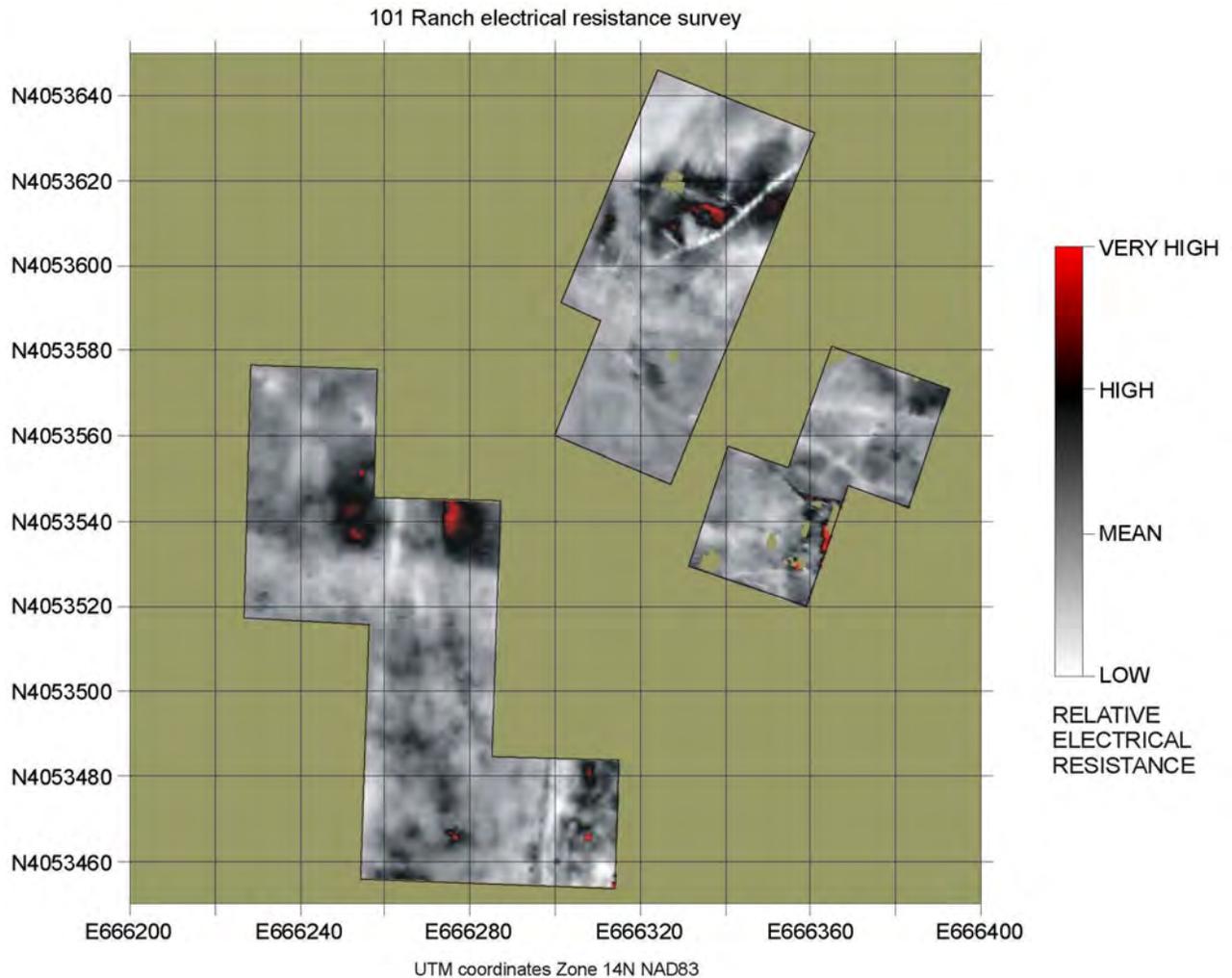


Figure 70: Electrical resistance survey results: Like the magnetic data, the resistivity of the natural geological background is relatively uniform, and is represented here as values near zero (medium gray). Positive (lighter) and negative (darker, with extremes in red) deviations from the mean are likely to be cultural. These can be caused by intrusive features (e.g., privies or foundations), soil disturbance or compaction, organic enrichment, and a number of other features and processes.

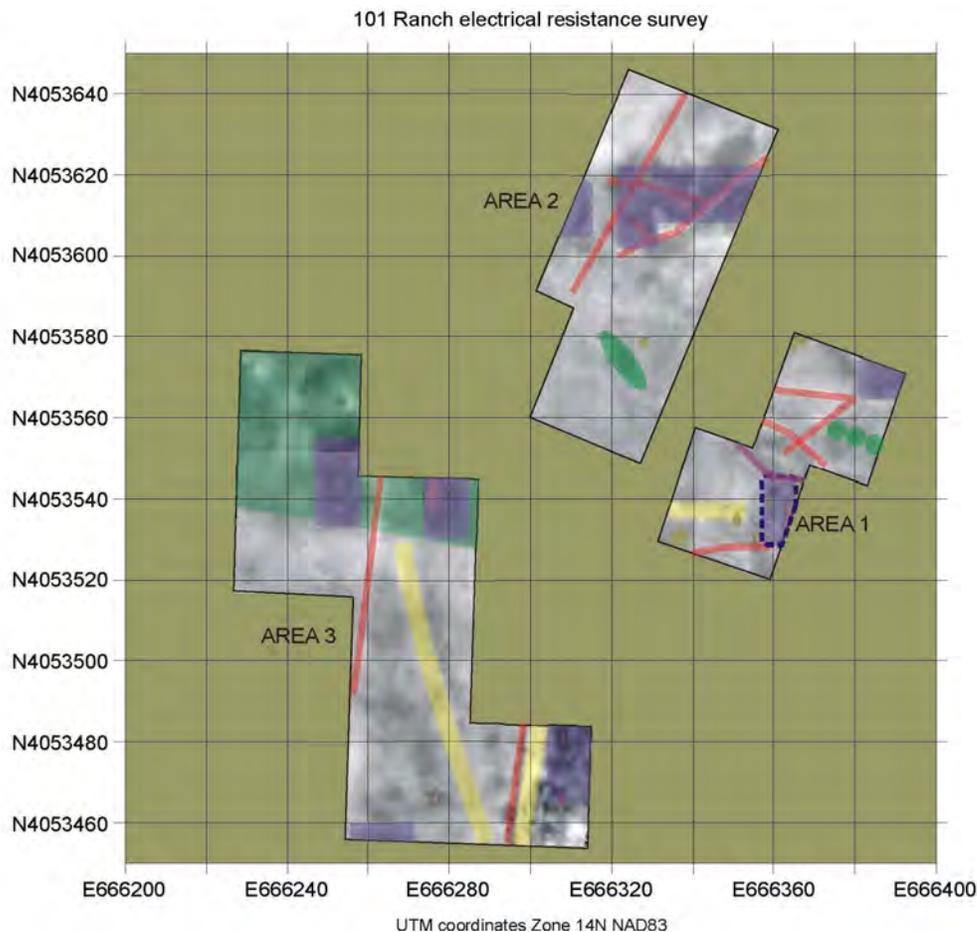


Figure 71: Interpretations of resistance survey data: Red lines indicate possible utility lines. At least some of these have correlates in the magnetic data. It is likely that disturbed soils in the trench are the main contributor to these anomalies, and the actual line could be electrical cables or other materials that are not magnetically detectable.

Blue shading indicates suspected structures. In general, these are poorly defined and may lack integrity, or may be caused by other types of features or disturbance. Dashed blue outlines indicate exposed foundations or slabs within the resistance survey area. Suspected structures are present, but less clearly defined in Area 3, which lies within the “large field,” perhaps indicating that foundations in this area were removed.

A purple line in Area 1 indicates a high linear resistance, thought to be caused by a buried sidewalk.

Green shading indicates other anomalies of possible interest. Those in Areas 1 and 2 are suspected intrusive features. The large zone indicated in Area 3 may be an activity area or very large structure, or it may be caused by a former field boundary. Of these, a cluster of three relatively small anomalies centered at N4053555/E666380 has perhaps the greatest archaeological potential. Although the patterning is ambiguous in terms of possible feature types, they are discrete and well defined, which may indicate good integrity. One possible source is privy pits, although other types of pit or intrusive feature are possible sources.

Broad yellow lines indicate subtle but coherent resistance lows that may indicate compacted soils of dirt roads or tracks.

Other anomalies with less distinct patterning that are not indicated here might also express features or artifacts of interest. Modern and natural phenomena should also be considered as possible anomaly sources, including those marked as suspected archaeological patterning.

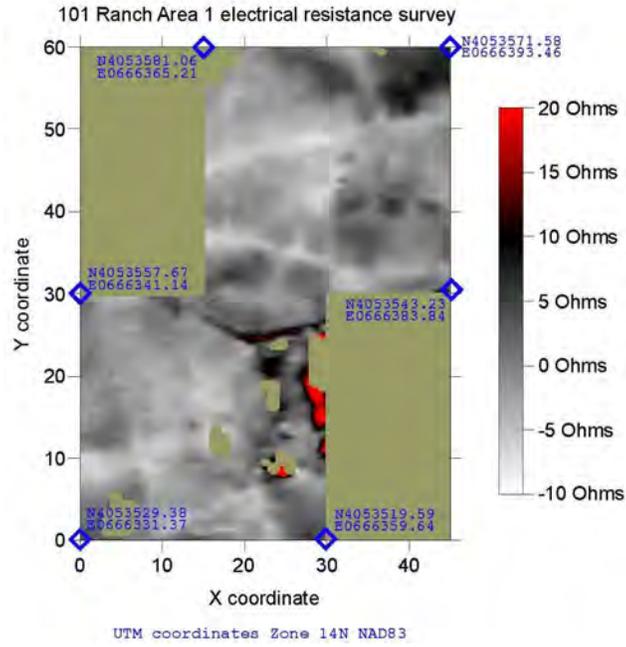


Figure 72: Electrical resistance survey, Area 1.

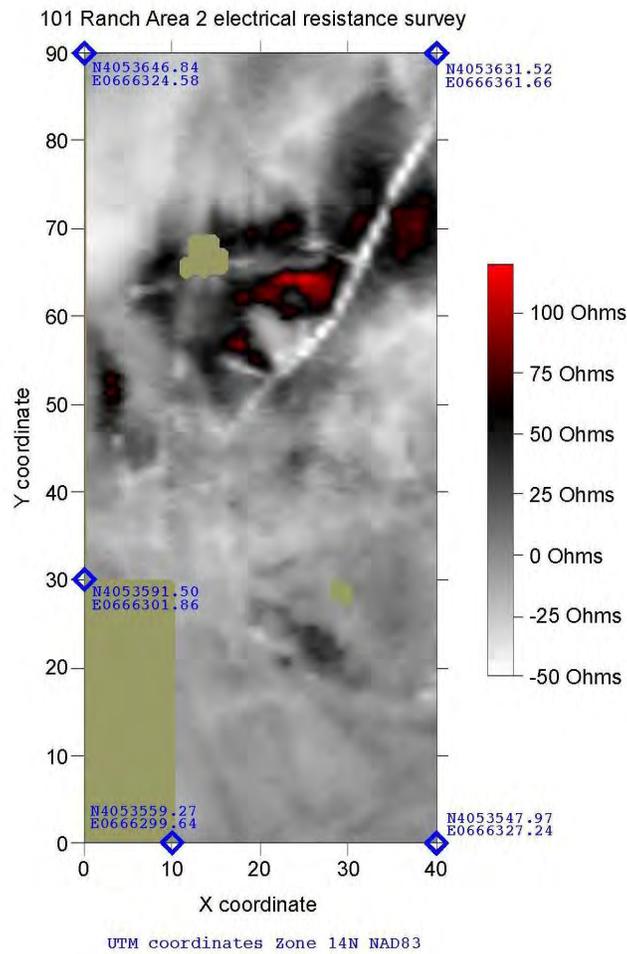


Figure 73: Electrical resistance survey, Area 2.

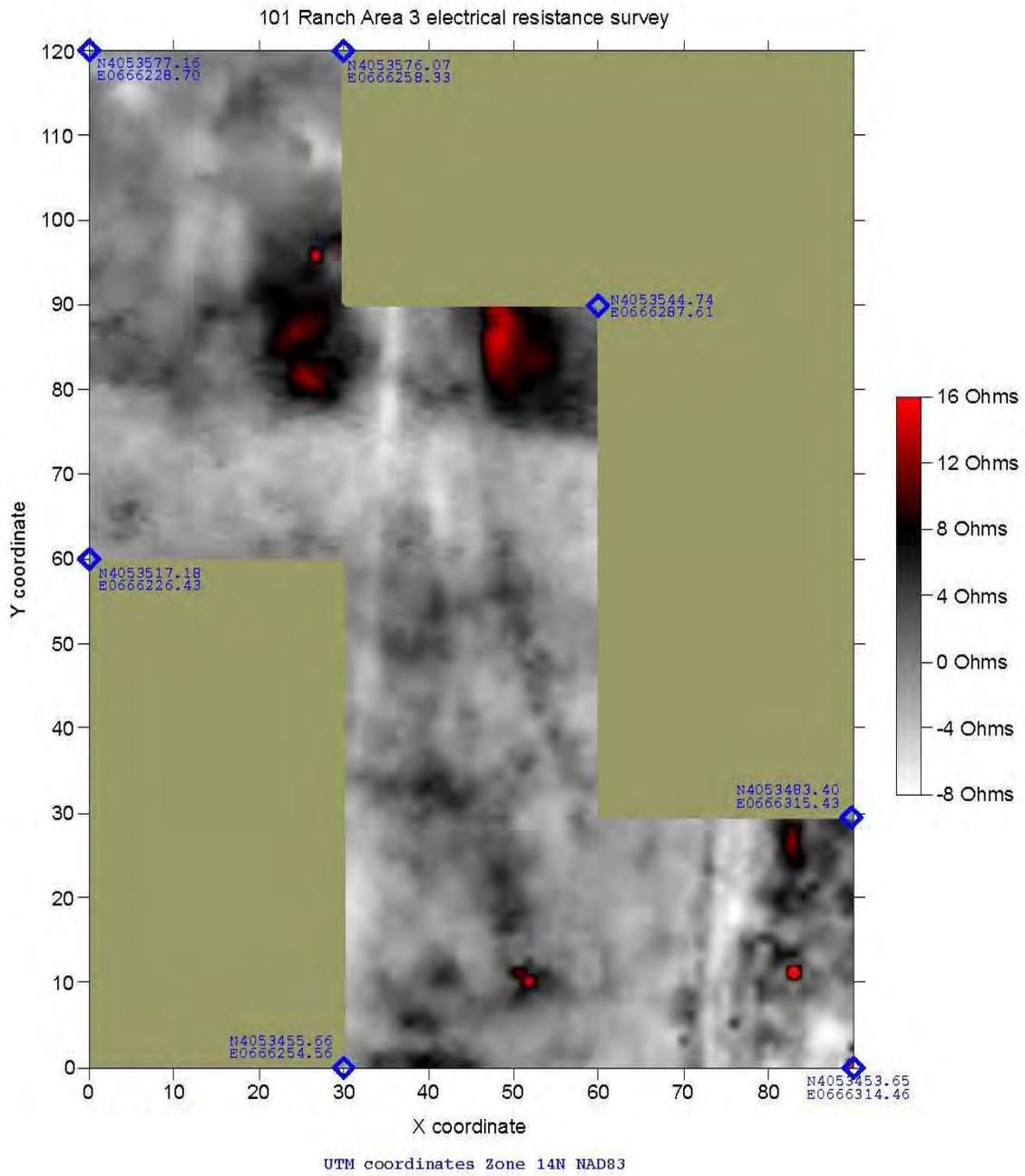


Figure 74: Electrical resistance survey, Area 3.

The geophysical survey did not detect evidence of intact foundations in the locations of the horse barns, mule barn, and round barn, and, in fact, the data indicate those foundations have likely been removed. However, the data also indicate the potential for subsurface features or deposits in other areas. In particular, the locations of worker housing between the White House remains and the silos, as well as the location of the first dining hall and ranch store exhibit a potential for subsurface features or cultural deposits. If these anomalies represent features or archaeological deposits associated with either worker housing or the original dining hall and store, they could be significant. Other areas of potential interest occur behind the ranch store remains in the area of the first horse barn and in the areas of the meat packing plant and hog barns. The resistivity data indicate potential features in Area 2, which is north of the ranch store remains. While historic photographs from the ranch do not indicate any structure at this location, the anomalies should be investigated prior to any ground disturbance. The other interesting finding from the geophysical data is the detection of the underground utilities that served the ranch headquarters complex.

Archaeological Survey

Riverside Camp

The Riverside Camp area (Feature 1; Appendix F) provided cabins for visitors who preferred not to stay in the bunk house/hotel. Located just north of the river on the west side of SH 156, cabins and a dining hall were scattered amongst the trees. Few historic photographs exist of the area. In aerial photographs, the cabins appear to be long and one-room wide. The physical remains located in this area include a storm cellar and house footers, along with a limited quantity of historic artifacts (Figure 75).

Storm Cellar

An intact concrete storm cellar measuring approximately 12 x 18 ft was located (Figure 76). It has a series of concrete steps over a distance of 8 ft leading down to the entrance. The roof of the structure is curved or arched. According to Joe Glaser of the 101 Ranch Old Timers Association, a tornado came through Ponca City in 1912 and the storm cellar was presumably built for protection from this type of threat.

House Footers

A concrete, brick, and rock exterior wall footing of a house was discovered in the southeast portion of the

Riverside Camp. The buried footings from the walls were uncovered (Figure 77). The full depth of the footings was not exposed. Much of the rock and concrete from this area was friable and would break apart easily. Also, pieces of burned wood were observed in the middle part of the east wall footing. These footers were approximately 6 in wide and approximately 30 to 40 ft long with a 5x6 ft slab. Some portions of the east and south wall footings were not visible and could not be located.

Diagnostic artifacts observed and recorded from the foundation included a glass Cory rod, bone toothbrush, a base to a small square bottle, and a door knob. Additional artifacts recorded include broken pottery, fragments of china (some with unidentifiable maker's marks), window glass, and metal pipes. The footings on the east and southeast part of the house showed the most evidence of burning.

Shovel Test Results

Seventeen shovel tests were excavated, with 11 positive for historic material (see Figure 75 and Table 1). The majority of shovel tests varied in depth from 75 to 100 cm bs with just two terminating at 45 cm bs (ST 8) and 55 cm bs (ST 11). Seven shovel tests contained charcoal flecking or chunks. Six of the shovel tests that contained charcoal were also positive for historic material. Five shovel tests did not contain any cultural material or charcoal (ST 4, 5, 6, 7, 16). The depth at which charcoal was noted is fairly consistent throughout the shovel tests at 25-60 cm bs (ST 1, 3, 8, 11, 12). Two shovel tests (ST 2, 9) encountered charcoal at a shallower depth of 10-15 cm bs.

Surface Finds

Five artifacts were recorded that were notable: a leather vest, a glass Cory rod, a bone toothbrush, a metal doorknob, and a small bottle base fragment. Four of the five artifacts were from the area of the house footers at the Riverside Camp.

After conducting a product research, it was determined that the leather vest has only been produced since 1991. It is therefore not historic or otherwise associated with the 101 Ranch.

The bone toothbrush was located about 15 cm near the west-southwest corner of the footers. The majority of the toothbrush was recovered. It is approximately 6½ inches long and a portion of the base was missing around part of the hanging hole. Similar bone toothbrushes were made from a cow femur (Mattick 1993). There were three rows of bristles which are no longer present and would probably have been swine hair. The words: "Hard; Pro-phy-lac-tic GUARANTEED; Made in U.S.A.; Florence Mfg. Co.; A CLEAN TOOTH

NEVER DECAYS” are printed on the handle (Figure 78).

The Florence Manufacturing Company got its start experimenting in a crude, brittle plastic made from resin, wood fibers, and shellac. This early plastic was used in the manufacturing of buttons, jewelry cases, revolver cases, and daguerreotype cases. It was not long before daguerreotypes were replaced by photographs leaving the company struggling to develop a new successful product. One day, an employee took the daguerreotype case, affixed a handle and attached bristles to one side and developed the new direction the company would go -- the brush business. Florence Manufacturing Company created hair brushes, hand brushes, military brushes, lather brushes, and toilet brushes. By 1884, the company began producing toothbrushes. Early toothbrushes were made of bone with holes for bristles and a hole on the end to hang (Historic Northampton Museum and Education Center 2011).

