ARCHAEOLOGICAL INVESTIGATIONS AT THE UNITED STATES ARSENAL SITE (41 BX 622), SAN ANTONIO, TEXAS

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ABSTRACT

Test excavations were carried out at two locations on the grounds of the old U.S. Arsenal in downtown San Antonio, Texas, in December 1983. Backhoe trenching at the north end of the site revealed no indication of the location of an acequia lateral suspected to run through the area. Test excavations at the south end of the stone stable building found no indication of the location of a stairway which is presumed to have led to a second story doorway in the wall of the building. Historical research resulted in production of a history of the Arsenal from the time of its founding to the present.
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INTRODUCTION

In December 1983, the Center for Archaeological Research, The University of Texas at San Antonio, entered into a contract with the Chumney/Urrutia architectural firm of San Antonio to conduct limited archaeological testing on the grounds of the old United States Arsenal in downtown San Antonio, Texas. The purpose of the testing was to determine whether a lateral ditch of the San Pedro acequia (a Spanish irrigation ditch) crossed the property under development. The Arsenal property is bounded by South Flores Street on the west, Durango Street on the north, the San Antonio River on the east, and Arsenal Street on the south (Fig. 1). The property is a City Historic Landmark and is on the National Register of Historic Places, making it subject to review by the State Historic Preservation Officer in accordance with Section 106 of the National Preservation Act of 1966 (as amended) and Executive Order 11593. It has been recorded by the Historic American Buildings Survey (HABS 1968). The eastern half of the property is currently being developed as a headquarters for the H. E. Butt (H.E.B.) grocery chain.

In addition to the testing, the Center agreed to compile a history of the United States Arsenal, with particular reference to the historic buildings still present on the eastern half of the site, which is the area acquired by H.E.B. Information for this history was partially provided by research done by Martha Freeman of Walker, Doty and Freeman, Architects and Planners, of Austin, Texas. This has been supplemented by additional research in San Antonio and Austin by the author.

PREVIOUS WORK IN THE AREA

Archaeological investigations in the immediate area have included tracing and recording of the route of the San Pedro acequia, or irrigation ditch, which runs north-south through the original Arsenal grounds west of South Main Avenue (Fox 1978:3-11), and excavations at the site of Guenther's Upper Mill, directly across the river from the Arsenal (Fox, Flynn, and Cox 1986). Of these, the acequia investigation is pertinent to the project herein reported.

The acequia investigation consisted of the cleaning off and documenting of a portion of the San Pedro acequia adjacent to the Arsenal Commander's house (Fox 1978:3-11). The stone walls lining the acequia were at or just beneath the surface. In the process of this investigation, a control gate for a lateral of the acequia was found which appeared to be running directly east into the northwest corner of the area now under development by H.E.B. It was therefore recommended by the author that testing be done in advance of any construction activity in that area of the Arsenal site in order to determine whether the lateral existed in that area. If it was found, plans could then be adjusted so as not to disturb it.

HISTORICAL BACKGROUND

In 1846, Brig. Gen. John E. Wool was sent to San Antonio to mobilize U.S. Army troops for the Mexican War. He established his supply depot at San Pedro Springs. The post included both quartermaster and ordnance supplies (Engelke 1965; Gomolak 1956:1).
Figure 1. Arsenal Site Plan. Basic data and building identifications from 1946 road map (San Antonio Arsenal, Office of the Post Engineer 1946); location of South Main Avenue from 1961 site plan (General Services Administration 1961). The area investigated by trenching is indicated by darkened area.

