

PUBLICATIONS IN CULTURAL HERITAGE

LOVELIEST OF PLACES: A Study of the Pre-Mansion Historical Resources of Bidwell Mansion State Historic Park



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Gregory G. White, Ph.D.

Sub Terra Consulting, Archaeology and Paleontology

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Richard T. Fitzgerald

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Bidwell Mansion State Historic Park*

By Gregory G. White, Ph.D., Sub Terra Consulting, Archaeology and Paleontology
Editor, Richard Fitzgerald; Series Editor, Christopher Corey

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*Old Adobe in Undated Photograph, probably circa 1860–1868.
Courtesy of CSU, Chico, Meriam Library, Special Collections SC4078.*

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*Photograph of the Rancho Chico Treaty Group, July 1851.
Top row: Maidu headmen, not identified; bottom row: left, Bidwell's superintendent Alex Barber,
center, Treaty Commissioner Oliver Wozencraft, right, not identified.
Adapted from Smith (2013:2).*

PREFACE

This volume, Number 32 in our series of *Publications in Cultural Heritage*, focuses on John Bidwell, an important early California pioneer, whose estate is preserved within Bidwell Mansion State Historic Park (SHP). The 22-year-old Bidwell arrived in California in 1841 with the Bartleson Party, the first wagon train to reach California from Missouri. From that point forward, Bidwell's life and times were intertwined with many of the most important figures in 19th-century California history, including the likes of fellow pioneers "Dr. John Marsh" of Marsh Creek SHP; John Sutter, whom Bidwell worked for at "Sutter's settlement" (Sutter's Fort SHP) and Fort Ross (SHP); Peter Lassen with whom he explored and mapped northern California; Captain John Fremont, whom he fought alongside with during the Mexican-American War; and James Marshall the discoverer of gold at Sutter's Mill (Marshall Gold Discovery SHP).

Bidwell's rise to prominence began in earnest after making a fortune mining gold at Bidwell's Bar on the Feather River in 1848. This led to two purchases (1849 and 1851) of the 22,000-acre *Rancho de Arroyo Chico* from his mining business partner. This land grant along Big Chico Creek is where Bidwell established his permanent home and eventually built his mansion (Bidwell Mansion SHP). With his *Rancho Chico* home established, Bidwell served California in many capacities including: conducting the first and second Californian census in 1850 and 1860; serving as a State Senator and a U.S. Congressman; and perhaps most importantly, as a leader in California agriculture.

He was a man of prodigious energy. Once he purchased the *Rancho Chico* property, Bidwell transformed it into a lucrative cattle operation and agricultural empire with a diverse array of tree and row crops. His initial success, however, suffered a blow in 1852. A poorly conceived and executed Federal Indian treaty, which was designed to create a reservation immediately east and south of *Rancho Chico*, backfired, and Bidwell's rancho headquarters became the target of Native American frustration. The Rancho headquarters was attacked, resulting in the loss of his log cabin home, stable, grain warehouse, and general store. Undaunted, Bidwell rebuilt his estate, adding blacksmith, wheelwright, and carpentry shops to the new dry goods store, barns, granary, and stable, all built near his pre-Mansion home. The mansion was constructed between 1864 and 1868 at the center of the footprint of his early *Rancho Chico* headquarters. He married Washington, D.C., socialite Annie Kennedy in 1868. After his marriage to Annie, Bidwell began to demolish his old Rancho headquarters, removing and relocating the various structures in order to use the grounds for the display of wealth and privilege he now enjoyed. From 1868 to 1874, the granary, warehouses, stables, etc., were replaced with verdant gardens, exotic trees, a carriage shed, an elaborate footbridge, decorative benches, and a gazebo.

Bidwell demolished the older structures of his ranch, leaving only subsurface evidence of their presence. Though these remnants are heavily mixed with late 19th and early 20th-century sheet debris, much of the archaeological footprint of his original *Rancho Chico* Headquarters endures. The grounds surrounding Bidwell Mansion SHP represent important vestiges of mid-19th-century California life and material culture. This report provides a glimpse of that period through descriptions of a portion of this archaeological record: the 1990 test excavations for the park Visitor Center and two earlier excavations conducted in 1976 and 1987. It also provides a meticulous analysis of relevant historical documents, as well as historic photos of the old *Rancho Chico* land grant. These were scanned at high-resolution and enabled the author to conduct line-of-sight interpolation and triangulation of views of key structures, leading to identification of their locations and the overall layout of the pre-Mansion (1864–1868) rancho landscape. Of equal importance, this report identifies the locations of the Native American communities that were extant on the rancho during this period and highlights the critical role that the local indigenous community had in making Bidwell so successful—an aspect of California history that is too often unrecognized and underappreciated.

Richard Fitzgerald
Editorial Advisor

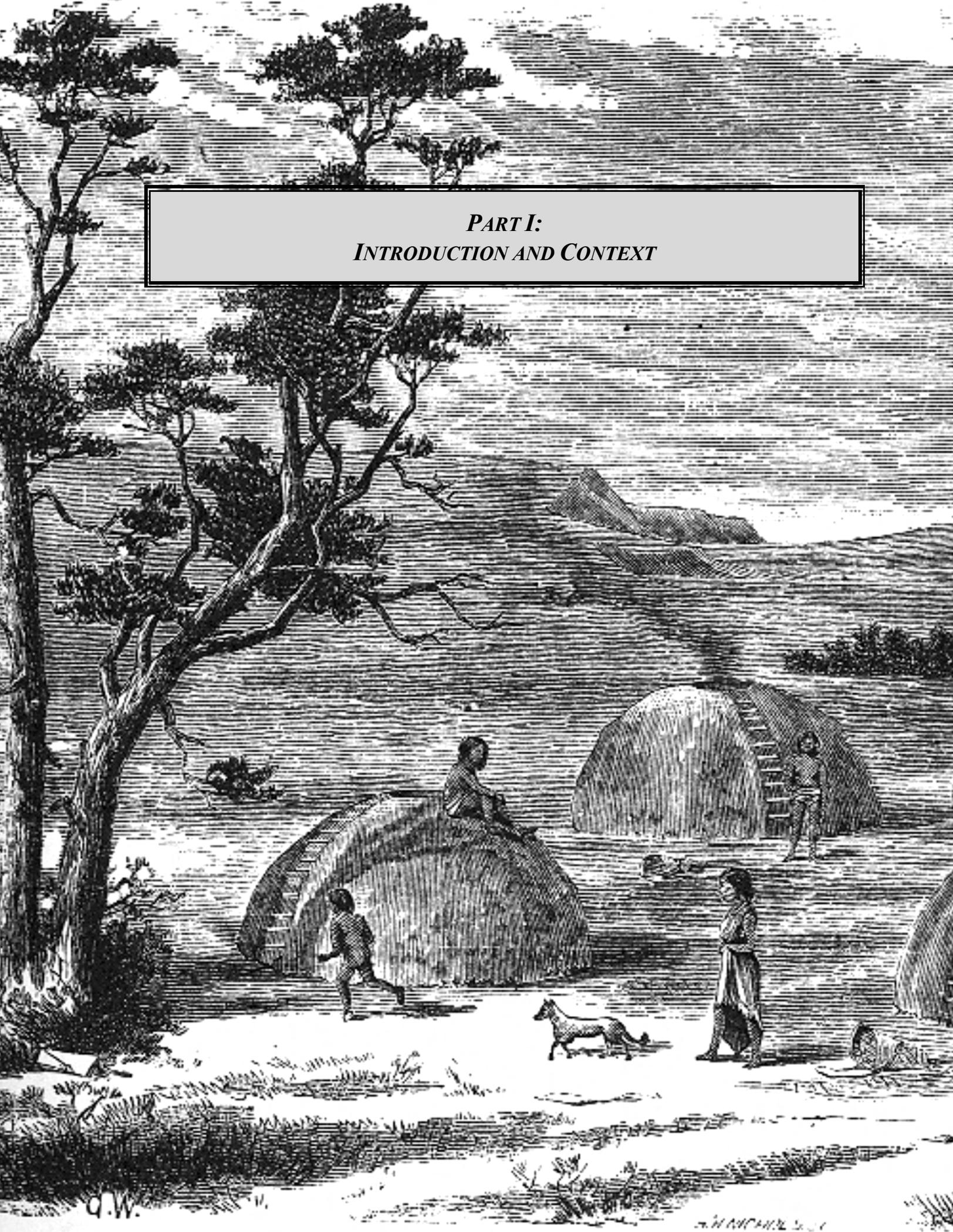
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I want to thank Northern District Archaeologist, Leslie Steidl, Bidwell Mansion State Historic Park Interpretive Specialist, Blair Pubols, and California State University, Chico, Professor of History, Dr. Michael F. Magliari, in recognition of their insightful substantive comments on an earlier draft of this manuscript. Leslie's comments helped clear confusion, Blair identified important new sources of information, and Michael caught a number of factual and interpretive errors, allowing me to remedy several of my most glaring and egregious abuses of the scholarly trade. Kathleen Hillman and Jarith Kraft were instrumental in assembling a number of the maps, documents, photographs used in this and an earlier study. Jennifer Muñoz and Tad Schwennesen completed a thorough and precise catalog of the 1990 Visitor Center collection. Richard Fitzgerald, Senior State Archaeologist and Director of the State Archaeology Collections Research Facility, and Christopher Corey, Associate State Archaeologist with the Cultural Resources Division, edited this manuscript for inclusion in the Cultural Resources Division's *Publications in Cultural Heritage* series.

Despite their best efforts, all shortcomings contained herein remain the responsibility of the author.

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*PART I:
INTRODUCTION AND CONTEXT*



Q.W.

W. MICHAEL

*Photo on previous page:
A Konkow Village near Chico.
Adapted from Powers (1874, reprinted 1975).*

Introduction

This document was completed under terms of a contract between the California Department of Parks and Recreation (State Parks), Northern Buttes District (Northern Buttes), and Sub Terra Consulting, Archaeology and Paleontology of Chico California (Sub Terra). The contract stipulated three tasks: (1) to complete a catalog and analysis of the collection generated by a 1990 archaeological testing program undertaken for the (then) proposed Visitor Center, Bidwell Mansion State Historic Park (the Park); (2) to complete a report of the 1990 archaeological investigation, and; (3) to complete and file the first formal archaeological site record for CA-BUT-3820/H (P-04-003820), here defined to include the entire current Park grounds.

As this work progressed, the project agenda expanded to incorporate additional—out of scope—but critical tasks. The most important historical artifacts produced by the 1990 excavation were attributable to the time frame pre-dating the Mansion, and this drew attention to a huge gap in the scholarly record and the need for a new appraisal of Bidwell’s pre-Mansion operation, from an archaeological perspective. First a compilation was created of primary and secondary resources providing information about early Rancho Chico, and files were created for each potential building, structure, or feature event. Next, a new assessment of high-resolution scans of historical photographs was conducted, along with a photo-matching field exercise and line-of-sight interpolation based on triangulation of the several views of certain buildings. In the end, all findings were combined into a new assessment of Bidwell’s pre-Mansion operation. Another tangent was then pursued: a limited re-examination of two more excavation collections from Park grounds, incorporated into Part 3 of this document.

The final document has four sections: *Part 1: Introduction* containing standard background information, *Part 2: Historical Evidence* as described, *Part 3: Archaeological Evidence* which is a consideration of the three excavations, the 1990 collection most thoroughly treated, and *Part 4: Conclusions and Recommendations*.

LOCATION

The Park consists of an irregular polygon of land measuring 537.4 feet (163.8 meters) north-south by 553.9 feet (168.8 meters) east-west, occupying 5.2037 acres (21,058.46 square meters) in the center of Chico,

California (Figure 1). It is located at street address 525 Esplanade, Chico, CA 95926 (Figure 2). The site is located in T22N, R1E in the Arroyo Chico Land Grant as depicted in USGS 7.5' Quadrangle Chico, CALIF (1945, photo-revised 1978). The Park centroid is located at UTM coordinates Zone 10, 599116 mE, 4398719 mN (WGS84). The full spatial extent of the site and the full range of its constituents and cultural components cannot be determined at this time; however, the site is likely to be linked to a number of features extending onto adjoining properties controlled by private landholders, the City of Chico, and California State University, Chico.

PURPOSE

The Park is one of 52 State Historic Parks in the California State Parks system, acquired and managed for the express purpose of preserving cultural heritage. This document addresses concerns integral to the Park's cultural heritage mission. The historical resources identified here are important management concerns going forward, as Northern Buttes District seeks to implement park maintenance and planning goals.

This document contains two sections: (1) a discussion of the archaeological research potential of the Park inclusive to the prehistoric and early historical occupations, both of which are no longer evident on the surface, and; (2) a report of an archaeological test excavation conducted in 1990 in advance of construction of the Park's Visitor Center. The report covers field methods, artifact descriptions, and an analysis of the recovery in light of research themes identified in the discussion of Park research potential.

This report does not provide an inventory or assessment of the Park's built features, including the lawns, trees, and ornamental gardens, and standing structures including the Bidwell Mansion, the Bidwell Office building, a reconstructed carriage house, a reconstructed footbridge, a reconstructed gazebo, and an historical concrete hitching post and steps. These features are described in the *Bidwell Mansion State Historic Park Interpretation Master Plan* (2014), a 1966 Historic American Buildings Survey report (Baird 1966) and an historical building inventory completed by Davis and Kimbro (1988). These features are also served by various interpretive installations including a Visitor Center, interpretive panels, and monuments, and are considered integral to the Park's every day operations.

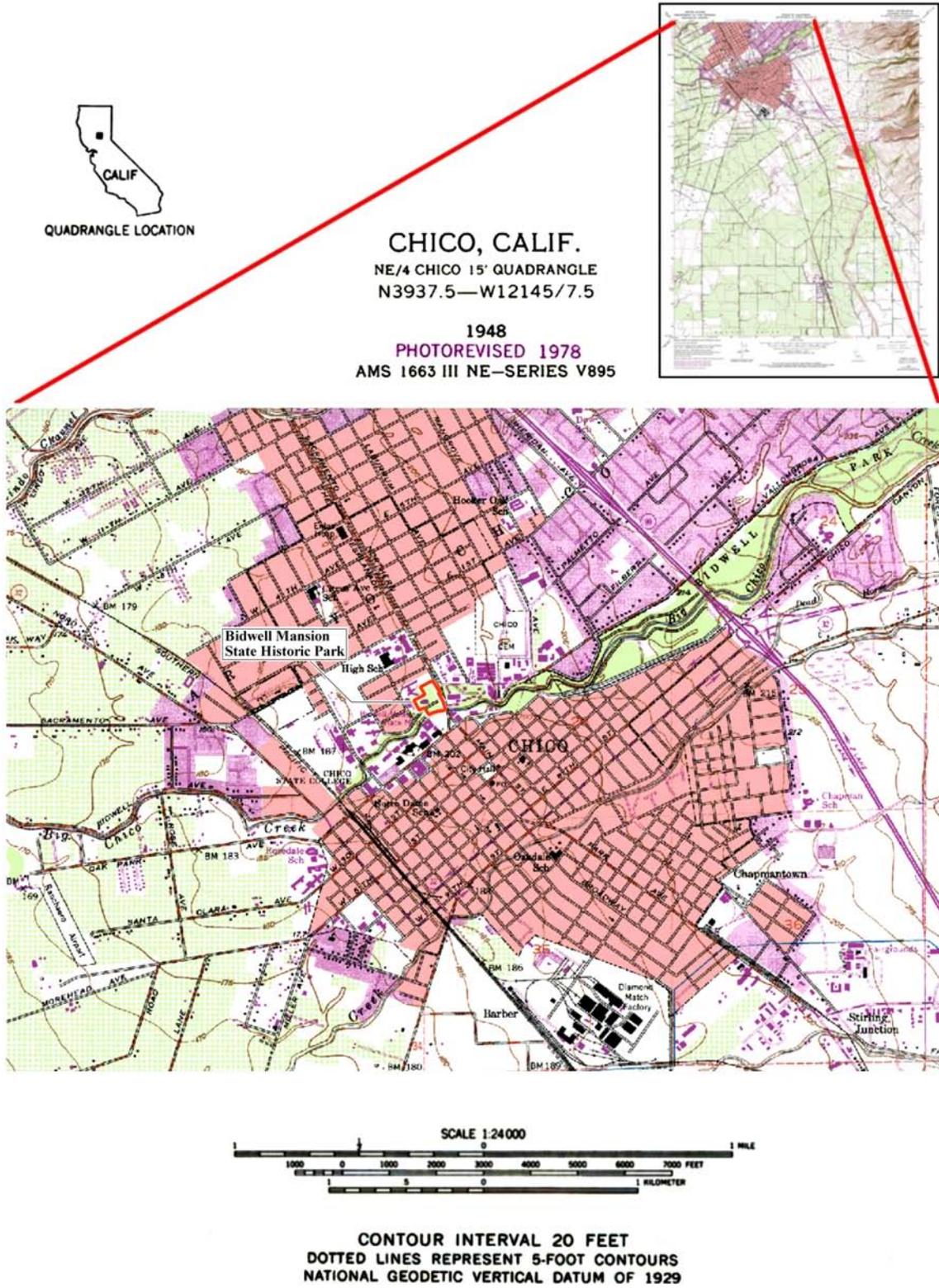


Figure 1. Bidwell Mansion State Historic Park, CA-BUT-3820/H Site Location.

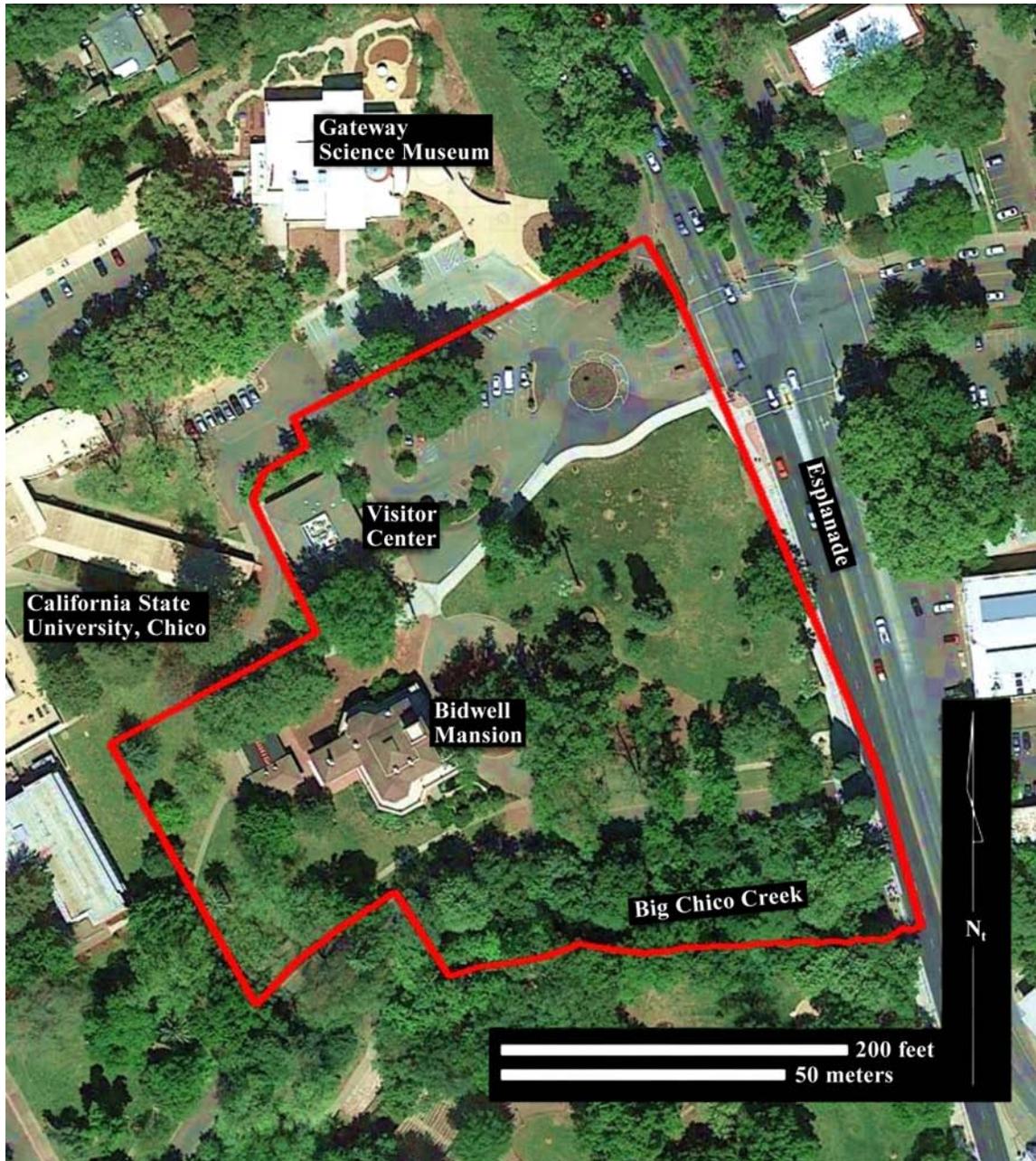


Figure 2. Aerial View of Bidwell Mansion State Historic Park.
Adapted from Google Earth image aerial dated 5-20-2013, accessed 7-12-2014.

NATURAL LANDSCAPE

Bidwell Mansion State Historic Park is situated in the eastern side of the Sacramento Valley at 197 feet above mean sea level. Perennial Big Chico Creek forms the south boundary of the site. Upstream and east of the Park the creek is a braided channel bracketed by oxbows, overflow channels, and wetland patches, but the Park resides on an elevated floodplain landform. In the vicinity of the Park the creek has entrenched, and has probably occupied the current channel through much of the Late Holocene. Soils are mapped as Vina Fine Sandy Loam, a *pachic haploxeroll* composed of a coarse-loamy alluvium derived from erosion of volcanic rocks. The Typical Profile published by the California Soil Resources Lab (2012) shows a truncated A/C profile with considerable depth and structure indicating primary cultural deposits could occur at depths of 90 centimeters or more below surface (Figure 3). Kowta's 1976 front lawn excavations deliberately chased cultural material to sterile and reached a maximum depth of 120 centimeters in two excavation units.

Historically—and probably throughout the span of human occupation—the active channel and floodplain of Big Chico Creek was characterized by riparian woodland. The riparian woodland habitat was fundamentally important to the prehistoric Native peoples of the Sacramento Valley because it supplied resources like fresh water, shade, and a triumvirate of key staple foods including acorn, deer, and salmon. Consequently, in this region, Native American archaeological sites representing prehistoric settlements, camps, and activity areas are concentrated in the riparian woodland zone.

RIPARIAN WOODLAND FLORA AND FAUNA

The typical Sacramento Valley riparian woodland has significant floristic diversity and a complex architecture with a woody overstory capping a dense understory of vines and herbaceous and shrubby plants. The overstory is dominated by California valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), and California sycamore (*Platanus racemosa*), all three representing deciduous, flood-tolerant species possessing deep taproots capable of reaching the permanent water table. A distinct intermediate overstory zone has also been identified, composed of Oregon ash (*Fraxinus latifolia*), walnut (*Juglans* sp.), cottonwood (*Populus*

sp.), big leaf maple (*Acer macrophyllum*), California box elder (*Acer negundo* sub *californicum*), White alder (*Alnus rhombifolia*), California bay (*Umbellularia californica*), and willow (*Salix* sp.). Typical understory species included elderberry (*Sambucus mexicana*), mulefat (*Baccharis viminea*), wild rose (*Rosa californica*), button-willow (*Cephalanthus occidentalis*), and blackberry (*Rubus* sp.). Common vines and climbers included Dutchman's pipe vine (*Aristolochia californica*), poison oak (*Rhus diversiloba*), wild grape (*Vitis californica*), greenbrier (*Smilax californica*), and wild clematis (*Clematis* sp.). The parasitic big mistletoe (*Phoradendron tomentosum* sub *macrophyllum*) is found on overstory trees (Barbour and Major 1988; Roberts et al. 1980; Thompson 1961, 1980). The California valley oak acorn was a key staple food for Native Californians, who also used fruits, nuts, and woody materials produced by the other riparian plant species listed here.

Black-tailed deer (*Odocoileus hemionus columbianus*) are common in association with the dense cover and diverse food sources available in the riparian forest. Historically, the tule elk (*Cervus elaphus nannodes*) were prairie grazers common at the forest/grassland interface. Neither species migrated. Small game of the riparian woodland included gray squirrel (*Sciurus griseus*), ground squirrel (*Spermophilus beecheyi*), Audubon cottontail (*Sylvilagus audubonii*), brush rabbit (*Sylvilagus bachmani*), and California quail (*Lophortyx californica*). Animals common to stream corridors included beaver (*Castor canadensis*), Pacific pond turtle (*Clemmys marmorata*), molluscs (*Margaritifera margaritifera*, *Anodonta californiensis*, and *Gonidea angulata*), and predators such as raccoon (*Procyon lotor*), weasel (*Mustela frenata*), mink (*Mustela vison*), ringtail (*Bassariscus astutus*), and river otter (*Lutra canadensis*). Resident riparian avifauna included waterfowl such as ducks, teal, and shovelers (*Anas* sp.), and wood duck (*Aix sponsa*). Wading birds, some of which were migratory, included great blue heron (*Ardea herodias*), green heron (*Butorides virescens*), snowy egret (*Egretta thula*), great egret (*Casmerodius albus*), and American bittern (*Botaurus lentiginosus*). Migratory waterfowl, including swans, geese, and ducks (Anseriformes) stopped over between approximately November to February. Native accounts describe the valley thick with waterfowl during the winter season.

In lower Big Chico Creek, the most common fishes were probably rainbow trout (*Salmo gairdneri*) and members of the cyprinidae family, including splittail (*Pogonichthys macrolepidotus*), hardhead (*Mylopharodon conocephalus*), and the western pike-minnow (*Ptychocheilus grandis*). Other common resident fish included the western sucker

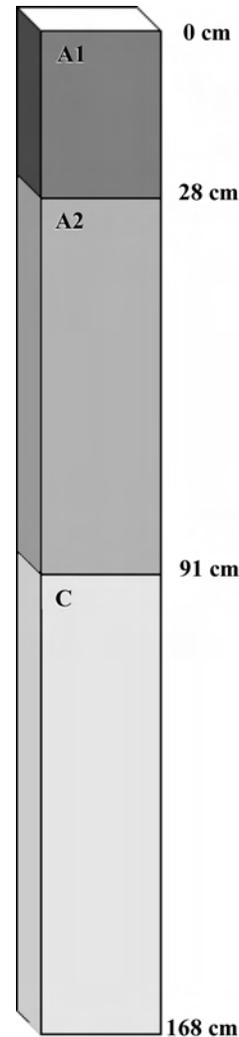


Figure 3. Typical Profile, Vina Sandy Loam.

Adapted from California Soil Resources Lab 2012.

(*Catostomus occidentalis*), Sacramento perch (*Archoplites interruptus*), and tule perch (*Hysterocarpus traskii*). Anadromous fishes primarily spawned in the late fall/winter but also had spring runs. These included the Pacific lamprey (*Lampetra lethophaga*), and several salmonids including the king salmon (*Oncorhynchus tshawytscha*), Coho salmon (*Oncorhynchus kisutch*), and steelhead rainbow trout (*Oncorhynchus mykiss*).

Most carnivores/omnivores, including coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), badger (*Taxidea taxus*), spotted skunk (*Spilogale putorius*), striped skunk (*Mephitis mephitis*), bobcat (*Felis rufus*), puma (*Felis concolor*), black bear (*Ursus americanus*), and California grizzly bear (*Ursus arctos californicus*) were common.

PRE-CONTACT NATIVE AMERICANS

Konkow Geography and Population

When Bidwell arrived here in 1843, the Konkow, or Valley Maidu tribe, lived in the Chico area, including the Big Chico Creek watershed in the adjoining foothills of the Southern Cascades. Kroeber (1925) estimated the Maidu population at around 6,000 individuals. Cook (1964:397–403), on the other hand, felt it was reasonable to double Kroeber’s population estimates, and John Bidwell, in a letter to Sutter dated December 1847, included a census that showed the Indian population in the Sacramento Valley north of the Sutter Buttes as 19,000 persons, consistent with Cook’s reassessment (McKinstry 1872).

Riddell (1978:371) plots the locations of 13 Konkow villages in the Chico area. Powers (1874, reprinted 1975), who visited Chico in the late 1860s and early 1870s, recorded the Konkow name for Chico Creek as *Chú lam shu*. Named settlements and resource use areas are recorded for the area by Dixon (1905:119–346), Heizer and Hester (1970), and Kroeber (1925). These sources place the Konkow villages of *Yaukü* and *Otaki* along Big Chico Creek in the general vicinity of the project area (e.g., Kroeber 1925:Plate 37). However, the location of these settlements and their correlations with known archaeological sites has not been determined.

Villages, Structures, and Facilities

The Konkow practiced a “tribelet” form of political organization composed of a nuclear village and surrounding hamlets, camps, and activity areas. Each tribelet community was considered autonomous and held territory recognized by adjoining communities (Riddell 1978:373). Tribelet territories were generally “well-defined, comprising in most cases a natural drainage area” (Kroeber 1925:831). According to Kroeber (1925:831), Konkow hamlets were occupied by extended families, and might have as few as 15 people and three houses. In contrast, the nuclear village was the population center, home to more than 500 people and 50 or more houses. The nuclear village was the site of the main assembly lodge, men’s sweat lodges, and the residences of leaders and specialists, and held caches of ceremonial regalia, food, and trade goods.

Settlements were established on low, natural rises or gentle slopes along the river and feeder streams. Village size varied from three to fifty houses. The houses were dome-shaped, covered with thatching, tule mats, and earth, and reached 10 to 15 feet across (Figure 4). Dixon recorded this description of Konkow houses:



Figure 4. A Konkow Village near Chico.

Adapted from Powers (1874, reprinted 1975).

an excavation was made to a depth of not over one meter and over a circular area from six to twelve meters in diameter. The ground was loosened by the aid of digging-sticks, and then gathered into baskets, in which it was carried off and dumped to be used later in making the earth covering. Spring was the season usually selected for building a house, as at that time the earth was soft whereas later in the summer the ground becomes hard and baked. [Dixon 1905:168–169]

According to Dixon, the interior post pattern and construction were similar to the larger dance house, with two main posts placed near the center fire and a circle of eight shorter posts of oak placed between the main posts and the walls:

The sides of the excavation were left vertical and lined or walled with logs either whole or split, set on end, or with large slabs of bark, forming thus a solid wooden wall around the interior of the house. From the edge of the excavation, then, the long beams to support the roof were leaned toward the center, resting on the post already set, and tied to them securely with grapevines or osiers [willow rods]...On these beams as a basis, cross-poles were laid; and on these, again, large pieces of bark, branches, leaves, and pine-needles; and lastly, a heavy covering of earth, generally from twenty to fifty centimeters [eight to twenty inches] thick. In the center of the roof, at the

top, an opening was left for a smoke-hole. This was covered, when necessary, by a skin, a basket, or a slab of bark. Directly in line with the two main posts, a door was made less than a meter wide and from one meter to a meter and a half high; and a passage was built out about two meters in length, slanting up from the floor of the house to the level of the ground outside. In the Sacramento Valley area it would seem that these doors opened, as a rule, to the south or southwest. It also appears probable that originally in this region the doors were much smaller, having to be entered on hands and knees, and being really little more than draught-holes, and the real entrance and exit being by way of the smoke-hole. When the latter was in use, however, a ladder composed of two poles, with cross-pieces tied with grapevine, afforded the means of ascent and decent, and ran almost vertically from the base of the main post to the smoke-hole. In some cases, it is said, a notched log was used instead of a ladder. It was through the draught-hole, however, that wood was generally carried into the house. [Dixon 1905:168–169]

Dixon states that several families might occupy the larger earth lodges, and that each family had their own space within the structure.

According to Dixon (1905:169), the dance house was similar in construction to the earth lodge, although double in size. Located in the central village, the dance house was a subterranean structure three to four feet in depth, constructed with large beams and two or four main posts then covered with brush, earth, or tule mats. The door faced east with a plank drum opposite and a smokehole at the top (Beals 1933). The two center posts of the dance house were set during a ceremony with the largest post or “spirit post” behind the fire pit. Only the dancers were allowed to walk near the spirit post.

