

East Feed Lot/Warren Hereford Ranch

East Feed Lot/Warren Hereford Ranch

[Existing conditions inventory maps and photographs are found at the end of this section]

Introduction

The Warren Hereford Ranch rests on the narrow strip of land that is contained by the railroad corridor to the west, Business Loop 90 to the east, Front Field to the north, and the Con Warren residence to the south. It is approximately 35 acres in size. The East Feed Lot, along with the Warren Barn, was constructed in the early 1950s.

The East Feed Lot was the center of much activity on the ranch as highly productive breeds of cattle were bred and sold. The ranch became well known throughout the western U.S. as the show place for champion Herefords. During the 1940s, hundreds of people often congregated at the ranch during stock sales. The entire operation was active until the early 1980s when the last remaining stock was sold.

Natural Systems and Features

[see Map EC-8 at the end of this section]

The East Feed Lot of the Warren Hereford Ranch is situated on a generally flat area of land, consisting of deep and well-drained Beaverell Loams that define the upper benchland area. A slight grade change occurs to the west of the corrals, where a drainage swale is located along the railroad corridor (see Photo 3-2-1). As a result, the area drains to the south and west. This complex is relatively devoid of natural water features.

Vegetation

[see Map EC-8 at the end of this section]

Pasture grasses comprise all the vegetation within this complex (see Photo 3-2-2), and provide food for the grazing livestock contained there. Because these corrals have been so heavily impacted by livestock, the species composition is a mix of native and non-native grasses and forbs. A detailed breakdown of vegetation species is not available for this area.

Spatial Organization

[see Map EC-8 at the end of this section]

Due to the muddy conditions of the poorly drained soils along the riparian corridor, Warren expanded his Hereford operations eastward across the railroad corridor in the early 1950s. The organization of these feedlots was determined by the function of Warren's ranching operations. The layout is defined by a central north-south axis that responds to the narrow strip of land located between the railroad lines and Business Loop 90.

Eleven corrals, each approximately 60 feet by 60 feet, are located to the north of the NPS Service Entry Road that links Business Loop 90 with the rest of the ranch. This bi-laterally symmetrical corral complex is connected by two alleys, one located along the central axis (see Photo 3-2-3), and the other located along the west edge.

Most of these corrals contain one cow loafing shed which is located on the northern side of the corral. The open side of these sheds faces south, responding to southern exposure and northern

winds. Each corral contains a feed house located on the inside of the north-south axis, providing ranchers with easy vehicular access for restocking feed.

One corral is occupied by buildings, including the Sales Barn (now NPS Maintenance Shop) (HS-65), which is located in the corral directly north of the Warren Barn, a new NPS Resource Building/Office (Bldg. 0003) that was constructed adjacent to this garage in 2000, and a Scale House (HS-66). The Warren Barn (HS-64) and Loading Chute (HS-69), which are located along the entry road, anchor the southeast corner of the north corral complex.

Two other pastures are found to the west of the primary feedlots. One of these west pastures contain a squeeze chute and feed rack, and serves as a staging area for moving cattle from the feedlots onto trucks or trailers, and vice versa (see Photo 3-2-4). The northwest pasture is the largest, measuring a little more than four acres in size, (see Photo 3-2-5).

Several other corrals are located to the south of the entry road, and are bounded on the north and south by the east-west entry roads that link the ranch with Business Loop 90. Four small corrals, each measuring 40' x 15', share access to two bull barns located along the road (see Photo 3-2-6). One large corral is located to their east (see Photo 3-2-7). This large corral (referred to as the "Whiskey" pasture), which was named after Con Warren's last horse, sits slightly above the surrounding grade. It consists of compacted rocky soil, which was the result of vehicular parking during cattle sales during the Warren era.¹ This pasture is now used for NPS parking; in 2003 the west end was filled with gravel.

Land Uses

[see Map EC-9 at the end of this section]

The East Feed Lots were originally established in the early 1950s for Warren's purebred Hereford operation. The complex of chutes, gates, and fences were constructed to support the purpose of holding cattle or moving them from one location to the other. The corrals were historically used to provide feeding areas for cattle, and areas for controlled breeding. Today these feed lots are used for calving in the early spring, temporary containment before sale, and some feed storage; a few are also used for calving and containment of the USFS horses. All breed and breed mixes occupy this area. Some of the feed lots are also used for storage of NPS materials and equipment.

The Warren Barn (HS-64) was once the center of Warren's breeding operations. Currently used for storage, this structure once housed Warren's best bull calves which were nursed by Holstein milk cows. The remaining calf crop was held and fed in the lots behind the Sales Barn (HS-65). The use of the bull barns (HS 62 and 63) has been continuous, alternating between bulls and horses; these structures are also used for storage.

The Sales Barn (HS-65) is currently used by the National Park Service to support the logistical and maintenance needs of the working ranch. These include a woodworking shop, metal working shop, storage areas, and restrooms. The chutes and animal access/egress fences are no longer used for their original sales purposes.

One new building, the Resource Building/Office (003), built in 2000, currently contains NPS offices and restrooms. The area immediately surrounding the Warren Barn, Sales Barn and Resource Building/Office also contains a variety of farm and earthmoving equipment and materials, such as a horse trailer, tractor, backhoes, trucks, a frost-free hydrant on the southwest

¹ Keohan, 12.

corner of the Sales Barn, wood posts and planks for fencing, and several other pieces of machinery associated with NPS working ranch operations (see Photo 3-2-8).

One corral, located in the northwest section of the complex, known as the “boneyard,” currently serves as a storage area for surplus materials, such as old wood palates, wood and metal fencing materials, a dolly, a chassis, and metal watering troughs (see Photo 3-2-9). It also contains the hand-irrigation pipes that are assembled to irrigate the fields with water from the effluent ponds, and some historic materials such as the manure spreader and the water truck.

Constructed Water Features

[see Map EC-9 at the end of this section].

Heated water troughs are located in each of the corrals (see Photo 3-2-10). These “Ritchie Fountains” can be found along shared fence lines between corrals, the shared fence lines of the two bull barns, and in the northeast corner of the west corral. These fountains are approximately 18 inches wide, four feet long, and three feet deep, and each derives its energy source from an underground electrical line. They were added sometime before 1956. In some corrals, the NPS has added a second fountain ca. 1999. Fire hydrants were added ca. 1999, around the same time as the city water connections. There is also enough hand line to irrigate the West Corral with water from the effluent ponds, if necessary. This system was installed by the NPS in 1999 and is described in more detail in the Pasture/Hay Fields section.

