**Explore Nebraska Archeology** 

# The Search for Engineer antonment



Nebraska State Historical Society



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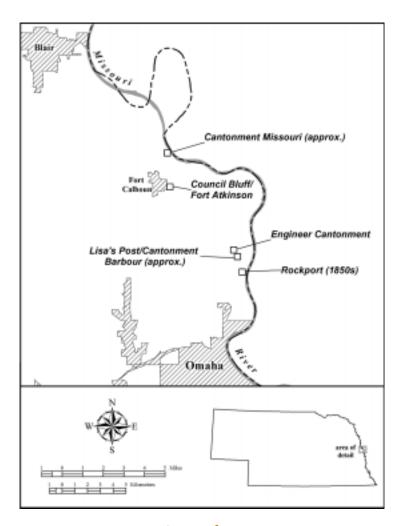
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2004

On the cover: Engineer Cantonment with the steamboat Western Engineer in the foreground. Watercolor by Titian Ramsay Peale, 1820. American Philosophical Society, Philadelphia.



# The Search for Engineer Cantonment

The following is a brief description of events relating to the recent discovery of the archeological remains of Engineer Cantonment, the 1819–20 winter quarters of Maj. Stephen H. Long's scientific party. This small group of scientists and support staff was part of a much larger undertaking, known variously as the Yellowstone or Missouri Expedition, which was led by Colonel Henry Atkinson (Goodwin 1917; Nichols 1969; Wesley 1931).

The primary object of the expedition was to establish a military presence on the upper Missouri River.

The military component of the expedition, consisting of more than a thousand men of the Sixth Infantry and the Rifle Regiment, was intended to provide protection to the expanding American fur trade and to lessen the influence of British traders from Canada on the Native American tribes of the northern Great Plains. To accomplish this mission, the establishment of two or more semi-permanent forts on the Missouri was contemplated.

The scientific branch of the expedition originally had been placed in charge of investigating a vast area, which included the upper reaches of the Missouri River and territories to the east and west of it. However, by the spring of 1820, for a combination of economic and political reasons, its mission had been curtailed considerably to include the exploration of the Platte River and its south fork to its source in the Rocky Mountains, and thence southward to the sources of the Arkansas and Red rivers, which were to be followed eastward to the American settlements. The mission was carried out successfully, with one exception: The Canadian River was mistaken for the Red River, leaving the exploration of the latter stream for a later day (Benson 1988; Foreman 1937; Nichols 1971; Nichols and Halley 1995).

On May 3, 1819, Major Long's scientific party left Pittsburgh, where their specially designed shallow-draft steamboat, the *Western Engineer*, had been recently built. An unusual feature of this craft was its bow, which had been formed in the shape of a serpent's head. Steam from the ship's boiler was allowed to escape through its open mouth. Since all the machinery was out of sight below the deck, the design was calculated to create the illusion in the minds of Indian viewers that the boat was being transported on



The Western Engineer, Titian Ramsay Peale. American Philosophical Society, Philadelphia

the back of a large, agitated serpent. The boat was also equipped with cannon and howitzers for its protection.

In spite of a variety of problems on the journey down the Ohio and up the Mississippi and Missouri rivers, the party made fairly good time and arrived at Lisa's Post, a fur trading establishment a few miles north of present Omaha, Nebraska, on September 17. A spot said to be about half a mile above Lisa's Post was selected for their winter quarters, and on September 19 the Western Engineer, the first steamboat to ascend so far up the Missouri River, dropped anchor there. Limestone and timber were readily available, and construction of quarters moved along rapidly. The location chosen for the winter quarters, called Engineer Cantonment, was a few miles south of a flat-topped bluff on the west bank of the Missouri River known as Council Bluff because of the meeting with Indians held there by Lewis and Clark in 1804. At that time it had been recommended as a likely place for a military post (Johnson 1957, 1959; Moulton 1986:440–442; Thwaites 1905).



Maj. Stephen H. Long. Independence National Historical Park, Philadelphia

The military branch of the expedition did not fare as well. The three steamboats carrying them and their supplies up the Missouri from Fort Belle Fontaine near Saint Louis developed navigational problems and were finally abandoned. The final portion of the trip was made on board keelboats, which the soldiers pulled upriver from the shore with long ropes called cordelles.

