

Identity Assessment of Human Remains Recovered from the Military Section of the Cemetery, Joint Courts Complex Archaeological Data Recovery Project, Tucson, Arizona

Statistical Research, Inc., December 10, 2008

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Statistical Research, Inc. (SRI), recently completed excavations and a preliminary analysis of grave features associated with the Joint Courts Complex Archaeological Data Recovery Project. The focus of this project was the former cemetery located at the northeast corner of Stone Avenue and Alameda Street in downtown Tucson, Arizona.

SRI identified two distinct areas within the cemetery: a military section and a civilian section. The military section was identified in the southwest corner of the project area. This section of the cemetery was used by the U.S. Army from 1862 until 1881, when a new military cemetery was established outside Tucson at Fort Lowell. In 1884, the U.S. Army had the remains of 74 individuals from the military section exhumed and reinterred at the post cemetery at Fort Lowell. Many individuals reinterred in the Fort Lowell cemetery were exhumed again in 1891 and reinterred in San Francisco National Cemetery. This report documents only the military section of the cemetery in the Joint Courts project area.

Under contract with Pima County, SRI began excavations in November 2006 to completely remove the remaining inhumations. Final excavations were completed in August 2008. SRI excavated a total of 64 grave pits inferred to have been part of the military section of the cemetery. Most of the grave pits in the military section contained incomplete sets of human remains or burial-associated artifacts, such as clothing fasteners or coffin hardware, that were left behind after exhumation in 1884. Only 4 of the 64 grave pits contained a complete or nearly complete human skeleton. SRI conducted extensive archival research before, during, and after excavations and was able to collect historical information on the identity and relative location of many of the individuals interred in the military section of the cemetery. No similar information was available for individuals interred in the civilian section. Figure 1 shows the correlation between excavated and historically recorded grave pits, as represented on an 1881 plat map of the cemetery discovered at the National Archives and Records Administration (NARA) in Washington, D.C. (Record Group 92, Entry 225). Within the military section of the cemetery, most of the grave pits excavated by SRI were located in the eastern half. Most grave pits historically recorded in the western half of the military section either were outside the project boundary or were disturbed by construction of the Tucson Newspapers building in 1953. Six grave pits excavated near the northeastern edge of the military section (grave features 3286, 3287, 3288, 3289, 3315, and 3438) were not found on historical maps or burial lists for the military section and could not be correlated with any historically documented burials. Those 6 grave pits are not included in the total of 64 inferred to have been part of the military section.

Because of the availability of historical information on individuals interred in the military section of the cemetery, SRI made a good-faith effort to assess the identity of human remains recovered there during cemetery excavations. Because each grave in the military section contained the remains of no more than one individual and some previously exhumed graves contained no artifacts or osteological remains, the assessment was made per grave. For each grave, the assessment of identity relied on three lines of evidence: context (i.e., where a set of remains was discovered and the items found in association with a grave), osteological indicators (i.e., the physical characteristics of the skeleton), and historical evidence (i.e., research on the identities of the people buried in the military section). After the three lines of evidence were evaluated for consistency, a statement was prepared to indicate whether a positive identification was possible

based on the available evidence. The information presented in this statement is based on the evidence available to date and could be revised or amended as a result of ongoing analysis.

Table 1 shows the biological, contextual, and correlated historical information for each grave excavated by SRI in the military section of the cemetery. The first column of the table lists the number of the grave-pit feature excavated by SRI. Osteological information is summarized in the next two columns, labeled Osteological Inventory and Biological Profile, respectively. The Osteological Inventory column indicates whether osteological remains were complete, nearly complete, incomplete, or not present in a grave and lists the elements present according to region of the skeleton. The Biological Profile column summarizes the osteological evidence for each set of remains that was used to assess identity. Where possible, information presented in the Biological Profile column includes sex, age, stature, biological ancestry, and individualizing characteristics, such as pathology, trauma, or evidence for autopsy. In some cases, poor preservation or fragmentation prevented elements listed in the Osteological Inventory column from contributing to information presented in the biological profile. For instance, if a femur was present but was poorly preserved or highly fragmented, it could not be used to infer stature or biological ancestry. Moreover, because of vague or ambiguous results, the elements of the skeleton used to approximate values in the biological profile do not always provide sufficient resolution for any determination. In such instances, the professional standard is simply to state that the attribute is “indeterminate.”

