

FORT HUACHUCA, CAVALRY STABLE
(Building No. 30025)
(Building No. 87)
(Building No. 123)
(Building No. 3036)
Clarkson Road
Sierra Vista vicinity
Cochise County
Arizona

HABS AZ-210-C
AZ-210-C

HABS
AZ-210-C

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
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Location: Building 30025 is located along the west side of Clarkson Road, north of the intersection with Hungerford Avenue. It is the third building from the south of seven cavalry stables aligned in a row on the site. The complex is located at Fort Huachuca (Sierra Vista vicinity), Cochise County, Arizona. The building and its complex lie within the Quartermaster area (Figure C.1).

USGS Quadrangle, Fort Huachuca, Ariz., 7.5 minute series, 1958, photo-revised in 1983

This building is bounded by the following UTM coordinates:

Zone	Northing	Easting
NW	3491237.94	560017.32
SW	3491228.55	560013.89
NE	3491215.99	560080.10
SE	3491206.55	560076.67

Date of Construction: 1916.

Designer: Quartermaster Corps.

Builder: United States Army.

Present Owner: U.S. Department of the Army, Fort Huachuca.

Present Use: Vacant.

Significance: Building 30025 is an integral component of Fort Huachuca's cavalry stable complex. The seven cavalry stables at Fort Huachuca were completed in 1916 utilizing a standardized Quartermaster Corps Plan. The structures are eligible for listing on the National Register of Historic Places due to their association with the 10th Cavalry and the Punitive Expedition into Mexico in 1916-1917 (Criterion A) and because they represent the only known examples of stables constructed using the Quartermaster Corps plan no. 291 (Criterion C).

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PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of erection: According to U.S. Army Quartermaster Corps Form No. 173a (1916), the initial property record card, this building and the other six cavalry stables were completed 5 January 1916 (Figure C.2; HABS No. AZ-210-C-5).

2. Architect: The Office of the Constructing Quartermaster Corps (O.C.Q.M.C.), provider of standardized plan no. 291, as indicated on Q.M.C. Form No.173a. In 1916, this corps was one of five divisions of the Office of the Quartermaster General in Washington, D.C. (Chattey 1998:2).

3. Original owner, occupants, uses: The owner has been the U.S. Army. The known, original occupant/user was the 10th Cavalry and its mounts. Very little information has been found about subsequent tenants, although the building's uses can be determined. The building still had horses in 1941 (Parkhurst and Thiel 2005). It continued to be classified as a stable in 1951 (U.S.A.C.E. 1951). A change of use occurred between 1951 and 1955, when the building became a storage facility (Post Engineer 1955). Building 30025 was most recently a warehouse for the 504th Signal Battalion. This building is currently vacant and will be demolished.

4. Builder, contractor, suppliers: Built by the U.S. Army. Information about the contractor or suppliers has not been located. The photograph on Q.M.C. Form No. 173a shows two men in military uniform standing in front of the building, probably when construction was nearing completion (Figure C.2). It was Quartermaster Corps policy for Army buildings to be erected and repaired by the troops (Chattey 1998:2).

5. Original plans and construction: Office of the Constructing Quartermaster Corps, standardized plan no. 291. This plan could not be found at the National Archives; thus, it is not known whether its application on this post followed the standard or was a local modification to accommodate topographic and climatic conditions at Fort Huachuca (Chattey 1998:3).

6. Alterations and additions: All cavalry stables in the complex, including Building 30025, have been modified to a greater or lesser extent. Modifications in this building are not extensive enough to compromise the exterior integrity or obscure the essential, open-structure, spatial quality of the interior. Some modifications relate to the era when the building was first converted from a stable to a warehouse, between 1951 and 1955, and are historically significant.

Exterior modifications include original door replacement, the addition of one non-original door opening, and universal window grill installation. The building may retain its original east, north, and west door openings, but a south door near the east end, now covered over inside, was added at some point. Similarly, the north door opening was covered over on the exterior. Interior modifications involve former storage room alterations, wall and ceiling cladding changes, addition of concrete flooring, stall rail removal, the construction of wire mesh partitions for storage cages, and the addition of a small latrine in the northwest corner. Most

of the original structural system remains visible but has been compromised and is unsound in places.

As built in 1916, at its east end on either side of the aisle, the stable had a forage and grain room and a saddle room (U.S.A.Q.M.C. 1916). In 1941, as diagramed on Q.M.C. Form No. 117, the 1941 property record card, there was a four-bay saddle room of 38 ft by 9 ft (interior dimensions) in the southeast corner. The northeast corner enclosure was divided into a 9-ft square harness room, an 18-ft by 9-ft forage and grain room, and a 15-ft by 9-ft tool room (Figure C-S.1).

Currently the aisle wall, west wall, and ceiling of the former saddle room are missing, but the original double-hung windows, perimeter wall siding and concrete slab floor remain. The larger enclosure, partitioned into the former harness, forage and grain, and tool rooms, has been reduced in size to a two-bay office with an access door from the aisle. West of the current office, on the north perimeter wall, cladding and ceilings remain from spaces otherwise dismantled by partition removal. The double-hung windows also remain. There is some original vertical board cladding on the aisle wall of the office, but no original interior cladding. The office concrete floor is clad in vinyl tile.

In the stable area, at some point all former stall rails were removed and the perimeter walls were modified by the installation of early cladding over the original exposed structure. This cladding, visible today, is a system of painted, wainscot-level, horizontal boards with paper-backed gypsum plaster board above. Apparently this wall cladding was installed between 1951 and 1955, the era of conversion from stable to warehouse. Concrete flooring in the stable area was probably added at this time. The existing latrine in the northwest end bay was likely built during this same era.

More recent modifications include the installation of framed, wire mesh storage cages on either side of the central aisle. Cage installation was accompanied by a widespread removal of critical, structural framing members.

B. Historical Context

The United States Army completed the construction of seven cavalry stables at Fort Huachuca, Arizona, in January 1916. The stables housed horses and mules used by members of the 10th Cavalry, popularly known as the Buffalo Soldiers. The mid-1910s saw a military buildup along the United States-Mexican border, as internal Mexican political problems escalated. As intense fighting took place in northern Sonora, Fort Huachuca personnel patrolled the border, protected local residents, and sought to prevent smuggling activities. Members of the 10th Cavalry participated in the 1916-1917 Punitive Expedition, the last major use of cavalry forces by the United States Army.

The seven stables were likely one of the last cavalry stables complexes built in the United States. The Punitive Expedition saw the first use of motorized vehicles by the military and afterward the Army turned away from horse-mounted soldiers. The 10th Cavalry left Fort Huachuca in 1931; however, the stables remained in use until at least 1941. They were later used for other purposes including storage and office space (Parkhurst and Thiel 2005).

To reinforce the formality that was traditional at historic, American military forts, stables tended to be repetitious units arranged in an orderly pattern not far from the barracks of the troops. Such repetition could be assured by the use of a standardized plan. Fort Huachuca's seven cavalry stables were located in the expanded Quartermaster area. Aligned in a row along the railroad right-of-way, the buildings constituted a property of identical buildings, each having a simple gable-roofed form (minus monitor) generated from Quartermaster Corps plan no. 291. The stables were of the straight, double-loaded, central corridor type with identical, un-gated stalls lining the sides (Parkhurst and Thiel 2005).

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character: Like the other six stables in this complex, Building 30025 is distinctive for its simple morphology, a form most suited to its original function, the stabling of seventy-eight cavalry mounts. Generated from an elongated rectangular footprint, its walls arise punctuated by a regular array of double-hung and square windows, and its cap is a low-pitch, gabled roof. Although walls are now clad inside, the visible, original posts and roof framing system remind the viewer that the structural system is an elegant, although rustic, integration of repetitious components (HABS No. AZ-210-C-1).

The prototypical 1916 cavalry stable was an elongated, gable-roofed building with concrete foundations and a frame bearing wall system with interior posts installed along a central aisle that supported repetitive, exposed roof framing. Exterior walls were board and batten, and roofing was corrugated metal. There were three door openings, one on each gable end and one on the north side wall to allow mounts access into the paddock. Ramps were provided where needed. Readable photographs of the main entry doors alone can be found, showing a pair of swinging, wood panel doors with one light above. Fenestration included six-over-six double-hung windows for storage rooms near the east end and an array of square, six-light windows to illuminate individual stalls.

