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Guarding the Northwest Frontier: The U.S. Military Post at Sauk Centre

Minnesota 1862-1865

by

Michael Penrod

A Thesis

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science in

Cultural Resources Management Archaeology

May, 2020

Thesis Committee: Rob Mann, Chairperson Mark Muñiz Thomas Steman

Abstract

The intent of this project was to explore the history of the U.S. Military Post at Sauk Centre, Minnesota (Site # 21SN0198). The aim was to find out when it was built and why and to uncover any remaining physical evidence of the Post and the people who passed through it. Archival research confirmed this fort and its soldiers were part of a thought-out War Department plan to keep the peace in central Minnesota during the American Civil War. This site and several others in the region were built and garrisoned with the intent of projecting United States power into the region.

Archaeological research confirmed the long-suspected site of the fort is correct, not that there was any real doubt. We now know how the stockade and the buildings it enclosed fit on the site. Using metal detectors, we located artifacts from the fort which helped us confirm the location of the stockade and associated structures. Conducting excavations of some of those structures we also found evidence of the fort's people. We have an idea of the clothing they wore, of the dishes they used and of the food they ate. There is more work that could be done on this site and with the artifacts we collected.

Acknowledgement

I did not set out to do this, complete the Masters in Cultural Resource Management Archaeology. I was just taking courses for fun. But Dr. Rob Mann presented me with an interesting research topic and Dr. Mark Muniz and Mr. Thomas Steman both encouraged me at different times to pursue what has always been an interest. I would particularly like to thank Dr. Rob Mann, my major advisor, who was very encouraging and supportive as I ventured into new areas and engaged in research activities with which I was unfamiliar. Without his support I would never have completed this project.

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Chapter I: Project Rationale

This project sought to verify the suspected site of the U.S. Military at Post Sauk Centre, Minnesota (Site # 21SN0198). The suspected site is well known in the Sauk Centre community and has long been documented by the presence of a monument (see Figure 1). The questions we sought to resolve were: does physical evidence of the fort still exist on the suspected site? What did the structure look like? How did it fit on the landscape? How long was it used? Why was it built? What did its soldiers do? What was their daily life like? What impact did the fort have on the development of the Northwest Frontier at a crucial time in American history.

The investigations at Sauk Centre were the most recent efforts by graduate students and faculty in the St. Cloud State University Cultural Resource Management Archaeology graduate program to study the physical remains of forts related to the US-Dakota War of 1862. Two previous projects (Dupre 2017; Peliska 2018) sought to identify settlers' forts constructed as hasty defensive works to protect central Minnesota communities during the US-Dakota War of 1862. In the context of the American west settlers' forts were hasty defensive structures built by local citizens in response to an immediate threat usually from Native Americans (Carley 1976:45-58; George Elmore, personal communication 2020).

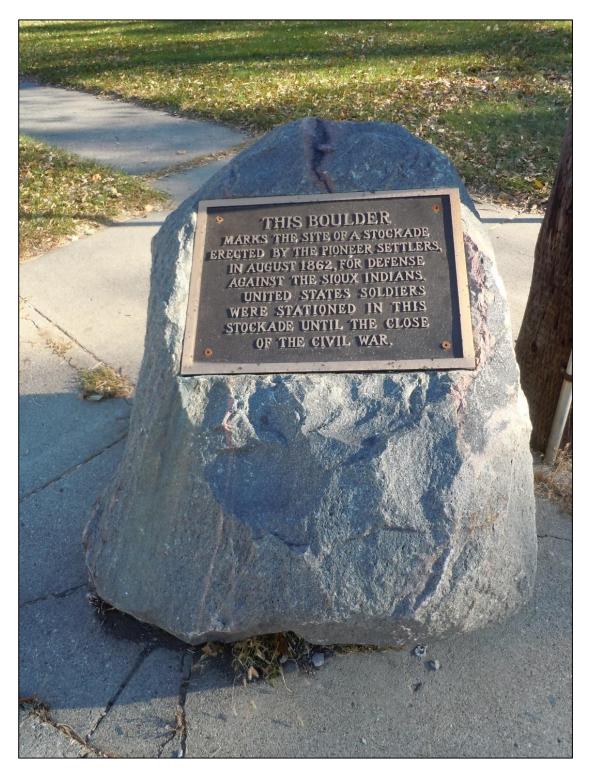


Figure 1. Memorial at the U.S. Military Post at Sauk Centre, Minnesota.

Such structures were common in many parts of the American west in the final three decades of the 19th century. As the line of Euro-American settlement moved west clashes with the indigenous peoples of the interior took place frequently. While there was a United States military presence throughout the interior of the country, the troops were few and spread out. When needing to protect themselves citizens frequently made do with what they had. It is these hasty defense activities specifically in relation to the US-Dakota War of 1862 that Dupre (2017) and Peliska (2018) examined. Carley (1976) also considered these activities as part of his larger work on the US-Dakota war in Minnesota.

Although inspired by these previous efforts, this project took a slightly different direction. It is concerned with a federal fort. Specifically, the U.S. Military Post at Sauk Centre Minnesota. Taken over from the Minnesota State Militia by the United States Army in the late fall of 1862 and enlarged during the winter and early spring of 1863 the Sauk Centre post, along with companion forts at Paynesville, Alexandria and Pomme de Terre, made up a significant part of the Lincoln Administration's response to the US-Dakota War of 1862 and related unrest along the Northwest frontier (Babcock 1963; Carley 1976; Minnesota Adjutant General's Office Annual Report 1866:339 [MNAGO Annual Report]; Sauk Centre *Herald* 1928a and b).

The US-Dakota War was brief. The fighting started in late August 1862 and was over by the end of September 1862. But the brief period of overt violence between Euro-American immigrants and the Dakota terrified the settlers across much of central, southern, and western Minnesota (Carley 1976:21; MNAGO Annual Report 1866:387-391). Settlers fled the affected region in significant numbers seeking the safety of the larger settlements along the Mississippi River. Some did not, or could not, or would not, flee and in these cases, they frequently built defensive fortifications to protect towns and villages in the region. These settlers' forts, referred to above, were intended as temporary places of refuge and places from which citizens could resist an immediate Indian attack (MNAGO Annual Report 1866:339; Peliska 2018). Settlers' forts have been studied and to some degree memorialized over the years since the war (Babcock1963; Carlson and John 2015; Dupre 2017; Howard 1931; Mann 2020; Peliska 2018).

Traditionally the US-Dakota War of 1862 has been seen as a localized event occurring within and prompted by but not necessarily related to the broader context of the U.S. Civil War. The war with the Dakota was certainly a product of western expansion by the United States. The direct impact was certainly regional. Parts of western Minnesota were temporarily abandoned by Euro-Americans and there were great fears about the impact of the fighting on future immigration into the state (MNAGO Annual Report 1866:420-430).

But these events along what was then the nation's Northwest frontier had repercussions beyond the state. The initial attacks by the Dakota in August 1862 caused a large-scale exodus of settlers leaving large areas of the Minnesota frontier uninhabited (MNAGO Annual Report 1862:420). The Dakota, in an assault on Fort Abercrombie in Dakota Territory in September 1862, almost closed the Red River Trail. This was a commerce link to the fur settlements in central Canada. Annually millions of dollars in furs passed along the trail to supply the garment industry in the east. And the supplies to sustain the settlements in central Canada passed back up the trail. This was a well-established pattern of commerce that existed from the 1830s at least through the early 1870s and no one in Washington D.C, St Paul, Minnesota of London wanted to see it disrupted (MNAGO Annual Report 1862:407; Gilman et al. 1979:1-26).

The Red River Trail also carried immigrants west into the new Dakota Territory. Closing this route, even for a short time, would have threatened the viability of settlement in the Dakota's (MNAGO Annual Report 1862:407-408). A secondary impact would have been to also threaten

the fur trading posts in central Canada thus giving the British another reason to want the US Civil War ended (Brauer 1972; Grabner 1972).

When Minnesota Governor Alexander Ramsey requested federal troops to deal with the hostilities between the Euro-American settlers and the Dakota in August of 1862 it was primarily to calm panicked citizens (Clodfelter 1998:45). When the Lincoln administration responded with four regiments of infantry it was partly to calm panicked citizens, partly to secure the Red River Trail and partly to establish a strategic position in an effort to intimidate the Dakota for the duration of the Civil War (DeCorse and Beier 2018:7-9). It was also to demonstrate to the British that the United States, even though distracted by a civil war, had the military power to protect its borders (Brauer 1972; Carley 1976:89; Grabner 1972).

Under the direction of the Military Department of the Northwest the four regiments noted above were positioned at sites across central and western Minnesota. Two of the regiments were specifically assigned the task of constructing and garrisoning a line of forts intended to separate the Dakota and the white settlements. The line ran from the Iowa and Minnesota border north to Fort Ridgley to Paynesville, Sauk Centre, Alexandria, Pomme de Terre and ended at Fort Abercrombie on the Minnesota and Dakota Territory border (Carley 1976:87; Howard 1931:302; McKusick 1975; MNAGO Annual Report 1866:339-343). The state of Iowa undertook separate, but related, military construction activity in the northwest part of that state (McKusick 1975;34-35). This was intended as an interim measure to calm the Northwest frontier until Euro-American immigration into the region reached a level making further conflict with the Dakota unlikely. The scope of this defensive line can be seen on the map in Figure 2.

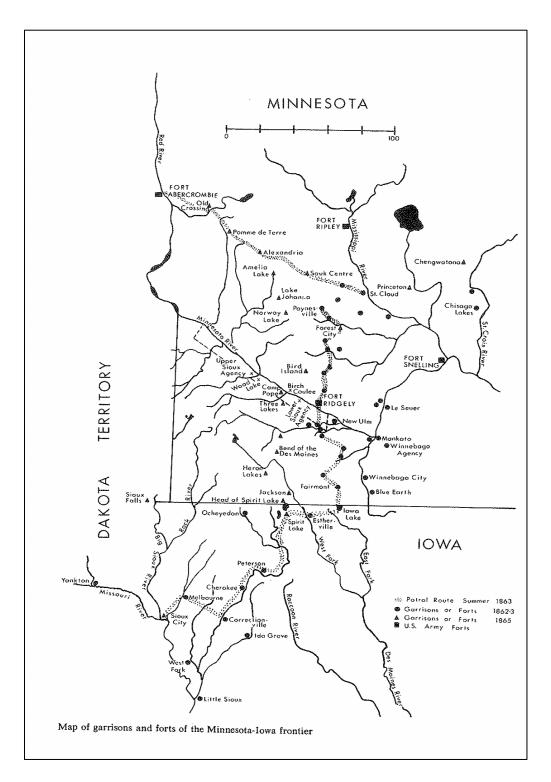


Figure 2. Map showing the line of forts built in 1862-1863 between Sioux City, Iowa, and Fort Abercrombie Dakota Territory to separate the Dakota and the White Settlements (McKusick 1975. Used with permission, University of Iowa Office of the State Archaeologist).

The section of the line north of Fort Ridgley and specifically the fort at Sauk Centre is the focus of this project. From Paynesville north these were log stockades built as places to house soldiers and as places from which the soldiers could fight (Babcock 1963:274-286; Howard 1931). They were also intended as places of refuge for local citizens during periods of violence (MNAGO Annual Report 1862:480). From the spring of 1863 until the end of the Civil War the troops along this stretch of the line engaged in active patrolling and had occasional fire fights with the Dakota (Carley 1976:87; MNAGO Annual Report 1862:337-341).

The U.S. Military Post at Sauk Centre was the largest of these forts. It was strategically sited near where the Middle route of the Red River Trail crossed the Sauk River (Howard 1931). Figure 3, the Army Plan Drawing of the U.S. Military Post at Sauk Centre, shows the fort as it probably looked in the late spring of 1863 (*Saint Cloud Democrat* 1863a). There is no record of who drew this plan. It was found in the papers of Oscar Taylor in the Minnesota Historical Society (2018b). Taylor was an officer in the Minnesota Mounted Rangers, state troops organized and sent to Sauk Centre by the Minnesota Adjutant General in the September 1862. Taylor served until the fall of 1863 and was mustered out (Minnesota State Legislature Reference Library 2020).

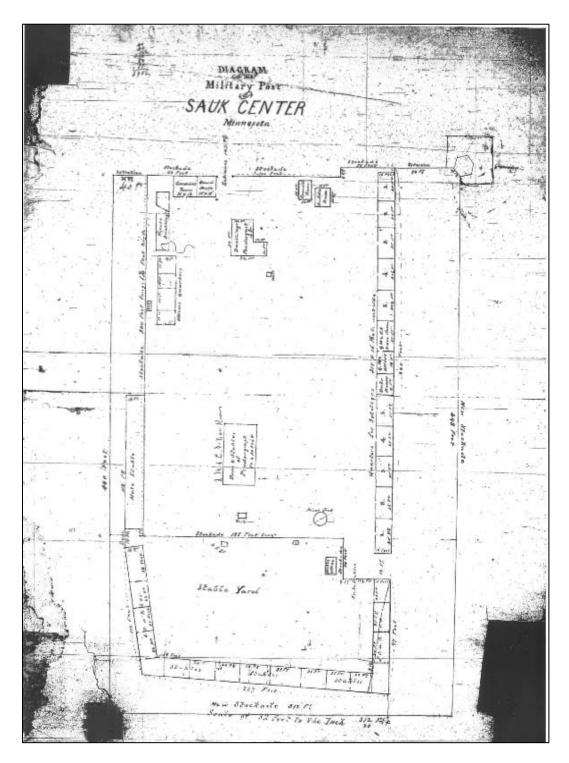


Figure 3. Army Plan Drawing of the Federal Military Post at Sauk Centre, Minnesota, Spring 1863 (Taylor, O. Papers. Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018b)

Figure 3 is remarkably like a drawing of the U.S. Military Post at Alexandria known to have been done by the Army (Swanson 2011). The two stockades were built at the same time by companies of the 8th Minnesota Volunteer Infantry Regiment. The fort at Alexandria was smaller than the fort at Sauk Centre (Howard 1931). Both were part of the central Minnesota line and situated in proximity to stage stops on the Red River Trail between Saint Cloud and Fort Abercrombie (Swanson 2011). Both were garrisoned from the late fall of 1862 until the end of the Civil War and were abandoned by the Army at the end of the war.

The similarities between the two drawings suggests that both are Army drawings. Probably done in the spring of 1863 to document the new forts as they were completed. Both are done to an identified scale and provide detail about buildings within the respective stockades. At the time it was built, the U.S. Military Post at Sauk Centre was a large installation with the stockade enclosure covering almost 3 acres. It had space to house two hundred soldiers (Howard 1931; MNAGO Annual Report 1866:480). It is likely the total reservation was even larger.

From this site troops staged to relieve Fort Abercrombie in the fall of 1862 (Carley 1976:56-58). The fort's soldiers patrolled north and south along the Red River Trail to keep the country calm during Henry H. Sibley's initial expedition against the Dakota in the fall of 1862 and the later punitive expeditions into the Dakota Territory by Sibley and Alfred Sully in 1863 (Carley 1976:59-60, 88-91). Sibley was a prominent Minnesotan given a senior military commission by the governor of the state to lead the state's troops in the field in response to the unrest of August and September 1862 (Carley 1976:31). Sully was a regular army officer who at the beginning of the Civil War had accepted the colonelcy of one of the early Minnesota volunteer regiments and had led that regiment through the first year of the war earning a

promotion to Brigadier General of U.S. Volunteers and was reassigned to the Military Department of the Northwest in Saint Paul (Carley 1976:88).