LIST OF BUILDINGS

1 Commanding Officer Quarters  
2 Servants Quarters  
3 Post Headquarters  
3A Main Office  
4 Hot House  
5 C. O. Garage  
7 Post Engineers  
7B Engineers Carpenter Shop  
9 Shops  
10 Battery Charging Shed  
12 Post Property  
16 Loading Platform  
17 Utilities Shop  
19 Storehouse  
20 Post Dispensary  
21 Auto Repair Shop  
22 Storehouse  
23 Storehouse  
25 Storehouse  
27 Storehouse  
29 Storehouse  
30 Shop and Storage  
31 Storehouse  
32 Storehouse  
33 Packaging Section  
34 Inspection Division and Guard Station  
34A Lavatory - Building 34  
34B P. E. Blacksmith Shop  
35 Plant Section and Safety Office  
41 P. E. Paint Shop and Storage  
50 Storehouse  
51 Storehouse  
52 Storehouse  
53 Change House and Cafe  
53A Cafe Store Room  
58 Shop Area  
60 Salvage Yard and Office  
62 Motor Pool Office  
63 Wash Rack, Motor Pool
The Army took over the Alamo for a Quartermaster Depot in 1849, fitting out the old Spanish Powder House (Garita) 1-1/2 miles to the east as a magazine (Conner n.d.:21). Since there was not sufficient room at the Alamo in late 1850, Quartermaster Babbitt constructed a building to house the Arsenal on a lot at the corner of Houston and Soledad Streets. The ownership of the building was to transfer to the owner of the lot after 2-1/2 years as payment of rent on the lot (Conner n.d.:20). However, it was not until 1855 that the Arsenal was officially established in San Antonio (Engelke 1965; Gomolak 1956:1), Lt. John McNutt commanding.

In 1858, the Army sent Capt. R. H. K. Whiteley to San Antonio to select a permanent site and to begin construction of the United States Arsenal (Garner 1969:1). He chose some property south of San Antonio on the west bank of the San Antonio River, consisting of 8-7/100 acres belonging to ex-Mayor Dr. James M. Devine and 7-3/4 acres belonging to ex-Governor Thomas H. Bell (Garner 1969:2; Chabot 1937:322). The area had until then been vacant farmland. Devine's property contained a house and outbuildings several years old, as well as a section of an old Spanish irrigation ditch, the San Pedro acequia, which had watered the surrounding fields since the early 18th century (Fox 1978:1, 3-11).

Construction began in 1859, under the supervision of John M. Campbell, a local building contractor whose brother, W. W. Campbell, was awarded the contract for stone and lime work (Garner 1969:2-3). At about this same time, C. H. Guenther was building a grist mill directly across the river from the Arsenal grounds (Schuchard 1951:5). Six or eight permanent stone buildings were planned for the Arsenal. Three of these buildings were erected or in progress at the start of the Civil War—the office building at a cost of $12,000, the magazine which cost $20,000, and the armorer's shop for $12,000 (Engelke 1965). The irrigation ditch that ran through the grounds had also been 'constructed in a substantial and careful and permanent manner' (Garner 1969:3), which probably refers to the stone lining of the old San Pedro acequia found by archaeologists in 1978 (Fox 1978:3-11). The Devine house and its outbuildings were meanwhile being used by the commander of the Arsenal as a residence.

There is some confusion over the actual date when the Arsenal was officially moved from the building on the corner of Houston and Soledad Streets to its new site. Since the office building was the only building which had been completed at the start of the war (Garner 1969:3), it seems possible that the Confederates were the ones who actually moved the ordnance onto the site. They completed the unfinished stone buildings and built four additional frame buildings, one to house a blacksmith shop, one for a carpenter's shop, and two for other, unspecified purposes (Garner 1969:3-4). No official records survive of the period of Confederate ownership (San Antonio Express 1927).

At the close of the war, when the Arsenal again became the property of the United States Army, the buildings were in very bad condition. The commanding officer's quarters needed repairs, the armory had no ceiling and was not weatherproof, the stable was "so old and rickety that it is likely to tumble down any day," and only the magazine was suitable to be used for storage (Garner 1969:4). Repeated, urgent requests for funds to properly finish the armory and build a new stable were finally granted when Captain Clifton Comly
assumed command in May 1871. The armorer's shop was soon repaired, and in 1873 Comly erected four new frame buildings, consisting of a carpenter shop and three storehouses. Shortly afterward, a new stone stable was built (Garner 1969:4). Since this stable is clearly shown on an 1873 map (Koch 1873), the structure must have been essentially completed during that year. Its predecessor was probably of frame construction, since it cost only $3000 to build in 1860 (Engelke 1965).

In 1877, the Arsenal consisted of five permanent stone buildings, a row of frame buildings along the southern edge of the property, and the frame carpenter shop (Fig. 2). The Army had been trying to get permission to buy a narrow strip of land between the south boundary line of the Arsenal and Arsenal Street since 1872 (Belknap 1872). The property was finally purchased from the family of Toutant Beauregard in 1881 (Russell 1881).