The soldiers began arriving in the Council Bluff vicinity in early October and chose a site for their quarters, called Cantonment Missouri, on the river bottom a short distance north of Council Bluff. Chosen for easy access to timber and water, the site had to be abandoned the following spring because of extensive flooding. A second post, later named Fort Atkinson, was built on the bluff top (Johnson 1956, 1959).

Following the completion of Engineer Cantonment early in October 1819, Major Long descended the Missouri and returned east for the winter. He was accompanied by Augustus Edward Jessup, who had resigned as geologist for the scientific party. Another member, Dr. William Baldwin, who had been the party's botanist and physician, had left the steamboat on the trip upriver because of illness at Franklin, Missouri, and died there shortly afterward. A third member, Maj. Thomas Biddle, who began the expedition as its journalist, was reassigned to the military branch late in 1819. One of Major Long's pressing tasks was to find replacements for these personnel by the time of his return in the spring.

Members of the scientific party remaining at Engineer Cantonment over the winter included Lt. James Duncan Graham, a West Point graduate and artillery officer who was Major Long's first assistant; Cadet William Henry Swift, the party's mapmaker and engineer, who received his commission as an artillery lieutenant from



Dr. Thomas Say. Ewell Sale Stewart Library, The Academy of Natural Sciences of Philadelphia

West Point in absentia while on the expedition; Dr. Thomas Say, a famous naturalist who was in charge of the zoological aspects of the expedition; Titian Ramsay Peale (son of enowned artist Charles Willson Peale), assistant naturalist and artist; and Samuel Seymour, originally from England, the principal artist of the expedition. The six civilian steamboat crewmembers also wintered over at Engineer Cantonment, and the military guard, one sergeant and eight privates of the Corps of Artillery, who had accompanied the scientific party on the steamboat trip, apparently also were quartered there to provide continued protection and assistance.

Over the winter, the scientists became familiar with the area, collected and prepared scientific specimens, provided for their own subsistence by hunting, and became acquainted with and studied the customs of the local Indian tribes. Two councils, one with the Oto and one with the Pawnee Indians, were held at Engineer Cantonment and documented in paintings by Samuel Seymour. Other Indians were frequent visitors at the cantonment, and members of the scientific party visited villages of the Omaha and Pawnee during the winter. A number of animal species new to the scientific community were studied and named at the cantonment by Dr. Say. His assistant, Titian Peale, busied himself preparing wildlife specimens and documenting them artistically. He also found time to make several paintings of Engineer Cantonment (Halley 1951; Thwaites 1905).

In early 1820 Major Long and two additions to the scientific party traveled to Engineer Cantonment from Missouri on horseback, arriving there on May 27. Dr. Edwin James, a doctor of medicine, botanist and geologist, replaced both Dr. Baldwin and Mr. Jessup; Capt. John R. Bell of the Light Artillery replaced Major Biddle as the official journalist (Fuller and Hafen 1957). The scientific group completed preparations for its



**Titian Ramsay Peale.** From a private collection

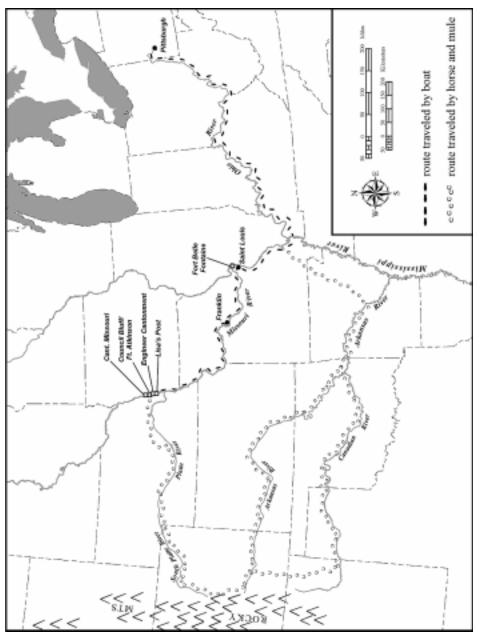


**Dr. Edwin James.**Colorado Historical Society

mounted overland trip to the Rocky Mountains, which began on June 6, 1820. There were twenty-one men in the party, including three military officers and six enlisted men, four scientists and artists, and eight locally hired civilians including interpreters, guides, baggage handlers, hunters, and a farrier.