In the spring 2018 Dr. Rob Mann, Associate Professor of Anthropology at St Cloud State University and an historical archaeologist and I began making plans to survey the site of the Sauk Centre fort. Its presumed location is well documented. As already noted, there is a monument commemorating the fort at the intersection of 7th and Birch Streets in Sauk Centre (see Figure 1). The Sauk Centre Historical Society has several paintings and drawings and an archival collection on the fort (Stockade File, Sauk Centre Historical Society 2018). The Stearns County History Museum also has an archival collection pertaining to the fort (Native Americans; Dakota Conflict, Sauk Centre; Stearns County History Museum 2018).

We decided to look at the Sauk Centre site because it was the largest post in the northern part of the line. We had documentation of the site in the form of the Army Plan Drawing (see Figure 3) and a datable Sketch of the U.S. Military Post at Sauk Centre (see Figure 4). The Army Plan Drawing (see Figure 3) has already been discussed and the Sketch of the U.S. Military Post at Sauk Centre (see Figure 4) will be discussed in detail in the next section. We also had descriptions of the how the fort sat on the landscape and information on its construction. And we knew something of its role in events in the region between 1862 and 1865 (Howard 1931; MNAGO Annual Report 1866; Sauk Centre *Herald* 1928a and b ; SF, SCHS 2018a; NA, DC, SCS, SCHM 2018).

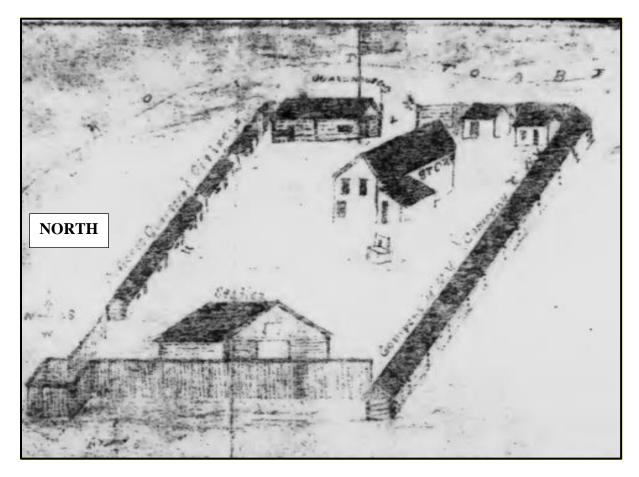


Figure 4. Sketch of U.S. Military Post at Sauk Centre, Minnesota, Fall 1862. (Nasmith Papers, Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018a).

Dr Mann and I made several trips to Sauk Centre in the spring of 2018 contacting the Sauk Centre Historical Society and property owners in the area we wanted to survey. We did presentations to the community, under the sponsorship of the Sauk Centre Historical Society, on our planned research activities. We received permission to survey and excavate from specific impacted property owners and the whole-hearted support of the Sauk Centre Historical Society. We engaged in initial field investigations between July 9 and 20 and returned for four more days October 18-21 all in 2018.

Chapter II describes the U.S. Military Post at Sauk Centre in detail. Chapter III presents the research questions that guided the inquiry; Chapter IV addresses the research methodology

and includes the literature review. Chapter V offers the cultural context for the events that resulted in the construction and occupation of the Sauk Centre Post. It addresses in separate subsections the general context of the Minnesota frontier; the origins and impact of the US-Dakota War of 1862 and the impact of the U.S. Civil War on events occurring in Minnesota between 1862 and 1865. Chapter VI offers my thoughts on the forts and what they represented to the different cultures meeting in central Minnesota in 1862-1865. Chapter VII describes and reports our investigations at the site. Chapter VIII summarizes and assesses our efforts.

Chapter II: The U.S. Military Post at Sauk Centre

The structure that became the U.S. Military Post at Sauk Centre was the second stockade built in that general location. The first was a temporary structure built in August of 1862 by the Sauk Centre Militia Company. It was one of the settlers' forts mentioned in Chapter I. It stood on what is today the southeast corner of the intersection of Ash and 7th Streets in Sauk Centre, Minnesota. It was near to but not on the same location where the U.S. Military Post at Sauk Centre was eventually built (Sauk Centre *Herald* 1928 a and b; NA, DC, SCS, SCHM 2018).

The Sauk Centre settlers' fort was not well built. The Militia Company Commander in his report written in September 1862 after the threat of hostilities had decreased described it as inadequate (NA, DC, SCS. SCHM 2018). The Minnesota Adjutant General, probably relying on the Militia Company Commander's report, described it as small and unsanitary (MNAGO Annual Report 1862:387-391).

A June 1928, (Sauk Centre *Herald* 1928a and b) newspaper story commemorating the U.S. Military Post at Sauk Centre says the settlers' stockade stood at the southeast corner of Ash and 7th Street east of the *Our Lady of the Angels* church. This information is in an interview the paper conducted with John Howard a prominent local resident who was an officer in one of the volunteer regiments stationed at the fort. It is generally corroborated by the Militia Commander's contemporary report which is in the archives of the Stearns County History Museum (2018). It should be acknowledged that Vince Botz (2014) offers a different view of the location of the Sauk Centre settlers' fort and the Pendergast store. *The Minnesota Adjutant General's Report for 1862* describes the decision to replace the Sauk Centre stockade with a more substantial structure (1862:480).

When the tactical situation settled down in September 1862 the Militia Company Commander implemented the plan to replace the settlers' fort with a larger one built of 12 to 18foot tamarack logs set two feet into the ground (NA: DA, SCS. SCHM 2018). This new, and considerably larger stockade was to be built a few yards to the northwest of the existing settlers' fort and would incorporate the "Pendergast Store" and more importantly its adjacent well and barn (Botz 2014:26; Howard 1931:301-303; NA, DC, SC, SCHM 2018). The Pendergast structures were near to but not encompassed by the Militia Company's settlers' fort. This suggests the settlers' fort remained standing and presumably in use until the new stockade was completed.

The Pendergast store was a stop on the Abercrombie to Saint Cloud Road, basically the Middle branch of the Red River Trail (Hildebrand 1993:29; Mitchell 1915:351). The store and stage stop were opened in 1861 by Solomon Pendergast an early area settler. Pendergast apparently continued to operate his business from the stockade after the arrival of the Army. Near the end of the Civil War, or just after, he moved the store to what was becoming downtown Sauk Centre where the structure he built is still in commercial use (Mitchell 1915:351; Hilderbrand 1993:22-23). There is a photograph of this store in operation in downtown Sauk Centre circa 1877 in the collections of the Minnesota Historical Society (MNHS 2018 (1877). The site of the U.S. Military Post at Sauk Centre is in what today is a residential area running along 7th Street from about Pine Street on the west to Ash Street on the east (Sauk Centre *Herald* 1928a and b, NA; DC, SCS, SCHM 2018).

The forts at Sauk Centre, Alexandria, and Pomme de Terre all incorporated existing stops on the Saint Cloud to Fort Abercrombie Road, a branch of the Red River Trail (Goetzinger 1962; Howard 1931, NA, DC, SC, SCHM 2018). It is important to note at this point that the Red River Trail was not a single road. Rather it was a set of trails that crossed Minnesota between 1820 and 1870. During the years it was in use the trail linked remote settlements along the Red River on the Minnesota Dakota Territory border and north into Canada to the more developed settlements in eastern Minnesota along the Mississippi River. The common names for the primary branches of the trail were: The North Dakota Trail, The Minnesota Valley Trail, The Woods Trail, The Middle Trail, and the Metropolitan Trail (Gilman et al. 1979: ix). Travelers used the different branches depending on the time of year, destination, and weather conditions. The branch of primary interest in this study is the Middle Trail. There were various routes of the Middle Trail and one passed through Sauk Centre south to Saint Cloud, the Middle Trail was after 1858 the busiest of the routes (Gilman et al 1979:69-80).

While we have no images of the settlers' fort built by the Militia Company, we do have drawings of the structure built to replace it. Figure 3, the Army Plan Drawing, probably depicts the fort after the work done over the winter and spring of 1863 by the 8th Minnesota Volunteer Infantry. This is suggested by information in the 1863 Minnesota Adjutant General's Report discussing construction at the Sauk Centre site during that period (MNAGO Annual Report 1866:478-479). Additionally, there is an article in the April 9, 1863 issue of the Saint Cloud *Democrat* newspaper describing work done at the Sauk Centre fort over the winter and offering dimensions for the stockade like those on the Army Plan Drawing. The article also described the work at the fort as still in progress as of the articles' publication date (Saint Cloud *Democrat* 1863a).

Figure 4 (Sketch of the U.S. Military Post at *Sauk Centre*) most likely depicts the fort in the late fall of 1862 before the expansion work and as it was being handed off from the Sauk

Centre Militia Company to 25th Wisconsin Volunteer Infantry. We know from the Militia Company Commander's report (NA, DC, SC, SCHM 2018) that unit began work in September to build the larger stockade. We also know from Babcock (1963:279) that the Militia Company was relieved by the 25th Wisconsin Volunteer Infantry near the end of September 1862. The Militia Company was sent home in early October 1862 (MN Board of Commissioners, 1893:794) and that the Wisconsin soldiers continued working on the fort and began patrolling the trail west toward Alexandria. We also know from the Minnesota Adjutant General's Report for 1862 (1862:378-391) that the state raised at least a regiment of Minnesota Mounted Rangers and sent them to Sauk Centre in the early Fall of 1862 with instructions to cooperate with the federal troops (MNAGO Annual Report 1866:409).

This knowledge helps us date Figure 4, the Sketch of the U.S. Military Post at Sauk Centre. The labels on the sketch identify one set of enlisted quarters as housing Wisconsin Volunteer troops (WV) and the other set Minnesota Mounted Volunteer troops (MMV). From Babcock's 1963 (280-281) account we know the only time Minnesota state troops and Wisconsin Volunteers were at the U.S. Military Post at Sauk Centre at the same time was in October and November of 1862.

Adding credence to the idea that the sketch of the U.S. Military Post at Sauk Centre (see Figure 4) is from the October/November 1862 time frame is the fact that it was found in the Samuel Nasmith Papers. (Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018a).

Nasmith was the Lieutenant-Colonel of the 25th Wisconsin Volunteer Infantry and commanded the troops from that regiment sent to Minnesota in the fall of 1862 and posted to Sauk Centre and other locations in central Minnesota (Holford 1900:279-280; MNHS 2018a).

The John Howard interview in the Sauk Centre newspaper (June 1928) and his letter to the Minnesota Historical Society (1931) provides additional information on understanding what the fort looked like and how it fit on the landscape. The Army Plan Drawing (see Figure 3) and the Sketch of the U.S. Military Post at Sauk Centre (see Figure 4) show the structure at different points after completion. Both depict a similar stockade facility of some size. Howard's letter to *Minnesota History* (1931:302) says the fort had bastions at the northwest and southeast corners and was large enough to hold 200 soldiers and their horses and artillery. Figure 3 shows a defensive bastion located at the corner to the right of the gate, the gate is in the east wall of the fort. Where the other bastion should be is what appears to be a black spot. Whether this means anything we do not know. Figure 4 does not show any bastions. This suggests Figure 4 depicts an early version of the stockade before the decision was made to add the bastions.

Two things help us orient these drawings to the ground. First, on the Army Plan Drawing (see Figure 3) there is part of a compass rose that became noticeable when the drawing was enlarged to its original proportions. It shows that north is to the left side of the drawing meaning the gate faced east. This allows us to identify the southeast bastion as the one to the right of the gate and to better understand references to locations in the stockade. Second, the 1928 Howard interview (Sauk Centre *Herald* 1928a and b) confirms the directions. He provides contemporary (late-1920s) geographic references for where the gate and other features of the fort stood. From that article we know the wall with the gate stood along present-day Ash Street confirming that the gate faced east and the bastion on Figure 3 is the southeast bastion.

In the Sauk Centre *Herald* interview (June 6, 1928) and the letter to *Minnesota History* (1931) Howard describes the site as having two bastions. Figure 3 clearly shows one and Figure 4 depicts none. As noted above we do not know why the other one is not depicted in

Figure 3. It could be as simple as damage to document or it could be the bastion missing from the Army Plan Drawing was never built.

It is interesting that the bastion shown is on the southeast corner of the stockade near the gate. From that location it probably would have been possible to observe the trail crossing site on the Sauk River. This would have likely been regarded as an important location for attacks on travelers. The southeast bastion may have been completed first for this reason and the northwest bastion was added later but was not there at the time the drawing was done, we do not know. The Army Plan drawing (see Figure 3) also shows the extensive stable areas described by Howard (Howard 1931; Sauk Centre *Herald*, 1928a and b).

From Howard's comments it is possible to confirm the gate faced east. We also know that the stockade begun in September of 1862 incorporated the Pendergast house and barn. This latter fact is also confirmed by the Army Plan Drawing (see Figure 3) and the Sketch of the U.S. Military Post at Sauk Centre (see Figure 4). In both the Army Plan Drawing (see Figure 3) and the Sketch of the U.S. Military Post at Sauk Centre (see Figure 4) structures significantly larger than other structures appear inside the stockade. They appear to be in approximately the same location on both although the perspective is different in the sketch and the drawing. In the Army Plan Drawing (see Figure 3) one is labeled as the Pendergast house and store and one as the Pendergast barn.

We know that the Pendergast barn was used by the Army as a commissary warehouse based on the Plat abstract for 621 Birch (Gerald Sunderman, personal communication 2018). The document identifies the plat survey for the lot as beginning from the large rock located at the northwest corner of Solomon Pendergast's barn. This evidence is discussed extensively elsewhere. The Deed Abstract notes that the barn is the same structure used by the Army as a Commissary Warehouse at the late U.S. Military Post at Sauk Centre. The Deed Abstract for 631 Birch (Brian Kleinvachter, personal communication 2018) corroborates this. It identifies the survey for that lot as based off the large stone at the southwest corner of block 1 of the James Addition. This is the modern corner of 7th and Birch Streets in Sauk Centre.

Additional corroboration comes from a memory map (see Figure 5) of the fort drawn by Leonore Aedle (Della) Veeder. She passed through the fort as a teenager in 1863 and later drew the memory map of the fort and labeled its buildings and other features (Stockade File, Sauk Centre Historical Society 2018b). She clearly identifies a large building positioned near the center of the fort as the Commissary. In her sketch the building referred to is positioned in essentially the same location as the Pendergast Barn on the Army Plan Drawing of the site.