The Cory rod is the upper portion of the handle, rod, and valve/strainer. The lower half of the rod has been

broken off. Three United States patent numbers are embossed on the rod, as well as the phrase “CORY ROD” (Figure 79). Patent numbers 1,927,287; 1,935,587; and 1,931,076 were for vacuum type coffee makers designed by the Macbeth-Evans Glass Company in Charleroi, Pennsylvania. Founded in 1899, Macbeth-Evans Glass Company merged with Corning Glass Works in 1936. Patent number 1,927,287 was issued to Raymond W. Kell and Charles D. Barth on September 19, 1933 (Kell and Barth 1933a). Kell and Barth wanted to create a coffee brewing method utilizing glass parts rather than brass or cooper. The valve/strainer portion was designed with a slightly rough surface “in order to insure that there will not be a perfectly fluid-tight fit” while keeping the rod in place by gravity alone (Kell and Barth 1933a). Patent number 1,931,076 was issued to Kell and Barth on October 17, 1933 (Kell and Barth 1933b). They submitted modifications for their previous patent on the vacuum type coffee maker. Patent number 1,935,076 was issued to Henry H. Blau on November 14, 1933 (Blau 1933). Blau’s patent was a modification of the September 1933 Kell and Barth

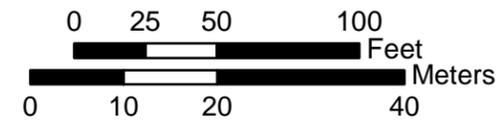
Table 1. Shovel Test Results

Shovel Test Number	Depth of Shovel Test	Materials Recovered
1	75 cmbs	2 nails, 5 glass fragments, charcoal
2	80 cmbs	Charcoal
3	80 cmbs	21 glass fragments, 2 ceramic fragments, 1 brick fragment, 2 metal fragments, charcoal
4	75 cmbs	None
5	80 cmbs	None
6	100 cmbs	None
7	70 cmbs	None
8	45 cmbs	4 brick fragments, 1 metal caster, charcoal
9	75 cmbs	1 metal coupling, 1 glass fragment, charcoal
10	75 cmbs	3 porcelain fragments, 1 glass fragment
11	55 cmbs	2 glass fragments, charcoal
12	95 cmbs	3 glass fragments, 1 whiteware fragment, 1 metal fragment, charcoal
13	100 cmbs	6 glass fragments, 1 nail, 1 metal clip, 1 bone fragment, 1 ceramic fragment
14	100 cmbs	~30 metal fragments, 2 glass fragments, 1 nail
15	60 cmbs	None
16	90 cmbs	1 mason jar glass lid liner fragment
17	90 cmbs	1 crockery base fragment, 1 burned bone fragment

Figure 75
101 Ranch
Historic District
Kay County, Oklahoma
Archaeological Survey
River Camp Area
Feature 1



- Surface Find
- Positive Shovel Test
- ⊗ Positive Shovel Test with Charcoal
- ⊠ Negative Shovel Test with Charcoal
- Negative Shovel Test
- Estimated Feature Boundary



Source: ESRI Basemap: BING Maps Aerial 2012

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design. It should be noted that the Cory rod seems to postdate the use of the River Camp as a recreational camp.

The metal door knob is hollow, heavily corroded, and of unknown metal or origin. The small square bottle bottom is approximately 2 x 2 cm. The manufacturing marks on the base are from the Owens Illinois Glass Co., Toledo, Ohio, 1929 to 1954 (Toulouse 2001).

Photographs were taken of features encountered and GPS coordinates were recorded for each feature and cultural material observed on the surface. Shovel tests were conducted in the western part of the summer camp area outlined by ODOT. The western side of this boundary would have been the location of the summer camp houses. Photographs were taken of the cultural material observed on the surface and recovered from the shovel tests.

Pedestrian survey was conducted to locate the dining hall or club house that was used for the Riverside Camp. By using the historic aerials, it can be observed that a larger building sits on the south edge of the river camp complex. Although the specific location of the dining hall or club house features is unknown, the survey effort was to possibly locate any remains of the building which is still unidentified. The archaeological survey was therefore focused on an area between a barbed wire fence and the river. Pedestrian transects were spaced at 15-20 m intervals. Artifacts observed in this area included a Ball canning jar with a zinc screw on lid, a 3 x 3 ft box refrigerator, and modern debris of plastic and soda cans. No evidence of any structure was found.

Round-Up Grandstands

An archaeological pedestrian survey was conducted to locate and better define the Round-Up Arena area situated on the east side of SH 156 (Appendix C). The arena was initially identified by the 2008 ODOT survey. The current survey successfully located the footings, which were uncovered and mapped. The fence line and additional fence posts on the southeast side of the arena area were also mapped using a sub-meter GPS unit (Figure 80).

The arena area is located in a cow pasture which allowed for good visibility of the ground surface for exposed features. A large portion of the grandstand footings were exposed and URS archaeologists followed the footings by probing with metal rods to determine the termination points. Most of the buried portions of the footings were immediately below the ground surface at approximately 2-3 cmbs. The fence line and additional fence posts on the southeast side of the arena were also mapped using a GPS unit.

The above-ground, concrete grandstand footings are in

an 'L' shape configuration (see History of the Miller Family and 101 Ranch; Appendix for historic photos). The first grouping of concrete footings is positioned east-to-west and the second grouping is positioned north-to-south. Both groupings meet at the southwest corner. Within this 'L' shape configuration, three parallel linear concrete footings were positioned which originally supported the grandstands (Figure 81). The grandstand footings have a clearly defined termination point as the ends of the footings have beveled edges. Midway in the north-to-south footing axis, a gap is evident and has a large concrete slab. This slab may have been a walkway into the grandstand area or the location of a staircase leading to the upper grandstand benches (Figure 82). After the break in the footings a modern two-track road crosses the feature. Approximately 0.60-0.90 m (2-3 ft) north of the two-track, the three footings terminated. From the gap and slab area the length of the concrete footings were approximately 50 m (164 ft) in length.

The east-west axis of the grandstand linear footings was predominantly exposed, with less exposure on the eastern terminus. Portions of the exposed footings were as thick as 0.30 m (1 ft). The eastern terminus of the three grandstand footings was located by probing and then excavated to expose the end of the feature. By examining the vegetation in the southern area of the grandstand, the footings are clearly visible immediately below the surface. The southern grandstand footings all terminated at the same distance towards the east.

Located midway to the east on the east-west axis, a two-cable fence extended from the grandstand footings. The cable is identical to a partially exposed buried cable that was observed in the summer camp area. East of the end of the footings, the two-cable fence and hog wire were still standing (Figure 83). A row of seven metal fence posts are perpendicular to the cable fence and two of the posts had the tops bent under, possibly from sledge hammers pounding the posts into the ground. Further along the east and south ends of the grandstand area, large deposits of sand and silt are visible.

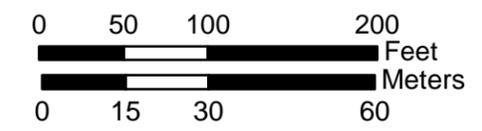
No artifacts were observed on the surface or while uncovering the footings with the exception of a large concrete block that had "101 Ranch" inscribed in it. This was found near the southwest corner of the grandstand support between the middle and outside footings (Figure 84).

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Figure 80
101 Ranch
Historic District
Kay County, Oklahoma
Archaeological Survey
Round-Up Grandstands
and School House Area
Features 2 and 3



- ⊕ Fence Post
- Grandstand Foundation
- Fence Line
- Estimated Feature Boundary



Source: 2010 NAIP Photography, Kay County, Oklahoma

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<p>Figure 81</p>	<p>DATE: 2011</p>	
<p>Direction Photo Taken: east</p>		
<p>Description: Photograph of the east-west concrete grandstand footing remnants.</p>		

<p>Figure 82</p>	<p>DATE: 2011</p>	
<p>Direction Photo Taken: north</p>		
<p>Description: Concrete slab of unknown purpose. It is situated almost center of the north-south concrete grandstand footings.</p>		

Figure 83	DATE: 2011	
Direction Photo Taken: southeast		
Description: Photograph of the hog wire and wood post fence that once surrounded the round-up arena.		

Figure 84	DATE: 2011	
Direction Photo Taken: southeast		
Description: Photograph of "101 Ranch" scratched into a portion of the concrete grandstand footing.		

School House

A pedestrian survey was conducted around the School House area (Appendix F). The locality surrounding the school is woodland with short to medium grasses and the features were slightly covered. No historic artifacts, other than building remnants, were observed on the surface. Photographs documented the features and end points of the foundation and corners were mapped using GPS (Figure 85-88).

The school house was used by the children of performers and employees of the 101 Ranch. A few historic photographs were found showing the school house. Located just north of the river on the east side of SH 156, it was a small, wood frame building with an entry on the west side. Portions of the school house foundation remain visible near the river. A large slab can be seen on the southeast corner, as well as a portion of the foundation on the west side, measuring approximately 20 x 30 ft.

A storm cellar and cistern were also recorded with the school house. There is a narrow stairwell leading into the cellar. It is constructed of reinforced concrete and approximately 10 x 17 x 12 ft. There is a coal stove at the rear of the cellar.



Figure 87	Date: 2011	
Direction Photo Taken: east		
Description: Cellar found near the school house footers.		

Figure 88	Date: 2011	
Direction Photo Taken: east		
Description: Cistern found near the school house footers.		

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Summary and Recommendations

On behalf of the Oklahoma Department of Transportation (ODOT), URS Corporation (URS) conducted a geophysical, archaeological, and historic structures survey of the National Register of Historic Places (NRHP) 101 Ranch Historic District near Ponca City, Oklahoma. The 2008 Memorandum of Agreement (MOA) between the Federal Highway Administration (FHWA), ODOT, and the Oklahoma State Preservation Officer, stipulated that in order to mitigate the adverse effects of a bridge replacement on Oklahoma State Highway 156 (SH 156) over the Salt Fork of the Arkansas River and the modifications to a historic road cut feature just west of the bridge that was the former ford and ferry road used in the early days of the Ranch, a survey be conducted to document the resources at the 101 Ranch. This effort provides data concerning the resources within the 101 Ranch Historic District and gives recommendations for further studies and identifying contributing and/or non-contributing resources to the 101 Ranch Historic District.

A geophysical survey was used in this investigation to rapidly produce a site-wide map of large-scale patterning and to identify areas of interest for further investigation. Rapid coverage of the large areas was accomplished by the use of a GPS for guidance and spatial control, and by lowering sample densities. The geophysical investigation consisted of 25 acres of the Ranch area north of the river camp and west of the White House. The archaeological survey was conducted over the entire river camp, round-up grandstands and the school house areas consisting of 25 acres. Shovel tests, probes and photographic documentation were conducted by evaluating the conditions in the field. The building inventory was conducted of the remaining structures and foundations which consisted of seven building ruins and six foundations and/or slabs. Upon completion of the field work, an analysis of historic photographs and maps were conducted to date, locate the resources, and document any changed or modifications to the resources.

Recommendations

Archaeological Resources

Three previously unrecorded resources located within the NRHP 101 Ranch Historic District were evaluated to determine whether they were contributing elements to the existing district. These resources are:

- School House
- Round-Up Grandstands
- Riverside Camp

For the purposes of the archaeological pedestrian survey of the three areas within the 101 Ranch Historic District, the archaeologists based their recommendations on the existence of the historic artifacts observed, building foundations located within the Riverside Camp and school house areas, and the location of the footings which supported the round-up grandstands. Sufficient data was collected at the school house area and round-up grandstands to determine that they are contributing elements to 101 Ranch Historic District.

This investigation did not provide sufficient information to determine that the Riverside Camp is a contributing element to the historic district. There is potential for intact features and deposits, but it has not been established that the observed foundation and cellar were present when the area was used as the Riverside Camp. The investigation establishes the presence of intact features in the area, but their association and function with the Riverside Camp are unknown. As such, the archaeological remains located here do not presently demonstrate the ability to yield significant information about this aspect of the NRHP 101 Ranch Historic District. It is recommended that further archival and subsurface investigations be conducted prior to any future ground disturbance of the area in order to evaluate the Riverside Camp as a possible contributing element to the district.

The geophysical survey did not detect evidence of intact foundations in the locations of the horse barns, mule barn, and round barn, and, in fact, the data indicate those foundations have likely been removed. However, the data also indicate the potential for subsurface features or deposits in other areas. In particular, the locations of worker housing between the White House remains and the silos, as well as the location of the first dining hall and ranch store exhibit a potential for subsurface features or cultural deposits. If these anomalies represent features or archaeological deposits associated with either worker housing or the original dining hall and store, they could be significant. Other areas of potential interest occur behind the ranch store remains in the area of the first horse barn and in the areas of the meat packing plant and hog barns. The resistivity data indicate potential features in Area 2, which is north of the ranch store remains. While historic photographs from the ranch do not indicate any structure at this location, the anomalies should be investigated prior to any ground disturbance. The other interesting finding from the geophysical data is the detection of the underground utilities that served the ranch headquarters complex.

Subsurface investigations performed prior to ground disturbing activities would be particularly important in the area where the worker housing and the dining hall and store were located. This is because the OTA is actively trying to develop this area by uncovering sidewalks, etc. as part of the roadside park. Subsurface investigations could also provide information regarding the future placement of walking paths, placement of plaques, and other interpretative aspects that the OTA may want to implement.

Historic-Age Resources

Re-evaluation of NRHP Boundaries

The 101 Ranch Historic District boundaries were created over 38 years ago, and since that time, constant flooding of the Salt Fork of the Arkansas River has altered the southern portion of the district due to erosion and reshaping of the river. The current eastern boundary excludes the round-up grandstand area. Re-evaluation of the current boundaries recorded on the NRHP nomination should be conducted to include all of contributing features to the district in order to accurately represent the 101 Ranch Historic District.

Maintenance

Several issues are taken into consideration when compiling the maintenance and preservation recommendations for the 101 Miller Ranch. The first concern is the safety of the visitors to the site, and liability from site safety issues. Portions of the site are open to the public; other areas are closed to the public but are accessible to and utilized by livestock, whose safety is also a concern. Funding for projects is limited at this time, so immediate and short-term recommendations are provided on a more conservative level. Medium and long-term recommendations are also provided so that as funding becomes available, permanent solutions to preservation problems can be implemented.

Immediate and Short Term Recommendations and Regular Maintenance

The following recommendations for the 101 Miller Ranch are generalized since the primary material is concrete. These recommendations apply to all structures on the site. The White House, General Store, and Cattle Barn Complex have specific issues and are called out separately.

General Recommendations

- Prior to any ground disturbance, it is recommended that subsurface investigations take place in the locations of the worker housing (near White House), dining hall, privy, Riverside Camp, Round-

up grandstands, and the school house.

Vegetation

- The grounds have at minimum 6-18" of silt from flood waters. The silt can be removed if desired; however, it is recommended that foundations remain covered to protect them from the elements and from potential damage by visitors. In the event that the silt is removed and features exposed, the maintenance recommendations that follow should be observed.
- All vegetation and debris should be removed from around and on structures and foundations. Vegetation and debris can trap moisture and infiltrate existing cracks or cause further cracks. When removing vegetation, care should be taken to remove roots, while taking care to not disturb the structures and foundation materials. In addition, pH-neutral biocides can also be used; manufacturer's recommendations should be followed.
- Trees and tree stumps that are abutting foundations should be removed. Care should be taken to remove the trees and stumps without damaging the foundations. Holes in the ground left by the tree and stump removal should be filled with soil and compacted to ensure that settling of the foundations at the removal locations does not occur.

Concrete

- The use of Portland cement mortar, which is used extensively for crack repair and patches on the site, should cease. Any cracks and patches in the concrete should be clear of debris and vegetation on a regular basis, as described above in the Vegetation section. Active cracks can be filled and patches made with Type N mortar (not Portland cement mortar such as Type S or Type M) to prevent water infiltration. Mortar may be colored to blend with the surrounding concrete according to manufacturer's recommendations. Crack repair and patching should only be performed by an experienced professional or by a person that has received training by a professional specifically in crack repair and patching. Refer to Preservation Brief #15, which discusses preservation of historic concrete (see attached CD). Patches and cracks should only be repaired when there is a need to prevent water infiltration or for structural stability, or if the site cannot be interpreted otherwise. Careful consideration should be given if a repair is simply for aesthetic reasons.
- Concrete that is soiled with dirt or biological

growth can be cleaned using a pH-neutral cleaner for masonry and soft bristle brushes such as horse grooming brushes or shoe polishing brushes. Manufacturer's recommendations should be followed. Suggested cleaners include ProsoCo EnviroKlean Restoration Cleaner or BioWash (www.proso.co), and D/2 Biological Solution (www.cathedralstone.com). Bleach, pool cleaner, and other harsh household cleaners should never be used.

- Rusted rebar should be cleaned of corrosion and debris with a wire brush then a rust inhibitor applied according to manufacturer's recommendations, taking care to avoid damaging surrounding concrete. Concrete can then be repaired where corrosion has caused spalling. Concrete should be patched by an experienced professional according to Preservation Brief #15, which discusses the preservation of historic concrete (see attached CD).

Site Security

- Access to building foundation remnants poses a safety and security issue for visitors, animals, and the foundations themselves. The installation of temporary fencing around the perimeter of foundations will discourage people from walking and climbing on foundations while allowing for visibility while repairs are undertaken. Historically appropriate permanent fencing should be installed after repairs are complete, as discussed in the five year recommendations section.

Flooding and Standing Water

- The 101 Ranch site floods regularly. When flooding occurs, care should be taken to immediately remove any standing water from floors and paths, and to clear silt and other debris from structures. Standing water can cause further deterioration of materials, exacerbate cracking, and allow for biological growth to occur. Silt provides a place for root systems of vegetation to establish, furthering deterioration. Please note that waterproofing sealers are not recommended for the structures at the 101 Ranch site, as they may exacerbate the deterioration.

Regular Monitoring

- The 101 Ranch structures should be monitored for new or exacerbated conditions on a regular basis (every six months or sooner). The conditions identified in the Building Inventory and Assessment should be studied so that any new or worsening conditions can then be properly addressed. Qualified personnel such as engineers, architects,

or tree removal specialists should be consulted as needed.

Monitoring Related to Construction

- The 101 Ranch features identified during this study should be considered during the planning phase of any new project conducted by the Old Timers' Association or other entities. Projects such as the uncovering of sidewalks and placement of interpretive signs, along with other types of work that may occur in the future and could involve placement of footers, post holes, etc. that could potentially disturb features should be monitored.
- Consideration should be given to placing new walking and interpretive paths along those paths and roads discovered during the current work.
- Access to building foundation remnants poses a safety and security issue for visitors, animals, and the foundations themselves. The installation of temporary fencing around the perimeter of foundations will discourage people from walking and climbing on foundations while allowing for visibility while repairs are undertaken. Historically appropriate permanent fencing should be installed after repairs are complete, as discussed in the five year recommendations section.

Conclusions

On behalf of the ODOT, URS conducted geophysical, archaeological, and historic resources survey of the National Register listed, 101 Ranch Historic District near Ponca City, Kay County, Oklahoma in partial fulfillment of Stipulations I-1, a, b, c; -2 and -9 a Memorandum of Agreement (MOA) between the FHWA, ODOT, and OKSHPO, to mitigate the adverse effects of a bridge replacement on SH 156 over the Salt Fork of the Arkansas River.

The goal of this project was to document what remains of the district, including archaeological features, to assess the conditions of ruins and remaining structures, and provide recommendations for their preservation. An interdisciplinary approach was used to achieve this goal; this included utilizing the expertise of architectural historians and conservators, archaeologists, geophysicists, and GIS analysts.

This project was done in conjunction with the geophysical, archaeological, and historic resources teams to identify and document all historic features associated with the 101 Ranch Historic District. A variety of methods for investigation were utilized to document surface level and buried historic-age foundations and structures associated with the ranch. Historic photographs and historic aerial and

topographic maps of the 101 Ranch were reviewed in order to determine the approximate locations and layout of the camp structures in the survey area.

The character of the 101 Ranch Historic District has changed significantly since its listing on the NRHP in 1972. Since the boundaries were defined over 38 years ago, most of the standing structures present when the district was listed have since been lost or have greatly deteriorated due to fire, decay mechanisms, and the continued cutting and repeated flooding of the Salt Fork of the Arkansas River, leaving ruins and subsurface archaeological features. Also, the current eastern boundary excludes the round-up grandstand and school house area.

Despite the loss of several structures since its listing, the 101 Ranch Historic District has, and continues to yield valuable information regarding the ranch history and ranch activities. It is recommended that a re-evaluation of the current boundaries recorded on the NRHP nomination should be conducted to include all of contributing features to the district in order to accurately represent the 101 Ranch Historic District.

Three previously unrecorded resources located within the NRHP 101 Ranch Historic District were evaluated to determine whether they were contributing elements to the existing district. These resources are:

- School House
- Round-Up Grandstands
- Riverside Camp

For the purposes of the archaeological pedestrian survey of the three areas within the 101 Ranch Historic District, the archaeologists based their recommendations on the existence of the historic artifacts observed, building foundations located within the Riverside Camp and school house areas, and the location of the footings which supported the round-up grandstands. Sufficient data was collected at the school house area and round-up grandstands to determine that they are contributing elements to the 101 Ranch Historic District.