This group did not return to Engineer Cantonment and there appears to be no historical evidence that the site was used by anyone else after they abandoned it. It may have been used occasionally as temporary shelter by Fort Atkinson soldiers working at the nearby limestone quarry, and possibly as part of Cantonment Barbour, a temporary military post occupied during the winter of 1825–26 by companies of the First Infantry that had taken part in the 1825 Atkinson-O'Fallon peace treaty expedition farther up the Missouri River (Jensen and Hutchins 2001:178-179). The precise location of Cantonment Barbour has not been determined, but the available information suggests that it was in the general vicinity of Lisa's Post and Engineer Cantonment.

Eventually, following the abandonment of Engineer Cantonment in 1820 and Fort Atkinson in 1827, the precise location of the cantonment was lost. In 1839 French scientist Joseph Nicollet visited the abandoned Lisa's Post and mentioned that Engineer Cantonment was half a mile north, but did not say explicitly that he had visited it (Bray and Bray 1976:146). Because of the break in continuity of occupation much of the knowledge regarding its earlier history had been lost by the time resettlement of the area began in the 1850s. Speculation continued from time to time, however, and in 1905 Engineer Cantonment and several other early historic sites were said to have been located (Omaha World-Herald, 1905). Unfortunately, the locations of the sites, if correctly identified, apparently were never reported to a historical



The route of Major Long's scientific party.

or anthropological organization so that adequate investigation and documentation could be made, leaving the claim unverified.

In the following hundred years, historians and archeologists pondered the evidence and made limited field searches whenever time permitted, often between nearby projects or as spare time pursuits, with no success. The general belief came to be that either modern quarrying activities, which greatly enlarged the small-scale quarrying operations carried out by Fort Atkinson soldiers and others of the early historic period, may have destroyed Engineer Cantonment, or that flooding or cutting by the Missouri River, or other modern development, had removed the site or altered the landscape so extensively that it would likely never be found.

# **Recent Search Efforts**

Against this rather negative backdrop the opportunity for an intensive search materialized in 2002. That spring the Nebraska State Historical Society began a yearlong archeological sampling survey, the third in a series of management studies sponsored by the Nebraska State Historic Preservation Office designed to gather information about existing cultural resources in the greater Omaha metropolitan area. The project was under the general direction of Robert Pepperl, an independent consultant contracting with NSHS, with the participation of NSHS Archeology Division staff.

In addition to assessing the effects that current and anticipated urban expansion and other developments might have on known significant prehistoric and historic archeological sites, a major objective of this and similar studies is to obtain a representative sample of information useful for predictive modeling purposes. The project was divided into Metro North and Metro South target areas. The Metro North target area included about 5,440 acres of land generally

The general belief came to be...that it would likely never be found.

on the upper terrace and bluffs within the lower ends of the Ponca Creek, Rock Creek, and Deer Creek drainages on the northern edge of the Omaha city limits.

Following an intensive archival and records search, a sample of about 40 percent (2,175 acres) was investigated by pedestrian survey. Major early historic archeological resources thought possibly to be within the survey area were Lisa's Post (ca. 1812–24), Engineer Cantonment (1819–20), and Cantonment Barbour (1825–26). The slightly later territorial townsite of Rockport (1850s) is also in the vicinity. A second reason for an intensive search for cultural resources in the area had to do with an upcoming road improvement project. The planned widening and hard surfacing of a segment of the county road closely paralleling the river bluff (known locally as the River Road) required an impact assessment.

Of the three earliest historic sites, Engineer Cantonment is the best documented and thus received the greatest attention. It was frequently referred to in the journals and official accounts of the scientific expedition (Fuller and Hafen 1957: James 1823: Thwaites 1905), and the cantonment and its surroundings were also the subject of several sketches by Titian Peale (Haltman 1993:cover, Figs. 11, 14; Nebraska State Historical Society 1970:cover). Additionally, a copy of a sketch map in the files of the NSHS Archeology Division made by Lt. Andrew Talcott, engineer for the Missouri Expedition, indicates that it was made from a station in the rear of Engineer Cantonment. In the sketch, a section of the Missouri River and the adjacent bluff line is shown, as well as measurements from the mapping station to various points on the river.