Like the Patwin, the Konkow built acorn granaries used to store raw acorns throughout the winter and early spring (Figure 5):

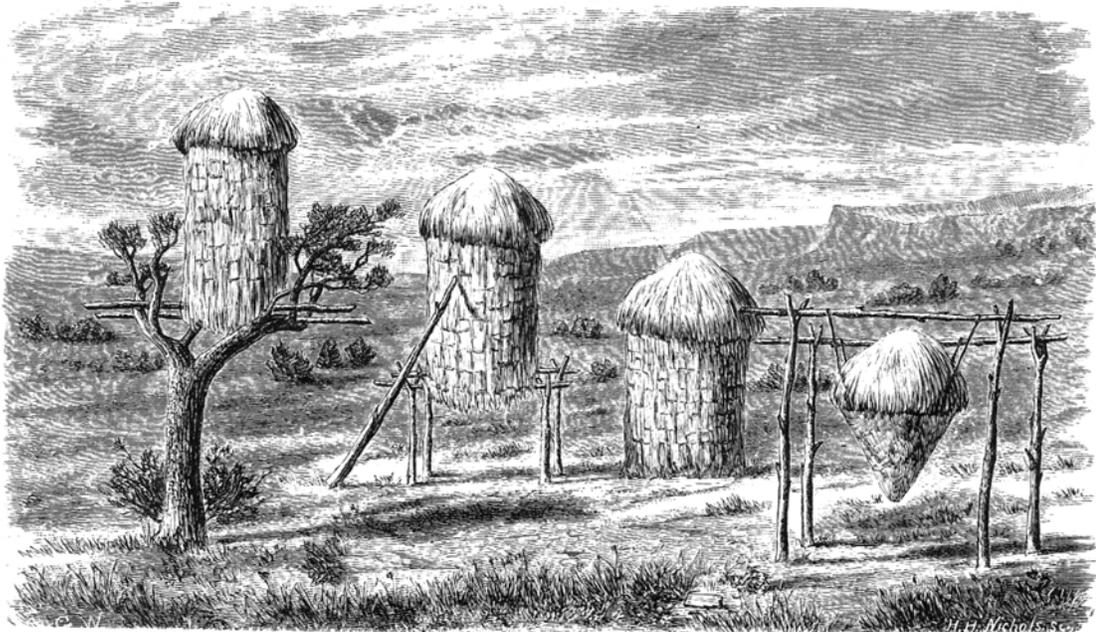


Figure 5. Konkow Acorn Granaries.

Adapted from Powers (1874, reprinted 1975).

one or more acorn-granaries of wicker-work stand around each lodge, much like hogsheads in shape and size, either on the ground or mounted on posts as high as one's head, full of acorns, and capped with thatch. [Powers 1874:284, reprinted 1975]

Smaller brush shelters, supported by upright poles, were built at temporary summer food-gathering locations (Kroeber 1925:407–408).

Social Structure

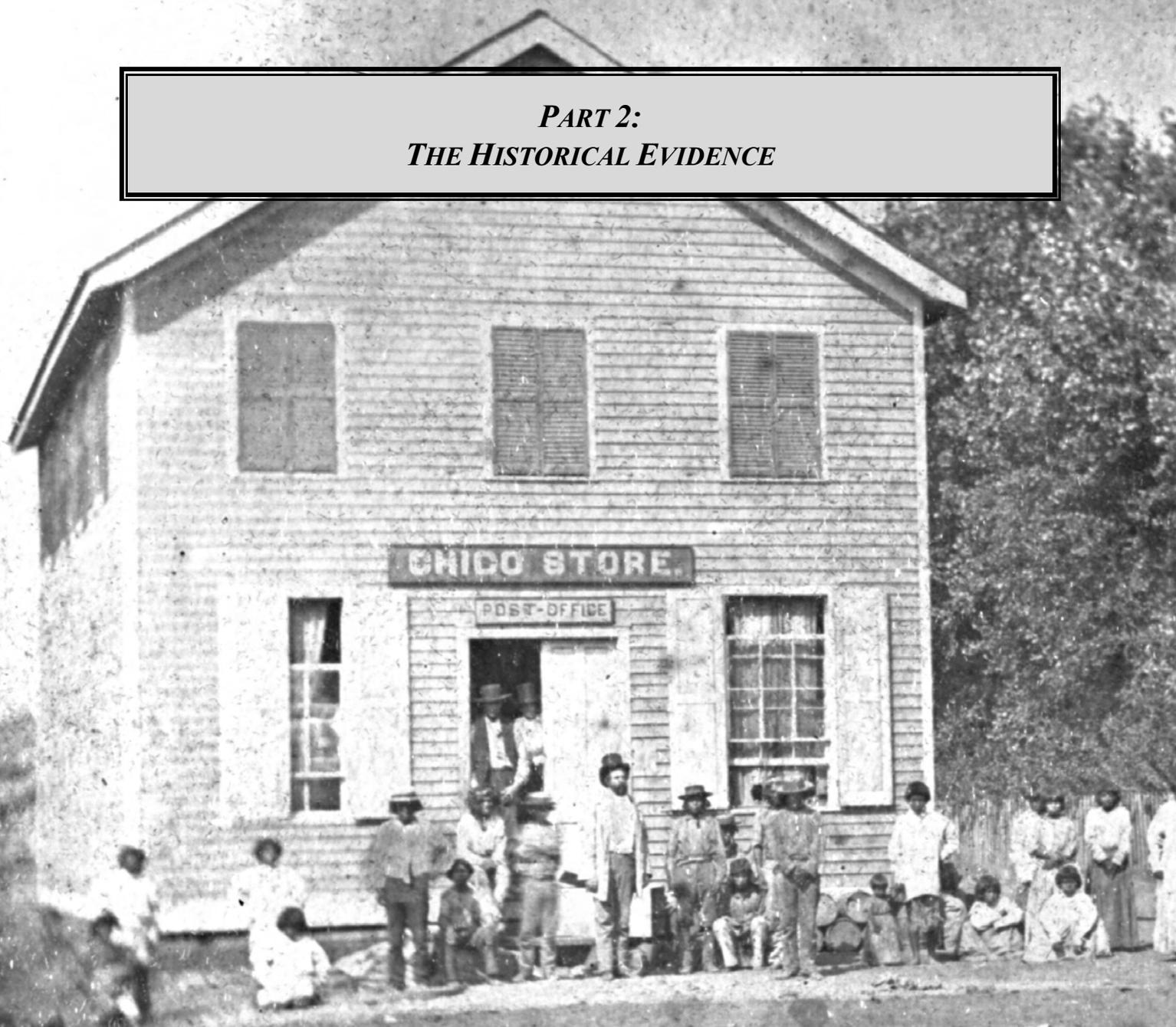
The central village was the chief's home. Chiefs generally inherited the position, but a shaman might use his powers to aid the selection. Wealth, generosity, and the ability to lead were the criteria used for a chief's selection (Riddell 1978:379). The Konkow chief's primary task was that of advisor. He answered to a council of elder members of the Kuksu cult, and it was generally understood that Kuksu cult members and not the chief held the real political power in a central village, controlling trade, craft groups, and resources. The chief's duties included leading his tribe into battle, keeping his people from trespassing, directing special festivals, arbitrating disputes, and acting as official host at ceremonial gatherings. He would also redistribute food when required (Dixon 1905:119–346). The chief could declare war or negotiate peace. The chief lived in the men's lodge, which was burned on his death. Other than this right, he received no other privileges from the community (Riddell 1978:379). Each extended family also had its own leader who would assist the chief. If the chief had the support of the villages and the shamans, his word was enforced. The position of chief was usually hereditary, but the villagers could choose the chief, or the current chief could name his successor.

Feuds were common between villages, but it was uncommon for Konkow towns to unite for battle, and this kept most conflicts localized. Warfare consisted of raiding and ambushing. Warnings of the coming attacks were common and given by smoke signal, with the attacks usually occurring at dawn. Prisoners, if taken, were sometimes tortured then killed (Dixon 1905:119–346).

Ceremony

The Konkow followed a Kuksu ceremonial pattern similar to the River Patwin, described in greater detail below. The Konkow also practiced several additional ceremonial dances: a mourning ceremony in the fall, a *Kamin* Dance to initiate the spring, the *Weda* or flower dance in late April, the *Lole* Dance for first fruits, the *Dape* or Coyote Dance, the *Omwulu* or Rabbit Dance, the Shaman's Dance, the *Nemusla* or Big Time Dance, and the *Husla* (Gifford 1927:233–238).

PART 2:
THE HISTORICAL EVIDENCE



*Photo on previous page:
"John Bidwell Distributing Goods to the Indians in 1852 at Rancho Chico."
Adapted from a figure appearing in Royce (1907).*

Purpose

JOHN BIDWELL AND EARLY CALIFORNIA

Bidwell Mansion State Historic Park celebrates the life and times of John Bidwell and his wife Annie Kennedy Bidwell. John Bidwell was a major California historical figure. Born in rural New York State, as a young man Bidwell was a leader of the first emigrant party to cross the desert west to California, reaching Sutter's trading station near the confluence of the American and Sacramento rivers in present-day Sacramento in 1841 (J. Bidwell, *A Journey to California*, in Royce 1907). That winter, Bidwell took employment with Sutter who directed him to join Robert Ridley at Fort Ross—which Sutter had recently purchased from the Russians—to oversee removal of horses, cattle, lumber, furniture, and agricultural equipment for transport back to Sutter's station. Bidwell stayed at the Fort for 14 months, and on his 1843 circuit, Bidwell had two horses stolen at a way station near present-day Vacaville. A borrowed replacement horse and mule were subsequently stolen on his return to Sutter's, and rather than pay the exorbitant price demanded by the owner, Manuel Vaca, Bidwell, joined by Peter Lassen, pursued the responsible parties heading north to Oregon. It was on this trip that Bidwell first visited Big Chico Creek:

Hastening up the valley we struck the trail of the Oregon Company on what is now known as Chico Creek, Rancho Chico, and to me one of the loveliest of places. The plains were covered with scattered groves of spreading oaks; there were wild grasses and clover, two, three and four feet high, and most luxuriant. The fertility of the soil was beyond question, and the waters of Chico Creek were clear, cold and sparkling; the mountains were lovely and flower-covered, a beautiful scene. In a word, this chase was the means of locating me for life. I never was permanently located till I afterward located here. It was early in March 1843, when we reached Chico Creek.

It is not easy to conceive and understand the change in the condition of the country caused by the extensive pasture of horses and cattle on these plains. We seldom or never were out of sight of game, deer, elk, antelope and grizzly bear. The snow-capped mountains on each side of the valley seen through the clear atmosphere of spring, the plains brilliant

with flowers, the luxuriant herbage, all truly combined to lend enchantment to the view. In fact the valley, with two or three unimportant exceptions, was as new as when Columbus discovered America. [Bidwell, *Early California Reminiscences*, in Royce 1907]

In the winter of 1843–1844, a vaquero named Pablo Gutierrez told Bidwell of the existence of gold deposits in the Bear River region, and shortly the two men visited the find. They were unable to capitalize, however, because Bidwell—by then a naturalized citizen of Mexico—was drawn into a war on the side of the Governor in a battle against insurrectionists known as the Micheltorena War. Gutierrez himself, serving as the Governor’s courier during this war, was killed by the insurgents (Bidwell, *Reminiscences of the Conquest*, in Royce 1907).

In 1845–1846, Sutter, who was constantly in need of new sources of pine lumber, dispatched Bidwell on several explorations to search out potential mill sites in the Cache Creek, Stony Creek, Feather River, and Yuba River drainages. During this span, Bidwell took his first major step toward establishing a ranch along Chico Creek when he visited and acquired an interest (via debt settlement) in the south half of Edward Farwell’s *New Salem Rancho* also known as *Rancho de Farwell*. This preliminary effort at land acquisition in the Chico area was put on hold when, in May 1846, the U.S. declared war on Mexico. At the time, Captain John Fremont was leading a brigade of 60 men on an exploratory foray in the northern California frontier. Receiving word of the hostilities, Fremont rallied American expatriates at Sonoma already engaged in the Bear Flag Revolt. Fremont drew Sutter and Bidwell into the revolt, and Bidwell joined the company as a Second Lieutenant, then Captain, then Major under U.S. Army Commander John C. Fremont in the California Battalion. As the company proceeded to capture San Luis Rey, San Diego, and Los Angeles, Bidwell stayed in the conflict through May 1847, and then returned to Sutter’s Fort (Bidwell, *Reminiscences of the Conquest*, in Royce 1907). In 1863, Bidwell was appointed to the largely ceremonial position of Brigadier General of the California State Militia.

Back in Sutter’s employ, Bidwell continued his activities in the upper Sacramento Valley, building structures on land grants along the Sacramento and Feather rivers, completing an Indian census for the new American Governor of California and buying and selling land interests. In 1847, Bidwell built a small cabin and drove cattle onto the Rancho Farwell property. In 1848, Bidwell wrote the contract between Sutter and James W. Marshall for construction of a mill on American River at Coloma, giving Bidwell a front row seat for the excitement caused by Marshall’s discovery of gold in the newly constructed mill race. In spring 1848, Bidwell struck out on his own to secure gold mines to the north, and in just a few months established successful gold diggings along the Middle Fork of the Feather River near present day Oroville. By fall of 1849, he closed the diggings, having collected considerable wealth. Around this time he also sold his interest in Rancho Farwell. Shifting his focus to agriculture and merchandise to provision the growing immigrant population of California, Bidwell acquired the *Rancho del Arroyo Chico* (Rancho Chico)—a 22,214 acre land grant issued in 1844 by Governor Micheltorena to William Dickey—in two purchases in 1849 and 1851. Bidwell developed an extensive ranching and farming enterprise very rapidly, benefitting from use of Native American labor. The Rancho Chico headquarters also grew rapidly, rebounding from Indian attacks that burned his operation to the ground in 1852. As early as 1857, Bidwell had 350 acres under cultivation, supporting a diverse array of tree and row crops (*The California Farmer* 1857). His ranching and farming enterprises grew and

diversified steadily through 1868, surviving severe market fluctuations (Gillis and Magliari 2003). In 1865, Bidwell began construction of his Mansion, situated at the center of the footprint of his early Rancho Chico headquarters. In 1868, Bidwell married Washington, D. C. socialite Annie Kennedy. The Mansion was completed that same year, and between 1868 and 1874, Bidwell demolished his Rancho headquarters, removing and relocating the various operations elsewhere, including a dry goods store, barns, a granary, a stable, warehouses, blacksmith, wheelwright, and carpentry shops, and Native American worker's quarters. He repurposed the grounds for the display of wealth and privilege, with verdant gardens, exotic trees, and new prestige fixtures, including a carriage shed, an elaborate footbridge, decorative benches, and a gazebo. Bidwell also shifted attention to land sales and development of the City of Chico, and also the development of his political career. He was a member of the California State Senate from 1849 to 1850, a California Delegate to the Democratic National Convention in 1860 and the Republican National Convention in 1864, he was elected congressional Representative from California's 3rd District from 1865 to 1867, became the People's Independent Party candidate for Governor of California in 1875, the Prohibition Party candidate for Governor in 1890, and the Prohibition Party candidate for President of the United States in 1892 (Gillis and Magliari 2003).

ARCHAEOLOGY AND PARK MANAGEMENT AND INTERPRETATION GOALS

The pre-Mansion historical resources identified in this document are important management concerns going forward as Northern Buttes District seeks to implement maintenance and planning goals. With respect to these goals, a 1983 General Plan (State Parks 1983) and a 2014 Interpretation Master Plan (State Parks 2014) steer State Parks toward an interpretive plan which focuses on a target date of 1900 for reconstruction, rehabilitation, and maintenance of the Park's built environment. That time period, marked by Bidwell's changing political stature and his gentrification of the grounds, from an archaeological perspective, is much less interesting and meaningful. The year 1868 marked a shift in the economic and social context of the Park, a shift that will be evident in the Park's archaeological record. Except for acts related to demolition and landscaping, after 1868 the grounds were essentially static. On the other hand, from an archaeological perspective, the Park is likely to contain a record spanning the full sweep of Northern California's dynamic frontier history, from 1849 to 1868. Throughout this span, Bidwell's Rancho Chico headquarters was located on or about the current grounds of Bidwell Mansion State Historic Park. This poses a compelling if not ironic conundrum: as the Park seeks to implement its goals, focused on 1900, every action it takes, every new planting, irrigation installation, and construction effort, is likely to unearth materials related to this vital period in Northern California's history, and directly pertinent to the actions of one of its most important individuals. These material remains are important because they reflect the period immediately after the gold discovery. In a mere decade the State of California came into existence. The region's ethnic diversity was at its greatest, and the social dynamic was spectacular, defined by the interplay between a numerically dominant and existentially threatened Native American population, the receding demographic and cultural dominance of the *Californios*, the rapid influx of immigrants from around the world, and growing Anglo-American population bent on prosperity and apt to take and exploit land, labor, and natural resources. The Park, containing the archaeological record of Rancho Chico, can tell a great story.

Research Themes

This section examines the research potential indicated by the combined documentary, oral history, and photographic record of Rancho Chico's earliest days, including a consideration of prehistoric cultural resources but focused on the period from 1849 to 1868. The following provides a discussion of the Park's pre-Mansion archaeological research potential, dividing the record into four temporal components, each representing a distinct time period and cultural context:

- Component 1—Prehistoric Native American Occupation (pre-1849)
- Component 2—Early Historical Native American Occupation (1849–1852)
- Component 3—Early Rancho Chico (1849–1852)
- Component 4—Rancho Expansion and Development (1852–1868)

For the earliest time periods, Components 1 and 2, relatively little is known except the broadest outlines, and no specific locations can be determined. For the later time periods, related to Components 3 and 4, discussion focuses on activities, buildings, and structures that may have created the predominant archaeological traces on Park grounds. Throughout, discussion focuses on features likely to occur on Park grounds or in the immediate vicinity especially if precise locations cannot be surmised. Additional features associated with historical Rancho Chico operations but likely not contained on Park grounds are also discussed, but only if their existence and location is pertinent to clear up some earlier confusion about two or more entities, or to be specific about the relationships pertaining between on and off-grounds features.

COMPONENT 1: PREHISTORIC NATIVE AMERICAN OCCUPATION

Prehistoric archaeological resources are common along the banks of Big Chico Creek upstream from the Park, and prehistoric artifacts should be expected on Park grounds. The three largest and most prominent sites nearby are all late prehistoric settlements. The nearest known site is CA-BUT-459, a late prehistoric settlement site situated on the south bank of Chico Creek just 300 meters east of the Park, near the junction of 1st Street and Flume Street. The site was first recorded by Dorothy Hill in 1966. According to Hill's record, site CA-BUT-459 was a village site marked by midden, clam shell disk beads, human remains, and shell and animal bone fragments. The site was heavily impacted by the 1908 construction of the "Rotunda Building," a

dome-shaped “amusement enterprise” housing an indoor swimming pool, merry-go-round, auditorium, and later housing a skating rink and dance floor. Hill reports human remains found during demolition of the structure in 1963, and rediscovery of midden, bone, and beads when a drainage ditch was dug through the site in January 1966. Just 3.5 kilometers upstream, a second prehistoric settlement site, CA-BUT-186, is located near the Chico Nature Center. This site was recorded in February 1964 by S. Edward Clewett and Keith Johnson, who noted a mound site marked by basalt and obsidian flakes with some shell and bone associated with a dark midden soil. A little farther upstream along Vallombrosa Avenue, CA-BUT-187 was recorded in February 1964 by Richard Bordin and Keith Johnson. The site was marked by basalt chipped stone flakes associated with a loamy midden soil, a shallow housepit depression measuring 15 feet in diameter, and several other possible house pits.

All three of these sites were occupied during the late prehistoric period, between A.D. 1500 and 1844. Based in part on excavations at CA-BUT-1, the likely location of the settlement occupied by Bidwell’s 1847 Rancho Farwell work force (see below), Chartkoff and Chartkoff (1983) have defined the archaeological record associated with this time period, and shown its strong links to Northern Maidu ethnography. Typical artifacts include bowl and hopper mortars, handstones and millstones, clam shell disk beads, *Olivella* A series spire-lopped beads, incised bird bone beads, a variety of plummet types, desert side-notched, triangular, and small corner-notched points made primarily from chert, stone pendants and cylinders, and a heavy reliance on deer and shellfish with fish and waterfowl supplementing the diet.

COMPONENT 2: EARLY HISTORICAL NATIVE AMERICAN OCCUPATION (1849–1852)

Bidwell’s First Interactions with Chico-Area Maidu

When he purchased a part-interest in Rancho Farwell in 1846, Bidwell secured the lands south of Chico Creek, completing the purchase in 1847. In 1847, he drove cattle onto the Rancho Farwell property and erected a small cabin, probably near the current Patrick Ranch, where he also cleared fields and planted a small fruit orchard.

To complete this work he employed the local Maidu to build and clear brush (J. Bidwell, personal communication, in Bidwell 1896:205). This working relationship expanded rapidly when he made a local gold discovery:

In 1848, while returning from San Francisco, General Bidwell camped on Feather River, three miles east of the present town of Biggs. There he washed out a few pans of sand obtained from the margin of the stream. A few “colors” was the result, the harbinger of the vast fortunes subsequently found in the stream. General Bidwell went to Chico and immediately fitted out an expedition, composed chiefly of Indians, and returned to Feather River. After prospecting at various places, finding gold everywhere, he located at a place known as Bidwell’s Bar, an extensive sandbar named after him. The bed at the stream was found to be fabulously rich in gold. The quantities of the precious metal which he and his Indians took away tradition estimates only by the donkey-load. [*San Francisco Call* 1900]

Mechoopda Settlement Upstream

Bidwell's gold mining success was clearly facilitated by his large Maidu crew, which is estimated at 20 men (Hill 1978) to as many as 40 men (McIlhany 1908:39). By fall of 1849, Bidwell closed the diggings having collected considerable wealth, and around this time also sold his interest in Rancho Farwell. Shifting his focus to agriculture and merchandise to provision the growing population of California, Bidwell acquired the 22,214-acre Rancho Chico Land Grant from William Dickey, one of his partners in the Feather River mining operation. Governor Micheltorena issued the Rancho Chico land grant to Dickey in 1844. Aiming to leave the region, Dickey transferred the grant title to Bidwell in two sales, one in 1849 and one in 1851 (Parry 1888:563). Many of the Bidwell Bar Indian workers and their families, perhaps as many as 250 individuals (Hill 1978:12), remained in Bidwell's employment after he closed the diggings and settled with him near his Rancho Chico headquarters in 1849.

This settlement, named Mechoopda, was located on Rancho Farwell lands on the south bank of Chico Creek, upstream from Bidwell's new Rancho Chico headquarters. Hill cites documentary and archaeological evidence linking the Mechoopda settlement to archaeological site CA-BUT-459, near the junction of Flume and First streets, just 1,000 feet east of the southeast corner of Park property (Hill 1978:17–18). The archaeological record described by Hill supports the notion that this was a prehistoric settlement occupied into the contact era or re-occupied during the contact era. This is consistent with the writings of Maidu scholar Henry Azbill, who also declared that, before Bidwell arrived on the scene:

the Mechoopda had established a summer camp on the south bank of *Chulamsawi* (Big Chico Creek), at about the location of Flume and First Streets. It was here that John Bidwell found them when he took possession of El Rancho de Arroyo Chico in 1849. [Azbill 1971a:57]

Shover also argues that the Indian settlement of Mechoopda existed before Bidwell's arrival and that Indians living there probably had also worked for either or both Edward A. Farwell or subsequent owners of sections of Rancho Farwell in the 1844 to 1848 period (Shover 2000). Mechoopda residents may have also worked for William Dickey, George McKinstry, or Justus McKinstry, as each held some interest in Rancho Chico from 1844 to 1849.

The Mechoopda settlement was described by several authors who visited in the 1849–1857 time frame. Hill relates a Gold Rush miner's account of Mechoopda's prominent features:

It was located just east of the trail or road on the south bank of Chico Creek. There must have been between 400–500 Indians and they lived in low mud huts or wigwams...In the center of the village was a larger structure made after the same manner called the assembly house. Here all the gambling games were held, and various festivities, such as marriages and dances were sometimes held. Another building was known as the sweathouse. It was smaller in size than the assembly house, and had its opening at the ground [Chico Record, March 31, 1935, in Hill 1978:17]

An expedition of the U.S. Corps of Topographical Engineers visited the settlement of Mechoopda in 1855:

We crossed Butte creek and Little Butte creek, about three miles beyond it, and encamped on Chico creek. The country was flat and uninteresting. Near

camp was a rancheria of Digger Indians. Their huts were partly excavated in the ground, and roofed over with sticks plastered with mud. When we visited them, at about sunset, the women were sitting on top of their houses, engaged in shelling out grain which they had gleaned from the neighboring fields. The men, nearly naked, were congregated in a large hut, gambling. A few burning sticks in the centre of the group threw a flickering light over the scene. The game was played by four men, who were seated in pairs, on opposite sides of the fire, while the background was filled up with eager spectators. Before each party was a pile of straw. One couple continually twisted up, and threw into the air, wisps of this straw, managing at the same time to conceal in it two pieces of white wood or bone. The other couple anxiously watched their movements, keeping up a monotonous, guttural cry. Whenever they thought they had detected the locality of the sticks, they clapped their hands violently, and their rivals immediately shook open the suspected wisp. If the sticks were there, the successful guessers received them, and began in their turn to throw them up; if not, the first couple continued.—The excitement occasioned by this simple game was intense. [Abbot and Williamson 1857:58]

Maidu historian Henry Azbill noted that the people of this settlement enjoyed Bidwell's protection, but:

Bidwell's haven was not altogether selfless. He had the benefit of a permanent corps of workers, with their families, who could be used in all sorts of ways for the benefit of the Bidwell holdings. [Azbill 1971b:21]

Throughout this span Bidwell maintained the social and physical separation of the young men serving as his ranch hands, who were housed not at the Mechoopda settlement but directly under his oversight on his Rancho grounds. As noted during a visit in 1850 by E. N. Blake, Bidwell's first Rancho complex included a "clapboard house for the Indian boys (vaqueros)" (Blake 1875).

Bidwell's treatment of the Indians of Mechoopda in the period 1848–1851 is best understood in the context of his own history under Mexican rule and his tutelage under Sutter and other California rancho bosses (Gillis and Magliari 2003; Smith 2013). In fact, Bidwell sought to institutionalize his Rancho Chico system statewide. In March 1850, as a member of the newly formed California legislature, he introduced Senate Bill No. 54, "*An Act Relative to the Protection, Punishment and Government of Indians*" which proposed a parallel judicial system to hear and decide suits "wherein an Indian is a party," and provide for continuity of the rancho patronage system under U.S. rule. The bill proposed a statewide system of Justices of the Peace to be elected by the male Indians of that district, providing for Indian carriers to notify affected tribes of upcoming elections, and interpreters to be present at the polling place. The bill also contained provisions to ensure that proprietors of lands where Indians reside would continue to permit Indians and their descendants to reside on these traditional lands peaceably and to pursue traditional subsistence pursuits. The bill made it illegal to provide Indians liquor, and set punishments for Indians convicted of stealing livestock, horses or dogs, and made it unlawful for any Indian to set fire to the woods or prairie, or for any Indian to not "exert full force of effort to extinguish said fires at pain of \$50.00 fine or corporal punishment not to exceed 100 lashes."

Sections 7–12 of the Act defined the conditions of servitude on rancho lands. The bill stipulated that Indians residing and working on lands held by an individual by virtue of a Spanish or Mexican land grant, if they so desired, should remain in the employment of that rancho and “not be molested by any other person,” thus ensuring continuity of the existing rancho patronage system. The Act determined that any rancho proprietor who treated his wards cruelly or inhumanely may be fined or lose rights of indenture to another to be determined by the justices. The bill made it unlawful to take minor Indians by force and also set fines of \$50.00 to \$500.00 for any person convicted of forcibly compelling Indians to work in the mines. Section 38 provided that:

[W]hen minor Indians attain their majority, and desire to leave the persons who have had the care of them, such persons shall pay to such Indians in useful property the value of fifty dollars if female and one hundred dollars if a male, and two good suits of clothes.

Senate Bill No. 54 never reached the floor, but a replacement bill, Senate Bill No. 129, which was quickly passed and signed into law on April 22, retained many of its provisions. “*An Act for the Government and Protection of Indians*” prevented any person from forcibly compelling an Indian to work against his will, yet made it lawful to “apprentice” any number of Indians while providing food, clothing, and humane treatment. The bill also provided for the arrest and detention of “loitering, profligate, and vagrant Indians” who could then be hired out as apprentices for a term not exceeding four months. Bidwell co-authored the final draft of the bill with General Mariano G. Vallejo and David F. Douglas, the former, like Bidwell, a rancho master whose operations depended on low-wage labor and the latter an expatriate antebellum southerner clearly at home with these stipulations (Rawls 1984:87–90). In some parts of California, the Act was interpreted to enable pernicious acts of slavery, including the kidnapping of children, both on- and off-reservation, by white slave dealers who provided “apprentice” labor to ranchers and miners under the color of law. The Act was repealed in 1863 (Heizer and Almquist 1971:39–58).

COMPONENT 3: EARLY RANCHO CHICO (1849–1852)

Bidwell’s First Residence and Rancho Complex

Bidwell selected a location on the north bank of Chico Creek at the burgeoning Marysville-Shasta Road ford as the headquarters for his new Rancho Chico operation. According to receipts on file with the Pioneer Papers housed at the State Library (in Hill 1978:16) and a claim filed by Bidwell listed in the *Report of the California Superintendent of Indian Affairs, of January 3, 1860* (State Parks 1983:11), in August 1849, Bidwell paid a builder to raise a new log house on his newly acquired Rancho Chico Land Grant. The log home was built concurrent with the final phase of his Feather River mining operation. In October 1849, he purchased furnishings and kitchenware to stock the home, and soon after he moved from Bidwell Bar to the new home. It should be noted that the *Historic American Buildings Survey* report for Bidwell Mansion (Baird 1966:2) indicates that the 1849 Rancho Chico cabin was built from “oak and sycamore” and “chinked with mud” but provides no citation. Absent a citation, it’s possible this is a conflation of detail from descriptions of Bidwell’s 1847 Rancho Farwell cabin, noted above, which Waterland describes as “made of oak and sycamore and chinked with mud” (Waterland 1934–1940 [Vol. I:28]).

Alternatively, both cabins may have been built on a similar plan. Waterland further described the Farwell cabin:

It had a door as entrance, covered in deer skins. On the veranda were two bunks, a window over each covered with cloth. The fire for cooking was built on a dry floor outside the cabin, and was partly roofed sheltering it from the rain. The effort was made to always keep a fire, so there would be coals to replenish it. [Waterland 1934–1940 (Vol. I:28)]

The *Northern Enterprise*, a Chico Newspaper that began publication in 1872, ran a letter to the editor in the February 19, 1875 issue describing the Rancho headquarters soon after its formation:

My first visit was made in the winter of 1850, when I rode up the valley with General Bidwell in his buggy, the first one that ever rolled over those roads. We left Nicholas early in the morning, breakfasted at Hock farm, spending half an hour with General Sutter, then on to Yuba City, then to Hamilton, then to Neal’s Ranch, arriving at Chico Ranch on the evening of the same day, crossing the creek (Chico) at the old ford (no bridge then)...The buildings at the time consisted of one log house one clapboard house for the Indian boys (vaqueros), and one shed as shelter for the saddle horses. [Blake 1875]

According to Annie Bidwell, the log house was augmented and became part of a three-building complex “all joined together” including the log cabin—Bidwell’s first residence—and two other buildings housing a “storehouse, general store, office, hotel, kitchen, dining room, and carpenter shop” located in what is now the lawn area in front of the Mansion (State Parks 1983:11). Annie Bidwell suggested the complex was “just in front of the present mansion” (ibid.), while Waterland placed the buildings “to the right of the entrance of the mansion grounds” (Waterland 1934–1940 [Vol. I:32]), which, based on the birds-eye view map of 1871 (see ahead to Figure 15), would place the complex around the footprint of the “Old Adobe” built in 1852 (see below).

Shasta-Marysville Road

As early as 1844, John Sutter, John Bidwell, and Peter Lassen blazed a road linking Sutter’s *New Helvetia* land grant and trading colony near present-day Sacramento to Lassen’s *Rancho de Bosquejo* colony headquartered near present-day Vina in southern Tehama County. This early trail probably adapted to existing major Native American trails which followed rivers and funneled to major stream crossings, as described in the logs of early non-Indian explorers, but augmented by new spurs built by Sutter, Bidwell, and Lassen that struck out across the plains in a beeline to rancho headquarters along the route. This trail appears on several pre-1849 diseños and is clearly marked as the “Sutter-Lawson [Lassen] Road” in one of the region’s earliest cadastral maps, *The Sacramento Valley from American River to Butte Creek Lt. Derby, Topographical Engineer 10th Military Dep. (September & October 1849)*.