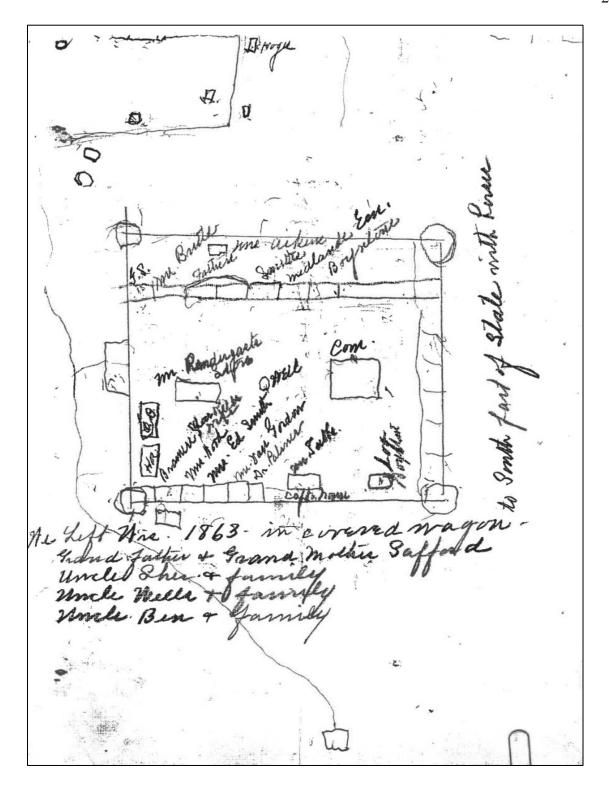


Figure 5. Veeder Memory Map of the U.S. Military Post at Sauk Centre, Minnesota. (Stockade File, Sauk Centre Historical Society 2018b).

Two aspects of the Sauk Centre stockade set it apart from other US Army installations of the period. First, was the stockade. For a fort of this period in the interior of the country to be stockade was unusual. US Army posts of the second half of the 19th century in the interior of the United States were typically buildings grouped in a square around a parade ground. Most did not have walls. Many did have block houses or some sort of defensive bastion where the garrison could make a stand if necessary. Sometimes the buildings on the perimeter of these forts had firing loopholes in their outer facing walls. But generally, from the Civil War on forts in the interior were intended as logistics and administrative facilities not places to fight from. In reality most were frontier military villages rather than fortified positions.

One of the interesting aspects of the Sauk Centre defensive works and walls is it appears the stockade was not loop holed. Nor does it appear to have had a banquet. United States Army doctrine of the period called for loop holing the walls of defensive works at specific intervals as firing positions for individual soldiers (United States Army 1861 [2013]). Usually the soldiers stood on a walkway called a banquet. The banquet ran the length of the wall on the inside below the loopholes (Mahan 2017 [1862]:21). This could be on the ground or it could be elevated; a really elaborate large fort might have both.

There is no archival evidence of either a ground level or elevated banquet at Sauk Centre. However, in excavating Unit 1 and Unit 3 (discussed in detail in Chapter VII) we identified two features (Feature 1 and Feature 5) that seem to be large posts. They are in proximity to where the original wall likely stood but are not part of it. Given their location they could be part of a support structure for a banquet. They could also have served some other purpose of which we are aware. It is likely, based on the Army Plan drawing at Figure 3 and Howard's descriptions (Howard 1931; SCH 1928b), that the bastions were loop holed. Howard (1931: 301-303) describes them as having positions for cannon and infantry soldiers reinforcing this assumption. Given the design of the fort, straight walls with no defensive offsets or angles and no evidence of loopholes in the walls the bastions were set out slightly from the walls so that soldiers in them could see and shoot along the outer walls. Each bastion of the U.S. Military Post at Sauk Centre, assuming there really were two, was able to observe and bring fire on two of the forts four outer walls. This would have been consistent with US Army doctrine on field fortifications as outlined in *A Treatise on Field Fortifications* by Dennis Hart Mahan (2017 [1862]).

Second of the two major features of interest were the presence, inside the walls, of quarters for citizens. These are shown on both Figure 3 and Figure 5 (Memory Map) located in the northeast corner of the fort. Howard (1931) describes the Sauk Centre, Alexandria, and Pomme de Terre stockades as all having space for area citizens. Many 19th-century United States forts were located along overland trails, as was this site, and served as stopping places for travelers as apparently did this site. But usually these travelers were expected to put themselves up in camps or other temporary quarters.

That the Sauk Centre stockade and other forts along the Red River Trail had facilities for civilians makes them unique. This space for citizens was apparently included at the direction of the Minnesota Adjutant General (Goetzinger 1962:66). The Minnesota Adjutant General saw these facilities as places of refugee for area citizens in the event of a resumption of fighting between settlers and the Dakota (MNAGO Annual Report 1866:480).

The first point suggests that the Sauk Centre stockade was built with the idea that it might be attacked and would need to defend itself. The corner bastions would have had commanding fields of fire around the fort and along the walls. It is likely the plan would have been to employ fire from the bastions to keep attackers at a distance and use mounted troops to run them off. But we do not know. The size and relative combat power of the garrison (200 soldiers with artillery), suggested by installation size, indicates that the intent was to project U.S. military power into central Minnesota with the idea of making a political statement to the settlers and the Dakota and the Ojibwe and possibly others. Howard's letter to *Minnesota History* (1931) suggests they did this through patrolling and other small-unit military operations from late 1862 until mid-1865, and possibly later. Offering a military presence implying safety and security was a common function of forts in the interior during the 19th century (Tveskov and Cohen 2014:195).

The second point, the presence of accommodations for civilians inside the walls, makes it clear these forts were intended to provide a sense of safety to citizens residing in the area and traveling along the Red River Trail. The fighting in the summer and fall of 1862 had seen considerable numbers of citizens flee western Minnesota (MNAGO Annual Report 1862:407). While no one explicitly says this, it appears the forts were intended to signal to the people of the region that the government was there to protect them. Thus, it seems consistent with this approach to have the soldiers highly visible throughout the region rather than hunkered down in fortifications (DeCorse and Beier 2018:7-9). But it also seems consistent to have the increased presence of soldiers accompanied by these places of war projecting strength and power. These forts would have been large commanding structures in this part of Minnesota in 1863-1865.

At the time it was built the fort at Sauk Centre was likely the largest structure in northern Minnesota, the forts at Paynesville, Alexandria, and Pomme de Terr were smaller (Babcock 1963). The structures themselves, the emphasis on active patrolling, and the construction of several fortified camps between the forts all provide evidence of an Army presence to interested observers. A presence that appeared permanent.

As can be seen on the map (see Figure 2) the garrison at Sauk Centre was part of a line that ran from Sioux City, Iowa for a distance into Iowa turned north to Sauk Centre, Minnesota and then west to Fort Abercrombie. As noted in 1975 by the Iowa State Archaeologist (McKusick 1975:34-36) the line formed three sides of an irregular box with the fourth side open to the west. It appears the intent was to manage the Dakota inside this box and give them space to withdraw to the west. The general idea was to keep the Dakota and the advancing line of white settlement apart and to give the former someplace to go and the latter time to stabilize and achieve greater permanence (McKusick 1975:34-36; MNAGO Annual Report 1866:480-481; Willoboughy 1963:275-276).

Based primarily on the archival research for this project there was a significant public, state, and federal response to the events of August and September 1862 in Minnesota. The public response was to flee or stay and build settlers' forts. The state response was to request federal assistance and call out and support local Militia Companies and create standing state military units to combat the Dakota. The federal response involved building across central and western Minnesota a line of U.S. Military Forts to separate the Dakota and the white settlements (MNAGO Annual Report 1862:387-391). The U.S. Military Post at Sauk Centre was the largest of the forts built for this purpose. It was located about halfway between the existing posts at Fort Ridgley, Minnesota and Fort Abercrombie, Dakota Territory. From 1862 to 1865 it served as a base of operations against the Dakota and supported security along the most isolate stretches of the Red River Trails.

Chapter III: Research Questions

Analyzing the archival research on the U.S. Military Post at Sauk Centre and on the US-

Dakota War of 1862 a set of questions emerged regarding the former. As put forward in the April

2018 proposal meeting, those questions were:

• If the existing evidence is as it appears to be, the research question at the core of this

project is:

Can we find physical evidence on the suspected site conclusively showing that the U.S. military stockade once stood there?

• As we seek to answer the core question, we will also address the following supporting

research questions.

Supporting Research Question 1: If we find material evidence is it characteristic of mid-19th century American Military activities and can we discern the horizontal and vertical limits of these deposits?

Supporting Research Question 2: If we find material evidence does it allows us to draw any conclusions about the Sauk Centre garrison and specifically about the daily life of the individual soldiers stationed here?

Supporting Research Question 3: In the process of identifying the site we addressed, primarily through archival research, the following questions:

When was the federal garrison established?How big was the federal garrison?What units were assigned to the federal garrison?What did the federal garrison do (military operations and daily activities)?When did the federal garrison leave?

As I formulated these questions, I concluded the over-arching research question and

supporting questions one and two would be answered primarily by archaeological research on

site. On the other hand, answers to the group of questions characterized as supporting question

three relied primarily on archival investigations. These questions are generally addressed by the

discussion in Chapter V, and Chapter VI.

By the time we started the actual physical work on the site we had a fairly good idea of the sites' boundaries and of how the stockade actually set on the site and what the various buildings were used for. In addition, we knew who, as in what units, were assigned to the fort and when and we had a good idea of the activities the soldiers engaged in.

Knowing how the stockade sat on the site compared to the current lay of the site helped us decide where to focus our limited efforts. Knowing what the buildings were used for and approximately where they stood also helped because, given the areas we had access to, we had some idea of what we might find in a particular modern location.

Chapter IV: Research Methodology and Literature Review

Developing the research methodology to study the proposed questions proved interesting. It quickly became apparent that two types of research would be involved. First would be an archival phase looking for written evidence of the U.S. Military Post at Sauk Centre. Second would be an archaeological phase looking for physical evidence of the U.S. Military Post at Sauk Centre and the people who were there.

The archival research yielded valuable information on when the fort was built; why it was built; and how it was oriented on the suspected site. This information facilitated our efforts to identify where on the site we needed to focus our research efforts (Howard 1931; Saint Cloud *Democrat* 1863a; Sauk Centre *Herald* 1928a, 1928b, 1947; SF. SCHS 2018a and 2018c; NA, DC, SCS, SCHM 2018).

Files in the Minnesota Historical Society's Dakota Conflict collection proved useful. I specifically consulted the Samuel Nasmith Papers (Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018a) and the Oscar Taylor Papers (Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018b). Nasmith was the commander of the 25th Wisconsin contingent sent to Sauk Centre in the fall of 1862. Nasmith was from Platteville, Wisconsin. He lived there before the war although what he did is unclear. There is evidence he was active in local politics (Holford 1900:480). Nasmith was mustered into the US Army at Platteville, Wisconsin in 1861 as the Commander of Company C, 7th Wisconsin Volunteer Infantry. In that capacity he saw combat in the Virginia theater of the Civil War. In 1862 he was appointed Lieutenant-Colonel of the 25th Wisconsin Volunteer Infantry and served with that regiment in Minnesota and in the Mississippi campaigns of 1863. He died in August 1863 of disease contracted in Mississippi (Holford 1900: 279-280). Taylor was an officer in the Minnesota Mounted Rangers, state troops sent to Sauk Centre also in the fall of 1862. In civilian life he was a lawyer and Minnesota State Senator in Saint Cloud, Minnesota (MNAGO Annual Report 1862: 409; Dakota Conflict of 1862 Manuscripts Collections. Minnesota Historical Society 2018b; Minnesota Legislature Reference Library 2020).

The Minnesota Historical Society Press has published numerous works on this period. Among the more useful for this study were: Kenneth Carley (1976), *The Sioux Uprising of 1862* and Ronda R. Gilman, Carolyn Gilman, Deborah M. Stulz (1979) *The Red River Trails 1820-1870; Oxcart Routes Between St Paul and the Selkirk Settlement*. The former is a good general history of the events of August and September of 1862 told primarily, but not exclusively, from the perspective of the white settlers. The latter provides a good history of the Red River Trails from their initial use through abandonment after the Civil War. Mary Wingred's (2010) book *North Country: The Making of Minnesota* is the standard work for understanding Minnesota history from about European contact to the start of the Civil War.

Among other sources consulted were records at the Sauk Centre Historical Society and the Stearns County Museum. The former has a Stockade File (SF; SCHS 2018a) which includes drawings and documents describing the stockade during US-Dakota War of 1862 and after. The latter has a file on the US-Dakota War of 1862 (NA; DC, SCS, SCHM 2018) which includes a typed transcript of a report from the Sauk Centre Militia Company Commander on the August and early September 1862 operations undertaken by his unit. These documents tell the story of the events of August and September 1862 in Sauk Centre and Central Minnesota in general from the perspective of the white participants.

Events in Minnesota between 1862 and 1865 have also been addressed by conventional military historians. Several works have been published looking at United States and state

military operations in the region both in terms of confronting the Dakota and providing general security along the overland trails. These include: Howard (1931) on the building of the forts and their mission; McKusick (1975) on period military activities in Iowa but with insights that apply to Minnesota as well; Willoboughy (1963) which addresses military operations in Minnesota both against the Dakota and security activities along the trails; Clodfelter (1998) which considers operations on the Northwest frontier within the broader military context of the Civil War and the US Army's thinking about warfare in the mid-19th century. Carley (1976) also provides useful insight into the issues that led to the fighting and the construction of the forts and he describes military operations including both initial clashes between troops already in the state and the Dakota and the later punitive expeditions against the Dakota (1976:25-31, 40-44, 59-63).

Of value in understanding the broad outlines of the Army's activity in Minnesota between 1862 and 1865 and within the context of its broader role in western expansion are Robert Utley's *Frontiersmen in Blue* (1967) and *Frontier Regular's* (1973). Utley is the former Chief Historian for the National Park Service. Helpful to understanding the US Army of the 19th century is Dennis Hart Mahan's *A Treatise on Field Fortifications* (2017 [1862]). Originally published by West Point in the 1850s and updated as the Civil War began Mahan's work was intended as a pocket guide for officers in the field who might find themselves charged with building fortifications. We do not know if the officers charged with designing and building the fort at Sauk Centre would have had access to Mahan's book as they were volunteers newly appointed from civilian life. But because the book was specifically intended as a reference for Militia officers it is likely they did.

A document the officers at Sauk Centre would most certainly have been familiar with was the *Revised Regulations for the Army of the United States*, *1861*. Published in 1861 by the War Department this document would have provided guidance on the management of most aspects of Army life in the mid-19th century. Studying it provides insight into the rhythms of daily life at the U.S. Military post at Sauk Centre as well as insight into how US Army officers of the period would have approached carrying out their assignments.

To bring the focus in to Minnesota and the specific topics addressed in this paper are the Minnesota Adjutant Generals' Department Reports for the period. I consulted two specific volumes extensively: the *Minnesota Adjutant Generals' Report for 1862* (1862) and the *Minnesota Adjutant Generals' Report for 1863-1865* (1866). Both are available in the Minnesota Historical Society collection and provide significant detail on military activities and response to the issues with both the Dakota and the Ojibwa during this period. Also, of help in gaining perspective on the Minnesota's military response to the US-Dakota War of 1862 and its aftermath is *Minnesota in the Civil War and Indian Wars, 1861-1865*, vol. 1, *Regimental Histories* and *Minnesota in the Civil War and Indian Wars, 1861-1865*, vol. 2, *Official Reports and Correspondence*. These volumes were the work of a state organization called the Minnesota Board of Commissioners and were published in 1893. They provide detailed information on all aspect of Minnesota's role in the state and national conflicts of the period 1861-1865.