This investigation did not provide sufficient information to determine that the Riverside Camp is a contributing element to the historic district. There is potential for intact features and deposits, but it has not been established that the observed foundation and cellar were present when the area was used as the Riverside Camp. The investigation establishes the presence of intact features in the area, but their association and function with the Riverside Camp are unknown. As such, the archaeological remains located here do not presently demonstrate the ability to yield significant information about this aspect of the NRHP 101 Ranch Historic District. It is recommended that further

archival and subsurface investigations be conducted prior to any future ground disturbance of the area in order to evaluate the Riverside Camp as a possible contributing element to the district.

The geophysical survey did not detect evidence of intact foundations in the locations of the horse barns, mule barn, and round barn, and, in fact, the data indicate those foundations have likely been removed. However, the data also indicate the potential for subsurface features or deposits in other areas. In particular, the locations of worker housing between the White House remains and the silos, as well as the location of the first dining hall and ranch store exhibit a potential for subsurface features or cultural deposits. If these anomalies represent features or archaeological deposits associated with either worker housing or the original dining hall and store, they could be significant. Other areas of potential interest occur behind the ranch store remains in the area of the first horse barn and in the areas of the meat packing plant and hog barns. The resistivity data indicate potential features in Area 2, which is north of the ranch store remains. While historic photographs from the ranch do not indicate any structure at this location, the anomalies should be investigated prior to any ground disturbance. The other interesting finding from the geophysical data is the detection of the underground utilities that served the ranch headquarters complex.

Subsurface investigations performed prior to ground disturbing activities would be particularly important in the area where the worker housing and the dining hall and store were located. This is because the OTA is actively trying to develop this area by uncovering sidewalks, etc. as part of the roadside park. Subsurface investigations could also provide information regarding the future placement of walking paths, placement of plaques, and other interpretative aspects that the OTA may want to implement.

Additional information regarding the preservation and management guidelines are contained in the *Assessment and Maintenance Manual for Historic Features of 101 Ranch Historic District, Kay County, Oklahoma* (Howard and Emery, 2012).

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Appendix A: Phased Maps and Historic Photos of 101 Ranch

101 Ranch

Phase 1 - 1900s



Detailed View

See inset for detailed view.

Legend

- 1: Miller Family Residence (a: 1903, b: 1910)
- 2: Blacksmith Shop
- 3: General Store (a: 1903, b: 1905, c: 1918)
- 4: Dining Hall (a: 1903, b: 1918)
- 5: Poultry House
- 6: Horse Barn (a: 1903, b: 1918, c: 1920)
- 7: Mule Barn
- 8: Oat Bin
- 9: Dairy Barn
- 10: Power House
- 11: Seed Storage
- 12: Corn Storage
- ▭ 13: Riverside Camp
- 14: Worker Housing



Source:
ESRI Basemap: BING Maps Aerial 2012



Figure A1

Direction Photo Taken:
north

Image of 101 Ranch used in the 1905 article from the Northwestern Weekly.

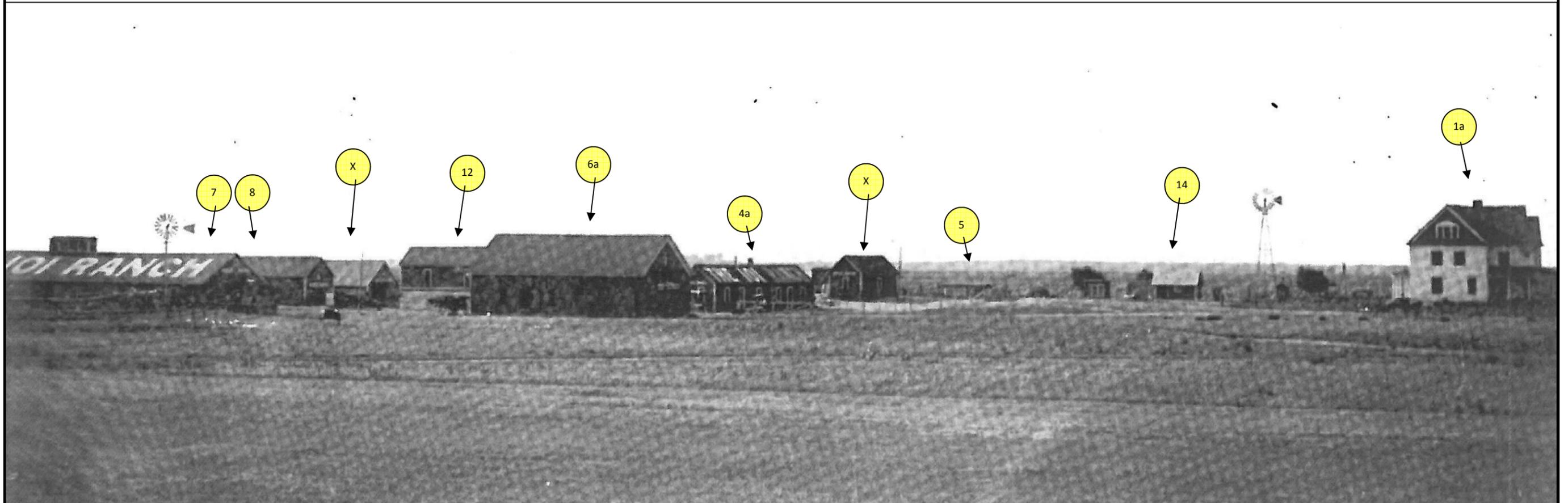


Figure A2

Direction:
west

101 Ranch circa 1905



Figure A3

Direction:
north

101 Ranch circa 1905 with ranch cowgirls



Figure A4

Direction:
west

Blacksmith Shop circa 1903



Figure A5

Direction:
northwest

General store (L) and Dining Hall (R) in a photograph taken circa 1903



Figure A6

Direction:
northwest

General store (L) and Dining Hall (R) in a photograph taken circa 1905



Figure A7

Direction:

Dining Hall in a photograph taken circa 1903. Power house and Seed storage building shown in background. The building to the right is believed to be worker housing.



Figure A8

Direction:
northwest

The poultry house as seen circa 1905.

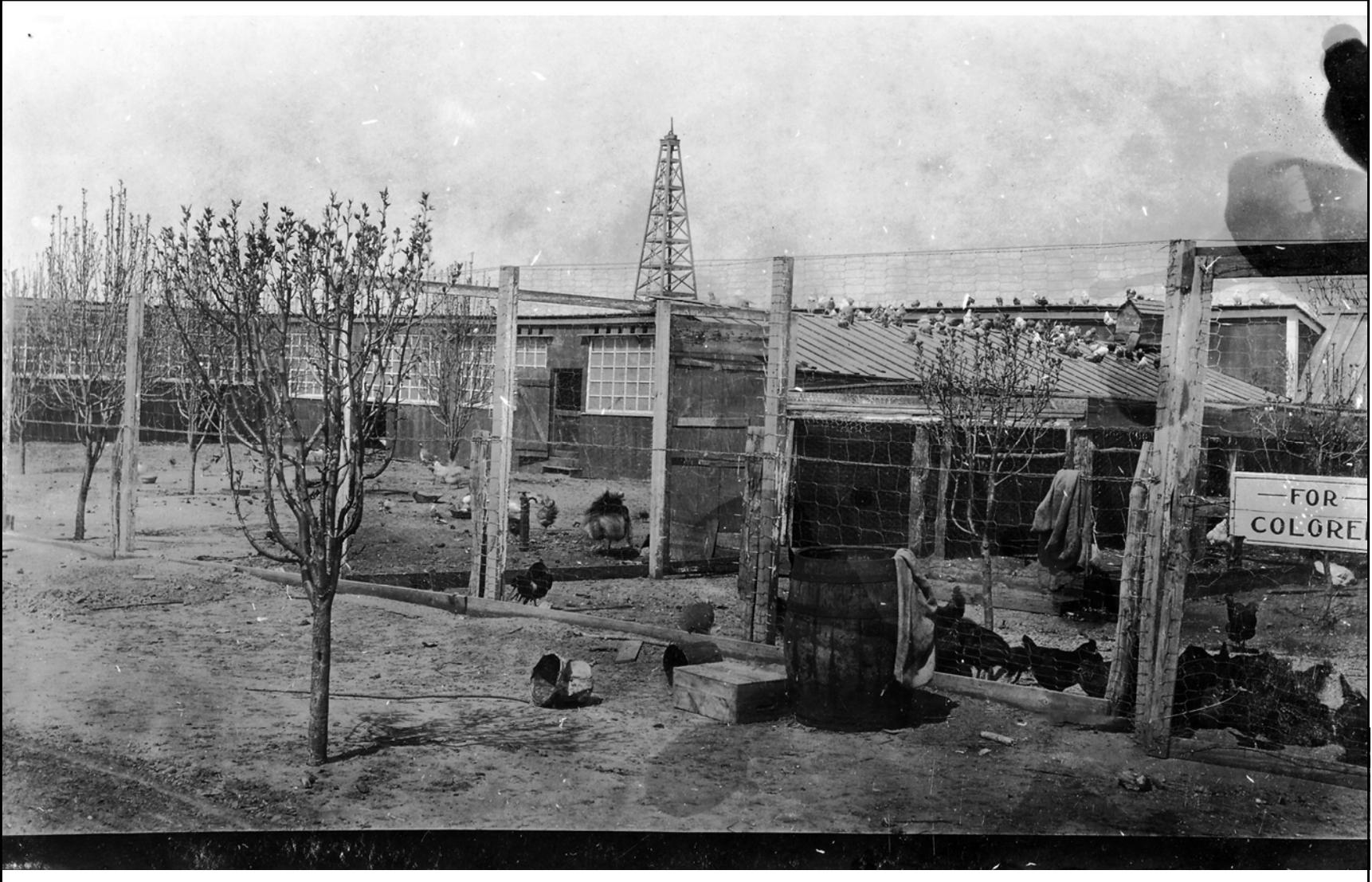


Figure A9

Direction:
Northeast

A photograph of the earlier horse barn which was built circa 1903. The photograph was taken between 1915 and 1918.



Figure A10

Direction:
west

The building in the center is believed to have been a dairy barn built circa 1905.



Figure A11

Direction:
west

An earlier photograph of the power house with the seed storage behind. The faded building to the right is the general store. Photograph taken circa 1903.



Figure A12

Direction:
southwest

Photograph of the seed storage north façade taken circa 1905.



Figure A13

Direction:
unknown

Image of the Riverside camp taken from an undated advertisement for the camp.



Figure A14

Direction:
unknown

Image of the Riverside camp taken from an undated advertisement for the camp.



Figure A15

Direction:
north

An example of the side hall style worker housing.



Figure A16

Direction:
unknown

An example of the shotgun style worker housing.



Figure A17

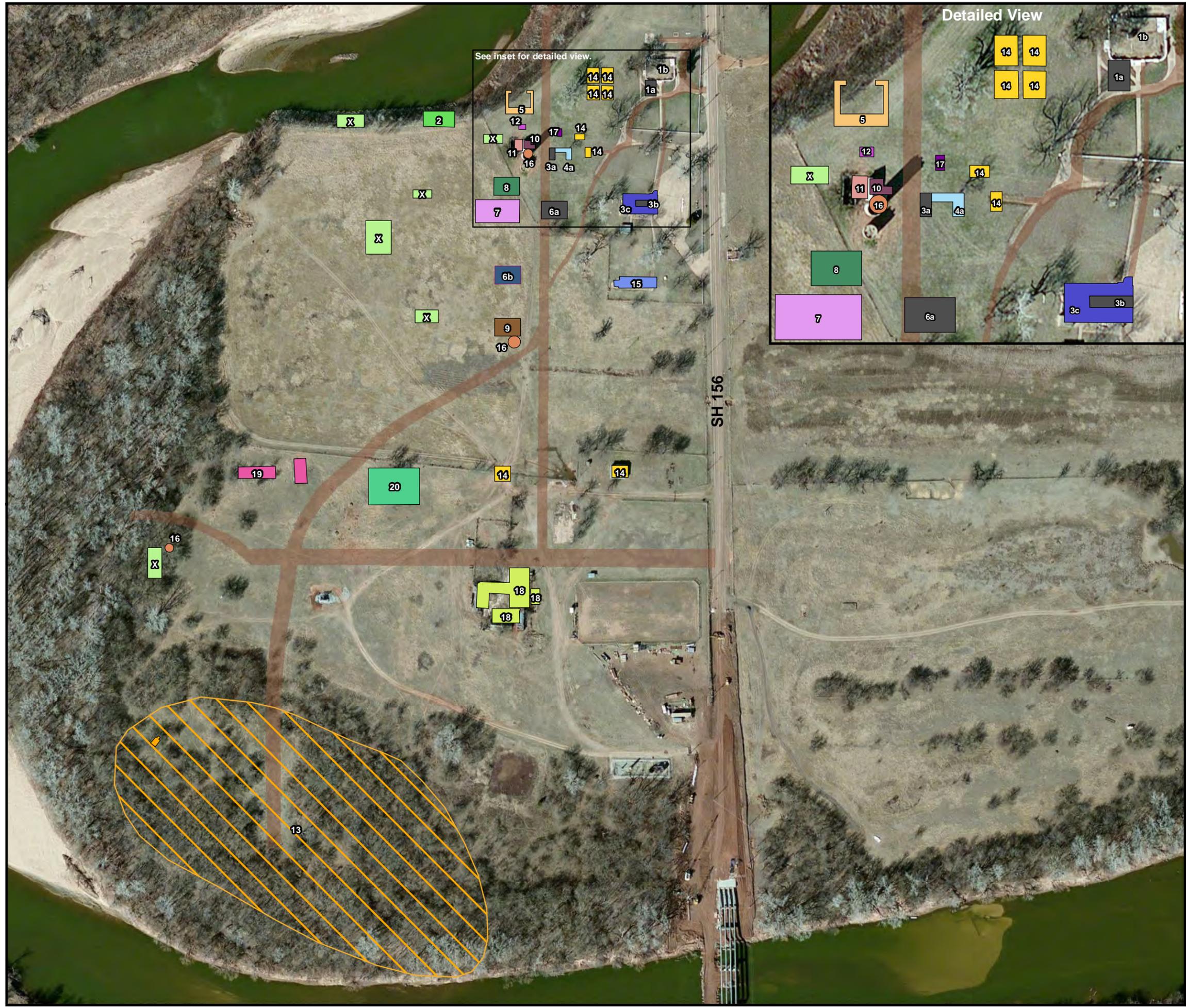
Direction:
unknown

An example of the shotgun style worker housing.



101 Ranch

Phase 2 - 1910s



See inset for detailed view.

Detailed View

Legend

- 1: Miller Family Residence (a: 1903, b: 1910)
- 2: Blacksmith Shop
- 3: General Store (a: 1903, b: 1905, c: 1918)
- 4: Dining Hall (a: 1903, b: 1918)
- 5: Poultry House
- 6: Horse Barn (a: 1903, b: 1918, c: 1920)
- 7: Mule Barn
- 8: Oat Bin
- 9: Dairy Barn
- 10: Power House
- 11: Seed Storage
- 12: Corn Storage
- 13: Riverside Camp
- 14: Worker Housing
- 15: Hotel
- 16: Silo
- 17: Privy
- 18: Cattle Barn Complex
- 19: Hog Barn
- 20: Meat Packing Plant
- X: Building Function Unknown
- Building no longer standing
- Dirts Roads



Source:
ESRI Basemap: BING Maps Aerial 2012



Figure A18

Direction Photo Taken:
Northwest

Image of 101 Ranch circa 1910.

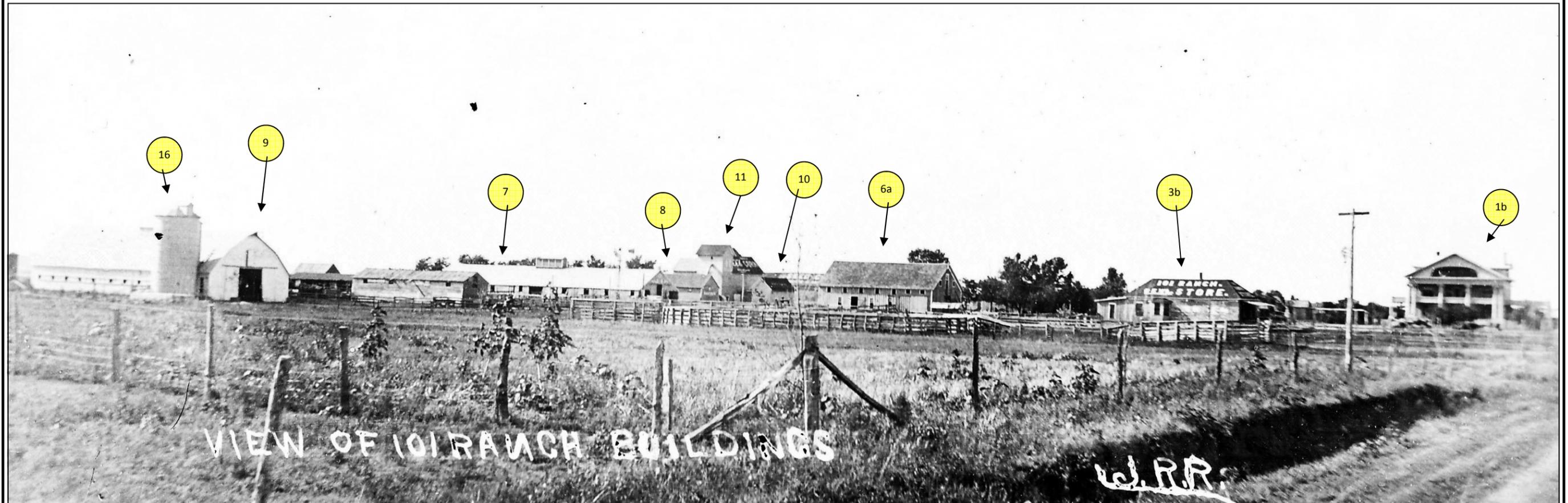


Figure A19

Direction Photo Taken:
west

Image of 101 Ranch circa 1915.

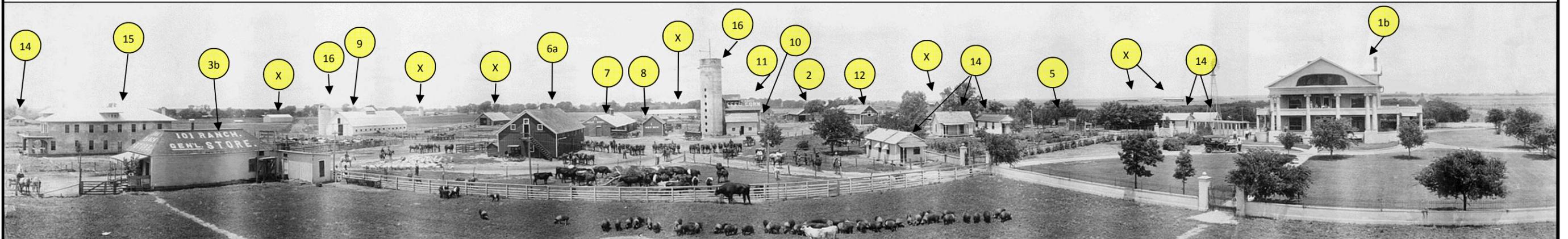


Figure A20

Direction:
northeast

The 1910 ranch headquarters in a photograph taken shortly after construction.



Figure A21

Direction:
southwest

Photograph of the ranch headquarters north façade. It is believed that this photo was taken shortly after construction.



Figure A22

Direction:
northwest

Photograph of the ranch headquarters taken circa 1915 during porch enclosures.



Figure A23

Direction:
north

Photograph of the ranch headquarters taken circa 1918 after porch enclosures.



Figure A24

Direction:
north

Photograph of the ranch headquarters taken circa 1925.