The following description of the Arsenal written in 1882, provides a picture of the area at that time.

The institution [that is the Arsenal] is well worthy of a visit by a stranger and is one of the numerous attractions of this city. It is situated on South Flores and Arsenal Streets and extends east to the San Antonio River. It includes a tract of nearly 20 acres, the ample grounds being tastefully laid out with beautiful drives and walks and well-shaded with various varieties of trees, while semitropical plants are planted in convenient localities about the enclosure. The grounds are lined by gas lamps and are supplied with water (Gould 1882).

A stone storehouse was erected south of the administration building in 1883 (Fig. 3). This was the first permanent storehouse on the site, and served in that capacity until the deactivation of the Arsenal (Shank 1968; Garner 1969:6).

A plan of the Arsenal in 1894 (Fig. 3) shows the addition of a number of minor buildings and changes in the function of other buildings. However, it was not until 1919 to 1920 that another major building period occurred (San Antonio Express 1927). Three new storehouses, an oil house, a small arms shop, two magazines, a machine and equipment shop, barracks, and quarters eventually increased the number of buildings to 44 with a total value of $900,000 (Garner 1969:6). The newest building on the grounds is the principal office structure, built in 1942 (Anonymous n.d.:2).

The Arsenal was declared surplus war property in 1947, its function was transferred to Texarkana, and the buildings have since been occupied by various federal agencies. In 1949, Main Avenue was extended through the property to connect with a street to the south, effectively cutting the Arsenal into two sections. A summer house on the same grounds as the commander's house, which had been used for a bandstand for many years, was moved at that time to a park in the King William area (Ramsdell n.d.:2). In November 1981, it was announced that the H. E. Butt Grocery Company had acquired the eastern half of the old Arsenal property and would locate its new corporate headquarters on the site.
Figure 2. Map of Arsenal in 1877.
Figure 3. Plan of Arsenal from 1894-1905. From Department of the Army, Corps of Engineers (1905).
DUTIES AND FUNCTIONS OF THE ARSENAL

From its inception, the Arsenal served as a central supply point for arms and ammunition for the U.S. Army throughout the southwest region. In its early days it supplied the Department of Texas during the campaigns against the Indians on the frontier, and made minor repairs to arms and equipment. It is said that Bowie knives and buckshot were made there during the Civil War (Gomolak 1956:2). In 1898, saddles and other horse equipment were manufactured there for Theodore Roosevelt's Rough Riders (Engelke 1965; Commanding Officer, San Antonio Arsenal 1913). In 1914, General Pershing was supplied with weapons from the Arsenal for his pursuit of Pancho Villa (Ramsdell n.d.:2).

A major renovation beginning in 1916 was directly related to support of the Southern Department during the first World War, and allowed the Arsenal to become the major building for storage of the large quantities of ordnance which were left after the war was over. In fact, there were 450 civilians employed there in the years directly after the Armistice. Immediately after the war, however, all pyrotechnics and explosives were transferred to an area at Camp Stanley, north of the city (San Antonio Express 1927). By 1927, the Arsenal supplied the entire Eighth Corps area, which included Texas, Oklahoma, Colorado, Arizona, and New Mexico, and was responsible for all repair of artillery material for the area. The major activities included "modification, upkeep, storage, issue and repair of small arms, machine guns, optical instruments, tractors, tanks and mobile artillery" (San Antonio Express 1927). Small arms and field artillery targets were manufactured there as well. A brief flurry of activity during World War II was soon followed by the Arsenal's deactivation in 1947.

ARCHAEOLOGICAL INVESTIGATION

On January 6, 1984, a series of backhoe trenches was excavated in the northwest corner of the development site, under the direction of the author and an assistant (Fig. 4). The first two trenches were positioned so as to determine whether the acequia lateral entered the area (Trench 1) or whether branches of the lateral intruded upon the site from the northern boundary (Trench 2).

In Trench 1, two gas lines were encountered which ran east-west across the area. A large disturbance six feet across was also found, which ran parallel to the gas line trenches. The trench was dug from the original ground level, which was beneath 10 inches of gravel fill laid for the asphalt paving on the western part of the lot. At first this disturbance was thought to be the acequia lateral, but a 5-1/2-inch iron pipe was found in a 15-inch trench in the bottom of the disturbance, at eight feet below the original surface.