There has also been work done on the military archaeology of the period in Minnesota specifically and in the region in general. Two of these works were done recently by graduate students at St. Cloud State University; Jacob Dupre (2017) and Charles Peliska 2018. Both reports deal with setters' forts from the period. Also providing insight into the settlers' fort activity is McKusick (1975) and Carley (1976). Both have good maps showing locations of forts and activity related to their construction and use during the fall 1862 through spring of 1865.

The McKusick book is also valuable because the author was the Iowa State Archaeologist at the time of publication. This work provides insight into the construction techniques used in building the Iowa forts. We only have limited information (Babcock, 1963; Howard 1931; Sauk Centre *Herald* 1928a and b) on construction techniques used on the Minnesota forts. McKusick's observations provide a useful supplement.

Considering the archaeology relevant to this subject: Sigrid Arnott and Doug Maki conducted a survey of the Wood Lake battlefield in 2016 (Arnott and Maki 2016). This is an analysis of the decisive engagement of the US- Dakota War of 1862. It documents the flow of the battle based on physical evidence found on the site. As introduced above, Dupre (2017) and Pleskia (2018) both conducted archaeological studies of settlers' forts. They were looking at quite different structures. The fort Dupre was seeking, located in Fair Haven, Minnesota, was a hastily built structure to shelter settlers and protect the community. The fort Peliska was seeking in Saint Cloud, Minnesota was a substantial structure built with some thought to military considerations such as fields of fire. (Dupre 2017:24-25; Peliska 2018:14-15). The *Iowa Northern Border Brigade* (1975), referenced above, is a cultural resource management analysis of the sites on the Iowa part of the 1862-1865 fort line. Some of these sites fit the settlers' fort category and some were more substantial.

G. Hubert Smith's *A Frontier Fort in Peacetime* (1976) approaches Fort Ridgley, the center of the Minnesota part of the 1862-1865 fort line, from both an archaeological and historical perspective. Smith is the archaeologist who did much of the original work at Fort Ridgley in the 1930s (Mather 2010). Smith's article puts the fort in the historical context of the Euro-American movement west. Its value to this study is Smith's article describes in detail, using both archaeological and historical evidence, the daily life at Fort Ridgley covering the period

from the forts' establishment through the US-Dakota War of 1862 and later. A more recent publication looking at archaeological work on the Fort Ridgley site in 2010 is by David Mather (2010). Mather is an Archaeologist at the Minnesota State Historic Preservation Office and the article is in the July-August 2010 issue of the *Minnesota Conservation Volunteer*. The article describes state sponsored archaeological work then in progress at Fort Ridgley State Park. Writing for the general public Mather describes how the current research builds on work done in the 1930s by Smith and documents the August 1862 battle for control of the fort between the soldiers at the fort and the attacking Dakota (Mather 2010). He describes artifacts recovered indicative of the US military in the Civil War period as well as artifacts related to the battle and to the Native American occupation of the area prior to the arrival of Euro-Americans.

Another article that is not an archaeological survey but does provide background on a Minnesota fort that is contemporary to the U.S. Military Post at Sauk Centre is William Goetzinger's 1962 work on the fort at Pomme de Terre (1962). Built at the same time as the fort at Sauk Centre and for the same purpose (Howard 1931) the fort at Pomme de Terre was smaller and more geographically isolated than the one at Sauk Centre. Goetzinger's article describes activities at the fort from its construction in 1862-1863 to its abandonment by the Army in 1865.

There has also been a great deal of work done on the archaeology of United States forts in the interior of the country during this period. Of interest to this study are works done on forts west of Mississippi River, especially those built to guard routes west or the line of settlement. These places are likely to have histories like the fort at Sauk Centre. Two of the most widely known are the work done at Fort Bowie, Arizona by Robert Herskovitz (1978) in the 1970s and the work done by the National Park Service at Fort Union, New Mexico in the 1990s (DeVore and Hunt 1993; 1996). While both sites are in the Southwest United States, they are sites long occupied by the US Army in the 19th century. Fort Union was a key site guarding the Santa Fe Trail. Fort Bowie guarded the western end of the Rio Grande Valley. Both played significant roles in Army operations against indigenous peoples during the 19th century and both yield significant numbers of artifacts which can be used to identify, and date suspected Army artifacts of the period recovered elsewhere in the western United States.

Of somewhat more direct interest to this study because the sites targeted are more like the U.S. Military Post at Sauk Centre are Justin Eichelberger's (2019) study of Forts' Hoskins and Yamhill in Oregon during the Civil War period. He specifically looks at the social behaviors of Officers' assigned to the forts between 1856 and 1866. In the process, using both archaeological and archival evidence, he describes daily life at the two forts and documents archaeological explorations of various structures at both Forts to include Officers' Quarters. This latter information is useful because it provides a contemporary context against which to assess the work at the U.S. Military Post at Sauk Centre

Like the Eichelberger article is the Tveskov and Cohen chapter on Fort Lane, Oregon in *Rethinking Colonial Pasts Through Archaeology* (2014). Again, something of an archaeological and historical study of the site, Fort Lane was a contemporary of Fort Hoskins and Fort Yamhill. The three formed a line intended to separate indigenous people and Euro-Americans in Oregon, the time frame for this was the mid-1850s through the mid-1860s. The excavations and research at Fort Lane, like the similar activity at Fort Yamhill and Fort Hoskins, provides insight into the daily lives of the people who occupied the site and insight into the use of various structures on the site. Because all three are contemporary with the fort at Sauk Centre this provides us with greater information useful to our understanding of what occurred there. In addition, W. Stephen

McBride's work (1994) at the Camp Nelson Army Depot in Kentucky is also pertinent. He reports on the archaeological survey of this extensive US Army Civil War site. His analysis and description of the artifacts recovered in the camp headquarters site also provides a useful touchstone against which to consider the artifacts from the U.S. Military Post at Sauk Centre. Joseph Balicki's report on the archaeological excavations at Fort C.F. Smith (2000), one of the U.S. Army Civil War era forts guarding Washington DC, offers insights like McBride's. As does Ryan McNutt's (2019) work at Camp Lawton Georgia, a Confederate prison camp.

Also, of relevance to this study is the work done at the Fort Larned National Historic site in Kansas. Fort Larned guarded the Santa Fe Trail from the late 1850s to the late 1870s. During the Civil War it was garrisoned by US Volunteers. The parallels with the U.S. Military Post at Sauk Centre are striking. Information about Fort Larned was accessed in a personal conversation I had with George Elmore, Chief National Park Service Ranger (NPS) at the site. Elmore is regarded within the NPS as a subject matter expert on 19th century US Military activities in the west.

In short there is a great deal of information available on various aspects of this inquiry. There is also a good deal of information available on United States and Minnesota state military operations to secure what was called the Northwest frontier in the early 1860s. And there is a great deal of information available the helps set the US-Dakota War of 1862 and Northwest frontier in the broader historical context of the mid-19th century. Knowing what all these sources brought together helped shape and focus what we were attempting to do at the U.S. Military Post at Saul Centre

Local citizens of Sauk Centre were also an important source of information. As people found out what we were doing they freely volunteered stories about the fort. Dr. Mann and I

made several formal presentations in the community to explain what we were doing. This involved meetings with the local historical society (Sauk Centre Historical Society 2018c). We also had very informal discussions and meetings with residents of the area who stopped by to ask about our work and watch. It was through input and suggestions from local residents that we identified a primary clue to how to orient ourselves on the ground.

Because the fort monument (see Figure 1) stands at the northeast corner of 7th and Birch Streets we approached the property owner of the house on that corner. We were also aware that in 1947 construction activity associated with this house had uncovered artifacts related to the fort (Sauk Centre *Herald* 1947). This turned out to be 631 Birch Street and the property owner is a Mr. Kleinvachter. We contacted other property owners and residents in the block and in the process met Mr. Sunderman at 621 Birch Street.

Mr. Sunderman showed us his Deed Abstract that begins with the entry indicating the initial land survey establishing the legal boundaries of his lot started at the large rock located at the northwest corner of Solomon Pendergast's barn and that the barn was the same structure used by the Army as a Quartermaster and Commissary Warehouse when the Sauk Centre fort was in use (Gerald Sunderman, personal communication 2018). Mr. Kleinvachter also showed us his Deed Abstract. His Abstract indicated that the original lot survey started from a large stone located at the Southwest corner of block one of the James Addition (Brian Kleinvachter, personal communication 2018). The two surveys originated off the same point. Based on the Army Plan Drawing, Figure 3, we knew the barn stood inside the walls of the military stockade. Associating the Barn with the Monument Stone gave us an idea of where the barn stood in reference to the current site layout helped us understand how the stockade fit on to the contemporary landscape.

The information outlined in the previous paragraphs helped us understand the significance of the rock with the memorial plaque at the northeast corner of 7th and Birch Streets. The idea that the large boulder could be the rock referred to in the lot abstracts was considered. Vince Botz, a member of our research team and local historian made inquiries of residents asking if the boulder had ever been moved. The replies he received were no. We also made informal inquiries of the local historical society which also had no record of the stone being moved. The Sauk Centre Historical Society also inquired of city officials who likewise had no record of the stone ever being moved (Sauk Centre Historical Society 2018c).

From the local historical society, we learned the plaque was put in place in 1916 by the local chapter of the Daughters of the American Revolution (Sauk Centre Historical Society 2018c). As far as anyone could remember it had always been attached to that boulder and always stood on that corner. Working with John Howard's comments in 1928 (Sauk Centre *Herald* 1928a and b) about the approximate location of the east wall of the fort and the main gate we concluded that it was likely the boulder at the corner of Birch and 7th and the large rock referred to in the lot abstracts were the same object.

In addition, we searched for city maps that would show the area in question during the years 1870 to the present. We were interested in when the area was developed. The earliest map we found was Sauk Centre City Plat Map dated 1896 by the C. M. Foote & Company (University of Minnesota 2018). It shows the beginnings of development in the James Addition along Birch and Ash Streets, Figure 6.

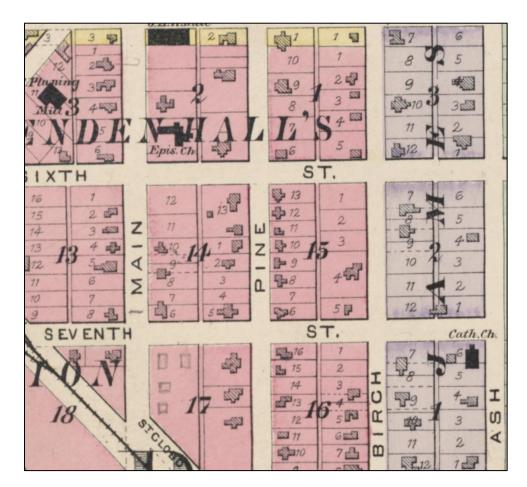


Figure 6. Extract from 1896 Plat Map of Sauk Centre showing 7th and Biorch streets, the location of the U.S. Military Post at Sauk centre and the adjoining area (University of Minnesota 2018).

Interestingly, along the north side of 7th Street between Pine and Birch and Birch and Ash and for about two lots north on Birch there was no construction until after World War II. On Ash north from 7th there was construction. On Birch south from 7th there was some construction and along the south side of 7th between Birch and Ash there is construction. What this means is the area at the corner of 7th and Birch and for about a half a block north which would have been the heart of the stockade sat relatively undisturbed from the time the Army left in 1865 until about 1947. We know from a story in the Sauk Centre *Herald* (1947) construction started on houses in this area in the early fall of 1947 and almost as soon as construction started, they hit artifacts related to the fort. Knowing this also helped focus the decision on where to look for physical evidence of the fort's presence.

We also contacted the Stearns County Surveyor about the stone and what appeared to be an associated property corner marker. The Surveyor was unable to verify that the rock in question was the same one mentioned in the deed abstracts but suggested it could be. He confirmed that what appeared to be a later survey marker set in the sidewalk next to the rock was probably a lot corner (Stearns County Surveyor, personal communication 2018). While not the conclusive confirmation we had hoped for it did support the idea that the monument rock (see Figure 1) was the same rock referred to in the two abstracts.

Based on this analysis we produced the Google Earth Overlay Map in Figure 7. This shows the Army Plan Drawing superimposed on a Goggle Earth plot of the site. The references are based on the rock at the northeast corner of 7th and Birch being the same rock at the northwest corner of the Pendergast Barn and the east wall of the fort standing along modern day Ash Street and interpreting comments by John Howard about the general location of the main gate of the fort and the northeast bastion (Sauk Centre *Herald* 1928a and b). This allowed us to identify locations on the modern landscape for the fort and its' associated buildings. Understanding this quickly revealed what parts of the fort were open to possible excavation.

What became clear was the Barn Area and the Officers' Quarters Area were not obstructed by modern construction activity. Initially we included the post Enlisted Men's' Quarters Area in this assessment as well. The Officers' Quarters area was almost totally exposed, and research suggested that part of the site was relatively undisturbed. The barn structure was partially exposed and the part that was exposed was probably undisturbed. The supposed site of the barn itself was primarily under 7th Street. Based on Figure 7 it appeared the north wall of the barn was on the utility easement along 7th Street in front of 632 Birch Street. Also, the area outside the barn to the north appeared to be in the front yard of 631 Birch and thus relatively open and, we had permission to explore there.

It also became clear we had misjudged the location of the Enlisted Quarters Area by about twenty-five to thirty feet. Rather than setting just south of the driveway of the house at 705 Birch it sat under part of the house. The impact of this discovery will be discussed in detail below.

Looking at historical archaeology methodology appropriate to a site like the U.S. Military Post at Sauk Centre (Connor and Scott 1998; Scott 2010; 2015) the idea of using metal detectors emerged. Using metal detectors to locate artifact concentrations that indicate the presence of related cultural features has become a relatively common practice especially on sites related to the US Civil War and the Indian Wars (Connor and Scott 1998:76-77). Considering the locations, we were initially targeting, a living quarters area, a warehouse area, and an enlisted quarters area it seemed reasonable to conclude that we would find metal artifacts that would indicate the presence of the structures (Connor and Scott 1998:82).

A Minnesota Historical Society grant allowed for the purchase of two pulse induction (PI) metal detectors. By pairing these with two very low frequency (VLF) metal detectors belonging to the SCSU Department of Anthropology our metal detector survey would be able to identify both near surface and more deeply buried artifacts. Thus, a working hypothesis of this project became the idea that the PI machines could detect artifacts to a greater depth than could the VLF machines.

As noted, in early planning, we were working primarily off the Army Plan Drawing (see Figure 3) and archival evidence of the stockade's location (Sauk Centre *Herald* 1928a and b) and

the Plat Map and using Google Earth to try and figure out where features might be on the modern site. As also noted above, at that point, prior to going on site, a third location was identified for inclusion in the metal detector survey. The enlisted barrack stood along the original south wall of the stockade. This appeared to be an accessible area and an area where we could expect to find metallic artifacts that might help us identify the feature.