An 1859 *Plat of the Rancho Arroyo Chico* shows the nexus of Bidwell’s operation located on the Marysville-Shasta Road (Figure 6). The route of the historical Marysville-Shasta Road forms the eastern boundary of the current Park grounds; the current Esplanade

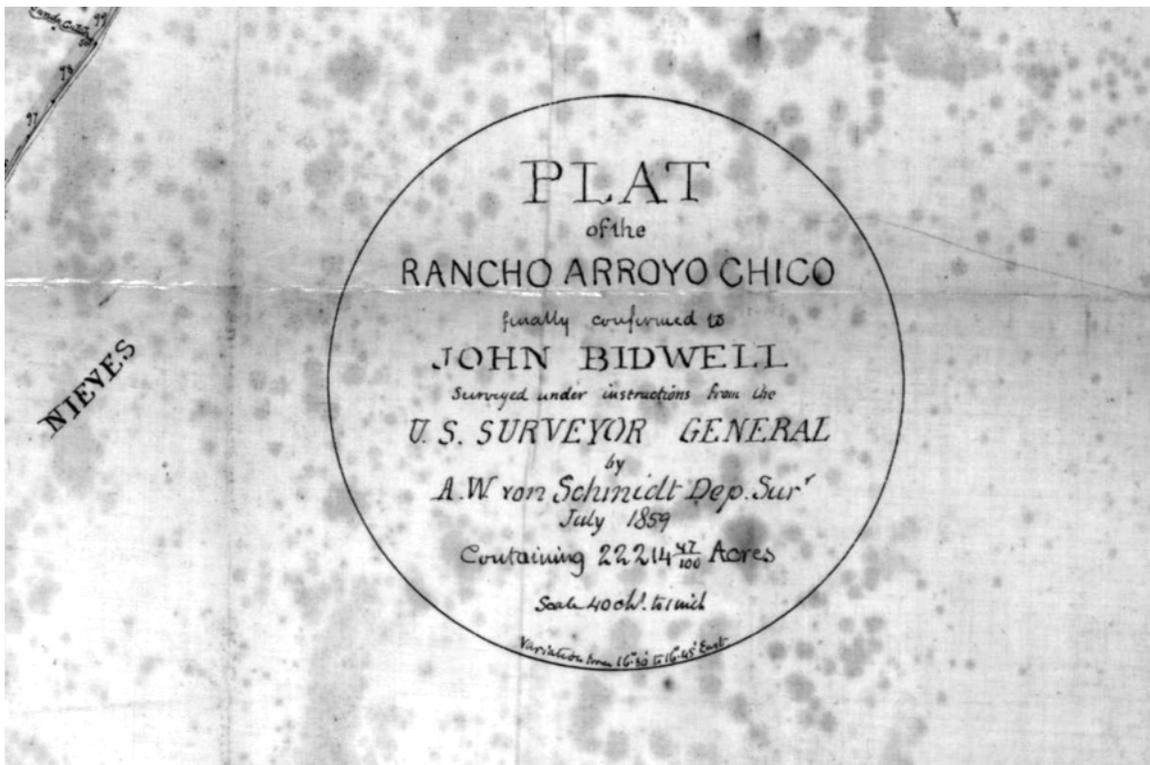


Figure 6. Two Details from “Plat of the Rancho Arroyo Chico,” July 1859.
 From the original completed by A. W. von Schmidt, Deputy Surveyor, U.S. Surveyor General’s Office.

is built on the path of the historical road, and the Esplanade Bridge over Big Chico Creek, at the southeast apex of the grounds, is built on the approximate footprint of Bidwell's original Marysville-Chico bridge crossing, built in 1851 (Waterland 1934–1940 [Vol. I:33]). In fact, it is plain that Bidwell's purchase of and plans for Rancho Chico were thoroughly embedded in his grasp of the commercial opportunities presented by traffic and transportation along the Marysville-Shasta Road. By 1852, his Rancho Chico headquarters became an important station on the stage-route, where hungry travelers and exhausted animals could seek refreshment and rest. The road delivered a huge, new market to his front door, and he quickly focused on agricultural products and goods to serve this market.

The Gold Rush created many new population concentrations, markets, trails and roads in Northern California, and by mid-1849, these were connected together by a few, poorly maintained axial roads. Commodities and equipment came by boat to Sacramento River ports and then had to be transported north by pack train. Marysville became a major staging area for pack trains and passengers north (Dyke 1932:60), and mule trains and freight wagon companies were quickly organized. The Sutter-Lawson Road became the principal route to and from central California and the gold fields. The Marysville-Shasta Road linked three pre-Gold Rush trails (the Marysville Road or "Sutter-Lassen [Lawson] Road," the Chico-Marysville Road, and the Chico-Tehama Road), into a single broad dirt track which progressed north out of Marysville, then known as the "Queen of the Valley," along the west bank of the Feather River, then overland across Butte Creek to Bidwell's Rancho Chico, north to Lassen's Bentonville/Rancho Bosquejo, then to a ferry crossing over the Sacramento River at Tehama, and on to Red Bluff (Hardwick and Holtgrieve 1996:120). Initially, mules and ox carts dominated commerce along the Marysville-Shasta Road (Johnson 2001:15). Like Bidwell, a number of existing landowners adapted to the new traffic by establishing crude inns or hospices along the road, offering meals and drink for the drivers and packers, a place to sleep, and fodder for animals (Johnson 2001:15).

The first Marysville-Shasta Road stage line was established by James Birch in 1849. Two types of vehicles were used to transport passengers, the springless passenger wagon and the commodious Concord Coach (Dyke 1932:32, 53). The American Coach from Concord, New Hampshire first appeared in California in late 1850. The coach could seat nine passengers inside, twelve more outside, with cargo holds front and rear. In the spring of 1851, the California Stage Company secured mail contracts, which made it immediately profitable to run stagecoach lines on both the Tehama and Shasta roads.

A second stage line was established by Hall and Crandall in 1852. This stage line crossed the Sacramento River at Tehama and on to Marysville. The Hall and Crandall firm was awarded the contract to carry the U.S. Mail from Sacramento to Shasta City in June 1852 (Dyke 1932:35–38; Hardwick and Holtgrieve 1996:120). Commerce along the road continued to expand. By 1853, the Hall and Crandall Stage Line had 150 horses and 12 coaches in service, valued at \$50,000. By 1853, there existed seven express companies supplying mule, oxen, and horse teams, and 20 individual mule train owners providing service to the northern mines from Marysville, with more than 4,000 mules between them. The mule trains could travel about 25 miles in one day (Dyke 1932:61–66). Ultimately, the pack trains were superseded by wagons and prairie schooners, which entered the state as new roads were constructed over the mountains. The demand for better roads increased as more and more people began to travel in California.

The Rancho Headquarters as Treaty Grounds, 1851

In 1847, the military governor of the newly secured territory of California identified regional Indian agents to conduct surveys and identify measures to maintain peace. In Northern California these agents were the same rancho bosses who controlled the labor of thousands of Indians in the last decades of Mexican rule, initially including John Sutter, subagent for the lower Sacramento/upper San Joaquin area, and Mariano G. Vallejo, subagent for the region north of San Francisco Bay (Ellison 1922:41–42). In 1847, John Bidwell was commissioned to survey the population, geography, and condition of Northern California Indians. These new commissioners defended the rancho system of forced labor and recommended legal measures to institutionalize and adapt it to the American form of governance. Many of these measures were enacted after statehood (see below). In 1848–1852, a relentless and destructive wave of Gold Rush-era depredations to Butte County Maidu individuals and communities occurred. Although these events are not enumerated here, several sobering volumes detail the institutional and pervasive discrimination that resulted in the genocide, murder, rape, slavery, and starvation of Northern California Indians during this era (Cook 1955, 1976; Heizer 1979, 1993; Heizer and Almquist 1971; Hill 1978; Magliari 2012; Phillips 1981; Rawls 1984; Smith 2013; Trafzer and Hyer 1999). Gillis and Magliari (2003) and Shover (1998, 1999, 2000) provide detailed accounts of John Bidwell's role in these events.

Aware of these depredations statewide, in 1850, the U.S. congress made appropriations, and the President directed the Secretary of War to identify special agents and commissioners to undertake on-the-ground investigations in the far west, resulting in reports that at once identified the harsh realities of the treatment of Indians on the California frontier, yet also spoke to the issue from a deeply bigoted and martial perspective. The U.S. government enacted laws denying suffrage and rights of ownership of land to the Indians, and at the same time approved Acts to appoint new agents to secure treaties for reservation lands and identify depots for the distribution of assistance to Indians on the California frontier (Ellison 1922:47–49).

The three commissioners arrived in California and began work in mid-January 1851. They found the newly minted state's legislature and governor busy authorizing funds for troops to defend the frontier against Indian uprisings, lending urgency to their mission (Ellison 1922). The commissioners' first efforts focused on the San Joaquin Valley, and then in May they separated.

Commissioner O. M. Wozencraft reached Rancho Chico on or about July 30, 1851, with wagons and a mounted 53-man military escort including a major, two lieutenants, and 50 infantry. Wozencraft was in communication with Bidwell in the months before this visit, and Bidwell responded by directing his superintendent, Alex Barber, to map out a planned reservation area in the foothills to the east, and to visit Indian settlements in the valley and mountain districts around Chico and invite community leaders to attend the treaty summit and feast (Shover 2000; Figure 7). In response to Barber's invitation, some groups arrived at Rancho Chico three weeks early. On the day Wozencraft arrived, 300 or more Indians, including a mix of Maidu from rancherias located on major ranchos in the valley and Indians living in independent settlements in the mountains were waiting for him at Rancho Chico (Shover 2000; U.S. Court of Claims 1861, John Bidwell Deposition).



Figure 7. Photograph of the Rancho Chico Treaty Group, July 1851.

Top row: Maidu headmen, not identified; bottom row: left, Bidwell's superintendent Alex Barber, center, Treaty Commissioner Oliver Wozencraft, right, not identified.

Adapted from Smith (2013:2).

Shover (2011) indicates that the visiting Indians camped in a wooded area “across from” Bidwell’s Rancho Chico buildings, by which she probably meant the area to the east, across the Marysville-Shasta Road and in the vicinity of the Mechoopda settlement. Before Wozencraft’s arrival, Bidwell directed his workers to build a podium to draw attention to the speaker, and Bidwell supplied two interpreters, one the daughter of the Mechoopda headman and the other his long-time houseboy and interpreter.

The treaty offered the assembled Indians a reservation spanning approximately 227 square miles immediately east and south of Rancho Chico. Big Chico Creek and Upper Butte Creek at Nimshew formed the north boundary and the Feather River from Thermalito to Concow forming the south boundary. Wozencraft promised that signatories to the treaty would reap a bounty of individual and community goods and benefits:

[T]he United States, in addition to the few presents made them at this council, will furnish them, free of charge, with two hundred head beef cattle, (200,) to average in weight five hundred pounds, (500 lbs.) seventy-five sacks flour, one hundred pounds (100 lbs.) each, within the term of two years from the date of this treaty.

As early as convenient after the ratification of this treaty by the President and Senate, in consideration of the premises; and with a sincere desire to encourage said tribes in acquiring the arts and habits of civilized life, the United States will also furnish them with the following articles, to be divided among them by the agent, according to their respective numbers and wants, during each of the two years succeeding the said ratification, viz : one pair strong pantaloons and one red flannel shirt for each man and boy; one linsey gown for each woman and girl; 2,000 yards calico and 50.0 yards brown sheeting; 20 pounds Scotch thread and 1,000 needles; 6 dozen thimbles and 2 dozen pairs scissors; 1 21/2-point Mackinaw blanket for each man and woman over fifteen (15) years of age; 1,000 pounds iron; 100 pounds steel. And in like manner, in the first year, for the *permanent use* of the said tribes, and as their joint property, viz: 25 brood mares and one stallion; 100 milch cows and six bulls; four yoke work cattle, with yokes and chains; six work mules or horses; 12 ploughs, assorted sizes; 75 garden or corn hoes; 25 spades; four grindstones.

The United States will also employ and settle among said tribes, at or near their towns or settlements, one practical farmer, who shall superintend all agricultural operations, with two assistants, men of practical knowledge and industrious habits, one carpenter, one wheelwright, one blacksmith, one principal school teacher, and as many assistant teachers as the President may deem proper, to instruct said tribes in reading, writing, &c., and in the domestic arts upon the manual labor system; all the above-named workmen and teachers to be maintained and paid by the United States for the period of five years, (5,) and as long thereafter as the President shall deem advisable.

The United States will also erect suitable school houses, shops, and dwellings for the accommodation of the school teachers and mechanics above specified, and for the protection of the public property.

In accepting these terms, the signatories would provide the U.S. government right-of-way: over any portion of said territory, and the right to establish and maintain any military post or posts, public buildings school-houses, houses for agents, teachers, and such others as they may deem necessary for their use or the protection of the Indians.

The treaty also stipulated that:

The said tribes or bands, and each of them, hereby engage that they will never claim any other lands within the boundaries of the United States, nor ever disturb the people of the United States in the free use and enjoyment thereof. [U.S. Court of Claims 1861; Exhibit C, punctuation original]

In 1858, Bidwell was deposed in a federal claim dispute concerning cattle supplied to this and other Wozencraft treaty meetings around the state (U.S. Court of Claims 1861, John Bidwell Deposition). Bidwell's testimony sheds light on his misgivings about Wozencraft's conduct and expressed his lack of confidence in the value of the effort itself:

The Indians asked him when they were going to get all these things, and my impression was that they understood these things to be present in the baggage wagons which belonged to the escort...from what occurred

immediately after I was convinced the Indians did not understand, for they commenced a great clamor for the blanket, shirts, pantaloons, &tc, which he had promised them; when they found that they were not there they left the ground without much ceremony and started off. [U.S. Court of Claims 1861, John Bidwell Deposition, punctuation original]

Bidwell's concerns were echoed by Heizer (1972), who argued that Wozencraft and his fellow commissioners lacked practical knowledge of California Indians and did not comprehend the nature of their small-scale social and political organization:

most of the so-called tribes were nothing more than villages. We can also assume that men listed as "chiefs" were just as likely not to be chiefs, or at least tribelet heads who are called chiefs by anthropologists. Further, since land was owned in common, even chiefs had no authority to cede tribelet or village lands. [Heizer 1972:4]

The record is murky as to who left and who stayed at the Rancho Chico treaty gathering. Shover (2000) indicates that Bidwell went among the leaders and convinced many to stay; Hill (1978:23), citing an interview with Maidu elder Henry Azbill, indicates that at least one of the mountain groups refused to sign and then left. The entire proceedings, Wozencraft's entrance and presentation, and the treaty negotiations occurred in the span of two to three days. The treaty was signed by nine individuals on August 1, 1851, and witnessed by a major, a lieutenant, and Bidwell himself. Belying his endorsement, Bidwell later confessed that he considered the treaty land "barren and worthless," and that he believed the arrangement doomed to failure; with limited resources present on treaty lands, instability and government dependence would ensue. Bidwell's testimony regarding his concerns put his concepts of labor and reward clearly on display:

I conceived it an injury to give the Indians beef when not employed, because they had enough of their native food. I thought it would have a tendency to make them more idle and vicious... Wozencraft's proceedings rendered these Indians less valuable to me as laborers, and a greater nuisance to the community generally. [U.S. Court of Claims 1861, John Bidwell Deposition]

The presence of American claims and interests, objections about the dedication of too much land to tribes, and concerns about the peace and stability of nearby Anglo-American communities led to strong opposition to the California Treaties. The treaties reached Washington in February 1852, and the California congressional delegation strongly opposed ratification. The California Treaties were rejected in committee in June 1852 (Heizer and Almquist 1971:65-79).

Rancho Complex Burned, 1852

The mountain groups were angered by the empty promises made by Wozencraft, and harbored resentment toward Bidwell for his part in the treaty farce. Rancho Chico continued to see visits by the mountain groups who sought the goods and lands promised by Wozencraft, and the mountain Indians exacted revenge on the Mechoopda settlement and ultimately, on Bidwell and his Rancho Chico operation.

The mountain group's ensuing martial actions against Bidwell and Rancho Chico can be seen as part of a series of conflicts perpetrated against the Mechoopda of Rancho

Chico during this period, in which Bidwell became engaged. In his *History of Butte County* George C. Mansfield relates this story:

As early as 1850, General Bidwell, assisted by Michael Nye, then a famous Indian fighter and a popular man among the whites, joined with the Indians of the Bidwell Rancheria in pursuing a band of mountain Indians, who had attacked the Bidwell Indians. On a narrow trail between Butte Creek and West Branch, Nye was shot and killed with an arrow. Bidwell himself had a narrow escape from death. [Mansfield 1918:185]

Building on their frustration over the 1851 treaty, the mountain Indians raided Rancho Chico in June 1852, making off with several head of cattle. Determined to avoid the indiscriminate retribution common at the time, Bidwell deliberately sought to learn the specific identity of the perpetrators, and after securing this information in July 1852, assembled a posse to pursue the thieves in the upper Chico Creek watershed. Aiming to single out and remove the perpetrators for legal trial, the posse came under attack and Bidwell called a retreat. In the exchange, 11 Indians and one of Bidwell's ranch foremen were killed. Bidwell was the target of local derision for the failure, and the battle also emboldened the mountain Indians who twice attacked Rancho Chico in the month following. In the second of these attacks, in August 1852, the Rancho Chico headquarters was attacked and burned, consuming Bidwell's the cabin built in 1849, as well as a stable, a grain warehouse, one or more buildings containing a general store, office, kitchen and dining room, and a carpenter shop. The property loss included a stack of approximately 5,000 board feet of sawn lumber intended for a new residence, 3,000 bushels of grain, farm equipment, and store goods (Gillis and Magliari 2003:258–259; State Parks 1983:11).

COMPONENT 4: RANCHO EXPANSION AND DEVELOPMENT (1852–1868)

In 1852, Bidwell began a major new building phase. The following offers a synthesis of documentary and photographic records of the structures and buildings of the 1852–1874 Rancho Chico headquarters, focused on the lands now forming the Park. Three documents dating 1855, 1857, and 1858 provide an excellent inventory of Rancho Chico buildings, their purpose, construction, and dimensions, cited below (*Sacramento Daily Union* 1855; California State Agricultural Society 1857, 1858). Photographic analysis has been successful in locating these building in relation to one-another and to modern features. All of the buildings described below have are represented by one or more physical descriptions contained in contemporary accounts, and all of the buildings appear in one or more period photographs, taken in the years 1854 to 1868. Photographic analysis was particularly useful in locating the buildings. Certain of the photographs bear images of two or more buildings, and some of these buildings appear in two or more photographs from different angles, making it possible to use “line-of-sight” triangulation. One of the photographs was particularly useful in this exercise; a panoramic photograph shot circa 1858 (Figure 8). It should be noted here that the CSU, Chico Meriam Library Northeast California Special Collections as well as the Park Visitor Center lists this photograph as 1854, while another copy placed on file in Special Collections by Ted Meriam identifies the image as circa 1856. Based on a variety of details noted below, the weight of the evidence actually places the photograph in 1858. In particular, the photograph contains an image of



Figure 8. 1858 Overview Photograph of Rancho Chico.

This photo is essential to puzzling out the nature and locations of Bidwell’s Rancho headquarters building during Components 3 and 4 timeframe.

Courtesy of CSU, Chico, Meriam Library, Special Collections SC13244.

Bidwell’s Federal Adobe residence, built in 1858—a date established by the California State Agricultural Society report of 1857 which identifies the Old Adobe hotel as Bidwell’s residence (California State Agricultural Society 1857:20), while the report of 1858 lists the Federal Adobe as “a large new brick building about forty by one hundred feet, all two stories high” (California State Agricultural Society 1858:221). The 1858 overview photograph is essential to working out the details of Component 4 Rancho Chico building locations because the photo station can be identified. The 1858 photograph clearly depicts the Marysville-Shasta Road approach to the Big Chico Creek bridge, built in 1851 (see above). Several pieces of evidence allow us to plot the coordinates of this photo station and its line-of-sight bearing. The current Main Street feeder to the Esplanade and the Big Chico Creek bridge follow an identical route, traced back through generations of Sanborn maps (Sanborn Fire Insurance Company 1890, 1902, 1909, 1921, 1945, 1951, 1960, 1963, 1965). A Flour Mill built in 1853, visible in the far right in the 1858 image, also appears in late 19th-century Sanborn maps, where it held the same relationship to the road and bridge. Given this constant, it is possible to use line-of-sight viewpoints to plot the structures visible in the 1858 photograph on a modern map. The central focus of the 1858 photograph is the southeast corner of the Old Adobe, at approximate sill level. Ten buildings and structures are visible in the photograph, as follows.

Chico Store and Post Office

Taking advantage of the ready supply of customers coming off the Marysville-Shasta Road, Bidwell built the “Chico Store” in 1852. An 1857 publication describes this building as “a large wooden building, two stories high, the lower part used as a store and the

upper part as a Masonic Hall” (California State Agricultural Society 1857). Bidwell secured the local contract for postal services in 1851, and the store also housed the post office for the first few years of operation. Three photographs provide significant detail. The earliest photograph of the Chico Store is entitled “John Bidwell Distributing Goods to the Indians in 1852 at Rancho Chico” (Figure 9; Royce 1907:20). This image looks to the front of the building and catches an oblique view of the south side. A sign “CHICO STORE POST OFFICE” is prominent over the door, and the windows are shuttered. An enlarged portion of the 1858 overview image shows the Chico Store broadside from the south and provides a perspective on the front, facing the road (Figure 10). In this photograph a framed addition is clearly visible on the north side of the building, tucked under the rafter drop. The addition is flat-topped, and a separate window and door appears on the front, indicating the addition has a separate function. Another photograph entitled “Rancho Chico Buildings in 1858” (Figure 11) shows the store in relation to the Big Chico Creek bridge from the perspective of the south bank of the creek immediately south of the flour mill. The addition is indicated by a white patch that is visible through foliage. An 1858 description indicates the original Chico Store building measured 40 feet long by 24 feet wide (California State Agricultural Society 1858); based on photographs the building was 24 feet high at the peak. The addition appears to have added approximately 15 feet of width to the building. In all three photographs, field fencing surrounds the Chico Store plot and a picket fence on the north side separates the store from a row of cottonwood trees. The store building was reportedly torn down in 1860 (State Parks 1983:12).



Figure 9. From an Image Entitled “John Bidwell Distributing Goods to the Indians in 1852 at Rancho Chico.”

Adapted from a figure appearing in Royce (1907).



Figure 10. Chico Store Close-up from the 1858 Rancho Chico Overview.
Courtesy of CSU, Chico, Meriam Library, Special Collections SC13244.



Figure 11. Rancho Chico Buildings in 1858.
Adapted from a figure appearing in Royce (1907).

Old Adobe

The building identified as the “Adobe Residence” or “Mechoopda Adobe” by Baird (1966) and Hoover et al. (1991:36) and later identified by Bidwell himself as the “Old Adobe” was a two-story structure built in 1852 with an L-wing added by 1858. This adobe served as Bidwell’s Rancho headquarters, residence, and office through 1858, and contained a public hotel and bar. The Old Adobe is well represented in three period photographs and in the 1871 Bird’s Eye View map. The earliest is an enlarged portion of the 1858 overview image, which shows the Old Adobe broadside from the south and provides a perspective on the front, which faced the road (Figure 12).

It is two-story with a low-gabled single ridge roof. It is probably timber-framed adobe finished with plaster. The alignment of the tops of the doorframe and window headers suggests they are tied to longer support lintels. Second floor joists extend out from the walls approximately five feet and tie to external vertical timbers to support a planked second-story veranda on the south and east sides. The external timbers on the south wall appear to be approximately 18 x 18 inches and 20 feet in length, set at six-foot centers and tied to 18-x-18-inch headers which in turn support the roof rafters and a significant overhang sheltering the veranda. With respect to the overall dimensions of the structure, an 1858 publication describes the Old Adobe as “a dwelling and hotel, thirty by fifty feet” (California State Agricultural Society 1858:221).

If one assumes that the door frames visible on the south-facing wall of the structure are a standard 3.0 x 7.0 feet, then extrapolating to the adjoining wall the structure measured approximately 24 feet high at the peak. An 1857 publication indicates the Old Adobe had 25 rooms (California State Agricultural Society 1858:221).

In all three photographs—and in the Birds-Eye View map—the L-addition is clearly visible on the north side of the building. The L-addition was one-story, windowed, and had



Figure 12. Enlargement Showing the Old Adobe Hotel,
from 1858 “Rancho Chico Buildings.”

Courtesy of CSU, Chico, Meriam Library, Special Collections SC13244.

separate door entry. It was low gabled with a single-ridge roof. An 1858 publication calls the L-addition a “wing sixteen by fifty feet” (California State Agricultural Society 1858:221). In all three photographs the main structure and L-addition are painted bright white and door and window frames an indeterminate darker color.

Two photographs are from the 1860–1868 time frame (Figure 13 and Figure 14). In both, the Old Adobe appears unchanged from 1858 in basic structural make-up. However, the grounds around the Old Adobe are altered. In the 1860–1868 photographs, the picket fence dividing the Chico Store from the Old Adobe is gone, as are the field fencing and separate entrance gate and road to the store. This is consistent with documentary evidence that the store was demolished in 1860. In the 1860–1868 photographs, a white rail fence graces the Marysville-Shasta Road front with a single, gated entry point visible immediately southeast of the Old Adobe. This fence pattern and the adobe’s location and orientation are consistent with the 1871 “Bird’s Eye View of Chico” map, shown here in close-up (Figure 15). Both photographs were probably taken after the Mansion was built or mostly built, sometime between 1866 and 1868. The Old Adobe hotel contained Bidwell’s residence and offices until the 1858 completion of the federal-style residence described below. According to the 1983 General Plan, the adobe was demolished in 1872 (State Parks 1983:12). Bidwell’s diaries indicate that a granary and warehouse built in 1874 across Tehama Road from the Mansion was built on a seven-foot-wide, multi-tiered foundation of adobe bricks “from the old building,” presumably the demolished Old Adobe. A diary entry on December 14, 1889 indicates that Bidwell’s ranch hands were “hauling to fill old adobe hole.”



Figure 13. Old Adobe in Undated Photograph, probably circa 1860–1868.

Courtesy of CSU, Chico, Meriam Library, Special Collections SC4078.



Figure 14. Old Adobe from Big Chico Creek, circa 1868.
Courtesy of CSU, Chico, Meriam Library, Special Collections SC17297.

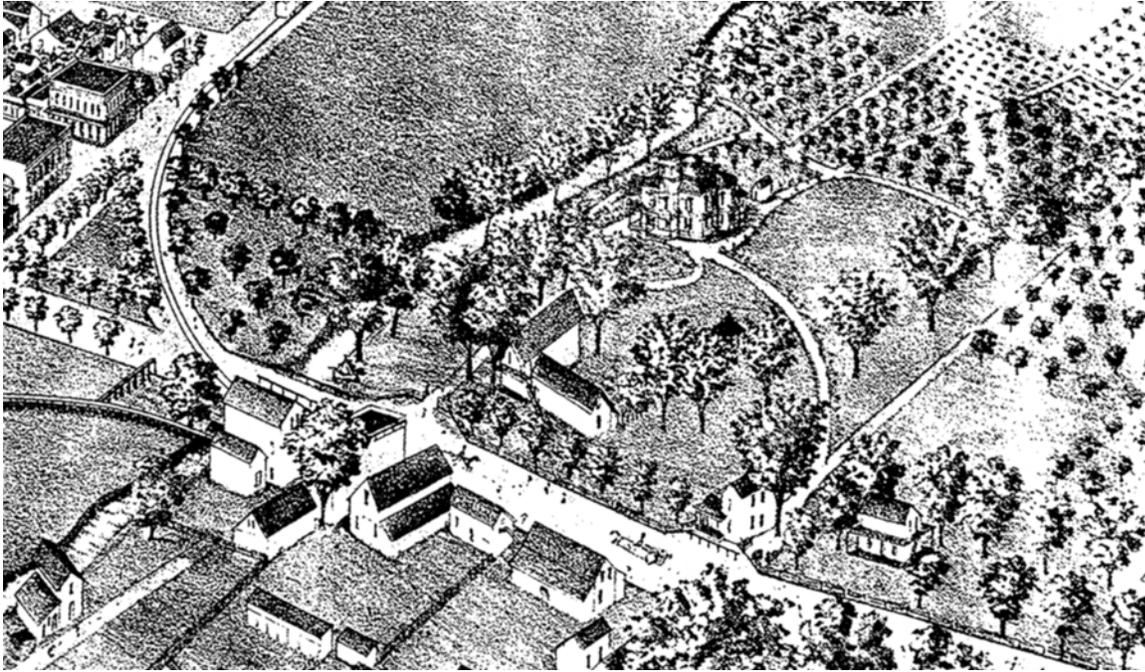


Figure 15. Close-up from “Bird’s Eye View of Chico, California.

Courtesy of CSU, Chico, Meriam Library, Special Collections G4364.

Federal Adobe

The term “Federal Adobe” is adopted here in order to avoid confusion with the Mechoopda Octagon building, described below. Baird (1966) and Hoover et al. (1991) do not mention the Federal Adobe and may have confused the Federal Adobe with the Old Adobe; the State Parks General Plan identifies the building and says it was built “by 1857” (State Parks 1983:12), but based on the 1858 State Agriculture Society description noted below, it is more likely to have “begun by” 1857. Documentation and photographs consulted for this investigation provide a “built by” date of 1858, and primary among these are an 1857 Rancho Chico building inventory which identifies the Old Adobe hotel as Bidwell’s residence (California State Agricultural Society 1857:20), while the report of 1858 lists the Federal Adobe as “a large new brick building” (California State Agricultural Society 1858:221). Returning to the 1858 Rancho Chico overview photograph, the roof of the Mechoopda Adobe can be clearly seen poking up above the Chico Store (Figure 16). Two more photographs taken in the 1866–1868 time frame provide additional detail and fix the structure’s location. One of these photographs is taken from the south bank of Chico Creek looking true north, approximately oriented along the present-day footbridge (Figure 17). The other photograph was taken looking east toward the Marysville-Shasta Road from a location northwest of the Mansion, probably from the front of the stables, described below (Figure 18). The photographs indicate that it was a classic federal-style, two-story structure characterized by a gable-style roof, double end-chimneys, and a large center-gable front on the east side, toward the road. There is a white painted exterior lintel rail and frieze just below the eave on the south end, but it is not known if it encircles the building. No corner boards, crown moldings, or roof trim can be seen in any of the photographs. The building



Figure 16. Detail from the 1858 Rancho Chico Buildings Overview.
Courtesy of CSU, Chico, Meriam Library, Special Collections P13244.



Figure 17. Bidwell Mansion under Construction circa 1866–1868
showing the Federal Adobe (right mid-ground).
Courtesy of Bidwell Mansion State Historic Park, Visitor Center.



Figure 18. Bidwell Mansion under Construction circa 1866–1868 showing SW Corner of the Federal Adobe (left mid-ground).

Courtesy of Bidwell Mansion State Historic Park, Visitor Center.

rear wall is characterized by slot windows. None of the photographs show the front, so additional details cannot be made out. Bidwell resided in this structure until 1868, when he moved into the completed Mansion and demolished the Federal Adobe:

Gen. Bidwell has commenced to reside in his new house, which is all completed. He has displaced the brick building standing near it. [*Daily Alta California*, June 2, 1868:1]

While not much is known about the Federal Adobe, the photographs are especially useful in placing its location on the grounds. Line-of-sight for the 1858 Rancho Chico overview photo places the Federal Adobe in line with the Chico Store at a bearing of N315°E (true) and both buildings are similarly aligned on an approximate true east-west axis (see Figure 8). The 1866–1868 photo from the south bank of Big Chico Creek shows the Federal Adobe approximately 30 feet forward of the Mansion's Italianate front portico and canted to the southeast relative to the Mansion (see Figure 17). The 1866–1868 photo from the rear places the Federal Adobe on or slightly north of a line formed by the Mansion's north wall (Figure 18).