Inside, on either side of the central aisle at the east end, were a forage and grain room and a saddle room. These rooms had concrete floors plus vertical board siding along the aisle and horizontal wood sheathing inside. The end wall of each room, which formed one side of an adjacent stall, was reinforced by thicker, horizontal, board sheathing. Each room had two panel doors on the aisle and ceilings were board and batten.

The rest of the building was devoted to the stabling of horses and mules in repetitive, double-stall bays defined by the wood posts. Here the walls were unfinished with exposed framing. There was no ceiling other than the roof framing clad in corrugated metal. The floor was dirt. Stall rails were framed into the back of each post, and there were no gates at the aisle. Mangers were attached to walls where animals were tethered.

2. Condition of fabric: The overall structural condition of Building 30025 is fair to poor because of wall tilting, structural member deterioration, and framing modification by unskilled hands. Much framing is not intact, due to removal of tie members. There is some post base deterioration and serious tilting of part of the south bearing wall. Exterior cladding is weathering and currently is in fair-to-poor condition.

B. Description of Exterior

1. Overall dimensions: Building 30025 is 219 ft, 9 inches long by 30 ft, 4 $\frac{3}{4}$ inches wide. The walls are approximately 10 ft, 8 inches high from the top of the stem wall to the top of the wall plate. The gable height is approximately 18 ft.

2. Foundations: Foundations are hand-poured, board-formed concrete and comprise an 8-inch-thick stem wall. It is unlikely there is any steel reinforcing in this foundation. Due to the site slope, the stem wall is not visible at the east end of the building, but it is exposed along most of the south façade and the entire north and west facades. In the northwest corner, the stem wall is 2 ft, 8 inches from the earth to the bottom of the wall sheathing. Its hand-poured quality is seen in occasional voids and seams from uneven board placement. The stem wall is painted tan to match the current color of the walls. The stem wall is currently in fair condition with some cracks, abrasion, and corner deterioration. There is no sign of major structural cracking. Where the wall has deteriorated or in voids, it can be seen that a large stone aggregate was used in the original concrete mix (Figure C.3).

As in Building 30023, each interior wood post probably bears on a small concrete pad, approximately 7 inches square in plan and installed level with the top of the wall foundation. Owing to the presence of a concrete floor, this could not be studied.

3. Walls: Exterior walls are structural wood frame sheathed in a vertical board-and-batten system that extends from the eaves and gable rakes to approximately 5 inches below the top of the exposed concrete stem wall. Wallboards and battens vary slightly in width. The boards average approximately $\frac{3}{4}$ inch by 9 $\frac{1}{2}$ inches, and the battens are approximately $\frac{3}{4}$ inch by 3 inches wide. The board-and-batten system produces a regular rhythm, with battens casting shadows at different times of the day and year.

This building has been painted more recently than the other cavalry stables. Study of the others indicates at least four coatings of paint on each building. The earliest layer appears to have been a strong Kelly green. The second layer was a cream yellow, and the third a powder blue. The final layer, visible today on the wall of the buildings is a medium-tan brown. Building 30025 has an additional, more recent coat of the same color.

The condition of the exterior walls is fair owing to preservation from the recent maintenance. The boards and battens are obviously early vintage, and members are damaged at the bottom, with some broken or split parts elsewhere (Figure C.4).

4. Structural system, framing: Much of the integrated, repetitious structural system is easy to study because it is exposed inside. Although cladding obscures the wall structure, it is a wood frame bearing wall system on continuous concrete foundations, with two internal, longitudinally placed rows of regularly spaced posts along a central aisle. The posts should be braced and tied to the walls, the sloping roof rafters, and across the aisle by lateral, longitudinal and diagonal members. Posts, roof framing members, and nailing boards appear to be of redwood, whereas wall studs and exterior board siding are probably of fir.

Like Building 30023, the bearing walls are undoubtedly 2" x 6" studs. The studs would be toe-nailed to a 6" x 8" wood sill anchored to the concrete stem wall by large bolts. There are

undoubtedly double plates atop the studs and horizontal blocking at certain intervals above the sill.

The posts are 6" x 6" redwood timbers that extend from below the floor to the bottom edge of a rafter. Except for the large 3" x 10" support header and the 3" x 6" tie beam at the top of the posts, framing members are 2" x 6"s. Although some unskilled modification has compromised the structural system in Building 30025, posts should be tied longitudinally and across the aisle at the top and longitudinally at 9 ft, 7 inches above the floor. Each post should also be connected to the top of the nearest wall by a tie beam attached to a rafter and the wall plate. The structure and bottom of the corrugated metal roofing retain the remnants of gray paint, now deteriorating. Posts are painted yellow at the bottom.

Roof rafters are 2" x 6"s that extend beyond the walls to form eaves with overhangs. They tie into a 3" x 8" ridge member. Above the rafters are 2" x 4" nailing boards to which corrugated metal roofing is attached. The 2" x 4"s extend beyond the gable walls to form rake overhangs.

Structural members in Building 30025 are in fair-to-poor condition due to wood deterioration, removal without replacement of some structural members that contribute to an integrated system, and movement of one perimeter wall from its sill. These serious problems require a structural investigation. Although two posts have been replaced along with their diagonal bracing, several posts have splits and interior rot or insect damage near the base, sporadically along six bays. In a unique case, one extra post has been installed.

Many of the longitudinal ties at the 9-inch to 7-inch level have been removed, as have lateral ties to the wall. This work occurred when flimsy frame walls were constructed to convert bays to storage cages (Figure C.5). In the former south saddle room, the perimeter bearing wall is seriously tilted out and dislodged from the sill. This problem occurs along approximately three bays, starting at the east end, and leaves a gap up to 7 inches wide (Figure C.6). A remedial post and beam has been added inside as bracing to mitigate this condition.

5. Entrance aprons, ramps: Photographs on Q.M.C. forms No. 173a and 117 do not show any kind of grade-level apron at the principal, east entry up to 1941 (Figure C.2; Figure C-S.1). The current, slightly sloped, angled concrete apron between the east door and the road pavement was probably installed between 1951 and 1955 (Figure C.7). Asphalt covers the east edge of this feature.

There is no longer a platform for the walled-in north door opening, but there is a rectangular-plan, heavy timber frame loading platform for the west door. Of unknown vintage, it is accessed by prefabricated steel stairs on the north and south sides. The deteriorating, structurally unsafe platform is built of 8" x 10" beams attached to 8" x 10" posts by steel straps. There is a 2" x 11" board top with a steel edge piece.

6. Chimneys: There are three, through-the-roof, metal chimney flues near the east end of the building. Two are on the north roof slope and one on the south.

7. Openings:

a. Doorways and doors: Currently, Building 30025 has two operable exterior doors, one each on the east and west facades. The two openings appear to be original, or slightly modi-

fied, but there is door replacement. In addition, there are two former door openings, one each on the south and north facades, which are now enclosed. The north opening was probably original, while the south one was a later addition.

The east or principal entry has a pair of single leaf sliding doors. They are a non-original assembly of the same vintage as the doors on Building 30023, being more recent than 1941. The sliding doors are suspended on metal brackets that slide in a steel track above. Inside, 2-inch-thick boards have been added at the lintel level to which the steel track is bolted. The track has a sheet metal cover that is dislodged and deformed in places. The east door opening is 9 ft, 6 ½ inches wide by 9 ft, 6 inches high. The doors are an assembly of plywood in grooved board stiles and rails. The corners are secured by diagonal, sheet metal plates. The metal elements, which appear on both faces of the door, are through-bolted (Figure C.8).

The west doorway has a single sliding door that is falling off its track. The opening is 7 ft, 3 inches wide by 8 ft, 6 ½ inches high. The original opening has been strengthened by the addition of multiple 2" x 12"s at the head and jamb (HABS No. AZ-210-C-2). The former north door opening is currently filled in with board-and-batten wall sheathing, as well as boarding inside. The battens do not align with those above. The south door is located near the east end of the building. Sealed inside by horizontal board siding, it is a small, double-swing door constructed of narrow vertical boards, painted brown.

b. Windows:

Windows are a very interesting feature of this building, and they reflect former interior use. They are located on the south and north walls only. Most original windows remain. The former storage room areas, used by humans only, have double-hung windows of a type customary for the era. Each former stall is served by a hopper-type, square window with glazing. The window sash itself was manufactured and is identical to that used originally on all cavalry stables.