From the monument rock the Enlisted Men's' Quarters Area was south on Birch Street just passed the driveway of the house at 705 Birch, or so we thought. Working with the distance scale on the Army Plan Drawing we measured the distance from the Pendergast barn, from the Monument (see Figure 1), to the Enlisted Quarters. This turned out to be just south of the driveway at 705 Birch. We had permission to look at this site from the property owner (Charles Eiden, personal communication 2018), so we undertook immediate metal detector survey work at this location and the Barn Area shortly after arrival onsite.

At the same time, we continued the analysis outlined in the previous paragraphs hoping to better understand how the stockade fit on the site thus gaining a better understanding of where we were working on the onsite. After developing the Google Earth Map (see Figure 7) it became clear we were most likely working south of the location of the enlisted barracks and were in fact likely in the space between the extension stockade wall built in the spring of 1863 and the original stockade wall built in the fall of 1862. The enlisted barracks likely stood under part of the house at 705 Birch.

Also, we learned (Charles Eiden, personal communication 2018) that the house at 705 Birch dated from the 1880s. We had suspected this but were not sure. During remodeling and renovation, they had found square nails and other 19th-century artifacts. During gardening activity, they routinely turned up similar artifacts in the yard of the house. This suggested that anything we had found in our initial metal detector survey of what we thought was the Enlisted Quarters area could be associated with the house rather than the fort. So, we opted to stop work in the Enlisted Quarters Area and concentrate our survey efforts on the Barn Area and the Officers' Quarters Area.

As explained above, review of the Google Earth Overlay Map suggested the site of the Officers' Quarters and the area around the barn to be relatively undisturbed, compared with the rest of the property. These facts suggested a reasonable likelihood of *in situ* artifacts some of which should have been detectable with the metal detectors (NPS Workshop 2019).

Working from the premise outlined above we decided to initially conduct a metal detector survey of the two areas. Using the machines would allow for determining the presence of artifacts (although we would not know exactly what was there) without conducting invasive digging. Based on the apparent concentrations of artifacts picked up by the metal detectors we could then consider what might be reflected in those concentrations based on the plan of the Fort superimposed over the modern view of the site depicted in Figure 7. Using that information, it would then be possible to more effectively decided where to put Shovel Test Pits (STPs) and ultimately excavation units.

Our approach was based on the work of National Park Service Archaeologist Douglas Scott. He pioneered the use of metals detectors in historical archaeology studying the Little Big Horn National battlefield (Scott 2010). Scott's work showed that Very Low Frequency (VLF) detectors work to a depth of 15 to 20 centimeters and Pulse Induction (PI) detectors work to depths of 30 centimeters and greater (Scott 2010; 2015:11). The VLF machines are designed to discriminate between certain types of metal, depending on how the machine is set up. PI detectors only indicate the presence of a metallic object (Scott 2015:11).

Our methodology was like a metal detector deployment strategy developed at the Monroe's Crossroads North Carolina Battlefield (Connor and Scott 1998:81). The idea was to conduct a survey of each area using first the VLF machines. As the survey was being conducted each positive hit would be marked with a pin flag. Later Total Station target numbers were assigned to each flag and the locations recorded. Once this was done it would be possible to decide about how many targets, or hits, to dig. The tentative thought was to dig 25% of the VLF positive target hits and 25% of the PI positive target hits. But not knowing how many positive targets would be identified in the metal detector surveys it seemed best to defer a final decision until we knew the results of the surveys. Each positive target hit identified to be dug would be excavated and the associated fill sifted by hand to locate artifacts. All collected artifacts were logged, bagged, and described in field notes. The bags were marked with the Field specimen number, the total station number and the date of the recovery and the name of person or persons doing the digging. Each bag also was marked with a brief description of what was inside and the centimeters below surface where an item(s) was/were found. This process required continually rechecking the dig hole with a metal detector to make sure we had recovered all identified artifacts.

After digging the VLF positive target hits we filled in the holes and resurveyed the site with the PI machines. The assumption was that the PI machines would find deeper artifacts than those identified with the VLF machines. We followed the same digging and collection procedures with both phases of the metal detector survey. The assumption was that metal detector survey around the Barn/Commissary Warehouse Area would find artifacts indicative of the kinds of activity that would occur in such a structure. This would include horseshoes, horse tack, possibly nails, perhaps discarded farm implements and from the Commissary Warehouse use possibly discarded cans and packing material associate with 19th century food stuffs. Around the Officers' Quarters the assumption was we would find metallic personal items such as buttons and possibly uniform fittings and nails since it was a wooden structure. Additionally, the expectation was that vessel glass shards and ceramic sherds indicative of personal use items of the mid-19th century would be comingled with the metallic items.

Working from the assumptions outlined above about the location of the site and site features and about how to employ the metal detectors the research methodology evolved as outlined below.

- Conduct a VLF metal detector survey of the Barn/Commissary Warehouse are and the Officers' Quarters area
- Dig 25% of the VLF positive target hits if feasible, if not adjust based on the number of positive target hits.
- 3. Conduct PI metal detector survey of the Barn Area and the Officers' Quarters area
- Dig 25% of the PI positive target hits if feasible; if not adjust based on the number of PI positive hits and the number of VLF positive target hits dug.
- 5. Based on the results of two and four dig one or more shovel test pits.
- 6. Dig one or more units based on the results of the shovel test pits.

Knowing the VLF machines would find artifacts to about 20 to 25 centimeters below surface and the PI machines would find artifacts to about 35 centimeters below surface the procedural choice was obvious. Conduct the VLF surveys, excavate the selected targets, refill the excavations, and conduct the PI surveys, excavate the selected targets, and refill the excavations. Deciding which targets to excavate was a problem because we knew little about the target. The VLF machines could discriminate between ferrous and non-ferrous metal. We used the machines set to this function. The PI machines do not have this capability. We also attempted to use the strength of the tone of the detected objected to give as an indicator of the size and depth of the object. We noted this information as we conducted the metal detector surveys and used it in deciding which positive target hits to dig. Dr. Mann's field notes for July 9, 2018 indicate that as we began the VLF survey of the Barn Area we marked positive target hits with a pin flag and tied a piece of pink tape to the pin flag to mark a particularly strong hit. We used two pieces of tape to denote a very strong hit.

As outlined above, our original plan was to dig 25% of the metal detector survey hits for both the VLF and PI surveys and we stayed with that plan. Because we adapted in the field to the possibility of being able to distinguish between strong and very strong hits with the VLF survey we decided to divide the number of hits to be dug between regular, strong, and very strong hits. We recognized the numbers involved would likely vary with each meatal detector survey conducted at the U.S. Military Post at Sauk Centre site. As we excavated positive target hits, we concluded that strength of the tone was not necessarily indicative of the target and stopped using this approach to decide which hit to dig.

With the PI survey we did attempt to distinguish between ferrous and non-ferrous metal based on the tone of a positive hit. It is possible to do this based on the tone produced by the machine (NPS 2019). We marked the PI positive hits with blue pin flags. We decided to divide the 25% of the hits to be dug evenly between ferrous and non-ferrous hits if possible, based on the actual number.

So, with both types of metal detectors we ended up using discrimination between ferrous and non-ferrous metal as a factor to determine which hit to dig. We also used geographic distribution, to some extent, with in the site (Barn or Officers' Quarters) we were working on. This was based primarily on a visual assessment of the flags picked to dig but was an attempt to dig at least one hit in each part of an area.

We used two related processes for numbering metal detector survey positive targets. All positive hits were assigned a Total Station Number. These were assigned based on Total Station Numbers available at the phase of the of the project where we were doing a survey. Thus, the VLF positive targets hits for each area, Barn, Enlisted Quarters, and Officers' Quarters are grouped sequentially as are the PI positive target hits. This means the numbering system cited throughout this paper for positive metal detector target hits is the Total Station number assigned to that hit as the hits were plotted.

Those hits that were dug, not all hits were dug, were also assigned a field specimen number. Each bag of artifacts excavated from each positive target hit dug, VLF and PI, was given a number in the Field Specimen Log. The metal detector hits are reported and discussed here using the Total Station numbers. This approach is was used because the Field Specimen Log is still being reviewed and some specimens analyzed at the time this paper was written.

This is the broad methodological outline used to guide the metal detector survey and the eventual siting of STPs and units in the survey of the U.S. Military Post at Sauk Centre. The primary purpose was to identify any surviving physical evidence of the post and its garrison. The secondary purpose was to use that physical evidence to better understand the lives of the people who passed through the fort during its relatively short life, fall 1862 to spring 1865. We did find evidence addressing those questions but before reporting that evidence, it is necessary to explore the background research questions looking at why the fort was built and what purpose it was intended to serve.

Chapter V: Cultural History

The Minnesota Country

The events that led to the establishment of the Sauk Centre military stockade are rooted in the first contact between Europeans and the indigenous people of the Minnesota country in the mid-1600s. That first contact was primarily concerned with establishing fur trade relationships in the mid-17th century. For much of the next three hundred years Europeans and Native people shared the region. However, by the 1860s the world in which the Minnesota country existed had shifted to the point where sharing the region was no longer possible and at least from the white perspective the answer was removal or extermination of the Native Americans (Wingerd 2010:1-150)

The Europeans, initially the French and later the British, were interested in establishing trading relationships to acquire furs for the European and American markets. The British, moreso than the French, were also looking for a water route across North America. The ascendency of the Americans in the early 19th century changed this relationship. The Americans were looking to take control of the land. With American ascendency came increased tensions between the people of European descent and the Dakota culminating in the US- Dakota War of 1862.

Formally organized in 1849 the Minnesota Territory included land from the original Northwest Territory acquired from Great Britain under the Treaty of Paris in 1783 and land acquired in the Louisiana Purchase 1803. The region originally extended east to west from the Mississippi River to the Missouri River. With statehood for Wisconsin in 1848 the area east and north of the Mississippi to the St. Croix River and the northern shore of Lake Superior became part of Minnesota. With statehood for Minnesota in 1858 the area west of the Red River became Dakota Territory. These moves settled the states' political boundaries. From the time of first contact between Europeans and Native Americans in the Minnesota country, sometime in the mid 1600s, until the Americans moved into region in force in 1819 the inhabitants were primarily the Dakota and Ojibwe and fur traders of varying nationalities. Initially French who were replaced in the mid-1700s by the British who were eventually replaced in the early 1800s by the Americans.

The first permanent American government presence in Minnesota was in late 1819 with the arrival of soldiers at the confluence of the Minnesota and Mississippi Rivers. In 1805 Zebulon Pike had negotiated an agreement with the Dakota to allow the U. S. to build a fort on that site and now the Americans intended to implement that agreement. The site was of considerable strategic importance because it controlled the key southern routes into and out of the Minnesota fur trade country (Wingerd 2010:82-83).

This outpost became Fort Snelling. One of the original, and unique missions, of the soldiers stationed there was to mediate disputes between the Dakota and the Ojibwe. The installation served as something of an embassy or consulate in this role of maintaining peaceful relations in the Minnesota region. The Fort became a trading site for the American fur companies as they sought to draw the tribes away from the British. The Americans took an approach like the British with trading sites to which the tribes were expected to bring their furs (Economic History Association 2017).

During this pre-permanent settlement phase, the American Fur Company challenged the Hudson's Bay Company and the North-West Company for control of the fur trade. The American government sought to prohibit the British affiliated traders' access south of the international boundary. Although initially difficult to enforce, the British companies eventually withdrew north of the 49th parallel rather than fight with the Americans.

As they withdrew the British sought to lure the Ojibwe and the Dakota to the new Canadian trading posts. The Americans sought to convince them to trade in the United States. For the first time in decades the Native Americans, especially the Ojibwe, found themselves with bargaining leverage in the trading process as both the British and the Americans sought what they had to offer. This entire arrangement also added to tensions in the region because to trade with the British the Dakota and tribes to the south and east had to pass through Ojibwe territory (Wingerd 2010:83-109).

As the Americans moved into the region Fort Snelling became a focal point for the establishment of white settlements in central Minnesota. Most were in proximity to the Mississippi or Minnesota rivers and most initially had links to the fur trade. Prior to this time the only permanent white settlement in Minnesota was Grand Portage in the extreme northeast. This was also a fur trading site with French origins and later maintained by the British (Wingerd 2010:59,65-69).

Even with the establishment of permanent American settlements the population of the Minnesota country remained, through the 1830s, primarily Native Americans and white fur traders. However, the coming of steamboats to the upper Mississippi in 1823 began to change this. Travel into the region was easier during the months when the river was ice free. During the winter months, the region remained much as it had since before the arrival of the French (Wingerd 2010:101-102).

This pattern changed slowly over the next two decades, but it did change. The 1830s saw a decline in the fur industry but an upswing of interest in timber. Increases in steamboat traffic on the upper Mississippi and the Minnesota River to the Red River made it easier to move goods, mostly raw material like lumber and furs out of Minnesota to the factories and markets to the south and east. The arrival of the railroad at the Mississippi in Illinois in 1854 signified an improvement in the quality of travel. It was now easier to get to the edge of the frontier and much easier to get to Minnesota-almost the entire journey could be done under steam power (Wingerd 2010:101-103).

There are no accurate census records for Minnesota prior to territory status. Into the mid-1830s Minnesota was considered Indian Territory and officially closed to white settlement. Fur traders, missionaries, soldiers, and some merchants were allowed into the region. In the 1840 census, Native Americans do not appear to have been counted and white Minnesota residents were included in the counts for Wisconsin territory. The first time Minnesota appears in the federal census data is in 1850 with a white head count of 6077. By 1860, two years after statehood, the federal census counted 170,023 white residents in the new state (United State Bureau of the Census 2017).

Most of these residents were in and around the new settlements close to Fort Snelling. Just to the north, across a region called the contested zone, the Dakota and the Ojibwe were in increasing conflict. This contested zone was a strip of land that ran basically across central modern-day Minnesota from Wisconsin to North Dakota. It was a border region between the two tribes which neither attempted to occupy recognizing the need for a buffer but which both sought to exploit and control (Wingerd 2010:87).

Against this backdrop the Americans began to slowly drift west toward the Dakota country and the Red River Valley in the 1840s and 1850s. During this time, the fur trade also began shifting. The Hudson's Bay Company and the Northwest Company shifted their focus north into central Canada and pursuit of larger furs. Because of geography these central Canada

fur posts found it easier to trade with the Americans to the south than with their own country to the east.

Consequently, by the early 1840s a brisk commercial trade had evolved along what became known as the "Red River Ox Cart Trail." This route followed roughly the Red River Valley from central Canada to points in western Minnesota where various branches of the trail then turned south and east eventually terminating in Saint Paul. Not open the year around, the trail saw ox cart trains of up to two hundred vehicles come south in the spring with furs and return north in the summer/early fall with supplies for the central Canadian fur posts. This trade became an important part of the fur trade economy and eventually grew to be a dominate part (Wingerd 2010: 162-170).