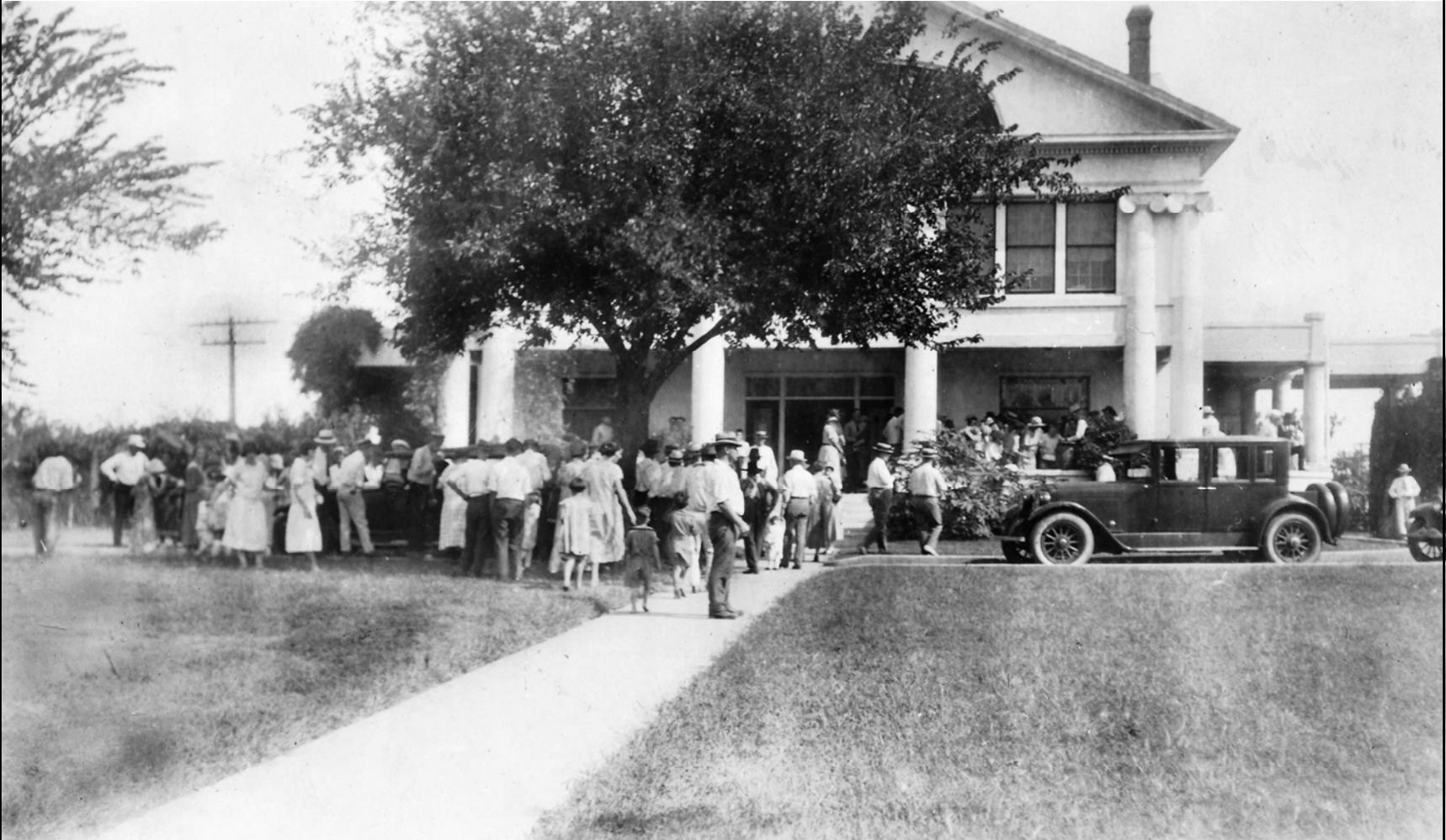


Figure A25

Direction:
east

Photograph of front porch of ranch headquarters taken during the 1923 flood. Bill Pickett is sitting on the bench in the foreground and Tony the Bear is chained to the porch.



Figure A26

Direction:
interior

Photograph of the interior of the ranch headquarters. It is unknown as to which room this is, but believed to be the foyer.



Figure A27

Direction:
southwest

Photograph taken of the hotel during the 1923 flood. The elephant barn is on the left side.



Figure A28

Direction:
northwest

Photograph of the hotel taken circa 1915.



Figure A29

Direction:
east

Photograph showing the hotel west façade taken circa 1915.



Figure A30

Direction:
northwest

Photograph of the general store and office taken shortly after construction in 1918.



Figure A31

Direction:

Photograph of the general store and office taken shortly after construction in 1920.



Figure A32

Direction:
northwest

Photograph of general store taken in the early 1920s.



Figure A33

Direction:
northwest

Photograph of general store taken in the mid-1920s.



Figure A34

Direction:
west

Photograph of general store taken in the mid-1920s.



Figure A35

Direction:
southwest

Photograph of general store taken in the mid-1920s.



Figure A36

Direction:
interior

Interior image of the general store. The date of the photograph is unknown.



Figure A37

Direction:

Overview photograph of 101 Ranch circa 1923.



Figure A38

Direction:
southwest

Overview photograph of 101 Ranch circa 1925.



Figure A39

Direction:
west

101 Ranch creamery



Figure A40

Direction:
west

Photograph of the creamery building circa 1920s.



Figure A41

Direction:
southwest

Photograph of the cattle barn complex. The original creamery has been demolished and replaced with a smaller building referred to as the machine shop. Photograph taken circa 1940s.



Figure A42

Direction:
east

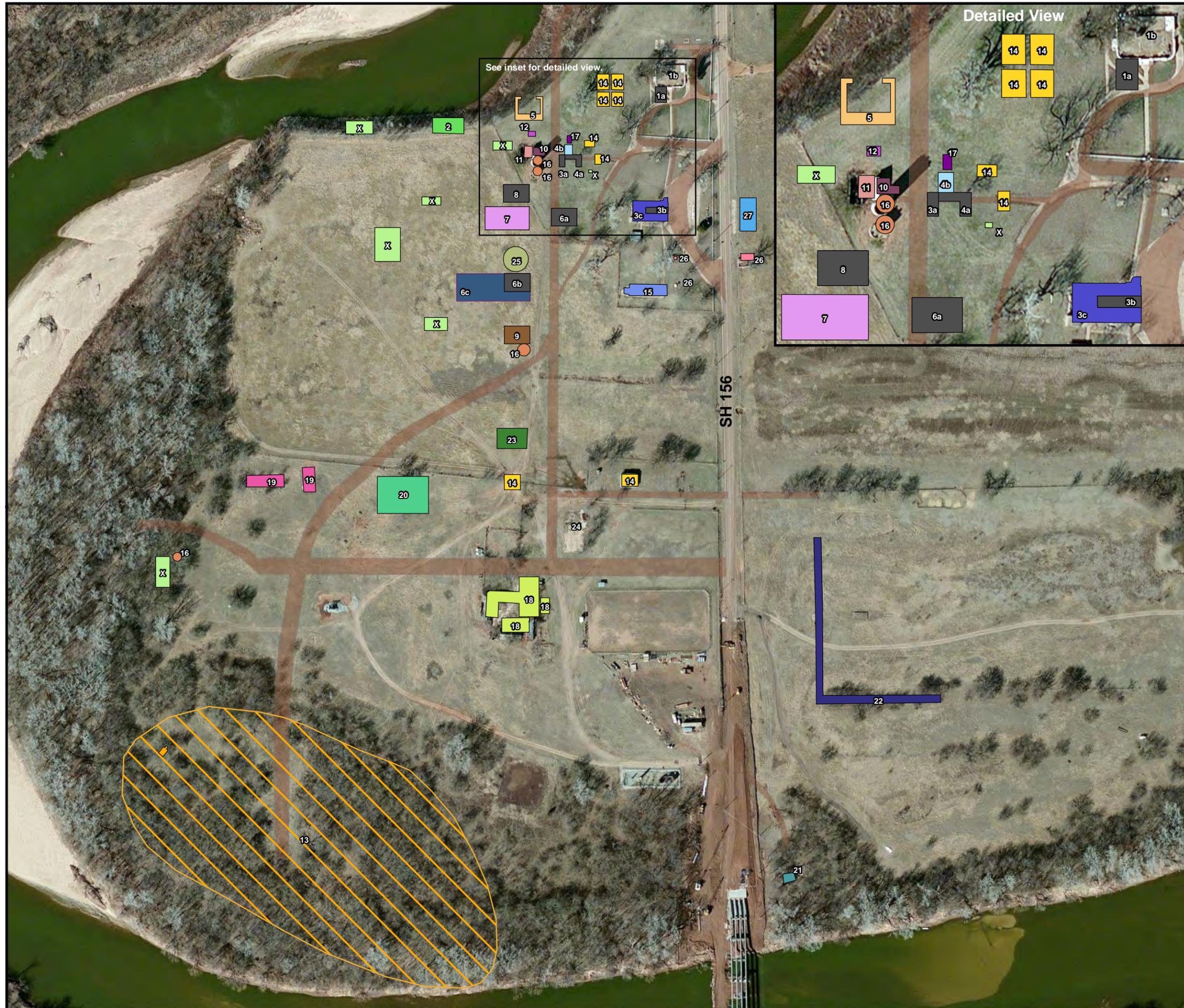
Photograph of one of the buildings in the hog barn complex. The low structure to the left of the picture was swine feeding floor.



101 Ranch

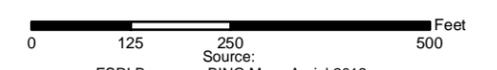
Phase 3

1920s & 1930s



Legend

- 1: Miller Family Residence (a: 1903, b: 1910)
- 2: Blacksmith Shop
- 3: General Store (a: 1903, b: 1905, c: 1918)
- 4: Dining Hall (a: 1903, b: 1918)
- 5: Poultry House
- 6: Horse Barn (a: 1903, b: 1918, c: 1920)
- 7: Mule Barn
- 8: Oat Bin
- 9: Dairy Barn
- 10: Power House
- 11: Seed Storage
- 12: Corn Storage
- 13: Riverside Camp
- 14: Worker Housing
- 15: Hotel
- 16: Silo
- 17: Privy
- 18: Cattle Barn Complex
- 19: Hog Barn
- 20: Meat Packing Plant
- 21: School House
- 22: Round Up Arena
- 23: Cider Mill
- 24: Curing House/Circus Barn
- 25: Round Barn
- 26: Exotic Animals
- 27: Market
- X: Building Function Unknown
- Building no longer standing
- Roads



Source: ESRI Basemap: BING Maps Aerial 2012



Figure A43

Direction Photo Taken:
west

Image of 101 Ranch circa 1923.

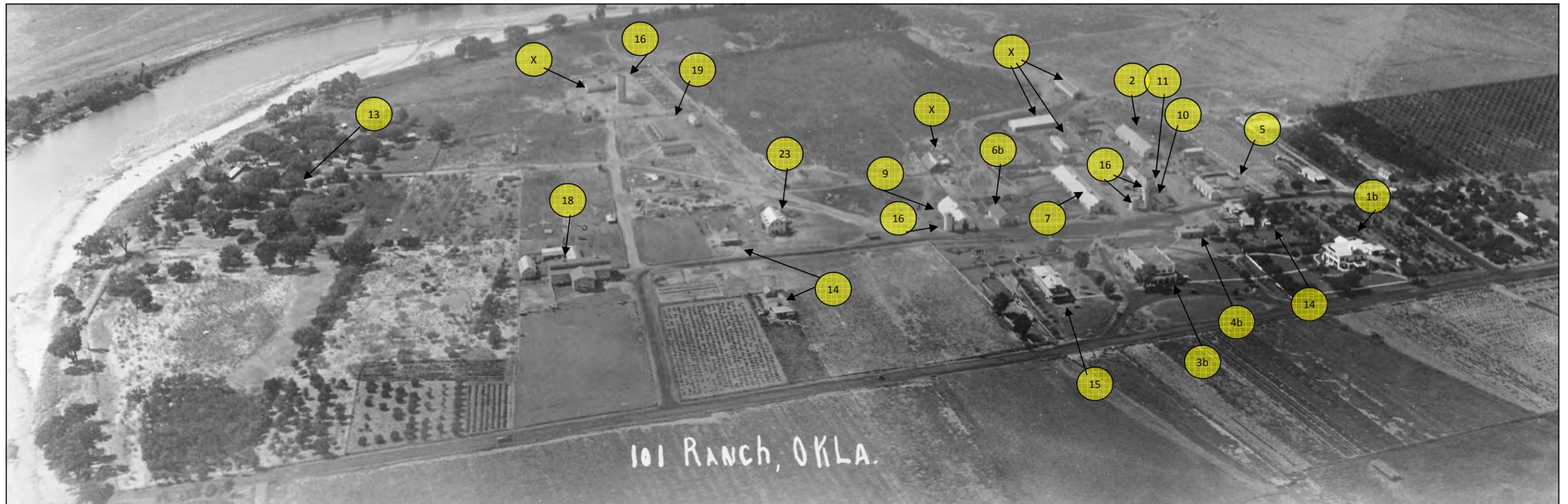


Figure A44

Direction Photo Taken:
aerial

Image of 101 Ranch circa 1925.

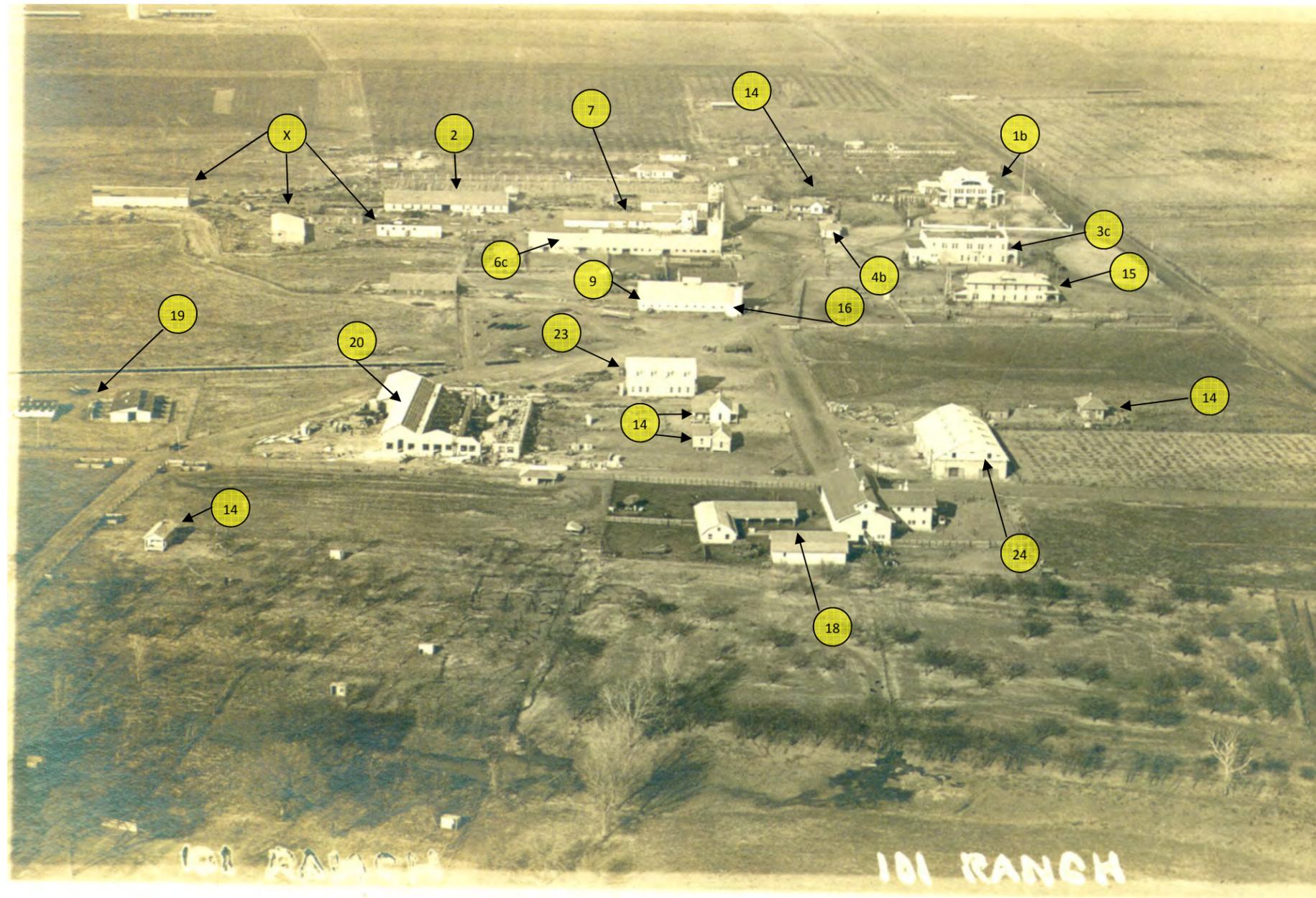


Figure A45

Direction Photo Taken:
aerial

This is the 1938 USDA Soil Conservation Aerial photograph.



Note: See Phase maps for building key.

Source: 1938 USDA Soil Conservation Services Aerial Photographs for Kay County

Figure A46

Direction:
east

Image of the west side of the meat market. Date of photograph is unknown.

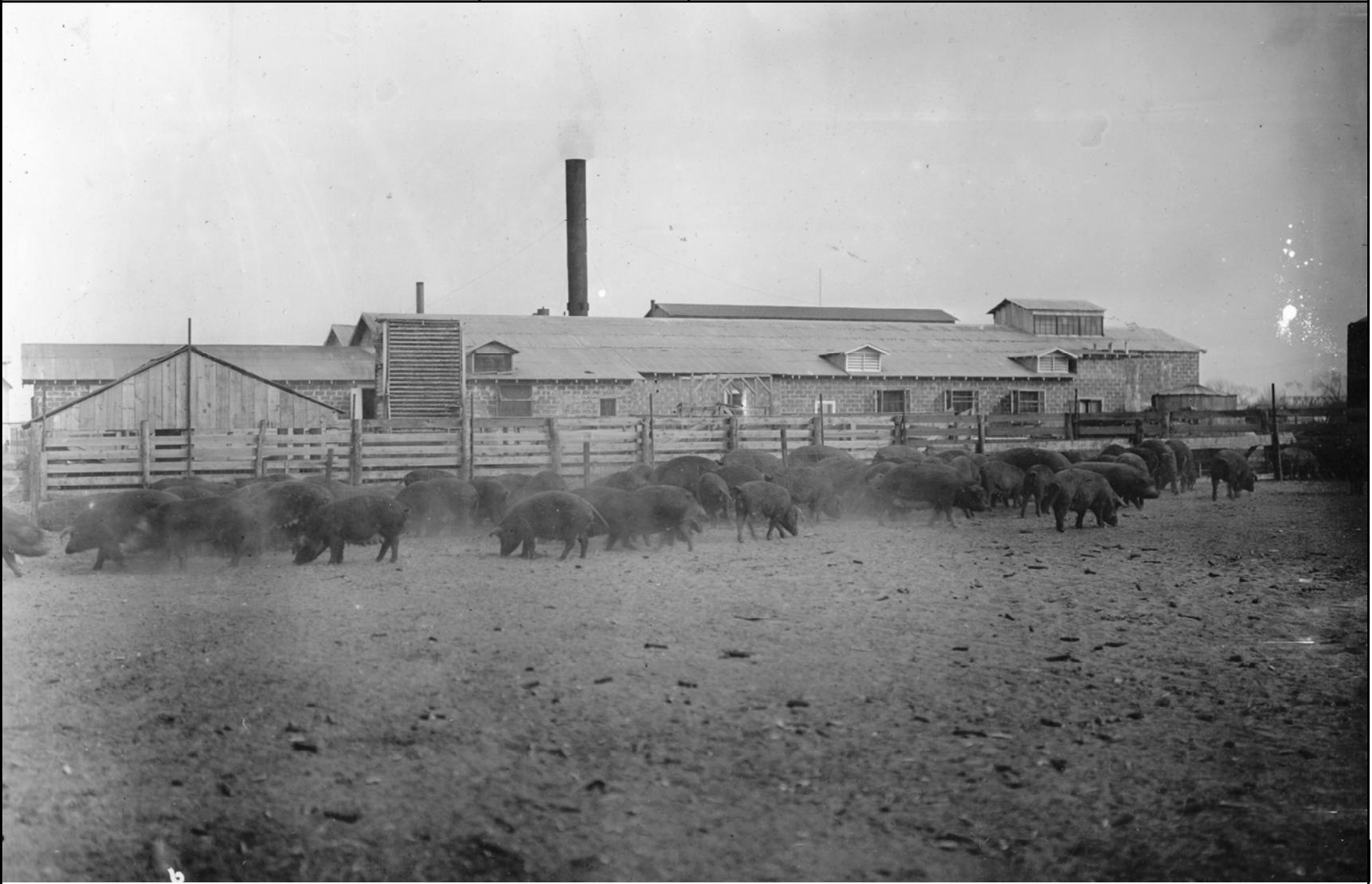


Figure A47

Direction:
northeast

Photograph of the meat market. It is believed that this image was taken after a 1925 fire that destroyed the east portion of the building.



Figure A48

Direction:
north

Image of original bridge with school house in the background. This was taken pre-1923.



Figure A49

Direction:
north

Photograph of school house with 101 Ranch in the background circa 1920s.



Figure A50

Direction:
north

Photograph of the 1924 roadway bridge. Note the grandstands being constructed in the background.



Figure A51

Direction:
west

Photograph of the school house west façade. The date of the photograph is unknown.