Circulation

[see Map EC-8 at the end of this section]

As mentioned earlier, the NPS Service Entry Road links Business Loop 90 with the rest of the ranch. This road divides the north corral complex from the south (bull) corrals, and continues over the railroad corridor to the west (see Photo 3-2-11). It was built in 1973 by the NPS and expanded upon the Bull Barn Road built by Warren.

Another road, Kohrs-Warren Lane, bounds the Warren Hereford Complex on the south, dividing it from the Warren Residence. Historically the main approach to the ranch from the highway, this road eventually links to the main entry road before passing over the railroad tracks (see Photo 3-2-12).

One gravel driveway provides access from the NPS Service Entrance to the parking area serving the Sales Barn and NPS offices located to the north of the Warren Barn (see Photo 3-2-13). This gravel parking area is located to the south and west of these structures and dates to the Warren period.

Unpaved grass/dirt roads provide north-south vehicular access along the alleys. The central alley connects the north corral complex with the Front Field.

Views and Vistas

[see Map EC-8 at the end of this section]

Views within the Warren Hereford Ranch Complex are generally focused inward, as the feedlots and alleys divide the spaces into several contained areas. As the elevation of the Warren Ranch sits above the elevation of the Home Ranch Complex, views to the majority of Home Ranch complex are generally obstructed. Views of the western foothills and Flint Creek Mountain range, however, figure prominently in the western viewshed and are important features in the landscape.

Views to the east, particularly the Continental Divide, are equally important, as are views of the Warren Residence. Views of the Warren Hereford Ranch complex, particularly the bull barns, are also easily seen from the Warren House. Views of newer development along Business Loop 90 generally occurred after 1982 (particularly commercial development north of the Fairgrounds). However, the Fairgrounds grandstands date to before the 1930s and were part of Warren's view to the east.

Buildings and Structures

[see Map EC-9 at the end of this section]

The following buildings and structures information has been derived from the "National Register of Historic Places Registration Form," the draft *Warren Hereford Ranch Historic Structures Report* and survey forms, and supplemented by field observations during the 2002 site visit (see bibliography for full citations).

Buildings and structures within this zone interpret Conrad Warren's breeding operations. Features include barns, chutes, sheds, and other equipment used for handling the animals.

The functional center of Warren's purebred breeding operation lay within the **Warren Barn** (HS-64), (see Photo 3-2-14). This large, two and one-half story, post-and-beam, rectangular barn has a barrel-vault roof formed by large, glue-laminated beams. The roof features 1" by 10" sheathing, corrugated metal roofing, and three metal ventilators. The building is constructed on a concrete slab foundation. In 1972, the original white-painted shiplap siding was covered with red, vertical, anodized, corrugated steel siding. Four multi-light, multi-panel overhead garage doors, three added in 1972, dominate the lower level of the south elevation. At the loft level, the south elevation contains one set of centered, cross-braced, wood-frame double doors. Three hopper windows surround the double-doors: one on either side and one centered above. The north side of the west elevation has two wooden cross-braced sliding doors suspended from a metal rail. Eight multi-light hopper windows are spaced evenly across the west elevation. A multi-light, multi-panel overhead garage door, on the north elevation, is off-center to the east. A pair of wood-frame, cross-braced double doors are off-center to the east at the loft level. Multi-light hopper windows surround the hay doors. Ten multi-light hopper windows are spaced across the east elevation. A centered, wood-frame, side-hinged, cross-braced door provides access to the stall area.

Two identical **Bull Barns** (HS-62 and 63), (see Photo 3-2-6) are located directly east of the railroad grade and northwest of the Warren home. The barns used to house Warren's prize Hereford bulls. They are two-story, rectangular, wood-frame structures constructed on poured concrete foundations, each approximately 32 feet long, 16 feet wide and 20 feet high. Corrugated metal panels cover the gable roofs and rafter ends are exposed. Red, originally white, 5 1/4" horizontal wood siding sheaths the walls. Each gable-end contains a square, side-hinged hay door with cross bracing and painted metal hardware. A four-light window is centered above each hay door. A central, side-hinged door, flanked by two small windows, is on the north elevation of each barn.

A **Squeeze Chute** (HS-67), (see Photo 3-2-15) and **Feed Rack** (HS-68), (see Photo 3-2-16) are located in the corral north of the Bull Barns and west of the Warren Barn. The squeeze chute is approximately 110' long and is constructed of wood. It was rehabilitated in the 1990s. The feed rack consists of several narrow wood beams crossed close to the bottom of the beams to form a large V pattern at the top while the rack rests on the smaller V. A long wood plank rests in the crux of the larger V to support fodder. As this structure was completely deteriorated, it was reconstructed in 1998.

A **Portable Chute System** (see Photo 3-2-17), constructed of sheet metal, square tubing, and round pipe was added by the NPS in 2000 to more safely and efficiently control the movements of animals. It is dark brown in color and is a completely portable structure. The chute ends consist of sliding metal doors. Each side consists of a row of vertical metal posts resting on a metal wall. The animals enter one end from a corral and are released through the other into a narrow passageway leading to a second corral. This portable chute is used instead of the existing historic squeeze chute (HS-67) for animal and staff safety.²

Directly north of the Warren Barn lies the **Sales Barn** (HS-65) now the NPS Garage/Shop, (see Photo 3-2-18). Built in 1954, the metal barn is a square, pre-fabricated, steel-frame building with a gabled roof that rests on a concrete pad. Corrugated metal covers the exterior walls and roof. A set of massive corrugated metal and steel-framed, sliding, double-doors dominate the south elevation. The doors open to expose a four-light, multi-panel overhead garage door installed by NPS circa 1992. Sized to hold many of the buyers it has large open spaces measuring overall to be 50 feet long, 50 feet wide, by 20 feet high. The east elevation contains three steel-frame, shed-roof, enclosed additions that once housed restrooms and concessions. The additions are sided and roofed with corrugated metal. Solid metal-frame pedestrian doors flank the central addition. The recessed area leading to these doors is covered by an extension of north and south addition shed roofs. Wooden, cross-braced, side-hinged doors are set on either side of the south elevation of the central addition. The south and north elevations of the central addition feature a four-light, wood-frame, fixed-sash window centered above the shed roof extensions.

The **Resource Building/Office** (003), (see Photo 3-2-19) contains NPS offices and is located north of the Sales Barn. Built in 2000, the office is a one-story building with corrugated metal siding and gabled roof, designed to blend in with the utilitarian buildings on the ranch.