Another interesting feature of the map is a linear enlargement of the river on its west bank,



**Engineer Cantonment in 1820 by Titian Ramsay Peale.** American Philosophical Society, Philadelphia

directly in front of Engineer Cantonment, apparently depicting an oxbow cutoff still attached to the river, which would have served as a safe harbor for the steamboat. A comparison of this map with the modern U.S. Geological Survey topographic map for the vicinity (USGS Loveland Iowa-Nebraska Quadrangle, 7.5 minute series) reveals only two places, one directly north of the other, where the curving bluff line of the earlier map closely approximates that shown on the modern map. Information obtained from the available documentary evidence and on-the-ground inspections of both areas during the 2002 field season appeared to favor the southernmost location as the better fit, reducing the search area to about one mile of bluff edge.

According to one contemporary source (Thwaites 1905:271) the quarry that supplied limestone for Cantonment Missouri was about a hundred yards below Engineer Cantonment, which also fit well with the southern location. Since the bluffs are heavily wooded throughout the entire area, comparison of the Peale sketches



**Engineer Cantonment site in 2003.** Photo by Robert Pepperl

with modern topography during the warm months was not very useful. One deep cut in the bluff edge, which had been extensively modified in fairly recent times to serve as a farm road from the river bottom to the bluff top, was examined by the field party and thought possibly to be the location of the ravine behind the cantonment shown in Peale's sketches.

## The Search Narrows

Then, early in 2003, with all the trees bare, a clearer view of the bluff edge was possible. As first observed by one of the authors (Bozell) while driving along the county road, and later by all three authors, from near the bluff and from a distance, a slightly more southerly location close to the northern edge of the modern quarry appeared to match the Peale sketches surprisingly well. Conversely, the section of bluff modified by the modern farm road, which could be seen from the same viewpoint, did not match the Peale sketches.

The Peale sketches show a long section of the

bluff line as well as a wide ravine descending from summit to base near the middle of the view. Near the base of the ravine, a two-room log building is depicted, and behind the first structure, extending to the left, is what appears to be a portion of a second building. The front building is quite close to the bank of what is probably an oxbow cutoff of the Missouri River. The steamboat *Western Engineer* and several keelboats are anchored in the harbor.

The newly found location was photographed, and later comparisons of the photographs with the Peale sketches further strengthened our field impressions. The major difference between the Peale sketches and the modern view was that the ravine was much wider and deeper in the modern view. This seemed to be the logical result of 183 years of erosion since the Peale sketches were made. Otherwise, the general topography of the bluff line was very similar. The next step was to devise a way to test the location and determine if it actually was the site of Engineer Cantonment.

Because the area to be tested was in an abandoned farmyard directly west of the planned county road project, an agreement was made with the Department of Roads to use a utility-cable trencher to assist in the search. On April 12, 2003, this phase of the project was carried out. As we learned later from the present landowners, the southern portion of the abandoned farmyard where we began our search had been used primarily as an orchard. A north-south farm lane traversed it, but to their knowledge no farm buildings had been constructed on it, nor had it been otherwise modified.

That proved to be a lucky break for the archeologists. The area was heavily overgrown with small brush and a few larger trees, so the most obvious place for the trencher to begin was the middle of the relatively clear north-south lane. The trenching began near a round steel grain



The first exploratory trench at the Engineer Cantonment site. Photo by Robert Pepperl

bin in the middle portion of the farmyard near the east entrance from the county road. It proceeded southward along the lane all the way to the south end of the farmyard, where the lane exits to the county road. The trench was about six inches wide and a maximum of about six feet deep, with the excavated dirt deposited in shallow rows on each side. At a distance of about forty-seven feet from the north end of the trench, small fragments of limestone began to appear in the back-dirt. At about seventy-five feet, limestone fragments discolored from burning began to appear. Some evidence of limestone continued for about another fifty-three feet.

A second trench was dug west and northwest from the west side of the first. From the end of that trench, near the base of the bluff, a third trench was dug back to the original trench in a generally northeastern direction. The purpose of the secondary trenches was to expand the exploration in the general area where limestone was found in the main north-south trench.