The Contextual Profile column presents the contextual information found within a grave—such as personal artifacts (e.g., buttons and clothing fasteners), grave size, or evidence for mortuary treatment—that could be used to infer identity. In general, information presented in the Contextual Profile column was used to infer identity characteristics such as gender, age, stature, military service, and the possibility that an individual had suffered a gunshot wound (as indicated by the presence of a bullet in the grave). Figure 1 depicts the extent of excavated grave pits as they appeared when first discovered during excavation. In some cases, the apparent size of a grave pit depicted on the map seems to contradict the assessment in the contextual profile of a grave as “adult-sized,” “small, adult-sized,” or “child-sized.” In these cases, information developed as a result of excavation, such as grave-bottom length or width, allowed us to determine the grave size that we reported in the contextual profile.

Historical information is presented in two columns labeled Correlated Grave Number and Correlated Historical Information, respectively. Correlated grave number is the number of the historical-period grave that is spatially correlated with the grave-pit feature excavated by SRI (see Figure 1). Correlated grave numbers are derived from the 1881 burial list and 1881 plat map. In two cases, correlated grave numbers were not recorded on the 1881 plat map but were recorded in the 1881 burial list. The relative locations of these two graves could be inferred on the basis of the sequence of burials recorded in the 1881 burial list. In one case, the relative location of a grave was inferred from an undated plat map of the cemetery that appears to date to 1873 (NARA Record Group 92, Entry 225). The correlated historical information presented in Table 1 is consolidated from the following sources: information in the 1881 burial list; the undated plat map; *U.S. Army Register of Enlistments, 1798–1914* (NARA Record Group 94, M233); *Field Records of Hospitals, Compiled 1821–1912* (NARA Record Group 94, Entry 544); *Medical History of Posts, Compiled 07/1868–1913* (NARA Record Group 94, Entry 547); *Roll of Honor Vol. XIII* (Government Printing Office, 1867); *Returns From U.S. Military Posts, 1800–1916* (Record Group 94, M617); the historical newspaper *Arizona Citizen*; and *U.S. Civil War Soldiers, 1861–1865* (National Park Service, online database). Graves listed as “unknown” in the 1881 burial list could not be correlated with specific individuals in the historical record using available information. The appendix lists information on individuals who may have been among individuals listed as “unknown” in the 1881 burial list.

The Comments column provides information on consistencies or inconsistencies among biological, contextual, and historical information. For each excavated grave pit, the Comments column indicates the spatial correlation between an excavated grave pit and historically recorded grave locations; it also indicates where biological information and contextual information on age, sex, gender, stature, or biological ancestry are inconsistent with each other, or where either is inconsistent with the correlated historical information.

The final column of Table 1 indicates whether a positive identification could be made for each grave pit excavated by SRI in the military section. It is important to emphasize that positive identification rests

firmly on the weight of unambiguous biological evidence—such as DNA or dental evidence—linking human remains with a known individual. As is stated above, most of the individuals buried in the military section of the cemetery were exhumed historically in 1884. In most cases, the graves excavated by SRI in the military section had incomplete osteological remains and few or no burial-associated artifacts. In only a few cases was a complete set of remains recovered, and even in those cases, the correlation between osteological and historical information was not strong enough for a positive identification.

Even though the spatial correlation between excavated and historically recorded graves (see Figure 1) is in many cases quite close, the biological evidence was in each case insufficient to make a positive identification. Although the spatial correlation of excavated and historically documented graves was compelling in many cases from an archaeological and historical standpoint, it was in no case compelling from an osteological standpoint, as no positive correlation can be made with any historically named individual. As a result, we are currently unable to positively identify the grave of any specific named individual buried in the military section of the cemetery

Disposition of the burials will be in accordance with state burial statute ARS §41-844 and burial agreement Case 06-40. Consultation with identified claimants will be scheduled. Anyone wishing further information on the identification and disposition of burials may contact John Madsen, the state repatriation coordinator, at the Arizona State Museum ([520] 621-4795 or jmadsen@email.arizona.edu).



Figure 1. Spatial correlation between excavated grave pits and historically mapped graves.