With statehood in 1858 the Red River Trail also became an immigrant and commerce route linking the settled areas of eastern Minnesota and western Wisconsin with the newly opened areas in western Minnesota and the Dakotas. By 1858 this commerce and immigration was brisk enough to prompt the establishment of a military post, Ft. Abercrombie, to protect the Red River Trail. Accessible by steamboat, at certain times of the year, from Fort Snelling up the Minnesota River Fort Abercrombie sat at one of the points where the Red River Trail turned east for Saint Paul (Gilman et al. 1979:17).

In the late 1850s the Minnesota Stage Company initiated freight service along the East Plains Trail from Saint Cloud to Fort Abercrombie. In the early 1860s the Hudson's Bay Company contracted with the Minnesota Stage Company for the freighting of furs from Fort Garry in Canada to Saint Paul. Also, during the period limited steamboat service began on the Red River focusing on the movement of furs and supplies between Fort Abercrombie and central Canada. At Fort Abercrombie furs were shifted either to wagons for an over land trip to Saint Paul or transported the short distance to the Minnesota River and put back on steamboats for the trip to Saint Paul. After 1858 the focus was on the overland route (Gilman et al. 1979:17-24).

By the time of the US-Dakota War of 1862 there was a well-established commerce pattern along the Red River Trail. There was also a well-established and growing but still relatively small Euro-American settler presence in central Minnesota and along the various branches of the Trail. And this presence was beginning to creep north and west into the Red River valley and beyond. The Dakota and the Ojibwe were thus not only being pressured by each other but also by the encroaching Euro-Americans (Gilman et al. 1979:23-24)

As has been observed at numerous points in this narrative, the Ojibwe developed a working relationship with the encroaching Euro-American powers (regardless of who was in the region) while the Dakota were not as accommodating to outsiders. Consequently, by the early 1860s, as the white presence in central Minnesota and adjoining areas steadily increased the Dakota were under increasing pressure to give up their traditional lands and move west (Westerman and White 2012:169-183).

The US-Dakota War of 1862

In the fall of 1862, facing deteriorating living conditions on their reservations, a faction of the Dakota opted for war; a war many Dakota knew they would not win. The harvests for the previous two years were bad. Promised treaty payments were late. The warehouses at the Lower Sioux Agency contained supplies destined for the Dakota but the Agent refused to release them. The Dakota watched an ever-increasing stream of immigrants moving into the state taking more and more land for farming (Anderson and Woolworth 1988; Westerman and White 2012:169-183; Wingerd 2010:195). To many the end seemed certain whether they fought or not. As the decade of the 1850s ended the Dakota found themselves largely confined to reservations along the Minnesota River. Sensing their way of life under threat it was only a matter of time until something triggered open hostilities between the Dakota and the whites. That something occurred in Action Township near Meeker, Minnesota in August 1862. A Dakota hunting party killed members of an immigrant family. Fearful of retaliation by the whites the Dakota decided to strike first to drive the whites from the Minnesota valley specifically and western Minnesota in general (Carley 1976:10-11)

On August 18, 1862, the Dakota attacked the Lower Sioux Agency and surrounding farms. They followed up on August 19th with an attack on New Ulm and on August 20th with attacks on Fort Ridgley and on the 23rd with a follow-up attack on New Ulm. These were the centers of settler presence in the Minnesota River Valley and the Dakota believe if they were destroyed the whites would withdraw at least back to Mankato and possibly all the way to Saint Paul (Carley 1976:25-30, 32-39). At Fort Ridgley the Dakota were eventually driven off by fire from the fort's cannon. At New Ulm much of the town was destroyed in the fighting but the Dakota were driven off by the defenders, local volunteers, and state militia. Many of the citizens evacuated to Mankato for the duration of the hostilities. (Carley 1976:9).

Unsuccessful in their attempts to gain control of the Minnesota River Valley, the Dakota moved north and west attacking isolated farmsteads and communities. Whether or not the Dakota engaged in a deliberate strategy is difficult to determine. But the impact of their activities was to terrify white settlers across central and western Minnesota. Terrified of Indian assault significant numbers of these people fled to the more established settlements in eastern Minnesota (McKusick, 1975:7; MNAGO Annual Report 1862:131).

A few whites also opted to stay and fight. An almost universal response by those who did remain or could not get out was the construction of what have come to be call settlers' forts in towns throughout the contested region. Figure 2 shows many of these forts (McKusick 1975).

Settlers' forts were common throughout the American west They varied in complexity from barricades across a city street, to fortified buildings, to the sturdily constructed fortress called Fort Holes in Saint Cloud (Carley 1976:48-49; Dupre 2017:24-25; Peliska 2018:1; George Elmore, personal communication 2020). These settlers' forts were generally built with great haste in immediate response to news reaching a community about the outbreak of hostilities with the Dakota. Most were garrisoned by local volunteers or local militia companies during the immediate period of hostilities and most were abandoned by late September 1862.

Sauk Centre had such a settlers' fort. It was located adjacent to an existing stop on the Abercrombie Road between Saint Cloud and Fort Abercrombie. It was a temporary structure built in August of 1862 by the Sauk Centre Militia Company (NA, DCS, SCS. SCHM 2018). The Sauk Centre settlers' fort was not well built. In his report the Sauk Centre Militia Company Commander described it as inadequate (SF, SCHS 2018a) and the Minnesota Adjutant General described it as small and unsanitary (MNAGO Annual Report 1866: 387-391). We do know this was part of the hasty fortification construction efforts under taken across the region by frightened settlers in response to the events of late August 1862 and that it stood near the southeast corner of what is now 7th and Birch Streets in Sauk Centre (Carley 1976:45-52; MNAGO Annual Report 1866:387-391; Sauk Centre *Herald* 1928a and b).

In September 1862, once the perceived threat from the Dakota had lessened, the Militia Company Commander decided to replace the original structure with a larger one built of tamarack logs set two feet into the ground (NA: DC, SCS. SCHM 2018). Located near to the settlers' fort the new structure incorporated the Pendergast store and barn (Botz 2014:26; Howard 1931:301-303; NA, DC, SCS. SCHM 2018). The site is in what today is a residential area of Sauk Centre running along 7th Street from about Pine Street on the west to Ash Street on the east (Sauk Centre *Herald*, 1928a and b; NA: DC, SCS. SCHM 2018).

There is no specific evidence pointing to why the Sauk Centre Militia Company decided to build their original stockade where they did. The general location for the original structure was near the Pendergast house and store and its adjacent well and barn. This was an established stop on the trail west of Saint Cloud (Hilderbrand 1993:23). The Pendergast structures were apparently substantial although we do not know for sure what they were made of; we assume wood. They may well have been the only structures of any size in that part of the Stearns County in 1861. The site also appears to have overlooked the point where the Middle branch of the Red River Trail crossed the Sauk river. This would have been a strategically significant spot as fording the river would have slowed travel thus creating a choke point making travelers vulnerable to attack by the Dakota.

According to Hildebrand (1993) the store and barn were built in 1860. Botz (2014:26-31) confirms some of this and suggests they were a rallying point for area settlers (Botz 2014). The site was also geographically about a days' travel out of Saint Cloud. These factors combined to make the Sauk Centre site important and prompted the construction of the first temporary settlers' fort and the second larger stockade that became the U.S. Military Post at Sauk Centre and the eventual stationing of U.S. troops. This new fort begun by the Militia Company and probably completed by the 25th Wisconsin is pictured in Figure 4 (MNAGO Annual Report 1862:478-481; SC *Herald* June 6, 1928).

As stated in the Sauk Centre Militia Company Commander's report, construction on what became the U.S. Military Post at Sauk Centre began in September 1862 (SF, SCHS 2018a). The new structure was to be built out of 18-foot tamarack logs set two feet into the ground (MNAGO Annual Reportn1862:480). On September 25[,] 1862, the 25th Wisconsin Volunteer Infantry arrived in Sauk Centre and took over the fort from the Militia Company. This was in accordance with General Order #3, Military Department of the Northwest (Saint Cloud *Democrat* 1862b).

The Wisconsin soldiers continued work on the fort and engaged in active patrolling east and west along the Red River Trail (Clodfelter 1998:72). In late October, the 25th Wisconsin was relieved by the 8th Minnesota Volunteer Infantry. The former left Minnesota and moved south to join Union armies in Mississippi while the latter turned to completing construction of the Sauk Centre stockade and other forts along the line (see Figure 2). The 8th Minnesota continued the active patrolling activities originated by the 25th Wisconsin (Babcock 1963: 279; Carley 1976:52; Howard 1931:300-301; Minnesota Board of Commissioners 1893:386-387; MNAGO Annual Report 1862:339-343).

With the departure of the Sauk Centre Militia Company and the arrival of the 25th Wisconsin and ultimately the 8th Minnesota the structure at Sauk Centre became the U.S. Military Post at Sauk Centre. By late Spring 1863 the structure probably looked like Figure 3. The reason for this conclusion is presented elsewhere in this paper.

Sometime after the 8th Minnesota took over the Sauk Centre post a decision was made to expand the stockade. This is another one of the decisions about the site that we do not know when it was made or who made it. Records of this action, assuming there were any, do not seem to have survived. However, we do know such expansion occurred. The Army Plan Drawing (see Figure 3) shows the dimensions of the original stockade and the dimensions they were building out to. Howard's (1931) article in *Minnesota History* and the article in the (Saint Cloud *Democrat* 1863a) suggest that construction continued through the winter and into the spring of 1863. The (Saint Cloud *Democrat* 1863a) offers dimensions for the expanded stockade that match those on the Army Plan Drawing (see Figure 3). The *Democrat* article also includes a description of the expanded fort then under construction that is consistent with the Army Plan Drawing and Howards' descriptions (Howard 1931; SC *Herald*, June 6, 1928).

From late October or early November 1862 to mid-1864 the 8th Minnesota Volunteer Infantry Regiment garrisoned the U.S. Military Post at Sauk Centre. Units of the 8th Minnesota were also at Fort Ripley, the stockades at Paynesville, Alexandria, and Pomme de Terr and Fort Abercrombie. These units engaged in active patrolling between the posts on the line and escorted commerce on the trails. In 1864 the 8th Minnesota was ordered south to join Union armies preparing for the final push against the Confederacy. They were replaced by the 2nd Minnesota Volunteer Cavalry which garrisoned the forts from Sauk Centre out to Fort Abercrombie through the end of US Civil War (Goetzinger 1962:71).

While construction on what became the U.S. Military Post in Sauk Centre was getting underway in September 1862 Fort Abercrombie, far to the west on the Minnesota Dakota territory border, was attacked by the Dakota. Again, the Army successfully held the fort. A relief force of partially trained Minnesota troops on federal service and state troops mustered in to fight the Dakota assembled at Sauk Centre and moved west along the Red River trail to reinforce Fort Abercrombie. Arriving after the Fort Abercrombie garrison had driven off their besiegers, they reinforced the fort and insured the Red River Trail route between Abercrombie and Sauk Centre remained open (Babcock1963:277-278).

These activity patterns suggest the Lincoln administration was willing to commit troops to this area for two reasons. First was to calm settler anxiety and second was to keep the Red River Trail open into Canada. A mass abandonment of the Minnesota country would have shaken public confidence in the government in Washington. The trail was the primary supply route for the central Canadian fur trading settlements. Its closing might well have led to their abandonment and would have given the British another excuse for intervening diplomatically in the Civil War. These were events that Lincoln could not afford to allow if he were going to achieve the goal of preserving the Union (Nichols 1974:4-7).

The Civil War

It is important to understand events in central Minnesota in the fall and winter of 1862-1863 in the greater context of the U.S. Civil War. Lincoln was determined to prevent any form of foreign intervention. Allowing this would have changed the political rational for the governments' response to succession and turned it into an international war and possibly have led to foreign recognition of the Confederacy.

In the late summer of 1862, as hostilities with the Ojibwa looked imminent and hostilities with the Dakota commenced the Civil War was not going well for the United States. It could reasonably be argued that the country was in the process of losing the war (Nichols 1974:4). In March 1862, a large Union force under Major-General George McClellan began moving up the James Peninsula in Virginia to threaten the Confederate capital at Richmond, Virginia. The objective was to capture the Confederate capital and end the war. Between March and August 1862 McClellan's forces and Confederate forces fought a series of battles on the James

Peninsula. The result was a significant Union defeat and in mid-August the withdrawal of Federal forces from the James Peninsula (Weigely 2000:122-126).

While McClellan was busy not capturing Richmond another Union force under Major-General John Pope was operating in northern Virginia. As McClelland was withdrawing from the Peninsula Pope was drawn into what came to be called the second Battle of Bull Run with Confederate Generals Jackson and Longstreet. Using the distraction of McClellan's campaign on the James Peninsula the Confederates launched their own effort to threaten the United States capital. Occurring in the last ten days of August 1862 as McClellan's troops were moving back into northern Virginia the Second Battle of Bull Run was also a solid defeat for the United States forces (Weigely 2000:135-144).

The two battles suggested that the Confederacy's military power was at least equal to that of the United States and that the latter might not be able to bring the former under control. As this was going on in Virginia, near the end of August 1862, the US-Dakota War of 1862, and potential conflicts with Ojibwe, described elsewhere in this document, were developing in Minnesota. Against this backdrop in early September 1862 General McClellan came into possession of the Confederate General Lee's plans for an invasion of the North through Maryland. McClellan's moves to meet this threat led, in mid-September 1862 to the Battle of Antietam and the single deadliest day of the American Civil War (Weigely 2000:144-154).

Antietam was a tactical victory for the United States. The two sides fought to a standstill and the Confederates withdrew to the south leaving the US forces in possession of the battlefield. However, the battle had been incredibly costly in causalities for both sides with the US forces incurring slightly more losses that the Confederates. The result was the Union managed to stop the Confederate invasion but at a cost that suggested the Union might not be able to do so again (Weigely 2000:144-154).

In a period of about forty-five days the United States had lost two major battles in its Civil War and fought a third battle in that war to a stalemate with those in rebellion. At the same time hostilities with indigenous peoples had erupted on a remote frontier. This latter activity threatened to close a major overland route linking British fur trading settlements in central Canada to a major source of supplies in Saint Paul, Minnesota. Also, if the indigenous rebellion was not brought under control it threatened to destabilize the new state of Minnesota and potentially larger parts of the upper mid-west. None of this made it appear to external observers that the United States was on the verge of settling its internal problems. The disruption these activities caused to international trade, primarily the supply of cotton, had Great Britain by August and September of 1862 offering to mediate between the North and the South (Brauer 1972:49-64; Gluek 1955:317-324; Grabner 1972:34-45).

One of the focal points of British concern was the fur trade in central Canada. If the indigenous people succeeded in closing the Red River Trails, central Canada was in jeopardy. Most of the supplies for the region came north from Minnesota. Isolated as the region was any serious disruption in the flow would have likely forced evacuation. Lincoln understood this. He also understood the importance of not abandoning central Minnesota and the Dakotas. Allowing the Native Americans to close the Red River Trail and stop the spread of settlement into western Minnesota and the Eastern Dakotas would have adversely impacted the country in multiple ways (MNAGO Annual Report 1862:407; Nichols 1974:2-15). None of the above is to suggest that the British could have inserted troops into central Canada with a thought to taking Minnesota from the Americans. No evidence exists to suggest this was contemplated. But disruption to the

central Canada fur trade would have provided one more reason for the British government to want the war in North America ended.

