Architectural Summary

EARLY NEW MEXICO MILITARY FORTS

Site planning and construction of forts in New Mexico seem to have followed few guidelines. Certainly paramount was the need to construct the necessary structures as cheaply as possible, which often meant building with adobe using troop labor. Apparently the fort structures, if not the forts themselves, never were intended to have permanence. Fort Selden is no exception.

Of the 1850s New Mexico forts, Fort Craig was built from late 1853 for two companies. Fort Craig was built mostly of stone, with some enlisted quarters of jacal. The residential quarters had front porches with wood columns. Three commissary storehouses were built as much as 10 feet belowground, with buttressed walls 5 feet aboveground. These structures had roofs layered with dirt, gravel, and plaster (Noble 1994:239).

William W. H. Davis, a visitor to Fort Fillmore in the middle 1850s, described it as

a large and pleasant military post, and is intended to garrison a battalion of troops. The form is that of a square, the quarters of the officers and men inclosing the open space within on three sides, while the south is open toward the river. The buildings are adobes, but comfortable.... There is also a well-selected post library for the use of officers and men... [Davis 1982 (1857):374].

The early structures at Fort Davis in Texas were "little more than rude shelters" (Wooster 1990:44), and some of the men lived in tents, just as they did at various times at the forts in New Mexico. Early Fort Davis structures were jacales of oak and cottonwood slabs set lengthwise about a rude frame and chinked with mud and prairie grass. Lt. Zenas R. Bliss's house was 15 feet square and 6 feet tall, with a canvas roof. The first enlisted men's barracks, 56 feet long by 20 feet wide, also was of picket construction. In the spring of 1856, the troops

erected several miscellaneous buildings. Two or three female laundresses per company lived in small jacales. The hospital was composed of a large, specially designed tent and a small wood building. The bakery was wood, but the blacksmith's shop, powder magazine, and quartermaster's storehouse were stone. The magazine and storehouse had canvas roofs (Wooster 1990:44, 47).

NEW MEXICO MILITARY FORTS, 1870s

Comparing site plans of 1870s New Mexico forts (Figures A5.1–A5.11) illustrates that while parade grounds normally were their central features, this was not the case at Fort McRae (Figure A5.4). The major buildings of Forts Bayard, Craig, Cummings, Selden, Stanton, Union, and Wingate are organized around their parade grounds.

Although buildings define the perimeters of the various forts' parade grounds, building placement and groupings do not follow a

definite pattern. The only obvious pattern is the placement of officers' quarters on the sides opposite the company quarters, providing a true spatial separation of officers from enlisted men; in many cases this also would have been a racial separation of whites from blacks. Forts Bayard, Craig, Cummings, Selden, Union, and Wingate follow this pattern, although the separation at Selden is more pronounced, with the structures a greater distance away on the shorter sides of the long, rectangular parade ground.

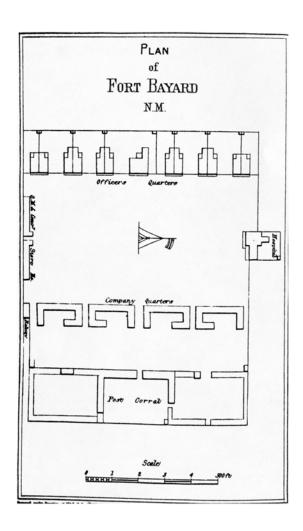


Figure A5.1. Plan of Fort Bayard, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:159).

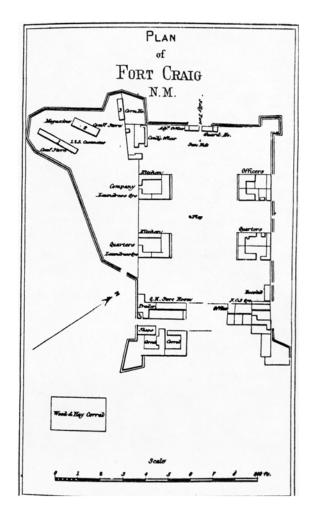


Figure A5.2. Plan of Fort Craig, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:151).

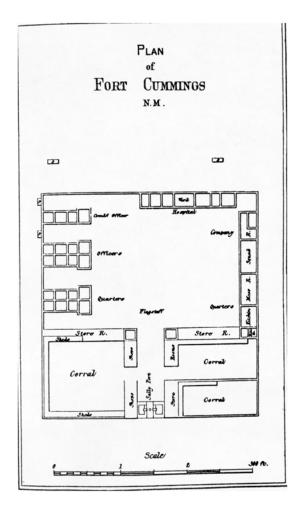


Figure A5.3. Plan of Fort Cummings, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:162).

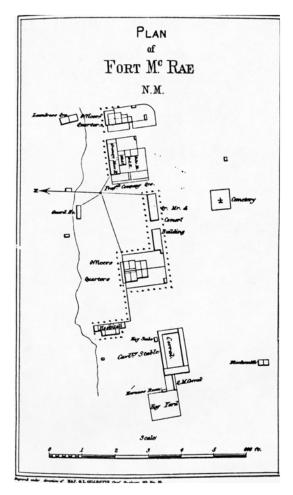


Figure A5.4. Plan of Fort McRae, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:159).

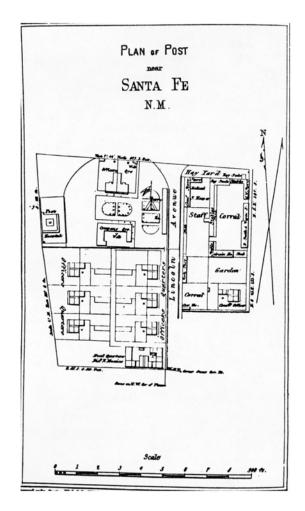


Figure A5.5. Plan of Post near Santa Fe, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:158).

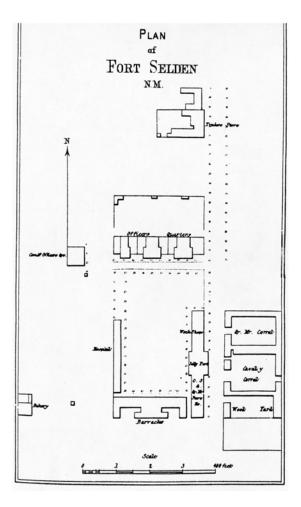


Figure A5.6. Plan of Fort Selden, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:___).

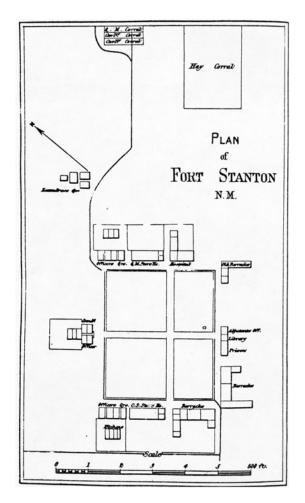


Figure A5.7. Plan of Fort Stanton, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:153).

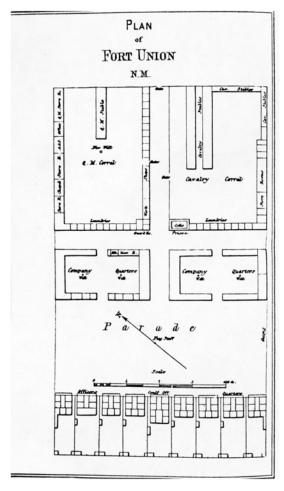


Figure A5.8. Plan of Fort Union, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:144).

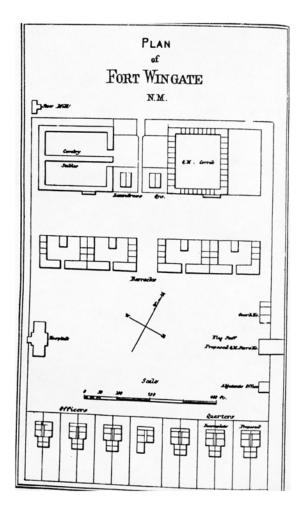


Figure A5.9. Plan of Fort Wingate, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:147).

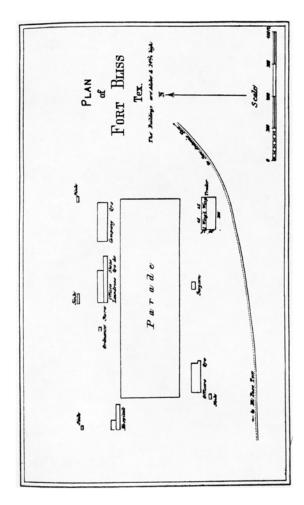


Figure A5.10. Plan of Fort Bliss, Texas. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:208).

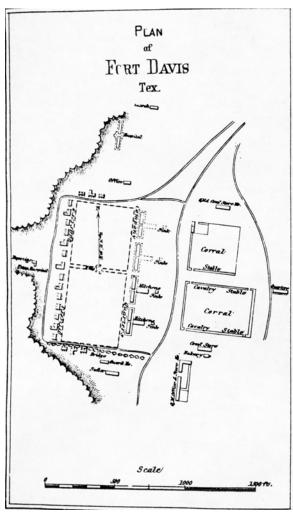


Figure A5.9. Plan of Fort Davis, Texas. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:196).

Placement of the commanding officers' quarters is random. At Fort Union (Figure A5.8) and perhaps Forts Bayard and Wingate (Figures A5.1 and A5.9), the commanding officer resided in the middle of the row of officers' quarters, as did the commanding officer at Fort Davis, Texas (Figure A5.11). The residence for Fort Cummings's commanding officer was at one end of the officers' quarters (Figure A5.3). Fort Selden's commanding officer's residence also was at the end of the officers' quarters, but it stood a short distance from the parade ground and was oriented at a right angle to the officers' homes. Fort Stanton's commanding officer's residence stood prominently alone on one side of the parade ground (Figure A5.7).

At Forts Bayard, Craig, Cummings, Selden, Stanton, and Wingate, the hospital is placed along the parade ground; only at Fort Union is the hospital separated from the main buildings, as it is at Fort Davis, Texas. Sally ports are called out for the headquarters buildings at Forts Craig, Cummings, and Selden, although other forts also may have had these features.

Laundresses' quarters are shown at Forts Craig, McRae. Stanton. Union. and Wingate. Laundresses' quarters are listed at Fort Selden but unfortunately are not shown on the site plans. Laundress quarters are neither shown nor listed for Forts Bayard and Cummings (Headquarters Military Division of the Missouri 1969 [1876]:143–169). In 1877 the proprietor of the Valverde Hotel, situated on the Fort Craig reservation a short distance from the post, complained "some of the post laundresses had been located in his building, leaving him but one room for transient guests" ("From Fort Selden to Santa Fe," Daily New Mexican, Santa Fe, February 15, 1877:1, microfilm, SRC).

Traders' facilities are shown at Fort Craig (Figure A5.2), and a separate sutler's building is shown at Fort Cummings (Figure A5.3), in addition to the very prominent trader's store at Fort Selden (Figure A5.6). The uses and layouts of these structures deserve extensive future research

Corrals tend to be very near the company quarters, perhaps to provide easy access to transportation in emergencies as well as protection for the stock; the proximity of the corrals no doubt made the men's quarters quite odorous. Forts Craig, McRae, and Stanton are exceptions to this arrangement. At Fort Cummings, one officers' quarters is near the corral, although separated by a storeroom. Fort Selden's corrals run parallel to and across the road from the headquarters building.

Building materials at all forts mainly consisted of adobe, with the exception of Fort Stanton, where the principal buildings were of stone and ancillary structures were adobe. Stone foundations for adobe buildings are mentioned only at Fort Union. Pine lumber also was used in buildings at Fort Wingate. Fort Bayard's buildings mostly were adobe and logs, but the

magazine and bakery were stone. Building conditions at the forts ranged from good to very dilapidated (Headquarters Military Division of the Missouri 1969 [1876]:143–169).

Cemetery locations are shown for Forts Bayard, Cummings, McRae, and Selden. No doubt all the forts provided burial space.

Selection of the Fort Selden Site

Bvt. Lt. Col. Nelson H. Davis, who arrived in New Mexico as Inspector General in November 1863, selected the sites for building the new forts, including Fort Selden (Holmes 1990:11-12). Davis staked out parts of Fort Selden and may have prepared a preliminary site plan (N. H. Davis, Inspector General's Department, letter to Ben C. Cutler, Las Cruces, April 8, 1865, copy of typescript in miscellaneous research files, Fort Selden permanent files, NMSM). Special Orders No. 12, however, stated that Col. John C. McFerran, U.S. Army, Chief Quartermaster of the Department, would provide the plan and construction of the fort (Special Orders No. 12, by command of Brigadier General Carleton, April 25, 1865, copy of typescript in miscellaneous research file, Fort Selden permanent files, New Mexico State Monuments [NMSM]).

On March 30, 1865, General Carleton had instructed Lieutenant Colonel Davis to insure an adequate supply of "cottonwoods for vigas" for the new fort (Holmes 1990:14). Colonel McFerran typically wanted the post constructed as cheaply as possible. He requested Davis also to scout for trees or poles for use in forming frameworks for jacal structures, to be built of upright poles chinked with mud. John Leman of La Mesilla offered to build the fort for \$29,000, but Carleton thought that by using troop labor, it could be built for less than \$20,000 (Holmes 1990:16–17).

In early April 1865 Davis selected a fort site on the Rio Grande near Robledo. Davis located some wooded areas of cottonwoods on the opposite side of the river between the fort site and Robledo as well as one to three miles above the fort (N. H. Davis, Inspector General's Department, letter to Ben C. Cutler, Las Cruces, April 8, 1865, copy of typescript in Fort Selden miscellaneous research file, Fort Selden permanent files, NMSM).