Table 1. Identity Assessment for Graves in the Military Section of the Cemetery

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
68	Incomplete: elements of the hand and feet, several ribs, patellae, and clavicles are present.	adult	The grave was an adult-sized grave. The clothing fasteners were fasteners typically used by men. A .32-caliber lead bullet was collected in the coffin fill.	43	Patrick Corr, Private, 1 US Cav Co C, laborer from Ireland; age 20-25; 5'4"; enlisted Feb 2, 1866, in New York; died Sept 28, 1867, from gunshot wound to head; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
73	No osteological remains.	no biological data	No mortuary artifacts were present in this grave.	25	Rufus W. Hinds, Citizen; exhumed June 1884.	Excavated grave feature consistent with 1881 burial list sequence.	no
74	Complete.	18-35-year-old Hispanic male; 5'4"-5'9"	The grave was an adult-sized grave. Clothing fasteners included five uniform cavalry officer's coat buttons and buttons typically used by men.	26	Michael H. Murphy, Private, 32 US Inf Co C; laborer from Kingston, Canada; age 25-30; 5'4.5"; enlisted July 29, 1867, in New York; died Feb 3, 1868, of consumption; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological ancestry inconsistent with correlated historical information. Cavalry officer's buttons inconsistent with rank and regiment indicated by correlated historical information.	no
77	Incomplete: elements of the hand and feet, dentition, several ribs and vertebrae, right radius, and patellae are present.	adult male; severed right thumb; 5'4"-5'9"	The grave was an adult-sized grave. There were 12 military uniform buttons, one of which could be identified as a General Service coat button. Precise functions of the other clothing fasteners cannot be determined because of disturbance during historical-period exhumation.	27	John King, Sergeant, 14 US Inf Co I and 32 US Inf Co I; laborer from Tipperary, Ireland; age 25-30; 5'7.5"; enlisted on Nov 10, 1866, in Cleveland, Ohio; died Jan 21, 1868, of chronic dysentery.	Excavated grave feature consistent with historical map.	no
304	Incomplete: portions of the cranium, dentition, several hand and foot elements, clavicle, os coxae, and several vertebrae and ribs are present.	newborn	The grave was an infant-sized grave. No personal artifacts were recovered with this individual.	no correlated grave	No historical information.	No historical information.	no
511	Incomplete: elements of the hands and feet are present.	18-35-year-old	The grave was an adult-sized grave. Clothing fasteners include seven shell shirt buttons and three Prosser shirt buttons.	41	Archibald K. Homan, Private, 32 US Inf Co I; engineer from New Haven, Connecticut; age 23; 5'6.5"; enlisted in New Haven, Connecticut, on Oct 22, 1866; died Jan 1, 1868, of pneumonia; exhumed June 1884.	Excavated grave feature consistent with historical map.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
512	No osteological remains.	no biological data	The grave pit was significantly deeper than surrounding grave pits. The coffin was an adult-sized and well-appointed coffin. The coffin handles were too deteriorated to be identified. No personal artifacts were recovered.	42	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
513	Incomplete: elements of the hands and feet, dentition, several vertebrae, patellae, and sternum are present.	adult Hispanic	The grave was an adult-sized grave. Clothing fasteners were three brass General Service buttons and clothing fasteners that are typically used by men.	9	Allen Valentine Green, Sergeant, 32 US Inf Co A; soldier from Blissville, Massachusetts; age 20–25; 5'6"; enlisted on July 18, 1865, in Boston, Massachusetts; died April 2, 1867, of acute dysentery; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological ancestry inconsistent with correlated historical information.	no
514	Incomplete: elements of the hands and feet and dentition are present.	insufficient data	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	8	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
607	Incomplete: a fragment of a long bone is present.	insufficient data	The grave was a child-sized grave.	35	Leander Spofford, Citizen; child; died Aug 24, 1872; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
608	Incomplete: elements of the hands and feet, dentition, and sternum, and hyoid are present.	20–40-year-old	The grave was an adult-sized grave. General Service coat buttons and clothing fasteners that are typically used by men were associated with this grave.	36	James Smith, Private, 21 US Inf Co K; teamster from Dublin, Ireland; age 30–35; 5'9"; enlisted Sept 12, 1870, in Stockton, California; died Sept 24, 1871, of liver cirrhosis/dropsy; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
609	Incomplete: elements of the hands and feet, dentition, thorax, and left patella and fibula are present.	18–30-year-old; 5'4"–5'9"	The grave was an adult-sized grave. Clothing fasteners included four brass Dragoon coat buttons and pants buttons. White ceramic pipe fragments were also associated with this individual.	37	Edward Murphy, Private, 3 US Cav Co F; boilermaker from Ireland; age 25–30; 5'5.5"; enlisted August 30, 1870, in Cleveland, Ohio; died June 6, 1871, of chronic pleurisy; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
610	Incomplete: elements of the hands and feet, dentition, patellae, and left fibula are present.	18–35-year-old European; 5'0"–5'6"	The grave was an adult-sized grave. A brass General Service coat button and other clothing fasteners typically used by men were associated with this grave.	38	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
613	Incomplete: elements of the hands and feet, dentition, right arm, and patellae are present.	20–40-year-old with pathology on right hand; 5'1"–5'8"	The grave was an adult-sized grave. No personal artifacts were present.	39	William J. Amott, Private, 14 Inf Co H and 32 Inf Co H; clerk from Utica, New York; age 30–35; 5'2"; enlisted Sept 9, 1865, in Rochester, New York; discharged and reappointed twice; died June 19, 1868, of congestion of the lungs; exhumed June 1884.	Excavated grave feature consistent with burial list sequence	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