Mechoopda Octagon

An article in the *Sacramento Daily Union* for November 29, 1855, provides one of the most comprehensive early descriptions of the Rancho Chico headquarters, highlighting the most interesting structure of all, the “Mechoopda Octagon,” or “Pow-wow Castle”:

last, but not least, a most unique building for the accommodation of those Indians who are constantly employed on the Ranch, either as house servants, teamsters, shepherds, or vaqueros—in all, about 80. This latter building is of adobes, and consists of a large octagonal towerlike house; or, as it is called in familiar phrase “Pow-wow Castle,” thirty feet in diameter and twenty feet high, with two wings thirty or forty feet in length, running at right angles. The latter contain a number of sleeping rooms for those who have wives. The former, or castle part, is in one room, from the pavement to the roof. Here the Indians build their fire in the center, and cook their *shemuk* or food, in their own way. The top is entirely covered, and the smoke issues through round port holes, which to the traveler appear like the dark mouths of so many cannon, pointing in all directions. The exterior is painted white and penciled with red, and presents a decidedly neat and grotesque appearance, standing, as it does, on the very banks of the crystal stream. The design of this building, it is easy for the careful observer to divine. The comforts of civilized life are so harmonized with the peculiar customs of the California Indians, as to render him reconciled to, if not pleased with his condition. He cannot help seeing and feeling the superiority of his home, over the wretched dens of the wild Indian. [*Sacramento Daily Union* 1855]

Two 1857 publications provide confirmations and brief descriptions of the building:

His Indians live in a cluster of substantial adobes, arranged in the form of a cross. [*California State Agricultural Society* 1857:20]

There are fifty Indians attached to Bidwell’s Ranch, and all trained. A very excellent brick house is erected for their comfort, and they fare well. A large, triangle is used to call the Indians; one stroke upon it calls the first garden boys; two strokes calls the second garden boys; three strokes calls Indian boys. [*The California Farmer* 1857]

A Gold Rush pioneer provides additional detail:

He had an Indian village not far from his residence built of adobe houses, trees set out in the village and ditches through the village to carry pure water from the mountains. Trees were set out along these ditches which made the Indian village very pretty. [McIlhany 1908:39]

The Mechoopda Octagon—and its distinctive portholes—is visible in the 1858 Rancho Chico overview photo, between the Chico Store and Old Adobe (Figure 19). This position placed the worker quarters close to the granary, smithy, stable, orchards, and fields to the west of Rancho headquarters and away from the public facilities to the east, including the hotel, bar, and store, and at the greatest possible distance from the Marysville-Shasta Road and Mechoopda settlement, which in the 1858 time frame would have also been even further east of the Marysville-Shasta Road. It is also notable that the Mechoopda Octagon was immediately north of Bidwell’s Federal Adobe residence, placing Bidwell himself as a



Figure 19. Detail from the 1858 Rancho Chico Buildings Overview showing the Location of Mechoopda Octagon Structure and Distinctive Portholes.

Courtesy of CSU, Chico, Meriam Library, Special Collections P13244.

buffer between the workplace and what he would have perceived as public and family distractions. This is consistent with Bidwell's segregation of workforce versus non-workforce Indians, borne-out by his own testimony. Referring to the Mechoopda settlement upstream and east of Rancho Chico headquarters, Bidwell offered that:

[t]here was only one Indian village there, containing about a hundred Indians—men, women, and children—altogether. [U.S. Court of Claims 1861, John Bidwell Deposition, answer, 36th Question]

And, this was distinct from his cadre of workers:

I had a number of Indian boys constantly with me that belonged to that village; the grown Indians did not work much for me except for a week or two in the harvest. [ibid., answer, 38th Question]

Given that Bidwell's testimony pertained to circumstances in 1851 and the four to six years passed to get to the date of the published observations, it is reasonable that some of Bidwell's 1851 "boys" were married and required the expanded quarters by 1855.

Construction methods for the Mechoopda Octagon and its two wings cannot be determined from the blurry photograph; nevertheless, description of the octagon as "brick" and Bidwell's propensity for building large adobe structures during this time period indicates the Mechoopda Octagon was also built in timber-framed adobe. The 1858 overview photograph indicates the building was painted white, and the octagonal dome roof appears to be surmounted by a cupola, or large vent. The low-lying north wing is also visible in the 1858 overview photograph, following an orientation similar to the other buildings. The second wing "at right angles" presumably pointed west but is not visible in the 1858 overview photograph.

Granary

The 1855 *Sacramento Daily Union* article quoted above identifies "a spacious store house, surmounted by a cupola, from which a delightful view of the Ranch and surrounding country may be had" (*Sacramento Daily Union* 1855). An 1857 publication describes a "granary...two stories high" (California State Agricultural Society 1857:20), and an 1858 publication identifies a "hay barn, thirty-five by one hundred feet" (California State Agricultural Society 1857:20). Annie K. Bidwell identifies one of the pre-Mansion buildings as a granary 100 feet in length located "where the south part of the mansion is now" (Annie K. Bidwell in Hill 1980:68). A high-resolution scan of the 1858 Rancho Chico overview photograph yielded a solid fit (Figure 20). The building appears in the photograph's left background, and the cupola surmounted by a flagpole is clearly visible. It is oriented on an east-west axis, and appears to be about one-half as wide as it is long, presumably 50 x 100 feet. The building is not visible in any other period photograph. Line-of-sight analysis is aided by the position of other two buildings shown in the 1858 photograph, a salt box style plank shed and attached low adobe structure located on the north creek bank, along the line-of-sight alignment with the Granary (Figure 20). Both of these sheds are also visible in the 1866–1868 photograph taken from the south bank of Chico Creek (see Figure 17), where their location can be understood relative to the Mansion. The 1866–1868 photograph shows that the low adobe building, on the left margin of the 1858 photo, was aligned slightly east of the Mansion portico. Fixing the location based on the 1858 line-of-sight buttressed by the



Figure 20. Detail from the 1858 Rancho Chico Buildings Overview showing Various Locations.

Bidwell's 1855–1864 grain warehouse is in the left background, the stable is in the right background, and the smithy is in the right of the middle ground.

Courtesy of CSU, Chico, Meriam Library, Special Collections P13244.

1866–1868 shed view places the Granary precisely where Annie Kennedy claimed, overlapping the kitchen at the rear of the Mansion (see below).

Stable

Two more buildings are visible in the 1858 photograph, located in the same area on the west edge of the Rancho Chico headquarters (see Figure 20). One of these is north of the and at right angles to the Granary. The Annie K. Bidwell recollections mention a stable near the granary (Annie K. Bidwell 1913 in Hill 1980:68), and this building appears to be a good fit. It has a low-gabled roof similar to the granary and a large center gable on the east side like the Federal Adobe. It appears to have been built on approximately the same plan as the granary but oriented north-south. The 1855 *Sacramento Daily Union* article does not mention a stable, and it may be, like the Federal Adobe, the stable had not yet been built in 1855 but was present for the 1858 photograph. An 1857 publication identifies what is probably the stable: “very large and airy, and contains stalls for twenty-five head of stock” (California State Agricultural Society 1857:221). An 1858 publication mentions a “carriage-house, with barn overhead, twenty by fifty feet” (California State Agricultural Society 1858:221).

Smithy

Along the same line-of-sight as the stable, a low-lying, dark building is visible in the middle distance. It appears to be single-story and open, essentially a pole-barn on the south end nearest the observer; it may be enclosed on the north end (see Figure 20). Based on line-of-sight analysis, this building was located about halfway between the Federal Adobe and a line formed by the front walls of the granary and Stable. This is interpreted as Bidwell’s smithy, described in a *Sacramento Daily Union* article as a “blacksmith’s, carpenter and wheelwright’s shop” (1855). An 1857 publication identifies a “blacksmith shop, and wagon-maker’s shop, are built of adobes, and are all two stories high” (California State Agricultural Society 1857:20), and an 1858 publication also mentions a “wagon and blacksmith shop, twenty-two by thirty feet” (California State Agricultural Society 1858:221). No additional construction details can be ascertained.

Additional Structures and Sheds

Three small sheds are visible in photographs spanning the north bank of Big Chico Creek. In the 1858 overview, a plank shed and attached low adobe building are visible in the left middle ground. In the 1866–1868 south bank photograph, the low adobe building is evident in the right foreground, and a second plank shed is visible in the left middle ground. The low adobe structure is the most interesting of the three. In both photographs, a tree with a distinctive, twisted trunk marks the south wall (Figure 21 and Figure 22). In the 1866–1868 photograph it is apparent that the adobe is in disrepair, partially collapsed and vertically fissured. The small adobe appears to have been timber-framed and single-brick thick, with a steep, shake roof perhaps truncated-hipped in form. According to Annie Bidwell, after the 1852 attack which left John Bidwell’s operation burned to the ground, “[a] temporary shed was built on the bank of the creek, where the footbridge is now, for shelter” (Annie K. Bidwell 1913 in Hill 1980:68). This shed was Bidwell’s temporary residence until the Old Adobe was completed, where he took up residence and established an office. Based on line-of-sight analysis, the low adobe structure was indeed just 25 feet east of the



Figure 21. Detail from the 1864–1868 South Bank Photograph (top).

Courtesy of Bidwell Mansion State Historic Park, Visitor Center.

Figure 22. Detail from the 1858 Rancho Chico Buildings Overview (bottom).

Courtesy of CSU, Chico, Meriam Library, Special Collections P13244.

current north abutment of the pedestrian footbridge. Notably, the 1855 *Sacramento Daily Union* article cited above states that “[t]he principal improvements which attract the attention of the passer-by, have all been made since the year 1851; but one small house of prior date is standing on the premises” (*Sacramento Daily Union* 1855), and a link here seems likely.

Additional buildings are indicated by the documentary record but not yet correlated with photographed features. For example, an 1855 publication mentions two buildings: “[a] few hundred yards from the Major’s dwelling [Old Adobe] is what is familiarly styled the ‘chicken ranch,’ an establishment fitted up expressly for the raising of fowls” and “[Q]uite lately the Major has erected. . . a very tasty garden house” (*Sacramento Daily Union* 1855:1). The latter may also be identified in an 1858 publication, which mentions “a cottage for his gardener” (California State Agricultural Society 1858:221).

Bahapki: Re-Settlement Near Bidwell’s Headquarters

After 1852, on the heels of the failed Wozencraft treaty, conflicts between Anglo Americans and Native Americans escalated and intensified in Butte County. U.S. Government measures failed to produce a solution.

In 1853, the U.S. Congress authorized funds to form the Nome Lackee Reservation, located across the valley in the coast range foothills 20 miles west of Corning (Allen 1967; Barnes 1978; Hislop 1978). In 1854, a military post was established at the location. By August 1855, in a series of military actions known as the “First Indian Removal,” 1,000 Native Americans from Feather River and the west and east sides of the Sacramento River had been moved to the Reservation. By 1857, the Reservation housed 2,500 individuals, including many members of mountain tribes in constant conflict with Anglo American settlers. The reservation was temporarily successful but foundered on the U.S. government’s failure to meet commitments, resulting in increasing ill health and starvation experienced by reservation residents. By 1860, groups began to drift off. By 1863, few were left in the confines of the reservation. Beginning in 1870, the government put the land up for auction. Many of the Native Americans displaced by the failure of Nome Lackee returned to Butte County where few found homes or work, and all found a growing Anglo American population increasingly hostile to their presence.

A number of factors conspired to physically marginalize local Maidu. Epidemics of cholera, typhoid, malaria, smallpox, pneumonia, influenza, and diphtheria swept through Maidu populations leading to 3,500 deaths by disease by 1865. Most at this time also found themselves homeless and landless, a product of empty treaties, failed reservations, and the break-up of the old rancho system as owners of the large estates sold off lands and new owners drove out the Maidu from long-time settlements, some located on traditional village grounds occupied for hundreds if not thousands of years. The displaced people faced constant, deep, and abiding racism. During this same period, Anglo American on Native American homicide accounted for another 500 deaths (Cook 1976:255–277). Rare instances of Native American retribution were met with overwhelming, brutal, and indiscriminate Anglo American reprisals. Anti-Indian sentiment in Butte County ran rampant. Editorials in Chico, Red Bluff, and Marysville newspapers called for all-out war and scalp bounties. For example, one local newspaper ran an editorial demanding extermination:

The man who takes a prisoner should himself be shot. It is a mercy to the red devils to exterminate them, and a saving of many white lives. Treaties are played out—there is only one kind of treaty that is effective—cold lead.
[*Chico Weekly Courant* 1866]

A series of conflicts in 1863 culminated on July 5 in the murder of two Anglo American children by Native American perpetrators in the mountains 12 miles east of Chico. This precipitated a watershed confrontation carried out by a local militia with Secessionist sentiments, which commenced to scour the region, seeking to round up or murder every Native American in Butte County. On July 26, Bidwell, in communication with Indian agents, agreed to harbor more than 100 Native Americans from Feather River Rancherias at his Bidwell Landing on the Sacramento River six miles west of Rancho Chico headquarters. As the militia's sweep continued, Bidwell was fearful for the fate of the Rancho Chico Native American families. Militia leaders then threatened to attack Rancho Chico and destroy his operations, forcing Bidwell to attend a meeting on July 27, where he promoted a distinction between the Rancho Chico Native Americans and all others, promising Rancho Chico people would stay productively engaged on his ranch. On July 31, Bidwell telegraphed the Commander of the U.S. Army Department of the Pacific, who dispatched a captain and 40 mounted troops to Rancho Chico. This troop established what would be called "Camp Bidwell" at the Rancho Chico headquarters, eventually augmented to include 100 men. According to Annie Bidwell's interview with William Conway and verified by Bidwell's Indian workers Bill Preacher, Jack Frango, and Chico Tom, the soldier's camp was located "where the cutting shed is now [1913], northeast of the Mansion" (A. Bidwell 1913 in Hill 1980:68), a facility tentatively identified in contemporary Sanborn maps (Sanborn Fire Insurance Company 1902, 1909) and outside Park property. The Rancho Chico Indians remained under military protection while the militia's war of extermination raged all around. On August 28, the California Superintendent of Indian Affairs attended another militia meeting and agreed to a forced removal of surviving Native Americans to the Round Valley Reservation in the North Coast Ranges 74 miles west of Chico. In this "Second Indian Removal," a U.S. Army force of 150 began to assemble Native Americans from the foothills and mountains, collecting them together with the group already established at Bidwell Landing, all with the express consent of Indian Affairs and the U.S. Army to leave the Rancho Chico Mechoopda community in place and under Bidwell's care. On September 4, 1863, the troops and 435 Native Americans began the long march to Round Valley, completed by just 277. Gillis and Magliari (2003:270–275, 302–304) provide a thorough and thoughtful analysis of these events from the perspective of Bidwell's actions and motives. Fascinating studies are also published by Hill (1978:30–42), Currie (1957), and Shover (2002a, 2002b).

The Chico town plat was laid out in 1860, and by 1863 the town was filling in on the south bank, near the Mechoopda settlement, and the Mechoopda settlement proved vulnerable to continued depredations perpetrated by the region's growing Anglo American population. Bidwell had the settlement moved to the north bank in an area farther from the town but still under his protection. Because the new settlement incorporated an amalgam of the survivors of the Second Removal, according to Maidu elder and historian Henry Azbill:

The older Maidu people called it Bahapki. In the Maidu Mechoopda dialect "bah ki" means to sift or separate. "Bahapki"—unsifted or mixed is the meaning of the designation by the Maidu for the latter-day community.

[Azbill 1971a:57]

Annie Bidwell left no doubt about the role of this new settlement as a refuge:

[Bahapki] was about one hundred yards from the mansion, whither it had been removed by my husband for the better protection of the Indians from the lawless white element ever incident to new settlements. [A. Bidwell 1896:205]

A variety of sources place this settlement immediately downstream from Bidwell's Rancho Chico headquarters on the north side of Big Chico Creek. Bidwell plotted the location in a handwritten letter written to Annie E. Kennedy (Bidwell) dated July 5, 1867, and on file at the Park and the California State Library in Sacramento (Figure 23). Comparison to later historical (1880–1920) and modern maps shows a close correspondence with modern creek meander features indicating that Bidwell plotted the Indian settlement immediately west of the Park grounds, on the CSU, Chico campus (see ahead to Figure 25).

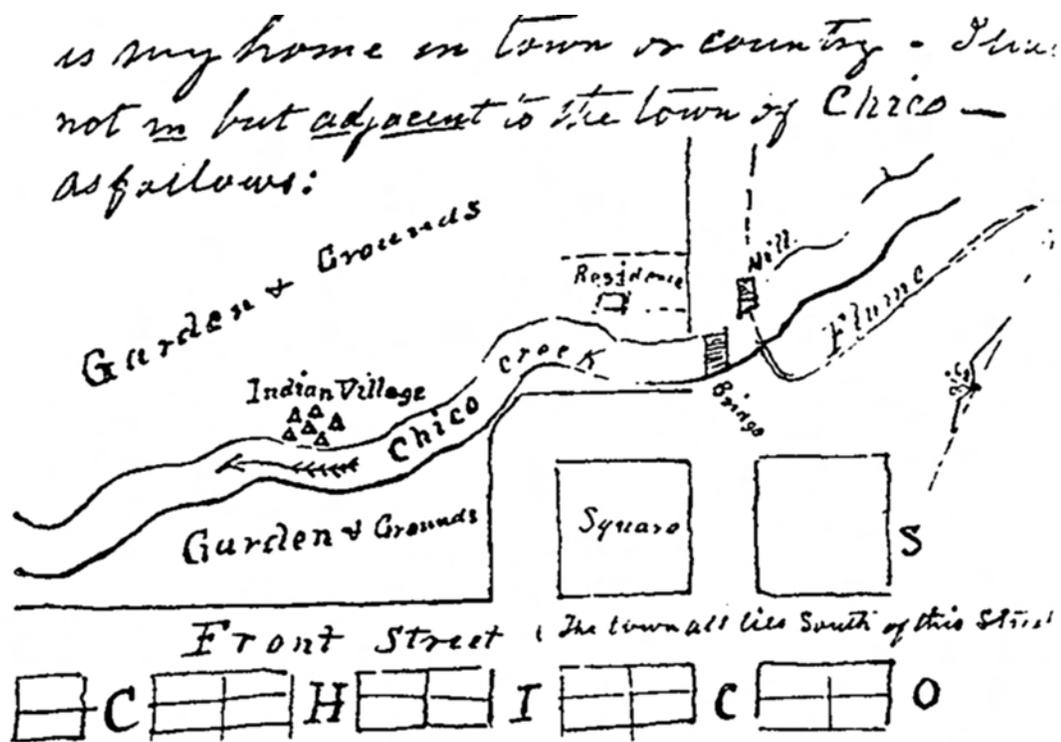


Figure 23. John Bidwell's Hand Drawn Map showing the Location of Bahapki, 1867.

Dorothy Hill (1978) reports the discovery of archaeological materials in this area, found in the bank of Chico Creek in 1968. According to Hill, CA-BUT-295, was a protohistoric site located on the north bank of Chico Creek approximately 250 meters southwest of the Mansion, in the vicinity of the current Alumni Glen and west wing of Holt Hall. Hill's visit to the site in 1968 predated construction of Holt Hall. At the time of her visit Sowelleno Avenue (now Sol-wil-le-no Avenue) bisected the site. Hill found clam shell disc beads, a magnesite bead, glass beads, as well as glass, metal and china fragments.

Despite the overwhelming social forces at play-acting against traditional practices, the Bahapki residents persevered. A. K. Bidwell recalled Bahapki in 1896:

The houses were principally earthen, the few frame ones being the result of my husband's persistent efforts to civilize them. The earthen ones were made by excavating the earth in a circular form, and roofing it with a dome supported by saplings bound together and thatched with straw and grass and the excavated earth. A circular opening in the center of the dome served as chimney, ventilator, and door; a ladder of saplings, for stairs; a fagot fire for cooking and heating...I have seen comfortable bunks of saplings encircling the room. [A. K. Bidwell 1896:205]

Annie Bidwell provides fine detail that could guide future archaeological survey of the Park grounds and vicinity:

Here and there lazily curled the smoke from fagot fires on which smooth stones were heating wherewith to cook acorn soup and bread, and other luxuries. Shallow circular depressions, some two feet in diameter, were made in the sand for washing the acorn meal, to remove the bitter, astringent properties. The acorns after being dried were pulverized in stone mortars of rude construction with stone pestles, and put into these shallow cavities. Water was then repeatedly poured on till the bitterness was gone. Then with the finger the dough was marked into squares, lifted by one hand, and the adhering sand removed by a dexterous application of water with the other. It was then transferred to the heated stones on which fresh grass or leaves were hastily laid to receive it. Then another handful of grass on top of the dough, and hot stones upon that, until it was baked. My husband says they also made the dough into balls and put it into holes in the ground, previously heated, and added stones on top. The meal not made into bread was diluted with water and boiled into soup in large water-proof baskets of beautiful shape and ornamentation, made of grass roots, wild simlax, and certain shrubs. The stones were lifted from the fire with two long pointed sticks, dipped into a basket of water to remove the ashes, then dropped into the soup and on cooling returned to the fire. This was repeated until the soup was thoroughly boiled, bubbling like a mud geyser. The very aged still adhere to some of the old customs. [A. Bidwell 1896:205–206]

After Annie's 1868 arrival and settlement into the Mansion as Bidwell's new wife, John Bidwell "placed the village in her care" (Azbill 1971a:57). Despite an epicurean appreciation of traditional lifeways apparent in the quote above, the tribe experienced the consequences of the asymmetry between the resident's traditional ways and A. K. Bidwell's stringent Protestant leanings and assimilationist views (Azbill 1971a, 1971b; Jacobs 1997).

One year after her arrival, in March 1869, owing to her discomfort with noise emanating from Bahapki village, Annie Bidwell had Bahapki dismantled and rebuilt one mile west, along Sacramento Avenue, which was then along the principal route to Bidwell Ferry and Bidwell Landing. However, Annie Bidwell continued to lead activities including religious and technical training involving Indian girls in and around the Mansion until her death in 1920.

SUMMARY

Table 1 provides a list of the 17 potential feature elements described above. The locations and approximate dimensions of structures and buildings present on the grounds circa 1858 are depicted in Figure 24. The locations and names of Native American settlements inhabited by groups employed and protected by John Bidwell appear in Figure 25.

Table 1. List of Pre-Mansion Rancho Chico Buildings, Structures, and Features Determined by this Analysis.

BUILDING/STRUCTURE	DIMENSIONS (ESTIMATED)	COMPONENT/ERECTED	RAZED
Mechoopda Settlement	Unknown	Components 1&2/Pre-1848	1863
First Bidwell Cabin	Unknown	Component 3/1849	1852
Clapboard House	Unknown	Component 3/by 1850	1852
Stable Shed	Unknown	Component 3/by 1850	1852
Treaty Grounds	Unknown	Component 3/1851	1851 (estimate)
Temporary Adobe	30 x 10 ft	Component 3/late 1852	1868 (estimate)
Federal Adobe	40 x 28 ft	Component 4/by 1858	1868
Old Adobe	M 48 x 24 ft; L 16 x 50 ft	Component 4/1852; L addition by 1858	1874–1884
Chico Store & P.O.	30 x 45 ft (w/ addition)	Component 4/1852; addition by 1858	1860
Mechoopda Octagon	Oct. 30 ft diam.; 35 ft 'L's	Component 4/by 1855	1865 (estimate)
Granary	100 x 50 ft	Component 4/by 1855	1865 (estimate)
Smithy	50 x 25 ft	Component 4/by 1855	1865 (estimate)
Stables	100 x 50 ft	Component 4/by 1855	1865 (estimate)
Plank Shed (upstream)	30 x 20 ft	Component 4/by 1858	1868 (estimate)
Plank Shed (downstream)	20 x 15 ft	Component 4/by 1858	1868 (estimate)
Camp Bidwell	Unknown	Component 4/1863	1863
Bahapki Settlement	Unknown	Component 4/1863	1869

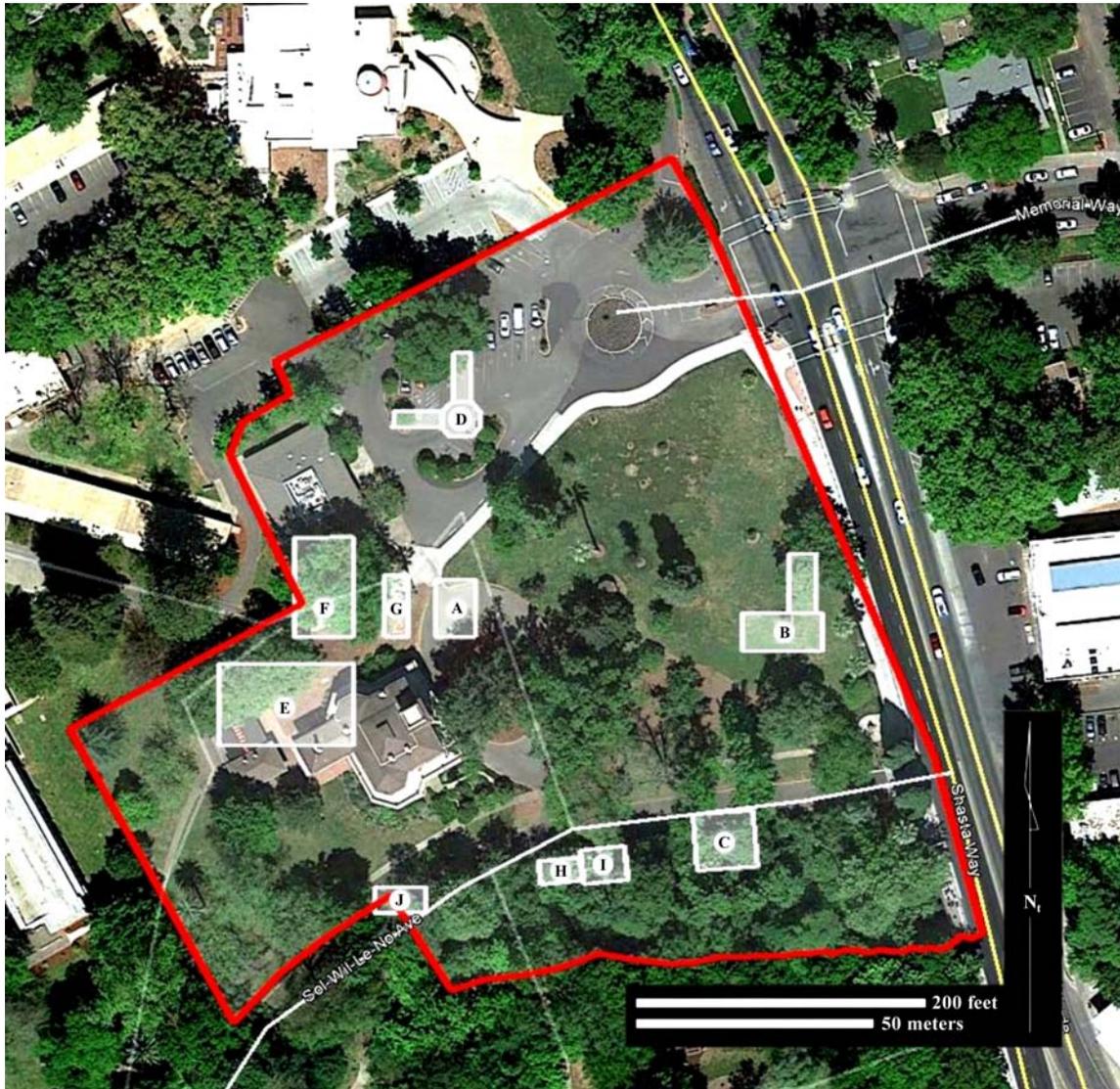


Figure 24. Locations and Approximate Dimensions of Buildings Constituting the Rancho Chico Headquarters Complex circa 1858, including Structures and Buildings Erected and Demolished at Various Times during 1851–1868.

Dimensions determined by line-of-sight triangulation and photometrics.

Buildings along the Big Chico Creek north bank are oriented to the angle of creek flow, while buildings and structures on the main grounds are oriented to true east-west.

A – Federal Adobe (residence); B – Old Adobe (hotel); C – Chico Store, Post Office, and Lodge;
 D – Mechoopda Octagon (residence); E – Granary; F – Stables; G – Smithy, Wheelwright, and Carpentry;
 H – Adobe Shed, Probably 1952 Temporary Residence; I – Plank Shed; J – Plank Shed.

Adapted from Google Earth image aerial dated 5-20-2013, accessed 7-12-2014.

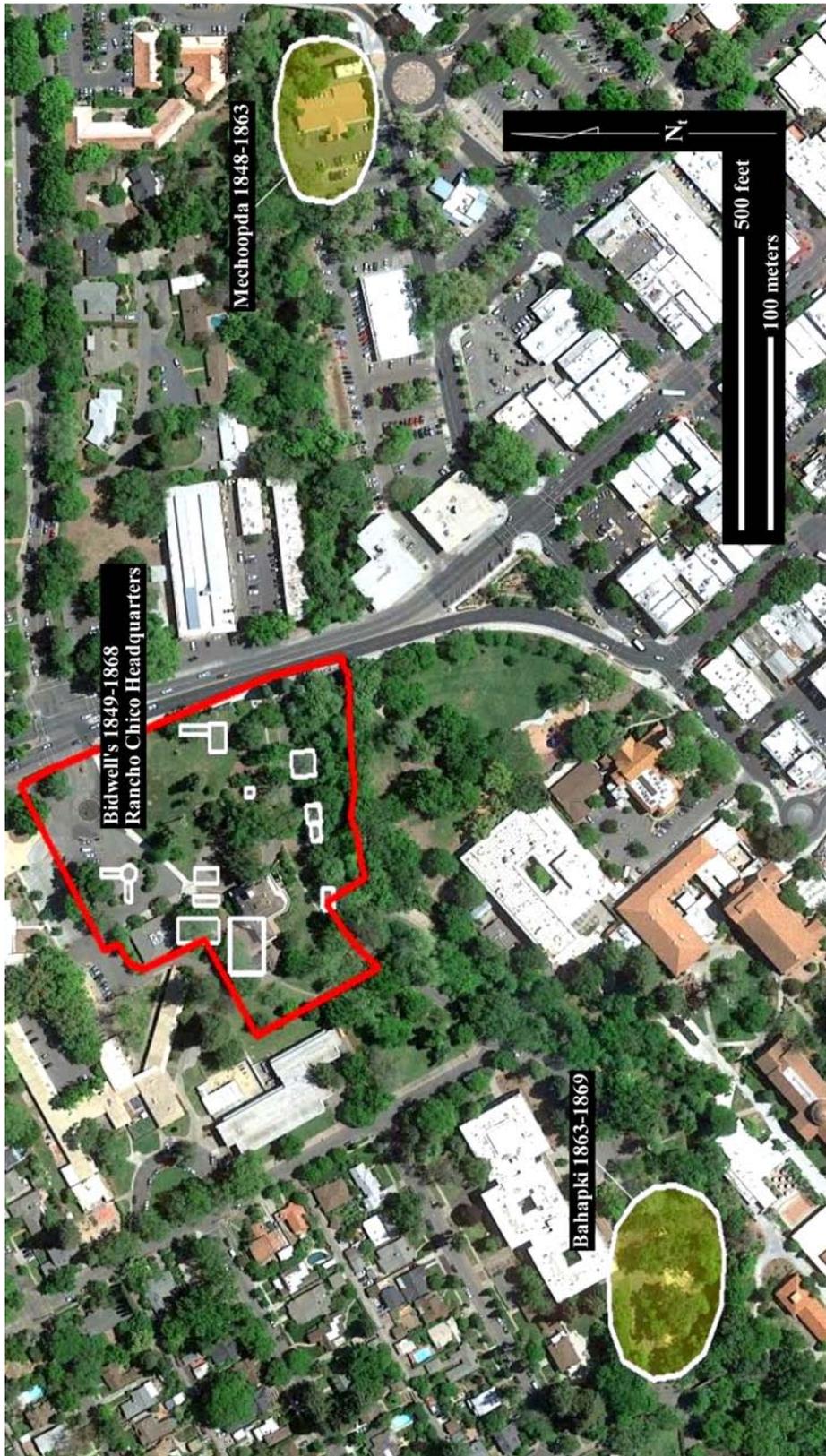
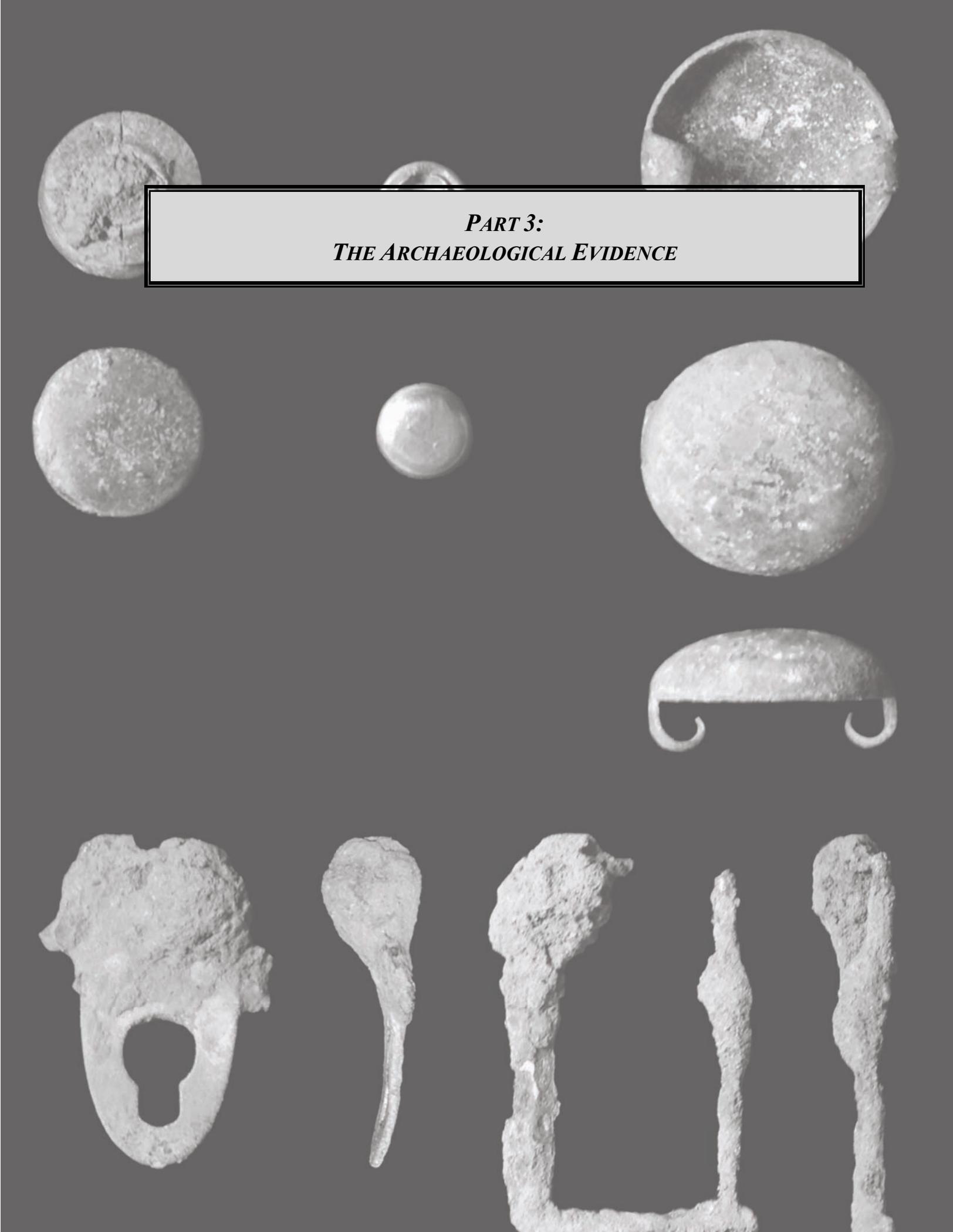
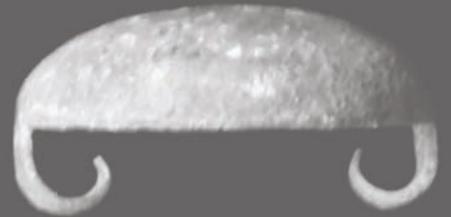


Figure 25. Locations of Native American Settlements Associated with Bidwell's 1849–1868 Rancho Chico Operation, Mechoopda, Occupied by at least 1848 through 1863, and Bahapki, occupied 1863–1869.