Davis recommended the fort be built of adobes. with timber corrals if sufficient suitable wood was available. A man was offering to deliver good peeled pine logs for vigas from Tularosa at \$1 per log. Davis staked a 60-foot-wide street running north and south between the quarters and the corrals. He suggested placing the officers' quarters opposite the side shown on the plan and placing the troops on the lower side and nearer the river. He recommended reservation follow the Rio Grande for three miles with one mile back, and that the United States claim and hold the timber for a greater distance. Davis wanted an acequia built above the fort site to irrigate land for cultivation, to provide water for the fort, and for making adobes. He wanted a company sent to the post at once to establish a permanent camp, preferably Captain Cook's company in Albuquerque because it was one of the largest in the department and the men were experienced at making adobes (Davis to Cutler, April 8, 1865, NMSM).

Special Orders No. 12, April 25, 1865, ordered the fort built of adobes, with a "capacity for a company of infantry and a company of cavalry with sixty horses." Col. John C. McFerran was to provide "all necessary employees, funds, tools, means of transportation and supplies...to have the post completed at the earliest practicable day." Troops were to "assist in the work as far as possible" (Special Orders No. 12, by command of Brigadier General Carleton, April 25, 1865, copy of typescript in miscellaneous research files, Fort Selden permanent files, NMSM).

Despite Davis's recommendation for the military reservation's configuration, he was ordered to lay it out four miles square. The fort structures, and specifically a point on the parade ground near the flagstaff, were to be in the center of the reservation (Cohrs and Caperton 1983:2–3), (see Figure A5.12).

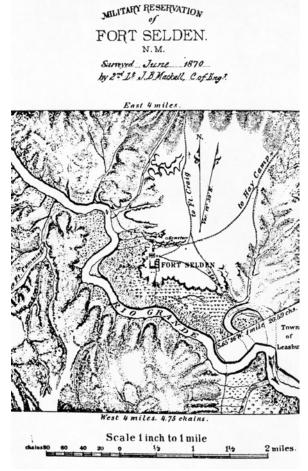


Figure A5.12. Military reservation of Fort Selden, New Mexico. U.S. Army, Headquarters Military Division of the Missouri (1969[1876]:).

Fort Selden's Buildings

In 1975 Thomas J. Caperton wrote an architectural history of Fort Selden as part of his report, Fort Selden Development Project, Phase II. Much of the following information comes from his report, and the reader is referred to that document.

Most of Fort Selden's buildings were organized around a central parade ground (Figure A5.13). The structures formed a rectangle, with wide gaps between buildings at the northwest and northeast ends of the field. The barracks ran almost full length of the south end of the parade ground. The hospital ran along the west side, from near the barracks toward the north. The headquarters with central sally port was on the parade ground's east side and ran from the east

end of the barracks toward the north. The officers' quarters closed the north end of the rectangular open space. East of and across the roadway from the headquarters building were the corrals; north of the officers' quarters was the large trader's store; and west of the officers' quarters was the commanding officer's quarters. The bakery stood west of the barracks' west end (Plan of Fort Selden, N.M., 1871, copy on file, Fort Selden State Monument [FSSM]).

Fort Selden was constructed mostly during its initial period of occupation, from 1865 to 1878, and primarily in the middle to late 1860s. During its second period of occupation, late 1880 to 1891, remains of buildings were salvaged, reconstructed, or destroyed, depending on the military's need for structures as well as the existing structures' conditions. Both periods witnessed the use of temporary structures such as tents.

During its first period of occupation, the fort consisted of seven major buildings with ancillary structures; most were constructed of adobe. All the buildings were single story except the two-story sally port section in the center of the headquarters building. Caperton speculates the earthen materials for the adobes may have come from an existing large depression east of the present visitor center (Caperton 1975:8). Exterior building walls were built 2 feet thick, except the first-floor walls under the sally port were 3 feet thick. Interior nonloadbearing walls were 12 inches thick. Ceiling heights were 10 feet, and parapet walls extended 2 feet above the roofs. The exterior walls of the structures may not have been stuccoed originally. Most buildings initially had dirt floors; wood floors were not installed until the early 1870s. The corral walls and walls connecting the quarters were 7 1/2 feet tall and 2 feet thick.

Local woods such as cottonwood and pine were used in the fort's construction. Milled lumber came from a sawmill at Tularosa. The officers' quarters, hospital, offices, and employees' quarters had pine batten doors. Building roofs were composed of peeled cottonwood vigas covered with cottonwood poles covered with willows and a thick layer of hay or dry grass; this was covered with a 3 1/2 inch coating of

mud mixed with cut straw, then a 3 inch layer of tamped dry earth, and finally a second 3 1/2 inch layer of mud. The hospital, at least, had vigas covered with peeled willows and tule, covered with dirt and lime. The officers' quarters' roofs were composed of sawed joists with boards above, covered with dirt and lime (Caperton 1975:1, 17, 59; Cohrs and Caperton 1983:4; Holmes 1990:20–21).

The buildings were constructed in the Territorial Style popular in New Mexico from 1846 to 1890. Fort Selden displays this style's use of local building materials such as adobe, with very simple added features of squared porch columns with molding, triangular pedimented door and window frames, and brick cornices on parapet walls. Greek Revival influences are evidenced by the central hall floor plan of the commanding officer's quarters (McAlester and McAlester 1984:130; McHugh et al. 1985:n.p.).

Photographs of the fort structures taken in the 1860s and 1870s show windows to be 9 over 6 lights. Exterior adobe walls do not appear to be stuccoed. The architecture in general is very plain, with few buildings having porches or any architectural interest. Collectively, the structures represent utilitarian buildings on a desolate site, but surrounded by natural resources of outstanding beauty.

Below is a list of all known names for structures that existed on the Fort Selden reservation while it was occupied by the military.

Barracks (built 1866-1867) Water barrels (1869) Bakery (built by 1867) Ovens (built 1869) Commanding Officer's Quarters (built by 1867) Cellar in rear yard Water barrels (1869) Commissary Sergeant's Quarters Company Washroom, Shoe Shop, Barber Shop (1896)Corrals (built by 1866) Beef Corral (1866); Lumber Corral (1871); Wood Yard (1883); not used (1885) Bacon House (1866, 1869, 1871) Fresh Meat House (1866) Slaughter Pen (1866)

Cavalry Stables (1866); [North] Troop Corral

(1871); Wood Yard (1885)

Company Quartermaster Sergeant Quarters (1866)Granary (1866, 1871) Saddle Room (1871) Saddler (1871) Hay Corral (1866); [South] Troop Corral (1871); Mule Corral (1885) Quartermaster Sergeant (1871) Saddle Room (1871) Saddler (1871) Sink (1866—perhaps never built) Teamsters' Rooms (1885) Quartermaster Corral (1866, 1869, 1871); Wagon Yard (1886) Employees' Quarters (1866) Forage Room (1866) **Granary** (1886) Harness Room (1886) Kitchen (1866) Quartermaster Sergeant's Quarters, 2 rooms (added 1886) Sheds (1866) Wagon Master's Quarters (1866) 3 unidentified rooms (1871) **Undetermined Locations in Corrals** Commissary Property Store Room (1869) Company Blacksmith Shop (1869) Company Granary (1869) Company Quartermaster's Room (1869) Employees Room (1869) Forage Master's Room (1869) Fresh Meat House (1869) Employees' Quarters (built by 1867); Granary (1896)Garden (1889) Well (1889) Guardhouse (1871, 1876) Hospital (1869) Water barrels (1869) Hospital Steward's Quarters Headquarters Building (built by 1867) Laundresses' Quarters (built by 1867; 1876) Magazine (built by 1867 or 1869?–1890) Officers' Quarters (built by 1867) One single building (1876) Two single buildings (1876) Two double buildings (1876) Kitchens (built by 1867) Water barrels (1869) Schoolhouse (1886, 1896) Surgeon's Quarters Trader's Store (1865) Hotel (built by 1867) Post Office (1865) Fort Selden Hotel is post trader's residence (1877)

Blacksmith Shop (1866)

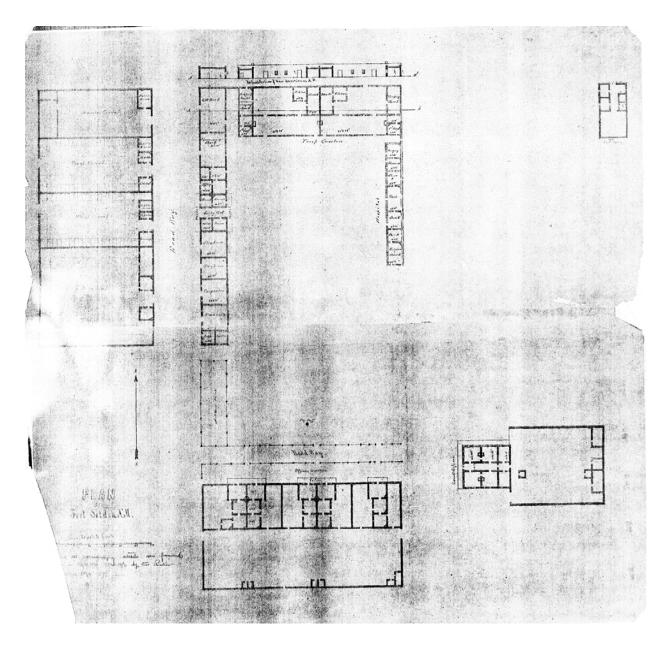


Figure A5.13. Plan of Fort Selden, New Mexico, 1871. Copy of file, Fort Selden State Monument.

EVOLUTION OF FORT SELDEN

Company C, 1st Infantry, California Volunteers, and Company F, 1st Infantry, New Mexico Volunteers, apparently built the post's first structures. Civilian employees and military prisoners also performed some work during the fort's initial construction. Its early progress was too slow for General Carleton, and on May 23, 1865, he sent Captain Whitlock an order on the organization of labor. He blamed quartermaster Capt. Rufus Vose for providing insufficient tools for the work and for a general lack of interest. Carleton even offered a gill of whiskey per diem to all troops on the job and working Caperton 1983:3-4; Holmes (Cohrs and 1990:18, 20). The Santa Fe New Mexican on December 19, 1865, complained that the soldiers worked all summer on the fort's construction (December 19, 1865, in Holmes 1990:20). The amount of land to be prepared and the number of structures to be erected must have required most of the available manpower.

At least part of the trader's store was completed in 1865, when a post office for the fort was established there (Holmes 1990:64). Since the post commander would recommend the next year that the military purchase the trader's store (Cohrs and Caperton 1983:5–6), this structure obviously was neither built nor owned by the military.

In June 1866, post commander Lt. Col. Edward B. Willis, 1st New Mexico Infantry, reported that good progress was being made on the fort construction. Although Willis estimated the post would be completed by September (Holmes 1990:21), it was not mostly finished until January 1867, a year after Carleton had hoped to have it completed (Cohrs and Caperton 1983:4).

The headquarters building was fairly complex, containing a number of functions from shops to offices to prison cells. The second story of the sally port housed a courtroom and guard rooms (Caperton 1975:36–37). The hospital proved inadequate almost immediately, and the post commander requested the military purchase the trader's store and convert it into a hospital; though approved the building was not purchased (Cohrs and Caperton 1983:5–6).

The four corrals had specific uses, and a number of rooms with various functions lined the corrals' west walls. The corrals could accommodate about 200 animals in 1866 (Holmes 1990:96).

The barracks still were under construction in June 1866. These adobe structures were to house one cavalry and one infantry company, apparently with separate but equal accommodations. Latrine walls were 7 1/2 feet high and 2 feet thick (Caperton 1975:24, 28).

Construction of the acequia to be fed from the Rio Grande, envisioned by Nelson H. Davis, proved unsuccessful. For most of the life of the fort, water was hauled from the river and stored in large barrels (Cohrs and Caperton 1983:6).

An 1869 inventory claimed Fort Selden could accommodate 200 men, 100 horses, and 100 mules. The magazine was under construction in 1869, and the post was authorized to have ovens built for the post bakery (Caperton 1975:24, 25, 48, 77, 85; see Figure A5.14).

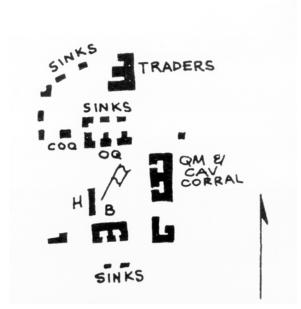


Figure A5.14. Ground plan, Fort Selden, New Mexico, 1869. Courtesy of Museum of New Mexico, Negative No. 40984.

The officers' quarters had dirt floors until 1870, when the rooms were floored, the walls were plastered, and the roofs were repaired. The commanding officer's quarters also was floored, and its veranda was reconstructed of lumber (Caperton 1975:59, 70). Maj. David Clendenin complained in June that post repairs required a considerable force. "There is not a roof but has to be thoroughly overhauled and plastered to save loss" (Clendenin to AAG, District of New Mexico. June 5, 1870, typescript miscellaneous research file, Fort Selden permanent files, NMSM). A general inspection of the post in September reported most buildings' external appearances were bad because they lacked plastering (Wilson and Caperton 1994:20).

In 1871 the post commander said the buildings and quarters were "sufficient for the present garrison" and were "well built" of adobe. Unfortunately, the material "disintegrates so fast during the summer rains that constant repairs are needed to preserve the buildings from decay and ruin" (quoted in Cohrs and Caperton 1983:6).

As-built drawings of Fort Selden from 1871 (Figure A5.15) show all building exterior walls to be 15 feet high, and garden walls are 8 feet 6 inches high. Courtyard walls south of the company quarters appear to be about 12 feet high (Rueker 1871, also referenced in Oliver and Hartzler 1997:3).

Several rooms in the headquarters building changed uses between 1866 and 1871. The uses of the rooms lining the west walls of the corrals also changed (Caperton 1975:37, 55). Fencing was added at the north end of the parade ground, and an artillery park was created in the northeast corner (Figure A5.13).

A description of Fort Selden published in 1876 lists its buildings as:

Quarters for two companies; officers' quarters, two double and two single buildings; hospital, capacity for ten beds; laundresses' quarters, guardhouse, offices, storehouses, workshops, magazine, bakehouse, four corrals, etc.; the buildings are constructed of adobe and are generally

in good condition, but somewhat in need of repair. The magazine and the laundresses' quarters are in a very dilapidated condition [Headquarters Military Division of the Missouri 1969 (1876):164].