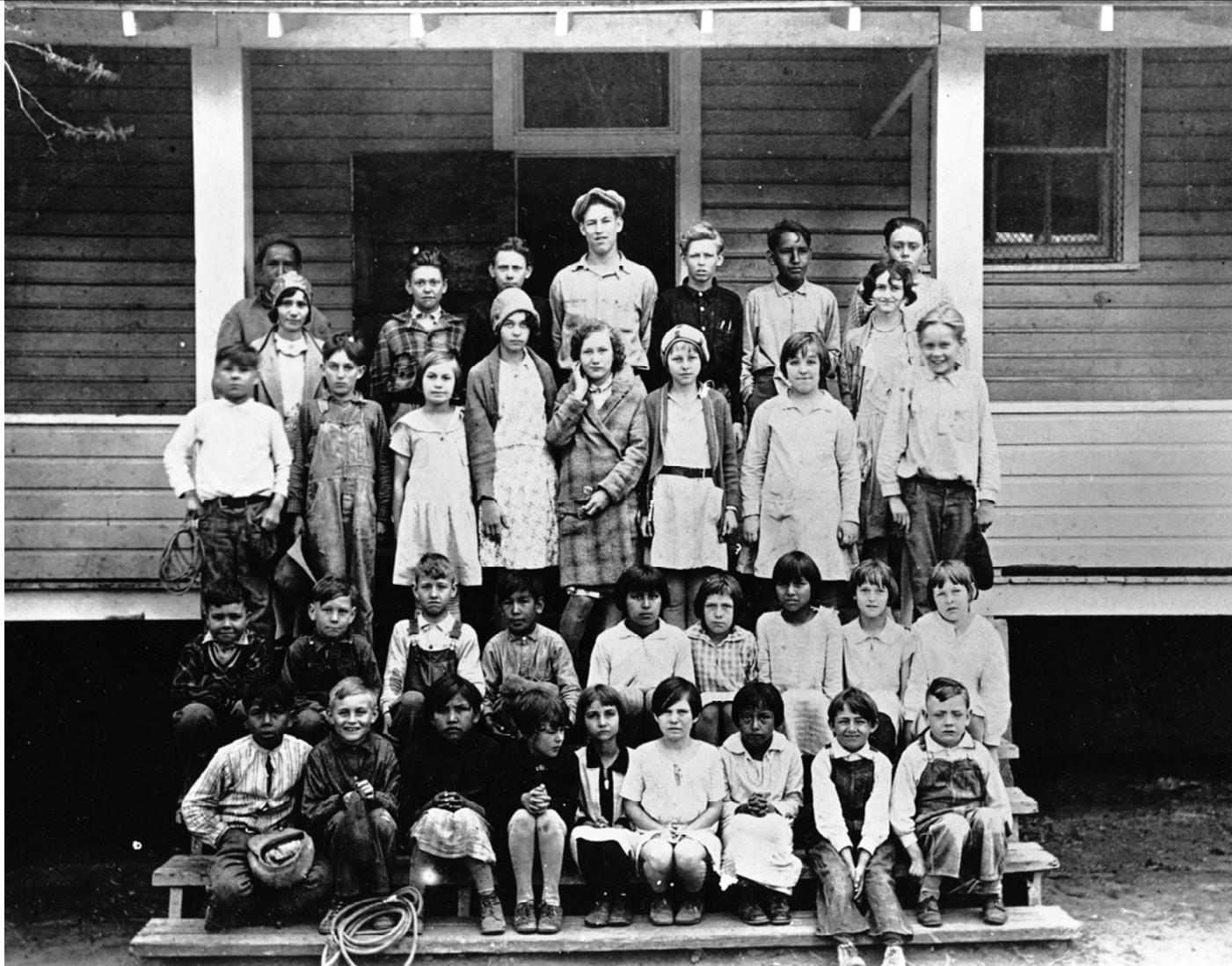


Figure A52

Direction:
west

101 Ranch Round-up arena grounds circa 1925.



Figure A53

Direction:
southeast

101 Ranch Round-up arena grounds circa 1925.



Figure A54

Direction:
southeast

101 Ranch Round-up arena grounds circa 1925.



Figure A55

Direction:
southeast

101 Ranch Round-up arena grounds circa 1925.

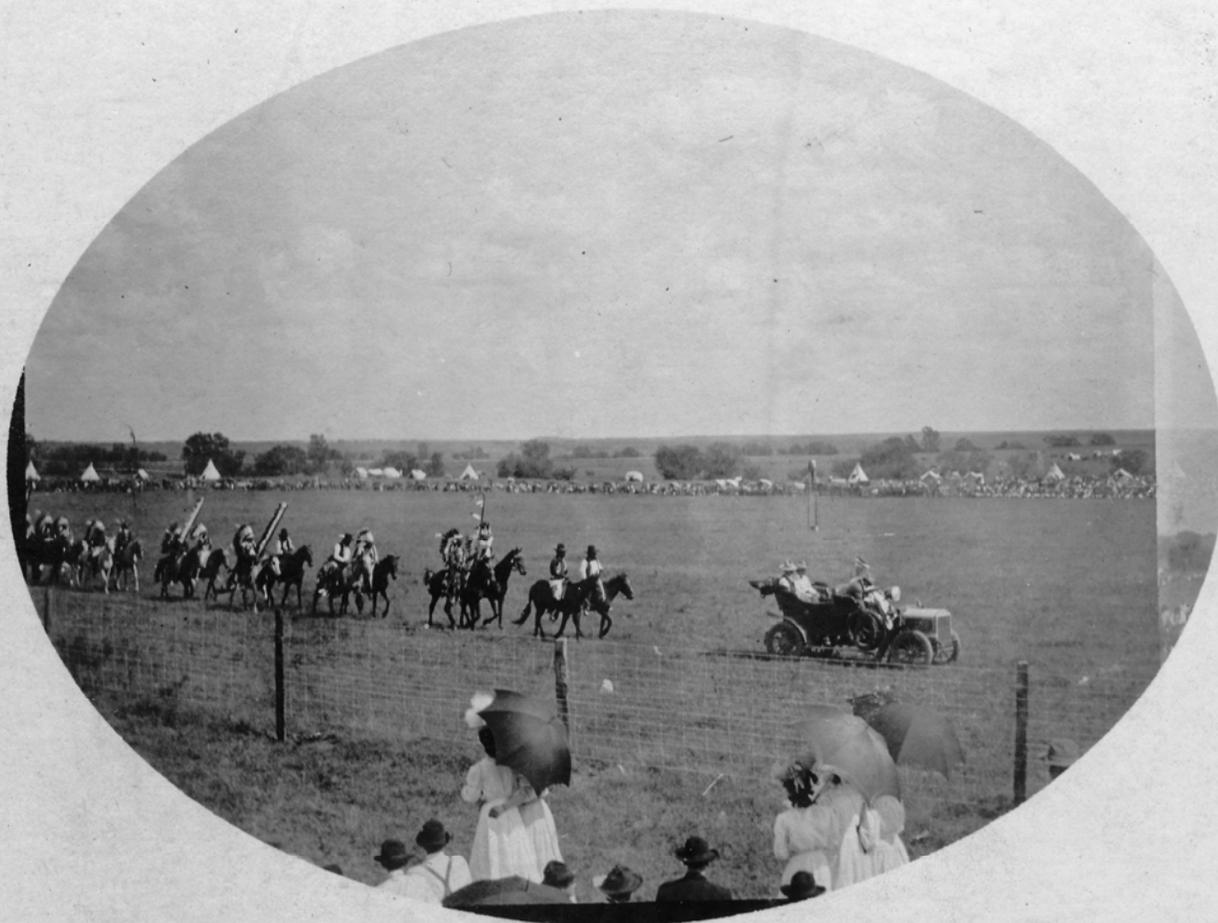


Figure A56

Direction:
southeast

101 Ranch Round-up arena grounds circa 1925.



Figure A57

Direction:
northeast

101 Ranch Round-up arena grounds circa 1936.

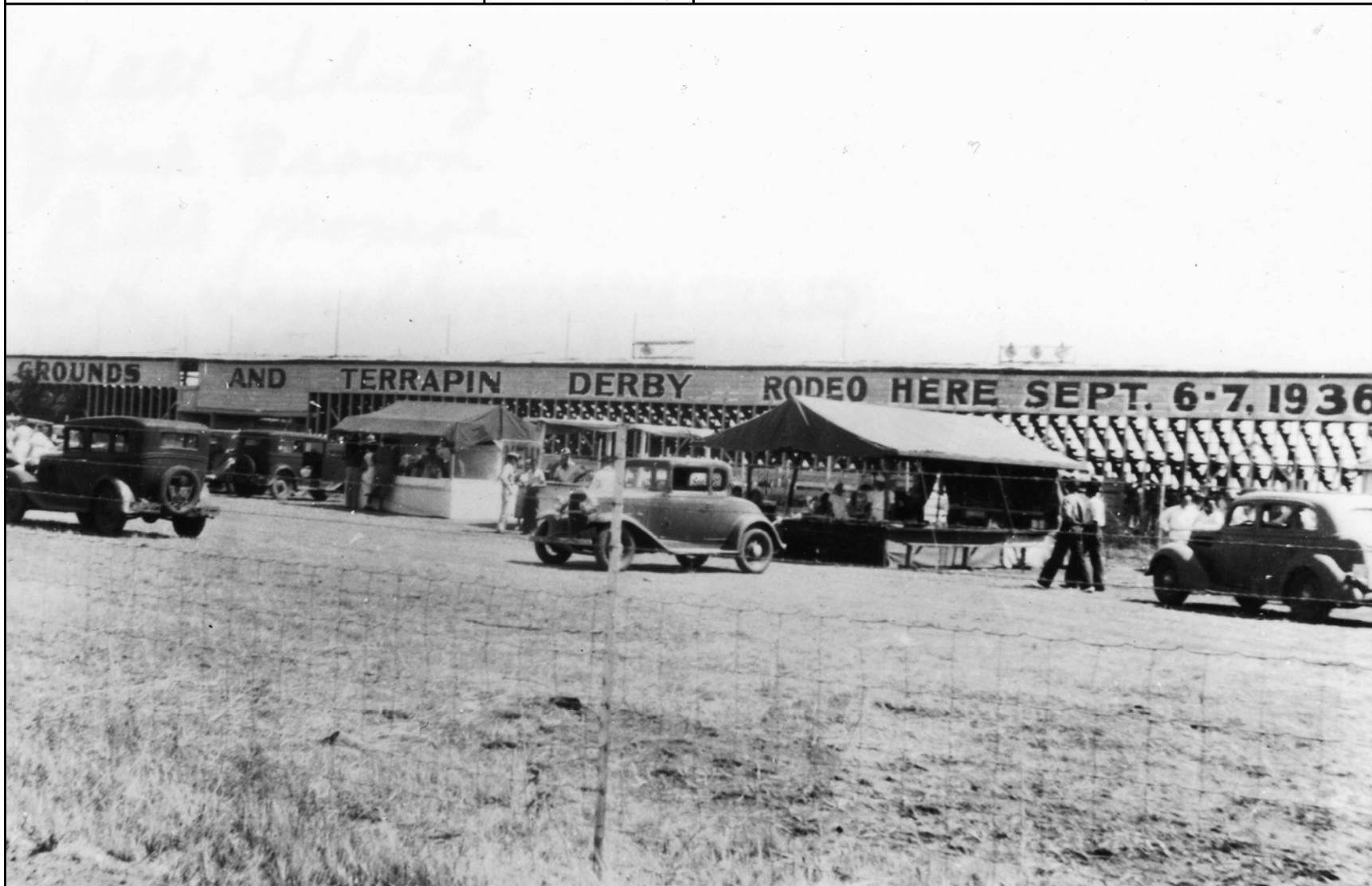


Figure A58

Direction:
south

101 Ranch Round-up arena grounds circa 1928.



Figure A59

Direction:
southeast

101 Ranch Round-up arena grounds circa 1930.



Figure A60

Direction:
southwest

Cider Works and Canning Factory, east façade. Photograph taken circa 1923.



Figure A61

Direction:
southeast

Cider Works and Canning Factory, west façade. Photograph taken circa 1923.



Figure A62

Direction:
south

Cider Works and Canning Factory and meat market. Photograph taken circa 1925.



Figure A63

Direction: .
southwest

Photograph of the Cider Works and Canning Factory. Also seen in this image are the dairy barn (R) and the meat market behind the Cider works. Photograph taken circa 1925.

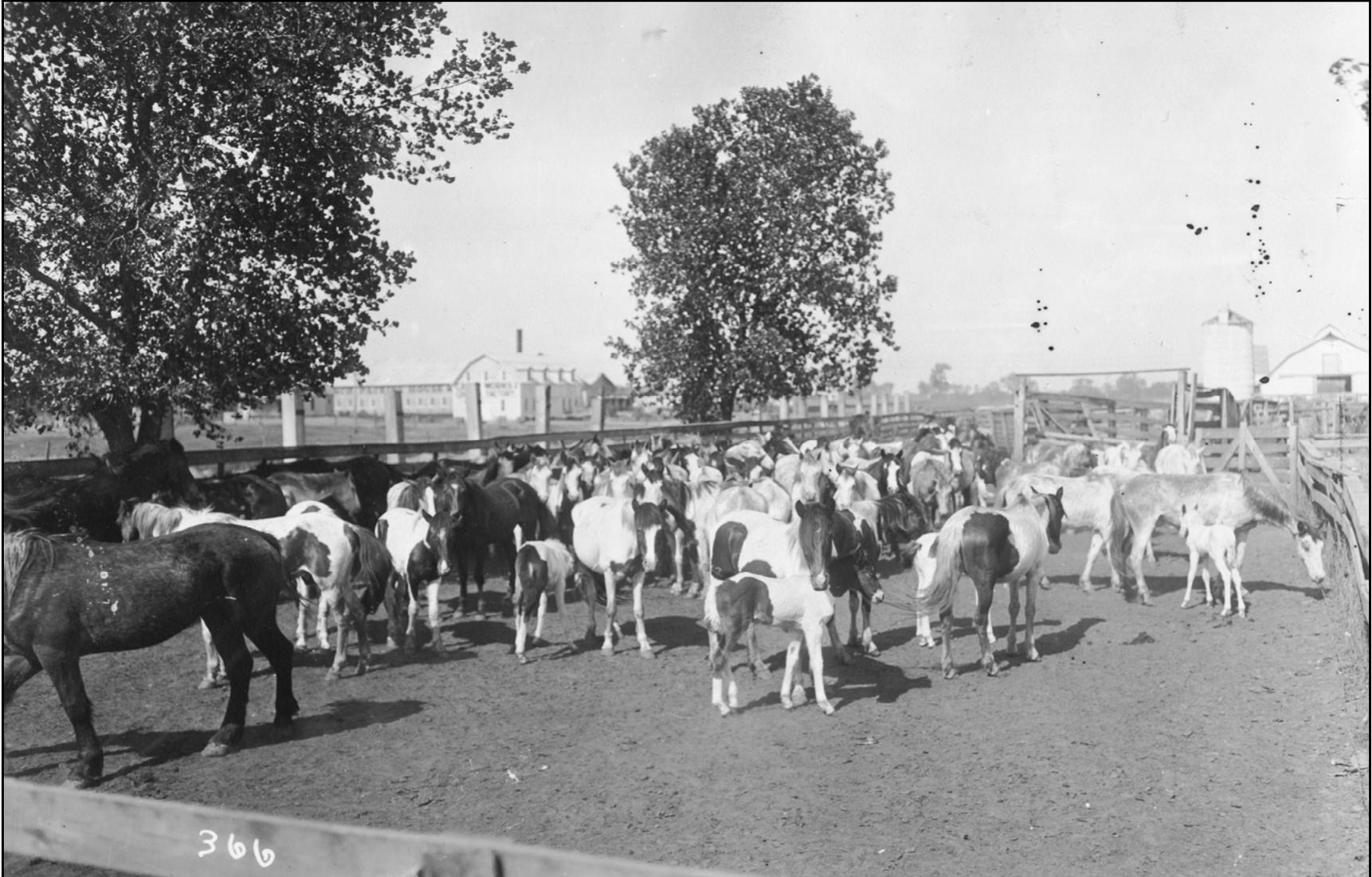


Figure A64

Direction:
northeast

Photograph of the elephant barn taken shortly after construction, circa 1925.



Figure A65

Direction:
west

Photograph of the Bar-B-Que restaurant on the east side of the main road,
circa 1930s.



101 Ranch

Phase 4 - Post 1930s



- Legend**
- 1: Miller Family Residence (a: 1903, b: 1910)
 - 2: Blacksmith Shop
 - 3: General Store (a: 1903, b: 1905, c: 1918)
 - 4: Dining Hall (a: 1903, b: 1918)
 - 5: Poultry House
 - 6: Horse Barn (a: 1903, b: 1918, c: 1920)
 - 7: Mule Barn
 - 8: Oat Bin
 - 9: Dairy Barn
 - 10: Power House
 - 11: Seed Storage
 - 12: Corn Storage
 - 13: Riverside Camp
 - 14: Worker Housing
 - 15: Hotel
 - 16: Silo
 - 17: Privy
 - 18: Cattle Barn Complex
 - 19: Hog Barn
 - 20: Meat Packing Plant
 - 21: School House
 - 22: Round Up Arena
 - 23: Cider Mill
 - 24: Curing House/Circus Barn
 - 25: Round Barn
 - 26: Exotic Animals
 - 27: Market
 - X: Building Function Unknown
 - Building no longer standing
 - Foundation Only
 - National Historic Landmark 1974
 - HABS Documentation 1993
 - Both NHL 1974 and HABS 1993
 - Roads

0 125 250 500 Feet

Source: ESRI Basemap; BING Maps Aerial 2012

Figure A66

Direction:
unknown

White House as documented in 1974 for the National Historic Landmark
Nomination Form.



Figure A67

Direction:
northwest

Blacksmith Shop as documented in 1974 for the National Historic Landmark
Nomination Form.



101 Ranch Historic District (Blacksmith Shop), Marland, Oklahoma

Figure A68

Direction:
southeast

Power house, silos, and shower house as documented in 1974 for the National Historic Landmark Nomination Form.



101 Ranch Historic District (Silos, Granery and Milk Storage), Marland, Oklahoma

Figure A69

Direction:
northwest

Foreman's House as documented in 1974 for the National Historic Landmark
Nomination Form.



Figure A70

Direction:
southwest

Hotel as documented in 1974 for the National Historic Landmark Nomination Form.



Figure A71

Direction:
northwest

Dining hall as documented in 1974 for the National Historic Landmark Nomination Form.



Figure A72

Direction:
north

Cattle barn complex as documented in 1974 for the National Historic Landmark Nomination Form.



Figure A73

Direction:
northeast

Cattle Barn complex as documented in 1974 for the National Historic Landmark Nomination Form.



101 Ranch Historic District (Horse Barn), Marland, Oklahoma
Photo by Peavler and Associates for ABC and NPS 1974

Figure A74

Direction:
southeast

Cattle Barn complex as documented in 1974 for the National Historic Landmark Nomination Form.



Figure A75

Direction:
east

Monkey Cage as documented in 1974 for the National Historic Landmark
Nomination Form.



Figure A76

Direction:
unknown

Chicken house as documented in 1974 for the National Historic Landmark Nomination Form. Note: the location and function of this structure was undetermined.