Initial excavations at Engineer Cantonment site. Photo by Robert Pepperl

After the trenching was completed, close examination of the main trench in the area of the burned limestone fragments in the back-dirt revealed a concentration of similar material in the trench walls at a depth of 60 centimeters (about 23½ inches). This strongly suggested that the remains of a fireplace might be present at that location, and with that amount of overburden, it might not have been extensively damaged by more recent occupation of the site. Immediately obvious to the field crew was the relationship between this location and the ravine behind it, which corresponded closely with the buildings and the ravine depicted in Peale's sketches.

## The Evidence Accumulates

To learn more about the age and possible identity of the buried remains, a sample of dirt from the trench in the vicinity of the burned limestone was dry screened through quarter-inch hardware cloth. Within a few minutes several items, including a plain, flat, brass button, animal bone fragments (some burned) and a bottle glass fragment were found. The most diagnostic item, the brass button, was similar to specimens found during excavations at Fort Atkinson, the second military post occupied by the soldiers of the Missouri Expedition (Carlson 1979; Kivett 1959). Laboratory water screening of soil samples from the same location produced a small glass bead, two small lead balls (shot), more animal bone, and a brass trigger guard fragment from a gun similar in design to specimens excavated at Fort Atkinson. It appeared from the evidence emerging that the site of Engineer Cantonment had at last been relocated.

Hoping to gain useful information about subsurface deposits at the site prior to excavation, Robert Nickel, a private contractor from Lincoln, was hired to conduct remote sensing surveys (ground-penetrating radar and magnetometry). A preliminary GPR survey (5 m²) in the vicinity of the burned limestone discovery produced encouraging results, showing a rectangular pattern near the center of his test, possibly produced by the presence of a large fireplace. Before more extensive GPR and magnetometer surveys (40m²) could be performed



Engineer Cantonment artifacts. NSHS photo

the area had to be cleared of brush and tree cover. This was also a very wet period, with rain falling nearly every day. Test excavations at the site, using University of Nebraska-Lincoln Department of Anthropology field school students as the crew, were scheduled to begin on May 19. The results of the remote sensing surveys were needed before that date, so the surveys were conducted even though the somewhat saturated ground conditions were not ideal. Both surveys produced useful results and helped in planning the locations of archeological test units. Drier ground conditions probably would have improved the results, and a resurvey of some of the unexcavated portion of the site may be conducted in the future.

# **Site Excavations and Related Research**

Test excavations at the site began on May 19, supervised by UNL and NSHS Archeology Division personnel. Field school students worked at the site for three weeks. By the second day of testing, diagnostic artifacts from the excavations, including fragments of ceramic tableware, ceramic smoking pipes, and other materials confirmed the ca. 1820 date of the site remains suspected earlier. This, plus the correspondence between its location and the Peale sketches, further strengthened our belief that it was Engineer Cantonment.

During June, July, and September about two additional weeks of test excavations were conducted with volunteer crews supervised by NSHS staff members. By the end of this period, approximately 30 percent of what was then believed to be the front building depicted in the Peale sketches had been uncovered. The remains of a double fireplace made of limestone and constructed in the middle of the interior wall dividing two rooms had been nearly completely excavated, and the approximate locations of all four walls of the building had been determined. Based on this information, the building is believed to have measured about forty-eight feet north-south by thirty feet east-west. The structural remains are protected by an accumulation of between sixty and eighty centimeters of deposits left by river flooding and slope wash from the nearby bluff. Testing to the rear of the structure produced evidence then thought possibly to be the remains of the second building, some of which is depicted in the Peale sketches beyond the left end of the front building.

During the same period, trenching with a backhoe in front (east) of the partially excavated building remains, under the direction of geomorphologist Dr. Jeremy Dillon of the Geography



Partially excavated remains of the limestone fireplace. Photo by Robert Pepperl

and Earth Sciences Department, University of Nebraska at Kearney, located the edge of the harbor depicted in Peale's sketches. This feature, shown as quite near the front building in Peale's sketches (reflections of both buildings can be seen in the water), begins a short distance west of the modern county road ditch and extends under the road and to the east. A bonus find in this backhoe trench was a large round-bottomed pit with evidence of heavy burning around its edges. This may be the pit described in a contemporary source (Thwaites 1905:279–280) that was dug for roasting an entire bison hump.