A **Hazmat Storage Building** was added in the Summer of 2003. It is a Bally building on a concrete slab.

The **Scale House** (HS-66), (see Photo 3-2-20) is located west of the Sales Barn. The structure is a square, wooden, post-and-frame building with 2-foot-wide corrugated metal siding and roofing. The building poles are 6 inches in diameter and set 6 feet apart on center. Both the north and south elevations of the scale house contain a large, sliding, corrugated metal door.

A **Loading Chute** (HS-69), (see Photo 3-2-21) is located west of the Warren Barn. The red-painted chute consists of a wood-frame ramp with fence side-rails. The ramp is made of six 8-inch-diameter wood posts, 2-inch by 6-inch floor joists, and three 2-inch by 12-inch wood boards laid lengthwise. The ramp angle is adjustable.

Several **Cow Sheds** (HS 70-77), (see Photo 3-2-22) are located in the zone. The cow sheds are nearly identical and are located north and east of the Sales Barn; one shed is located in each of a series of eight separate corrals. Built in 1952, each shed is a one-story pole structure with board-and-batten siding and a gabled roof. The roofs are finished with corrugated metal sheets and have exposed rafter ends. Each shed is open to the south exposing a four-bay wide by two-bay deep structural system.

Within seven of the eight separate corrals, in conjunction with the Cow Sheds, are seven **Feed Houses** (HS 78-84), (see Photo 3-2-23). The feed houses are rectangular, shed-roofed, wood-

² Grant-Kohrs Ranch National Historic Site, "Compliance Review Form, Portable Chute System," Compliance No. GRKO-005 (On file at Grant-Kohrs NHS archives, October 16, 2000).

frame structures with horizontal shiplap siding. The roof is covered with rolled red mineral roofing.

Objects and Small-scale Features

[see Map EC-10 at the end of this section]

Within the Warren Hereford Ranch landscape, there are several types of fencing and gates. Fences and gates are constructed of various combinations of wood, metal posts, wire mesh, and metal pipe. Although definite fence types occur, many variations exist within each type; a testament to ranch living where any available and useable materials were used. Some features are of obviously new construction while others appear to be reconstructions of historic fence or gate types once present on the ranch. While most of the fencing found within the Warren Hereford Ranch Complex is in good or fair condition, a few segments were observed to be missing or falling down at the time of the field visit.

The most prevalent type of fence within this component landscape is the **5-rail locked-end fence**, (see Photo 3-2-24). This fence type comprises most of the corrals in the landscape. Five split-log rails extend between log posts on one side of the fence while two more split-log rails (or “rub rails”) are placed on the lower half of the fence on the other side. At each post, the rails for one section are stacked alternately with the rails for the next section, creating a stacked, or locked, appearance. This creates a stronger intersection at the posts, and prevents ends from splitting from nails being too close to butt ends, rather than abutting each rail end. Variations of this fence include 4 or 6 rails instead of five and 3 opposite logs instead of 2. In some instances, no rub rails are present.

Along the interior corridor, between the two rows of corrals, is the **Plank and Post fence**, (see Photo 3-2-25). This fence consists of flat wooden planks attached to round wooden posts with small, rectangular, wood battens. One or two sets of planks are attached at ground level to create a feeding area while another is attached just over half-way up the post (cattle can reach through for hay and the planks hold the hay back to keep it from being stepped on). A variation on this fence has two upper planks; one attached to each side of the post.

Contemporary, in-kind replacements of the deteriorated historic fencing is located around the Bull Barns and part of the Squeeze Chute/Feed Rack corral. The **Flat Rail and Post fence**, (see Photo 3-2-26) has 5 flat, milled boards attached to thick, round posts.

Woven Wire fence, (see Photo 3-2-27) is located along the perimeter of many of the corrals, especially the eastern edge of the corrals located along the road. In general, the fence consists of un-milled wood posts or peeled logs supporting a wire mesh component. Variations of this fence type include metal posts or a combination of wood and metal posts supporting wire mesh. Sheep Wire fence is commonly referred to as woven wire fence. This fence is common throughout the ranch. It is bundled in a large roll and when stretched, it has a strong wire top and bottom. Wire squares are larger on top and smaller on the bottom.

While Hog Wire fence is also made of woven wire, it is never referred to as such. Hog wire fencing is comprised of individual “panels” and is occasionally used as a quick fix around the ranch. All the wire is of the same size and stands up by itself with the help of a few wire ties to hold the posts in place.

Within the corrals located around the Warren Barn and in the southwestern corner of the component landscape is a new **squeeze chute system** consisting of a squeeze chute, alley way,

drum, and holding pen. It is constructed of metal pipe fences and gates (Photo 3-2-28), which are round, painted, pipe rails and posts welded together. All of these pipe fences and gates were added by the NPS.

East of the Sales Barn is a complex **system of wood chutes and gates** that were used during the auctions (see Photos 3-2-29 and 3-2-30). This system contains a wide variety of different fence types, to include plank and post fence, 5-rail locked end fence, 5-rail stacked end fence, and a unique chute structure that consists of flat rails stacked horizontally to the inside of a pair of round wood posts. In some areas, the sides of this structure are braced by a wooden plank that spans the approximate three foot space in between the rails. These chutes and gates were observed to be in poor condition at the time of the field visit.

The primary type of gate witnessed in the landscape is the **Red Wood Gate**, (see Photo 3-2-31). This red-painted gate consists of five milled boards attached horizontally to support posts at either end. The gate is braced on each side with a central vertical board and two diagonal boards. Other gates, similar in construction yet not painted, are located throughout the component landscape. A variation of the red gate is the double red gate which has two red gates that swing open from the center instead of from one side.

The second most prevalent type of gate is the **Overhead Bar gate**, (see Photo 3-2-32) consisting of two tall, vertical posts supporting a horizontal crossbar. A red gate is attached to one of the posts and meets the opposite post after swinging closed.

At the entrance to the Warren Hereford Ranch, west of the Bull Barns, is an overhead bar gate with a **5-rail Braced Gate**, (see Photo 3-2-32). This gate has a hinge-post almost twice the height of the gate and has a long, diagonal brace leading from the top of the hinge-post to the opposite corner of the gate. This brace prevents and corrects sagging. This gate type is also located at the eastern end of this same entrance road.

There are three **fire hydrants** located within the Warren Hereford Ranch complex. These were added in 1999, with the phase two extension of the city water line by the NPS. A **hitching post** is located just south of the sales barn. This feature, added by the NPS ca. 1991, is constructed of two log posts that support a horizontal log beam. It is approximately four feet high (see Photo 3-2-33).