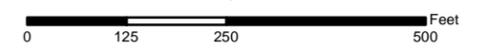
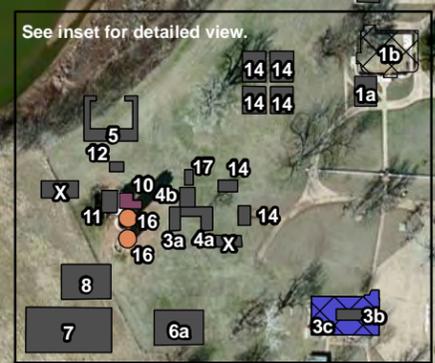
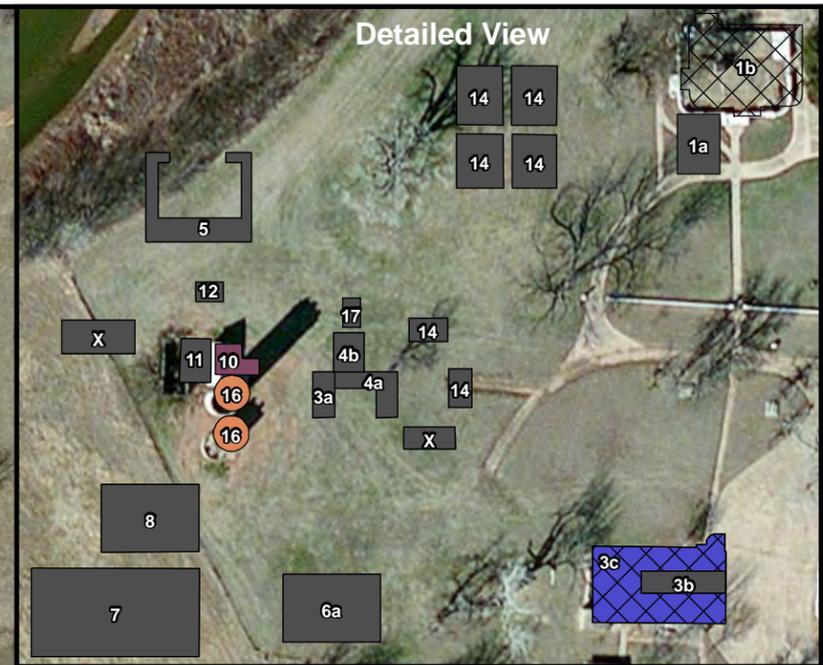
101 Ranch

Phase 5 - 2011

Legend

- 1: Miller Family Residence (a: 1903, b: 1910)
- 2: Blacksmith Shop
- 3: General Store (a: 1903, b: 1905, c: 1918)
- 4: Dining Hall (a: 1903, b: 1918)
- 5: Poultry House
- 6: Horse Barn (a: 1903, b: 1918, c: 1920)
- 7: Mule Barn
- 8: Oat Bin
- 9: Dairy Barn
- 10: Power House
- 11: Seed Storage
- 12: Corn Storage
- 13: Riverside Camp
- 14: Worker Housing
- 15: Hotel
- 16: Silo
- 17: Privy
- 18: Cattle Barn Complex
- 19: Hog Barn
- 20: Meat Packing Plant
- 21: School House
- 22: Round Up Arena
- 23: Cider Mill
- 24: Curing House/Circus Barn
- 25: Round Barn
- 26: Exotic Animals
- 27: Market
- X: Building Function Unknown
- Building no longer standing
- Foundation Only

Detailed View



Source: ESRI Basemap: BING Maps Aerial 2012



Figure A77

Direction Photo Taken:
aerial

Image of 101 Ranch in 2011.



Note: See Phase maps for building key.

Source: ESRI Basemap: BING Maps

Figure A78

Direction:
northeast

Oblique view of south side of existing White House foundation.



Figure A79

Direction:
northwest

Oblique view of south and east sides of existing White House foundation.



Figure A80

Direction:
southwest

Oblique view of north and east sides of existing White House foundation.



Figure A81

Direction:
southeast

Oblique view of north and west sides of the existing White House foundation.



Figure A82

Direction:
west

View of the power house (right), large silo (center), and small silo (left).



Figure A83

Direction:
east

View of the shower house (foreground), power house (left background), large silo (center background), and small silo (right background).



Figure A84

Direction:
east

View of concrete footer in Riverside Camp.



Figure A85

Direction:
southeast

View of concrete footer in Riverside Camp.



Figure A86

Direction:
northwest

Oblique view of the east and south façades of the worker house known as the "foreman's house."



Figure A87

Direction:
southeast

Oblique view of the north and west façades of the worker house known as the “foreman’s house.”



Figure A88

Direction:
southwest

Oblique view of the hotel foundation slab.



Figure A89

Direction:
northeast

Oblique view of the hotel foundation slab.



Figure A90

Direction:
southwest

Oblique overview of the general store foundation slab.



Figure A91

Direction:
northwest

Oblique overview of the general store foundation slab.



Figure A92

Direction:
southwest

Overview of the cattle barn complex showing the machine shop (left foreground), dairy (background), and cattle barn (right).



Figure A93

Direction:
northeast

Overview of the cattle barn complex showing the cattle barn (left) and machine shop (right).



Figure A94

Direction:
south

North façade of the dairy at the cattle barn complex.



Figure A95

Direction:
northeast

View of west façade of the machine shop at the cattle barn complex.



Figure A96

Direction:
east

View of farrowing house foundation slab at the hog barn complex.



Figure A97

Direction:
southeast

View of stalls at the farrowing house at the hog barn complex.



Figure A98

Direction:
north

View of foundation slab at the farrowing house at the hog barn complex.



Figure A99

Direction:
north

View of foundation slab of sow and pig nursery/farrowing house at hog barn complex.



Figure A100

Direction:
north

Detail view of diamond pattern in foundation slab of sow and pig nursery/
farrowing house at hog barn complex.



Figure A101

Direction:
north

View of foundation slab at meat packing plant.



Figure A102

Direction:
north

View of foundation slab at meat packing plant.



Figure A103

Direction:
east

View of footer at meat packing plant.



Figure A104

Direction:
northwest

View of storm shelter at schoolhouse.



Figure A105

Direction:
southwest

View of footer at schoolhouse.



Figure A106

Direction:
east

View of well or cistern at schoolhouse.



Figure A107

Direction:
east

View of concrete footer of the grandstands.



Figure A108

Direction:

N/A

View of footer at grandstands.



Figure A109

Direction:
N/A

View of footer at grandstands showing "101 RANCH" written in the concrete surface.



Figure A110

Direction:
northeast

View of concrete footer of the grandstands.



Figure A111

Direction:
southeast

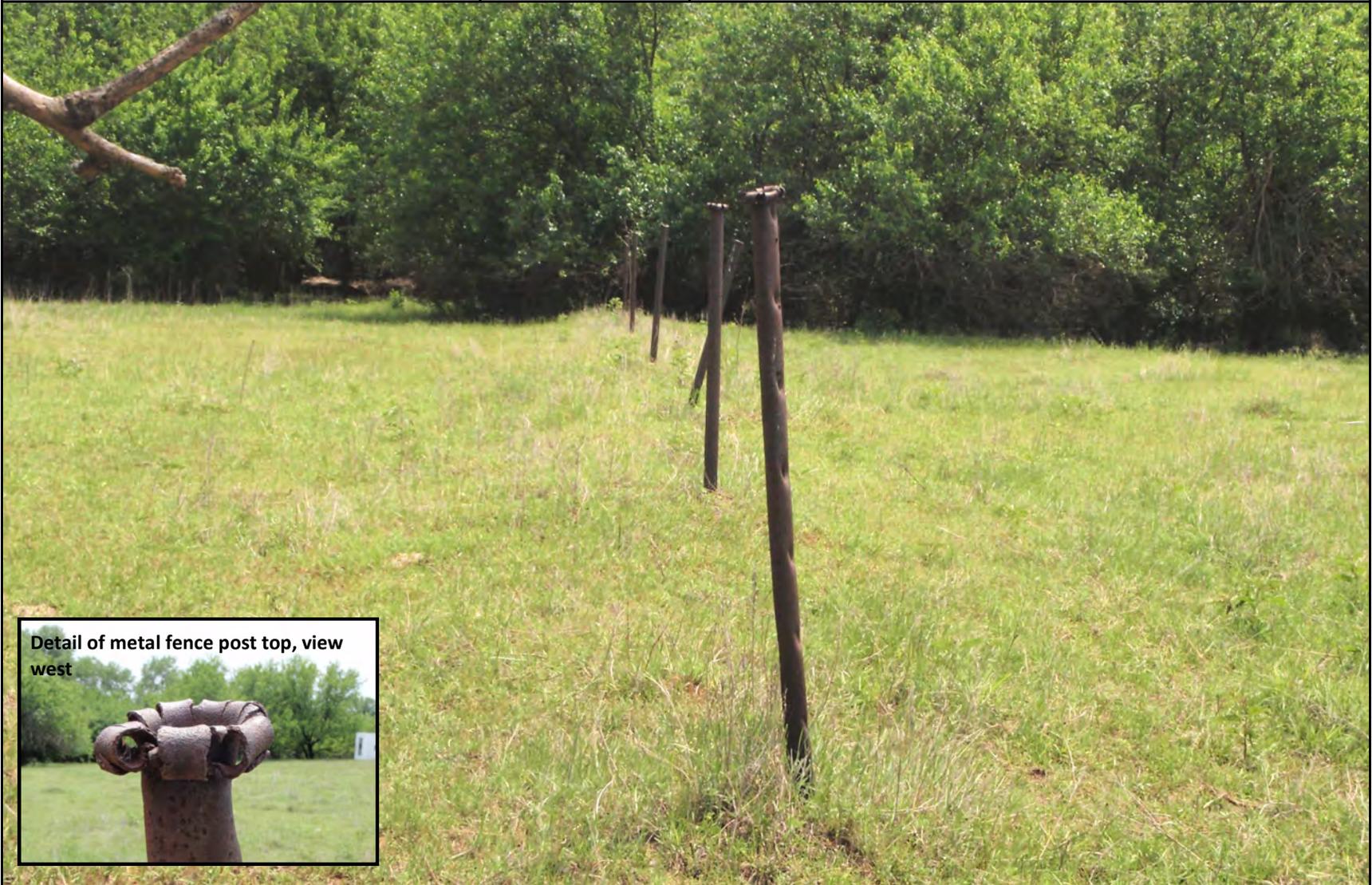
View of fence that once surrounded the Round-Up arena



Figure A112

Direction:
south

View of metal fence posts near Round-Up arena



Detail of metal fence post top, view west



Figure A113

Direction:
southwest

Overview of “elephant barn” foundation slab.



Figure A114

Direction:
northeast

Overview of foundations slab of "elephant barn."



Figure A115

Direction:
northeast

Oblique overview of the west and south sides of the “monkey house.”



Figure A116

Direction:
southeast

Oblique overview of the north and east sides of the "monkey house."



Figure A117

Direction:
northwest

Overview of the east and south sides of the bear den.



Figure A118

Direction:
northwest

Overview of the “alligator pit.”



Appendix B: Interpretation of Low and High Magnetic Resolution

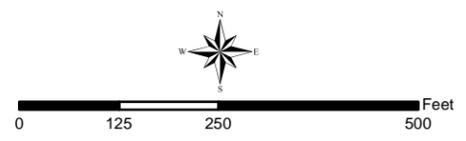
101 Ranch

Building Index for High and Low Contrast Magnetic Survey Maps



Legend

- 1: Ranch Headquarters (a: 1903, b: 1910)
- 2: Blacksmith Shop
- 3: General Store (a: 1903, b: 1905, c: 1918)
- 4: Dining Hall (a: 1903, b: 1918)
- 5: Poultry House
- 6: Horse Barn (a: 1903, b: 1918, c: 1920)
- 7: Mule Barn
- 8: Oat Bin
- 9: Dairy Barn
- 10: Power House
- 11: Seed Storage
- 12: Corn Storage
- 13: Riverside Camp
- 14: Worker Housing
- 15: Hotel
- 16: Silo
- 17: Privy
- 18: Cattle Barn Complex
- 19: Hog Barn
- 20: Meat Packing Plant
- 21: School House
- 22: Round Up Arena
- 23: Cider Mill
- 24: Elephant Barn
- 25: Round Barn
- 26: Exotic Animals
- 27: Market
- X: Building Function Unknown



Source:
ESRI Basemap: BING Maps Aerial

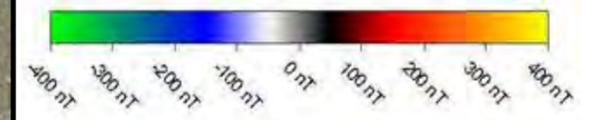


101 Ranch

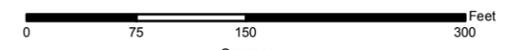
High Contrast Magnetic Survey

See index map for building identifications

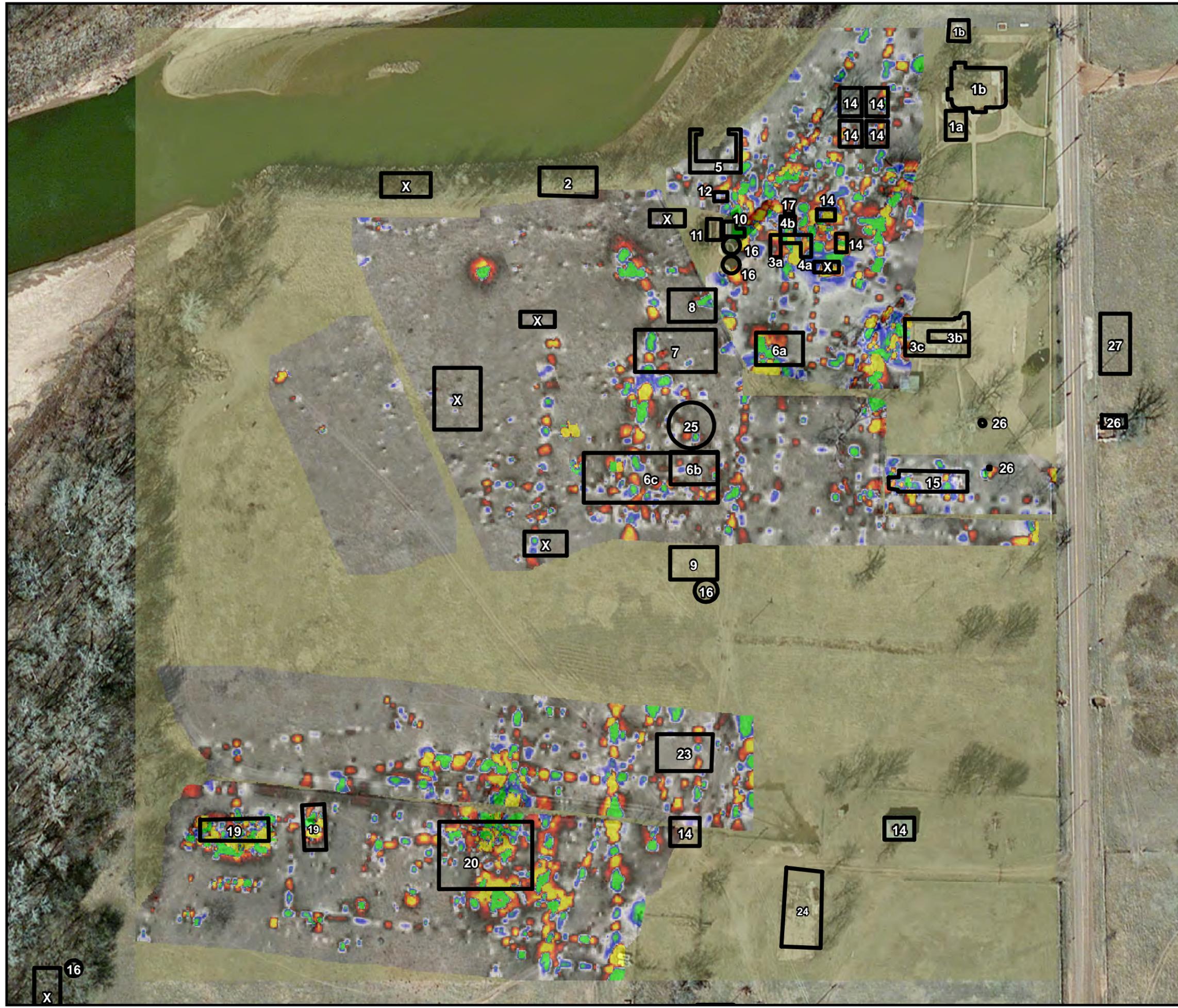
Geophysical Data Collected
and interpreted by:
Archaeo-Physics LLC
Minneapolis, MN



The natural magnetic background is relatively uniform, expressed as values near zero (medium gray) in this plot. Positive and negative deviations from the mean can generally be assumed to be cultural. In general this dataset is dominated by ferrous metal, which occurs in great quantities. Ferrous metal objects are typically expressed as bipolar anomalies - having both positive and negative poles - which are pervasive throughout much of the area surveyed. Ferrous metal (iron and steel) is very highly magnetic, and can be assumed to be the source of most of the variance in the colored range of the scale, although fired brick architecture is another possible source. Weaker anomalies in the white-gray-black range of the scale may be caused by smaller masses of metal, especially if the anomalies are spatially small. If these weak anomalies are larger and more diffuse, they may be caused by organic enrichment, soil disturbance, non-reinforced concrete, or a variety of cultural and natural phenomena. This type of subtle variance is difficult to distinguish in this dataset, which is dominated by very high amplitude "clutter" caused by ferrous metal. Another source of magnetic anomalies can be burned materials, including rock and soil. Anomalies caused by burning can vary in strength from very weak to relatively strong.



Source:
Archaeo-Physics LLC;
ESRI Basemap: BING Maps Aerial



101 Ranch

Low Contrast Magnetic Survey

See index map for building identifications

Geophysical Data Collected
and interpreted by:
Archaeo-Physics LLC
Minneapolis, MN



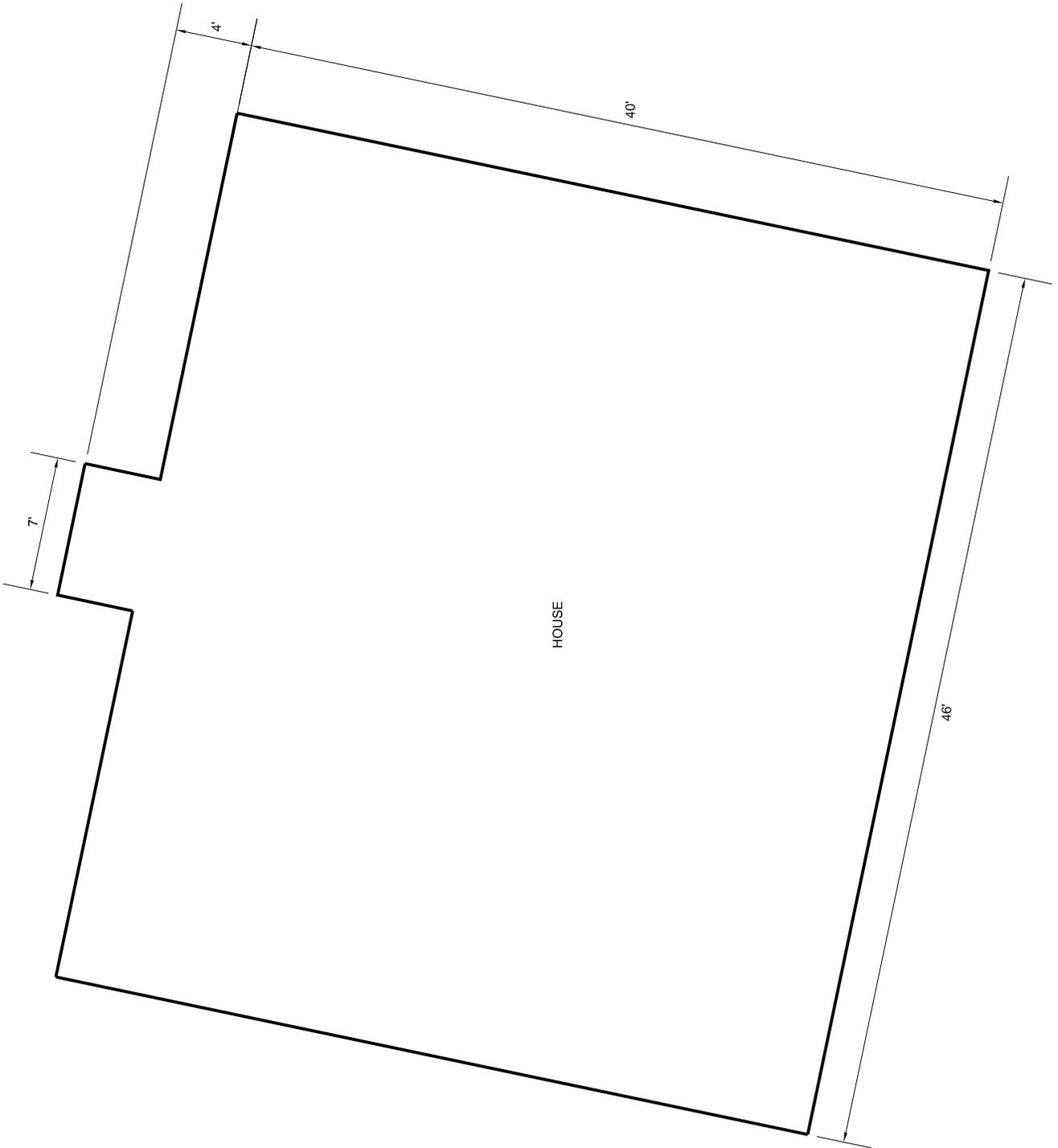
In this alternate plot, rendered in lower contrast with a simplified color scale, high-amplitude patterning can be more easily distinguished. In particular, the linear patterning of steel pipes is apparent. In this plot, positive and negative values are not distinguished, as both are almost certainly caused by ferrous metal in the range that is displayed.