Water still was furnished from the Rio Grande by wagon. The reservation had no timber except a "scant growth of cottonwood on the river." Because the reservation had no suitable land for cultivation, the company gardens were 12 miles away in Doña Ana (Headquarters Military Division of the Missouri 1969 [1876]:164, 167).

Fort Selden's commanding officer, 1st Lt. Caspar A. Conrad, on January 18, 1876, also provided a detailed written description of the post. Conrad said the buildings would accommodate one company of cavalry and one of infantry (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM). His descriptions of individual structures are included below in the text for those structures.

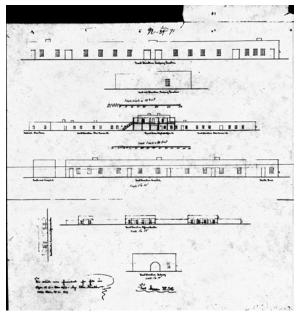


Figure A5.15. Elevations of Fort Selden buildings by Rueker, March 29, 1871. From top, front elevation of Company Quarters, east elevations of Company Quarters, front elevation of Headquarters Building, front elevation of Hospital, font elevations of Officer's Quarters, and front elevations of Bakery. At the bottom left is the front elevation of the Commanding Officer's Quarters.

Fort Selden was abandoned from 1878 to late 1880. In June 1879 the commanding officer at Fort Bliss was ordered to dismantle the materials at abandoned Forts Craig and MacRae in addition to Fort Selden (Cohrs and Caperton 1983:16–17). The adobe buildings quickly deteriorated.

SECOND OCCUPATION, 1880–1895

Fort Selden was reactivated at the end of 1880. Company K, 15th Infantry, arrived in late December, and Company M, 9th Cavalry, arrived on Christmas Day. The post buildings were badly deteriorated. Only the trader's store, which apparently had continued to be used by the post trader and the stage company, was sound. Some question remained as to the need for the post's structures, since it was not reestablished as a post but the men were considered "in the field" (Cohrs and Caperton 1983:17-19). Both black and white soldiers accomplished rehabilitation through weeks of work, although white troops performed most of the work. The black troops mostly were on detached service (Billington 1987:75-76). During Fort Selden's final phase, its normal contingent was only one infantry company (Holmes 1990:3), thus reducing the need for some facilities.

Immediately after reoccupation, because of the condition of the fort's buildings, the trader's store was used as living quarters for the officers and employees, and as the hospital (Caperton 1975:61). As post buildings were rehabilitated, the store resumed its function. Several fort buildings never were restored, however, such as the commanding officer's quarters and parts of the headquarters building. The commanding officer moved into a double house of the officers' quarters. The barracks, bakery, and magazine were in ruins, and all the corrals were in bad condition (Cohrs and Caperton 1983:19). Col. Orlando Poe, reconnoitering the area in March 1881, reported that Fort Selden's adobe buildings "would now be in good condition had they not been dismantled to get the woodwork for use at Fort Bliss" (Colonel Poe to General Sherman, March 17, 1881, quoted in Holmes 1990:134). In December 1881 only 31 mules and 1 horse were at the post (Holmes 1990:97-98).

Fort Bayard also was in serious condition at this time. "The men's quarters are wretched, the officers' quarters barely inhabitable....All the roofs are bad and leaky, many of the floors are worn out. The corrals and stables scarcely deserve the name. Extensive repairs are

imperatively demanded" (Chief Quartermaster Lee, June 1881, quoted in Miller 1989:235).

A branch of the Atchison, Topeka, and Santa Fe Railroad crossed the Fort Selden reservation in 1881. A small siding, which could accommodate one car at a time, was built for the fort (Cohrs and Caperton 1983:19–20; Holmes 1990:122).

When a second cavalry company spent four months at Fort Selden in 1883, they stayed in tents because the barracks still were in ruins (Cohrs and Caperton 1983:19). The hospital building served as the barracks while the hospital function temporarily was in the trader's store (Caperton 1975:17).

When Capt. Arthur MacArthur, his wife and two young sons arrived in March 1884, the post still was being reconstructed. In fact, MacArthur spent most of his command rehabilitating the post, a project for which he exhibited a good deal of zeal (Caperton 1975:63; Cohrs and Caperton 1983:20–22; Holmes 1990:22–23, 43).

The railroad siding platform for the fort was expanded in the summer of 1884. Randall Station also had been built in the northwest quarter of the reservation. This station was larger than the fort siding and later would become the Radium Spring Station (Cohrs and Caperton 1983:20).

By 1885 Fort Selden's renovation was almost complete. One double officers' quarters had been rehabilitated as well as four rooms of the other double house, although the kitchens remained in bad condition. The north wing of the administration building and the hospital were rehabilitated, while the second story and south wing of the administration building had been demolished. The barracks had been extensively renovated, with its east dormitory restored to accommodate one company (Caperton 1975:40; Cohrs and Caperton 1983:19). Four men were in tents, however, since the barracks was designed for double bunks. MacArthur wanted to extend the room so the men would be more comfortable. The bakery, in good condition, would be in ruins only two years later (Caperton 1975:24, 27).

AT&SF railroad crews began digging rock on the reservation to repair some washed out track, and were given permission to remove 25,000 cubic yards of stone from the northern portion of the reservation. The quarry was reopened in August 1886. A private citizen opened a bar and gambling saloon near Randall Station, and this business lasted until the railroad work was completed (Cohrs and Caperton 1983:22; Holmes 1990:123).

In 1886 a small, one-room schoolhouse was built for post use (Cohrs and Caperton 1983:19). By March 1886 the barracks had a reading room, probably in its west half (Caperton 1975:27). When asked if Fort Selden could house a second infantry company, MacArthur said the quarters and barracks were "commodious for one company" but entirely inadequate for two. Furthermore, making Selden again a twocompany station would require "a very considerable expenditure" (Cohrs and Caperton 1983:19). The magazine was repaired, and MacArthur added two rooms to the wagon yard (the former quartermaster corral) for the quartermaster sergeant's quarters (Caperton 1975:51, 77). Two civilians were employed as plasterers (Holmes 1990:44).

In 1887 a front porch was added the length of the barracks. The hospital got a new roof and its woodwork was painted (Caperton 1975:20, 29). Yet at the same time, final abandonment of the fort began. Recommendations were made for no further expenditures for repairs or construction (Cohrs and Caperton 1983:25). Despite this, the barracks was repaired in 1888, and the bakery, too, apparently was repaired (Caperton 1975:24, 29). In May the last full company of white troops left, and Fort Selden became a subpost of Fort Bayard. In August, 10 soldiers from the 24th Infantry at Fort Bayard were assigned temporarily to Fort Selden to permanently close the fort (Billington 1987:76).

The Mesilla Valley received extremely heavy rains in October and November 1888, with nearly 24 inches falling mostly in a month's time. The fort's roofs leaked so badly the soldiers placed tents in their quarters to protect themselves and their equipment, and placed

tarpaulins in the magazine to protect the ordinance stores (Caperton 1975:1, 77).

In June 1889 a fire in the corral destroyed animals and equipment as well as part of the structure (Post letter, June 8, 1889, quoted in Caperton 1975:51, 54). This fire should have made a good archaeological preserve of the corrals' history. Apparently a garden now was maintained on the reservation; in August the surgeon said "the old well at the garden has been cleared out and sunk a few feet deeper to about 10 1/2 feet" (quoted in Holmes 1990:92).

In March 1890 the barracks was painted and whitewashed and the roof partially repaired, apparently for the comfort of the few troops at the post (Caperton 1975:29). A contract is said to have been awarded that year to remove the soldiers' bodies from the cemetery to the National Cemetery. In payment the contractor was to receive the wooden portions of the buildings (Trumbo 1946:41).

The troops helped crate and ship all serviceable property to Fort Bayard. According to Billington, "The troopers tore lumber from the old buildings in order to pack these items for shipment. They shipped to Bayard all usable doors, windows, and window frames." On January 20, 1891, the post was abandoned except for a noncommissioned officer and three privates left until June to guard the buildings. On March 30, 1892, the Fort Selden Military Reservation was transferred to the Department of the Interior (Billington 1987:79–80).

An 1896 survey of Fort Selden Abandoned Military Reservation reported, "The wood-work of all these buildings, which are adobe has been removed and there is nothing left but parts of walls and piles of dried mud, all of which is worthless. There is nothing to appraise in the shape of buildings or building material." Seventeen buildings were listed: (1) barracks, (2) company washroom, shoe shop, barber shop, (3) commanding officer's quarters, (4) subaltern officers quarters, (5) surgeon's quarters, (6) headquarters building, (7) hospital, (8) bakery, (9) school house, (10) quartermaster sergeant's quarters, (11) commissary sergeant's quarters, (12) employees quarters (granary), (13) post quartermaster sergeant's quarters, (14) hospital steward's quarters, (15) guard house, (16) magazine, and (17) corrals (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

EARLY TWENTIETH CENTURY

The fort site was patented to Felipe Duran in March 1909. Six months later Duran sold the southwest quarter of the northwest quarter of Section 14, Township 21, and part of Section 11 to Charles Cole, who held it for six months before selling to Ida M. Llewellyn. Llewellyn kept the property for four years, until November 13, 1914, when she sold to the Fort Selden Hot Springs International Spa and Improvement Company (List of Fort Selden Owners, in miscellaneous research file, Fort Selden permanent files, NMSM), which planned to capitalize on the nearby Radium Springs as a health resort; however, the company failed almost immediately. About the same time, a Fort Selden home site was platted (Cohrs and Caperton 1983:28). On May 3, 1921, the Fort Selden Hot Springs Resort, National Spa and Improvement Company sold the property to Francis L. Lewellyn. On September 9, 1944, Harry H. Bailey acquired the Fort Selden ruins from E. E. and Helen McIntyre (List of Fort Selden Owners, in miscellaneous research file, Fort Selden permanent files, NMSMl see Figure A5.16).



Figure A5.16. Fort Selden adobe ruins, photographed March 1955 by William H. Farrington, Jr. Courtesy of Museum of New Mexico, Negative No. 1803.

STATE ACQUISITION

In 1963 Harry N. Bailey donated a small portion of the Fort Selden property to the State of New Mexico. Unfortunately, the State never received the property containing the trader's store (Cohrs and Caperton 1983:29; Guzman et al. 1988). In 1970 Harry H. Bailey donated a meager 3 more acres and the state purchased an additional 2 acres, bringing the total park acreage to about 19.35—a miniscule amount of the original military reservation. Excluded from Bailey's donation was a 1.758-acre strip of land adjacent to the west side of the site and containing the remains of the post bakery and commanding officer's quarters. Bailey did give the state first right to purchase or lease the land (Guzman et al. 1988).

In July 1971 members of Parks and Recreation, the Cultural Properties Review Committee (CPRC), and the state legislature met regarding Fort Selden. They agreed on five points, including the need for immediate priorities for development. The CPRC would fund a preservation project of Fort Selden through the State Planning Office, with NPS preservation grant funds matched with severance tax bond funds. No money would be released until Parks and Recreation furnished the State Planning Office with a specific plan for Fort Selden's immediate development (Keith M. Dotson and Brad L. Hays, State Planning Office. memorandum to James L. Dillard, Director of Parks and Recreation, August 5, 1971, Fort Selden deeds files, NMSM). On November 17, 1971, the Committee reviewed and approved a ruins preservation plan prepared by Charlie Steen (David W. King to James L. Dillard, November 19, 1971, Fort Selden deeds files, NMSM).

The State hired Pacheco and Graham, Architects, Albuquerque, to prepare plans for the ruins preservation work. Their scope of work consisted of preparing ground plans of the existing ruins, a development study for the park to be produced in conjunction with Charlie Steen, working drawings and specifications for force account construction, and an updated and revised ground plan containing information obtained during excavation and stabilization

work (Channell Graham, letter to James Dillard, December 28, 1971, Fort Selden deeds files, NMSM).

In 1972 the MNM received custody of Fort Selden through a Memorandum of Agreement with the State Parks and Recreation Commission (Cohrs and Caperton 1983:29). Stabilization work was conducted on the headquarters building, the hospital, and part of the company quarters. Wall tops were capped with adobes containing Pencapsula, inclined wall edges were coated with amended mud plaster, and amended adobes were used to repair eroded wall bases. According to Guzman and others, unfortunate project was fraught with problems, ranging from "the use of prison labor, poor control. inappropriate administrative preservation techniques, and fiscal irregularities" (Guzman et al. 1988).

The hospital was excavated and partially stabilized. Relatively level wall remnants were capped with up to five courses of new adobes and mortar stabilized with Pencapsula. Inclined wall remnants were plastered with Pencapsulaamended plaster. Corner fireplaces were stabilized with both Pencapsula-amended adobes and plaster. A large hole through the base of the wall between two rooms was filled with stabilized adobes and plaster; this hole turned out to be a doorway. By 1975 the wall caps, which extended slightly beyond the tops of the walls and trapped moisture underneath their edges, had caused deterioration and separation of the caps from the walls. Those walls that were plastered only had weathered better than the ones with caps, yet the plaster was poor quality and did not adhere to the original walls. Partial reconstructions of some walls, particularly the east side of the hospital wing, obviously were of different width and texture than the existing wall remnants (Caperton 1975:20).

The west company quarters were excavated and stabilized. Relatively flat wall tops were trimmed and capped with Pencapsula-amended adobes. Low walls were built up with as many as five courses of new adobes and covered with stabilized plaster. Eroded wall bases in two rooms were stabilized. Only three years later Caperton reported the caps had separated from

the original walls, the walls had deteriorated beneath the cap, and the leveling of the wall tops had changed the original profile. In addition, removal of fill from the west company quarters created drainage problems, with some features being substantially lower than the parade ground and the dormitory. Two rooms in the headquarters building also were excavated and stabilized (Caperton 1975:29, 43).

The corrals were partially excavated but not stabilized. Trenches were dug along the interior and exterior of the length of the north wall, the exterior of the east wall, and some unidentified rooms (Wilson and Caperton 1994:17).