A large **lumber stack** is located southeast of the Sales Barn. The wood is being salvaged for fire wood. Large **material piles** are also located in the northwest feedlot, north of the cow shed (HS-72) and in an area termed the "boneyard." These materials consist of old wood pallets, wood and metal fencing materials, a dolly, a chassis, and metal watering troughs (see Photo 3-2-9). It also contains the hand-line irrigation pipes that are assembled to irrigate the fields with water from the effluent ponds. The material pile located in the northwest section of this corral dates to the Warren period (ca. 1970s), while the other dates to NPS management of the ranch (ca. 1988-present).

A **wooden trough** is located in one of the feed lots, south of B-75 (see Photo 3-2-34). This small structure is constructed of wood planks on three sides (with some metal components), and is open on one end. Approximately six inches deep, it is supported by four wooden posts, braced on the bottom with a horizontal plank. A small piece of wood appears to divide the trough in half. This trough is typical of those built and used by Warren in the feed lot area. There used to be one in each corral.³

³ NPS comment, 75% draft CLR review.

A **stop sign** and **railroad crossing sign** are located along the Main Entry Road near the railroad crossing. Installed by the NPS, these are metal signs mounted on a round wooden post. Three **concrete blocks with metal rings** are located at the north end of the feed lots. They are arranged like they were possibly tie-downs for a small airplane.

Missing & Archeological Resources

[see Map EC-10 at the end of this section]

A pump house (HS-85) was constructed in the 1950s by Con Warren to irrigate fields for the production of grain for the Warren Hereford Ranch. Located to the east side of the corrals, between cow sheds HS-75 and HS-76, this pump house was moved from its original location (approximately ten feet east of its current location) sometime before 1990 by Con Warren to retrieve the pump motor and remove the steel well casing. This structure was in poor condition and removed in 2002.⁴

⁴ Personal correspondence with Mike McWright, Facility Manager, Grant-Kohrs Ranch NHS June 2003.



JMA, October 2002

Photo 3-2-1 : (RQ-23) The topography within the Warren-Hereford Ranch is generally flat. The dominant grade changes occur to the west of the corrals, where a drainage swale occurs along the railroad corridor.



JMA, October 2002

Photo 3-2-2 : (RQ-22) Pasture grasses comprise all the vegetation within this complex, and provide food for grazing livestock.



JMA, October 2002

Photo 3-2-3 : (RL-07) The feed lot corral complex is organized by two alleys; the one shown here is located along the central axis.



JMA, October 2002

Photo 3-2-4 : (RR-22) One corral contains a squeeze chute and feed rack, and serves as staging area for moving cattle from the feedlots onto trucks or trailers, and vice versa.



JMA, October 2002

Photo 3-2-5 : (RQ-19) Northwest corral in feed lot complex.



JMA, October 2002

Photo 3-2-6 : (RT-19) Four smaller corrals, each measuring 40' x 15', share access to two bull barns located along the road.



JMA, October 2002

Photo 3-2-7 : (RS-07) The "Whiskey" pasture, named after Con Warren's last horse, is now used for NPS parking, with the west end filled with gravel.



JMA, October 2002

Photo 3-2-8 : (RP-19) The area immediately surrounding the Sales Barn and resource building/office also contains a variety of NPS farm and earthmoving equipment and materials, such as a horse trailer, tractor, backhoes, trucks, wood posts and planks for fencing, and several other pieces of machinery associated with working ranch operations.



JMA, October 2002

Photo 3-2-9 : (RN-24) The "boneyard," currently serves as a storage area for surplus materials, such as old wood palates, wood and metal fencing materials, a dolly, a chassis, and metal watering troughs. It also contains the hand-irrigation pipes that are assembled to irrigate the fields with water from the effluent ponds.



JMA, October 2002

Photo 3-2-10 : (RM-15) Heated water troughs, "Ritchie Fountains," are located in each of the corrals.



JMA, October 2002

Photo 3-2-11 : (RS-18) Main Entry Road/Cattle Drive.



JMA, October 2002

Photo 3-2-12 : (RT-02) Warren Lane.



JMA, October 2002

Photo 3-2-13 : (RR-13) Gravel parking area.



JMA, October 2002

Photo 3-2-14 : (RR-14) Warren Barn (HS-64).



JMA, October 2002

Photo 3-2-15 : (RQ-01) Squeeze chute behind double gates (HS-67).



JMA, October 2002

Photo 3-2-16 : (RP-02) Feed Rack (HS-68).



JMA, October 2002

Photo 3-2-17 : (RP-03) Metal squeeze chute.



JMA, October 2002

Photo 3-2-18 : (RO-15) Sales Barn (HS-65).



JMA, October 2002

Photo 3-2-19 : (RO-14) Resource Building/Office (BLDG 003).



JMA, October 2002

Photo 3-2-20 : (RO-10) Scale House (HS-66).



JMA, October 2002

Photo 3-2-21 : (RP-01) Loading Chute (HS-69).



JMA, October 2002

Photo 3-2-22 : (RL-02) Typical Cow Shed (HS-76).



JMA, October 2002

Photo 3-2-23 : (RL-01) Typical Feed House (HS-83).



JMA, October 2002

Photo 3-2-24 : (RL-25) 5-Rail Locked-End Fence.



JMA, October 2002

Photo 3-2-25 : (RL-11) Plank and Post Fence.



JMA, October 2002

Photo 3-2-26 : (RQ-03) Flat Rail and Post Fence.



JMA, October 2002

Photo 3-2-27 : (RL-9) Hogwire panel (NPS quick fencing fix).



JMA, October 2002

Photo 3-2-28 : (RP-05) Metal Pipe Fence and Gates (elements of squeeze chute).



JMA, October 2002

Photo 3-2-29 : (RO-4) Complex system of fences and gates once used for auction.



JMA, October 2002

Photo 3-2-30 : (RO-3) Complex system of fences and gates once used for auction.



JMA, October 2002

Photo 3-2-31 : (RM-23) Typical Overhead Bar Gate with Red Wood Gate.



JMA, October 2002

Photo 3-2-32 : (RQ-09) Overhead Bar Gate with 5-Rail Braced Gate.