Trench 2 ran east-west across most of the area under investigation. There were no signs of disturbance of any kind except for the presence of a number of two-foot-square concrete footing pads. These bore the marks of the 8- x 8-inch posts which once supported a temporary frame structure in this area (No. 20 in Fig. 1). Two small (2-1/2 inch) gas pipes and an electric line crossed (in a north-south direction) this trench. Caliche bedrock was found
Figure 4. Plan of Backhoe Trenches.
in Trench 2 at ca. 30 inches below the present surface. The soil above is reddish brown loam with a medium clay content, grading to dark brown at the surface.

After the size and depth of the large disturbance in Trench 1 were noted, Trench 3 was excavated in order to determine if the deep pipe trench/disturbance could have preempted the original acequia lateral. If so, the lateral, with or without the pipe trench, might have continued toward a junction with the river to the east. Trench 3 revealed the same soil profile as that of Trench 2, with no disturbances.

Since no indication of the acequia lateral was found to enter the development property, testing was then discontinued, and the trenches were backfilled.

In mid-February, the Center was requested to do additional testing at the south end of the old stone stable building (No. 21 in Fig. 1). It was hoped to determine if any indication remained of the location of an outside stairway providing access to the loft above the stable. A test pit measuring ca. 1-1/2 m x 3 m was excavated. The first level consisted of ca. 15 cm of gravel fill. A 1-m² concrete slab was found at the west end of the unit at this level, and a pipe trench at the opposite end. Excavation continued through several alternating layers of brown soil and gravel fill until a hard, cobble layer set into caliche at ca. 30 cm below the original ground surface was encountered in the area. No postholes or other traces of support for a stairway were found within this area. A profile of the south wall of this test unit is on file at the Center for Archaeological Research.

No significant artifactual evidence was recovered during the test excavations. One sherd from a stoneware J. Arnold ink bottle was found in the fill of the deep disturbance in Trench 1 along with two cut nails and a few fragments of bottle glass. Trench 2 yielded sherds of early 20th-century bottle glass and window glass, one compound metal button of uncertain age, a battery carbon, and one bone fragment. The result of the stable excavation was a contemporary Coca-Cola bottle and a metal object that appears to be a bracket which might have supported a gutter or some similar object hung on the stone wall of the building.

CONCLUSIONS

The archaeological testing revealed that the San Pedro acequia lateral did not enter the west half of the Arsenal property at the northwest corner as we had anticipated. No archaeological remains of consequence appeared in the entire northwest section of the property which will be impacted by planned construction. We also found no clue as to the construction of a stairway against the south wall of the stable building.
ACKNOWLEDGMENTS

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Crew members who aided in the field work were Ralph Snavely and Margaret Greco. Administration of the project was provided by Dr. Thomas R. Hester, Center Director and Principal Investigator, and by Jack Eaton, Associate Director and Co-Principal Investigator. Kenneth Brown executed the maps in Figures 1 and 4.
REFERENCES CITED

Anonymous

Belknap, W. W., Secretary of War

Chabot, F. C.
1937 With the Makers of San Antonio. Artes Graficas, San Antonio, Texas.

Commanding Officer, San Antonio Arsenal
1913 Communication 29604-D/86, to the C. of Ordnance, Washington, D.C.

Conner, J. E.

Department of the Army, Corps of Engineers
1905 Plan of Arsenal in 1894, updated to June 30, 1905.

Engelke, L.
1965 Old Arsenal Served Army for 85 Years. San Antonio Express, November 14, 1965.

Fox, A. A.
Fox, A. A., L. Flynn, and I. W. Cox


Garner, J. C., Jr.


General Services Administration


Gomolak, L. G., Capt.


Gould, S.


Historic American Buildings Survey (HABS)

1968 United States San Antonio Arsenal Magazine. No author indicated; drawings by Charles W. Barrow, Jr., and Larry Hermsen.

Koch, A.

1873 Bird's Eye View of the City of San Antonio, Bexar County, Texas, 1873. Reproduced from the San Antonio Museum Association. Published by R. H. Holland.

Ramsdell, C.


Russell, G., Capt. 9th Infantry

San Antonio Arsenal, Office of the Post Engineer

1946 General Road Map, August 25, 1946.

San Antonio Express


Schuchard, E.


Shank, W. I.