Identical, six-over-six, double-hung windows that originally served the storage rooms are found on the east end. There are three double-hung windows on the south façade and two on the north façade installed in 2-ft, 8-inch by 5-ft, 2-inch rough openings. Identical, six-pane windows to serve former stalls are installed in 2-ft, 10-inch-square openings. Originally up-swinging hoppers, most were later boxed inside with 1-inch-thick boards in the head and jambs to fix them. Both window types have ¾" x 3 ¾" casing and a 1 ¼" x 8" sill. Inside, a second layer of ¾" casing was added after the open frame walls were sheathed. A few stall windows were then reset and hinged to the added casing so they could swing inward (Figure C.9; HABS No. AZ-210-C-3).

Currently windows have either steel-frame or wood-frame, square-wire mesh grills attached to the casings. The windows, exterior casing, and wood grill frames have been recently painted and are thus in fair condition.

8. Roof:

a. Shape, covering: The roof is a low-pitch gable. Its slope is approximately 27.4 degrees. Since the principal building entry is on the gabled wall of the east façade, this is a front-gabled roof form. The 1941 property record card indicates that the original roofing was "cor-

rugated iron,” and the current corrugated metal may be original or over 50 years old (U.S. War Dept. 1941). It has been painted light gray. The paint has flaked off in places. At the rakes, the metal is bent to form a drip edge.

b. Eaves: Eaves comprise exposed 2” x 6” rafter ends that extend to form a 2-ft overhang. The gable rakes, supported by the nailing boards, extend approximately 1 ft. There is a cornice board at the rakes and eaves. Eaves are generally in fair condition because framing members have been recently painted. There is weathering of rafter ends and paint peeling on the underside of the roofing.

C. Description of Interior

1. Floor plan: Today this single-story, former stable building is a long, vacant hall zoned so that the former storage rooms—either missing aisle and end walls or reduced in size—occupy the east end on either side of a 10-ft-wide aisle. Defined by posts, the aisle courses through an extensive area once devoted to the stabling of mules and horses. Wood posts form a repetitive pattern of bays, each formerly a stall. The stable area is now divided into framed, wire-mesh, storage cages. Generally three bays in size, they line the aisle and typically have a central door opening. There was once a partition, probably with a gate, installed across the aisle approximately nine bays from the west end (Figure C.10; HABS No. AZ-210-C-4).

As mentioned, there are two door openings with doors and two sealed openings. The principal entry is at the east end. Besides the double-hung windows, former stall windows are centered in bays to form a regular array on the exterior. There is a small frame latrine, 6 ft, 8 inches by 10 ft, 0 inches in plan, built into a single bay in the northwest corner of the building. The end bay in the southwest corner is an open loading zone with stripes painted on the floor.

2. Stairways: None.

3. Flooring: The original, good quality concrete slab floors of the south storage room remains. The north office has vinyl tile flooring. In addition, the former dirt floor in the stabling zone is currently covered in concrete. The concrete was probably installed between 1951 and 1955 when the stable was converted to a storage facility. White and yellow stripes are painted on the aisle concrete near the posts.

4. Wall and ceiling finish: The interior perimeter wall faces in the former stable area (originally unfinished, exposed structure) are clad in black building paper over which an early vintage, horizontal, 8-inch wooden board sheathing has been installed up to 3 ft, 10 inches above the slab. Above this band is an early type of ½-inch gypsum wallboard encased in brown paper. This material extends to the rafter level. There is no trim. This wall system relates to the era of conversion from stable to warehouse, between 1951 and 1955. Some of the storage cage perimeter walls have been painted different colors, likely indicating that different tenants used the space (Figure C.11).

The frame walls for the storage cages are built longitudinally between posts and laterally between posts and the perimeter wall. They are about 9 ft high. On the aisle, they have an intermediate 2” x 6” stud attached to a sill and a plate. “Simpson” type metal connectors are employed. Chain-link mesh is mounted up to the plate level. Rectangular metal mesh is in-

stalled above. Each cage once had a 4-ft-wide gate, now missing. The gate was probably frame with chain-link mesh.

The walls in the former storage room zones have a variety of treatments. As noted, only the east and south perimeter walls remain of the formerly enclosed south saddle room (Figure C-S.1). The interior faces of the perimeter walls are sheathed in 1-inch horizontal boarding of variable width. The boards on the east wall are painted gray, and those on the south wall are painted black and white (Figure C.12).

Of the original, partitioned north storage enclosure, now only a two-bay, enclosed office remains at the east end. This office incorporates the space of the former harness room and the east bay of the forage and grain room (Figure C-S.1). On the outer face of the aisle wall, some of the original vertical board siding remains. Inside, the office has gypsum wallboard, and wall and ceiling cladding. To install gypsum wallboard, blocking and furring was added to the original frame wall to the post width.

Adjacent to the office, in the zone of the west bay of the former forage and grain room and tool room, there are two types of perimeter wall and ceiling finish where partitions have been dismantled but ceilings remain. One is an early type of plywood on the wall and ceiling with narrow wood strips on the joints. Once painted black, the plywood has a 1" x 3 1/2" base. The second is corrugated metal. Not well installed on the wall or ceiling, it is deforming in places. The latrine has 1950s-era gypsum wallboard on the walls and ceiling.

5. Openings:

a. Doorways and doors: When first built, the stable probably had four interior doors, two for each east-end storage enclosure, located on the aisle. (When the north storage room was partitioned, a third door may have been added to accommodate the three distinct spaces.) The existing office in the northeast corner has one five-panel door with one light in the second panel from the top. It is painted white and has contemporary hardware. Its vintage is original or early and probably predates the office remodel (Figure C.13). The latrine has a flush panel door with a contemporary lockset.

b. Windows: Noted elsewhere. There is a small, rectangular, pass-through opening on the west office wall into the adjacent storage cage.

6. Decorative features: None.

7. Hardware: None.

8. Mechanical equipment:

a. Heating, air-conditioning, ventilation: When first constructed, the building had no mechanical equipment. Ventilation, a necessity for a stable, was provided through operable windows. There is an old space heater on the floor of the office.

b. Lighting: In 1936, a hand-written entry on the original property record card notes the addition of a 5-amp electrical switch (U.S.A.Q.M.C. 1916). The real property record notes a 60-amp connection with #8 wire. Original wiring and lighting fixtures no longer remain. In the

former stable area, four bare-bulb fixtures illuminate the aisle, each in a porcelain socket. They are suspended by cable from a round metal housing installed on the ridge board. These fixtures do not look like recent improvements. Their installation date is not known. In 1999, light fixtures were installed for \$3,097 (U.S. Army Form 2877). This installation may include the current "cage" light fixtures installed at either end of a cross-aisle tie, on every fourth tie (Figure C.14). Wiring is fed through metal conduit. In addition, there are two double fluorescent light fixtures in the office.

c. Plumbing: The 1941 building record card indicates a ¾-inch water and 6-inch sewer connection (U.S. Army War Dept. 1941). There is no subsequent information on property record cards to indicate gas installation or plumbing upgrades. There is a vitreous china toilet and wall-mounted lavatory on the west wall of the latrine.

9. Original furnishings: None.

D. Site

1. General setting and orientation: Near the northwest corner of the intersection of Hungerford Avenue and Clarkson Road, Building 30025 is the third unit from the south of Fort Huachuca's historic cavalry stable complex in the former, expanded Quartermaster area east of Huachuca Creek. The building is an integral component of a property of parallel, regularly arranged, matching units aligned along Clarkson Road and spaced approximately 70 ft apart, with former paddocks in between. These elongated, gable-roofed buildings are southeast-northwest trending. Given the spatial quality inherent in the regulated positioning of these buildings, the complex itself can be considered a single historic property.