618	Incomplete: elements of the hands and feet, dentition, cervical vertebrae, and right ulna are present.	20-40-year-old; 5'4"-5'11"	The grave was a small, adult-sized grave. Artifacts recovered from this grave are gender neutral.	28	Charles Pomeroy, Private, 14 US Inf Co C and 32 US Inf Co C; laborer from Morgan County, Kentucky; age 25-30, 5'8.75"; had syphilis, "habits of dissipation"; enlisted Aug 7, 1866, at Fort Mason, Arizona Territory; died Feb 26, 1867, of chronic diarrhea; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
619	Incomplete: elements of the hands and feet and dentition are present.	18-35-year-old	The grave was an adult-sized grave. A thin, silver-plated finger ring was associated with this grave.	45	Nathaniel C. Nute, Farrier, 1 US Cav Co G; died Sept 27, 1868, of acute dysentery.	Excavated grave feature consistent with historical map.	no
624	Incomplete: elements of the hands and feet, dentition, thorax, arms, and patellae are present.	20-29-year-old male	The grave was an adult-sized grave. Clothing fasteners recovered from this grave included pants buttons and fasteners typically used by men.	46	George Rogers, former Teamster with Quartermaster Department (1 US Cav Co W?); died March 23, 1869; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
631	Incomplete: elements of the thorax and cranium are present.	18-40-year-old	The grave was an adult-sized grave. No personal artifacts were present.	47	Peter Bus, Private, 21 US Inf Co K; sailor from Delfshaven, Holland; age 20-25; 5'5.5"; enlisted March 7, 1871, in San Francisco, California; died Feb 19, 1872, of accidental gunshot wound to right arm; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
632	Incomplete: elements of the hands and feet, dentition, arms, and several vertebrae and ribs are present.	18-23-year-old male	The grave was an adult-sized grave. General Service coat buttons and other clothing fasteners typically used by men were associated with this grave.	48	Michael Keegan, Private, 21 Inf Co A; cooper from Longford, Ireland; age 30-35; 5'6"; enlisted Nov 22, 1870, at Camp McDowell; committed suicide Feb 29, 1872, with gunshot wound to head; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological estimated age inconsistent with correlated historical information.	no
633	Incomplete: elements of the hands and feet, dentition, arms, and several vertebrae and ribs are present.	adult European; 5'0"-5'7"	The grave was an adult-sized grave. General Service coat buttons and other clothing fasteners typically used by men were recovered from this grave. A large, silver finger ring was recovered from the remains of this individual.	31	John English, Corporal, 1 US Inf Co A and 32 US Inf Co A; shoemaker from Ireland; age 20-25; 5'8"; enlisted July 16, 1865, in Boston, Massachusetts; died Feb 6, 1867, of chronic diarrhea; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological estimated stature inconsistent with correlated historical information.	no
634	Incomplete: elements of the hands and feet, dentition, several vertebrae, and several ribs are present.	insufficient data	Dimensions for this grave are unknown because of disturbance. Metal pants buttons, an artifact typically associated with men, were associated with this grave.	30	Thomas Roberts, Private, 14 US Inf Co C and 32 US Inf Co C; soldier from Boston, Massachusetts; age 25-30; 5'6"; enlisted September 11, 1865, in Boston, Massachusetts; died Feb 7, 1867, of gunshot wound; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
635	Incomplete: elements of the hands and feet, dentition, vertebrae, sternum, and patellae are present.	30-50-year-old; 5'0"-5'8"	The grave was a small, adult-sized grave. Two brass General Service coat buttons were recovered from this individual. No other personal artifacts were recovered.	29	Edward Gallagher, Private, 1 US Cav Co C; laborer from Tipperary, Ireland; age 20-25; 5'3"; enlisted January 24, 1866, in New York; long series of related health complaints; died Feb 21, 1867, of chronic dysentery/diarrhea; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological estimated age inconsistent with correlated historical information.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
785	Incomplete: elements of the hands and feet, dentition, left and right arms, fibulae, patellae, and sternum are present.	adult male with possible amputation of lower left leg; 5'3"-5'9"	The grave was an adult-sized grave. A single brass uniform button was recovered from the grave, but no distinguishing marks could be identified because of poor preservation. No other personal artifacts useful for identification were recovered from this grave.	17	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
789	Incomplete: elements of the hands and feet, dentition, fibulae, and patellae are present.	20-25-year-old European with broken finger on left hand; 5'0"-5'6"	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	1	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
790	Incomplete: elements of the hands and feet, dentition, and left patella are present.	18-50-year-old European	The grave was a small, adult-sized grave. No personal artifacts were recovered.	2	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
791	No osteological remains.	no biological data	The grave was an adult-sized grave. A metal pants button, typically associated with men, was collected from the grave.	18	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
792	Incomplete: elements of the hands and feet, arms, legs, right scapula, and ilium are present.	5-6-year-old child	The grave was a small, adult-sized grave. No personal objects were recovered from this grave.	19	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map. Biological estimated stature and grave size inconsistent.	no
793	Incomplete: elements of the hands and feet, dentition, coccyx, patellae, and hyoid are present.	20-35-year-old	The grave was a small, adult-sized grave. Clothing fasteners were limited to a metal pants button, typically associated with men, recovered from the fill.	3	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
799	Nearly complete.	newborn	The grave was an infant-sized grave. Seven brass straight pins were collected from the torso and pelvic regions of this individual and may represent the remains of a burial shroud or diaper. A single freshwater, terrestrial snail shell was found in the coffin fill. No other clothing fasteners or personal objects were recovered with this individual.	no correlated grave	No historical information.	No historical information.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