Source:
Archaeo-Physics LLC;
ESRI Basemap: BING Maps Aerial

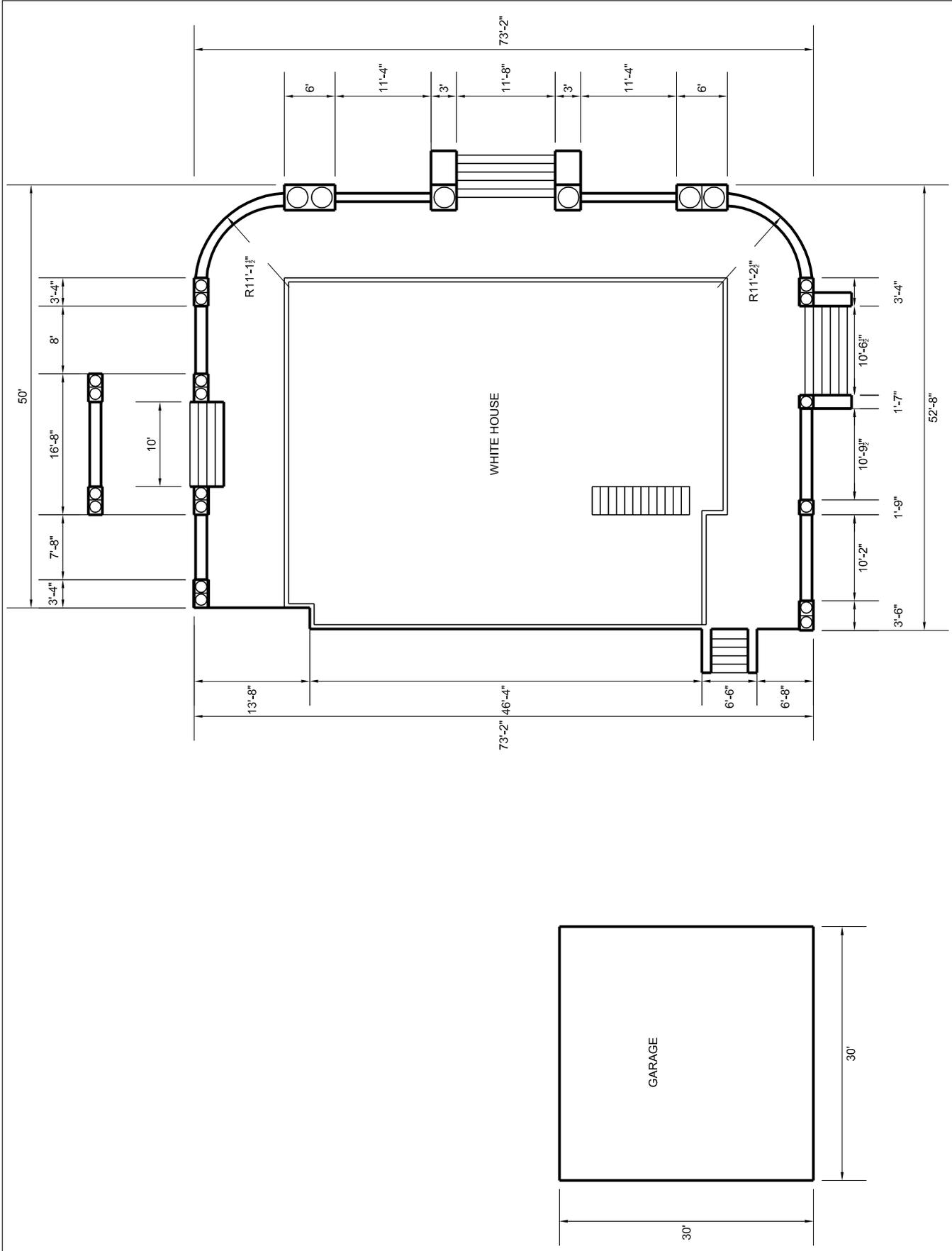


Appendix C: Plan Maps

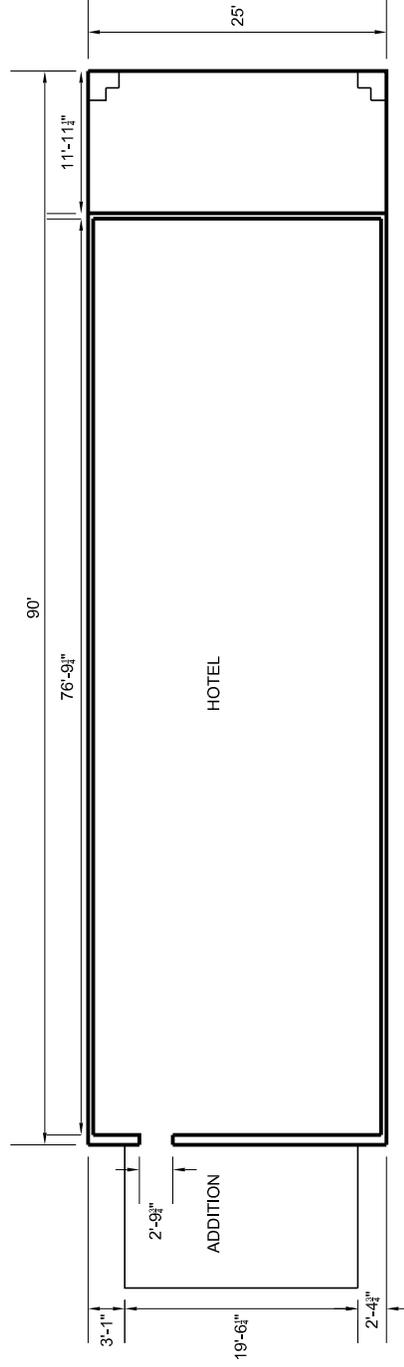
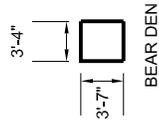


101 MILLER RANCH
HOUSE AT RIVER CAMP
1/8" = 1'-0"



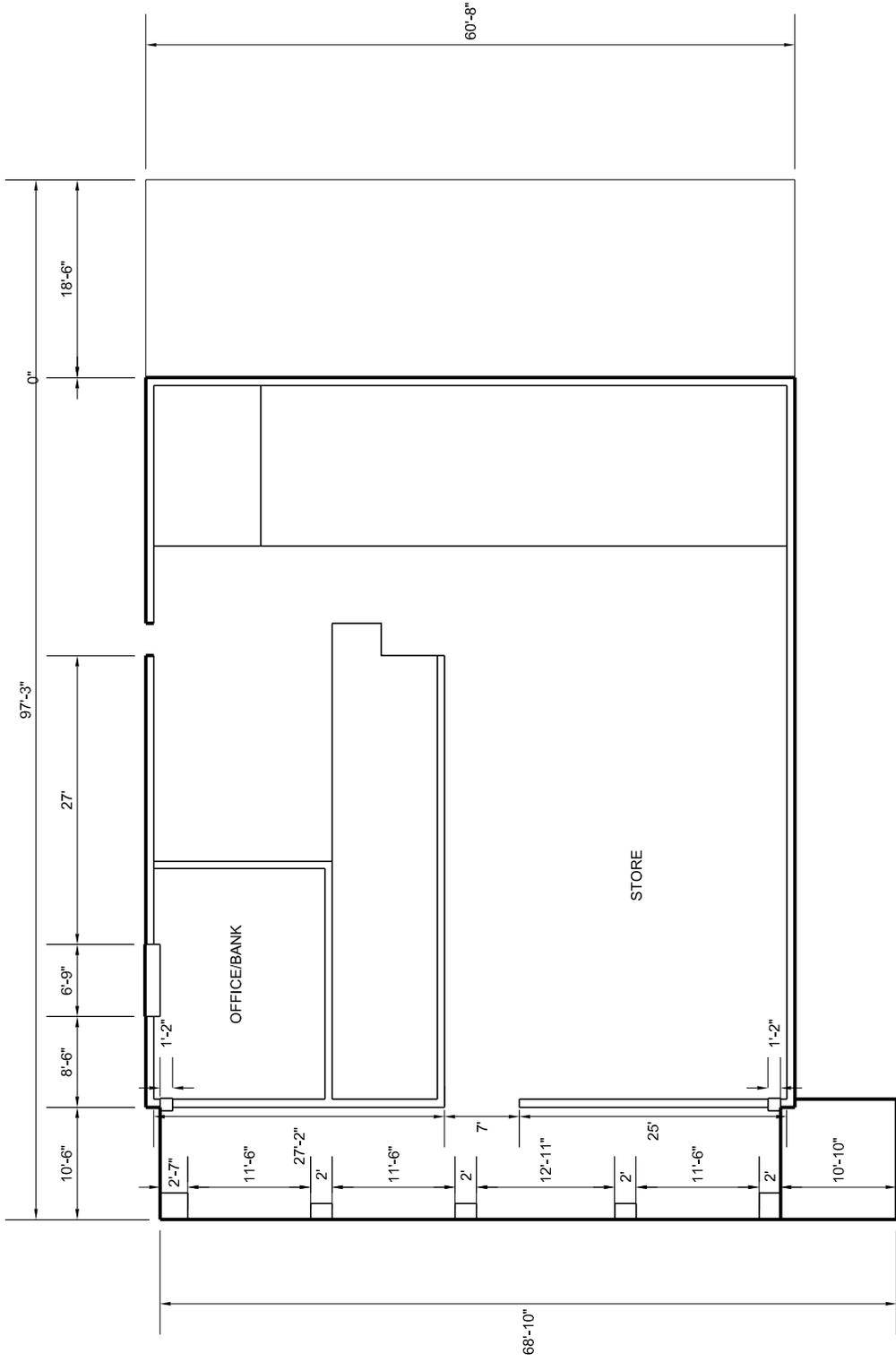


101 MILLER RANCH
 WHITE HOUSE AND GARAGE
 1/16" = 1'-0"



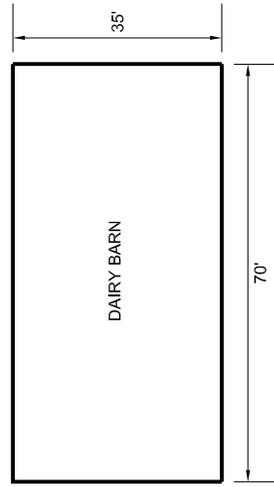
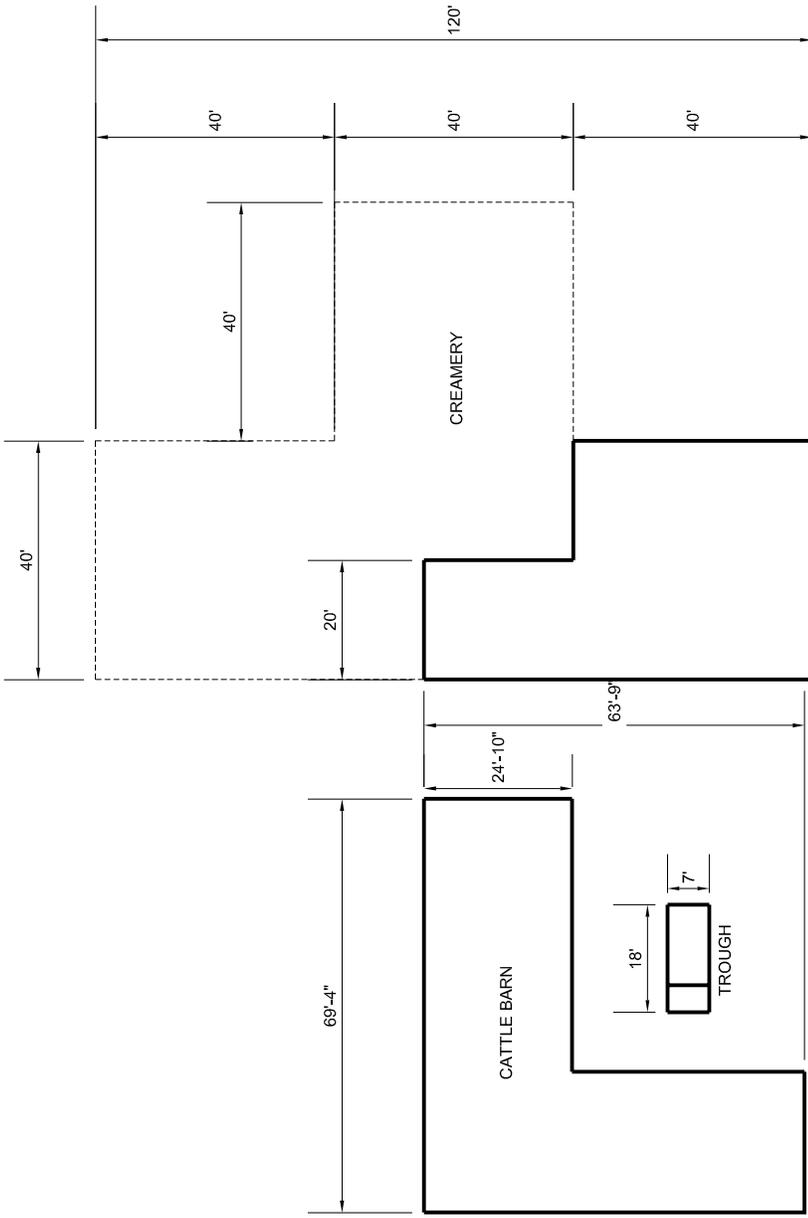
101 MILLER RANCH
HOTEL/BUNK HOUSE AND BEAR DEN
 $\frac{1}{16}$ " = 1'-0"





101 MILLER RANCH
 GENERAL STORE
 $\frac{1}{16}" = 1'-0"$

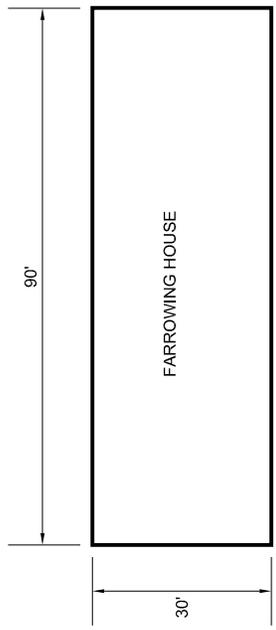
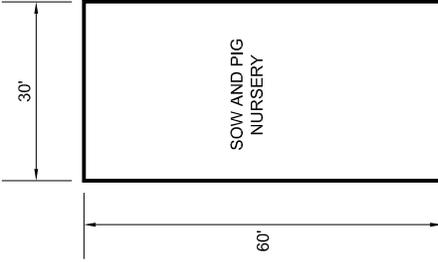




----- ORIGINAL FOOTPRINT
 _____ CURRENT FOOTPRINT

101 MILLER RANCH
 CATTLE BARN COMPLEX
 1/32" = 1'-0"

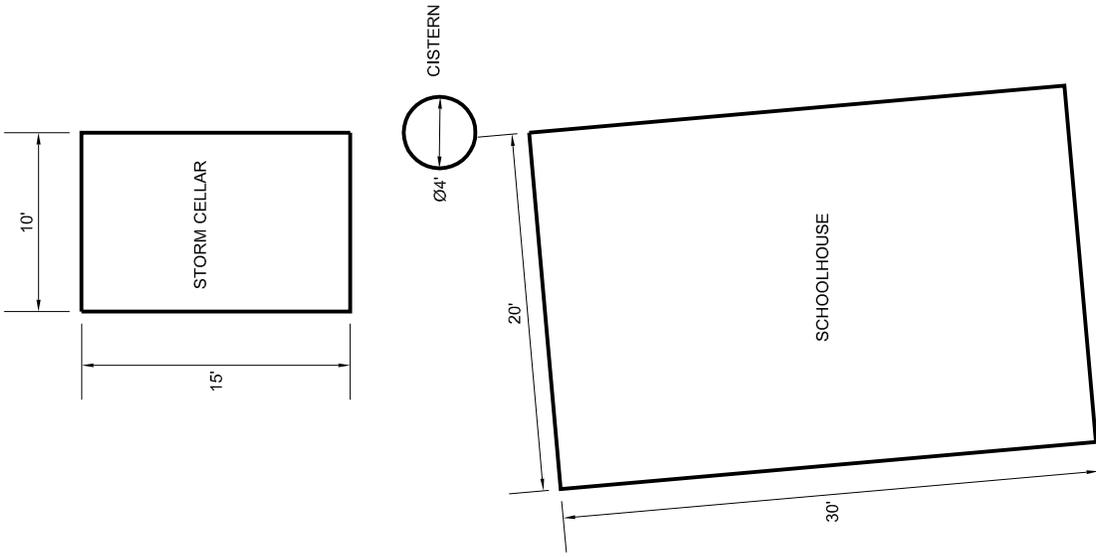




101 MILLER RANCH
SOW AND PIG NURSERY AND FARROWING HOUSE

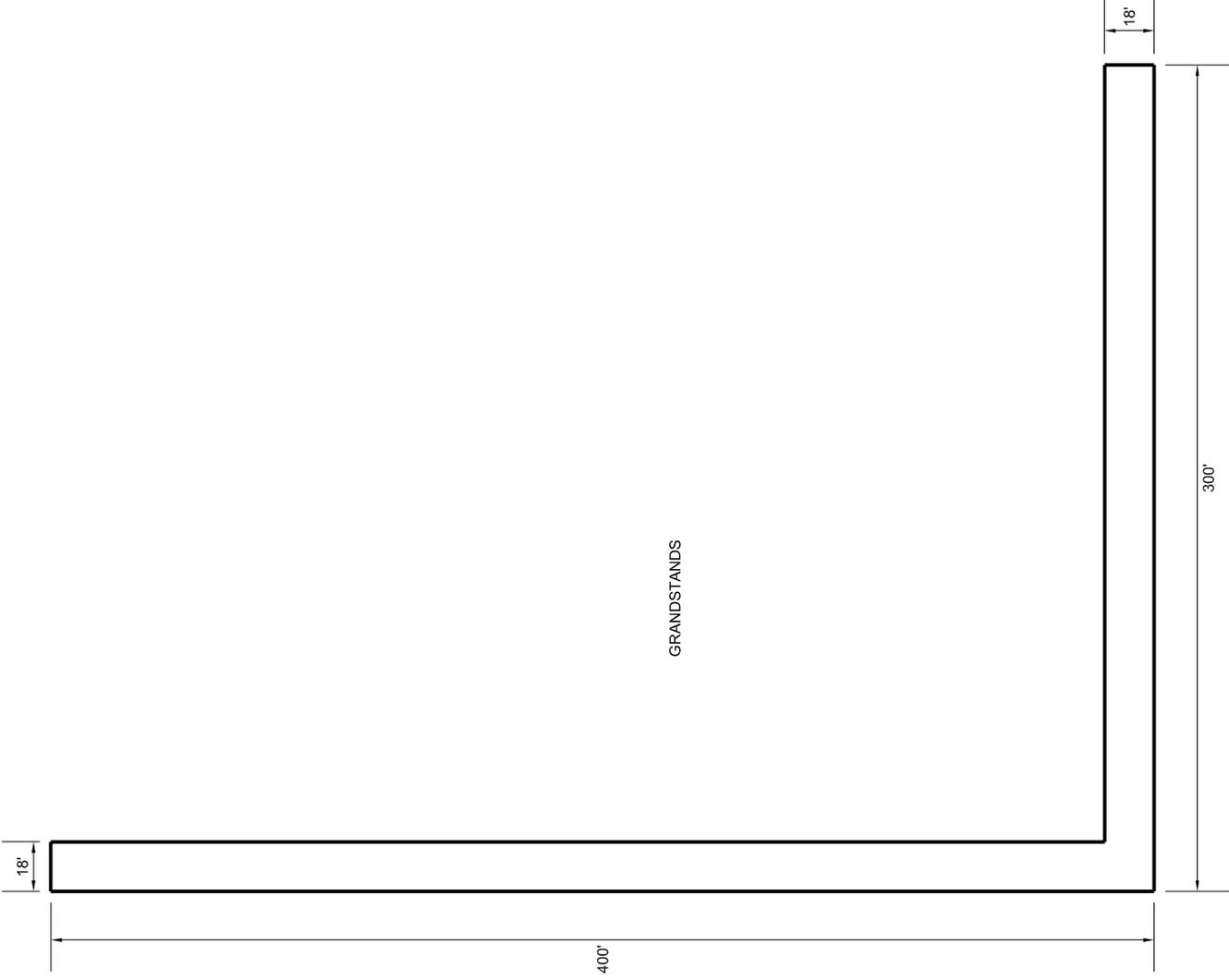
1/32" = 1'-0"