The site incorporates the stable complex and a surrounding area that includes the right-of-way of former railroad tracks to the east, Hungerford Avenue to the south, Huachuca Creek to the west, and part of the parking lot of Building 30031 to the north. The terrain slopes considerably to the northwest. Today's Clarkson Road, once an unnamed dirt access way, is asphalt paved. The historic railroad right-of-way, just east of Clarkson Road, is a level strip along a steep embankment. There is a stone-lined drainage ditch along the east edge of the railroad bed and several Depression-era mortared, stone masonry features, including stairs and a retaining wall, within view of the buildings. Large, historic cottonwood trees grow along the railroad bed and downslope to the west along Huachuca Creek, a dry watercourse for much of the year. (See Parkhurst and Thiel 2005.)

The microsite of Building 30025 consists of its former paddock area (between this building and Building 30026), the adjacent paddock to the south (between this building and Building 30024), and a zone to the rear and in front. The strip between the east building and the pavement edge of Clarkson Road is a zone of packed earth where the concrete apron lies. The former north paddock, where horses and mules for Building 30025 were turned out, is a 69-ft, 10 ½-inch-wide zone of trimmed grass and packed earth. Once a fenced enclosure, today it lacks the chain-link fencing characteristic of the other stable buildings (Figure C.15). The south paddock is a chain-link enclosed grass zone. West of the building, a grassy slope descends to Huachuca Creek and its banks lined with riparian vegetation.

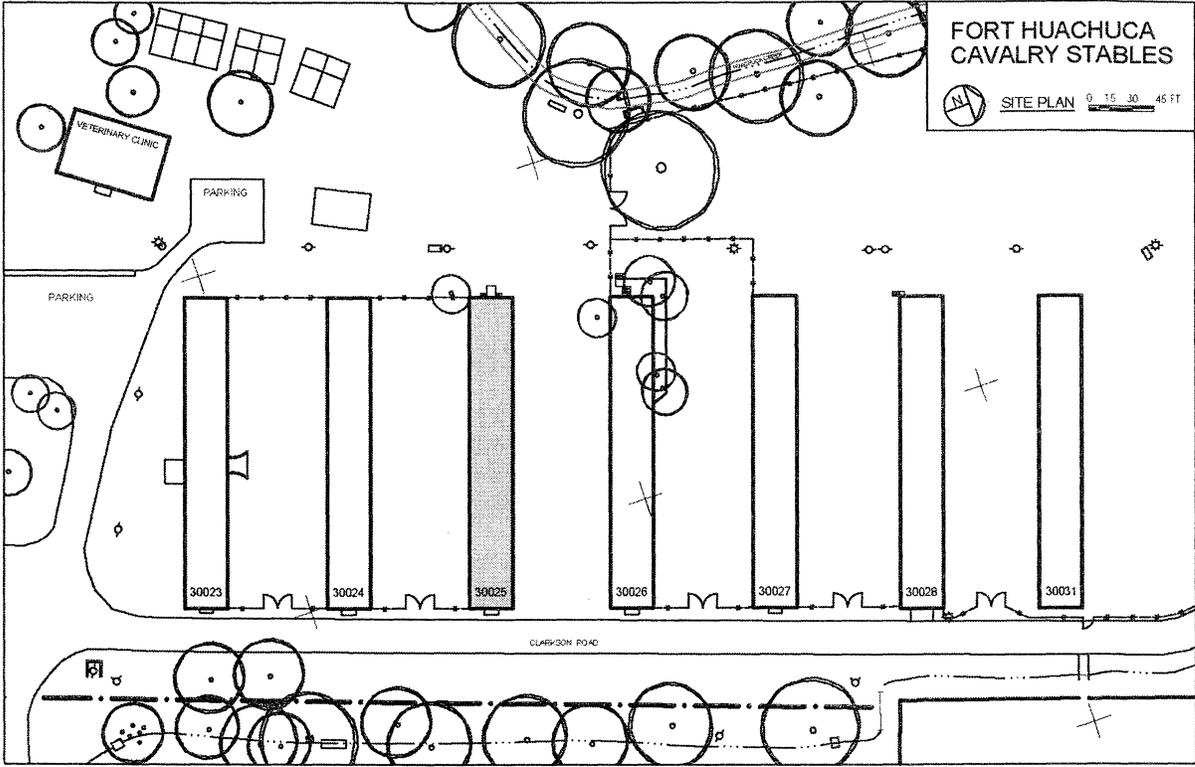


FIGURE C.1. SITE PLAN SHOWING BUILDING 30025 LOCATION.

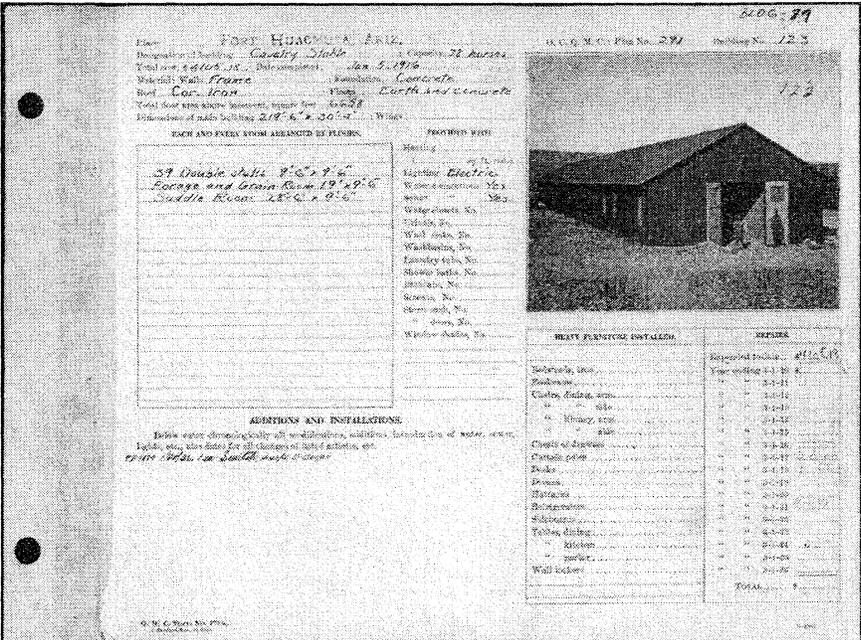


FIGURE C.2. U.S. ARMY QUARTERMASTER CORPS FORM, NO. 173A (1916); INITIAL PROPERTY RECORD CARD, BUILDING 30025 (ON FILE AT THE FORT HUACHUCA HISTORICAL MUSEUM).

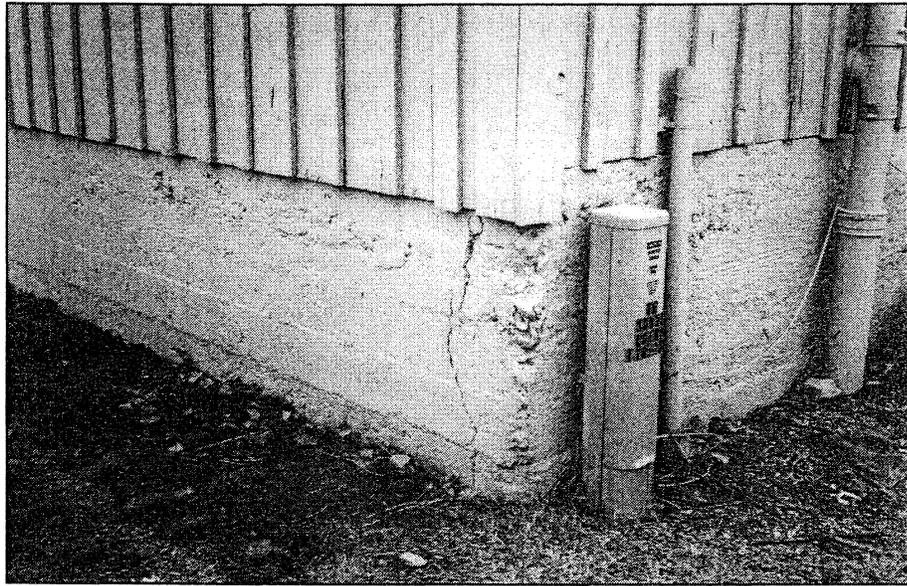


FIGURE C.3. CONCRETE STEM WALL, NORTHWEST CORNER, SHOWING MINOR CRACK. STEM WALL HAS BEEN RECENTLY PAINTED (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