813	Incomplete: elements of the hands and feet, ribs, hyoid, and patellae are present.	adult with evidence of autopsy	The grave was an adult-sized grave. No personal artifacts were present.	23	Alexander McDonell, Private, 32 US Inf Co I; painter from Canada; age 20–25; 5'10"; enlisted on October 22, 1866, in Lockport, New York; died Dec 25, 1867, of chronic dysentery; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
814	No osteological remains.	no biological data	The grave was an adult-sized grave. No personal artifacts were present.	24	Thomas Wallace, Citizen; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
817	Incomplete: elements of the hands and feet, arms, dentition, and vertebral elements are present.	20–40-year-old with healed back fracture	The grave was an adult-sized grave. Clothing fasteners typically used by men were also present in the grave.	7	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
818	Incomplete: elements of the thorax, arms, hands, and feet, dentition, and vertebral elements are present.	17–20-year-old Hispanic with healed back fracture; 5'4"–5'11"	The grave was an adult-sized grave. Four brass military uniform coat buttons were collected from this grave.	22	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
823	Incomplete: elements of the hands and feet, thorax, and dentition are present.	18–35-year-old European; 5'0"–5'8"	The grave was a small, adult-sized grave. Clothing fasteners were gender neutral.	5	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
824	Incomplete: elements of the thorax, arms, hands, and feet, dentition, and vertebral elements are present.	adult European with healed back fracture	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	4	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with 1881 burial list sequence.	no
980	Incomplete: elements of the hands and feet are present.	18–35-year-old	The grave was an adult-sized grave. The other artifacts recovered from this grave are gender neutral.	13	James L. Richards, Private, 1 Cal Inf Co H; enlisted Aug 17, 1861, in San Francisco, California; died July 12, 1862; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
982	Incomplete: elements of the hands and feet, dentition, and thorax are present.	adult with evidence of autopsy; 5'0"–5'6"	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	12	John C. McQuade, Sergeant, 2 Cal Cav Co B; enlisted Sept 14, 1861, in San Francisco, California; died July 12, 1862; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
983	Incomplete: elements of the hands and feet, dentition, hyoid, patellae, and sternum are present.	18–25-year-old European	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	11	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
992	Incomplete: elements of the hands and feet, thorax, dentition, and right patella are present.	insufficient data	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically used by men.	10	Unknown; California Regiment; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3329	Incomplete: elements of the thorax, hands, and feet are present.	adult male; 5'5"–5'11"	The grave was an adult-sized grave. No personal artifacts were present.	14	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3330	Incomplete: elements of the hands and feet, and dentition are present.	20–35-year-old European male; 5'4"–6'0"	The grave was an adult-sized grave. Clothing fasteners were gender neutral.	15	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3331	Incomplete: elements of the hands and feet, dentition, and thorax are present.	18–25-year-old Hispanic; 5'1"–5'11"	The grave was an adult-sized grave. No personal artifacts were present.	16	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3371	Incomplete: elements of the hands and feet, dentition, mandible, and right fibula are present.	insufficient data	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	34	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3372	Incomplete: elements of the hands, feet and legs, and one tooth are present.	adult male; 5'4"–5'10"	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	33	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
3373	Incomplete: elements of the hands, feet and arms, and dentition are present.	18–25-year-old	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	32	John Finegan, Private, 1 US Cav Co C; baker from Ireland; age 20–25; 5'7"; enlisted Feb 2, 1866, in New York; died Nov 6, 1866, of chronic diarrhea; exhumed June 1884.	Excavated grave feature consistent with 1881 burial list sequence.	no
10188	Incomplete: elements of the arms, legs, hands and feet, dentition, and thorax are present.	adult with well-healed foot fracture; 5'0"–5'6"	The grave was an adult-sized grave. The coffin was well appointed with coffin handles dating as early as ca. 1870. Clothing fasteners collected from this individual include General Service brass uniform buttons and other fasteners typically used by men.	49	John Foley, Farrier, 1 US Cav Co D; age 25–30; 5'6.75"; servant from Wexford, Ireland; enlisted Aug 2, 1869, in New York; died May 11, 1872, from trauma resulting from accidental fall from horse while intoxicated.	Excavated grave feature consistent with historical map. Biological estimated stature inconsistent with correlated historical information.	no
10189	Incomplete: elements of the hands and feet, dentition, and thorax are present.	insufficient data	The grave was an adult-sized grave. Uniform coat buttons and other clothing fasteners typically used by men were associated with this grave.	50	Paul Remy, Corporal, 23 US Inf Co D; from Cologne, Prussia; age 29–30; 5'11"; enlisted Nov 28, 1868, in San Francisco, California; discharged June 30, 1871; reenlisted Jan 26, 1872, at Fort Vancouver, Washington Territory; died Oct 2, 1872, of acute dysentery; autopsied.	Excavated grave feature consistent with historical map.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
10190	Incomplete: elements of the hands and feet, sternum, and hyoid are present.	adult male	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	51	Peter Conlon, Private, 1 US Cav Co D; soldier from Roscommon, Ireland; enlisted March 23, 1869; had syphilis; age 30–40; 5'7.75"; died Oct 26, 1872, of suffocation resulting from throat infection; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