The owners of the property on which the site of Engineer Cantonment is located, the Herb Gibreal family, have enthusiastically supported the research carried out by NSHS at the site. They were unaware of the existence of such an important site on their property and have now decided to donate this tract to the Society so

that proper study and long-term protection of its remains will be assured. This generous gift will allow for a carefully thought out long-term approach to the continued study of this nationally significant site. Because of the proximity of the site to the county road, the Nebraska Department of Roads has also taken an interest in it and is supporting our research.



Test excavations north of identified building remains. NSHS photo

The second season of field investigations began on May 17, 2004. The crew for this three-week session was again made up of University of Nebraska-Lincoln field school students under the supervision of UNL Department of Anthropology personnel and NSHS Archeology Division staff. Two main goals of this session were to investigate directly west of the identified build-

ing remains to determine if a second building could be identified there, and to complete the excavation of the fireplace area of the partially excavated building remains. Additional backhoe trenching was also contemplated to learn more about the geomorphology of the site location and to determine if evidence of earlier (prehistoric) cultural activity was present.

Part of the crew was set to work excavating tests to the southwest and west of the identified building remains. An equivalent occupation level was identified but was considerably deeper (slightly over a meter) at this location because of its proximity to the erosion-prone bluff edge. However, no evidence of a second, contemporaneous, building was found. Only a light scatter of non-diagnostic material, such as animal bone fragments and charcoal was discovered. More recent farm-related material was also present at shallower depths.

This called for a re-evaluation of our assumptions. Several lines of evidence point to the existence of more than one building at Engineer Cantonment. In addition to the Peale sketches, which strongly suggest two buildings, contemporary archival records repeatedly refer to structures in the plural ("huts," "cabins," "houses," and the like). Also, since apparently at least twenty people wintered at the site, multiple buildings seem likely. Since evidence of a second early building west of the partially excavated remains did not materialize, we had to consider a second possibility: Were already identified building remains from the rear structure, and was the front building slightly northeast of it?

With this in mind, several test squares were excavated at that location toward the end of the field school session. These tests established that a considerable amount of limestone is present, although quite widely scattered, and that occasional artifacts of the Engineer Cantonment

period are also present. One disturbing finding, however, is that the deposits at this location are uniformly less deeply buried than those at the nearby partially excavated building remains. This is because much of the overburden above the identified building remains has accumulated during heavy rains that transported soil down the ravine behind the site and created a fan-shaped deposit. The fan deposit covers almost all of the partially excavated building remains but extends little, if any distance beyond them. Hence, this second possible early building location has been less well protected and more vulnerable to later disturbance.

The other objectives of the field school session were completed successfully. Excavation of the fireplace portion of the previously identified building remains was essentially completed. Because of the potential for significant amounts of food remains being preserved in the interior portion of the fireplace, all fill from that area was bagged and returned to the laboratory for flotation and water screening (only samples of fill are being collected from other squares). A second long backhoe trench was excavated, again under the direction of Dr. Jeremy Dillon, this time in a generally east-west direction near the south edge of the site. Evidence of the harbor was found again, the Engineer Cantonment occupation level was identified across the site, and three features associated with it were exposed in the north trench wall. All were small, shallow, and exhibited evidence of burning.

At considerably deeper levels, between about 1.5 and 2.9 meters, cultural material, including charcoal and animal bone, was found at several locations. Two quite large ovoid pit features that contained abundant evidence of burning were excavated, and all pit fill was bagged for laboratory processing. No diagnostic artifacts were observed but charcoal was collected for dating.



Fire pit probably dating from the Late Archaic period. NSHS photo

Based strictly on preliminary field observations, the materials are estimated to be about three thousand to four thousand years old (Late Archaic), adding a new dimension to the previously established significance of this site.



**Creamware plate found near the fireplace.** Photo by Robert Pepperl

Tentatively scheduled fieldwork for the late 2004 season includes an electrical resistivity survey of the site under the direction of Dr. Terry Steinacher, NSHS historic preservation archeologist, as well as additional photography and site mapping. Electrical resistivity surveying is a non-intrusive measurement of the resistance to an electric current passed through the ground at regular intervals, with results displayed on a computer-generated map. Ground disturbances and intrusive material can create patterns of readings different from those generated by

surrounding soils. Our hope is that buried limestone and other culturally related items will be discernible and aid in the positive identification of a second set of building remains, and possibly other related features as well. Follow-up testing of these findings will be the focus of future fieldwork.