A small rectangular stone structure uncovered 3 feet 4 inches from the quartermaster corral's west wall had 2-foot thick walls and inside measurements of 8 feet 3 inches by 11 feet. Because its door opens into the corral's west wall, Caperton determined the structure was not in use after the corral was constructed and that it probably served as a jail until the prison was built, when it most likely was torn down (Caperton 1975:48).

In late February 1974 Caperton reported construction of the visitor center (Figure A5.17) progressing well. Completion scheduled for March 22 though Caperton thought they might finish early. The exhibit designer was completing his work, and the exhibits should be installed in the late spring. Also, Chan Graham had asked Caperton for a recommendation to the State Planning Office for consideration for future consultant work. Caperton praised Graham and his work for Fort Selden. "Communication with Chan has been good and he has done an excellent job of contract administration with a sometimes difficult contractor" (Thomas J. Caperton, letter to David W. King, February 27, 1974, Fort Selden correspondence file, HPD).



Figure A5.17. Fort Selden State Monument visitor center, photographed by David Sullenberger, March 1976. Courtesy of Museum of New Mexico, Negative No. 67545.

On March 20, 1974, in a telephone conversation, Mark Velsey, architect with NPS, suggested a drainage tile below grade along the foundation walls might be helpful for drainage. The visitor's trail might double as part of the drainage system. He requested more specific information about the work planned at the ruins, particularly what soil cement would be used, a specification for adobe curing, and a work method specification (Mark Velsey, telephone report, March 20, 1974, copy in Fort Selden correspondence file, HPD).

A few days later Jerry Rogers, Chief, Division of Grants, U.S. Department of the Interior, responded to Dan Riley at the New Mexico state capitol, that some points in the stabilization and preservation project must be resolved before NPS could give approval. Questions regarding the drainage and maintenance of the site and the adobe must be resolved. The choice of materials and methods must be narrowed and the extent of the work defined (Jerry L. Rogers to Dan Riley, March 25[?], 1974, Fort Selden correspondence file, HPD). Apparently no questions were raised regarding archaeology associated with the project. Caperton responded that the soil at the base of walls with and without rock foundations would be sloped gently away from the walls and compacted to provide drainage. Ground level would be maintained slightly below the top of the existing stone work. No major recontouring of the site would take place except the parade ground would be taken down to, or close to, its historic level. The avenues would be contoured

to approximate their original surfaces, which would provide natural drainage away from the administration building and corrals. Interior room drainage would be accomplished in some cases by contouring and compacting the soil to carry water out and away from the room through doorways or areas with no existing walls. In rooms without such openings, where necessary the water would be directed to the center of the room and taken away by an installed ceramic drainage tile. A continual maintenance program would maintain all contours. Water, however, was not the major factor causing deterioration of ruins. Rather, frequent and severe sandstorms periodically blasted the walls. Plans for 85 cottonwood trees to be planted in their historic locations around the parade ground and irrigated underground should considerably cut down the wind action on the ruins. No walls would be capped or wall profiles changed; such work done in the previous field session had unsightly results of "dubious stabilization value." No soil cement would be used in the adobe restoration. New adobes duplicating the size of the originals would be made using wood adobe forms. No chemicals and no Portland cement would be used (Thomas J. Caperton, letter to Jerry L. Rogers, June 12, 1974, Fort Selden correspondence file, HPD).

A flagpole was scheduled for delivery to the site in mid-April 1974 (Thomas J. Caperton, letter to Mrs. Olin Stephens, April 8, 1974, Fort Selden outgoing 1973–1974 files, NMSM). A Certificate of Substantial Completion was issued for the visitor center in June 1974 (Thomas J. Caperton, memorandum to Carl Sedillo, Property Control, June 6, 1974, Fort Selden outgoing 1973–1974 files, NMSM).

By late September Caperton complained that the funding had been promised to be available in July 1973, and the Monuments Division had geared up for work to start that September. Several plans were drawn up, but the funds did not come through. Then NMSM was assured funding would be available in February or March, and again they geared up to do the work. Now that funds finally were available, the MNM could not afford to finance the project in advance, so the SHPO requested an advance from the NPS; however, NPS had not

responded. In addition, each passing day put the project closer to having to be accomplished in the winter (Thomas J. Caperton, memorandum to George Ewing, Director of MNM, September 25, 1974, Fort Selden outgoing 1974–1975 files, NMSM).

By the following October, however, Caperton was at work on site, where he began 10 days of photodocumentation. Contracts were let for heavy equipment work, which began on October 28. The staff purchased materials to build 2 desk tables and a worktable and ordered materials to build shelving in the work area and office, since funds were not available to purchase these items. Six men would be hired for the hand labor and the adobe repair work on the ruins (Stephens, Monthly Narrative Report, October 1974, in Fort Selden Monthly Report 1974–1975 file, NMSM).

The field season for this work ran from October 1974 to February 1975. Funding was under a Historic Preservation Grant-in-Aid, administered by the State Planning Office. Tom Caperton, Superintendent of Monuments, MNM directed fieldwork. Most of the work was accomplished by heavy equipment—road grader, backhoe, compactor, dump truck, and water truck—used to clear brush, remove upper fill from rooms, backfill, contour land, and construct berms and the interpretive trail. Drainage slopes were established to provide runoff away from existing wall remnants, and fill next to the walls and in the rooms was graded by excavation and backfilling to provide drainage. Water was directed to the room exteriors, except in a few cases where this was not feasible, drainage was directed to the room centers. The parade ground and roadway was contoured to prevent water from accumulating next to the walls. Equal ground levels were established between exteriors and interiors of rooms to eliminate differential erosion. Where possible, all ground surfaces were saturated with water and mechanically compacted (Caperton Caperton researched Tom construction and architecture of the post, which he included in the completion report (Guzman et al. 1988).

About 450 adobes to be used for stabilization work were made until freezing weather prevented further manufacture. Then some 500 adobes salvaged from a house being demolished in the neighborhood were used. The adobes were inserted into rectangular areas chopped into wall areas having advanced deterioration. In some cases the wall then was plastered with adobe; however, Caperton believed the best results came from the unplastered reused adobes (Caperton 1975:7, 12). Moderately deteriorated areas were repaired with layers of adobe plaster. Small holes and eroded areas in wall faces and tops of walls were covered with adobe to smooth the appearance. The new adobes were made using the adobe forms made for the 1972 project, which produced a brick 14 1/4 by 6 by 3 1/2 inches. Soil for the adobes was obtained from a source with suitable clay, located about 100 yards east of the visitor center, near an area Caperton believes may represent the source for the original adobes used in the post construction. No stabilizing agents were used (Caperton 1975:7-8, 12). The adobes original to the fort vary in color and texture, particularly in the barracks, where definite layers are evident. The adobes have a substantial amount of native grass, as well as bits of prehistoric pottery, cloth, historic glass, and metal (Caperton 1975:11–12).

All capping applied to the walls in 1972 was removed. The Pencapsula used in the adobes and mortar used in the wall caps made the adobe water resistant, forming a moisture barrier that caused the walls beneath to deteriorate at an accelerated rate. This weathering produced rounded tops to the walls. Walls that had not received caps in many cases were very close to their original height, with erosion affecting the wall bases and vertical edges next to windows and doorways. Caperton speculates that the barracks walls that were thicker at the top than in the middle may have resulted from the 1880s reconstruction, when about 8,000 adobes were added to the walls (Caperton 1975:12, 15).

Sixty-six cottonwood trees were planted in rows in locations similar to those in the 1860s. The trees were planted on 30-foot centers rather than the 15- to 25-foot centers of the originals and are watered by an underground system. Caperton hoped the trees would slow the wind erosion and

provide visual barriers, as well as shade for visitors. In addition, salt cedars were planted in clumps along the north boundary east of the roadway for a visual barrier and west of the hospital for a windbreak. Areas disturbed by construction were seeded with Blue grama, sideoats grama, and Lehman's Love grass to prevent erosion, reduce the effects of sandstorms, and help prevent the growth of unwanted vegetation (Caperton 1975:8, 15).

An interpretive trail was installed with interpretive signs explaining the historic features. The trail starts behind the visitor center, goes west to the roadway, then south along the east side of the headquarters building to the sally port, with a spur to the quartermaster corral. From the sally port it continues along the north side of the company quarters to the post hospital, then north to the officers' quarters, then along the south side of the officers' quarters, and then connects with the beginning of the trail, forming a continuous clockwise loop. A replica flagpole was erected on the parade ground (Caperton 1975:8, 15–16).

Most of January 1975 was spent completing stabilization work on the ruins. Adobe work was completed, and 61 trees were set out. Two latrines were excavated—the enlisted men's and the one at the officers' quarters. Bids on the water system were let in early February (Glen Stephens, Monthly Report, January 31, 1975, in Fort Selden Monthly Report 1974–1975 file, NMSM). In February the ruins stabilization work and the irrigation system for the trees were completed. The backhoe returned to clean up and fill the magazine and fill the officers' quarters latrine. In March display cases were prepared, and plans were made to enlarge the holes around the trees (Glen Stephens, Monthly Narrative, February 28, 1975, in Fort Selden Monthly Report 1974–1975 file, NMSM).

To alleviate drainage problems, the fill in features associated with the company quarters complex was brought to the approximate grade of the parade ground. The rooms were both excavated and filled to reach this grade, and a berm was built up against the south and west exteriors. The berm was intended to help support

the high walls as well as to deter erosion and promote drainage (Caperton 1975:29).

In June 1975 Caperton sent a list of deficiencies in the visitor center to Carl Sedillo, Property Control Division. The five items listed are: (1) the concrete front and back porch floors extended beyond the porch roofs, which had no rain gutters, and water ran onto the porch floor and into the museum, especially at the front entrance; (2) the building roof leaked in a number of places, partly caused by the placement of the drain spouts; (3) the chimney for ducting on the building's north side was separating from the main entrance; (4) the service yard wall was separating from the main building; and (5) the plywood on the yard gates was coming loose (Thomas J. Caperton, letter to Carl Sedillo, Assistant Chief, Property Control Division, June 25, 1975, copy in outgoing 1974– 1975 Fort Selden files, NMSM).

In 1976 the magazine and additional latrines were excavated (Guzman et al. 1988). In May the CPRC complained to George Ewing, Director of the MNM, that a large house trailer was parked next to the visitor center. The committee requested the trailer be moved to the State Park and suggested that plans for future visitor centers provide for suitable housing (Albert H. Schroeder, Chairman, CPRC, letter to George Ewing, May 19, 1976, in Fort Selden correspondence file, HPD).

Fort Selden, 1980s

In 1984 the state legislature approved a bill sponsored by Rep. Lamar Gwaltney, Doña Ana County, to provide funding for remedial stabilization work at Fort Selden and a controlled experiment on adobe degradation. The scope of the stabilization work was similar to that done in 1974 and 1975. Adobe bricks were inserted into eroded wall bases, and walls were capped with adobe mud. Twelve test walls with different foundations were constructed near the visitor center to study the effects different foundations have on rising damp in walls. Two 65-foot-long walls were plastered with mud containing various amendments. Another test wall was constructed with four different caps, including fired bricks in a Territorial style. The walls were intended to test capillary rise in adobe, the suitability of wall caps in adobe preservation, and the preservation value of various chemical amendments used with mud plaster. Plans and specifications for the project were developed by NMSM in conjunction with preservationists from NPS and the private sector, and the experiment was intended to last 10 years. Paul G. McHenry of Corrales designed the walls, and Rio Abajo Archaeological Services of Polvadera performed work under a \$61,000 contract. The more than 3,500 adobes used in the ruins and the test walls were made in Mexico because the only adobes available in quantity were "modern, chemically stabilized bricks." Bill and Cye Gossett of Rio Abajo had recently completed a stabilization project at Fort Craig in Socorro County. A newspaper reporter quoted Ranger José Guzman calling the Fort Selden experimental walls "rainbow walls" because of their various hues (Bill Diven. Albuquerque Journal, November 24, 1985:C1 and C3, in Fort Selden files, HPD; Guzman et al. 1988).

In 1986 the J. Paul Getty Conservation Institute (GCI), Marina del Rey, California, undertook the testing and evaluation of high-performance preservatives and chemical systems collaboration with the NMSM and preservation architect Paul Graham McHenry. The GCI provided funds for construction of additional test walls. The purpose of the 15 new 5-foot-tall test walls was to evaluate chemical preservatives, construction of site shelters, installation of drainage systems, synthetic fiber reinforcing elements, and accelerated weathering. A water line was run to the walls to provide water to sprinkle the walls with a quarter-inch of simulated rain each day (Guzman et al. 1988; Julie Aicher, Santa Fe New Mexican, February 5, 1989:B-6, in Fort Selden files, HPD).

The visitor center received a new EPDM roof in 1987. An extensive cactus garden had been developed adjacent to the visitor center (Guzman et al. 1988). An archaeological survey of .7 acres funded by the GCI was conducted in October 1987 in the proposed area of the new test walls. Archaeologists recorded trash scatters including historic bottle and windowpane fragments, a probable latrine, and a historic

road. Compaction of the 25-foot-wide road suggested use by wheeled vehicles. The road ran 175 feet through the test wall area (Kirkpatrick 1988). These adobe test walls also were intended to last for 10 years (Guzman et al. 1988).

The visitor center was closed for about six weeks beginning in January 1988 for installation of new exhibits (News release, December 15, 1987, in Fort Selden permanent files, NMSM). The exhibit opened in mid-March and included items found during recent archaeological projects (Guzman et al. 1988; Joan Morris, "State Opens Exhibit at Fort Selden," El Paso Times, March 11, 1988, in Fort Selden files, HPD).