From the perspective of almost 200 years later it is easy to underestimate the level of fear the hostilities with the Dakota brought to Euro-American settlers in central and Western Minnesota in 1862 and 1863. When the Minnesota Lieutenant-Governor visited the area in the fall of 1862 he found what he described as an abandoned countryside (MNAGO Annual Report 1862:417-419). The Governor of Minnesota was extremely concerned about the Ojibwe and the Dakota aligning in a combined assault. And of course, the state authorities were concerned about the impact on efforts to attract settlers and investment into the state (MNAGO Annual Report 1862:417-419, 519-525).

Newspapers of the period helped feed the fear on the part of the general population of war with the Dakota and the Ojibwe. The Minnesota Historical Society collection includes articles from the St Paul *Pioneer & Democrat* originally published during the period August 22,1862 to August 29, 1862. These articles vividly (for the time) describe attacks on the white settlers and call for vengeance against the Dakota, Indians were described as fiends in human form and the St Paul *Pioneer & Democrat* called for their extermination (Minnesota Historical Society 2020).

Preceding the articles in the St Paul paper was an article, August 14, 1862, in the Saint Cloud *Democrat titled Indian Rising* reporting on events at the Sioux Agencies on the Minnesota River and at Fort Ridgley and New Ulm. The Dakota were described as in open warfare with the whites raiding and killing at will and the paper advised its readers to be ready for an Indian massacre in the Saint Cloud area. Nearly a year later in May 14,1863 similar stories were still in the front page (Saint Cloud *Democrat* 1862a). In the May 14, 1863 issue of the Saint Cloud *Democrat* in a column titled *Editorial Correspondence*, Jane Swissehelm, editor of the paper, advocated executing Indian women and children as a way to convince Little Crow to bring the warriors back from Canada (Saint Cloud *Democrat* 1863b). In the May 28, 1863 issue the same paper describe the Dakota as watching all the area fords and river crossings and reports on attacks on mail carriers. The same articles described the Dakota leader Little Crow as telling authorities in Canada that he had "served the Americans some tricks" and would show them more (Saint Cloud *Democrat* 1863c). These and other stories served to heighten fear throughout the Minnesota country.

At the same time, in late August. 1862, Major General John Pope the commander of the Military Department of the Northwest issued a directive to Colonel Henry Sibley who was preparing to lead a relief expedition to Fort Ridgley to exterminate the Dakota should the opportunity arise (Nichols 1974:8-9). In the spring of 1863, the Minnesota Adjutant General issued General Order #44 authorizing the formation of additional Minnesota Mounted Rangers units. This order also authorized the payment of a bounty to any member of the Mounted Rangers who brought a Dakota scalp to the Adjutant General (MNAGO Annual Report 1866:195). Again, illustrating the measures the government was undertaking to end the hostilities and insure no additional trouble between the Dakota and the white settlers.

In addition, there was concern about an alliance between the Dakota and the Ojibwe (MNAGO Annual Report 1866:519-525). Added to that was a belief that the rising resistance of indigenous people in Minnesota, and elsewhere on the frontier, was being influenced by the Confederates (Nichols1974:5). This fear reached all the way to Washington DC as is evidenced by Lincoln's Annual Report to Congress in December 1862 (Lincoln 1862). Much of this proved to not be true but people at the time acted on what they were reading in the local papers.

Consequently, at a time when there was definitely not a surplus of United States troops in any theater of the Civil War the Army assigned 4 regiments (about 2000 men) to the security of central Minnesota (Babcock 1963:279-281; Nichols 1974:2-15). At the same time the state raised several companies of mounted rangers (Minnesota state troops) to operate along the Red River Trail in support of federal forces (Clodfelter 1998:72-73; MNAGO Annual Report 1862:409). Iowa also raised a brigade of state troops to garrison the parts of the defensive line located in that state (McKusick 1975:30-48).

It was this long chain of events that brought the 8th Minnesota Volunteer Infantry to the line of forts being built north of Fort Ridgley in late 1862. They garrisoned Fort Abercrombie and Fort Ripley and began building log stockades at Paynesville. Alexandria, and Pomme de Terre and expanding the existing stockade at Sauk Centre (Babcock1963:280-281; Clodfelter 1993:72-74; Howard 1931:301-302).

To summarize: the foregoing discussion has established there were two separate stockade structures in Sauk Centre both built in response to the hostilities with the Dakota in August 1862. The first, what I have called the settlers' stockade, was built by the Militia Company in August 1862. This was deemed inadequate by the Militia Company Commander and the State Adjutant General. As a result of that decision construction was begun on a larger replacement in September 1862. This replacement stockade is the structure called, in this paper, the U.S. Military Post at Sauk Centre. It was built near to, but not on the same site as, the settlers' stockade. In late September1862 the 25th Wisconsin Volunteer Infantry took over the larger stockade from the Sauk Centre Militia Company. At this time, the U.S. Military Post at Sauk Centre looked like the drawing in Figure 4. The 25th Wisconsin garrisoned the stockade until late October or early November 1862 when they were relieved by the 8th Minnesota Volunteer Infantry. This stockade was part of a line of forts in central Minnesota partially garrisoned by the 8th Minnesota and other state and volunteer units through the end of the US Civil War. Early in their time in Sauk Centre the 8th Minnesota expanded the U.S. Military Post to look like the drawing at Figure 3.

Based on archival evidence reviewed in the forgoing discussion we also know the east wall of the stockade stood along Ash Street and that the gate was near the present-day intersection of Ash and 7th Streets. Using archival evidence to develop the Google Earth Overlay Map at Figure 7 we know generally how the fort sat on the site. Working with early Plat maps of the site (see Figure 6) we knew that development started in the 1880s but remained limited until after World War II. Based on the forging discussion we know from archival evidence that certain areas on the site where fort structures likely stood have seen only minimal disturbance. We know other areas of the site have seen considerable disturbance or have been covered over by modern construction.

Finally, we know the forts were intended to send a message to various populations in the Minnesota country. They signaled a change in the relations between various cultures that were bumping into each other in the region. The next chapter explores the message these places were intended to send to the various people they impact.

Chapter VI: Thinking About the Forts and What They Represent

The forts themselves are artifacts of the period in which they were created. They represent a response to social, economic, and political systems operating on the Northwest frontier of the United States in the 1850s and 1860s. These systems structured how the various groups jockeying for position in that region interacted with each other. They include personal perceptions of the Native American groups by whites and personal perceptions of the whites by Native American groups. They also include perceptions of physical safety and security by both groups. And they include competing visions of the future of the region by both groups. In addition, included in these structures are perceptions by the governments in Saint Paul and Washington about how to project and use power. These latter perceptions are linked both to the local settlers and the Native Americans and to the British watching from Canada and wondering whether the United States could protect its borders. Finally, this is all embedded in the unique context of the U.S. Civil War.

Archaeologists and historians are generally concerned with the meaning of things in a given cultural context (Shackel and Little 1992:5; Shanks 2009:134). The assumption is humans do things or make things or go places for a reason; historical archaeology attempts to understand reasons for particular human behavior that often manifests itself in the production of physical artifacts and how these artifacts do or do not correlate with the written record. The assumption is there are patterns to this behavior which form systems around ways of being and doing (Shanks 2009:135). The results are changes in a given cultures' world view seen in the material things the culture produces (Shackel and Little 1992:7).

Based on the archival evidence it appears a major shift in the systems structuring the relationships between Euro-Americans and Native Americans took place on the Northwest

frontier during the years 1862-1865. This shift was based on both the white population's and the Native American population's perceptions of what appeared to be happening. Both cultures were attempting to defend their way of life.

The central Minnesota federal forts, the forts in the line depicted in Figure 2, were built, and occupied in response to actions by the Dakota and other Native American groups during the fall of 1862. The fall 1862 outbreak of violence in Minnesota, and seemingly across the frontier, surprised the Lincoln administration (Lincoln 1862). It appeared to represent a shift in the social, cultural, and political systems that had long provided structure to the relations between the Native Americans in the region and Native Americans from the outside and the various settler cultures vying for geo-political control of the region. As noted above, the various cultural groups long shared the region with only occasional open warfare, but it is important to note there was conflict between native groups and between whites and native groups. The encroachment of white culture brought new pressures on the indigenous people and as different white cultures moved into the region the rules governing that relationship changed (DeCorse and Beier 2018:200-201).

As noted earlier in this paper the Dakota saw themselves as being asked to give up their traditional lifeways. I do not think this was as clearly understood by the state or federal governments as it should have been. I am also not sure how well it was understood by the local immigrant settlers. Most saw the land as free for the taking. Even if the issue had been widely understood by the immigrants to the Minnesota country there is little if any evidence that anyone would have reacted differently. It is at this juncture important to acknowledge; there was a small group of whites who understood what was happening. It may even be that President Lincoln could be included in this group. But the demands of the war and the prevailing views of the time

focused attention else-where—fixing the problems that led to the fall 1862 war between the Dakota and the immigrant settlers in Minnesota was not going to happen

As expressed by President Lincoln's 1862 (Lincoln 1862) annual message to congress Native Americans across the west were seen to some degree as in league with the Confederacy. Also, to a large degree as in league with each other willing to use the crisis of the Civil War to drive out the whites. While some of this proved to be true most of it was not. Nevertheless, as discussed in previous sections of this paper, this view guided the actions and reactions not only of individual settlers and communities but of the state and federal governments (Gotzeinger 1961:63-71).

The forts and their garrisons were the physical manifestation of how the white culture adapted to the changing social and cultural environment of central Minnesota, and the frontier in general, in 1863. While that adaptation was specifically in the United States Army's thinking about how to provide for the security of the Northwest frontier it was also reflected in the behavior by the primary audiences. The Dakota were to move farther west; the immigrants were to keep coming; the British in Canada were to deny aid to the Dakota in the region and beyond; and the British were to refrain from intervening in the Civil War (DeCorse and Beier 2018:1-8).

The forts and their garrisons and how they interacted with the social and political structures on the Northwest frontier of 1862-1865 are the artifacts which document this cultural shift in United States Army specifically and United States government in general. Understanding these artifacts helps us understand how and why the white culture reacted as it did to the Native American culture (DeCorse and Beier 2018:9).

The four forts in question, Paynesville, Sauk Centre, Alexandria, and Pomme de Terre, were built partially for defense and protection of their occupants but primarily to project offensive US military power into the area. Archival evidence tells us this (Howard 1931:301-303; Goetzinger 1961:63-71; Mahan 2017 [1862]; MNAGO Annual Report 1862:419). Based on the Army scale drawing of the fort at Sauk Centre (see Figure 3) and other evidence about the Pomme de Terre fort (Goetzinger 1961:63-71) we know that these sites were also intended as places of refuge for area settlers and travelers along the Red River Trail system. These issues were also discussed in previous sections of this paper.

In addition, the size of the forts (3 were intended to accommodate 100 soldiers each and the one at Sauk Centre 200) and the fact that they were equipped with artillery suggests an intent to provide offensive capability as well (Howard 1931:301). And, we know from archival information that these garrisons engaged in active patrolling along the Red River Trail and undertook small scale local offensive operations in response to clashes between settlers and Dakota in the area (Howard 1931:301-303; MNAGO Annual Report 1866:339-341).

So, the major shift in the systems structuring the relationships between whites and Native Americans in the Minnesota region is the move from coexistence to open warfare. The forts of the Minnesota line are the Euro-American reaction, primarily a military reaction. They are large physical structures staffed with large numbers of soldiers. As noted earlier in this paper the intent was to send a message of power and permanence to several audiences.

The forts also had other purposes. They are part of a wall, both physical and metaphysical. As can be seen from Figure 2 the wall was intended to separate the Dakota and the Euro-Americans. It was intended to keep Native people out and Euro-American people in. The real intent was probably more the former than the latter. The shape of the wall, a three-sided box, was not an accident. It was intended to box in the Dakota giving them an easy exit only to the west into a region of the country at that time not occupied by whites and viewed as not likely to be so occupied anytime soon (MNAGO Annual Report 1862:387-391).

In her book, *Walled States, Waning Sovereignty* (2010) Wendy Brown suggests that walls are a traditional state response to defining sovereignty and establishing title to land, especially contested land (Brown 2010:25, 44-45). It is not clear whether the Euro-Americans in the region regarded Minnesota as contested land. The ferocity of their response to the Dakota attacks suggests they did. It is clear the Dakota certainly saw the conflict as contest for the control of the Minnesota country.

There is evidence, discussed earlier, that the Minnesota state government was concerned about maintaining sovereignty. As note the Lincoln administration was concerned about maintain the sovereignty of national borders; but there is no specific evidence to suggest that this motive was behind the administration actions in responding to events in Minnesota. Thus, it is arguable that by building the forts the United States government and the government of Minnesota were reinforcing their statement of ownership. The interesting question here is did the federal or state governments ever see another option? Did the people making the decisions about how to respond to the Dakota and secure the Northwest frontier in 1862 see themselves as having any other choice than the deployment of military force? Other options were considered but, in my opinion, not taken seriously (Wingered 2010:318). The archival record offers insight into what they planned. The archaeological record confirms what they did.

There is one more aspect of the forts and what they represent to be discussed. To borrow an observation form Tveskov and Rose (2019) these forts and the response to the Dakota and the Ojibwe were about a broader act playing out nationally. The Civil War, as Tveskov and Rose (2019:43) observe was partially about the relative authority of the state's verses the authority of the federal government. Was St. Paul or Washington responsible for the safety and security of citizens on the Northwest frontier? As noted at several places in this discussion the idea of the plan for the line of forts was created by the Minnesota Adjutant General (MNAGO Annual Report 1862:387-391). The state responded, in part, by supporting the replacement of the settlers' fort at Sauk Centre with a larger and more permanent structure (MNAGO Annual Report 1862:478-479). And the state of Minnesota formed and sent to Sauk Centre and other locations in central Minnesota a regiment of Mounted Rangers (MNAGO Annual Report 1866:195) to conduct aggressive offensive operations against the Dakota. The state in collaboration with the federal government, supported the Henry Sibley expedition against the Dakota in the fall of 1862 which ended in the Battle of Wood Lake (Carley 1976:59-62; MNAGO Annual Report 1862:445-460). The intent of this action was to take the pressure off the Minnesota River Valley and punish the Dakota. It led to an end of the fighting directly associated with the events of August and September 1862 and the eventual surrender of the Dakota.

While the state was responding so was the Federal government. The first evidence of the this was the appointment of Major General John Pope to command the newly organized military Department of the Northwest on September 5, 1862 (Carley 1976:60-61). At the same time the War Department gave General Pope the 25th Wisconsin Volunteer Infantry Regiment, the 27th Iowa Volunteer Infantry Regiment and the 3rd Minnesota Volunteer Infantry Regiment with which to fight the Dakota (Babcock 1963:279-280). The 25th Wisconsin moved to take over the forts under construction by the state and militia units in central Minnesota while the 27th Iowa did the same thing south of Fort Ridgley. The 3rd Minnesota accompanied Sibley on the fall 1862 expedition against the Dakota. To further strengthen the military presence in the state and deepen the federal commitment in the late fall the War Department allowed Pope to keep four Minnesota

Volunteer regiments then organizing in the state for federal service in exchanged the 25th Wisconsin, the 27th Iowa and the 3rd Minnesota sent in the fall of 1862 in response to calls for help by Governor Ramsey (Carley 1976:52). While these federal units were arriving and departing the Minnesota Mounted Rangers continued military operations in central Minnesota (Carley 1976:52). These happened before the 1st of January 1863. By that date, the Militia Companies were all mostly back home. The Mounted Rangers continued operations into early 1863 and were also demobilized. But they were reformed in the summer of 1863 in response to what was believed to be an increasing Dakota presence in Central Minnesota. The garrisons along the line of posts separating the Dakota and the white settlements were predominately federal and this pattern would continue until the soldiers were withdrawn at the end of the Civil War.