PART 3:
THE ARCHAEOLOGICAL EVIDENCE



*Photo on previous page:
Clothing and Gear Fasteners Recovered by the 1990 Visitor Center Excavation.
Details listed in Figure 40 on page 92.*

Previous Archaeological Investigations

Four archaeological investigations have taken place on the grounds of Bidwell Mansion State Historic Park, all four conducted by the Department of Anthropology, CSU Chico under agreement with the California Department of Parks and Recreation. All four were designed to determine the nature, location, and extent of cultural resources contained in Bidwell Mansion State Historic Park, including excavations led by Makoto Kowta in 1976, Keith Johnson in 1987, Keith Johnson again in 1990, and one non-invasive remote sensing and documentary research study conducted by White in 2002. White's (2002) remote sensing study is set aside here, in part because it is a stand-alone report, but primarily because the magnetometer findings were confused by anomalies related to modern sewer, drinking water, and irrigation sprinkler installations, as well as tree, sidewalk, and landscaping elements that impinged on the grid on all sides, making the exercise surprisingly unproductive. While potential feature anomalies were found, the links to constructed elements are speculative. The following provides a brief review of the 1976 and 1987 excavation findings and a full report of the 1990 excavation results (Figure 26).

1976 KOWTA OLD ADOBE EXCAVATION

Objectives

In the fall of 1976, Professor Makoto Kowta, archaeologist with the Department of Anthropology, CSU Chico (retired), led the first archaeological investigation on Park grounds. Dr. Kowta's aim was to identify archaeological evidence of Bidwell's "L"-shaped 1852–1874 adobe inn and hotel. He conducted thorough documentary research to determine the likely location of the feature. A trove of Dr. Kowta's research notes archived with the collection in the Department of Anthropology's Archaeological Curation Facility indicates that Kowta consulted many of the documents, photos, and maps described above, and he concluded that the old adobe was immediately east of and aligned with the Mansion, located in what is now the front lawn area between the Mansion and the Esplanade. After securing the permission of the California Department of Parks and Recreation, Dr. Kowta led the spring, 1976, Department of Anthropology archaeological excavation class in a test excavation on the front lawn. The 1976 excavation

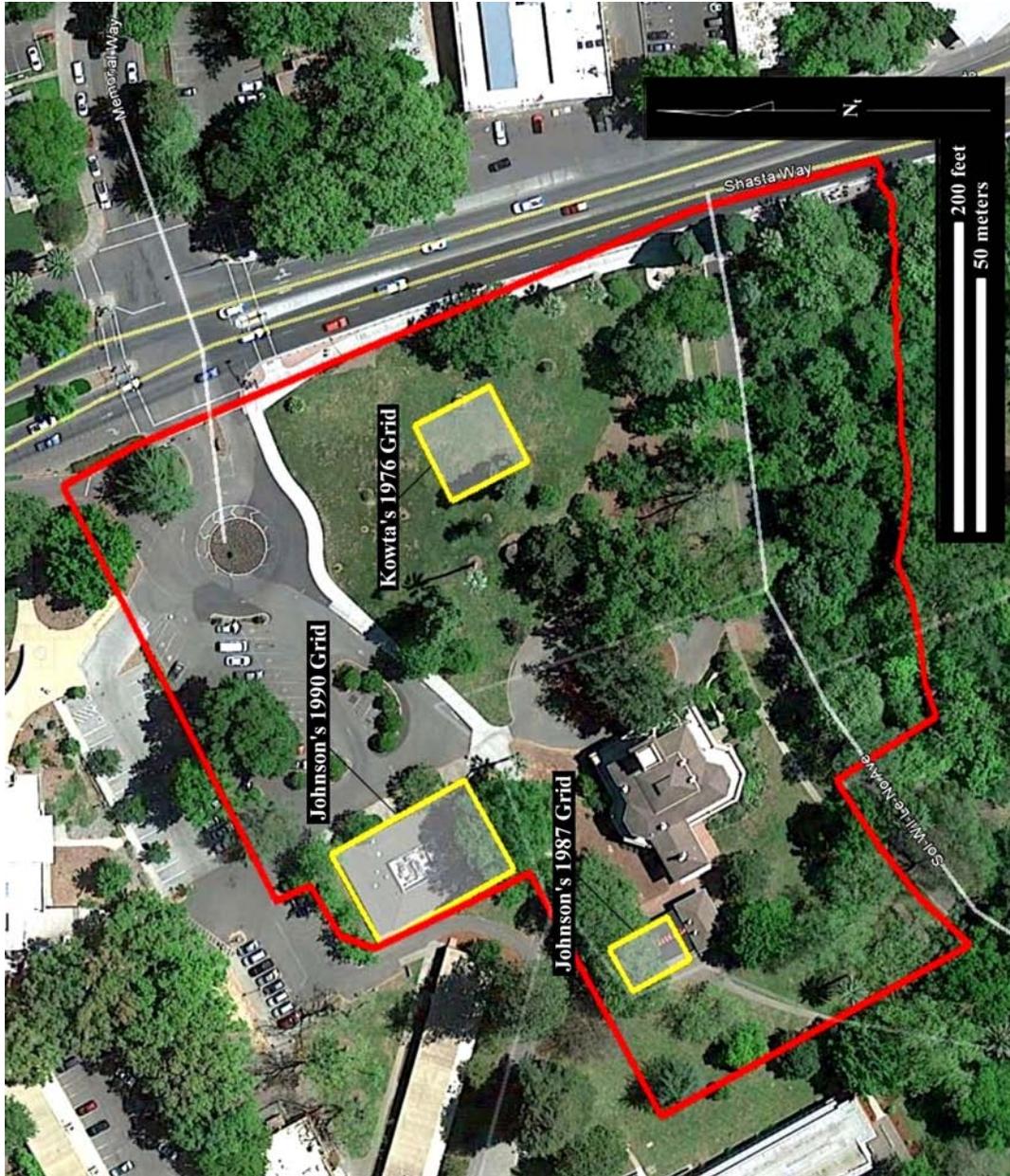


Figure 26. Locations of 1976, 1987, and 1990 Excavation Grids.
The 1976 grid location is approximate.

collection is curated at CSU, Chico under Accession 109, and includes prehistoric, historical, and modern artifacts, as well as maps, photographs, and field and lab notes from the investigation.

Soil Resistivity Study

In May 1975, in preparation for the test excavation, Dr. Kowta sponsored student Brad Vierra's soil resistivity study of the Mansion front lawn. Soil resistivity measures the flow of electricity between grounded electrodes. The method tracks variation measured in ohms, and in historical sites most of this variation is produced by the presence of conductive objects such as steel and iron, which suppress flow by capturing a part of the current. Kowta

and Vierra hoped to identify resistivity anomalies that might represent masses such as nails, adobe, or other construction materials related to the old adobe. Vierra laid out a sampling grid across the proposed adobe footprint. The grid was composed of four, 30 meters long transects; three of the transects were set approximately 10 meters apart at a bearing of N340°E parallel to the alignment of the Esplanade, and the fourth transect was set at a right angle crossing the three. Vierra's charts showing the results of the resistivity study were found on-file with the 1976 collection at CSU Chico. Variation is exhibited in these charts but it is unclear precisely where the transects were located, and it is possible if not likely that some or all the variation relates to the four major east-west underground utility lines to the Mansion that must have been intersected by the north-south transects, Bidwell's 1890 cast iron water pipe, a 1902 iron water main, a gas line installed some time before 1948, and the 12,000-volt electrical line installed sometime before 1977.

Excavation Methods

Dr. Kowta began the 1976 investigation by laying out a comprehensive sampling grid. A grid datum was established near the center of the front lawn, and the sampling grid was laid out west of the datum, spanning the area likely to contain traces of the old adobe. The grid was metric and measured 15 x 15 meters. A table of random numbers was used to select unit locations, and 16 excavation units and five auger holes were dug in this grid. The precise location of Kowta's datum is not known, and the layout depicted here (see Figure 26) is based on a best-fit assessment of field notes on file with the collection, which indicate the excavation grid, like Vierra's resistivity study grid, was oriented to run parallel to the Esplanade. Figure 27 depicts the units as 1 x 1 meters in size, but it is not clear from the records whether some or all of the units were 1 x 1 meters or 0.5 x 1.0 meters, in plan view.

Units were excavated in 10-centimeter arbitrary levels, and excavated spoils were dry-screened in shakers lined with 1/4-inch hardware cloth. Table 2 lists the excavation units and maximum depth.

Table 2. 1976 Kowta Test Excavation Units.

UNIT	MAXIMUM DEPTH (CM)	UNIT	MAXIMUM DEPTH (CM)
9N/6W	140	1N/15W	130
8N/7W	120	1N/12W	100
6N/5W	80	1N/10W	130
6N/4W	115	1N/6W	220
5N/11W	90	2S/9W	60
3N/13W	90	3S/6W	100
3N/8W	100	5S/12W	70
3N/7W	80	6S/6W	120
3N/3W	100		

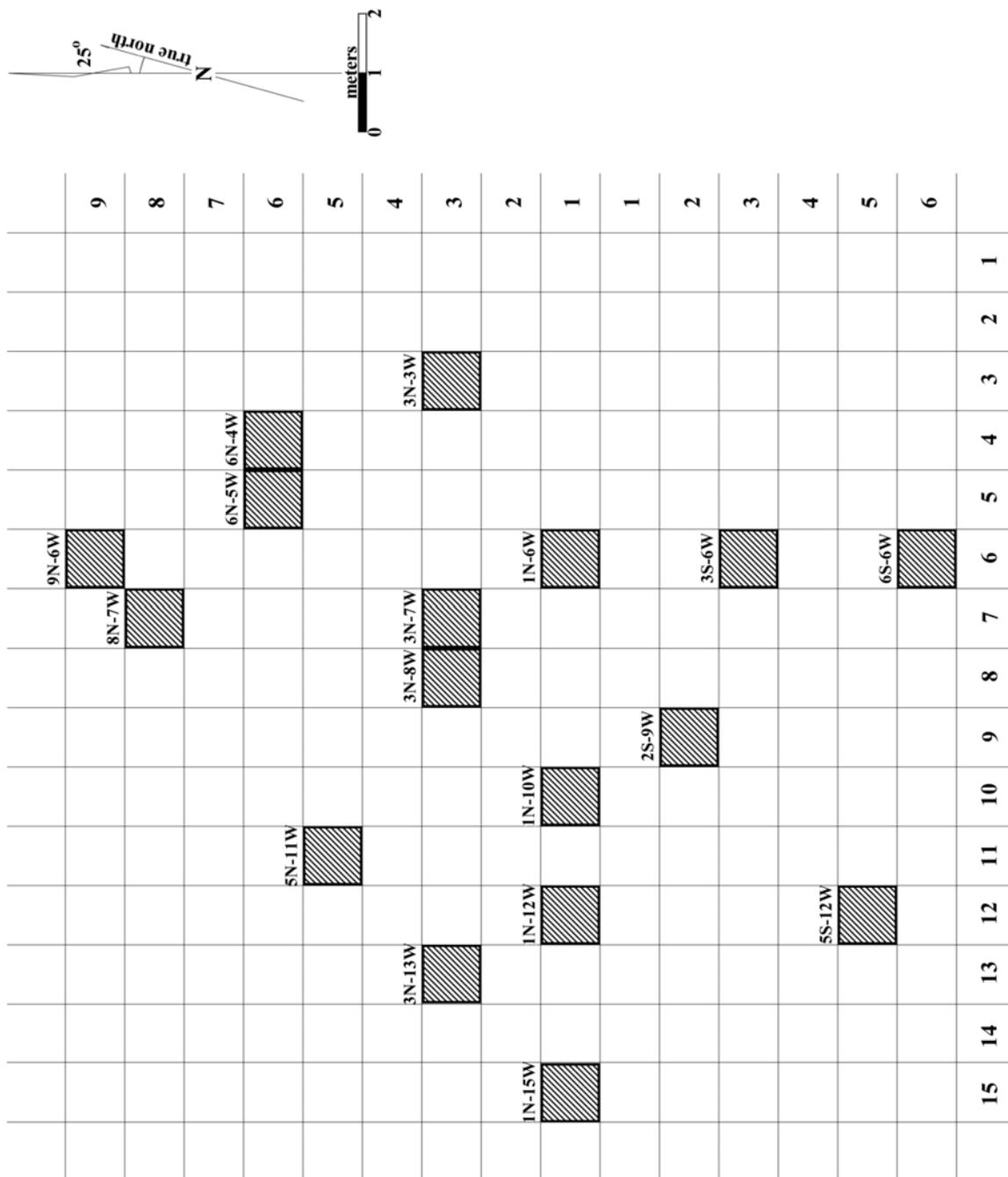


Figure 27. Kowta's 1976 Excavation Sampling Grid.

Artifact Collection

The 1976 Old Adobe excavation collection has not been analyzed or reported. However, in 2003 the author cataloged the collection, and in 2014 conducted a preliminary inventory, the results of which follow. The catalog lists 1,661 entries and 9,023 individual items.

Native American Artifacts

There were 45 items attributable to Native American activity (0.5% of the collection). These include 28 traditional Native American technological items, including two projectile points (one basalt and one obsidian), one basalt biface, 22 flakes (18 basalt, one chert, and three obsidian), two basalt cobble core-tools, and one large greenstone or serpentinite pestle. There are 16 artifacts representing contact-era Native American artifacts including 12 flakes chipped from dark olive-green (“black”) glass and four white-on-white glass beads, including one wire-wound chalk white oblate-spheroid, and three cane-snapped, oblate-spheroid “seed beads.”

Historical and Modern Artifacts

There were 8,978 items of historical manufacture, representing 99.5 percent of the collection.

There were 46 artifacts representing temporally diagnostic personal gear indicative of the historical period, including nine glass buttons, two bone shirt buttons, one glass marble, and 34 white, vitrified clay smoking pipe fragments.

The predominant historical artifacts are glass, mostly broken bottle glass. Breakdown by color appears in Table 3. Glass likely to be historical (dark olive, aqua, amethyst, and cobalt) accounts for 33.1 percent of the glass fragments. These include a number of specimens with diagnostic embossed lettering, beveling, finish, and bases. Glass likely to be modern (amber, light olive, light blue, green, colorless, turquoise, and yellow) accounts for 65.7 percent of the collection. These pieces also include many with diagnostic features. The remaining 1.2 percent consists of indeterminate melted ingots.

Table 3. 1976 Old Adobe Excavation Collection, Glass by Color Type.

COLOR	QUANTITY	PERCENT
Dark Olive	91	5.4
Aqua	456	27.2
Amethyst	3	0.2
Cobalt	5	0.3
Amber	60	3.6
Light Olive	200	11.9
Light Blue	2	0.1
Green	3	0.2
Colorless	834	49.7
Turquoise	1	0.1
Yellow	2	0.1
Melted	21	1.2
Total	1,678	

There were 283 ceramic fragments. Most, if not all, were of materials and glazes typical of the historical period, and included 245 improved earthenware tableware fragments; 19 stoneware crock, jar, and beer bottle fragments; 16 brown, salt-glazed vitrified terra cotta sewer pipe fragments; and three porcelain fragments. The improved earthenware is primarily white glazed, but 19 blue-on-white and one green-on-white transfer print pieces were observed, along with a few hand-painted pieces. Five pieces with maker's marks were observed.

Historical construction materials were common, including 2,057 red common fired brick fragments, 846 nails and fragments, 127 adobe brick fragments, 47 rock fragments including some possible masonry fragments, and 39 pieces of concrete, lime, plaster, and mortar.

The excavation recovered 40 small pieces of coal and 128 metal artifacts (the majority heavily rusted and corroded), including 97 indeterminate pieces, 15 lead fragments, one bullet lead and four brass cartridges, five copper wire or fasteners, two mule or horse shoes, two keys, and two coins.

The faunal collection was extensive, including 1,993 pieces of bone. As of yet, no faunal analysis has been done, but it was observed that the majority of identifiable specimens were from common domesticated food species.

Modern or Indeterminate Materials

The remainder of the collection was composed of 153 modern manufactured pieces (including 92 insect soil-casts, 15 plastic items, 45 pieces of aluminum foil, one crown cap), and 1,497 floral items (including 1,325 pieces of charcoal, 87 burned nut shell fragments, and 85 wood fragments of undetermined nature).

1987 JOHNSON CARRIAGE HOUSE INVESTIGATION

Objectives

The 1983 Park General Plan proposed a series of demolition and construction projects designed to restore the grounds to the 1868–1900 time frame. The plan recommended the demolition of post-1900 structures and additions, along with restoration of some 1868–1900 features including gardens and a gazebo on the front lawn and a Carriage House in the rear.

As part of the General Plan study, historic photos dating to the target era were examined and it was found that substantial alterations to the character of the rear of the Mansion had been made after 1900. Photo analysis determined that a small brick building still standing at the rear of the Mansion—identified as “Bidwell’s Office” or the “architect’s office”—was erected in 1865, when Mansion construction began. However, additional structures attached to this building were problematic. A “Carriage House” built before 1890, identified in historical maps and photos, was missing. Photo-documentation and Sanborn map analysis indicated that the Carriage House was open on the east side, facing the Mansion. Around 1921, after the Mansion property passed to Chico State College, the Carriage House was partially remodeled to make an enclosed storage room, and then in 1922, the Carriage House was torn down and replaced by a smaller “Office Annex.” In carrying out

restoration plans, State Parks decided to demolish the Office Annex and re-build the Carriage House as it appeared in photographs dating to the target interpretive period.

In order to get a better fix on Carriage House construction details, in 1987, the Department of Parks and Recreation contracted with the Archaeological Research Program, CSU, Chico, to conduct an archaeological excavation in the original Carriage House footprint. The archaeological study, under the direction of Professor Keith Johnson, had four goals: (1) to determine the locations and dimensions of the historical Carriage House; (2) to determine to the extent possible Carriage House construction details; (3) to recover artifacts from subsurface contexts; and (4) to establish a chronology of the construction and alteration of the Carriage House.

The Carriage House archaeological work took place in two phases, an initial exposure dug between January 6 and 16, expanded to a full exposure dug between July 27 and 31, 1987. In between these phases, the existing Office Annex structure was demolished by State Parks, laying open the ground surface needed to pursue additional archaeological work. The full exposure spanned the mapped footprint of the Carriage House, a roughly rectangular area measuring 50 x 27 feet, dug in 5-x-5-foot units numbered by alphanumeric grid (Figure 28). Thirty-six units were dug; 23 of the units were screened using 1/4-inch shaker screens; 13 units were not screened. Excavations proceeded in 0.5-foot levels to a maximum depth of 1.5–2.0 feet below surface, for a total of 800 square feet and 1,130 cubic feet.

Features

The 1987 excavation exposed three archaeological features thought to relate to the Carriage House and more modern construction associated with the Bidwell Office building. One of these was a pavement of red common brick fragments with crumbling plaster and mortar smears. The bricks were broken-up and pounded flat to form a pavement; Johnson identified the patches as construction or demolition debris re-used as an underlayment for the Carriage House dirt floor. The brick pavement was probably originally more extensive but most of it had been removed by later building construction and underground utility installation. Two complete and two fragmentary concrete wood-cap pier blocks were also identified. The pier blocks were set at 13-foot centers, and Johnson considered these the remnant of six to eight pier blocks that originally anchored interior beams supporting the Carriage House roof, but the others had been removed by later construction and utility installation. Perhaps the most interesting of the features was revealed when the 1987 demolition of the 1922 Office Annex exposed the original north wall of the Bidwell Office Building. This demolition exposed the north wall for the first time in 65 years, revealing two traces related to construction of the Carriage House (Figure 29). Near the center of the north wall of the Office Building at a height of approximately 12 feet above grade, a chiseled mortise mount for the Carriage House ridgeboard was found. The second feature was a paint shadow marking the outline of the Carriage House roof pitch. The two features combined clearly showed that the Carriage House was built flush to the north wall of the Bidwell Office Building.

Johnson found that the 1922 Carriage House demolition and Office Annex construction had erased all traces of the Carriage House in the south one-half of the exposure. However, the south one-half did produce two 20th-century features attributable to

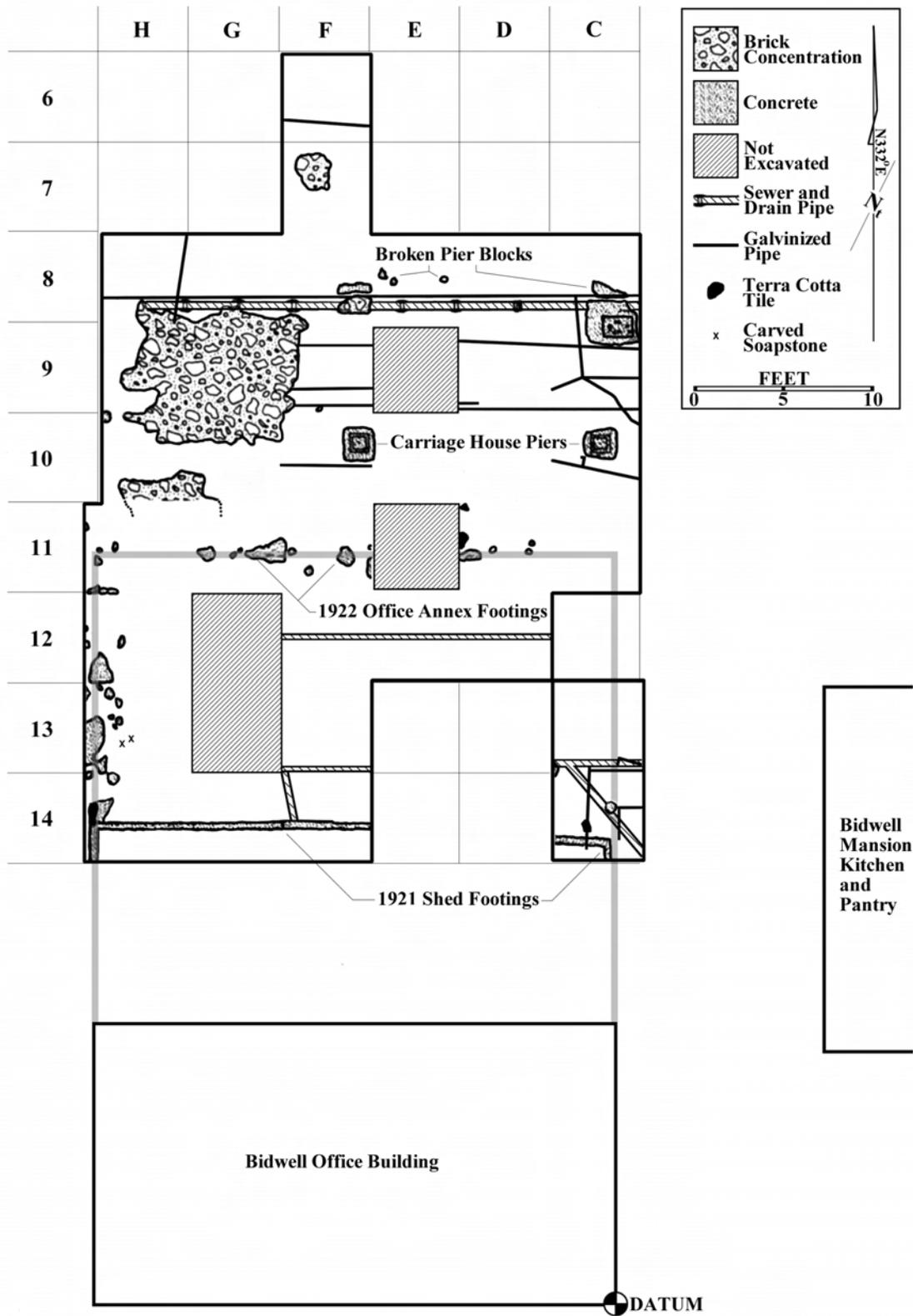


Figure 28. Johnson's 1987 Carriage House Excavation Sampling Grid.

Adapted from Johnson (1988:Map 2).

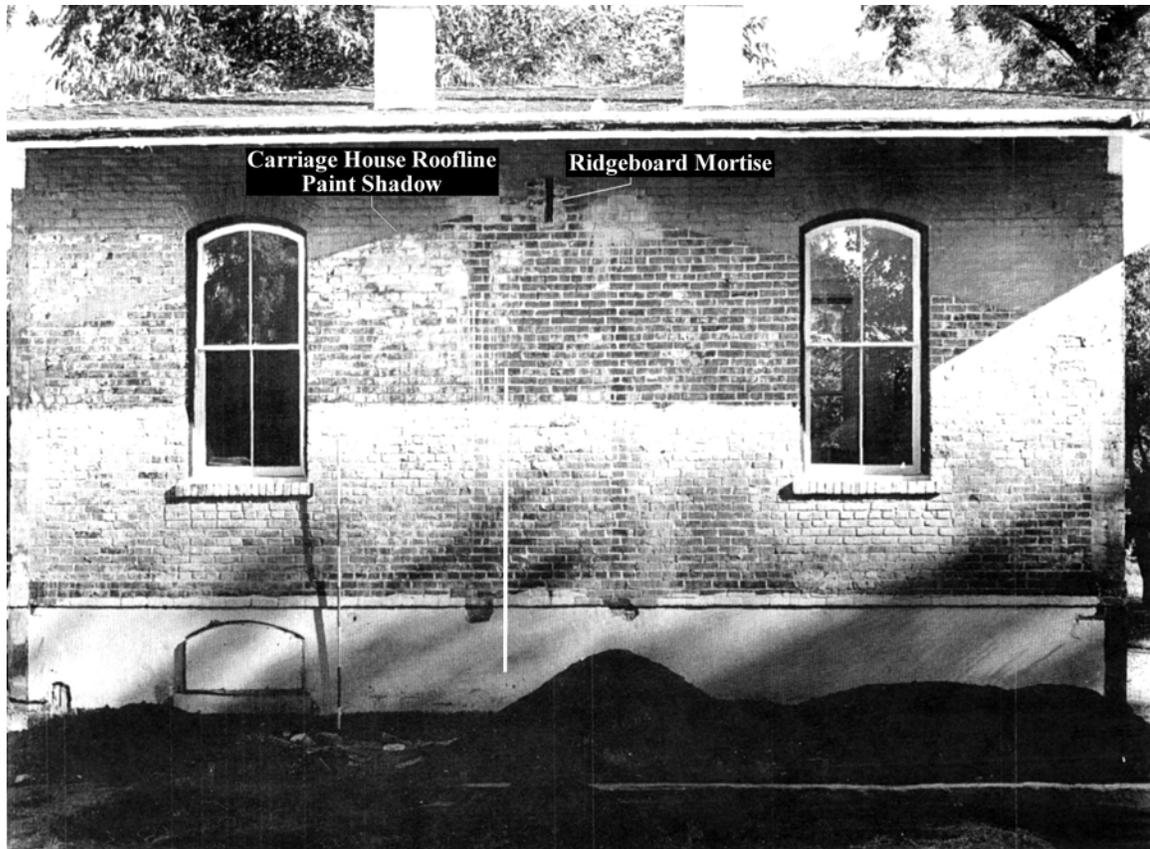


Figure 29. Johnson's 1987 Photograph of the North Wall of the Bidwell Office Building immediately after the Spring 1987 Demolition.

Photo shows two clear traces of Carriage House construction, a roofline paint shadow, and a ridgeboard mortise cut into the brick facing.

Adapted from Johnson (1988:Plate 13).

Chico State College ownership of the Mansion property. One of these was a concrete perimeter footing identified on the south end of the exposure marking the outline of an enclosed room built sometime between 1909 and 1921. The room, built near the end of Annie Bidwell's residence or the beginning of the Presbyterian Church's ownership of the Mansion grounds, was listed in the 1921 Sanborn map (Sanborn Fire Insurance Company 1921) as 27 feet east-west by 20 feet north-south. However, Johnson's excavations exposed a footing measuring just 10 feet north-south. The second modern feature consisted of broken concrete masses found in an alignment tracking the footprint of the garage and laundry room (aka, "Office Annex") identified in the 1945 Sanborn map. On the map the structure is depicted measuring 48 feet north-south by 27 feet east-west. The footing traces identified by Johnson measured 27 x 27 feet. Johnson's findings indicate that construction of this building resulted in destruction of Carriage House traces in the south end of his exposure.

Artifact Collection

Johnson's (1988) report provides only a brief and generalized description of the artifact inventory recovered by his Carriage House excavation, and no quantitative tables or

discussion of associations. Artifacts recovered by the dig were also not re-examined for this study, so it is not possible to link specific artifacts to specific stratigraphic contexts, time periods, activities, and functions. The following descriptions are abstracted from Johnson’s report.

Native American Artifacts

Johnson recovered seven artifacts linked to Native American occupation of the Mansion grounds, including one small corner-notched projectile point of obsidian, three basalt flakes, one flake scraper (material not identified), and two small glass trade beads, the latter including one faceted black glass bead and one red-on-white wire-wound cylinder bead. The chronological associations of these items cannot be determined, but the finds are consistent with overall nature and associations of Native American artifacts found on the Mansion grounds by all archaeological investigations to date, described below. The overall findings suggest that an ancient, dispersed, low-density prehistoric archaeological deposit existed on the grounds prior to establishment of the Rancho Chico headquarters, and that Native Americans living and working at the headquarters also used traditional artifacts and new, manufactured materials in traditional ways, contributing additional materials to the deposit.

Historical Artifacts

Johnson (1988:28–29) lists 2,241 historical artifacts, an inventory that expressly excludes the predominant construction debris encountered throughout the exposure, the “bricks, cement fragments, pier block fragments, asphalt, linoleum or PVC pipe” (Johnson 1988:28). The prevalence of materials related to construction and operation of the series of buildings constructed at this location is also made evident by re-organizing his artifact list by functional category (Table 4). Fasteners and building materials related to construction and operation of the buildings represent a combined 1,449 items, or 64.7 percent of the total inventory of diagnostic items.