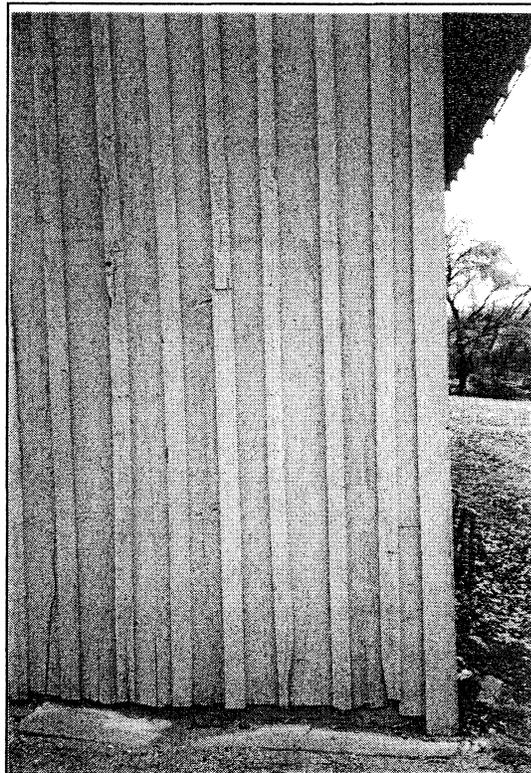


FIGURE C.4. EAST BOARD-AND-BATTEN SHEATHED WALL AT NORTH CORNER, SHOWING RECENT PAINT JOB, PLUS DAMAGED MEMBERS AT THE BOTTOM (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

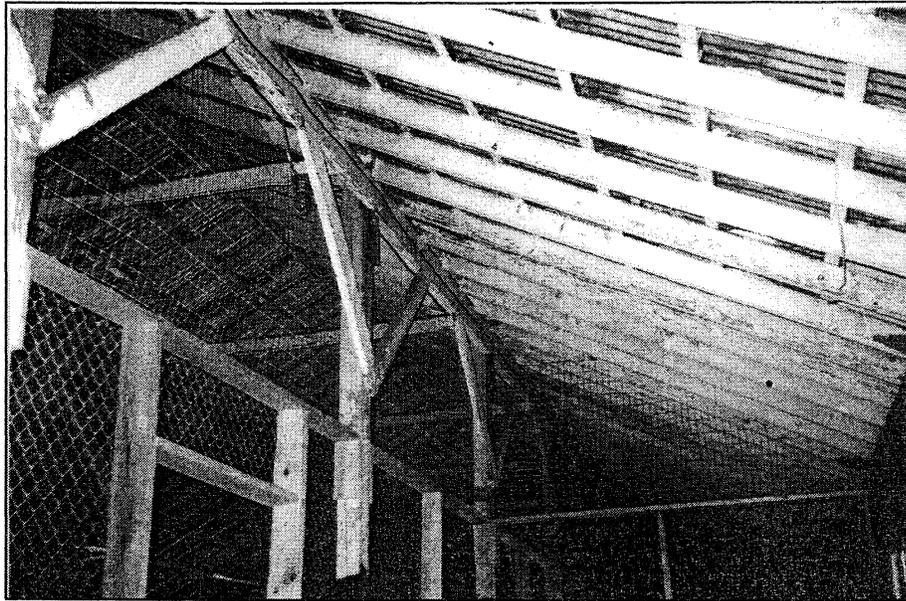


FIGURE C.5. FRAMING DETAIL SHOWING TYPICAL MISSING TIE MEMBERS, FROM INSIDE A STORAGE CAGE NORTH OF THE AISLE. THIS STRUCTURAL DAMAGE IS RECENT (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).



FIGURE C.6. SOUTH PERIMETER BEARING WALL, SERIOUSLY TILTED OUT FROM SILL, AT EAST END OF BUILDING (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).



FIGURE C.7. ANGLED CONCRETE APRON AT EAST ENTRY, PROBABLY INSTALLED WHEN THE BUILDING WAS CONVERTED TO A WAREHOUSE (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

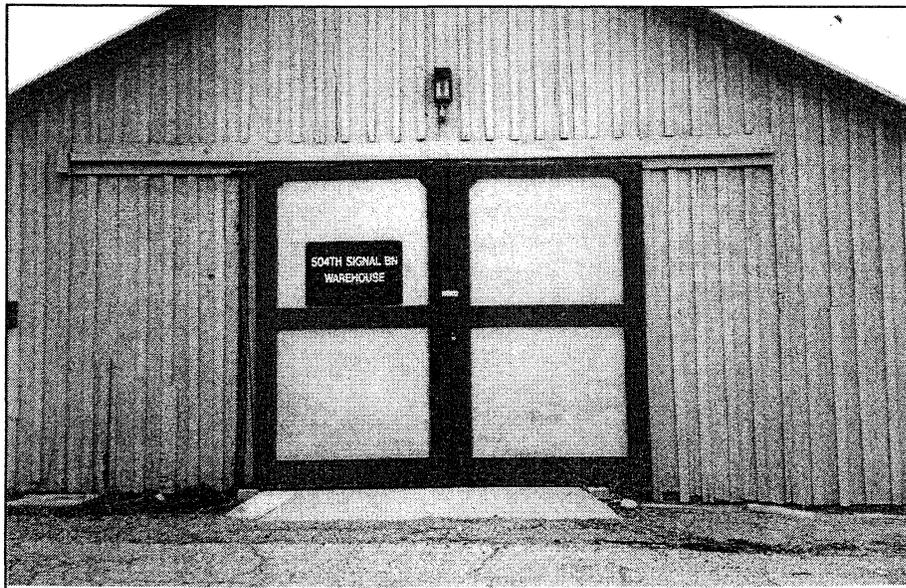


FIGURE C.8. EAST FAÇADE SHOWING SLIDING DOOR ON A STEEL TRACK. EACH DOOR LEAF IS A PLYWOOD ASSEMBLY IN BOARD STILES AND RAILS (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

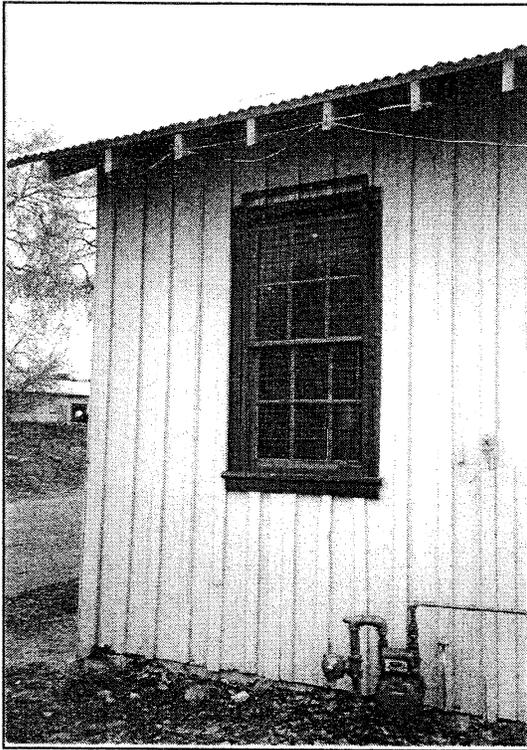


FIGURE C.9. ORIGINAL DOUBLE-HUNG WINDOW ON NORTH WALL WITH AN ADDED STEEL FRAME, WIRE-MESH SECURITY GRILL (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