By the end of 1989, Bailey had deeded 5.683 acres containing the post bakery, commanding officer's quarters, and the hospital steward's quarters to the State. Bailey retained the water rights, a well on the property, a 7 1/2-foot-wide easement from the existing well to the NM State Road right-of-way for access, pipe and power lines, along with a 12 by 12 foot space for a pump house or enclosure (Harry N. Bailey, Mission Viejo, California, letter to Thomas J. Caperton, Director of NMSM, June 30, 1989; Harry N. Bailey, letter to Robert Baca, Acting Associate Director, NMSM, November 7, 1989; Tom Livesay, memorandum to Rob Baca, November 17, 1989; Thomas A. Livesay, Director, MNM, letter to Harry N. Bailey, November 27, 1989; Quitclaim Deed, December 20, 1989, all in Fort Selden Bailey land file, NMSM).

Fort Selden, 1990s

In a paper on the adobe ruins preservation efforts at Fort Selden presented at an international conference on adobe held in Las Cruces, New Mexico, in 1990, Caperton observed that the techniques used had "at best, extended the life expectancy of the ruins and hopefully have not had a deleterious effect upon the resource." He concluded that, "The most effective preservation technique for earthen ruins is burial. It is recommended that research be directed toward the burial of sites, alternative methods of presentation and interpretation, and

the investigation of erosion rates" (Caperton 1990:211).

A major stabilization project in 1991 included patching the 1985 shelter coats and repairing walls with new unamended soil shelter. Additional repairs were made and shelter coat test panels were applied to an historic wall in 1992. Repairs were conducted in essentially the same manner as those done in 1985. Six 5-footwide shelter coat test panels were applied to the tops and north and south faces of the south walls of two rooms in the company quarters. In a seventh test, unamended adobe block caps were installed to the south wall of one of the rooms, to the west of the test panels (Oliver and Hartzler 1997:51).

About 1993 workers covered many low walls of the corrals with permeable soil membranes (or geotextiles), and backfilled with crusher fines. Between 1993 and 1996 other adobe walls were wrapped or tented with black aerotextiles. During the three-year experiment, the textiles were removed if they were observed to fail or damage the walls. All the textiles were removed by the end of 1996 (Oliver and Hartzler 1997:58, 64).

Beginning in 1993 the GCI conducted a series of experiments on the historic adobe walls in an attempt to define a system of chemical consolidation to preserve the adobe. A four-step treatment was applied only to the walls of the officers' quarters (Oliver and Hartzler 1997:60).

Two small projects were conducted in 1995. In the summer the local Youth Conservation Corps hand-troweled shelter coats to repair erosion on the bases of the exterior faces of two areas in the company quarters. In a separate project workers repointed the stone walls of two rooms at the south end of the north wing of the headquarters building and removed the Pencapsula cap from the low interior adobe wall dividing the two rooms. They then covered the low wall with a soil membrane and backfilled it (Oliver and Hartzler 1997:67).

William Porter, Las Cruces, donated a bronze statue of a buffalo soldier (Figure A5.18) to Fort Selden SM in 1995. Porter intended to market copies of the sculpture (Charles Bennett, MNM,

letter to William Porter, May 2, 1995, copy in Fort Selden permanent files, NMSM).

By March 1996 Rob Baca was the NMSM's director (Bruce K. McHenry, Albuquerque, letter to Rob [Baca], March 6, 1996, in Fort Selden permanent files, NMSM). In May 1996 Mike Taylor, Deputy Director of the Monuments Division, wrote a memorandum to Tom Livesay, Director of the MNM, of his ideas for Fort Selden SM. Las Cruces was growing rapidly, and the area around Fort Selden SM was quickly being built up with residential and commercial development. Taylor suggested assessing the land around the monument for possible acquisition for buffers from such development. suggested increasing Fort interpretation to include the Mogollon pit house village and the Spanish paraje on the Camino Real. Taylor also suggested an addition to the visitor center, to house a large audiovisual facility for daytime interpretive use as well as evening and weekend lectures and meetings, for exhibit space to interpret the Mogollon and Spanish periods, and for more office and storage space. The addition should be constructed of adobe because it is "cheap and environmentally sound and comfortable." Over the last 25 years, the monument staff had maintained the adobe ruins with cyclical maintenance, but the walls continue to get smaller and thinner, losing their The adobe test wall interpretive definitions. experiments initiated in 1985 continued, providing interesting insights and possible solutions to the fort's preservation problems. Taylor suggested the commanding officer's quarters would be a possibility reconstruction, with proper documentation of the original construction. He estimated Selden's adobe ruins would not exist in 50 years, and he suggested constructing up to 3 shelters, one each over the company quarters, the hospital, and the officers' quarters. He proposed that each shelter would span the width and length of each group of rooms, with overhangs to protect the walls from wind-driven rain. The space frames would be roofed with translucent material, and facsimile windows and doors would be hung where they once existed. Rooms would be furnished, with public access along walkways suspended just above the ground from the roof structures (Mike Taylor, memorandum

to Tom Livesay, Director of MNM, May 29, 1996, in outgoing correspondence file, Fort Selden permanent files, NMSM).

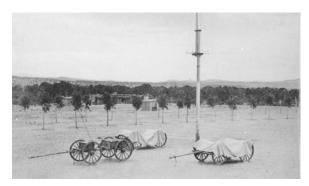
Taylor proposed starting with what he called a "master plan." This plan would include an assessment of the stabilization work done on the ruins and an assessment of the rate of erosion if the status quo was maintained; recommendations for preservation treatments of the various historic adobe walls; computer modeling of the historic fort showing various design schemes for shelter construction; preliminary designs for the proposed visitor center addition; concepts for landscaping and construction of a kiosk; investigations into potential land acquisition; preliminary interpretive schemes for the visitor center addition; and an assessment of visitor statistics in the Las Cruces area and recommendations for increasing visitation to Fort Selden SM. Taylor recently had discussed his proposal with Representative Porter, who wished to meet on site with other legislators to plan implementation for some of the ideas (Taylor, memorandum to Livesay, May 29, 1996, in outgoing correspondence file, Fort Selden permanent files, NMSM).



Figure A5.18. "Buffalo Soldier" by Reynaldo "Sony" Rivera. Ft. Selden State Monument, Radium Springs, New Mexico. Photograph by Charles Bennett, February 17, 1996. Courtesy of Museum of New Mexico, Negative No. 164823.

In a 1997 "preservation plan" for the ruins, Oliver and Hartzler determined that many of the unamended shelter coats applied in 1985 still were intact and well adhered to the historic adobe, with almost no cracking or friability evident. Their color was an excellent match to the original walls, and the aggregates were similar to the original. Nevertheless, one could easily distinguish the 1985 repairs from the original construction. The shelter coats had weathered in patterns the pair described as "brainlike." Most of the amended materials used in later years weathered in a similar pattern (Oliver and Hartzler 1997:48–49).

HISTORY OF INDIVIDUAL STRUCTURES AND FEATURES



northeast corner. This 110 by 35 foot rectangle was enclosed by post and chain fencing. Two parallel rows of post and chain fencing also defined the roadway in front of the officers' quarters. One fence row was 15 feet south of the quarters, and the other was 25 feet south of the first (Figure A5.13; Caperton 1975:72).

The 1876 plan of Fort Selden shows trees lining the roadway, but Caperton determined from examining historic photographs that the trees were not planted exactly as shown on the drawing. For instance, only one row of trees was

Figure A5.19. Parade ground and flagpole in July 1867. Photograph by Nicholas Brown. Courtesy of Museum of New Mexico, Negative No. 55043.

Parade Ground

1865-1879

The parade ground had primary importance and was the central organizing feature of the fort. Most of the post's buildings were laid out around the parade ground (see Figure A5.6). The headquarters officers' quarters, building, barracks, and hospital spatially enclosed the ground, except for open areas at the north ends of the east and west sides. The 1876 plan (Figure A5.6) shows the north-south road running through the fort between the headquarters building and the corrals, as laid out by Nelson H. Davis, straight north past the trader's store on its west side (see also Caperton 1975:Figures 26 and 30). Early maps seem to indicate that traffic entered the post from the north and south ends of the road running through the post, and also near the northeast end of the parade ground. This last entrance would have been convenient for troops, at least, placing them immediately at the corrals.

The rectangular parade ground was approximately 420 by 270 feet. The flagpole originally was midline of the parade ground but centered on the sally port. Late 1860s photographs (Figure A5.19) show the flagpole north of its 1866 position, and in 1871 it was still further north and only about 75 feet south of the officers' quarters (Caperton 1975:72).

The 1871 plan of the fort (Figure A5.13) shows an "Artillery Park" at the parade ground's

planted in front of the officers' quarters. No trees appear to have been planted in front of the barracks or along the headquarters building's west side. The one row of trees at the hospital may be the only landscaping true to the plan. Caperton doubts trees were planted during the fort's second occupation period (Caperton 1975:74).

In 1877 commanding officer Capt. Henry Carroll and quartermaster 2nd Lt. William A. Cory attempted to sink a water well near the center of the parade ground ("From Silver City to Selden," Daily New Mexican, Santa Fe, February 10, 1877:1). No doubt the entire fort regretted the failure of this project, which meant inhabits had to continue relying on the Rio Grande as their only water source.

1880–1891

Caperton notes the flagpole in 1883 was back in the position shown in the late 1860s photographs (Caperton 1975:72). Yet Capt. Arthur MacArthur obtained the flagpole from the closed Fort Cummings in 1884 (Holmes 1990:22–23).

Present Condition

In the 1970s the parade ground was graded and compacted to provide drainage away from the adobe ruins. Back dirt from the 1972 work was used to fill the southwestern corner of the ground. The center of the parade ground was lowered 4 inches, and that dirt was placed in a low area northeast of the hospital. Caperton says

the original level of the parade ground is still lower, nearly 2 feet below the surface existing at the time of the work. A dry sump well was built 6 feet deep at the southeast corner of the parade ground, and filled with gravel. During work on the parade ground, a "rocky approximately 35 feet in width, was uncovered south of and adjacent to the full length of the Officers' Ouarters" (Caperton 1975:76). Caperton speculates this fill had been placed to form the roadway.

Workers excavated in search of the flagpole locations and the historic stone survey marker; they found a pit with debris Caperton believed was from an historic pole. Another 1860s hole was found, with portions of the pole and the wood supports; this location was selected for placement of the existing flagpole, which was replicated from plans from Fort Union National Monument. The 1871 flagpole location also was located and excavated, but the survey marker was not found (Caperton 1975:76).

Although Caperton does not explain how workers located the historic roadway, they graded it in the 1970s work. The roadway was made concave to facilitate drainage, and it was compacted (Caperton 1975:48). Workers planted a total of 66 cottonwood trees in locations similar to those of the historic trees, but they spaced the trees at 30-foot intervals rather than the historic spacing of 15 to 25 feet. Inexplicably, water lines were run to the trees to make them "grow much more rapidly than those planted a century past," and invasive salt cedars were planted in clumps along the north boundary east of the roadway and west of the hospital (Caperton 1975:15).

An interpretive trail was constructed on a loop from the visitor center through the fort ruins. Interpretive signs were placed along the trail (Caperton 1975:15–16).



Figure A5.20. Headquarters Building, photographed from the parade ground by Nicholas Brown in July 1867. Courtesy of Museum of New Mexico, Negative No. 55040.



Figure A5.21. View of corrals, Headquarters Building, barracks in distance, and Officers' Quarter from northeast. Photograph taken by Nicholas Brown in July 1867. Courtesy of Museum of New mexico. Negative No. 55045.

Headquarters Building

1865-1880

The 1866 plan shows the north section of the headquarters building housing, from north to south, quarters for employees, harness shop, blacksmith shop, carpenter shop, quartermaster storeroom, granary, and two prison cells (Caperton 1975:36, see also Figures 22 and 23). The first-floor walls under the second story were 3 feet thick, and the second-story walls were 2 feet thick (Caperton 1975:37).

The courtroom was on the second floor (see Figures A5.20 and A5.21). The following description is given in Caperton (1975):

Portals in front and rear of Guard House, and all around 2nd Story, resting on 6 posts in front and 6 post in rear 8 inches in diameter, plates on posts 10 in square, joists 6 x 2 1/2 20 in. apart, 1 in flooring boards, planed hand

railing around the second story 3 1/2 feet high. The upper story of guard house to have two rooms the whole depth of the building and a hall over the entrance with glass doors in front and rear. (Probably means sash doors) [Plan for Fort Selden, quoted in Caperton 1975:36–37].

The south part of the building housed the adjutant's office, sergeant major's office, quar termaster and quartermaster sergeant's office, issue room, subsistence store, and quartermaster store. The plan shows 5-foot-wide double doors at the quartermaster and company storehouses, shops, and company quarters. The storehouses are shown with 10-inch diameter center posts about 12 feet apart the length of the room (Plan of Fort Selden, 1866, in Caperton 1975:37).

An 1869 inventory of completed buildings described the headquarters building in three sections. The south section contained the quartermaster's storeroom (34' x 54'), the commissary's storeroom (34' x 54'), offices, and workshops. The first floor of the two-story section had prison cells on the north and guardrooms on the south separated by the sally port. On the second floor were the commanding officer's offices, adjutant's office. courtrooms. The north section housed the quartermaster's storeroom (24' x 22.2'), granary, and shops (Caperton 1975:5, 37).

Uses for several rooms changed between 1861 and 1871. The employee's quarters was used by the saddler in 1871. The adjacent room, called the harness room in 1861, was used by the butcher in 1871. The adjutants and sergeant majors offices became guardrooms. The earlier quartermaster and quartermaster sergeant's offices had no specific use indicated in 1871. The issue room was divided into two separate rooms with no stated uses (Carleton 1975:37; see also Figure A5.15).

In 1876 the headquarters building was described as 328 by 34 feet. The building had two wings of equal length separated by a sally port at the two-story central portion. The building enclosed the parade ground on the east. At its north end were two small rooms, used as issuing rooms for the

ordnance sergeant and the butcher; a blacksmith shop; a carpenter shop; the quartermaster's storerooms; a corn room; and two cells for the guardhouse. South of the sally port were two guard rooms, a storeroom, and the quartermaster's storeroom. Upstairs were the commanding officer's offices, adjutant offices, and courtroom (Caperton 1975:40).