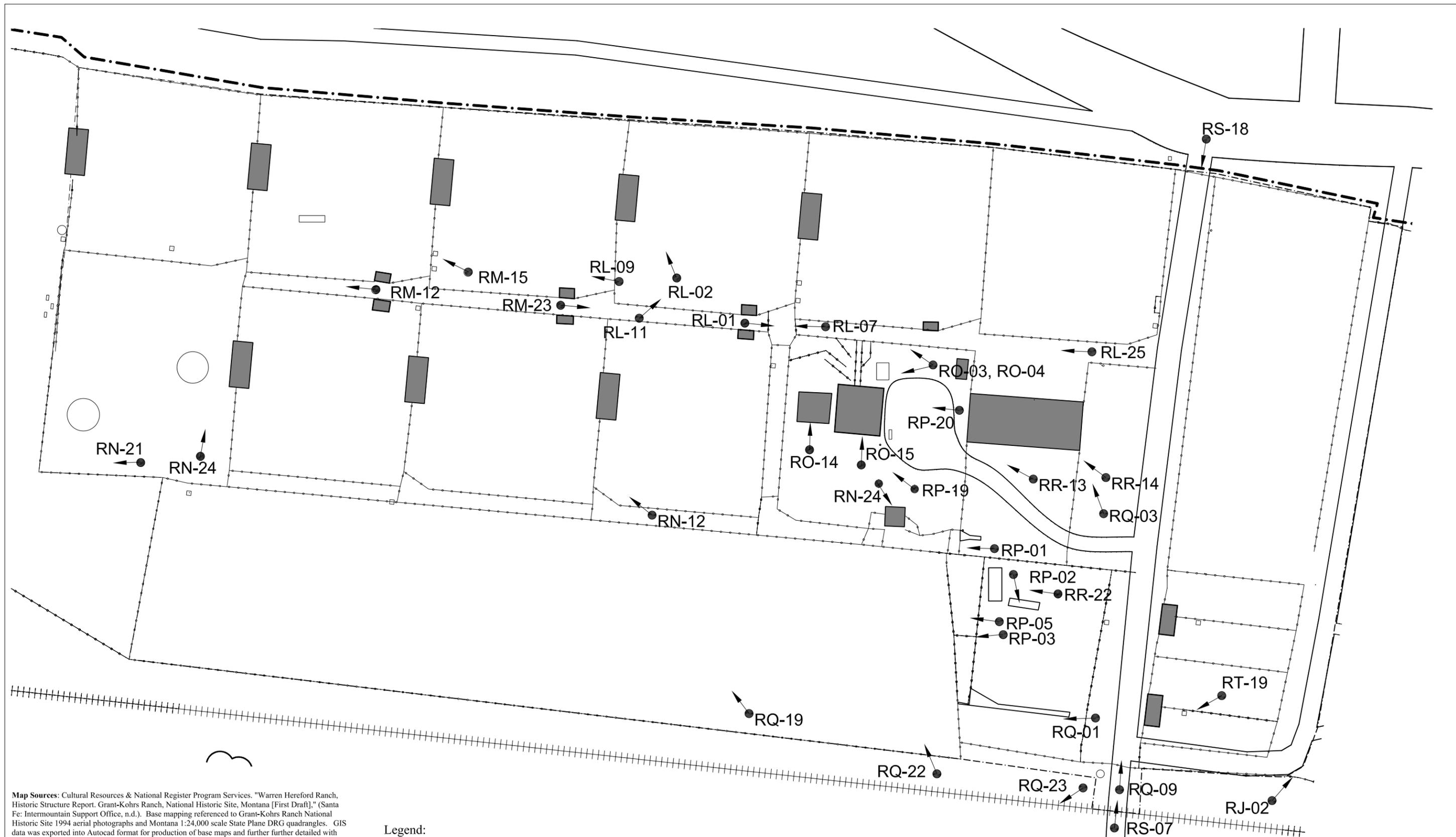
JMA, October 2002

Photo 3-2-33 : (RP-20) Hitching Post.



JMA, October 2002

Photo 3-2-34 : (RN-12) Wooden Trough.



Map Sources: Cultural Resources & National Register Program Services. "Warren Hereford Ranch, Historic Structure Report. Grant-Kohrs Ranch, National Historic Site, Montana [First Draft]." (Santa Fe: Intermountain Support Office, n.d.). Base mapping referenced to Grant-Kohrs Ranch National Historic Site 1994 aerial photographs and Montana 1:24,000 scale State Plane DRG quadrangles. GIS data was exported into Autocad format for production of base maps and further further detailed with additional data collected in the field.