Table 4. 1987 Carriage House Historical Artifact Inventory, Organized by Activity.

FASTENERS (N=1,231; 64.9% OF DIAGNOSTIC)	
865	Wire nails
272	Square cut nails
39	Wood fragments
25	Screws
11	Nuts/Bolts
10	Tacks
7	Metal washers
1	Brass rivet
1	Iron spike

Table 4. 1987 Carriage House Historical Artifact Inventory, Organized by Activity *cont.*

BUILDING MATERIALS (N=218; 11.4% OF DIAGNOSTIC)	
184	Window glass fragments
22	Wires (mostly electrical)
7	Metal pipes
2	Pieces of coal
2	Metal light bulb bases
1	Combination lock
CONSUMPTION ITEMS (N=638; 21.7% OF DIAGNOSTIC)	
262	Glass fragments (bottle?)
226	Animal bones and fragments
145	Ceramic fragments
2	Aluminum can pull tabs
2	Cigarette filters
1	Ice cream stick
WEAPONS AND AMMUNITION (N=6; 0.3% OF DIAGNOSTIC)	
5	Gunshell casing
1	Lead bullet
PERSONAL ITEMS (N=30; 1.6% OF DIAGNOSTIC)	
13	Woman's purse/contents
8	Clothing buttons
3	Coins (1918 penny, 1965 dime, 1971 penny)
2	Metal keys
1	Metal rasp or file
1	Metal cutting blade
1	Clay marble (?)
1	Plastic "Band-Aid"
NON-DIAGNOSTIC (N=118; 5.8% OF COLLECTION)	
69	Miscellaneous metal pieces
20	Leather fragments
14	Melted lead pieces
5	Plastic fragments
3	Wire mesh fragments
3	Tinfoil fragments
3	Styrofoam fragments
1	Metal spring

The next most-frequent category consists of items related to consumption, including beverage bottle fragments, ceramic tableware fragments, and animal bones and fragments. Notably, the 226 animal bones recovered by Johnson included saw-cut butchered bone and 58 species-diagnostic bones, primarily sheep, cow, and chicken. The prevalence of consumption-related discard on Mansion grounds is consistent with intensive historical and modern public use. One should expect a sheet scatter of materials related to every day and event-related food preparation and consumption, inclusive to artifacts resulting from the 1850s–1870s hotel, bar, store, and residences; the 1860s–1910s Mansion; and the 1920s–1950s College dormitory, offices, classrooms, and playing fields. These materials probably dominate the artifact inventory away from building footprints. A part of the sheet scatter may also relate to modern behaviors familiar to modern Park management: the accumulation of a constant shower of litter cast by visitors and passersby, the latter including a flood of college and high school students passing through the grounds in lunch and recess pulses.

Johnson (1988:29) claimed that none of the artifacts could be specifically linked to carriages, but other interesting finds were made that bear further investigation via artifact analysis. For example, two carved soapstone slab fragments were identified in the southwest corner of the exposure, in the vicinity of the 1922 footing (see Figure 28). The slabs probably represent architectural pieces discarded in the construction debris used for underlayment. Further analysis might determine if these fragments were made from material acquired from a local soapstone quarry, and additional analysis of Mansion ornamentation might identify where this material was used in construction, most likely in fireplace or oven features.

1990 JOHNSON VISITOR CENTER TEST EXCAVATION

Purpose

The 1983 Park General Plan recommended construction of a new Visitor Center to serve a variety of functions crucial to the Park's interpretive role: to funnel traffic, house interpretive displays, and provide public meeting facilities and offices for support staff. The proposed location of the Visitor Center was in the area north of the Mansion, away from the grounds so as to not conflate with and detract from the temporal character of the grounds. In May 1990, the Department of Parks and Recreation contracted with the CSU, Chico Research Foundation, Archaeological Research Program to conduct a test excavation in the footprint of the proposed visitor center in order to establish the presence/absence, nature, and extent of archaeological resources in the impact area.

Maps and Photodocumentation

Historical maps and photodocumentation consulted for this project indicate that four of Bidwell's 1858 Rancho Chico headquarters structures and buildings were located in the immediate vicinity of Johnson's 1990 Visitor Center excavation grid, including the Mechoopda Octagon, the stable, the smithy, and the Federal Adobe.

Field Methods

The 1990 Visitor Center test excavation took place on May 11–20, 1990. The work was done under the direction of Professor Keith L. Johnson. Johnson began the 1990 investigation on May 11, by laying out two main datums and grid lines. The grid conformed

to the orientation of the footprint of the planned Visitor Center, which in turn conformed to the orientation of Bidwell Mansion. Grid north was N330°E, and the grid consisted of a series of 15 north-south alpha lines and 22 east-west numeric lines set at five-foot intervals to form a rectangular grid measuring 75 feet east-west by 110 feet north-south, covering the footprint of the proposed Visitor Center (Figure 30).

On May 17, Johnson returned with a small crew and laid out three 5-x-5-foot excavation units on the perimeter of the proposed footprint, units N4, N12, and C4. On May 18, Johnson returned with a larger crew and began excavating the three units. The units were dug using shovel and trowel in six-inch levels, with galvanized buckets to move dirt from the unit to shaker screens. The first level dug, Unit C4, 0–6 inches, was dry-screened using a shaker box screen lined with 1/8-inch hardware cloth, but the high density of cultural material combined with a high proportion of clay made screening very difficult and as a result, all subsequent excavation was done using 1/4-inch hardware cloth. In order to preserve the grass, Johnson cut just below the root zone and rolled the turf, which was kept moist to return to the backfilled units at the end of the excavation (Figures 31 and 32). On May 18, Johnson also began work in a fourth unit, Unit J9, and a team was assigned to excavate auger holes at the center of each square on the west and south perimeter of the grid. A six-inch bucket auger was used, and spoils were screened in six-inch levels. Ten augers were excavated to a maximum depth of 30 inches below surface, located in squares E4, G4, I4, K4, N8, N10, N14, N16, N18, and N20 (Figure 30).

On May 19, work was completed in units N4 and N12, work continued in Unit J9, and new units were opened in squares J17 and N21. On May 20, work was completed and all six excavation units were backfilled. Two of the units reached a maximum depth of 12 inches, three to 18 inches, and one to 24 inches (Table 5).

Johnson’s 1990 excavation generated a small artifact collection that occupies two archive boxes. The collection catalog includes 363 catalog entries listing 1,253 specimens weighing 4,112.5 grams, described below in functional categories.

Table 5. 1990 Johnson Visitor Center Excavation Units.

UNIT	MAXIMUM DEPTH (INCHES)	VOLUME (FT ³)
C4	24	50.0
N4	18	37.5
J9	18	37.5
N12	18	37.5
J17	12	25.0
N21	12	25.0

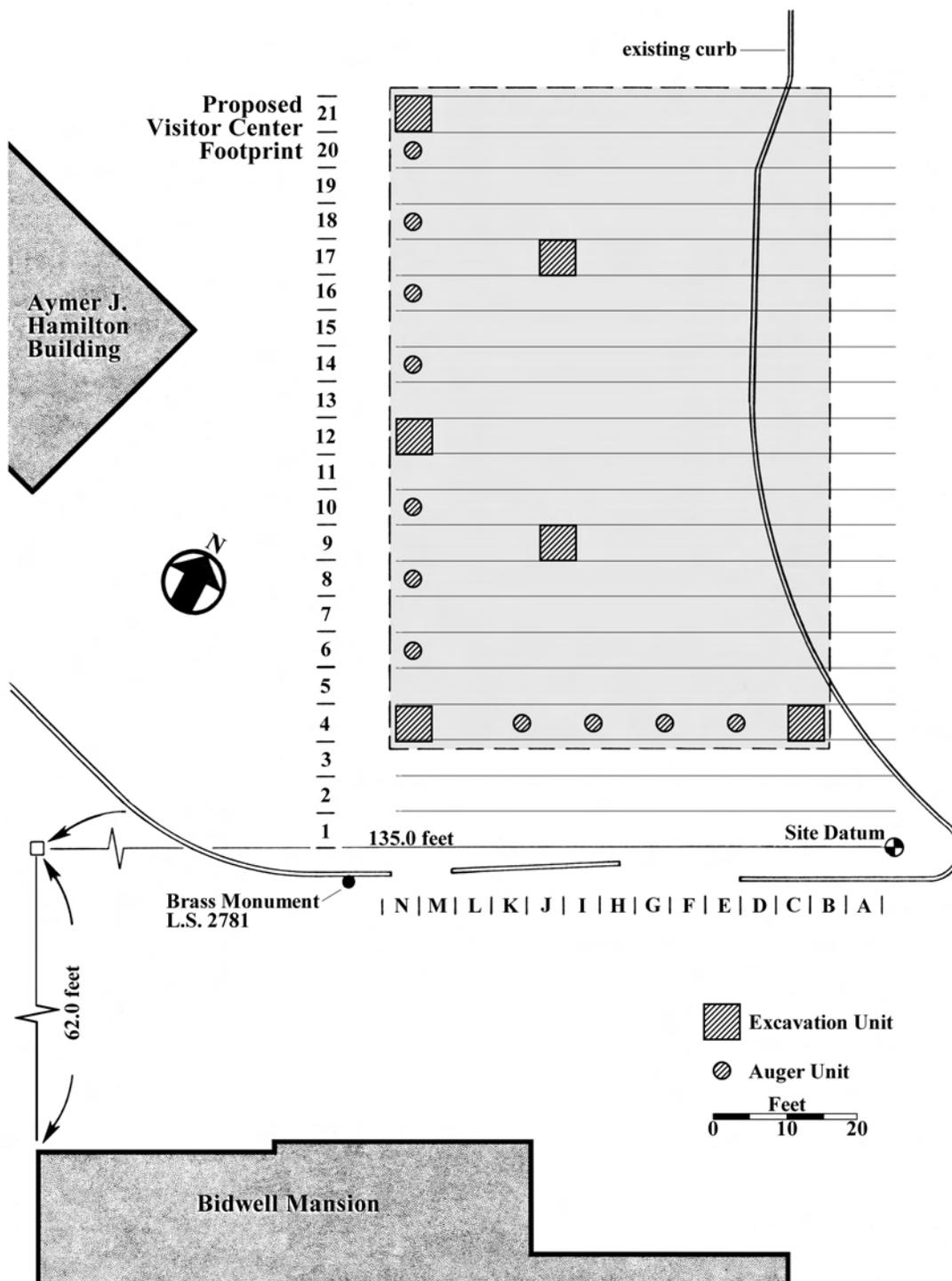


Figure 30. Johnson's 1990 Excavation Grid, showing the Location of Excavation Units and Auger Holes in Relation to the Proposed Visitor Center Building Footprint.

Adapted from Johnson's 1990 graphics and notes on file.

Native American Artifacts

The 1990 excavation recovered 19 artifacts linked to Native American occupation of the Mansion grounds.

Projectile Point. One small corner-notched projectile point of obsidian was found in Auger E4 at a depth of 0–6 inches (Artifact #P952-18-1). The specimen measures 21.1 mm long, 14.7 mm wide, 3.8 mm thick, and weighs 1.1 grams. It has a neck width of 7.3 mm and a maximum hafting width of 13.0 mm. It is made from vitreous to slightly grainy, translucent to cloudy gray obsidian consistent in appearance with high-quality material associated with the local Tuscan Plateau source (Hamusek-McGann 1995).

Chipped Stone Flakes. Three small, tertiary obsidian flakes were recovered from three different units at a depth of 0–12 inches. The flakes average 0.12 grams each and all three are made from grainy, semi-opaque, gray obsidian consistent in appearance with material associated with the local Tuscan Plateau source.

Fifteen small, secondary to tertiary basalt flakes were recovered from units J9, J17, and N12 at a depth of 0–12 inches. The flakes average 2.3 grams apiece, and all 15 are made from dark gray, grainy andesite typical of the Lovejoy Basalt formation found in Big Chico Creek canyon east of the project area. The overall findings suggest that a dispersed, low-density prehistoric archaeological deposit existed on the grounds prior to establishment of the Rancho Chico headquarters, and that Native Americans living and working at the headquarters also used traditional artifacts and new, manufactured materials in traditional ways, contributing additional materials to the deposit.

Historical Household Fixtures and Furnishings

The 1990 excavation recovered 40 items of historical household fixtures and furnishing, including mirror glass (n=1), drawer pulls (n=3), glass bead (n=1), cast iron fragment (n=1), coal fragment (n=1), and 33 lamp chimney fragments.

Note: All artifact images and photos referenced below are found together at the end of the chapter, on pages 85 through 95.

Mirror Glass. One fragment of mirror glass was recovered (P952-4-26). It is a small fragment of a very thin (0.6 mm) plane mirror weighing just 0.4 grams. The glass is solarized to a light, aqua tint produced by iron impurities in the siliceous mix, indicating that it probably dates to the late 19th century (Lindsey 2015). The specimen was found in Unit N21.

Drawer Pulls. Three drawer pulls and fragments (knobs) were recovered. One (Figure 39a; P952-5-3) is disk-shaped in plan-view, of colorless glass, and measures 1.25 inches in diameter and 2.0 inches thick. The mounting stem is broken off, but it appears to have originally mounted via embedded steel screw. It has a Victorian decorative motif marked by a ranked series of flutes and bumps, and is molded with fine bubbles in the glass mix to produce a sparkle when side lit. It probably dates to the early to mid-20th century. The second specimen (Figure 39b; P952-11-14) is disc-shaped in plan view, of black gutta percha, and measures 7/8 inches in diameter and 5/16 inches thick. It was mounted via embedded screw, which has been broken off leaving just the shank. In plan view it has the form of a truncated cone; however, the face is recessed and the pull probably originally had a fixed decorative element, possibly an additional, dome-shaped gutta percha piece, a glass element, or a painted or cloth-covered inset. Gutta percha is a latex product made from the

sap of the Gutta tree of the genus *Palaquium* native to Malaysia; its potential as a source for plastic production was discovered by the Malay people and developed by Europeans after 1845. By the 1850s gutta percha was in common use for many products later made with polymers, including decorative drawer pulls. Use of gutta percha discontinued around 1900, after development of hardened rubber and bakelite (Hardman 2012). The piece recovered from the Visitor Center excavation probably dates between 1850 and 1900. The third specimen is of near-opaque purple glass, and consists of two pieces of one fragment of a drawer pull base (P952-16-14). It is closely similar in size and form to the gutta percha drawer pull described above, but too small to ascertain morphological details. The drawer pulls were found dispersed throughout the grid, in units C4, N12, and N21.

Glass Bead. The excavation recovered one glass bead (Figure 39c; P952-4-8). It is an elongate oval wire-wound bead of translucent, cobalt blue glass with an uneven surface and bubbles in the matrix. It measures 9/16 inches long and 3/8 inches in diameter. In this context the bead can be considered an item of historical personal adornment or a decorative element associated with Victorian-themed door hangings, valances, or another ornamental piece used in one of the historical structures.

Cast Iron Fragment. One cast iron housing fragment was recovered (Figure 37h; P952-15-32). It measures approximately 2.5 inches long and wide, and is relatively thin-walled at 0.25 inches thick. The only possible decorative characteristic is a raised molding rib on the outer surface. It appears to be a fragment of cast iron stove housing; however, there are no maker's marks or parts numbers visible under the specimen's thick coat of rust.

Coal Fragment. One small piece of coal was found (P952-6-31). It is hard, black, lustrous, and partially crystalline marking it as anthracite coal. Johnson (1988) reports that, at the turn of the 20th century, Annie Bidwell used a portion of the converted Carriage House shed to store cooking coal, presumably used in the Mansion kitchen. The specimen was found in Unit J17 on the north end of the 1990 grid.

Lamp Chimney Fragments. The excavation recovered 33 lamp chimney fragments averaging 0.2 grams each. These are small fragments of thin-walled, colorless to slightly aqua glass pieces, and all appear to have been made to a similar standard and size typical of domestic lighting, suggesting they were part of a lantern set used in the Mansion. The first electrical service reached Chico via an electrical railway built by the Chico Electric Railway Company in 1904–1906, acquired by the Northern Electric Company in 1906. Electrical power reached domestic consumers gradually through the first decade of the 20th century but expanded rapidly after consolidation of suppliers and integrated utility management after 1917. In the previous chapter, it was noted that Annie Bidwell's 1902 acetylene gas shed, situated near the south end of 1990 grid, had been demolished by 1909. This is consistent with the Mansion being among the first homes to acquire electrical power sometime in the 1902–1909 period, and would indicate the lamp chimney fragments date to sometime between the occupation of the Mansion in 1868 and the elimination of Mansion gas service. The lamp chimney fragments occurred almost exclusively in the north one-half of the exposure, in units N12, J17, and N21.

Historical Personal Gear

The 1990 excavation recovered seven items of historical personal gear, including powder can fittings (n=2) and clothing and gear fasteners (n=5).

Powder Can Fittings. The excavation recovered two parts from one or more powder flasks (Figure 38). Based on weight and coloration, both appear to be made from tin-lead pewter. One is a spout fitting with 0.50-inch coarse female threads (P952-06-009). It is roughly conical shaped and has a mounting groove at the attachment point. The other piece is a flat head screw cap with a 0.50-inch male coarse thread stem (P952-12-004). The head is recess-molded and contains a framed, raised stamp reading “HAZARDS POWDER.” Both pieces were originally coated with a flaky, calcareous patina that was loosened using a diluted vinegar solution, revealing the detail shown in the artifact photo. They are spout and cap fittings for one or more “Hazards Gun Powder” cans. Originating as a partnership in 1836 and incorporated by George Hazard in 1843, the Hazards Powder Company was located in Enfield, Connecticut, and became a major producer of gunpowder for railroad construction, mining, domestic firearm, and military applications. Hazard Powder Company supplied gunpowder used by both the British and Russians during the Crimean War (1853–1856), and supplied an estimated 40 percent of gunpowder used by both warring sides during the U.S. Civil War (1861–1865; Allen 2012; Connecticut History.org 2015; Enfield Historical Society 2015). Hazard died in 1868 and the company sold its assets to Dupont Corporation in 1876, which continued production under a Hazard/Dupont Chemical logo. The plant was destroyed in a 1913 explosion, ending the Hazard Powder name. Flask-shaped powder cans of the type identified here were produced for the domestic market from 1843 to 1876, and were intended for muzzle-loaded rifles and shotguns (Clark and Company 1850:53). The powder flask fittings came from two different 1990 Visitor Center excavation units, N12 and J17, at the center of the 1990 excavation grid.

Clothing and Gear Fasteners. The excavation recovered five metal clothing and gear fasteners. There are three button pieces. One (Figure 40a; P952-17-008) is a small snap button, a press-style stud button with an enameled copper cap. It is a small button, with low, 0.25-inch profile and 0.50-inch diameter. A second specimen is a detached stainless steel cap from press stud button (Figure 40b; P952-14-6). It is very small, with a low, 0.125-inch profile and 0.25-inch diameter. The third is a fitted steel decorative cap from a jacket or sweater button (Figure 40c; P952-11-32). Traces of red paint are visible on the outer surface. It is heavily corroded and appears to be nickel or silver alloy. One buckle was found (Figure 40e; P952-6-13). It is an end fragment of a wire frame, wire bar clothing or shoe buckle, probably used to secure a fabric belt or sash. No details could be ascertained regarding make or manufacture. One small hasp was found (Figure 40e; P952-8-17). It is a jewel box-sized hasp made of a tin-copper alloy. A clump of corrosion covers most of the hinge, but two small button rivets that must have attached the hasp to the hinge are visible. The engaging end of the hasp has a notched catch slot suggesting it had a keyed catch, supporting the identification of the piece as a jewelry box hasp. The fasteners were dispersed throughout the excavation grid in units C4, J9, N12, and J17.

Historical Food and Beverage Consumption

The 1990 excavation recovered 190 items related to historical food and beverage consumption, including dark olive green bottle glass (n=83), aqua bottle glass (n=18), improved earthenware tableware (n=27), porcelain tableware (n=3), and faunal remains (n=59).

Dark Olive Green Bottle Glass. There were 83 small, olive green glass vessel fragments averaging 2.2 grams in weight. Olive green or “black” bottle glass, ranging in

color from dark forest green to dark olive-amber, was the predominant glass color used to make liquor and bitters bottles before 1880 in the far west (Lindsey 2015; McKearin and Wilson 1978). The bottles were mouth-blown and hand-made one-at-a-time, and the bottles are often asymmetrical. Glass thickness varies, glass finish is often uneven and “dimply,” and the glass matrix rife with bubbles. One of the olive green bottle fragments (P952-6-15) is piece of a recessed wall or face with the embossed serif of an indeterminate letter on a top line and the letter “O” on a second line. Two olive green bottle fragments are “push-up” bottle base fragments (P952-6-18 and 8-27). Both show weathering at the contact rim of the base indicating hard treatment. The remaining 80 specimens are small wall fragments lacking morphological features and are of indeterminate form and function.

Aqua Bottle Glass. There were 18 small fragments of solarized aqua-green and aqua-blue vessel glass averaging 1.3 grams in weight. These fragments are distinct from the modern aquamarine glass described below in that these older, historical pieces are weathered to a “matte” or buffed appearance, oxidized and hydrated, tinted to more subtle color variations, and some examples have embossed lettering, beveled side or face panels, features indicative of historic bottle manufacturing practices. Two aqua bottle fragments are wall fragments of contact-molded bottles with recessed panels and chamfered corners (P951-7-6 and 11-21). The pieces lacked any other diagnostic characteristics. Two fragments are pieces of recessed panels with remnants of embossed lettering (P952-7-7 and 8-18). One has just the serifed end of an indeterminate letter and the other has a portion of a loop of what may be the letter “O.” The remaining 10 specimens (P952-1-10, 1-13, 5-14, 5-18, 6-22, 7-13, 9-5, 11-20, and 15-15) are featureless wall fragments of indeterminate form and function.

Improved Earthenware Tableware. The excavation produced 27 small fragments of plain glazed earthenware. There were 25 pieces of plain white glazed earthenware. Four are base fragments. Two of the base fragments are small pieces from the center of the base and lack any diagnostic features except partial maker’s marks. One of these is a small, thin piece with the corner of an embossed English registry mark (Figure 43; P952-16-13). The diamond mark is partial, although the letter “E” is clearly visible in the left corner, the position used for letter-month codes in the years 1842–1867, and the letter code E indicates production in May (National Archives 2015). The second piece has a partial stamped maker’s mark reading “S EDWARDS” (Figure 42b; P952-6-3). The mark is a good match to the Staffordshire Pottery of “James Edwards & Sons, Dale Hall, Burslem, England,” which issued white improved earthenware dinner services, plates and platters, jugs and ewers, and tea services with maker’s marks and impressed marks of this type between 1851 and 1882 (Godden 1964:230; James Edwards Company 2015). The remaining two base fragments are small pieces with no marker’s marks. One of these consists of two pieces of one small fragment of indeterminate form and function (P952-6-6). The foot is weathered indicating hard use. It has a crazed and fire-affected glaze. The other base fragment (P952-7-2) is a thick piece probably representing a base fragment from a large soup plate or serving dish. It has a subtle flute or ripple pattern on the up-curved inner wall. Two rim fragments were recovered. One of these is a small fragment of thin-walled flatware, possibly a saucer (P952-16-12). It has a molded, embossed decoration of indeterminate form around the inner rim. The other specimen is a rim fragment of a large soup plate or serving dish, and it has a subtle flute or ripple pattern on the up-curved inner wall identical in form to the base fragment described above (P952-7-2). An effort was made to match and mend but no

common fracture could be identified. One delicate cup handle fragment was identified (P952-8-6). It has subtle pink colored patches in the glaze. The remaining 14 plain white glazed earthenware fragments (P952-6-5, 8-7, 11-9, 11-10, 12-11, 12-13, and 16-10) consist of small wall fragments 0.25–0.75 inches in maximum dimension, of indeterminate form and function. The glaze and weathered condition of these specimens is consistent with the appearance and antiquity of the diagnostic specimens described above.

One specimen (P952-16-11) consists of two pieces of one wall fragment of a cream-yellow glazed plate or bowl. The glaze is crazed and the body is fissured from burning, and it is likely that the piece was burned in a high temperature fire. It possesses no maker's or production marks.

Porcelain Tableware. Three fragments of low-grade porcelain or high-grade ironstone were recovered. None of the specimens has markers or production marks. One is a large base fragment (Figure 42a; P952-1-5). It is flat based and slightly curved to the wall and appears to be a margin fragment from a long, oval serving platter, and based on the curvature the platter was probably more than 10.0 inches in length. The base has a section of the foot, and the foot is smooth and fully glazed. Molded, raised decorative rings border the foot on the base and wall sides. The second specimen is a wall fragment (Figure 42c; P952-8-8). It is curved and appears to be a fragment of a small bowl or pitcher, and based on its curvature it was originally 5.0–6.0 inches in diameter. It has a vitreous, creamy glaze, but the inner surface has irregularities and tiny bubbles or impurities. The outer surface is molded with a textured raised relief scene that may have depicted an outdoor tableau with animals and vegetation. The third specimen (P952-6-4) is a small chip of shattered porcelain of unknown form and function. The three porcelain fragments were found dispersed across the grid in three separate unit, N4, J9, and J17.

Faunal Remains. The excavation recovered 59 bone fragments. One specimen is a right calcaneus from a California ground squirrel (*Spermophilus beecheyi*). It lacks burning or other modifications, and this bone can be considered intrusive. The remaining 58 bones are clearly derived from food preparation and consumption, including five taxonomically identifiable bones and 53 indeterminate fragments.

P952-7-15: Saw-cut medium mammal scapula segment, cut from the neck to scapula spine, fractured axially (Figure 41c). Two saw cuts are evident and both are fine and even. One cut separated the glenoid condyle from this piece, and the other cut trimmed the scapular spine. The bone is from a pig-sized (*Sus scrofa domesticus*) animal and appears to be a ham steak shoulder cut.

P952-11-38: Saw-cut segment of large mammal longbone shaft (Figure 41b). The saw cut is fine and even. Three osteological landmarks provide a general taxonomic assignment: it is from bone with a very thick, laminated bone wall; the medullary cavity exhibits very coarsely arched spongy bone, and; the outer surface of the bone has a distinct nutrient foramen. While the bone cannot be definitively classified, the size of the bone and these three characteristics are consistent with the proximal femur of a large herbivore in the cow (*Bos domesticus*) to elk (*Cervus elaphus*) size range. The bone most likely represents a leg cut, either a round steak or roast.

P952-12-14: Saw cut segment of a medium-sized mammal longbone shaft (Figure 41a). While the diagnostic proximal condyle itself is missing, three landmarks identify this as a tibia: posterior and lateral flare from the shaft to the condyle; paired posterior aspera,

and; posterior nutrient foramen. While the bone cannot be definitively classified, the size of the bone and these characteristics indicate that it is most likely a right proximal tibia from a domestic goat (*Capra aegagrus hircus*) or domestic sheep (*Ovis aries*), making this a leg or shank cut.

P952-17-19: Saw-cut segment of a burned large mammal longbone of indeterminate species.

P952-11-39: Duck-sized bird longbone fragment of indeterminate species.

Miscellaneous Fragments: There were 53 taxonomically indeterminate bones. The majority are very small fragments of bones, probably bone wall fragments from medium to large mammal longbone. The 53 fragments consist of 38 distinct bones, several of which have recent, post-excavation fractures. Of the 38 bones, 25 (65.8%) are unmodified, 8 (21%) are charred black, and five (13.1%) are burned white (calcined). The relatively high proportion of burned pieces probably reflects incidental immolation in food preparation coupled with intentional burning of bone scrap.

Historical and Modern Construction Materials

The 1990 excavation recovered 708 items of construction debris, including asphalt (n=13), brick (n=136), mortar (n=23), plaster (n=17), lime (n=2), concrete (n=5), masonry (n=5), wire nails (n=66), square-cut nails (n=190), tile (n=8), pipes (n=2), bolts and washer (n=3), wire (n=3), miscellaneous metal (n=18), wood and charcoal (n=103), and window glass (n=114).

Asphalt. A total of 13 asphalt fragments were recovered. These are small pieces of mixed tar, sand, and gravel weighing an average of 11.1 grams each. All of the asphalt fragments were recovered from Unit C4, located in the southeast corner of the grid, near the 1990 paved walkway, approximately on the south end of the present day Visitor Center.

Brick. A total of 136 fragments of red common brick were found. These pieces of are red-brown to red-orange, coarse-grained, common clay construction bricks with sand tempering. They measure 0.25–3.5 inches and weigh an average of 6.4 grams each. Most are small, nodule-sized pieces, and a few (Figure 35; P952-14-1 and 15-29) are large corner and body fragments. The majority of brick fragments (81.3%) were found in units C4, N4, and J9 on the south end of the exposure nearest the now-demolished 1890–1921 Carriage House which incorporated crushed brick as a underlayment for the dirt floor (see *1987 Carriage House Excavation* on page 62). According to Annie Bidwell’s interview with William Conway and verified by Bidwell’s Indian workers Bill Preacher, Jack Frango, and Chico Tom, the red fired bricks used to build the Mansion bricks were made “where the dry-yard is right now [1913]” (A. Bidwell 1913 in Hill 1980:71), a facility identified in contemporary Sanborn maps (Sanborn Fire Insurance Company (1890, 1902, 1909). The bricks recovered by the 1990 excavation probably originated as culls from Mansion construction, re-purposed as underlayment.

Mortar. There were 23 small pieces of mortar averaging 5.3 grams each. Several have a thin patina of brick indicating masonry application. Like the brick, all 23 pieces were found in units at the south end of the grid nearest the demolished Carriage House, and the mortar was probably originally attached to the bricks, then dislodged as the bricks were reworked and decomposed.

Plaster. There were 17 small chunks of plaster averaging 2.7 grams each. Four specimens (P952-8-1, 8-2, and 11-8) are painted ecru pink and one of these (8-1) has a patina of brick on the application face indicating these pieces were used as exterior finish on the Mansion, which is still today plaster coated and painted in the traditional color scheme. Two pieces are made from a fine-grained, epoxy paste. One of these (P952-12-12) is molded and probably a decorative applique fragment. The inside, application surface retains an impression of wood grain, and the exterior surface has a fluted decorative pattern. The other piece (P952-1-2) has a wood impression on the application face and is painted dark brown on the exterior face, and appears to be a hardened window grouting fragment. The plaster fragments were found in five of the six excavation units and were distributed throughout the grid.

Lime. There were two clumps of lime averaging 4.1 grams each. Lime was a key ingredient in plaster and mortar mixes, and its presence here indicates that primary materials were mixed and applied on-site. Both clumps of lime were found in the south end of the exposure nearest the demolished structures.

Concrete. There were five chunks of concrete averaging 45.5 grams each. All five were found in the south end of the exposure nearest the demolished structures.

Masonry. There were five stone fragments averaging 11.9 grams each. Two are small crushed pebbles probably derived from concrete mix, and three are pieces of distinctive stones probably representing fragments of stone used as facing or ornamentation in the Mansion. One is a piece of slate (P952-14-3), one is a blue-gray quartzite (P952-15-21), and one is a small fragment of red-brown quartzite (P952-16-5). All five were found in the south end of the exposure nearest the demolished structures.

Wire Nails. There were 66 wire nails and fragments averaging 3.8 grams each. Most of the nails are heavily rusted making precise details of manufacture difficult to make out. However, 41 of the wire nails and fragments were large enough and retained enough of the original form to estimate type and hardware size. In all, 40 of the wire nails were common wire or smooth box nails, and one was a scaffold (duplex) nail. The duplex nail was a 9d (2.75 inches long). The box nails mostly ranged between 6d (2.0-inch) and 10d (3.0-inch) nails (92.7%); only two 16d (3.5-inch) and one 20d (4.0-inch) nails were found (Table 6). The absence of flooring, roofing, and dry wall nails is consistent with the architectural theme of the Mansion buildings, featuring plaster exteriors and terra cotta roofs. The absence of finish nails is also interesting and implies that demolished buildings had cabinetry built using box nails, and this may explain the prevalence of small, 6d–8d nails. Wire nails were found throughout the grid but more common in the three north units N12, J17, and N21.

Square-Cut Nails. There were 190 square-cut nails and fragments averaging 3.5 grams each (Figure 37a–g). The square-cut nails were also very rusty, but 67 nails and fragments could be classified by type and size. There were floor head (narrow head), common head, spike head (faceted), and one brad head (round). The brad head nail was 4d (1.5-inch), the floor heads were 5d (1.75-inch) to 6d (2.0-inch) the common nails were 7d (2.25-inch) to 16d (3.5-inch). There were four 20d (4.0-inch), including two spike heads and two common heads (Table 6). Comparison of nail sizes listed in Table 6 shows roughly comparable use of square-cut and wire nails, with a similar gap between framing nails (16d–

Table 6. Comparison of Square-Cut and Wire Nail Sizes Recovered during the 1990 Visitor Center Excavation.