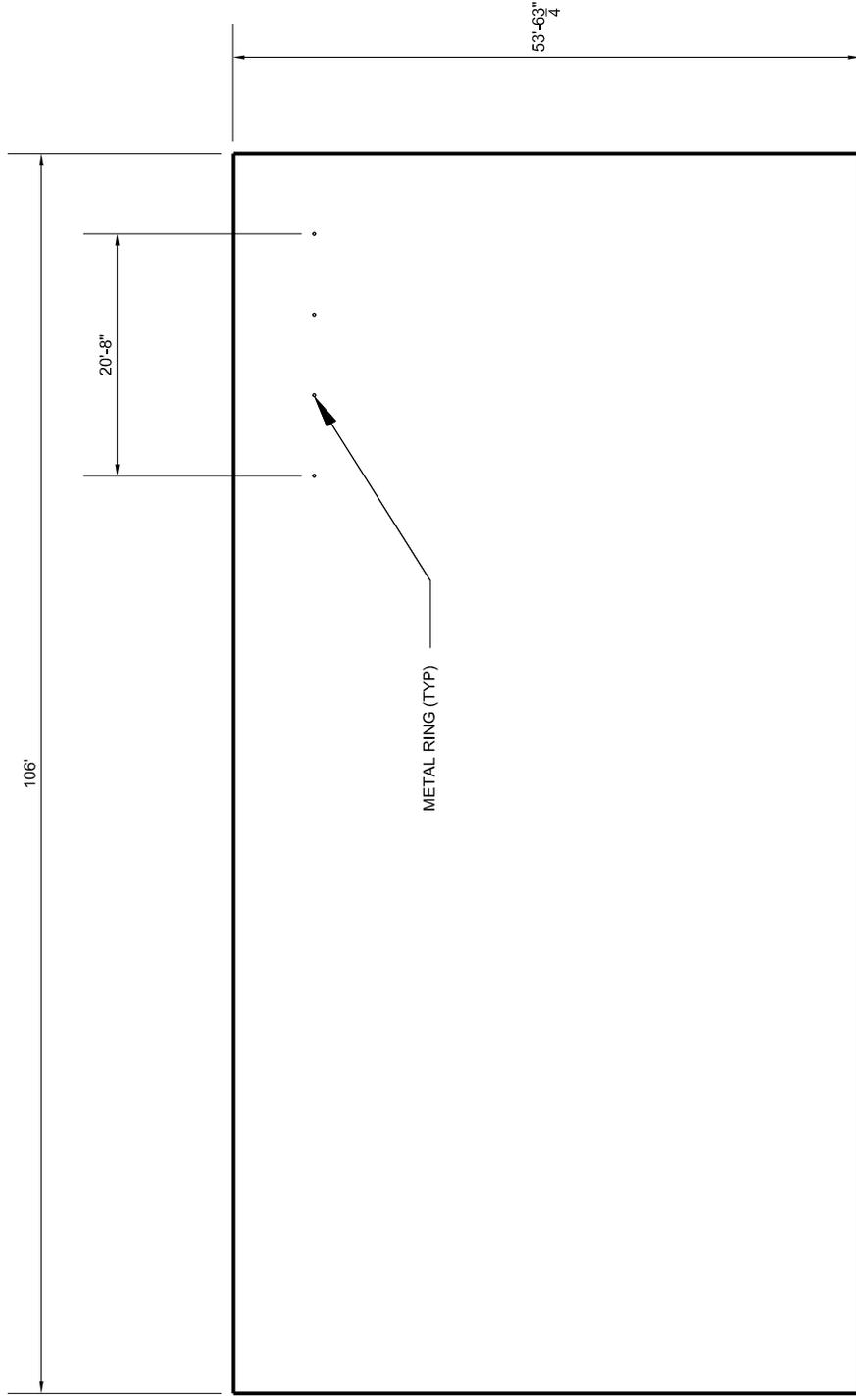


101 MILLER RANCH
SCHOOLHOUSE, CISTERN, AND STORM CELLAR
 $\frac{3}{32}'' = 1'-0''$



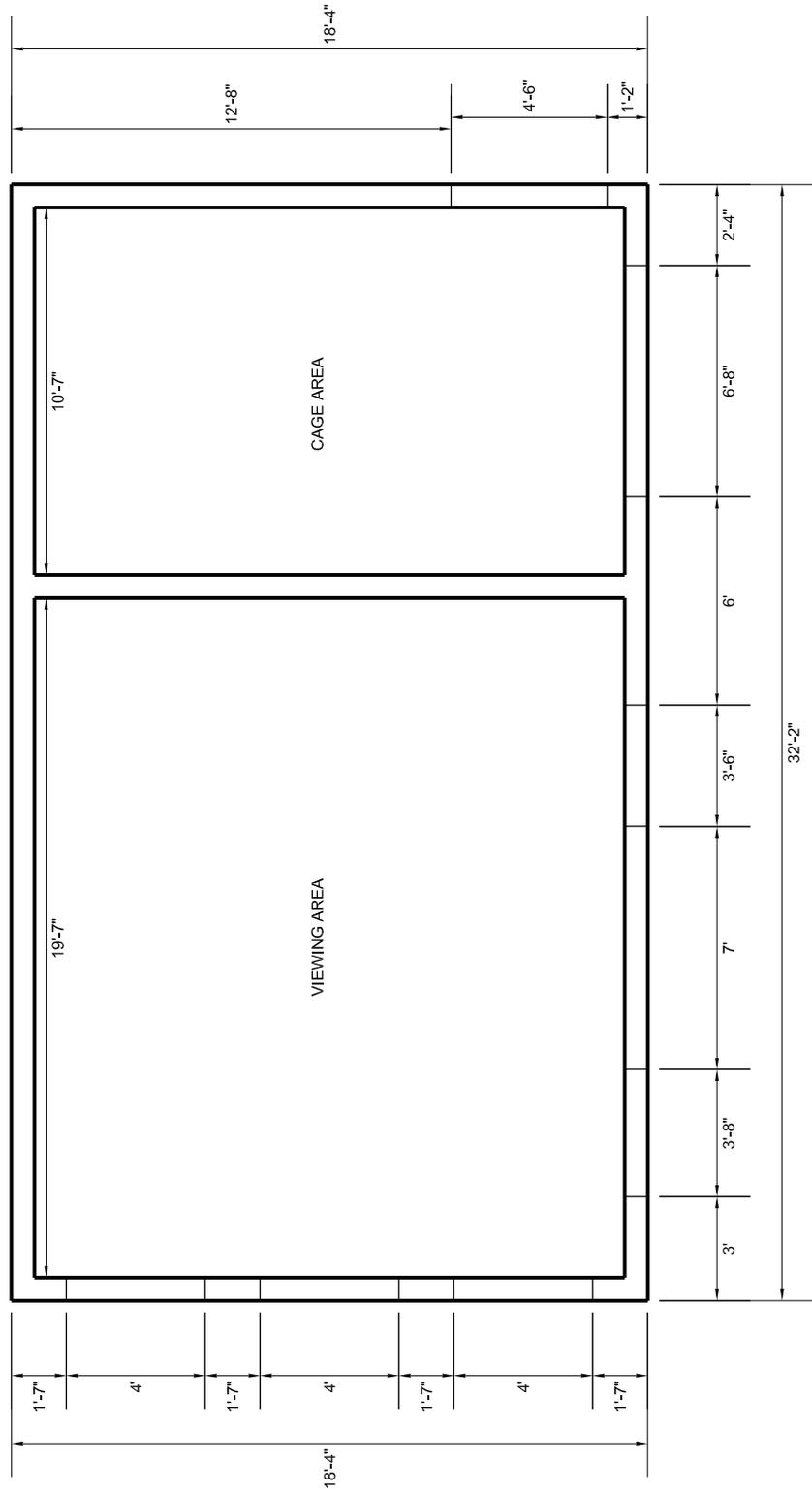


101 MILLER RANCH
GRANDSTANDS
1/64" = 1'-0"



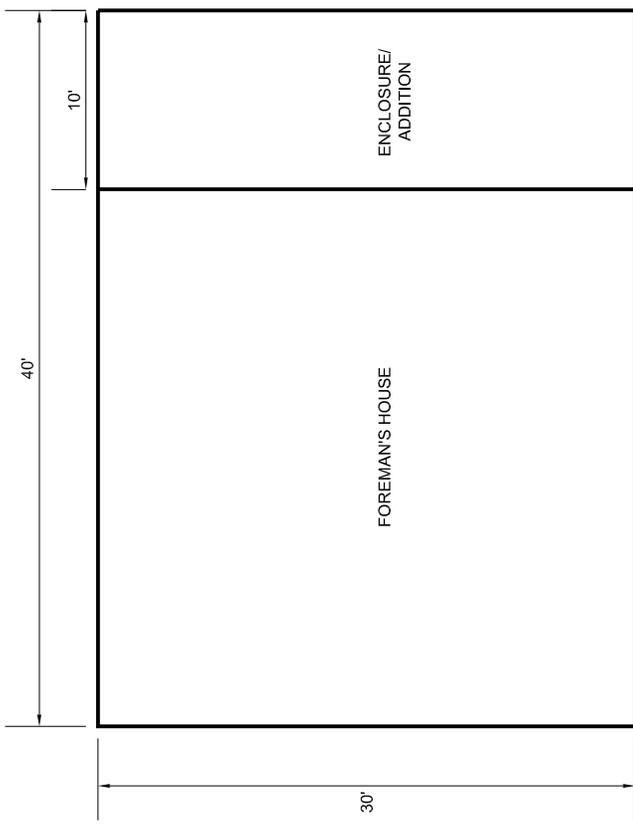
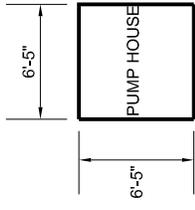
101 MILLER RANCH
"ELEPHANT BARN" (POSSIBLE CANNERY)
1/16" = 1'-0"





101 MILLER RANCH
 EXHIBITION BUILDING: "MONKEY HOUSE"
 $\frac{3}{16}" = 1'-0"$





101 MILLER RANCH
FOREMAN'S HOUSE
3/32" = 1'-0"



Appendix D: OAS Site Form Update and Feature Forms

Oklahoma Archeological Survey
Site Form -- Update

Site No. 34KA318

County Kay

Site Name 101 Ranch

Legal Description

NE 1/4 of the NE 1/4 of the SE 1/4 of Section 25 Township 25N Range 1E

Owner's name, address, phone:

Site description/current condition: The location of the site is on the Marland, OK 7.5-Minute USGS topographic quadrangle. The site currently functions as a de facto roadside park. The site is listed on the NRHP as the 101 Ranch Historic District. Most of the site is in ruins. Three separate areas were subjected to the archaeological survey. These include the area of the Riverside Camp (Feature 1), the Round-Up Grandstands (Feature 2), and the School House (Feature 3). The Riverside Camp area is located just north of the river on the west side of SH 156. The physical remains located in this area include a storm cellar and house footers, along with a limited quantity of historic artifacts. The Round-Up Grandstands and Arena area are situated on the east side of SH 156, located in a cow pasture allowing good visibility of the ground surface for exposed features. The grandstand footings, a slab foundation, and a two-cable fence were located and recorded. The School House area, located just north of the river on the east side of SH 156, was a small, wood frame building with an entry on the west side. Portions of the school house foundation remain visible near the river. A large slab can be seen on the southeast corner, as well as a portion of the foundation on the west side. A storm cellar and cistern were also recorded with the school house.

Additional artifacts (attach outline sketches): None collected; shovel tests produced historic glass fragments, historic metal fragments, historic ceramic fragments, and charcoal; diagnostic surface finds include the upper portion of the handle, rod, and valve strainer for vacuum type coffee maker (Cory rod), a bone toothbrush, and a small square bottle base (2 x 2 cm) (See attached)

If private collections, names and addresses of owners:

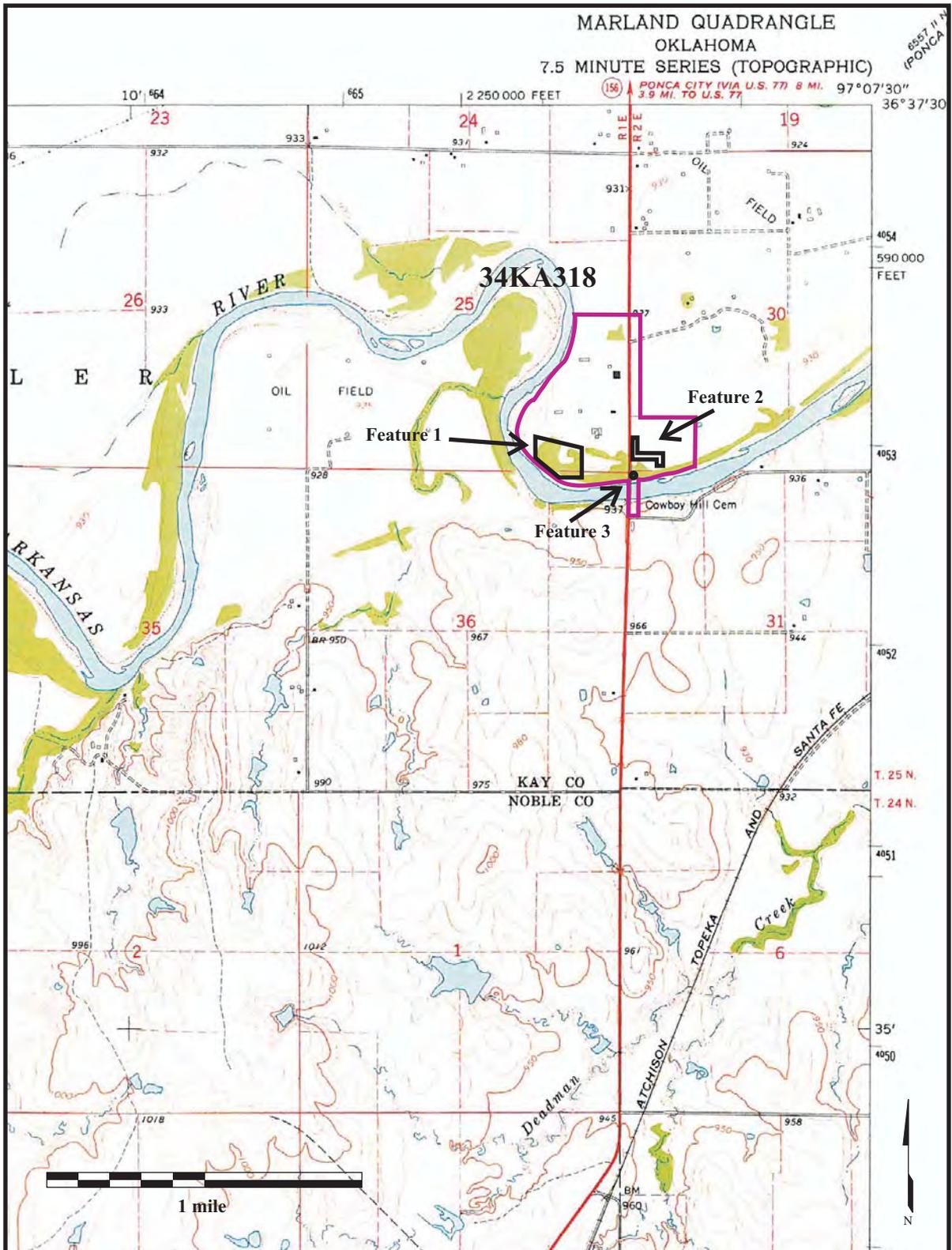
Photographs added to Survey's collection: Yes No

Publications or manuscripts: Geophysical, Archaeological and Architectural Investigations at
101 Ranch Historic District
Kay County, Oklahoma (2011)

Recorded by Karen Jordan

Date March/May 2011

Project No. 37974201



Topographic Map of Site 34KA318 (101 Ranch Historic District)

URS Source: USGS Quad 1968 Marland, OK 7.5 minute



FEATURE FORM

Project Name: ODOT 101 Ranch
Site Name: 101 Ranch
Feature Number/Name: 1/Riverside Camp

Project Number: 37974021
Site Number: 34KA318
Recorder: Karen Jordan Date: Mar/May 2011

PROVENIENCE

NAD 83
N 4053190.2988 E 666033.2635
N 4053138.2980 E 666233.6195
N 4052971.5896 E 666230.5606
N 4052992.2370 E 666024.0869
N 4053060.2969 E 665946.8505
N 4053157.4160 E 665946.8505

Describe location

The Riverside Camp area is located just north of the river on the west side of SH 156. The physical remains located in this area include a storm cellar and house footers, along with a limited quantity of historic artifacts.

FEATURE DESCRIPTIONS

The **storm cellar**, measuring approximately 12 x 18 ft, has a series of concrete steps over a distance of 8 ft leading down to the entrance. The roof of the structure is curved or arched

The **house footers** are concrete, brick, and rock exterior wall footings. The full depth of the footings was not exposed. Much of the rock and concrete from this area was friable and would break apart easily. These footers were approximately 6 inches wide and about 30 to 40 feet long with a 5 x 6 ft slab in the middle of the exposed wall footings. Orientation was W-NW to E-SE.

ARTIFACT ASSEMBLAGE

Type	Count	Comment
Historic Glass	42	Surface finds were not included in count
Historic Metal	40	Count is approximate; surface finds were not included in count
Historic Ceramics	8	Surface finds were not included in count
Faunal/Bone	2	Surface finds were not included in count
Charcoal	7	Count is by shovel test
Diagnostics	3	Surface finds

Description of Diagnostic Surface Finds:

Glass Cory rod: the upper portion of the handle, rod, and valve/strainer for vacuum type coffee maker (patent #s 1,927,287, 1,935,583, and 1,931,076)

Bone toothbrush: Three rows of bristles no longer present; probably swine hair; "Hard; Pro-phy-lac-tic GUARANTEED; Made in U.S.A.; Florence Mfg. Co.; A CLEAN TOOTH NEVER DECAYS" printed on handle

Small square bottle base: Owens Illinois Glass Co., Toledo, Ohio, 1929 to 1954

ADDITIONAL COMMENTS



FEATURE FORM

Project Name: ODOT 101 Ranch

Project Number: 37974021

Site Name: 101 Ranch

Site Number: 34KA318

Feature Number/Name: 2/Round-Up Grandstands

Recorder: Karen Jordan

Date: May 2011

PROVENIENCE

NAD 83

- N 4053281.3002 E 666487.5057
- N 4053281.3002 E 666533.3887
- N 4053189.5341 E 666534.1534
- N 4053188.0047 E 666736.8035
- N 4053096.2386 E 666738.3330
- N 4053097.7680 E 666702.3913
- N 4053145.9452 E 666701.6265
- N 4053145.9452 E 666488.2704

Describe location

The Round-Up Grandstands and Arena area are situated on the east side of SH 156, located in a cow pasture allowing good visibility of the ground surface for exposed features. The grandstand footings, a slab foundation, and a two-cable fence.were located and recorded.

FEATURE DESCRIPTIONS

The above-ground, concrete grandstand footings are in an ‘L’ shape configuration. The first grouping of concrete footings is positioned east-to-west and the second grouping is positioned north-to-south. Both groupings meet at the southwest corner. Within this ‘L’ shape configuration, three parallel linear concrete footings were positioned which originally supported the grandstands.

Midway in the north-to-south footing axis, a gap is evident and has a large concrete slab. This slab may have been a walkway into the grandstand area or the location of a staircase leading to the upper grandstand benches. From the gap and slab area the length of the concrete footings were approximately 164 feet in length.

Located midway to the east on the east-west axis, a two-cable fence extended from the grandstand footings. The cable is identical to a partially exposed buried cable that was observed in the summer camp area. East of the end of the footings, the two-cable fence and hog wire were still standing.

ARTIFACT ASSEMBLAGE

Type	Count	Comment
Historic Glass	0	
Historic Metal	0	
Historic Ceramics	0	
Faunal/Bone	0	
Charcoal	0	
Other	1	No artifacts were observed on the surface or while uncovering the footings with the exception of a large concrete block that had “101 Ranch” inscribed in it.

ADDITIONAL COMMENTS



FEATURE FORM

Project Name: ODOT 101 Ranch
Site Name: 101 Ranch
Feature Number/Name: 3/School House

Project Number: 37974021
Site Number: 34KA318
Recorder: Karen Jordan Date: May 2011

PROVENIENCE

NAD 83
N 4053057.2380 E 666448.5051
N 4053057.2380 E 666497.4470
N 4053007.5314 E 666498.9764
N 4053006.7666 E 666447.7404

Describe location

The School House area, located just north of the river on the east side of SH 156, was a small, wood frame building with an entry on the west side. Portions of the school house foundation remain visible near the river. A large slab can be seen on the southeast corner, as well as a portion of the foundation on the west side. A storm cellar and cistern were also recorded with the school house.

FEATURE DESCRIPTIONS

The school house foundation is approximately 20 x 30 ft
The storm cellar is constructed of reinforced concrete and approximately 10 x 17 x 12 ft with a narrow stairwell leading in. A coal/wood stove is at the rear of the cellar.

ARTIFACT ASSEMBLAGE

Type	Count	Comment
Historic Glass	0	
Historic Metal	0	
Historic Ceramics	0	
Faunal/Bone	0	
Charcoal	0	
Other	0	No artifacts were observed on the surface

ADDITIONAL COMMENTS



34KA318: Surface find from Riverside Camp, Cory Rod.



34KA318: Surface find from Riverside Camp, bone toothbrush.



34KA318: Surface find from Riverside Camp, small square bottle base.