10194	Complete.	14–16-year-old with systemic infection and well-healed foot fracture	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	A20	Unknown; correlated grave reportedly exhumed in June 1884.	Excavated grave feature consistent with historical map.	no
10431	Complete.	30–40-year-old Hispanic male with possible tuberculosis or some other systemic infection; 5'4" – 5'9"	The grave was an adult-sized grave. Clothing fasteners included pants buttons, an artifact typically associated with men.	A28	Unknown; nothing found in grave during exhumation in June 1884.	Excavated grave feature consistent with historical map. Archaeological discovery of human remains inconsistent with historical account of exhumations.	no
10432	No osteological remains.	no biological data	The grave was an adult-sized grave. There were no artifacts recovered from this grave.	no number assigned	Herbert Lord, Citizen; died Nov 3, 1872, of consumption; exhumed in 1872 or 1873.	Excavated grave feature consistent with undated historical plat map.	no
10447	Incomplete: elements of the hands and feet, the left patella, and sternum are present.	18–50-year-old	The grave was an adult-sized grave. A silver, heart-shaped locket pendant was collected from this grave. No other personal items were recovered.	62	Thomas Delancy, Musician, 8 US Inf Co G; died June 11, 1877, of inflammation of the membrane of the brain; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
10448	No osteological remains.	no biological data	The grave was an adult-sized grave. No artifacts were associated with this grave.	61	James Woods, Private, 8 US Inf Co G; age 20–25; 5'7.25"; carpenter from Liverpool, England; died July 17, 1876, of inflammation of the brain; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26789	No osteological remains.	no biological data	The grave was an adult-sized grave. No personal artifacts were recovered.	no correlated grave	No historical information.	No historical information.	no
26790	No osteological remains.	no biological data	The grave was an adult-sized grave. No personal artifacts were recovered.	53	Martin Burns, Private, 23 US Inf Co E; hatter from Newark, New Jersey (born in Ireland); age 25–30; 5'3.25"; enlisted Nov 2, 1869, in San Francisco, California; died Feb 21, 1873, of pneumonia; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26792	No osteological remains.	no biological data	The grave was an adult-sized grave. The artifacts recovered were gender neutral.	54	Jordon Richie, Private, 5 US Cav Co B; carpenter from Barren County, Kentucky; enlisted July 22, 1871, in Memphis, Tennessee; age 32; 5'11"; died Feb 7, 1874, of pulmonary infection; exhumed June 1884.	Excavated grave feature consistent with historical map.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
26793	Incomplete: elements of the hands and feet, hyoid, and right first rib are present.	18–40-year-old	The grave was an adult-sized grave. Uniform coat buttons and other clothing fasteners typically used by men were associated with this grave.	55	Charles Fisher, Private, 5 US Cav Co H; clerk from Prussia, Germany; age 20–25; 5'10.25"; enlisted Oct 26, 1871, in New York, New York; died June 25, 1874, of fever; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26794	Incomplete: elements of the feet and the left patella are present.	18–40-year-old	The grave was an adult-sized grave. A .34-caliber bullet was recovered from this grave. No personal artifacts were collected.	56	Jacob Buck, Corporal, 5 US Cav Co C; glassblower from Philadelphia, Pennsylvania; age 20–25; 5'8"; enlisted September 23, 1872, in Philadelphia, Pennsylvania; died Jan 7, 1875, from gunshot wound to spine; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26795	Incomplete: elements of the feet and the left fibula are present.	insufficient data	The grave was an adult-sized grave. No personal artifacts were present.	57	Unknown; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26796	No osteological remains.	no biological data	Grave dimensions could not be determined because of heavy disturbance. Ten coffin nails were collected as part of the coffin material. Coffin joinery is butted. A Prosser shirt button and two General Service military buttons were recovered.	58	Lack Tierney, Private, 8 US Inf Co D; soldier from Westmeath, Ireland; age 40; 5'4.5"; enlisted March 10, 1875, in San Francisco, California; died Dec 18, 1875, of inflammation of bowels; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
26797	No osteological remains.	no biological data	Grave dimensions could not be determined because of heavy disturbance. No personal artifacts were present.	59	Michael Ryan, Private, 8 US Inf Co G; soldier from Clare, Ireland; age 37; 5'5.5"; enlisted Apr 2, 1869, in Charleston, South Carolina; reenlisted Apr 2, 1874, in Beaver, Washington[?] Territory; died March 7, 1876, of inebriation; exhumed June 1884.	Excavated grave feature consistent with historical map.	no
28075	No osteological remains.	no biological data	The grave was an adult-sized grave. Uniform coat buttons and gender-neutral clothing fasteners were associated with this grave.	63	Frank Stevens, Private, 6 US Cav Co A; age 22; 5'10"; farmer from Keene, New Hampshire; enlisted March 9, 1880, in Boston, Massachusetts; died May 21, 1880, of typhoid fever; autopsied.	Excavated grave feature consistent with historical map.	no
28076	Incomplete: the right humerus is present.	18–40-year-old male; 5'2"–5'9"	The grave was an adult-sized grave. The coffin was well appointed and bears evidence of professional undertaking. The coffin hardware bears symbols associated with a Masonic fraternal organization that date from ca. 1880. Clothing fasteners were recovered that include military uniform buttons, other buttons typically associated with men, and a right shoe constructed of leather with machine stitching and brass screws.	64	Charles Knaeble, Hospital Steward; clerk from Offenburger, Germany; age 25; 5'6.75"; enlisted Sept 27, 1875, in New York, New York, with 8 US Inf Co F[?]; appointed Hospital Steward; died July 6, 1880, of typhomalarial fever; autopsied.	Excavated grave feature consistent with 1881 burial list sequence.	no