SIZE	SQUARE-CUT	WIRE
4d	7	-
5d	3	-
6d	23	10
7d	13	1
8d	11	18
9d	2	5
10d	-	4
12d	-	-
16d	4	2
20d	4	1

20d) and finish nails (6d–9d). The presence of a much higher proportion of 4d–6d among the square-cut nails may indicate one of Bidwell’s older structures had exterior or interior siding, or a shake roof. Notably, several of the 7d–8d square-cut nail shafts were embedded in lumps of putty, and these may have been used to frame windows or fix detail work. The best fit for these characteristics is the two-story federal-style adobe Bidwell built in 1858 and used as his residence until completion of the Mansion. He then demolished the structure in 1872. The northwest corner of the adobe residence was located approximately 35 feet southeast of Johnson’s 1990 excavation grid. The square-cut nails were evenly distributed throughout the grid.

Tile. There were eight ceramic tile fragments averaging 19.5 grams each. One specimen (P952-11-5) is a fragment of an earthenware art tile with no backing and an irregularly textured surface with an irregular cerulean blue glaze. Seven are modern, commercially made tiles cast in molds. One of these is a corner fragment of a thin (0.25-inch), beveled-edge tile. It is pea green with a spatter pattern facing and a rib-textured backing. It is typical of mid-20th-century bathroom tiles (Figure 36). Six of the tiles are very thick (0.5-inch) beveled-edge earthenware tiles with a thin, coppery glaze (Figure 36). They have a groove-textured backing (0.25-inch on center). The backing also has lightly stamped lettering which is generally indecipherable, but one fragment reads “CORPO...”; another reads “ALI...” or “ALT...” above “RT...T”; the third reads “RT...T.” Two pieces retain patches of caulking indicating these were applied. It is likely that these tiles derived from demolition of the 1951–1963 Chico State College Ceramic Arts building located in the immediate area of the south edge of the 1990 excavation grid. Six of the nine tile fragments were found in Unit C4 on the south edge of the grid.

Pipes. The excavation recovered two pipe fragments. One (P952-4-4) is a saw-trimmed end of a 1/2-inch galvanized water pipe, 3.75 inches long, with standard coarse threads. It has been cut with a hacksaw and pipe wrench bite marks are visible on the sides. The other specimen is a wall fragment of a standard brown-glaze, salt-glazed vitrified terra

cotta sewer pipe with a wall thickness of 1.0 inch and curvature indicating an inside pipe diameter of 12.0–14.0 inches. Salt glazed sewer pipe came into common use in California in the mid-1880s. The water pipe fragment was found in Unit N21 and the sewer pipe fragment in Unit J9.

Bolts and Washers. There were two bolts and one washer. The washer is a modern 5/8-inch flat washer (P952-15-8). One of the bolts (P952-11-1) is the hacksaw-cut shank of a modern, 1/2-inch bolt with a hex nut still threaded. The other bolt is the head-end of a forged, stove head bolt (P952-8-13). It is heavily corroded and threads are only partly visible (Figure 37i). The three items were found in three different units throughout the excavation grid.

Wire. The excavation recovered three pieces of modern steel wire. The largest is a one-foot-long section of 16 gauge soft steel wire twisted to form a hanger or hook (P952-17-5). The other two items are twisted and folded sections of 22 gauge binding wire (P952-9-2 and 11-31). The three wire pieces were found in three different units throughout the excavation grid.

Metal Fragments. The excavation recovered 18 pieces of indeterminate metal fragments averaging 2.6 grams each. One specimen (P952-11-42) is a small, melted ingot of lead probably residual to leading of glass or other Mansion features. The remaining pieces are heavily rusted and flaky, and in fact many appear to be exfoliated rust from larger iron objects. Metal fragments were distributed throughout the excavation grid.

Wood and Charcoal. There were 103 pieces of wood and charcoal weighing 0.7 grams each. The pieces are too small to determine if they consisted of decomposed lumber; however, for present purposes it is assumed that the material derived from burning of demolished building materials. Wood and charcoal was found primarily in units C4, N4, and J9, on the south end of the grid,

Window Glass. The excavation recovered 114 fragments of modern, colorless window pane glass averaging 1.1 grams each. It was crushed, and broken into small pieces 1/4 to one inch in maximum dimension. Window pane glass was distributed throughout the excavation grid.

Modern Refuse

The 1990 excavation recovered 287 items of modern refuse, including tin or aluminum foil (n=15), plastic fragments (n=23), light bulb fragments (n=6), a thumb tack (n=1), coins (n=2), pencil lead (n=3), pen nib (n=1), a cartridge case (n=1), an earthenware fragment (n=1), terra cotta planting pot fragments (n=6), steel crown caps (n=2), and colorless, amber, and green glass vessel fragments (n=226).

Tin/Aluminum Foil. There were 15 pieces of modern tin or aluminum foil. All 15 are tightly crumpled and corroded. No specific association or function could be determined.

Plastic Fragments. The excavation recovered 23 modern plastic fragments averaging 0.3 grams each. Most are small, unidentifiable fragments, but the few that can be recognized include: four trim pieces from plastic coated electrical wire, with cut lengths typical of 120 box and switch installation; one Styrofoam cup fragment; one piece of fiberglass facing, probably from athletic gear; and one pocket comb fragment.

Light Bulb Fragments. The excavation recovered six fragments of modern light bulb glass averaging 0.6 grams each. Five are thin-walled molded colorless glass bulb fragments

with curvature typical of modern household light bulbs. The other piece is the melted remnant of a small, blue glass and plastic bulb, probably a Christmas or other decorative light. The bulb fragments were found dispersed throughout the excavation grid.

Thumb Tack. One standard, modern stainless steel thumbtack with a bent shank was recovered in Unit N4 (P952-1-17).

Coins. The excavation recovered two modern coins. One is a 1971 Lincoln Head penny minted in San Francisco (P952-4-3). It is tarnished but shows little or no pocket wear. The other coin is a 1966 FDR dime with no mint mark, indicating it was struck in Philadelphia. The coin is tarnished but shows relatively little pocket wear. The coins were found at each end of the 1990 excavation grid.

Pencil Lead. Three sections of pencil lead were recovered (P952-5-26, 11-48, and 17-17). These are common leads associated with standard mechanical pencils used in engineering and art training throughout the modern era. Two are the standard 2.0 mm leads that prevailed throughout the mid-20th century, and one is a 0.5 mm lead that was rare outside the art and engineering worlds before the 1970s. The common name is “lead” but the material is generally a graphite/clay mix. An association with the Chico State art classroom that stood at the south end of the Visitor Center building is clear. The three leads were each found in different excavation units dispersed throughout the 1990 sampling grid.

Pen Nib. The excavation recovered one thin steel pen nib (P952-17-6). It is a common art nib that bears the obverse paneled imprint “Wearever” on the first line and “USA” on the second line. It has a basal securing notch and mounting hole indicating it was probably designed for fountain pen use, and a fine breather hole, long slit and tines leading to a fine tip, indicating it was designed for fine-line, probably art, applications. It is crushed at the tip end and corroded and tarnished. Wearever pens dominated the educational market through the mid-20th century, and this nib probably dates sometime between 1920 and 1965. It was found at the south end of the excavation grid, in Unit C4.

Cartridge Case. One cartridge case was recovered (P952-11-34). It is a .22 caliber short rimfire with a single firing pin strike. It has a centered, serifed “U” headstamp imprint marking it as a Remington issue. This type of cartridge and headstamp has been in production since 1885 (Barber 1987). It was found in Unit N12 at the center of the 1990 grid.

Earthenware Fragment. One partially fired earthenware fragment was recovered (P952-17-16). It is a small, rolled and hand-molded cylinder measuring 3/4 inches long and 3/16 inches in diameter, and is pinched on one end and coated with an over-fired, sooty glaze. The piece may be an appliqué element from a failed art project associated with the 1951–1963 Chico State College Ceramic Arts building which stood at the south end of the 1990 grid. The object was found in Unit C4.

Terra Cotta Planting Pots. The excavation encountered six terra cotta planting pot fragments (P952-8-4, 11-6, 11-7, and 15-27). All six are from standard, red-brown to ecru pots, and all six are from small pots probably used to germinate starts. Five are small wall fragments less than 0.75 inches in maximum dimension. One (P952-15-27) is a large base fragment of a thick, hand-thrown pot with a basal drain hole. It has a light, hand-incised maker’s mark “A” next to the drain. These pots are probably associated with the small, 10-x-15-foot “SEED SHED” depicted on the 1902 Sanborn map (Sanborn Fire Insurance Company 1902), located alongside the acetylene gas works in the immediate vicinity of the

southwest corner of the 1990 excavation grid. The terra cotta pot fragments were found in the center to south end of the grid, in units C4, J9, and N12.

Crown Caps. Two modern steel beverage crown caps were recovered (P952-4-2 and 11-33). Both are standard crown caps typical of mid-20th-century soda bottles. Both are too corroded to show product or manufacturing imprints or painted logos. The caps were found in units N12 and N21.

Modern Glass Vessel Fragments. The excavation recovered 226 20th-century to modern glass vessel fragments including 155 of colorless glass, 51 of amber glass, 14 of “Coca-Cola© Aquamarine” glass, four of “7-UP © Green” glass, and two of milk glass. The 155 colorless glass vessel fragments were all small pieces measuring 0.25 to 1.0 inches in maximum diameter, with crushed edges. The fragments appear to be from a combination of jars and bottles. There are two screw-top jar rim fragments (P952-4-20 and 8-26), and one crown-cap finish (P952-5-4). Ten wall fragments bear partial embossing, but the fragments are too small to decipher the partial lettering and makers marks. The remaining 142 specimens show no other product or manufacturing imprints. The 51 amber glass vessel fragments are of a thickness and glass quality typical of 20th-century to modern beer and liquor bottles. All but one of the amber glass fragments were thin-walled beverage bottle fragments. They are generally very small, between 1/4 and 3/4 inches in maximum diameter and crushed on the margins. The beverage link is buttressed by five pieces with partial embossed lettering including partial “O,” “DS,” and the largest piece with “FEDER” over “SALE,” all of which appear to be fragments of the embossed message “FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE.” This message was imprinted on liquor bottles as a result of a post-prohibition effort on the part of the federal government to ensure that liquor was distributed in bottles, which manufacturers sold exclusively to distillers, rectifiers or wholesalers under permit. The law went into effect in 1935 and was repealed in 1964, giving us a general mid-20th-century time frame for the amber glass vessel fragments. One amber glass fragment is a large, thick base fragment 3/8 inches thick, and based on its curvature probably from a jug at least six to eight inches in diameter. The form is consistent with early to mid-20th-century Clorox © jugs, however, the piece has no product or manufacturing imprints, embossing, or logos. The 14 “Coca-Cola©Aquamarine” bottle glass fragments are all small fragments of thick bottle glass including two neck fragments (P952-5-13 and 6-21), one crown finish fragment (P952-6-20), one wall fragment with a partial painted white label (P952-15-17), and one base with a heavily worn recycle scars around the margin and embossed lettering. The four “7-UP ©Green” glass vessel fragments (P952-6-26, 11-26, 15-12, and 23-3) are all small fragments of thick bottle glass crushed around the margins and less than 3/4 inches in maximum dimension. All four were of the intense, brilliant green bottle glass typical of the popular soft drink. One is a small base fragment with a partial embossed “3” imprint. No other product or manufacturing imprints were observed. The two white “milk glass” vessel fragments (P952-6-27 and 8-29) were both crushed around the margins and less than 0.5 inches in maximum dimension. Neither shows product or manufacturing imprints or painted logos.

Association and Context

Vertical Stratigraphy. As noted in Part 1, the Park is situated on an elevated floodplain adjacent to the entrenched channel of Big Chico Creek. Soils are mapped as Vina Fine Sandy Loam, a coarse-loamy sandy alluvium. The Typical Profile published by the

California Soil Resources Lab (2012) shows a young A/C profile with the upper ‘A’ soil characterized by high organic content and some structure (Figures 5 and 34). Primary cultural deposits should occur in the ‘A’ horizon—and based on the Typical Profile—to depths up to 35.8 inches (91 centimeters) below surface. Johnson’s 1990 Visitor Center excavation units were dug to the A/C contact and encountered soils consistent with the Typical Profile, with some differences attributable to local historical modifications. One of the differences was overall depth of the ‘A’ horizon. Johnson encountered the A/C contact between 12 and 24 inches below surface, with shallower depths on the north end of the grid, suggesting that one to two feet of soil had been graded from the location historically.

Cumulative unit tallies and individual unit tallies alike showed no vertical stratigraphic patterns. For example, traditional Native American technological items were found dispersed throughout the grid, 11 of the 19 at 0–6 inches depth, and the other eight at 6–12 inches depth, in soils dominated by historical and modern materials. Unit results indicate the excavated deposits possessed little or no integrity. Analysis of the three excavation units that reached a depth of at least 12–18 inches (units C4, N4 and J9) shows that there was no difference in depth distribution of artifacts grouped by chronological period (Table 7). The typical unit encountered archaeological materials throughout the excavated depths, but high-density, high-diversity deposits occurred in the upper 12 inches, visible as a coarse-grained layer in Johnson’s photograph of the completed Unit C4 (Figure 33). Native American, historical, and modern artifacts were all most abundant in the upper levels and diminished in frequency with depth.

Horizontal Stratigraphy. Analysis of horizontal distribution (Table 8) shows that the majority of artifact classes were dispersed evenly throughout the grid, including window glass, ceramics, square nails, wire nails, metal artifacts, and synthetic materials. A few of the artifact classes had patterned distributions. Units N12, J17, and N21, on the north end of the grid, produced 70 percent or more of the bottle glass, wood and charcoal. Units C4, N4, and J9 on the south end of the grid produced 69 percent of the brick and 92 percent of the construction materials; the latter including concrete, plaster, mortar, and lime. Since the majority of these materials most likely relate to construction of the Mansion, this difference in frequency is probably attributable to the closer proximity of the south end of the grid to the historical Mansion construction zone.

Table 7. Depth Distribution of Artifacts from Units C4, N4, and J9 Attributable to Native American, Historical, and Modern Occupations.

DEPTH (INCHES)	OCCUPATION			TOTAL
	NATIVE AMERICAN	HISTORIC	MODERN	
0–6	2	20	22	44
6–12	2	9	16	27
12–18	-	9	8	17
18–24 (Unit C4 only)	-	6	10	16
Total	4	44	56	104

Unit	Depth	Window Glass		Bottle Glass		Brick		Ceramic		Sq Cut Nail		Wire Nail		Metal *		Wood		Plastic		Faunal		Construction		Metal Detail
		N	#	N	#	N	#	N	#	N	#	N	#	N	#	N	#	N	#	N	#	N	#	
N21	0-6	5	3.7	61	116.9	-	-	-	-	2	4.6	4	16.3	12	122.5	2	1.6	12	3.0	-	-	1	1.4	* - bottle cap, aluminum foil, galvanized pipe, 1971 Lincoln Penny.
	6-12	3	6.2	61	188.1	-	-	-	-	9	42.2	6	32.5	5	0.3	5	0.6	-	-	-	-	-	-	* - aluminum foil, pencil lead.
J17	0-6	5	4.6	17	57.3	-	-	6	22.3	15	66.3	10	52.4	4	12.9	2	1.4	1	1.7	-	-	1	4.9	* - fitting, machine buckle, fence staple.
	6-12	10	5.0	31	39.4	1	2.3	2	28.7	9	26.7	2	4.6	-	-	6	1.4	-	-	1	4.0	-	-	-
N12	0-6	23	18.1	69	68.6	29	155.9	8	11.6	30	87.6	13	31.5	13	36.8	40	4.8	1	0.1	26	15.3	3	9.0	* - bottle cap, wire, 22. shell, pencil lead, foil, snap buttons.
	6-12	6	2.6	10	5.6	-	-	3	5.6	19	60.6	6	20.7	2	6.8	2	3.2	-	-	18	45.3	-	-	* - fitting, lead mass.
C4	12-18	1	0.4	1	0.6	-	-	-	-	3	9.7	-	-	-	-	1	0.9	-	-	-	-	-	-	-
	0-6	1	1.4	8	4.3	23	380.7	-	-	3	15.3	2	9.5	1	0.3	-	-	-	-	1	0.1	6	118.7	-
N4	6-12	3	4.4	14	27.5	8	278.7	5	204.0	3	29.1	3	12.0	3	76.9	1	1.1	-	-	3	1.2	14	311.4	-
	12-18	-	-	28	32.9	3	0.7	10	15.7	-	-	-	-	-	-	-	-	-	-	-	-	31	108.8	-
J9	18-24	13	16.1	11	57.1	-	-	1	0.6	12	28.2	12	26.1	8	43.4	8	0.5	1	0.3	10	9.0	-	-	* - pencil lead, aluminum foil, wire, snap button.
	0-6	13	6.8	16	22.5	25	18.4	2	26.6	6	25.6	-	-	1	0.7	1	37.7	3	0.4	-	-	-	-	-
J9	6-12	4	4.5	-	-	-	-	-	-	5	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	12-18	8	3.9	7	5.4	1	0.2	-	-	6	22.5	-	-	4	2.1	-	-	-	-	-	-	-	-	-
J9	0-6	15	21.8	23	74.2	7	8.1	9	24.3	19	64.7	7	46.3	42	94.0	6	0.3	7	1.1	-	-	4	18.8	* - bolt, 1966 Eisenhower Dime.
	6-12	1	0.4	4	6.2	-	-	-	-	10	96.4	1	3.8	-	-	-	-	-	-	-	-	-	-	-
J9	12-18	-	-	2	0.6	-	-	-	-	1	3.0	1	3.0	-	-	-	-	-	-	-	-	-	-	-
	Totals	111	99.9	363	707.2	97	845	46	339.4	152	590.1	67	258.7	95	396.7	74	53.5	25	6.6	59	74.9	60	573	-
North	53	48%	250	69%	30	31%	19	41%	87	57%	41	61%	36	38%	58	78%	14	56%	45	76%	5	8%	North: Bottle Glass, Wood, Faunal.	
South	58	52%	113	31%	67	69%	27	59%	65	43%	26	39%	59	62%	16	22%	11	44%	14	24%	55	92%	South: Brick, Construction Material.	

Table 8. Distribution of Major Artifact Classes by Unit and Depth, showing the Percentage of Total Recovered from Units on the North End of the Grid (N12, J17, and N21) versus the South End of the Grid (C4, N4, and J9).

Summary of the 1990 Findings

The 1990 Visitor Center excavation encountered stratigraphically mixed deposits impacted—or in part emplaced—by historical cut-and-fill. The artifacts are all small fragments, and all but a few are crushed down to one inch or less in diameter, indicating they were heavily reworked in the course of 19th- and 20th-century construction, demolition, and landscaping of the Mansion grounds.

Despite the lack of time-specific contexts, a number of the artifacts recovered by the 1990 excavation have historical research potential based solely on their general association with Bidwell's early Rancho Chico operations and later Mansion residence. The excavation yielded brick fragments likely to be construction culls, plaster pieces that may date to earlier phases of construction that retain original stain or paint, and nails that indicate patterns in framing, siding, or finish work. The excavation produced lamp chimney fragments, window glass, and drawer pulls attributable to furnishings and fixtures used in buildings and structures. There were gunpowder can fittings, buttons, and clothing and gear fasteners representing personal gear used by the occupants or sale items offered in Bidwell's store. The dig also yielded glass vessel fragments, tableware fragments, and animal bones indicative of past food and beverage consumption. These artifacts all may be examined and reconsidered in due course by researchers planning future investigations.

With respect to the modern assemblage, the discovery of 20th-century refuse dominated by soda bottle glass is predictable considering the location of the excavation in relation to the principal 20th-century educational institutions of the City of Chico. The 1990 Johnson Visitor Center excavation collection is currently housed in temporary curation at the Visitor Center and is slated for curation at the State Parks Statewide Museum Collections Center.



Figure 31. May 18, 1990, showing the Excavation Grid in Relation to Bidwell Mansion, Units C4, N4, and N12 Open.



Figure 32. May 19, 1990, showing the Initial Turf Cut in Unit N12, and Ongoing Excavation in Units J9 and C4.



Figure 33. Unit C4, 24 inches, showing Roots and PVC Line at the Base of the Excavation.
The high-density, coarse-grained historical fill is visible at the top of the profile just below the grassy root zone.



Figure 34. Unit N4, 18 inches, showing Roots at the Base of the Excavation.

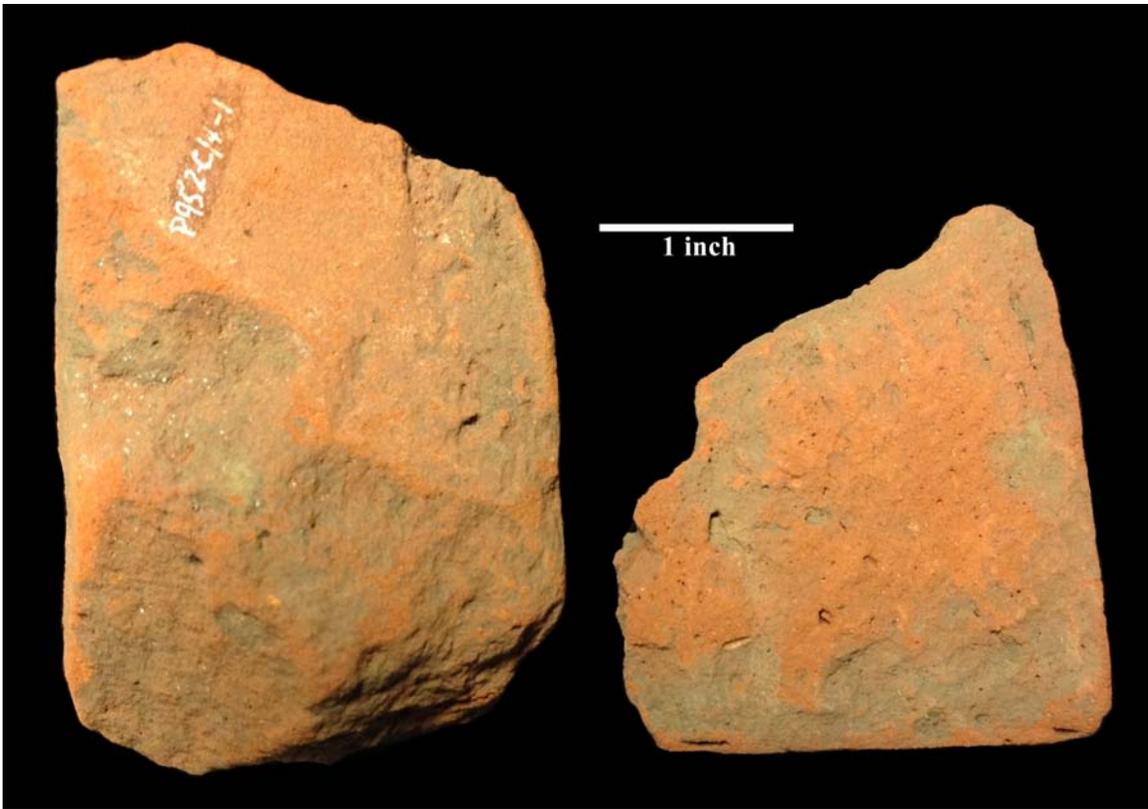


Figure 35. Red Common Brick Fragments Recovered by the 1990 Visitor Center Excavation.

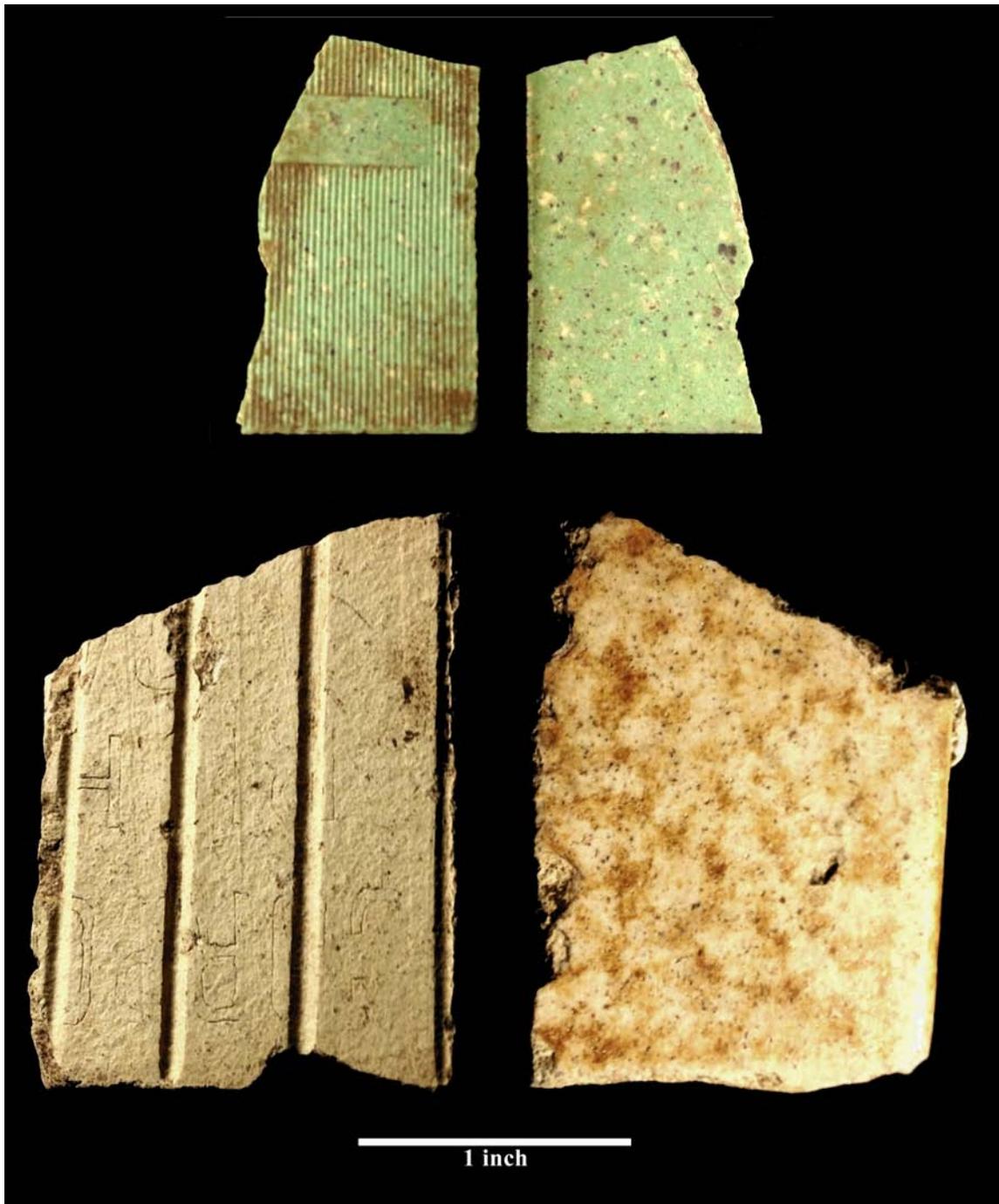


Figure 36. Building Tile Fragments Recovered by the 1990 Visitor Center Excavation.



Figure 37. Metal Artifacts Recovered by the 1990 Visitor Center Excavation.

Square-cut nails a-c – 20d spikes; d – 16d common; e – 8d common; f – 6d common;
g – 4d common; h – cast iron stove fragment; i – forged bolt fragment.



Figure 38. Pewter “Hazards Powder” Spout and Screw-top Recovered by the 1990 Visitor Center Excavation.



Figure 39. Drawer Pulls and Glass Bead Recovered by the 1990 Visitor Center Excavation.

a – glass drawer pull; b – gutta percha drawer pull; c – oval wire-wound blue glass bead.



Figure 40. Clothing and Gear Fasteners Recovered by the
1990 Visitor Center Excavation.

a – snap button with enameled copper cap; b – steel snap button cap; c – decorative steel cap showing red pigment; d – tin-copper alloy jewelry box hasp; e – iron wire-framed buckle.

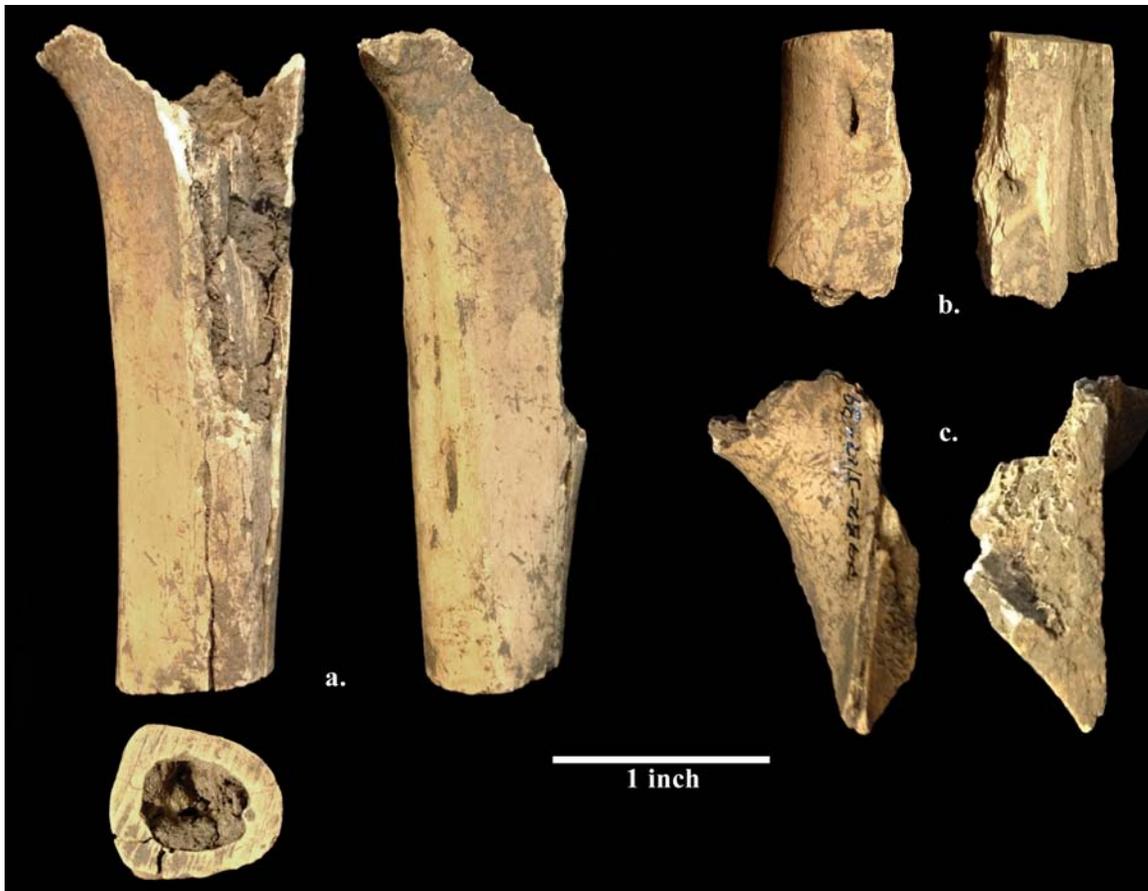


Figure 41. Saw-cut Mammal Bone Recovered by the 1990 Visitor Center Excavation.
a – goat or sheep tibia representing a leg or shank cut; b – cow or elk femur representing a round steak or roast cut; c – domestic pig scapula neck representing a ham steak shoulder cut.



Figure 42. Ceramic Fragments Recovered by the 1990 Visitor Center Excavation.

- a – fragment of a porcelain oval serving platter; b – white glazed improved earthenware fragment with an impressed “S EDWARDS” maker’s mark may indicate production between 1851 and 1882;
- c – porcelain, possible small bowl, jar, or pitcher fragment with raised relief element.