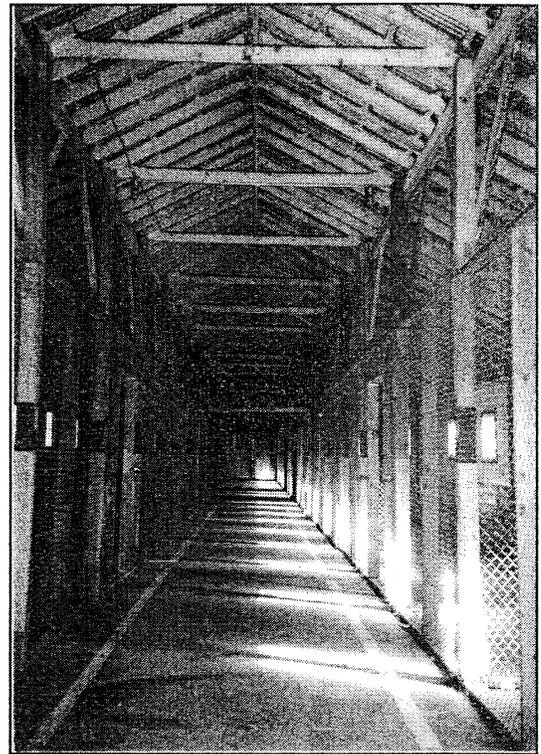


FIGURE C.10. VIEW DOWN CENTRAL AISLE LOOKING EAST SHOWING STRUCTURE AND ALIGNMENT OF POSTS USED TO DEFINE STORAGE CAGE BAYS (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

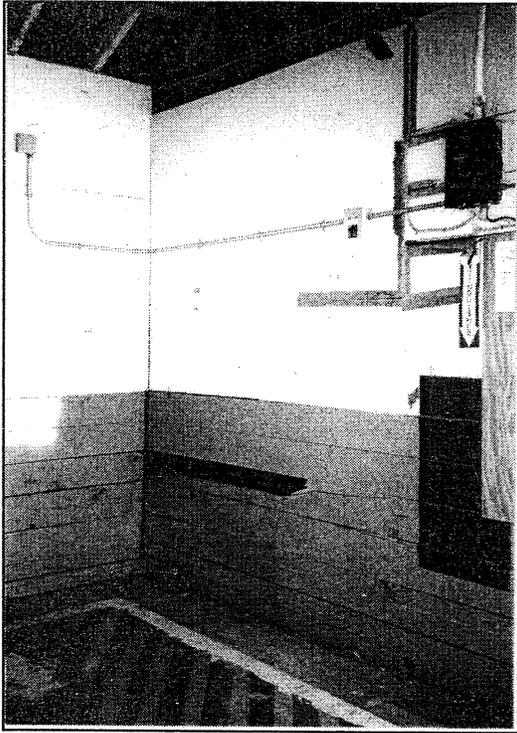


FIGURE C.11. EARLY 1950S WALL CLADDING WITH A HORIZONTAL BOARD WAINSCOT AND GYPSUM WALLBOARD ABOVE (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

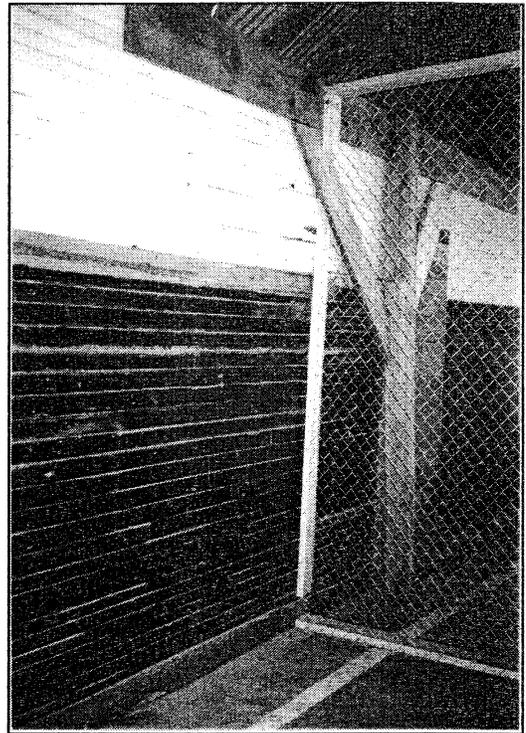


FIGURE C.12. ORIGINAL HORIZONTAL BOARD SHEATHING ON SOUTH WALL OF FORMER SADDLE ROOM (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).



FIGURE C.13. ORIGINAL OR EARLY FIVE-PANEL WOOD DOOR TO REMODELED OFFICE ROOM AT EAST END, NORTH AISLE WALL (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

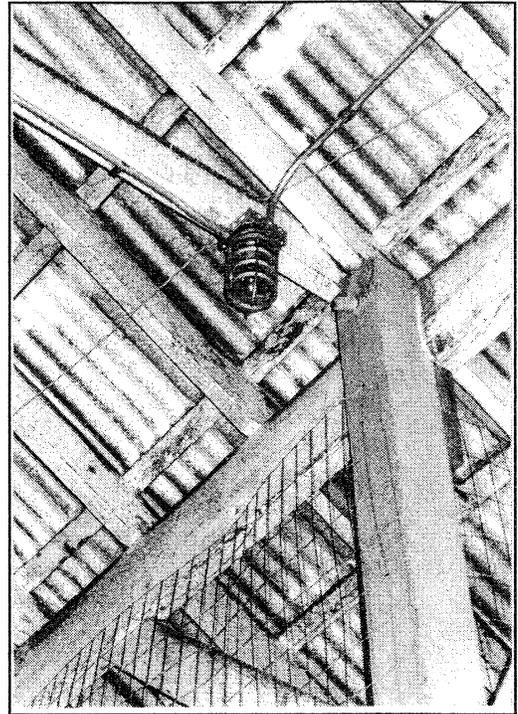


FIGURE C.14. "CAGE" LIGHT FIXTURE ON CROSS-AISLE FRAMING TIE, PROBABLY A RECENT INSTALLATION (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

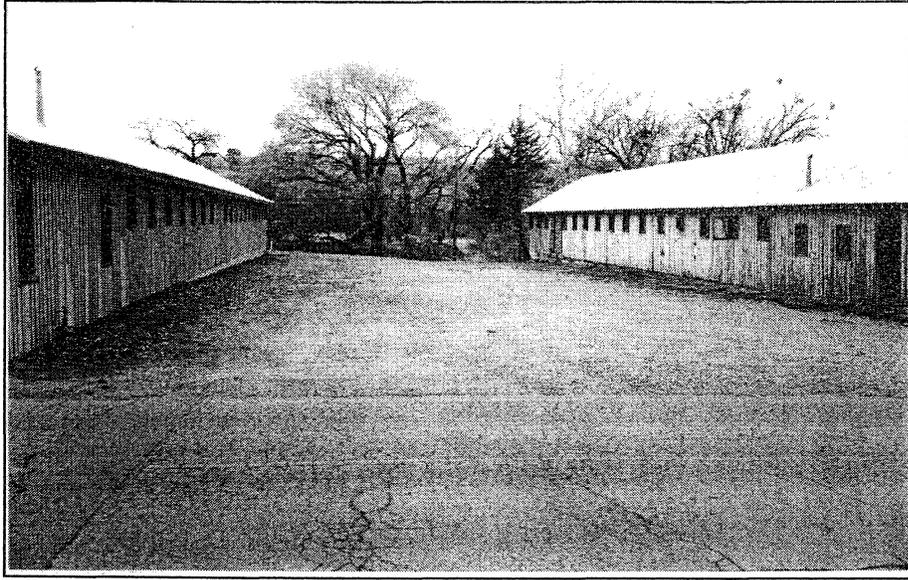


FIGURE C.15. FORMER NORTH PADDOCK OF BUILDING 30025, NOW TRIMMED GRASS AND PACKED EARTH (PHOTOGRAPH BY JANET PARKHURST, JANUARY 2005).

PART III. SOURCES OF INFORMATION

A. Architectural Drawings: This building was constructed from the Office of the Constructing Quartermaster Corps (O.C.Q.C.) standardized plan no. 291, as noted on the initial property record card (U.S.A.Q.M.C. 1916). The plans were not found at Fort Huachuca or other depositories of records. During the period when Fort Huachuca was deactivated and reactivated several times, from 1947 to 1954, drawings and records were removed from the post and apparently lost (Parkhurst and Thiel 2005).

The U.S. Army generated one early twentieth-century, standardized plan that is very similar to the Fort Huachuca cavalry stable plan (Construction Division of the Army 1919:plate 58). It has the same elongated layout, front-gabled form, framing system, and fenestration found in plan no. 291. This closed stable features a double-loaded, central-aisle, straight-stall plan with saddle and forage rooms at one end of the building. Mangers are mounted on the frame walls (Figure C-S.3).