Feature Number	Osteological Inventory	Biological Profile	Contextual Profile	Correlated Grave Number	Correlated Historical Information	Comments	Positive Identification?
28077	Incomplete: two hand elements and three teeth are present.	18-50-year-old	The grave was a small, adult-sized grave. The coffin was well appointed with coffin handles that date from ca. 1865. General Service coat buttons were recovered, as well as two leather shoes with right and left soles, constructed using brass screws and machine stitching suggesting that they were manufactured after the Civil War.	65	John Lyons, Corporal, 6 US Cav Co M; died Jan 21, 1881, of cancer of bowels; autopsied.	Excavated grave feature consistent with 1881 burial list sequence.	no

APPENDIX

This appendix lists historical information on 25 individuals who could have been buried in grave pits excavated by SRI in the military section of the cemetery, but for whom historical information on the specific location of burial within the cemetery is unavailable. Some, perhaps most, of the individuals listed below could equate with individuals listed in the Correlated Historical Information column in Table 1 as “unknown.” We are unable at this time to correlate the graves of any of the individuals listed below with a specific grave pit excavated by SRI.

The following seven individuals were listed in *Burial Registers for Military Posts, Camps, and Stations, 1768–1921* as among the unknown buried in the military section of the cemetery:

- Silas Beardsley, Private, 12 US Inf Co E and 21 US Inf Co E; from Sandy Cove, New York; age 20–25; 5'4"; enlisted August 5, 1867, in Syracuse, New York; possibly suffered from lead poisoning; died March 11, 1870, of smallpox
- Coyolerito [?], Indian Scout
- Julius Falk, Private, 32 US Inf Co E; cigar maker from Prussia, Germany; age 20–25; 5'9"; enlisted July 10, 1867, in New York; died April 25 or 26, 1869, of pneumonia or fall from army wagon
- Felicio Castro, Indian Scout; from Cacospi [?], Sonora; enlisted for 2 months November 27, 1868, and again for 6 months January 28, 1869; died May 4, 1869, of inflammation of the lungs
- Herminn, Indian Scout; guide from Fronteras, Sonora; age 30–35; enlisted October 27, 1868, at Tucson, Arizona Territory, for 3 months and again January 28, 1869, at Tucson, Arizona Territory, for 6 months; died May 6, 1869, from stab wound
- James B. Price, Private, 21 US Inf Co B; carpenter from Waynesboro, Pennsylvania; age 22; 5'8.5"; enlisted November 1, 1870, in Chicago, Illinois; died March 10, 1871, of chronic diarrhea; autopsied
- Augustine Shea, Private, 21 US Inf Co D; laborer from Limerick, Ireland; age 25–30; 5'5"; enlisted August 31, 1869, in San Francisco, California; committed suicide October 29, 1870, by cutting his throat with a razor