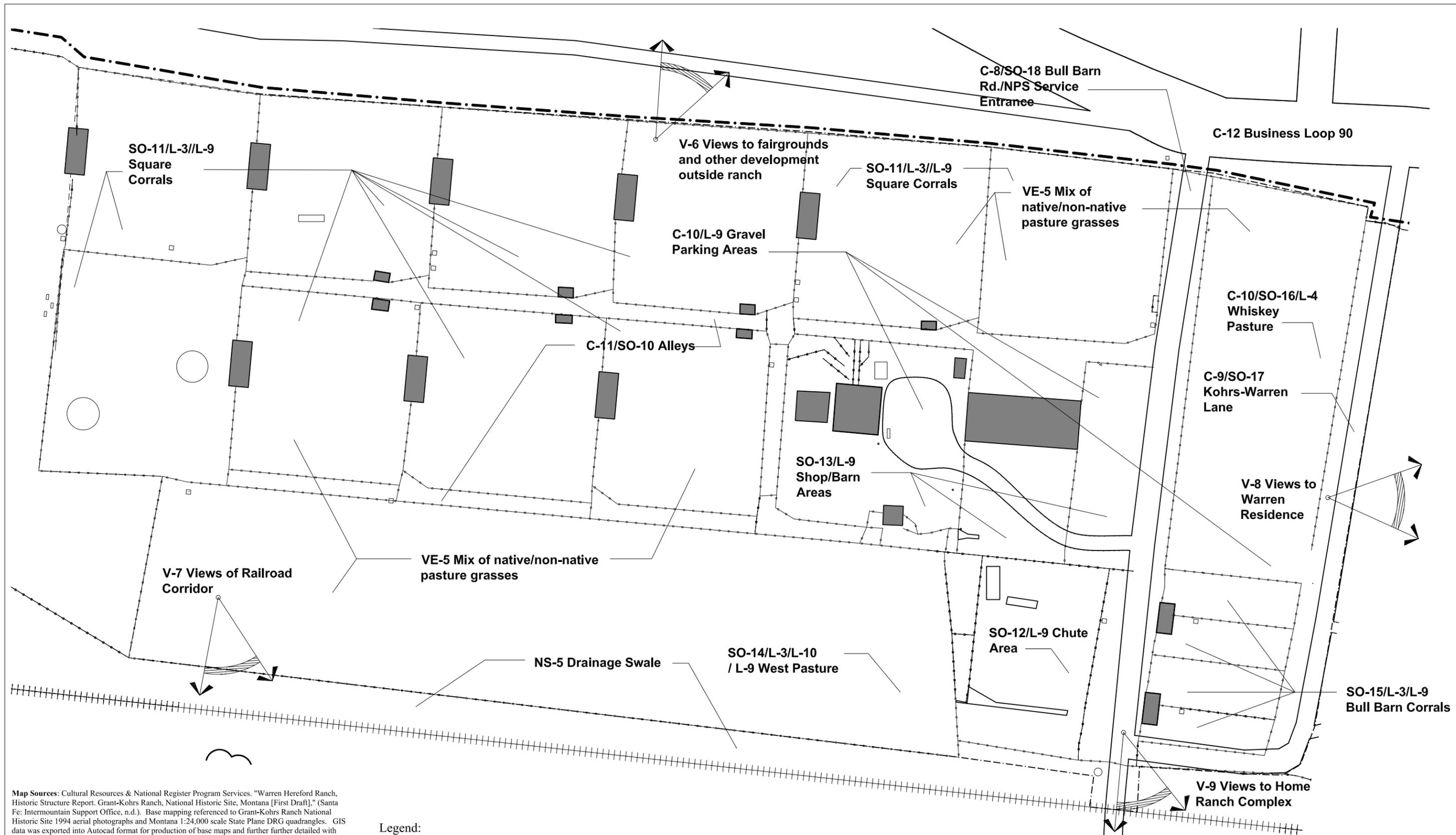
The following data was provided by the National Park Service, Grant-Kohrs Ranch National Historic Site GIS Program (shapefile format), which was compiled 1998 and updated/field-checked by OCULUS/JMA during the October 2002 site visit: fences and gates; boundary lines; utility lines; fire hydrants; irrigation ditches, headgates, pipes, and risers; culverts; river boundaries; roads; railroad tracks; unvegetated slickens and tailings; fields; trails; cottonwood trees; beaver lodges and dams; hydrology; and groundwater monitoring wells. Metadata for this data is available from World Wide Web: [http://www.nps.gov/gis/metadata/grko/]. Wetlands, hypsography (topography), and Montana 1:24,000 scale State Plane DRG quadrangles were derived from Montana State Library Natural Resource Information System, metadata available from: [http://nris.state.mt.us/gis/datalist.html].

- Legend:**
- Roads
 - Vegetation
 - Bench
 - Fences
 - Streams/Sloughs
 - Railroad
 - Buildings/Structures
 - Springs
 - Old Ditches
 - Main Ditches
 - Lateral Ditches
 - Component Landscape Boundary Line
 - GRKO Boundary Line
 - Beaver Lodges

Scale: 1" = 100'



<p>A/E FIRM</p> <p>PRIME NAME: Susan Maxman Architects CITY, STATE: Philadelphia, PA</p> <p>SUBCONTRACTOR NAME: John Milner Associates, Inc. CITY, STATE: Charlottesville, VA</p>	<p>DESIGNED:</p> <p>DRAWN: ADF</p> <p>TECH. REVIEW: KLS, RMM</p> <p>DATE: JULY 2004</p>	<p>SUB SHEET NO.</p> <p style="font-size: 24pt; font-weight: bold;">P-4</p>	<p>EXISTING CONDITIONS INVENTORY</p> <p style="font-size: 18pt; font-weight: bold;">WARREN HEREFORD RANCH</p> <p style="font-size: 18pt; font-weight: bold;">PHOTO STATION POINT MAP</p> <p>GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE</p>	<p>DRAWING NO.</p> <p>PKG. NO.</p> <p>SHEET</p> <p>OF</p>
---	---	---	---	---



Map Sources: Cultural Resources & National Register Program Services. "Warren Hereford Ranch, Historic Structure Report. Grant-Kohrs Ranch, National Historic Site, Montana [First Draft]." (Santa Fe: Intermountain Support Office, n.d.). Base mapping referenced to Grant-Kohrs Ranch National Historic Site 1994 aerial photographs and Montana 1:24,000 scale State Plane DRG quadrangles. GIS data was exported into Autocad format for production of base maps and further further detailed with additional data collected in the field.