The site is being nominated to the National Register of Historic Places, and listing will provide protection and recognition. The authors also may work with Dr. Hugh Genoways of the University of Nebraska State Museum and Dr. Jerry Choate of the Sternberg Museum of Natural History at Fort Hays State University (Kansas) in preparing a short paper announcing to the scientific community the discovery of Engineer Cantonment and focusing on its importance as the type site for the scientific description of many species of mammals, birds, reptiles, insects, and plants (including such well-known examples to Nebraskans as the coyote, garter snake, and boxelder bug). As laboratory processing of site materials progresses, we will move forward with a technical report dealing with what has been learned through field, laboratory, and archival research thus far. Work will also continue on the development of a long-range plan for the study and management of Engineer Cantonment. Because the precise location of the site is now known, the search for other nearby sites of the same general time period, such as Lisa's Post and Cantonment Barbour, should be easier and more productive than in the past.



# **Materials Recovered**

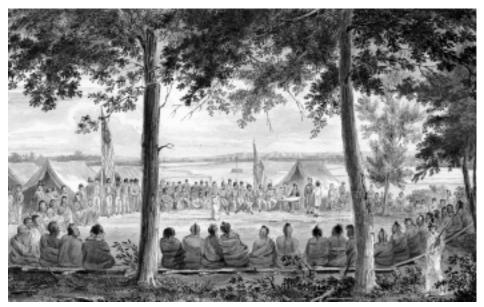
A large and varied collection of artifactual material has been recovered from excavations at Engineer Cantonment. As might be expected



**Pocketknife** 

from its abandoned farmyard setting, some farm-related items occur in the upper levels, but the Engineer Cantonment occupational level is abundantly represented by articles relating to the everyday life of the military and civilian members of the scientific expedition who lived there for approximately eight months. Military items, such as uniform buttons, are present in small numbers as are clothing-related items such as plain brass and bone buttons that probably were lost or discarded by the non-military members of the party. Items related to defense and hunting, both for procuring scientific specimens and for food, include lead rifle and musket balls, lead shot, gunflints, and firearms parts. Domestic items indicative of food preparation and consumption consist of fragments of various types of ceramics, including creamware, pearlware, redware, stoneware, and porcelain, as well as metal tableware such as knives, forks, and spoons. Food remains, such as animal bones, seeds, and the like are also quite common. Some of the latter items may also be related to the procurement of scientific specimens for study and preservation.

Personal items, such as clay pipe fragments, pocketknives, and other miscellaneous items are abundantly represented. Glass beads of various types, a small brass bell, a pierced Spanish silver coin, circular gaming pieces fashioned from discarded pearlware ceramic fragments, and a catlinite pipe bowl fragment provide evidence of trade or contact with Indians. What appears to be a nearly complete hand-made lead plumb bob was probably part of the equipment of a military engineer or civilian scientist. Building-related hardware and many other miscellaneous items are also included in the broad range of materials thus far discovered.



Council with the Pawnee Indians by Samuel Seymour. Beinecke Rare Book and Manuscript Library, Yale University

# **2004 NSHS History Conference**

The first public assessment of the site is the 2004 Nebraska State Historical Society History Conference held in association with the Society's 126th Annual Meeting on October 8 and 9, 2004, at the Gerald R. Ford Conservation Center in Omaha. Scholarly papers on a variety of aspects of the site, including its discovery, the artifacts so far recovered, the natural history of the area, and the historical context of the Long expedition mark the beginning of continuing study of this nationally significant site by archeologists, historians, and other scholars eager to further understand the exploration of the trans-Missouri West.



Scale model of the Western Engineer. Photo by R. Bruhn

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Archeological sites are fragile and nonrenewable resources. Looting for fun or profit has profound effects on significant sites. The loss of information makes it nearly impossible to intrepret the site for benefit of science and public appreciation. The Nebraska State Historical Society recognizes the need to balance preservation and the public's desire to participate in research. This publication series is directed to this need, and the Society also sponsors volunteer excavations for the general public.

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