The following 18 military-associated individuals were identified as possibly having died in or near Tucson, Arizona Territory, while the military section of the cemetery was in use but were not located on any known burial lists or plat maps of the cemetery:

- Joseph P. G. Black, Corporal, 5 US Cav Co F; engineer from Gallipolis, Ohio; age 24–26; 5'9.5"; enlisted October 29, 1868, in Cincinnati, Ohio; died August 27, 1872, of gunshot wound.
- John W. Brehmer [Brihiner?], Private, 5 Cal Inf Co A; died July 27, 1862
- Samuel Decoster, Private, 1 Cal Inf Co D; enlisted September 30, 1861; died October 25, 1862
- [blank] Green, Private; died May 6, 1871, in fight with Apaches in Whetstone Mountains, Arizona Territory
- Charles Hardenburg, former Private, 1 Cal Inf; possibly the Chief Carpenter at the Quartermaster's Depot in Tucson; sufferer of rheumatism; died January 15, 1870, of smallpox
- [blank] Henderson, Private, 5 Cal Inf Co I; personal effects auctioned February 29, 1864, in Tucson, Arizona Territory
- Bernard Hogan, Private, 32 US Inf Co E and 21 US Inf Co E; sailor from Kingston, Bahamas West [?]; age 20–25; 5'6.25"; enlisted July 22, 1867, in Cape Vincent, New York; died April 16, 1870, of gunshot wound at Picket Post Cienega, Arizona Territory

- Oscar Hutton, former Lieutenant [possibly former Second Lieutenant, 1 Ariz Inf]; died November 3, 1870, of typhoid fever
- Milton McConkey, Private, 5 Cal Inf Co I; enlisted November 29, 1861, in California; died December 8, 1863; personal effects auctioned February 29, 1864, in Tucson, Arizona Territory
- Robert Meanor, Private, 5 Cal Inf Co D; enlisted September 17, 1861, in Sacramento, California; suffered from rheumatism and delirium tremens; died August 7, 1863; personal effects auctioned February 29, 1864, in Tucson, Arizona Territory
- Ella Miles, Citizen; wife of Captain Evan Miles; age 32; died September 28, 1869, of purpural peritonitis (after giving birth to stillborn child); exhumed September 4, 1870, by Captain Miles
- Charles Moore, Private, 5 Cal Inf Co D; died March 2, 1864
- Peter O'Connor, Private, 1 US Cav Co D; died October 1872
- Iven Olesen, Private, 21 US Inf Co K; soldier from Denmark; age 35–40; 5'8"; enlisted March 25, 1870, at Drum Barracks, California; died July 5, 1870, of acute dysentery
- William Sayers, Private, 5 Cal Inf Co I; enlisted December 23, 1861, in Marysville, California; died August 20, 1863, of disease; personal effects auctioned February 29, 1864, in Tucson, Arizona Territory
- William H. Simpson, Citizen; fur trader and miner from England; died May 6, 1871, in fight with Apaches in Whetstone Mountains, Arizona Territory
- Jacob Smith, Private, 5 Cal Inf Co G; died October 5, 1862
- [blank] Todd, Private; died September 1862, in fight with Native Americans at Maricopa Wells, Arizona Territory

Note:

The information on individuals provided in this appendix is consolidated from the following sources: the 1881 burial list; the undated plat map; *Burial Registers for Military Posts, Camps, and Stations, 1768–1921* (compiled by Claire Prechtel-Klusgens from records in NARA Record Group 92); *U.S. Army Register of Enlistments, 1798–1914* (NARA Record Group 94, M233); *Field Records of Hospitals, Compiled 1821–1912* (NARA Record Group 94, Entry 544); *Medical History of Posts, Compiled 07/1868–1913* (NARA Record Group 94, Entry 547); *Roll of Honor Vol. XIII* (Government Printing Office, 1867); *Returns from U.S. Military Posts, 1800–1916* (Record Group 94, M617); the historical newspaper *Arizona Citizen*; and *U.S. Civil War Soldiers, 1861–1865* (National Park Service, online database).