1880-1891

On March 27, 1885, MacArthur reported the headquarters building's north wing rehabilitated except one room. The building's second story had been razed, and "the building is or soon will be of uniform height." The south wing also was demolished, except for the stone foundation. The building then measured 188 feet long, including the sally port. The 52 feet of the old building was 35 feet wide, and the remaining 136 feet was 34 feet wide, or 6 inches narrower than the old central building (Post Letter, March 27, 1885, quoted in Caperton 1975:40; Cohrs and Caperton 1983:19). The 30 by 30 foot quartermaster's storehouse (former carpenter shop) needed flooring. MacArthur also wanted to floor the 30 by 30 foot blacksmith shop (former quartermaster's storeroom) and use the space to store clothing. He wanted to convert the 30 by 30 foot room in ruins (former granary) into a blacksmith shop. In addition, he wanted to repair a mostly wood 15 by 15 foot room on the opposite side of the sally port (former guard room) (Caperton 1975:40).

The next year, 1886, the headquarters building was described as a one-story adobe building, 52 by 35 feet, with a 136 by 34 foot wing. The building contained all the offices and the quartermaster and commissary store rooms, carpenter and blacksmith shops, grain house, and telegraph office (Caperton 1975:40).

In 1887 new floors were laid in the clothing room, quartermaster storehouse, and blacksmith and carpenter shop, and a new roof was put on the clothing room (Caperton 1975:40). Final abandonment of Fort Selden began, and no expenditure for repairs or construction was to be authorized because of the post's probable abandonment (Cohrs and Caperton 1983:25).

By 1896 when the Fort Selden Abandoned Military Reservation was surveyed, the building's woodwork apparently had been removed. All the fort's buildings were in ruins (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Hospital

1865-1879

The hospital (Figure A5.22) is on the west side of the parade ground, and its south end is very near the barracks. The 1866 plan shows the hospital with 8 rooms, but only 7 were constructed (Caperton 1975:17, see also Figure 22). Cohrs and Caperton state the hospital's 2 wards could accommodate 12 patients, but the 1871 plan shows only 1 ward. The post commander was unhappy with the structure from the time it was built, and requested the military purchase the trader's store and convert it into a more suitable hospital. His request was approved, but the hospital never was moved (Figure A5.13; Cohrs and Caperton 1983:5–6).

In 1869 the hospital's roof was described as being like those of the other post buildings (except the officers' quarters): "rough cottonwood vigas covered with peeled willows, this with tule and this again with dirt and lime" (Consolidated Correspondence, June 8, 1869, quoted in Caperton 1975:17). The hospital was not floored until 1872 (Cohrs and Caperton 1983:6).

The 1871 plan shows a long, one-room deep building; all rooms are 16 feet deep. Each room opens into the next room, and five of the rooms have exterior doors as well. At the building's north end is the 26-foot-long kitchen and mess room, which has an exterior door and window on the north wall, three windows on the east wall facing the parade ground, and a flue in its southwest corner. Next is a 14-foot-long storeroom with one window on the east. Then another store room, 24 feet long, with an exterior door and one window on the east side. At the building's center is the 30-foot-long ward, with a flue in its southwest corner. Another storeroom, 16 feet long, is south of the

ward. Then comes a 14-foot-long room with a flue in the southwest corner, labeled "steward." At the south end of the hospital is the surgery room, 16 feet long, with an exterior door and one window on its east wall, one window on the south wall, and a flue in its southwest corner. A wall with a center opening closes the space between the hospital and the barracks, aligned with their west walls (Figure A5.13).

An 1876 description of Fort Selden says the hospital had a capacity for 10 beds (Headquarters Military Division of the Missouri 1969 [1876]:164). The 153 by 20 foot building was divided from north to south into kitchen, dining room, storerooms, wards, steward's room, and dispensary. "It is altogether too small, and absolutely unfit for hospital purposes" (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM). In October of that year, the surgeon reported that the "old bug infested shadings," or brush-roofed porches on the hospital, were removed (Holmes 1990:22); no porches are shown on the 1871 plan.

1880-1891

The hospital served as the barracks soon after the post was reoccupied, and the hospital facilities temporarily were located in the trader's store (Caperton 1975:17). In 1884 the hospital condition was good except for its mud roof. Over \$450 had been spent in the past year for general repairs on the building, including rebuilding walls, roofs, doors, windows, and floors. The flooring boards of "common rough lumber [were] put down green, consequently there are many wide openings" (Consolidated Correspondence, April 10, 1884, quoted in Caperton 1975:17). In October MacArthur reported that he had detailed soldiers to work as masons, had hounded headquarters for building funds and materials, and had submitted detailed plans for improvements to the barracks, store hospital, quarters and (Captain MacArthur to AAG, October 12, 1884, in Holmes 1990:23). By 1885 the hospital was completely rehabilitated, but for only seven patients (Cohrs and Caperton 1983:19).

In 1886 the hospital was described as a one-story adobe building, 148 feet long by 20 feet 6 inches, with two wards, a dispensary, and a room for the steward's quarters (Caperton 1975:17). Almost \$425 was spent in 1887 for a new roof and painting all the woodwork in the hospital (Caperton 1975:20). At some point a porch was constructed wrapping around the north and west sides of the structure (Caperton 1975:Figure 15). The hospital steward's quarters, behind (west of) the hospital, also was listed in the 1896 survey of the abandoned reservation (Fort Selden Abandoned Military Reservation, Folder #1, NMSM).

Commanding Officer's Quarters

1865-1879

The commanding officer's quarters was west of and at a right angle to the officers' quarters. This residence stood a short distance away from the northwest end of the parade ground (Caperton 1975:70). This rectangular structure was still under construction in 1869 when Lydia Spencer Lane and her family moved into it. Only four rooms were completed, and the porch roof was constructed of brush laid across and supported by poles (Lane 1964:170–172). Although Lane said the rooms of the house were completed through the summer, the interior floors would have been dirt.

In 1870 the house's porch was reconstructed of lumber, and the interior was floored (Caperton 1975:70). The porch ran the lengths of the east and south sides of the house (Figure A5.13; Wilson and Caperton 1994:Figure 8).

The 1871 map of Fort Selden shows the main part of the commanding officer's quarters having two rooms on either side of an 8-foot-wide central hall. The two front rooms were each 18 feet wide by 20 feet 6 inches deep, and the two rooms behind these were each 18 feet wide by 19 feet 6 inches. A doorway opened between the rooms, and fireplaces were in the center of their common walls. The main central hall opened into another central hall at the rear of the house, with an additional smaller room on either side. These two rooms were each 18 feet wide by 13 feet. Each of the total six rooms

opened to the central halls (Figure A5.13). One of the rear rooms apparently served as a kitchen. A large yard was walled at the rear, with a cellar and an outhouse (Caperton 1975:70; Cohrs and Caperton 1983:5). The 1871 plan shows several rooms along the rear wall (Figure A5.13).

1880-1891

The commanding officer's quarters was never restored after the post was reoccupied. In 1883 the structure was in ruins. The commanding officer eventually moved into the east side of the double houses of the officers' quarters (Caperton 1975:70, 72; Cohrs and Caperton 1983:19). The commanding officer's quarters was listed as 1 of 17 buildings enumerated in the 1896 survey of Fort Selden Abandoned Military Reservation (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Officers' Quarters

1865-1879

The row of officers' quarters defined the north end of the parade ground (Figure A5.22). The structures were two double houses (Figures A5.23 and A5.24) and one single dwelling, at the west side (Figure A5.25). The plan of the single quarters appears to be the same as the east side of each double quarters. Each individual quarters had a larger room as its front room, with two smaller rooms aligned behind the front room. Each room had a door to the next room and to the outside. Kitchens were said to be in small buildings behind the quarters (Cohrs and Caperton 1983:5). In 1869 the officers' quarters could accommodate five families. The roofs of these buildings were unusual to Fort Selden: they were sawed joists with boards over them (Caperton 1975:59).

The officers' quarters had dirt floors until 1870. At this time the roofs were repaired, the rooms were floored, and the walls were plastered (Caperton 1975:59).



Figure A5.22. The row of officers' quarters at the north end of the parade ground, photographed by Nicholas Brown in July 1867. Courtesy of Museum of New mexico, Negative No. 1740.



Figure A5.23. Double house in the row of officers' quarters, photographed by Nicholas Brown in July 1867. Courtesy of Museum of New mexico, Negative No. 1741.



Figure A5.24. Double house in the row of officers' quarters, photographed by Nicholas Brown in July 1867. Courtesy of Museum of New mexico, Negative No. 55042.



Figure A5.25. The single dwelling at the west side of the row of officers' quarters, photographed by Nicholas Brown in July 1867. Courtesy of Museum of New mexico, Negative No. 55044. Note the structure and yard wall are stuccoed on the front only.

The 1871 plan shows walls enclosing small yards immediately around each quarters as well as separating the spaces between the quarters. A large area behind the row of quarters, including fencing, is enclosed by a common wall with a few small structures at its rear (Figure A5.13).

In December 1874 the yards and root cellars needed "policing" (Holmes 1990:71). The single house had a front porch, and the double houses shared common porches (Caperton 1975:Figures 35 and 36). In 1876 each guarters had three rooms and a kitchen. The front rooms had three windows [two on the front and one on the side] and measured 18 by 22 feet. The other rooms were 16 by 16 feet. The kitchens, all separate buildings, were in very dilapidated conditions. Each set of quarters had a small front [side] yard and a larger rear yard. The common rear yard wall was 12 feet high. The only change since 1872 was the "addition of adobe walls in the previous common rear yards of the five sets of Officers' Ouarters, so to give each a separate vard" (quoted in Caperton 1975:61).

1880-1891

After the post was reoccupied, the commanding officer's quarters was not rehabilitated. The commanding officer eventually moved into one of the officers' quarters double houses (Caperton 1975:70, 72; Cohrs and Caperton 1983:19).

Caperton (1975) gives descriptions of the officers' quarters from an 1883 plan. The west quarters, the single dwelling (Figure A5.25), consisted of a 21 foot by 26 foot 8 inch front room in good repair; a center room in ruins; and an 18-foot-long north room in good condition. A 10 by 18 foot room had been added between 1876 and 1883 on the east side of the north room. The front two rooms of the center double quarters were in good condition, but the rear rooms had bad roofs. The west front room of the east double quarters appeared habitable, but the next two rooms to the north were partially repaired and their roofs were bad. A new 17 by 18 foot room north of the original north room on the west side was in good repair. The front room on the east was in repair except it had a bad roof. The two rooms to the north were in ruins. The 17 by 18 foot room east of the north room, which is inside the small yard enclosure on the

1871 plan, was in good condition (Figure A5.13; Caperton 1975:61, 63).

When Capt. Arthur MacArthur, his wife and two young sons arrived at Fort Selden in March 1884, the commanding officer's quarters were three rooms in one of the duplex officers' quarters. At some point the MacArthurs also took over the second half (Cohrs and Caperton 1983:20–21). In March 1884 MacArthur requested "a few hundred dollars...to put the Officers Quarters in suitable condition for the present occupants" (Post Letter, March 30, 1884, quoted in Caperton 1975:63).

By 1884 the officers' quarters were listed as only two buildings. Both were double sets of quarters. The first consisted of three rooms in each quarters. Its roof had been repaired, and its condition was fair. The second structure had four rooms on each side, but only those on the east side were habitable. One room was habitable on the west side and the other three rooms were in ruins, with only the walls standing. This building's roof also had been repaired. A lieutenant and the post surgeon occupied it. The rooms of both buildings were "insufficient" (Consolidated Correspondence, April 10, 1884, quoted in Caperton 1975:63). In October 1884 MacArthur reported that he had detailed soldiers to work as masons, had hounded headquarters for building funds and materials, and had submitted detailed plans for improving the barracks, store rooms, hospital, and quarters (Captain MacArthur to AAG, October 12, 1884, in Holmes 1990:23).

By 1885 one double quarters and four rooms of the other duplex had been rehabilitated (Cohrs and Caperton 1983:19). In March the west quarters was identified as the surgeon's quarters. Only a 25 by 22 foot room was in repair, and a porch had been added. One of the three other rooms was in ruin. The center duplex had a total of eight rooms and was used as the company officers' quarters. Except for the kitchens, the good condition. building was in commanding officer resided in the six-room east duplex. According to Caperton, this structure had two more rooms that were not counted (Caperton 1975:63, 69).

In 1886 the 2 front rooms of the post surgeon's quarters were listed in repair and the others still were in ruins. By 1888, however, only 1 room of this building was habitable (Caperton 1975:69). In the 1896 survey of Fort Selden Abandoned Military Reservation, the commanding officer's quarters, subaltern officers' quarters, and surgeon's quarters were listed as 3 of the 17 structures on the post (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Barracks

1865-1879

The barracks defined the south end of the parade ground (Figure A5.26). Variously called the troop quarters, company quarters, or barracks, this building was intended for one cavalry company and one infantry company. The building still was under construction in June 1866 (Consolidated Correspondence: June 20, 1866, quoted in Caperton 1975:24).

The front part of this long building was divided into two dormitories, one for each company. On the 1871 plan each dormitory was 85 feet long by 24 feet deep. Each dormitory had four doors, two on the north side and two on the south. Each room had five windows on the north side facing the parade ground and two windows on the south facing a walled courtvard. At the outside ends of the two barracks were two rooms for the sergeants' quarters, which do not open into the dormitories. For some reason, the rooms of the two quarters were different sizes. Both rooms of the east sergeant's quarters were 16 by 11 feet, but the front room on the west quarters was 16 by 13 feet with a 16 by 9 foot room behind it. Both quarters opened into company storerooms immediately behind them on the south. The east storeroom is divided approximately in half, with the company tailor occupying the south half (Figure A5.13). In the 1867 photograph of the front of the barracks (Figure A5.26), the four openings into the dormitories appear to be double doors.



Figure A5.26. Fort Selden's barracks,, photographed by Nicholas Brown in July 1867. Courtesy of Museum of New mexico, Negative No. 55039.