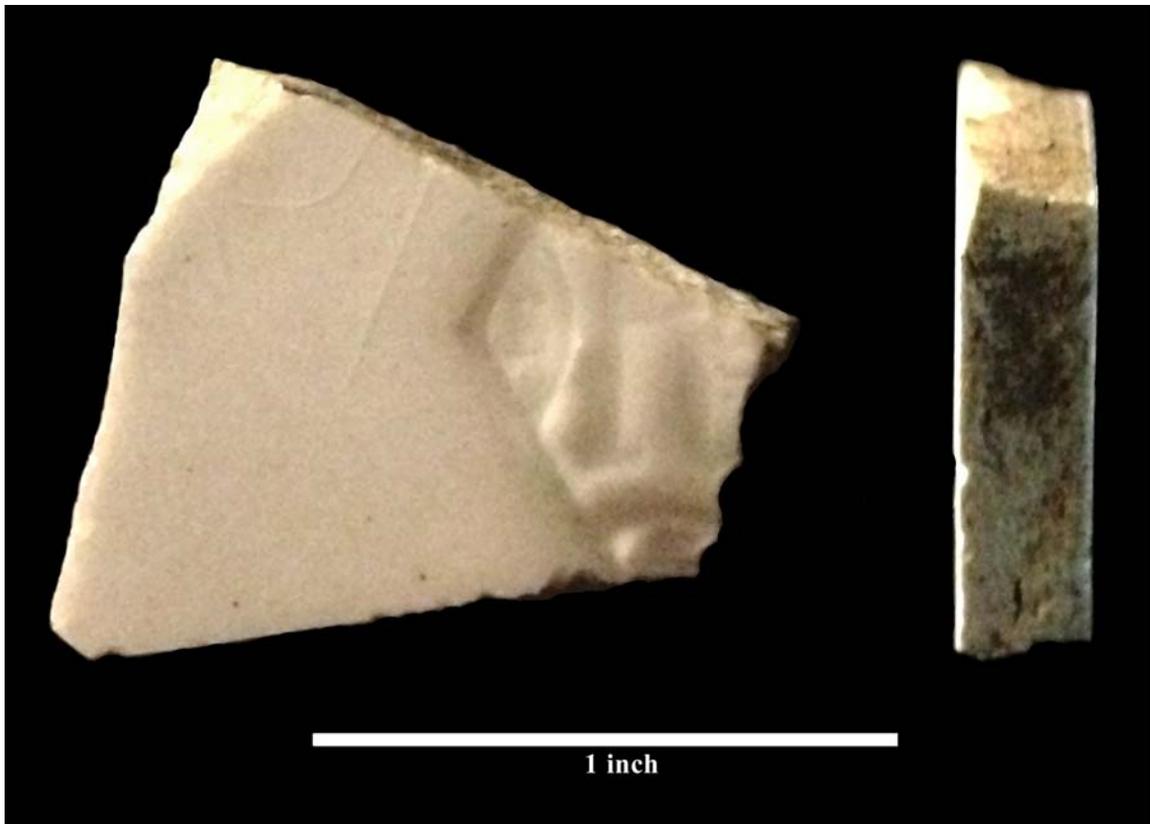


Figure 43. White Glazed Improved Earthenware Fragment Recovered by the 1990 Visitor Center Excavation.

The English registry mark indicates production between 1842 and 1882.



PART 4:
CONCLUSIONS AND RECOMMENDATIONS

*Photo on previous page:
Old Adobe from Big Chico Creek, circa 1868.
Courtesy of CSU, Chico, Meriam Library, Special Collections SC17297.*

Conclusions

THE EVIDENCE TO DATE

Part 2 of this document examined the historical documentary and photographic record of John Bidwell's Rancho Chico operation in an effort to learn more about the temporal phases of construction and each phase's cultural context. The principal aim of the section was to codify our understanding of the location and age of features likely to occur in and around the Park predating John and Annie Bidwell's occupation of the Mansion in 1868. Descriptions found in various period sources coupled with photographic analysis permitted the identification of 17 features (see Table 1), including eight buildings and structures, two camp settings, and two Native American settlements. The 13 buildings and structures identified here are all projected to be partially or fully contained on Park property. The two camp settings—the 1851 Wozencraft treaty grounds and the 1863 U.S. Army Camp Bidwell—were probably immediately adjacent to the grounds, but their locations have not yet been determined. The two Native American settlements (1840–1863 Mechoopda settlement and 1863–1869 Bahapki settlement) were not located on Park grounds but on lands managed by the City of Chico and California State University, Chico, respectively. Additional buildings related to Bidwell's various production and storage facilities along the Marysville-Shasta Road are not considered here.

Part 3 of this document detailed to the extent possible, the archaeological evidence compiled to date by examining the findings of three previous excavations on Park grounds conducted by California State University, Chico. The 1976 Old Adobe excavation yielded a significant amount of material but had not been previously reported. The 1987 Carriage House excavation also yielded significant findings, but the report contains highly generalized information and no artifact analysis. These two excavations are examined and the general findings described here in order to consider the research potential these excavation collections may have; full re-analysis and reporting fell outside the scope of this study. On the other hand, the 1990 Johnson Visitor Center excavation collection had also not been previously analyzed or reported and that is done so here, determining the temporal and functional context of objects and assemblages in order to address their potential for attribution to one of the four Components defined in Part 2.

Association and Context

Archaeological interpretive value is determined by the integrity of the depositional context. As students we are taught in the field, in the lab, and in the throes of analysis, to pay attention to association and context. To what extent can we determine the age, physical relationships, and behavioral associations of the objects and materials we collect during the course of an archaeological investigation? For the three excavation collections summarized above, not much.

The following summarizes the findings and addresses the evidence to date related to the archaeological signature of each of the Park's four temporal components. It is critical to note that no specific feature context, living surface, or constructed element has yet been found on Park grounds linked to any of the 17 features identified in Part 2, not in the remote sensing study reported by White (2002), and not in any of the three archaeological excavations described in Part 3. The remote sensing study generated findings that were confused by anomalies related to modern sewer, drinking water, and irrigation sprinkler installations, and tree, sidewalk, and landscaping elements constrained the grid on all sides making the exercise surprisingly unproductive. For the two excavations where it was possible to do so (1976 and 1990), stratigraphic analysis determined that artifacts attributable to different temporal components were fully mixed, probably a product of late 19th- through 21st-century landscaping and construction. Bidwell's comprehensive re-invention of the Mansion grounds in 1868, involved the complete demolition of the older Rancho Chico buildings, down to the footings, and emplacement of landscaping cut-and fill. This had the effect of re-distributing materials, a trend that re-doubled with construction related to Chico State acquisition and to State Parks' acquisition.

At present, it is not possible to ascertain the extent to which these ground-disturbing activities have destroyed or diffused the archaeological record. However, based on the type profile for Vina Fine Sandy Loam (see Figure 3), it is clear that an archaeologically sterile 'C' horizon lies no more than three feet below the surface; the archaeological excavations confirmed this and found evidence for significant cuts in some parts of the site, truncating the 'A' horizon containing the archaeology. Nevertheless, construction of the larger buildings and emplacement of features such as mounted posts, poles, and timbers, building footings, latrines, wells, basements, and cisterns could have resulted in deep, intrusive features that could contain temporally and behaviorally bracketed archaeological traces. For example, Bidwell's diary entry for December 14, 1889, indicates that ranch hands were "hauling to fill old adobe hole" (Bidwell 2002), suggesting that in some cases, the landscaping actually acted to seal these contexts. The answer to this question has to wait for future archaeological exploration, likely to incorporate a different remote sensing strategy.

Consequently, the following analysis examines the artifacts as relatively free-floating archaeological traces. Temporally diagnostic artifacts were recovered by the three investigations, and they possess some archaeological interpretive potential in the sense that they can tell us about the general condition and make-up of the deposits and the kinds of things that might be found associated with each component.

COMPONENT 1: PREHISTORIC NATIVE AMERICAN OCCUPATION

Artifact Descriptions

Previous archaeological investigations in Park grounds identified a cumulative total of 52 prehistoric Native American artifacts. Kowta's 1976 excavation in the front lawn area identified 28 definitive prehistoric artifacts including one large basalt point, one obsidian projectile point midsection (Figure 44), one basalt bifacially worked flake, one metasedimentary cobble core tool (Figure 45), one serpentine or greenstone pestle (Figure 46), one possible basalt ground stone fragment, and 22 chipped stone flakes. Johnson's 1987 Carriage House excavation (Johnson 1988) encountered five artifacts, including one small obsidian corner-notched projectile point, three basalt flakes, and one flake scraper (material not identified), all from historically mixed deposits less than 24 inches deep. Johnson's 1990 Bidwell Mansion Visitor Center test excavation identified 19 definitive prehistoric Native American artifacts, including 15 basalt flakes, three obsidian flakes, and one small, obsidian corner-notched projectile point (Figure 44). All three of the excavations also recovered constituents that probably relate to the prehistoric component but are of uncertain attribution, including weathered soapstone pebbles and rock fragments possibly representing fire-cracked cooking rocks.

Horizontal and Vertical Distribution

With respect to horizontal distribution, artifacts attributable to prehistoric occupation were found in excavations spanning the core area of the Mansion grounds, and one can assume that signatures of prehistoric occupation occur throughout the grounds. With regard to vertical distribution, Johnson's 1987 and 1990 excavations reached a maximum depth of just 24 inches below surface, and all of the prehistoric artifacts were found in historically mixed deposits containing a much higher frequency of 19th- and 20th-century sheet debris. One of Kowta's 1976 excavation units reached a maximum depth of 230 centimeters below surface. This unit encountered prehistoric artifacts at depths of 20–160 centimeters, where they were also found in historically mixed deposits containing a much higher frequency of 19th- and 20th-century debris (Table 9).

Age and Attribution

With respect to the age and cultural affiliation of the prehistoric component, one of the projectile points is a large point made of basalt (P952-109-401). It may represent a dart point dating to the Archaic Period, more than 1,200 years old, or it may be a late prehistoric dagger or spear tip, a tool type mentioned by Dixon (1905:119–346) for the ethnographic Northern Maidu. The other three points are late prehistoric arrow point types all probably dating to the last 400 years, including two small corner-notched points and one small barbed point. The three are forms characteristic of the Bidwell Complex as defined by Olsen and Riddle (1963) and Ritter (1970), or Chico Complex as defined by Chartkoff and Chartkoff (1983) and Kowta (1988), both attributed to the Northern Maidu (Kowta 1988).

The three excavations produced artifacts indicative of the late prehistoric Northern Maidu. Combined, the excavations generated a low-density, moderate-diversity artifact assemblage. The low-density indicates intermittent activities, while the diversity of functional types, including artifacts indicative of the preparation and maintenance of

hunting equipment and production and use of stone food preparation tools, suggest that a complete social unit was involved and some dedicated settlement took place at the site.

Table 9. 1976 Kowta Unit 1N/6W Artifact Depth Distributions.

DEPTH (CENTIMETERS)	HISTORICAL ARTIFACTS	PREHISTORIC ARTIFACTS
0-10	157	-
10-20	179	-
20-30	57	1
30-40	38	1
40-50	14	-
50-60	5	-
60-70	5	-
70-80	6	-
80-90	11	-
90-100	16	-
100-110	19	-
110-120	3	-
120-130	-	-
130-140	-	-
140-150	9	-
150-160	-	1
160-170	-	-
170-180	7	-
180-190	9	-
190-200	-	-
200-210	2	-
210-220	3	-
220-230	3	-

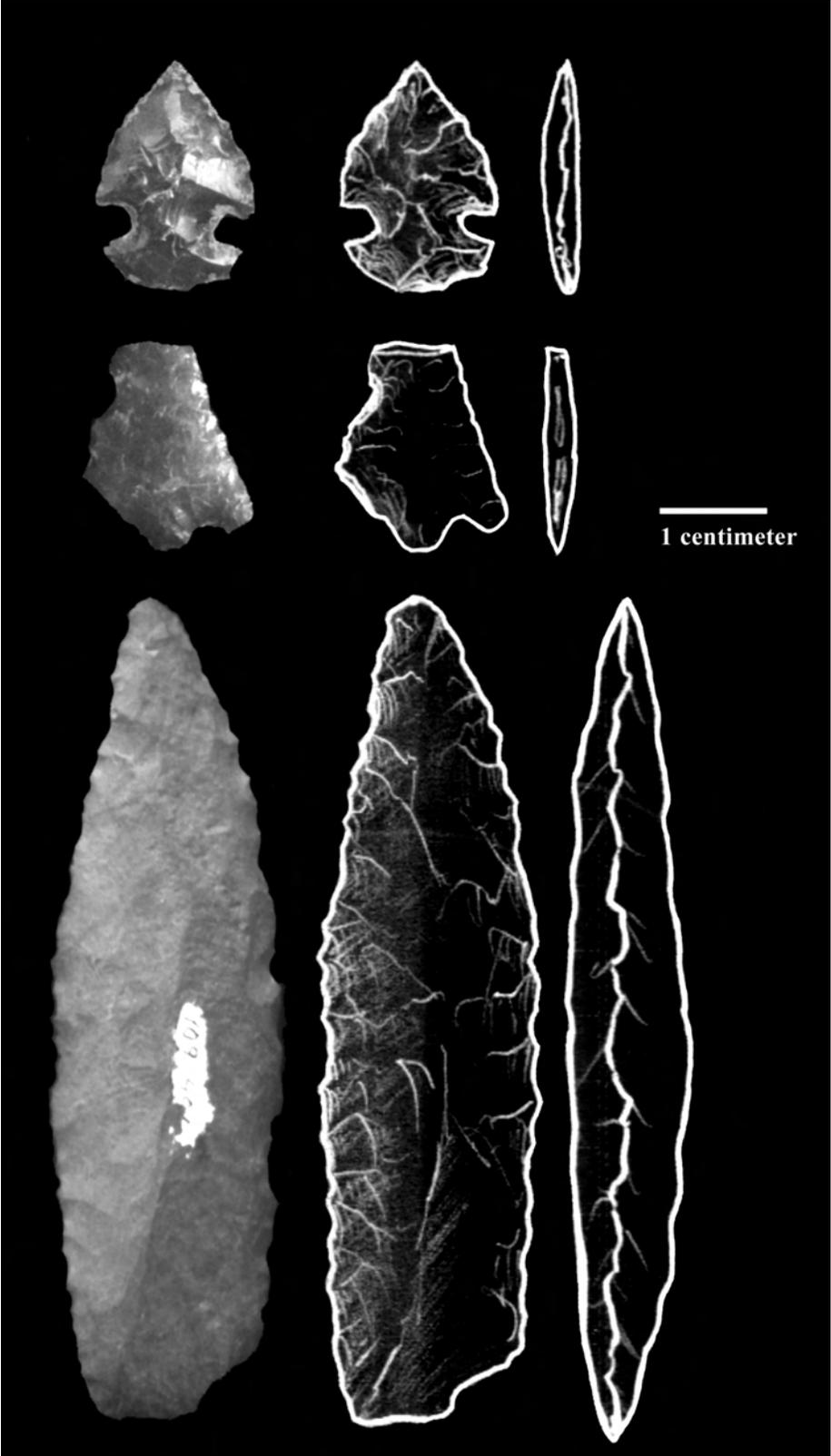


Figure 44. Prehistoric Projectile Points, Bidwell Mansion State Historic Park.

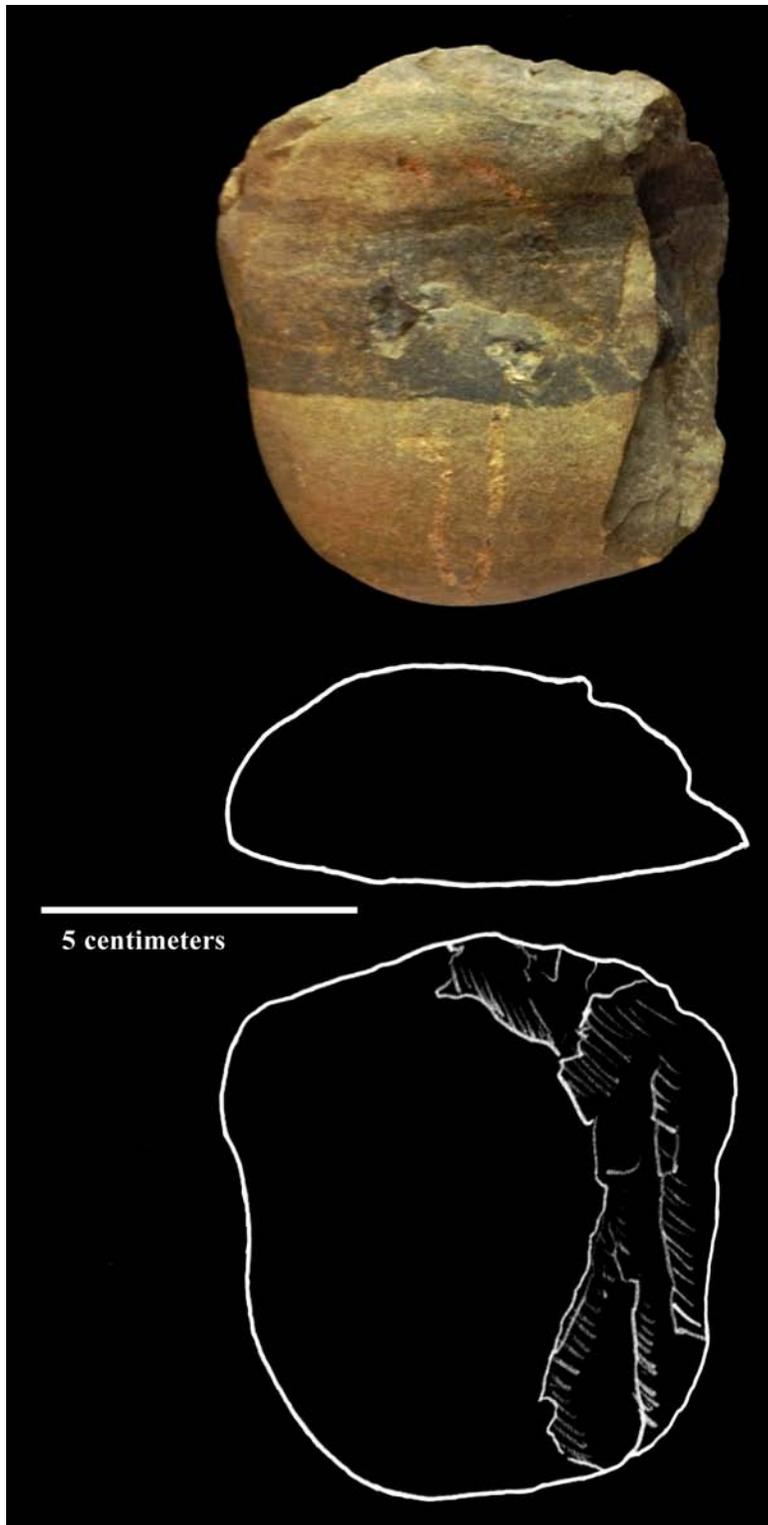


Figure 45. Basalt Cobble Core Tool, Bidwell Mansion State Historic Park.



Figure 46. Large Greenstone or Serpentinite Pestle, Bidwell Mansion State Historic Park.

COMPONENT 2: EARLY HISTORICAL NATIVE AMERICAN OCCUPATION (1849–1852)

Artifacts

The three previous Park excavations produced no features definitively linked to historical Native American activity, however, a total of 18 artifacts are here considered definitive evidence of historic-period Native American activity on the grounds. The 1976 Kowta excavation generated 16 specimens. Twelve are possible flakes from deliberately chipped glass, including five flakes from thick, black to olive glass vessels, six from colorless to slightly aqua glass vessels, and one from an olive green glass vessel. Notably, all but two of the possible glass flakes were found in Unit 1N-15W, in the southeast quadrant of the excavation grid, indicating a possible localized historical Native American activity area. The collection also contains four white-on-white glass trade beads (Figure 47). Artifacts P952-109-95, 109-128, and 109-137 are all a chalk-white color and are medium-sized, oblate-spheroid forms. All three of these beads were produced using the cane method, wherein beads were produced by heating hollow canes of glass and then snapping off individual beads before polishing them smooth. Titchenal dates this bead type to 1864–1880 (Titchenal 1994). Artifact P952-109-656 is a chalk white color and an oblate-spheroid shape. It is larger in size and appears to have been produced using the wire-wound method, made by winding molten glass around a copper or iron wire. Once the glass cooled, the wire contracted and could be pulled from the bead. Titchenal dates beads of this size and method of manufacture to 1880–1900 (Titchenal 1994). White-on-white cane and wire wound beads are typical of the early historical California frontier, reflecting the existence of trade between Bidwell and local Native Americans. Three of the four glass trade beads were found in units 1N-10W and 12W, in the immediate vicinity of the chipped glass.

Johnson's 1987 Carriage House excavation recovered "2 glass trade beads" (Johnson 1988:26), but these are not described in his report. Johnson's 1990 Visitor Center excavation produced one artifact potentially related to historic-era Native American activity. A cobalt-colored oblong glass bead was recovered from Unit N-21, 0–6 inches. It measures 14.3 mm long, 9.9 mm thick, and 1.8 grams, with a lengthwise cylindrical suspension hole. The bead is of a type characteristic of historical decorative door and window hangings and may actually have been used in the Mansion. The 1990 Visitor Center artifact boxes were also found to contain four glass trade beads contained in a Kodak© slide box labeled "Bidwell Mansion." These beads are a close match in color and type to the white-on-white glass trade beads recovered by Kowta in 1976, and may represent artifacts found on Park grounds by Park staff or as visitor confiscations designated for curation with the collection. Hill (1978:Figure 2) illustrates five beads found on the campus of CSU, Chico from an archaeological site near Holt Hall and the Faculty Glen attributed to the 1863–1869 Rancho Chico Indian settlement. The five include one fully finished, small clamshell disk bead and four white glass trade beads, a large wire-wound cylinder mimicking the traditional magnesite bead form and three white-on-white seed beads.

The preponderance of glass trade beads at the site is consistent with receipts for purchases made by Bidwell in 1848 and 1849 found on file at the California State Library, listing goods intended for trade with the Indians including handkerchiefs, cigars, scissors, brandy, pantaloons, and beads and necklaces (Hill 1978:16).

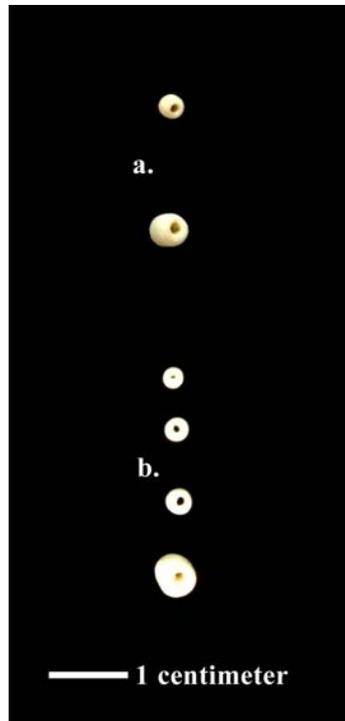


Figure 47. Glass Trade Beads, Bidwell Mansion State Historic Park.

a – Kowta 1976 excavation, white-on-white beads: Unit 1N/10W, 10–20 cm and Unit 1N/10W, 0–10 cm;
b – Johnson 1990 excavation, “Bidwell Mansion” white-on-white seed beads: unknown provenience.

Comment

Historical documentation indicates that Native Americans were a daily presence on the grounds of Rancho Chico from its establishment in 1849 until Annie Bidwell’s death in 1920. Research presented in Part 3 demonstrates that Bidwell held close to a distinction between Native Americans who were and Native Americans who were not part of his daily labor force. Those who were not, resided in the Mechooopda settlement upstream from Rancho headquarters in the period 1849–1863, and then downstream in Bahapki from 1863 to 1869. Those who were, resided on the grounds, by 1855 in a unique “Mechoopda Octagon” designed to combine contemporary building techniques with traditional community residence patterns. Bidwell’s management of this daily work force was rigorous and adhered to a strict work-and-reward system. It is likely that Indians in the work force used traditional materials and exercised traditional practices strictly in the Octagon, and when they were engaged elsewhere in the operation Bidwell and his staff probably made sure that the laborers received rigorous training in the use of modern tools and materials and followed strict rules and modern labor practices. The documentary evidence indicating that the Mechoopda work force built the major structures is testimony to this arrangement.

This gives way to two hypotheses: (1) traditional tools and materials dating to the contact era and related to Bidwell’s labor force are likely to be concentrated in or confined to the discrete residence, the Mechoopda Octagon; and (2) any tool or object of historical manufacture, hammer, nail, lumber, adobe, and so on, found in Park grounds may have a nexus to the contact-era Native American community. Native Americans had a daily presence on the grounds and built and worked in and around the various buildings and

operations. After 1869, Native Americans continued to actively visit and work at the Mansion (Hill 1978, 1980; Jacobs 1997).

COMPONENT 3: EARLY RANCHO CHICO (1849–1852)

Artifacts

No archaeological phenomena recovered during the four previous Park archaeological investigations can be specifically attributed to Component 3. It has been previously speculated that anomalies detected in the Mansion backyard during a magnetometer survey of Park grounds in 2002 might represent the nail pattern or fired-earth trace of the 1849 cabin (White 2002:Figure 25). The evidence is characterized as “weak,” and because no independent ground-truthing or artifact evidence has subsequently been forthcoming, there is no reason to change this view. As noted in Part 2, the weight of the documentary evidence places the 1849–1852 structures in the main grounds closer to the old Marysville-Shasta Road, and probably in or around the footprint of the Old Adobe.

Comment

Bidwell’s 1852 adobe Temporary Residence on the north bank of Big Chico Creek immediately east of the pedestrian bridge was the oldest surviving Rancho Chico structure for at least 14 years after it was abandoned, and unlike most of Bidwell’s buildings, it was allowed to fall into a state of disrepair, suggesting he regarded it sentimentally. It is likely that the structure was dismantled and filled-over with landscaping earth sometime around 1868, and brick fragments or the adobe footings could be at or near the surface in this area.

The 1851 Wozencraft treaty grounds are not likely to have produced much of an archaeological signature, but the distinctive Mexican cattle or *torones* driven to the proceedings and fed to the participants (U.S. Court of Claims 1861) might be detectable in the archaeological record, perhaps in the form of event-related features and via morphological or bio-chemical analysis.

The archaeological potential of the vitally important Marysville-Shasta Road has been completely overlooked by local archaeologists. According to the results of the document review for this study, to date no effort has been made to find traces of the original road in the course of surveying or monitoring construction along Main and the Esplanade. Nor has an effort been made to identify piers or other structures associated with the early Big Chico Creek bridges.

COMPONENT 4: RANCHO EXPANSION AND DEVELOPMENT (1852–1868)

Artifacts

The majority of early historical artifacts encountered by Kowta’s 1976 Old Adobe excavation and Johnson’s 1990 Visitor Center excavation are attributable to Component 4. This was the heyday of Rancho Chico expansion and development, a complex of structures and buildings depicted previously in Figure 24. Kowta’s 1976 Old Adobe excavation was probably close, but not contained within the footprint of the Old Adobe itself and perhaps just 30 feet too far to the north. Johnson’s 1987 Carriage House excavation was contained in the west end of Bidwell’s Component 4 granary, although in the absence of an artifact

analysis it is not possible to evaluate any of the potential associations. Johnson's 1990 Visitor Center excavation was located partially in the footprint of Bidwell's Component 4 stables, and within 30 feet of the possible smithy, within 50 feet the Federal Adobe, and within 80 feet of the Mechoopda Octagon, and probably even closer to its west wing. While no features or contexts associated with these buildings and structures were found, portions of the 1976 and 1990 collections are explicable as general sheet debris associated with local activity, and demolition debris from one or more of these buildings and structures.

Artifacts attributable to Component 4 include the two Hazard's Powder can fittings yielded by the 1990 excavation, the nine glass and two bone Prosser buttons found by Kowta's 1976 excavation, the 34 white clay pipe fragments produced by the 1976 dig, and two ceramics with diagnostic marker's marks found in the 1990 excavation collection. A number of artifacts associated with food preparation and consumption are likely to be associated with Component 4. Beverage bottle fragments predominate here, including 174 dark olive green glass (aka "black glass") bottle fragments, 91 produced by the 1976 dig near the Old Adobe and 83 produced by the 1990 excavation, and 474 aqua glass bottle fragments, 456 dug up by the 1976 excavation near the Old Adobe and just 18 produced by the 1990 excavation near the stable and smithy. The majority of the 272 pieces of improved earthenware found by the excavations are probably attributable to this period, including 245 recovered by the 1976 dig and 27 found in 1990. Faunal remains are also likely associated with Component 4, and a similar breakdown occurs, with 1,993 pieces found in 1976 and 59 in 1990. A part of this difference in frequency is attributable to excavated volume, but the contrast is proportional as well, indicating that Kowta's 1976 dig located near the Old Adobe hotel and bar produced an assemblage dominated by artifacts associated with the production and consumption of food, while Johnson's 1990 dig near the stable and smithy produced an assemblage dominated by construction and demolition debris.

Comment

Component 4 accounts for the majority of historic archaeological material found to date, and as field research at the Park moves forward, it is likely that Component 4 structures and buildings will be the first identified.

Three construction projects dating 1852–1868 used adobe brick as the primary building material. Annie Bidwell's interview with William Conway and verified by Bidwell's Indian workers Bill Preacher, Jack Frango, and Chico Tom, specified that the adobe bricks were thick (assumed to be at least six inches thick) and 2 x 2 feet square (A. Bidwell 1913 in Hill 1980:68). A quick cipher based on this figure times a rough calculation of wall area for the three buildings, gives an estimate of 15,000 adobe bricks used in these buildings, for a total of 30,000 cubic feet of adobe. This raises a number of questions that can be addressed by future research. For example, what kind of clay was used to make these bricks? Where was it quarried? When these buildings were demolished what did Bidwell do with all this material?

Recommendations

(1) The Northern Buttes District of California State Parks recognizes dual responsibilities; on the one hand, it manages the land and resources contained within the boundaries of Bidwell Mansion State Historic Park, and on the other it also manages the legacy of John and Annie Bidwell. As Park planning moves forward, hopefully this document helps open the path to new interpretive themes. As this effort progresses, it will be valuable to recognize that what makes the early Rancho Chico interesting is that it was not a Gold Rush site but, like Sutter's Fort, a venue for interpreting California's raucous and careening Gold Rush-era social and economic milieu. Bidwell was a great builder, entrepreneur, organizer, and leader, as well as a rational and liberal thinker. He built a great estate and the vital economic nucleus around which the modern Sacramento Valley took shape. Two things are clear about this:

(A) John Bidwell's success was fueled by his asymmetric dealings with the Northern Maidu, from his first trading post on Bidwell's Bar where he swapped trinkets for gold with inexperienced Indians, to his patronage of a Mechoopda labor force up to and including construction of the Mansion which was built primarily by skilled Mechoopda labor (A. Bidwell 1913 in Hill 1980:71), and;

(B) John Bidwell publicly and unflinchingly acknowledged this debt and personally invested himself in the protection and economic, social, and physical well being of the Mechoopda in casual and formal settings, and occasionally at threat of his own life. Bidwell's public acknowledgement can be read in a raft of articles appearing in venues like *The Overland Monthly* and *The California Farmer* where both John and Annie Bidwell directly and frankly spoke to this obligation and the philosophy behind his approach to the debt. Bidwell was different from the other rancho bosses in his sustained success and his willingness to convey a share of the spoils to his labor force and their families, children, and children's children throughout his life and in the form of bequeathals after his death that were sustained by Annie Bidwell even in the face of difficult debt reconciliation.

John Bidwell's stewardship of California Indians is an area of inquiry that has and still should bear close scrutiny, and it is clear that a number of the major events involving Anglo American-Native American conflicts swirling around Rancho Chico in the eventful period of 1849–1863 addressed in this document were embedded in the higher-order politics leading to and fueling the Civil War. Valuable perspectives on this factor as it pertains to John Bidwell's relations with the Native American community

can be found in Gillis and Magliari (2003), Heizer (1993), Shover (1999, 2001, 2002a, 2002b), and Smith (2013), among other sources. Compelling studies of Annie Bidwell's assimilationist views and her relations with the Mechoopda tribe appear in Hill (1978, 1980), and Jacobs (1997), among other sources.

(2) At present, California State Parks owns and controls the 1987 excavation collection and the 1990 excavation collection. State Parks does not control the largest and most important collection, the 1976 excavation collection, which is housed in the Archaeological Collections Facility, Department of Anthropology, CSU, Chico. State Parks should act to accession the 1976 collection together with other collections from the Park. This would make the whole more accessible to researchers and enable ready access to artifacts and records pertinent to the Park's interpretive goals. The recommendation is that the Northern Buttes District acquires the 1976 excavation collection from CSU, Chico. CSU, Chico may be willing to relinquish possession of the collection in order to benefit by the gain in shelf space in their impacted facility, or may be compelled to relinquish control if it is unable to provide evidence of title transfer from the California State Parks at the time the excavation took place.

(3) The 1976 excavation was never written up and the collection never analyzed. The rough inventory produced herein and reported in Part 3 demonstrates that the collection has considerable research and interpretive value that can only be realized with a full analysis and final report that examines the findings in light of Part 2 of this document and in relation to the 1987 and 1990 digs.

(4) Similarly, the 1987 excavation collection should be analyzed and a report prepared.

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