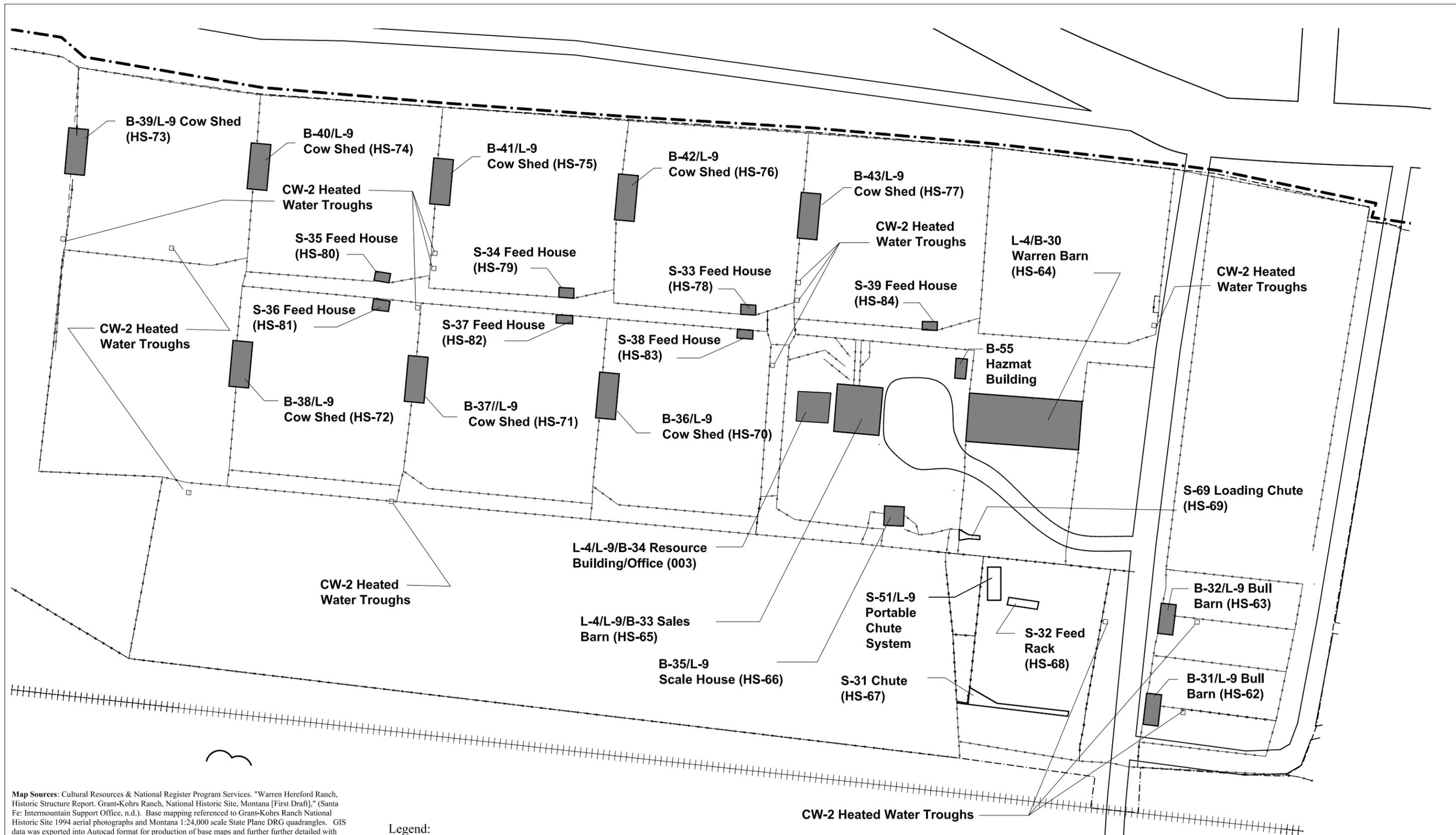
The following data was provided by the National Park Service, Grant-Kohrs Ranch National Historic Site GIS Program (shapefile format), which was compiled 1998 and updated/field-checked by OCULUS/JMA during the October 2002 site visit: fences and gates; boundary lines; utility lines; fire hydrants; irrigation ditches, headgates, pipes, and risers; culverts; river boundaries; roads; railroad tracks; unvegetated slickens and tailings; fields; trails; cottonwood trees; beaver lodges and dams; hydrology; and groundwater monitoring wells. Metadata for this data is available from World Wide Web: [http://www.nps.gov/gis/metadata/grko/]. Wetlands, hypsography (topography), and Montana 1:24,000 scale State Plane DRG quadrangles were derived from Montana State Library Natural Resource Information System, metadata available from: [http://nris.state.mt.us/gis/data.html].

- Legend:**
- == Roads
 - ++++ Railroad
 - Lateral Ditches
 - ☁ Vegetation
 - ▣ Buildings/ Structures
 - Component Landscape Boundary Line
 - ||||| Bench
 - Springs
 - GRKO Boundary Line
 - Fences
 - ⋯ Old Ditches
 - Beaver Lodges
 - Streams/Sloughs
 - Main Ditches

Scale: 1" = 100'



<p>A/E FIRM</p> <p>PRIME NAME: Susan Maxman Architects CITY, STATE: Philadelphia, PA</p> <p>SUBCONTRACTOR NAME: John Milner Associates, Inc. CITY, STATE: Charlottesville, VA</p>	<p>DESIGNED:</p> <p>DRAWN: JLB, WMW</p> <p>TECH. REVIEW: KLS, RMM</p> <p>DATE: JULY 2004</p>	<p>SUB SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">EC-8</p>	<p>EXISTING CONDITIONS INVENTORY</p> <p style="font-size: 1.2em; font-weight: bold;">WARREN HEREFORD RANCH</p> <p>NATURAL SYSTEMS, VEGETATION, CIRCULATION, SPATIAL ORGANIZATION, AND VIEWS</p> <p>GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE</p>	<p>DRAWING NO.</p> <p>PKG. NO.</p> <p>SHEET</p> <p>OF</p>
---	--	---	--	---



Map Sources: Cultural Resources & National Register Program Services. "Warren Hereford Ranch, Historic Structure Report. Grant-Kohrs Ranch, National Historic Site, Montana [First Draft]." (Santa Fe: Intermountain Support Office, n.d.). Base mapping referenced to Grant-Kohrs Ranch National Historic Site 1994 aerial photographs and Montana 1:24,000 scale State Plane DRG quadrangles. GIS data was exported into Autocad format for production of base maps and further further detailed with additional data collected in the field.

The following data was provided by the National Park Service, Grant-Kohrs Ranch National Historic Site GIS Program (shapefile format), which was compiled 1998 and updated/field-checked by OCULUS/JMA during the October 2002 site visit: fences and gates; boundary lines; utility lines; fire hydrants; irrigation ditches, headgates, pipes, and risers; culverts; river boundaries; roads; railroad tracks; unvegetated slickens and tailings; fields; trails; cottonwood trees; beaver lodges and dams; hydrology; and groundwater monitoring wells. Metadata for this data is available from World Wide Web: [http://www.nps.gov/gis/metadata/grko/]. Wetlands, hypsography (topography), and Montana 1:24,000 scale State Plane DRG quadrangles were derived from Montana State Library Natural Resource Information System, metadata available from: [http://nris.state.mt.us/gis/data1ist.html].