B. Early Views: Early views of Building 30025 are found on the initial property record card, Q.M.C. Form No. 173a, and the 1941 card, Q.M.C. Form No. 117 (Figure C.2; Figure C-S.1).

C. Interviews, Consultations:

Robert Arzola, Architect. Historic American Buildings Survey, National Park Service, Department of the Interior, Washington D.C. Mr. Arzola provided initial verbal guidance for architectural drawings. March 2004.

Tom Campbell, Mechanical Engineer. Engineering Services Branch, Engineering Plans and Services Division, Fort Huachuca, Arizona. Mr. Campbell researched and provided historic maps and building modification plans. January 2005.

Mike Berg, Branch Chief. Engineering Services Branch, Engineering Plans and Services Division, Fort Huachuca, Arizona. Mr. Berg provided a disk of scanned historic plans, including a modification for Building 30023. November 2004.

Jack Boucher, Photographer. Historic American Buildings Survey, National Park Service, Department of the Interior, Washington, D.C. Mr. Boucher provided initial verbal guidance for the large-scale photography. March 2004.

Paul W. Chattey, Historical Architect. Resources, Management and Science Department. Yosemite National Park. Mr. Chattey provided information about his work at Fort Huachuca, including his 1998 HABS documentation of four of the cavalry stables while working for the U.S. Army Corps of Engineers, Seattle District. March 2004, February 2005.

Thomas G. Cochran, Chief. Environmental and Natural Resources Division, Directorate of Public Works, Fort Huachuca, Arizona. Mr. Cochran provided administrative support for this HABS project. December 2003 to February 2005.

Paul Dolinsky, Chief. Historic American Buildings Survey, National Park Service, Department of the Interior, Washington, D.C. Mr. Dolinsky provided initial verbal guidance for documentation of a stable complex. March 2004.

Raymond L. Easton, Real Property Clerk. Real Property Division, Directorate of Public Works, Fort Huachuca, Arizona. Mr. Easton researched, interpreted, and provided property record cards for the seven stable buildings. In addition, he provided a very useful map and a 1951 building inventory. November 2004 through February 2005.

Bob Frankeberger, Architect. Arizona State Historic Preservation Office, Phoenix, Arizona. Mr. Frankeberger provided scope guidance, review, and coordination with Fort Huachuca and the National Park Service, Denver, Colorado. March and June 2004.

Steve Gregory, Museum Assistant. Fort Huachuca Historical Museum, Fort Huachuca, Arizona. Mr. Gregory provided research guidance and archival material including maps, photographs, and text about the evolution of the site and the stabling of mules and horses at Fort Huachuca. January, February 2005.

Tomas G. Keohan, Historical Architect. Heritage Partnership Program, National Park Service, Intermountain Regional Office, Denver, Colorado. Mr. Keohan provided guidance and review of CAD drawings of the site and Building 30023. October 2004 until April 2005.

Vince Moreau, Facility and Space Utilization Specialist, Real Property Division, Directorate of Public Works, Fort Huachuca, Arizona. Mr. Moreau secured access to the buildings for documentation purposes. December 2003 through January 2005.

Mary Padilla, HABS/HAER Coordinator. National Park Service, Santa Fe, New Mexico. Ms. Padilla assisted with initial procedure and provided original material from a 1996 submission for Building 30023. March 2004.

William T. Phillips, Museum Director, Fort Huachuca Historical Museum, Fort Huachuca, Arizona. Mr. Phillips provided archival property record cards, maps, early photographs, disks with scanned images, historic information and research guidance plus arranged the venue for the photographer. November 2004 to January 2005.

Charles Slaymaker, Ph.D., Historic Properties Manager. Environmental and Natural Resources Division, Directorate of Public Works, Fort Huachuca, Arizona. Dr. Slaymaker was the historic property manager for this HABS project. He provided administrative support and documentary material on the buildings. He provided on-going research guidance and participated in valuable interviews. December 2003 to February 2005.

Joshua Swanson, ITAM GIS Analyst. Range Management, Fort Huachuca, Arizona. Mr. Swanson provided base contour and aerial plans, appropriately scaled and adjusted, to be used for the project site plan. In addition, he provided individual building UTM's. January 2005.

Lysa Wegman-French, Historian. Heritage Partnership Program, National Park Service, Intermountain Regional Office, Denver, Colorado. Ms. Wegman-French outlined the project scope. In addition, she provided on-going guidance of HABS procedures and review of submittals. March 2004 to April 2005.

D. Bibliography:

Books and Reports:

Chattey, Paul W. "Fort Huachuca, Building 30023 (Cavalry Stable), HABS No. AZ-XX-XX." Draft HABS outline form. Seattle: U.S. Army Corps of Engineers, Seattle District. Technical Center of Expertise for Preservation of Historic Buildings and Structures, 1998. (This report has general information that also applies to Building 30025.)

Construction Division of the Army. *Manual of the Construction Division of the Army*. Washington, D.C.: Consolidated Supply Co., 1919.

Parkhurst, Janet H., and J. Homer Thiel. "Historical Narrative," in *A Historic American Buildings Survey of the Fort Huachuca Cavalry Stables (HABS No. AZ-210-A through G), Cochise County, Arizona*, by Janet H. Parkhurst, J. Homer Thiel, Ralph Comey, and Susan D. Hall. Project Report No. 05-116. Tucson: Desert Archaeology, Inc., 2005.

U.S. Army Forms:

U.S. Army. Real Property Record, DA Form 2877. Authorized for use on 1 November 1964. On file at the Fort Huachuca Real Property Division Office. Entries for Building 30025 go from 1951 to 2004.

U.S. Army Corps of Engineers (U.S.A.C.E.), Los Angeles District. DD Form 290 – Transfer of New Construction/Real Property – RE-C-292-51. An inventory of properties for re-activation of the fort. On file at the Fort Huachuca Real Property Division Office and at the Fort Huachuca Historical Museum, 25 April 1951.

U.S. Army Quartermaster Corps (U.S.A.Q.M.C.), Q.M.C. Form No. 173a, 1916. Property record card, authorized for use on 15 November 1913. Card is for Building No. 123. On file at the Fort Huachuca Historical Museum Annex, 1916.

U.S. Army War Department, Q.M.C. Form No. 117 (Old No. 173A), 1941. Property record card, revised 28 June 1939. Card is for Building No. 123. On file at the National Archives II, College Park, Maryland, Record Group 77, Ch. of Engineers, Entry 393, Historical Record of Buildings, Box 95, Folder 4.

Drawings:

Post Engineer Office, Fort Huachuca, Arizona. General Site Plan Building Use Map. On file at the Fort Huachuca Historical Museum, 9 June 1955.

U.S. Army Corps of Engineers, Los Angeles District. D.O. Series 1124-6. Demobilization Study Layout Plan. On file at the Fort Huachuca Real Property Division Office, 1 November 1945, revised 1946.

E. Likely Sources Not Yet Investigated: The occupancy history of Building 30025 has not been completely documented. It would be useful to know whose horses were stabled in the building after the 10th Cavalry departed, as well as who used the building when it was a storehouse rather than a stable. An Army personnel record search for individuals who might have worked in the stables could prove useful.

F. Supplemental Material:

WAR DEPARTMENT
O.M.C. FORM NO. 117 (OLD FORM NO. 173A)
Revised June 25, 1930

30025

Post Plan No. _____
O.O.M.C. Plan No. 293 Building No. 153

Place Fort Huachuca, Arizona
Designation of building Stable Capacity 78 Horses
Total cost \$ 1,193.18 Date completed January 5, 1916
Material Walls - Wood Foundation CONCRETE
Roof Corrugated Iron Floor Dir. & Cement
Total floor area above basement, square feet 5516.25 sq. ft.
Size: Main building 39'4" x 219'6" Wings NONE Basement NONE
a NONE (How heated) Height of first floor above ground Ground level
b NONE (Type of heat) How lighted Electricity
c NONE (Type of domestic hot water heater) Water connections 3/4"
Sewer connections 6"
Gas connections NONE

COOKING RANGES INSTALLED (Give quantity and size) REFRIGERATORS INSTALLED (Give quantity and size) METERS INSTALLED (Give quantity and capacity)
Coal NONE Gas NONE Gas NONE
Gas NONE Electric NONE Electric NONE
Electric NONE Ice NONE Oil NONE
Oil NONE Steam NONE
Steam NONE Water NONE

Approval of Secretary of War as required by A. R. 30-1435 (Give date and File Number)

ADDITIONS AND INSTALLATIONS
(Below enter chronologically all modifications, additions, introductions of water, sewer, lights, heating, etc.)