Behind the central part of the long building were separate mess rooms and kitchens for each company. Each mess room was 33 by 15 feet, and each kitchen was 16 by 16 feet. Each mess room and each kitchen was entered from the courtyard behind its respective dormitory. The exterior walls of the company store rooms and mess rooms were 14 feet tall, and their ceiling heights were 10 feet 8 inches (Figure A5.13).

The exterior walls of the main parts of the barracks were 15 feet high. The courtyard walls south of the barracks were about 12 feet high (Figure A5.13).

An 1875 report gives the dormitories' dimensions as 90 by 24 feet. The rooms were warmed by stoves; the 1871 plan shows a flue on the east and west walls of each dormitory. By 1875 the men had individual bunks rather than the double bunks for which the rooms were designed (Surgeon General Circular No. 8, 1975, quoted in Caperton 1975:25).

On January 18, 1876, commanding officer 1st Lt. Caspar A. Conrad described the barracks as 201 feet 4 inches by 24 feet. Each dormitory measured 84 feet 6 inches by 24 feet. At each end of the dormitory was a 16 by 11 foot orderly room with a 15 foot 9 inch by 11 foot company storeroom attached. South of each dormitory were squad rooms measuring 33 feet 5 inches by 16 feet. The dining rooms were each 33 feet 4 inches by 15 feet, and the kitchens were each 17 by 15 feet. A separate building south of the east dormitory housed the shoemaker and tailor shops, washroom, and storeroom; this building was 59 feet by 13 feet 7 inches (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to

Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM).

1880-1891

When the post was reoccupied, the barracks was in ruins and the soldiers used the hospital building as the barracks. A second company of cavalry spent four months at Fort Selden in 1883 and stayed in tents because of the condition of the barracks (Caperton 1975:17, 19; Cohrs and Caperton 1983:19).

By April 1884 repairs to the quarters were sufficient for one company. A mess hall and kitchen were in good condition (Consolidated Correspondence, April 10, 1884, quoted in Caperton 1975:25). Captain MacArthur had an amusement and reading room built in part of the barracks, probably the former west dormitory (Caperton 1975:27; Cohrs and Caperton 1983:21–22). The previous month, March 1884, MacArthur requested funds for a mason to work on the barracks (Captain MacArthur to AAG, March 30, 1884, in Holmes 1990:43), yet the same day he said, "the barrack is perhaps the best in the district, certainly far better than any I have yet seen" (Post Letter, March 30, 1884, quoted in Caperton 1975:25).

By 1885 the barracks had been extensively renovated, although four men were living in tents. One kitchen had been converted into a cellar or root house, and the west rear wing had been converted into a kitchen and mess room. The east dormitory had been restored (Caperton 1975:25, 27; Cohrs and Caperton 1983:19).

In June 1886 the barracks was described as being 212 by 28 feet with two wings each 35 by 20 feet (Post letter, June 15, 1886, quoted in Caperton 1975:27). By 1887 a 12-foot-wide by 191-foot-long porch had been added across the front of the building (Caperton 1975:29), although a photograph taken at the time (Figure A5.27) indicates the porch was intended to be covered with brush. What appear to be ventilators had been added to the roof.

In 1888 the barracks floor was repaired and wainscoting was placed in the mess hall. In

October and November, when nearly 24 inches of rain fell in the Mesilla Valley, the men set up tents in their quarters because the roof leaked so badly. The roof was repaired partially in March 1890, and the barracks were painted and whitewashed (Caperton 1975:1, 29, 77). The 1896 survey of Fort Selden Abandoned Military Reservation listed the barracks as 1 of the 17 buildings remaining (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM; see Figure A5.28).



Figure A5.27. Soldiers in front of barracks and hospital to the right, photographed by J. R. Riddle, circa 1886. Courtesy of Museum of new Mexico, Negative No. 14523.



Figure A5.28. This photograph documents the rapid deterioration of the barracks and hospital buildings in the 45 years after the fort was abandoned. Photograph taken in spring 1936. Courtesy of Museum of New Mexico, Negative No. 150956.

Hospital Steward's Quarters

An 1896 survey of Fort Selden Abandoned Military Reservation lists the hospital steward's quarters as 1 of 17 buildings at the post (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM). This small 3-room building was behind and west of

the hospital (Wilson and Caperton 1994:Figure 14).

Bakery

1865-1879

The bakery was west of the barracks and away from the parade ground (Cohrs and Caperton 1983:6). After unwholesome cornbread was blamed for causing diarrhea and other illnesses to the troops, ovens were approved for construction by the bakery (Caperton 1975:23–24). The soldiers apparently preferred the ovens to their army-issued camp stoves (Captain Fetchet to Lieutenant Robinson, October 31, 1869, in Holmes 1990:85).

The bakery is shown on the 1871 plan (Figure A5.13). The rectangular building is 34 feet 6 inches by perhaps 70 feet and runs north-south. It has one exterior door, in the middle of its south wall. A large square room with only an interior door opening to a center hall occupies the building's north end. Two ovens are shown along the west wall south of this room, followed by an open space near the building's exterior door. Opposite the ovens are two rooms that each open to the hall and each has one window centered on its east wall.

A description of Fort Selden published in 1876 lists the "bakehouse" as one of its adobe buildings that were generally in good condition but somewhat in need of repair (Headquarters Military Division of the Missouri 1969 [1876]:164). A January 18, 1876, letter describes the bakery as being well-arranged and having three large adobe ovens, although only one was fit for use (Caperton 1975:24).

1880-1891

The bakery was in ruins when the post was reoccupied. In 1885 35 by 37 feet of the bakery was in good condition. Only two years later, in 1887, the bakery again was in ruins. This time the building was described as only 16 by 28 feet, the size to which it apparently soon was rehabilitated. The building was described further as having adobe walls, a shingled shed roof, a brick floor, and two doors. Its one window, on the front, had fifteen 12 by 12 inch lights

(Caperton 1975:24; Cohrs and Caperton 1983:19); no such opening is shown on the 1871 plan. The 1888 annual report again referred to the building as being 16 by 28 feet and said it was in "good condition" (Consolidated Correspondence, March 31, 1888, quoted in Caperton 1975:24).

By March 1890 the post bakery again was in poor condition and its wall needed repair (Caperton 1975:24). The 1896 survey of Fort Selden Abandoned Military Reservation lists the bakery as 1 of 17 buildings on the post (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Magazine

1865-1879

The magazine ruins are east of the main fort buildings and approximately 150 feet northeast of the present-day visitor center (Cohrs and Caperton 1983:6; Wilson and Caperton 1994:18, Figure 15). Prisoners made the adobes for the magazine, which was under construction in 1869. A 12-foot-square room in the ground was used to store powder. Above this room was a 30foot-diameter circular superstructure. The walls of the square room were about 2 feet 5 inches thick, and the floor surface was a thin plaster layer. A stair with adobe walls stood in the center of the east wall. The 1870 inspection report says the magazine's external appearance was bad because it lacked plaster; in 1872 the building's interior and exterior walls were plastered (Caperton 1975:77; Wilson and Caperton 1994:20, 25, 27).

Only four years later in 1876 the building was described as being in a "very dilapidated condition" (Headquarters Military Division of the Missouri 1969 [1876]:164). Another 1876 report says the building "threatens to fall at any time" (Post Letter, January 18, 1876, quoted in Caperton 1975:77). In 1878 a lieutenant complained that the "magazine is in bad order and not likely to be repaired"; he recommended the ordinance stores be moved elsewhere (quoted in Caperton 1975:77).

1880-1890

Despite its condition the magazine was in continuous use until 1890. Funds were requested to renovate the building in both 1885 and 1887, when the building received a wood floor. Severe rains in 1888 damaged the building's dirt roof. The structure was in poor condition in 1890 (Caperton 1975:77-78; Wilson and Caperton 1994:20, 27). The magazine was listed as 1 of 17 buildings in the 1896 survey of Fort Selden Abandoned Military Reservation (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM). The magazine ruins were excavated and stabilized between 1974 and 1976. Wilson and Caperton (1994) describe the building and its archaeology in their report.

Corrals/Stables

1865-1879

The corrals are east of and parallel to the headquarters building (Figure A5.29). The corrals were built along the east side of the 60foot-wide roadway running north-south through the fort. According to Caperton, the 1866 fort plan shows four corrals: quartermaster corral, cavalry stables, hay corral, and beef corral. The corral walls were 7 feet 6 inches high and 2 feet thick. The 120 by 143 foot quartermaster corral had three rooms along its west wall and sheds along the north and east walls. The rooms were the forage and wagon masters quarters, kitchen, and employees quarters. Along the west wall of the cavalry stables were a granary, company quartermaster sergeant quarters, and blacksmith shop. The south wall of the hay corral was to have a 10 by 20 foot sink, which may not have been built. The beef corral had a bacon house in its southwest corner and a fresh meat house in its southeast corner. A slaughter pen was at the north of the meat house (Caperton 1975:48, 50, 54-56).

The corrals and stables were to accommodate 200 animals (Holmes 1990:96). The 1869 inventory says 100 horses could be stabled in the cavalry corral and 100 mules could be stabled in the quartermaster's corral. The inventory also

lists a number of buildings in the corrals (Caperton 1975:48).



Figure A5.29. This interesting photograph, taken from the north by Nicholas Brown in July 1867, shows the corrals at the left. Courtesy of Museum of New Mexico, Negative No. 1742.

By 1871 some of the corrals and associated structures had changed uses. The cavalry stables and hay corral were designated as troop corrals, and the former beef corral was a lumberyard. The quartermaster corral retained the same use (Caperton 1975:48, 50, 54–55). The troops corrals appear to be lined with stalls on their north, west, and south walls (Figure A5.13).

An 1876 description of Fort Selden lists four corrals. The site plan shows the quartermaster corral on the north, followed by the cavalry corral and the wood yard. At the south end is an unidentified rectangular area, which probably is roofed (Headquarters Military Division of the Missouri 1969 [1876]:164–165;

Figure A5.6). A post letter written on January 18, 1876, says the entire corrals measured 328 by 148 feet. The longest corral was used "for post transportation in charge of the AAQM. The next one is the Cavalry Corral. Then two more which are used for storage of spare transportation, etc." The stables were brush sheds, "now in bad condition" (Post Letter, January 18, 1876, quoted in Caperton 1975:50).

1880-1891

All the corrals were in bad condition when the post was reoccupied (Cohrs and Caperton 1983:19). In 1885 the only company at Fort Selden was infantry (Caperton 1975:50). The south troop corral now was the mule corral and contained rooms for teamsters. It measured 184 feet long by 62 feet wide. The south corral, 147

by 62 feet, was not being used. The north troop corral was now the wood yard (Caperton 1975:55).

In March 1886 it was mentioned that the mule corral could accommodate 60 animals. The quartermaster corral was the wagon yard, with a granary and harness room inside it. Capt. Arthur MacArthur added two rooms north of the harness room for the quartermaster sergeant's quarters (Caperton 1975:51, 55).

In June 1889 a fire broke out in the corral, an adobe structure with a brush roof partially covered with adobe, "which burnt like cotton," according to 1st Lt. James E. Brett. Although the alarm immediately sounded and everyone responded promptly, they were able "to save one mule of eight, and two horses of seven." In addition to the 7 mules and 5 horses, 1 Doherty wagon, 1 Red Cross ambulance, 1 army wagon, 2 escort wagons, 3 carts, 11 sets of harness, and "a quantity of timber and wagon fixtures" were lost in the fire. Brett had not determined the cause of the fire, but thought perhaps a match dropped from a teamster's pocket and was "accidentally ignited by contact with the feet of one of the animals" (Post letter, June 8, 1889, quoted in Caperton 1975:51, 54).

An 1896 survey of Fort Selden Abandoned Military Reservation lists the corrals (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Laundresses' Quarters

1865-1879

Cohrs and Caperton say the post bakery, the magazine, and the laundress's and employees' quarters were outside the perimeter of the parade ground (Cohrs and Caperton 1983:6). In 1869, however, military records locate Company K's laundress's quarters at the north end of the hospital (Holmes 1990:34–35).

In the 1870 census two laundresses are living at Fort Selden. One is married to a soldier, and one lives alone. Both are listed as living in separate residences.

A description of Fort Selden published in 1876 lists laundresses' quarters among the buildings constructed of adobe. The laundresses' quarters were in a very dilapidated condition (Headquarters Military Division of the Missouri 1969 [1876]:164).

Employees Quarters

1865-1879

Cohrs and Caperton say the employees' quarters were outside the perimeter of the parade ground (Cohrs and Caperton 1983:6). In the 1870 census the post butcher and his family and servants are listed as "Detached Families living in the Garrison of Fort Selden." Their residence is enumerated after the hotel and before the residence of the "Blacksmith in Q.M.D." Then follows the commanding officer and his family (see Figure A5.14).

Trader's Store

1865-1879

The trader's store stood on the west side of the north-south road through the fort. The store was north of the officers' quarters. The large building (Figure A5.30) eventually contained 17 rooms. The post office was established here in 1865, and the building included the Fort Selden Hotel with rooms for rent to travelers (Cohrs and Caperton 1983:6; Holmes 1990:64).



Figure A5.30. The trader's store and Fort Selden Hotel, photographed by Nicholas Brown, July 1867. Courtesy of Museum of New Mexico, Negative No. 55041.

In the 1870 census 10 persons are listed as living in the "Hotel in the Garrison of Fort Selden N M." Three of these are the hotelkeeper, his wife,

and a six-year-old girl. Also living there are the hotel cook, the hostler, the post trader, an army surgeon, an officer, and the clerk in the quartermaster's department. Presumably, at least some of these people shared quarters.

Unfortunately, the trader's store is not shown on the 1871 site plan of Fort Selden, but it is shown on the earlier 1870 plan (Figure A5.31). In 1875 the walk in front of the trader's store was reported to present a "disreputable appearance from slop" thrown from the store's dining room (Post Surgeon to Post Adjutant, January 21, 1875, quoted in Holmes 1990:126).