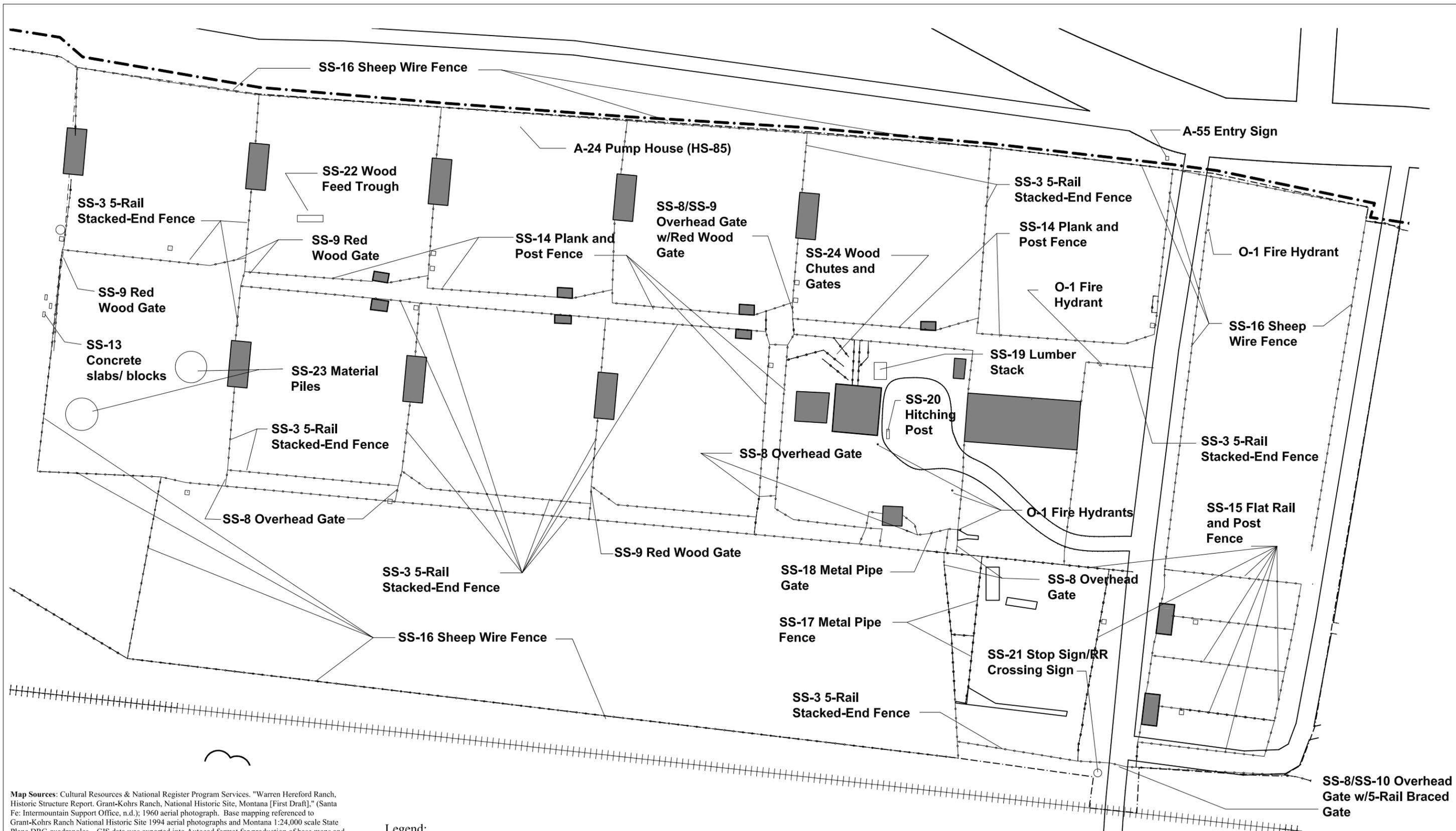
Legend:

- ==== Roads
- ++++ Railroad
- Lateral Ditches
- ☁ Vegetation
- ▣ Buildings/Structures
- Component Landscape Boundary Line
- ||||| Bench
- Springs
- GRKO Boundary Line
- Fences
- ⋯ Old Ditches
- Beaver Lodges
- Streams/Sloughs
- Main Ditches

Scale: 1" = 100'



<p>A/E FIRM</p> <p>PRIME NAME: Susan Maxman Architects CITY, STATE: Philadelphia, PA</p> <p>SUBCONTRACTOR NAME: John Milner Associates, Inc. CITY, STATE: Charlottesville, VA</p>	<p>DESIGNED:</p> <p>DRAWN: JLB, WMW</p> <p>TECH. REVIEW: KLS, RMM</p> <p>DATE: JULY 2004</p>	<p>SUB SHEET NO.</p> <p style="font-size: 24pt; font-weight: bold;">EC-9</p>	<p>EXISTING CONDITIONS INVENTORY</p> <p style="font-size: 18pt; font-weight: bold;">WARREN HEREFORD RANCH</p> <p>BUILDINGS & STRUCTURES, CONSTRUCTED WATER FEATURES, AND LAND USE</p> <p>GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE</p>	<p>DRAWING NO.</p> <p>PKG. NO.</p> <p>SHEET</p> <p>OF</p>
---	--	--	--	---



Map Sources: Cultural Resources & National Register Program Services. "Warren Hereford Ranch, Historic Structure Report. Grant-Kohrs Ranch, National Historic Site, Montana [First Draft]." (Santa Fe: Intermountain Support Office, n.d.); 1960 aerial photograph. Base mapping referenced to Grant-Kohrs Ranch National Historic Site 1994 aerial photographs and Montana 1:24,000 scale State Plane DRG quadrangles. GIS data was exported into Autocad format for production of base maps and further further detailed with additional data collected in the field.

The following data was provided by the National Park Service, Grant-Kohrs Ranch National Historic Site GIS Program (shapefile format), which was compiled 1998 and updated/field-checked by OCULUS/JMA during the October 2002 site visit: fences and gates; boundary lines; utility lines; fire hydrants; irrigation ditches, headgates, pipes, and risers; culverts; river boundaries; roads; railroad tracks; unvegetated slickens and tailings; fields; trails; cottonwood trees; beaver lodges and dams; hydrology; and groundwater monitoring wells. Metadata for this data is available from World Wide Web: [http://www.nps.gov/gis/metadata/grko/]. Wetlands, hypsography (topography), and Montana 1:24,000 scale State Plane DRG quadrangles were derived from Montana State Library Natural Resource Information System, metadata available from: [http://nris.state.mt.us/gis/datalist.html].

Legend:

- Roads
- ++++ Railroad
- Lateral Ditches
- ☁ Vegetation
- ▣ Buildings/ Structures
- Component Landscape Boundary Line
- ||||| Bench
- Springs
- GRKO Boundary Line
- Fences
- ⋯ Old Ditches
- Beaver Lodges
- Streams/Sloughs
- Main Ditches

Scale: 1" = 100'



A/E FIRM
 PRIME NAME: Susan Maxman Architects
 CITY, STATE: Philadelphia, PA
 SUBCONTRACTOR NAME: John Milner Associates, Inc.
 CITY, STATE: Charlottesville, VA

DESIGNED:
 DRAWN: JLB, WMW
 TECH. REVIEW: KLS, RMM
 DATE: JULY 2004

SUB SHEET NO.
EC-10

EXISTING CONDITIONS INVENTORY
WARREN HEREFORD RANCH
 OBJECTS, SMALL-SCALE & MISSING FEATURES
 GRANT-KOHRNS RANCH NATIONAL HISTORIC SITE

DRAWING NO.
 PKG. NO. SHEET
 OF