DATE		COST	DATE	COST
1-20-56	2-Y. No. 1680 1 Switch, 300W. 5-AMP.	\$.20		

INSTRUCTIONS: "a" State whether heated from central heating or by individual heating plants, stoves, furnaces, or fireplaces.
"b" State whether steam, vapor, hot water, or hot air.
"c" State whether gas, coal, oil, or central heating plant.

See reverse side of form. 19-2850

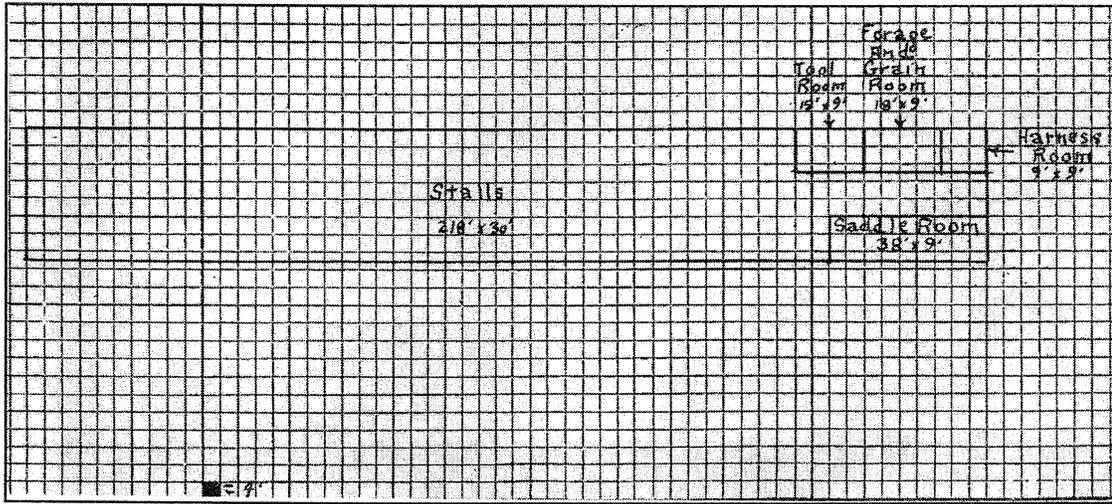


FIGURE C-S.1. QUARTERMASTER CORPS FORM NO. 117 (OLD FORM NO. 173A) FOR BUILDING 30025. A PLAN VIEW, PRESENT ON THE REVERSE SIDE, IS SHOWN (NATIONAL ARCHIVES, RECORD GROUP 77, ENTRY 393, HISTORICAL RECORD OF BUILDINGS, BOX 95, FOLDER 4).

SECTION C. PLATE 58

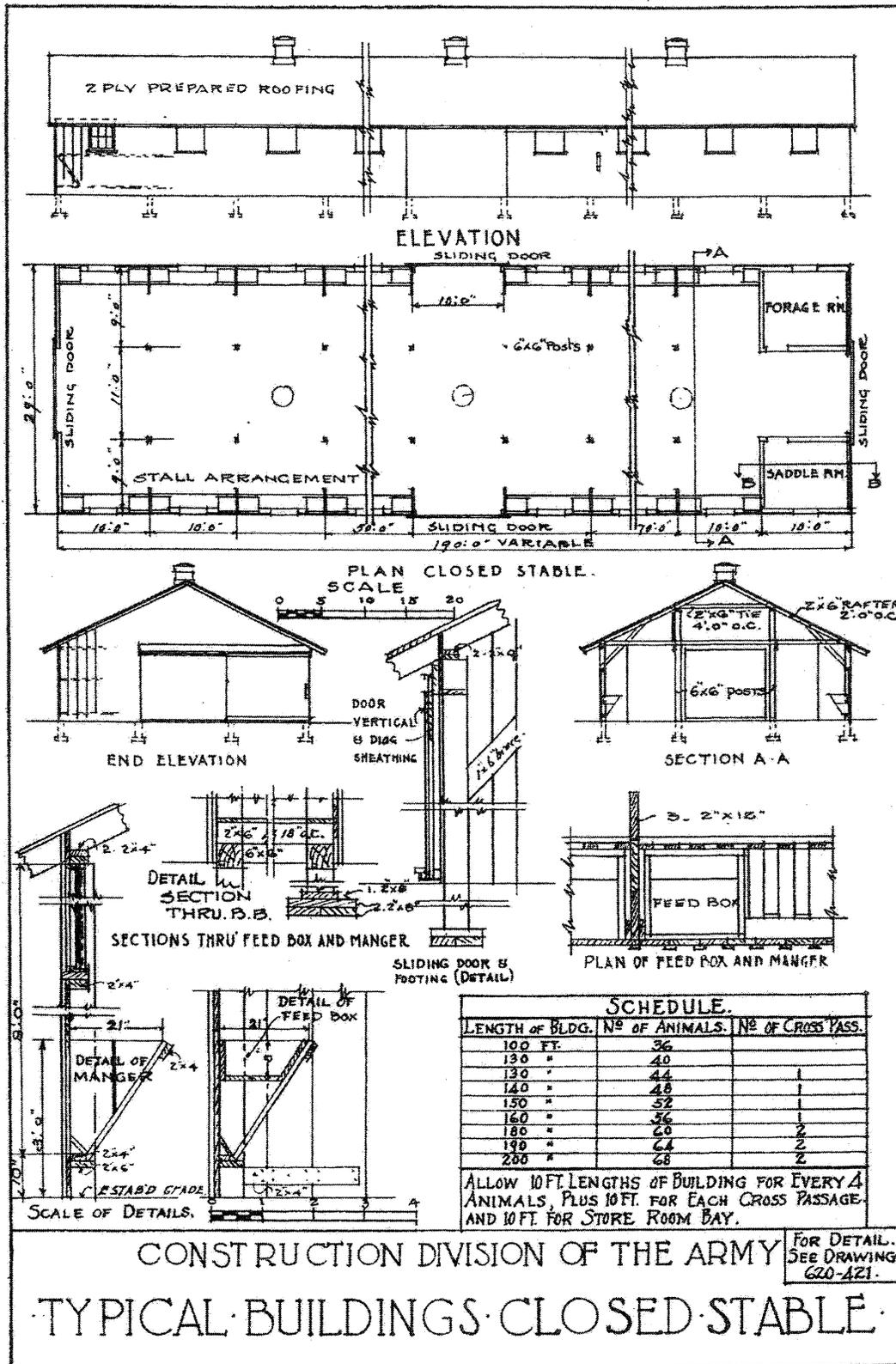


FIGURE C-S.3. "TYPICAL BUILDINGS, CLOSED STABLE." A 1919 STANDARDIZED Q.M.C. PLAN VERY SIMILAR TO FORT HUACHUCA'S CAVALRY STABLES (CONSTRUCTION DIVISION OF THE ARMY 1919:SECTION C PLATE 58).

PART IV. PROJECT INFORMATION

A number of individuals contributed to this project, working from December 2003 to March 2005. Architectural building documentation and historical research were completed by Tucson historic architects Janet H. Parkhurst, M.A., and Ralph Comey, M.A., AIA, of Ralph Comey Architects and Janet H. Strittmatter, Inc., Associated Architects. Historical research was also conducted by historical archaeologist J. Homer Thiel, M.A., of Desert Archaeology, Inc., at the National Archives and the Library of Congress in Washington, D.C.; the Arizona Historical Society and the University of Arizona Special Collections in Tucson, Arizona; and at the Fort Huachuca Historical Museum, Fort Huachuca, Arizona.

Peter L. Trexler, photographer, and Moira MacMahon, photography assistant, photographed the buildings and archival photographs at Fort Huachuca and prepared large-format photographs for inclusion in the report. Susan D. Hall, an archaeologist and former architect employed by Desert Archaeology, Inc., drafted the architectural drawings.