The 1876 description of Fort Selden includes a site plan showing the outline of the "Trader's Store" (Figure A5.6). A main building faces the fort's north-south road. This building has a short wing at its north end and a longer wing at its south end. A wall encloses the rear of this building, forming a rectangle. A small square structure sits in the southwest corner of this enclosure. Attached to the north side of the store is a slightly smaller U-shaped building with no fenced enclosure. Trees are shown lining both sides of the road running past the store. One of these structures must have served as the hotel.

In 1877 a Santa Fe reporter writes,

At Fort Selden we were politely accommodated at the post traders spacious residence, formerly the Fort Selden Hotel, by Mr. Edward Schiffer, who is with the proprietor, Mr. E. F. Kellner, now absent on a trip to Texas ["From Fort Selden to Dona Ana, Las Cruces and Mesilla," Daily New Mexican, Santa Fe, January 15, 1877:1, microfilm, SRC].

1880-1891

Fort Selden was reactivated at the end of 1880, with Company K, 15th Infantry, arriving in late December, and Company M, 9th Cavalry arriving on Christmas Day. The buildings were in serious condition after being abandoned, stripped of woodwork, and left to the weather. Only the trader's store was in usable condition, apparently because it had continued in use

during the post's temporary abandonment (Cohrs and Caperton 1983:17–19).

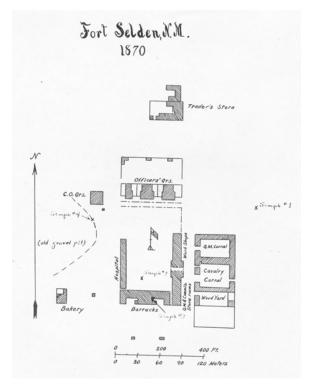


Figure A5.31. Plan of Fort Selden, 1870. From the National Archives, RG 153, copy on file, FSSM.

Fort Selden was a stage stop, and the Southern Overland Express had an office and a stable within the reservation, perhaps at the trader's store. The National Mail and Transportation Company also ran through Fort Selden from late January 1880 until the company ceased operation in March 1881 (Jim Purdy, "Info Relating to Stage Lines Passing through Selden," typescript in miscellaneous research file, Fort Selden permanent files, NMSM). During the fort's temporary abandonment, the stage company and the post trader were the only inhabitants. Two stages a week brought mail, supplies, and passengers from 1865 to 1881 (Holmes 1990:104–105).

In 1881 the trader's store served as living quarters for the officers and fort employees as well as housing the hospital. As buildings were rehabilitated, the trader's store returned to its original function (Caperton 1975:17, 61; Cohrs and Caperton 1983:19).

In May 1887 Aldophe Lea, the post trader, was reminded that beer, whiskey, and wine could not be sold by the bottle but must be sold by the glass only to be drunk at his counter (Captain Barrett to Adolphe Lea, May 28, 1887, quoted in Holmes 1990:126). The counter could indicate a bar at Lea's establishment, or it could be merely the counter inside the store.

In the 1960s the remains of the trader's store, arguably Fort Selden's most significant structure, were razed to make way for a house trailer (Guzman et al. 1988). Why the land containing this structure was not donated to or purchased by the state is difficult to comprehend.

The history of this building and its uses through time need thorough research to include in the interpretation of Fort Selden. Because the building was not abandoned between 1879 and 1880, it might have survived better than other structures on the military reservation. Its condition between 1891 and the 1960s also deserves research.

Guardhouse/Prison

1865-1879

A description of Fort Selden published in 1876 lists the guardhouse as one of the buildings constructed of adobe and generally in good condition (Headquarters Military Division of the Missouri 1969 [1876]:164).

1880-1891

In 1885 Capt. Arthur MacArthur wanted to repair a 15 by 15 foot room, described as mostly wood, opposite the sally port. Caperton identifies this structure as the former guard room (Caperton 1975:40). The 1896 survey of Fort Selden Abandoned Military Reservation lists the guardhouse as a separate building (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Schoolhouse

The saddler's wife was hired in 1884 to teach Fort Selden's first formally organized school (Holmes 1990:44). Apparently the fort had no

separate school building, however, until 1886 when a small, one-room schoolhouse was built (Cohrs and Caperton 1983:19). The 1896 survey of Fort Selden Abandoned Military Reservation lists a schoolhouse as one of the fort's buildings (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Miscellaneous Structures

An 1896 survey of Fort Selden Abandoned Military Reservation reported, "The wood-work of all these buildings, which are adobe has been removed and there is nothing left but parts of walls and piles of dried mud, all of which is worthless. There is nothing to appraise in the shape of buildings or building material." The survey lists 17 buildings: (1) barracks, (2) company washroom, shoe shop, barber shop, (3) commanding officer's quarters, (4) subaltern officers quarters, (5) surgeon's quarters, (6) headquarters building, (7) hospital, (8) bakery, (9) schoolhouse, (10) quartermaster sergeant's quarters, (11) commissary sergeant's quarters, (12) employees quarters (granary), (13) post quartermaster sergeant's quarters, (14) hospital steward's quarters, (15) guard house, (16) magazine, and (17) corrals (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Wash House

An 1876 description of Fort Selden says a small building (59 feet x 13 feet 7 inches) stood about 60 feet south of the barracks' east dormitory. This building was divided into shoemaker and tailor shops, and a wash and store room (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM).

The washhouse was described in 1886 as a onestory adobe building with a dirt roof. The 59 by 13 foot building had a coat and bathroom, washroom, barbershop, and shoe shop (Caperton 1975:36). An 1896 survey of Fort Selden Abandoned Military Reservation lists a building containing company washroom, shoe shop, and barbershop (Fort Selden Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Tailor. In 1876 tailor shops were in a small building behind the east dormitory of the barracks (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, NMSM).

Shoemaker. In 1876 a shoemaker shop was in the small building behind the east dormitory of the barracks (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, NMSM).

Workshops

A description of Fort Selden published in 1876 lists workshops among the buildings constructed of adobe and generally in good condition, but somewhat in need of repair (Headquarters Military Division of the Missouri 1969 [1876]:164).

Hospital Steward's Quarters

The quarters were behind and west of the hospital. This building is not shown on the 1870 or 1871 plans. The 1870 census enumerates the hospital steward, male hospital nurse, male hospital cook, and two soldiers as residing in the hospital.

In March 1888 funds were requested for material for a board fence and a water closet for the hospital steward's quarters. The 55 by 19 foot, shingle-roofed adobe building had three rooms. The building faced south and had a porch along its front (Caperton 1975:23).

Latrines

Little is known about Fort Selden's latrines other than specifications attached to the 1866 plan: "Walls of privies 7 1/2 feet high and two feet thick" (quoted in Caperton 1975:28). In June 1870 the surgeon said the company latrines must be filled at once and removed (Wilson and Caperton 1994:28).

In 1876 the sinks for the men were dug south of the barracks and were changed when necessary. Dry earth was the "only disinfectant required." The officers' quarters and the hospital had "ordinary latrines, with deep vaults" (Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM).

Eight latrines were excavated between 1974 and 1976. Three of these were south of the barracks, four were behind the east officers' quarters, and one was a hospital latrine. The hospital latrine dates to the fort's first occupation period, and the other latrines date to the second period. Most of the artifacts recovered were glass containers, shoes, and cartridges; ceramics and smoking pipes also were collected (Wilson and Caperton 1994).

Acequia/Water

Nelson H. Davis had hoped an acequia could be built to the Fort Selden reservation from the Rio Grande to supply the post with water, but the project proved unsuccessful. For most of the life of the fort, water was hauled by wagon from the river and stored in water barrels (Headquarters Military Division of the Missouri 1969 [1876]:167; Cohrs and Caperton 1983:6).

In 1877 a newspaper reporter stated that commanding officer Capt. Henry Carroll and quartermaster 2nd Lt. William A. Cory

are sinking a well near the center of the grounds, and have every prospect of being successful; the water for the post is now hauled from the river, and these officers deserve credit for endeavoring to get good water at small expense; in the summer season this far down the Rio Grande water is said to be execrable—in fact not fit to drink, besides causing disease among the inmates of the post ["From Silver City to Selden," Daily New Mexican, Santa Fe, February 10, 1877:1, microfilm, SRC].

Capt. Arthur MacArthur reported in 1886 that water still was hauled from the river each day by mule team and water wagon (Captain MacArthur to AAG, June 15, 1886, quoted in Holmes 1990:91).

Post Office

Almost as soon as Fort Selden was established, a post office was situated in the trader's store, in 1865 (Holmes 1990:64). J. B. Price, president of the National Mail and Transportation Company of Santa Fe, received permission in late January 1880 to establish a mail station at Fort Selden, with the stipulation that he would vacate at the demand of the Department (Jim Purdy, "Info Relating to Stage Lines Passing through Selden," typescript in miscellaneous research file, Fort Selden permanent files, NMSM). Fort Selden had a post office and postmaster in 1881 (Holmes 1990:64).

Railroad Siding

A branch of the Atchison, Topeka, and Santa Fe Railroad crossed the reservation in 1881. A small siding built for the fort could accommodate one car at a time (Cohrs and Caperton 1983:19–20; Holmes 1990:122).

The siding platform for the fort was expanded in the summer of 1884. Randall Station also had been built in the reservation's northwest quarter. This station was larger than the fort siding and later became the Radium Spring Station (Cohrs and Caperton 1983:20).

Rifle Range

The rifle range was described by Capt. P. H. Ellis in October 1883 as being "of standard distances...with an abutment of 8 feet filled with dirt at end...targets face south...20 rounds allotted per man per month" (Captain Ellis to AAG, October 1, 1884 [sic], quoted in Holmes 1990:73). The MNM missed acquiring the rifle range because of problems with water rights ownership (Thomas A. Livesay, letter to Sarah Alley, March 22, 1992, copy in Bailey land file, NMSM).

Stage Stop

Fort Selden was a stage stop, and the Southern Overland Express had an office and a stable within the reservation. Two stages a week brought mail, supplies, and passengers from 1865 to 1881. During the fort's temporary abandonment, the stage company and the post trader were the fort's only inhabitants (Holmes 1990:104–105).

The National Mail and Transportation Company also ran through Fort Selden, with stops from Albuquerque to Tucson. By March 30, 1881, however, this company had "fizzled" (Jim Purdy, "Info Relating to Stage Lines Passing through Selden," typescript in miscellaneous research file, Fort Selden permanent files, NMSM). The stage stop and possibly the corrals for the stage were at the trader's store.

Gardens

1865-1879

Because the reservation had no suitable land for cultivation, in 1876 the company gardens were maintained 12 miles away in Doña Ana (Headquarters Military Division of the Missouri 1969 [1876]:167; Description of Fort Selden, January 18, 1876, 1st Lt. Conrad, to Headquarters of the Military Division of Missouri, typescript copy in miscellaneous research file, Fort Selden permanent files, NMSM). Miller identifies John D. Barncastle, a former California volunteer and prominent Doña Ana County resident, as renting a tract of land adjacent to his farm to Fort Selden soldiers for a company garden (Miller 1982:110).

In 1877 a Santa Fe newspaper reporter had this to say about Barncastle: "A mile south of Doña Ana on the main road, with the telegraph running in front, is the tasteful residence of John D. Barncastle, one of the California 'column' who has been residing here about seven years; his vineyard contains about 9,000 vines, and he made over 2,000 gallons of wine the past season; the wine is sweeter than that made up north, and is considered to be of superior flavor" ("From Fort Selden to Dona Ana, Las Cruces and Mesilla," Daily New Mexican, Santa Fe, January 15, 1877:1, microfilm, SRC).

1880-1891

Fort Selden might have had a garden on the reservation in 1889. The surgeon said "the old well at the garden has been cleared out and sunk a few feet deeper to about 10 1/2 feet" (quoted in Holmes 1990:92).

CEMETERY

1865-1879

On October 23, 1866, two soldiers who had killed each other over a love triangle were buried side by side in the post cemetery. "A few yards march with muffled drums, three volleys over the graves, and that was the end of two men who might have lived for years to come, but for the perfidy of one woman." The men were Lt. John Warner and Lt. Fred Hazelhurst, and the woman fought over was Warner's wife Julia (Harry [Storey], letter to Annie Cheshire, Brooklyn, New York, October 18, 1866, Storey Letters, FSSM).

Soon after that incident, on November 12, 1866, Lt. Col. Alexander Duncan, 125th Infantry Regiment (colored) wrote that seven or eight soldiers already had been killed at Leasburg (Lt. Col. Duncan to AAG, November 12, 1866, quoted in Holmes 1990:121). They, too, were buried in the post cemetery.

When Fort Fillmore's cemetery was inspected on May 25, 1868, the report recommended that the remains of the only marked grave be removed to Fort Selden. The burial was Capt. H. W. Stanton, who died January 20, 1855. Fort Fillmore's cemetery was enclosed by a 225 by 90 foot wall built in 1857, and said to be in very bad condition and needing a gate 11 years later (Mozer 1967:16).

1880-1891

Lt. and Mrs. William N. Hughes, 13th Infantry, lost two children in the diphtheria epidemic that swept Fort Selden in 1886 (Holmes 1990:45). Numerous other soldiers and civilians died while associated with the fort and may have been buried in the post cemetery.

About 1890 or 1891, when Fort Selden was being closed, the military awarded a contract for removal of the soldiers' bodies from the post cemetery to the National Cemetery. The contractor was to receive in payment the wooden portions of the post buildings (Trumbo 1946:41). An 1896 inventory of Fort Selden reported the remains of two or three citizens, but "not now used as a cemetery" (Fort Selden

Abandoned Military Reservation, Folder #1, typescript in miscellaneous research file, Fort Selden permanent files, NMSM).

Today the area of Fort Selden's cemetery is just inside the entrance to Leasburg Dam State Park. A marker is near the park road. The soldiers' remains are said to be in the National Cemetery in Santa Fe, but no research has been conducted to locate their burials.

In addition to the names and number of individuals once interred in the cemetery, funeral customs would be of interest, such as those given above for Lieutenants Warner and Hazlehurst. Also, were white and black soldiers buried together, or were they assigned different areas? Where were children and other family members buried? What served as coffins, and where were they procured? Because death was such a common occurrence, it is a theme necessary for the interpretation of Fort Selden.