There is one other major federal action that needs to be mentioned here. This action was clearly intended to signal to both the white settlers in Minnesota and the Dakota and the Ojibwe and anyone else watching that the federal government had the power to stop the Dakota and protect the whites.

On December 26, 1862, the federal government executed 38 Dakota men. The largest mass execution in United States history (Carley 1976:70-76). A controversial act even in 1862 the executions should be seen as the United States government saying to its remaining enemies in the region, resistance is futile. To its citizens in the region the government was demonstrating its ability to protect them. With these executions the United States government was making a statement and the forts themselves and the soldiers garrisoning them were the exclamation point to that statement.

The forts and their physical remains are artifacts of the social and political social structures of the culture that built them. They reflect that the culture's reaction to threats to its sovereignty and hegemony. They reflect the cultures' efforts to mark its territory. They reflect the cultures' efforts to protect its citizens. They reflect the cultures' efforts to keep out those it considered undesirable.

Chapter VII: Site Investigation

As noted above, we used the Army Plan Drawing, Figure 3, superimposed over a Google Earth image of the site along with archival research to establish how the stockade was potentially oriented on the current landscape. This is displayed in Figure 7.

In deciding where to focus our field investigations we considered where we had permission to dig and what parts of the fort might be in reasonably undisturbed areas of the site One area identified was the Barn Area located in the center of the site and the other was the post Officers' Quarters located along the original north wall of the stockade. We initially identified a third area, the post Enlisted Quarters located along the original south wall of the stockade. We assumed these three areas would have seen some density of human occupation during the Army's presence and be likely places to find metal artifacts in our planned metal detector surveys.

These three areas also seemed good places to conduct our work because the Barn Area and the Officers' Quarters Area are on the property at 631 Birch where we had permission to dig and also where we knew artifacts had been found in the late 1940s (Sauk Centre *Herald* 1947). The Enlisted Quarters is on the property at 701 Birch where we also had permission to dig. Based on our conclusions about the Monument Rock we estimated the location of the Barn Area and the Enlisted Quarters Area using the scale on the Army Plan Drawing measuring from the Monument Rock to the respective areas on the site. Based on this assessment we believed much of the barn structure to be under 7th Street. But the north wall of the structure appeared to be located on the public easement along the north side of 7th Street on the lot of 631 Birch.

The operating premise was the area adjacent to the barn would show evidence of human activity either related to the buildings' use as a barn by Pendergast or the buildings' use as a food stores warehouse by the Army. We know little about the structure of the barn. We do know it existed prior to military occupation of the site as a barn and probably as stable built and used by Solomon Pendergast (Hilderbrand 1993:22-23). We knew, based on the access provided to the 631 Birch Deed Abstract by Mr. Kleinvachter (Brian Kleinvachter, personal communication 2018) and the Veeder Memory Map that barn was used as a Commissary Warehouse by the Army. We believe the structure reverted to a barn role for some time after the Army left (Mitchell 1915:351). We do know, based on the Sauk Centre Plat Map (see Figure 6) the barn was gone by the mid-1890s (University of Minnesota 2018).

As was referenced above we initially intended to survey a third area. This was the Enlisted Quarters area. As was noted its location on the ground was identified based on measurements taken off Figure 3. We did an initial metal detector survey on this location and had 80 positive target hits; these were VLF hits. We excavated twenty of those positive target hits while at the same time continuing to do research to clarify the positioning of the stockade on the site, this was described in detail in a previous section. The result of this research was the Google Earth Overlay Map (see Figure 7) which showed the enlisted quarters setting under part of the house 705 Birch and under Birch Street. Our initial estimate of the location was twenty or thirty feet farther south than where the structure actually stood

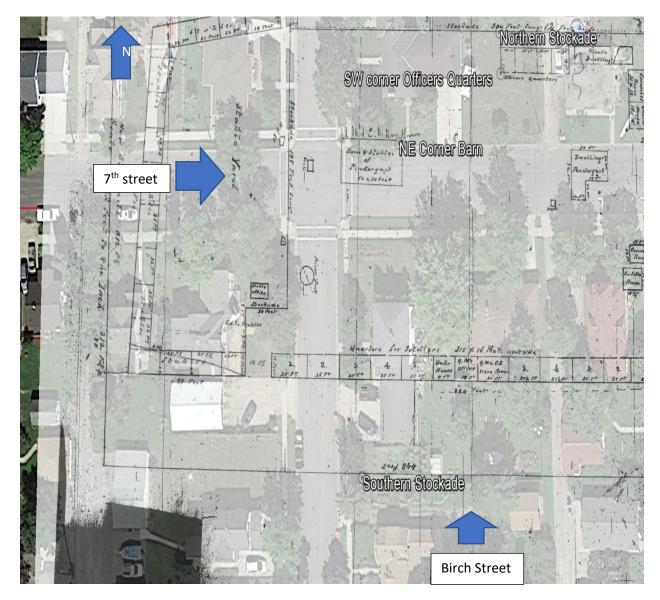


Figure 7. Google Earth overlay of Sauk Centre Military Post site.

After we recovered the artifacts from what we had thought to be the Enlisted Quarters Area we also learned through communication with Mr. Eiden (Charles Eiden, personal communication 2018), owner of the house at 705 Birch, that the current structure on that lot dated from the 1880s. This meant everything we had recovered on what we thought was the site of the post Enlisted Quarters that was of 19th century origin could have come from the house at 705 Birch and nothing we recovered in this survey was diagnostic of a U.S. military presence. It is on the 1896 Plat Map, the structure at the southeast corner of 7th and Birch (see Figure 6). The presence of the 19th century house on the site and the fact that we were likely south of where the Enlisted Quarters structure brought into question the rational for continued excavation of the location. Artifacts recovered could either be from the Army occupation or subsequent civilian occupation. Because our onsite time and excavation crew was limited, we decided to stop our efforts in the Enlisted Quarters Area and concentrate our work in the Barn Area and the Officers' Quarters Area.

The Officers' Quarters were located across the fort square to the northeast of the Barn Area along the original north wall of the stockade, although set in some distance from the wall itself. Based on Figure 7, the Google Earth Overlay Map, it appeared that a significant part of the west end of the Officers' Quarters was on ground that had minimal disturbance after the Army left the site. We had archival evidence (SF; SCHS 2018a. 2018b) suggesting the structures may have been occupied both by military and civilians during the time the fort was operational. These were residents for families and single military officers (Howard 1931). This information caused us to believe we had reasonable prospects of finding physical evidence of the building itself and of the humans who occupied it.

Metal Detector Survey of the Barn Area

Because we were working in a residential area employing traditional archaeological research methods on the site was not an option, The Barn Area is in the southwest quadrant of the front yard at 631 Birch Street. Digging standard 30 to 40-centimeter in circumference Shovel Test Pits (STPS) (Minnesota Office of the State Archaeologist 2011:27) did not seem prudent

without a specific idea of where to start. To better focus the survey efforts, we conducted VLF and PI metal detector surveys.

The Barn Area is about 50 feet by 50 feet and is bounded on the east by the sidewalk that goes from 7th Street to the house at 631 Birch, on the south by 7th Street, on the west by the side walk that runs along Birch and on the north by the house and a line running from the house to the sidewalk along Birch.

Initially, we did a sweep of the area with two VLF metal detectors. One person operated each metal detector and a third person marked positive target hits with pin flags. When the survey was completed, we shot in and recorded each positive target hit with the Total Station. This information is displayed graphically in Figure 7, U.S. Military Post at Sauk Centre Site Map. Figure 9, Barn Area Site Map and Figure 10, Officers' Quarters Area Site Map display this data for the specific survey areas within the larger U.S. Military Post at Sauk Centre Site (Site #21SN01

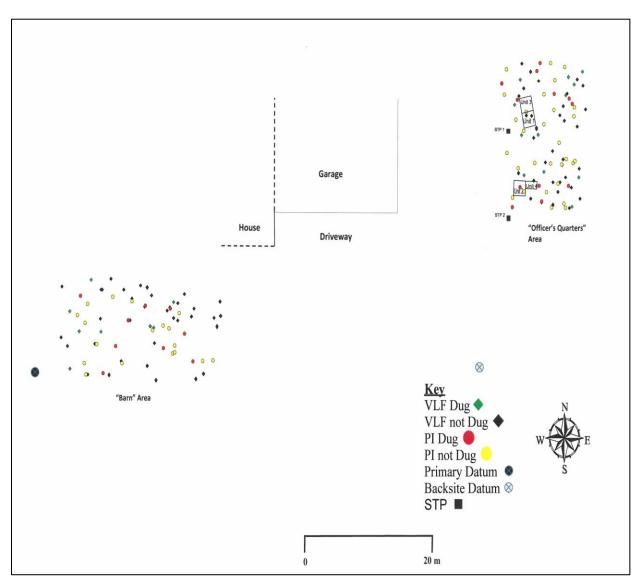


Figure 8. U.S. Military Post at Sauk Centre Site Map showing metal detector positive Target Hits, Shovel Test Pits and Units (Site #21SN0198).

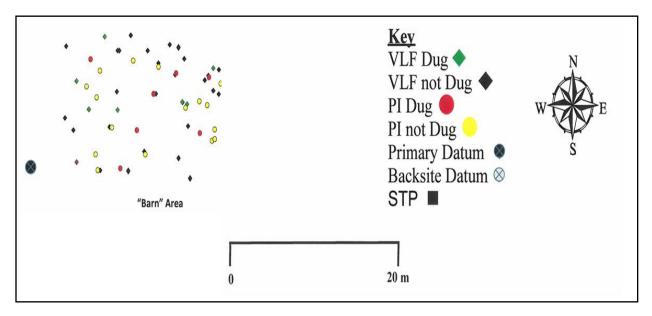


Figure 9. Barn Area Site Map showing VLF and PI Metal Detector Positive Target Hits. U.S. Military Post at Sauk Centre, Minnesota (Site #21SN0198).

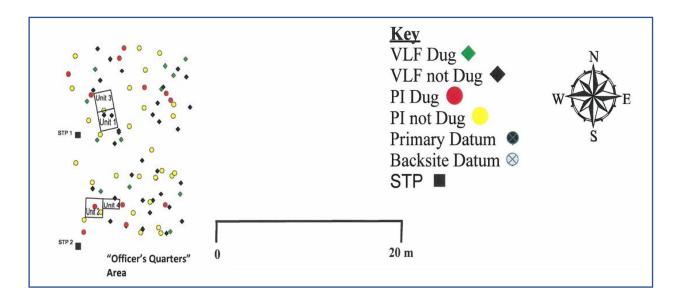


Figure 10. Officers' Quarters Area Site Map showing VLF and PI Metal Detector Positive Target Hits. U.S. Military Post at Sauk Centre, Minnesota (Site #21SN0198).

In the Field Specimen Log, we differentiated between weak and strong positive hits based on readings and sounds from the metal detector. As part of the recording process each positive target hit was assigned a total station number and that number was recorded in the Field Specimen Log and on the flag. The initial metal detector survey was done with the VLF detectors. We did this because they do not penetrate as deeply as the PI detectors the reasoning thus being that initial targeted excavations done in response to the VLF survey would leave deeper artifacts in place (NPS 2019).

We recorded 46 positive VLF target hits in the Barn Area. Because of the number of positive target hits and the small size of our crew (five people) we decided to stay with the original plan and dig 25% of the positive target hits. This resulted in 11 VLF positive target hits dug. At each of these positive hits we tried to center our initial excavation over the suspected location of the artifact(s) based on the strength of the sounds and readings from the metal detectors.

We dug with hand tools while systematically checking the hole and excavated earth with the metal detector for the metallic artifacts. In most cases we recovered multiple artifacts (both metallic and non-metallic) from the same hole, and it was not always possible to tell which of the metallic artifacts triggered the metal detector. In some cases, we found only a single artifact. In doing the excavation we attempted to cut a sod cap. We placed the sod cap and the dirt removed on tarps and hand sorted and checked both with a metal detector to be sure we had recovered all metallic artifacts present. We stopped digging and sorting when the metal detector no longer detected the presence of metallic artifacts. Once we had excavated the 11 VLF samples we refilled the VLF holes (replacing the sod cap in order to minimize damage to the lawn), removed the VLF survey pin flags, and initiated a survey of the same site with the Pulse Induction machines. The result was 28 PI positive target hits and a decision to excavate 11. The original plan to excavate 25% of the PI Barn Area positive target hits this would have met excavating only seven positive target hits. We made the decision in the field to excavate the additional four positive target hits to keep the number of VLF positive target hits and the number of PI positive target hits dug in the Barn Area the same. The thought was that this would facilitate comparison of the results of the two surveys. We followed the same excavation and artifact recovery procedures as with the VLF survey.

Results of the Metal Detector Survey of the Barn Area

The artifacts recovered in the metal detector survey of the Barn Area and the Officers' Quarters area is displayed in Table 1 and Table 2, respectively. The distribution of the positive target hits for both metal detector surveys is displayed in Figure 8 for the entire site and by survey area in Figure 9 and Figure 10. We found general physical evidence of human activity dating from the mid-to late 19th century and into modern times. The types of artifacts recovered are consistent with what we believe the site to have been used for. We found no evidence of site occupation prior to the mid-19th century.

Looking at Table 1 VLF positive target hits 1 through 11 were dug in the Barn Area. VLF positive target hits 2, 6, 10 and 11 are contemporary items reflecting modern (post-1900) occupancy of the site. VLF positive target hits 1, 3, 4, 7 and 9 are items that are 19th century origin. VLF positive target hit 8 contains two nails; one is a wire nail of modern origin and the other is a square machine cut nail from the 19th century. The recovery and analysis of machine cut square 19th-century nails at the U.S. Military Post at Sauk Centre site will be discussed in detail in a later section.

VLF positive target hit five, a dented, stamped tin can lid is interesting. It has the words, "pry this cap off with a screwdriver," machine stamped in it. Because the words appear to be machine stamped this suggests it is of 20th century origin-but so far attempts to identify and date it have been unsuccessful.

As noted above, the other items recovered appear to be of 19th century origin. VLF positive target hits one and three may reflect the Army use of the Pendergast Barn as a Commissary Warehouse. VLF positive target hit 1 on closer examination was identified as a tin can with a rolled and folded rim and VLF positive target hit three is a hole-in-cap tin can. Jim Rock's research with tin cans on archaeological sites in the Pacific Northwest (1984) shows that both are items characteristic of the mid-19th century. According to Rock such cans were introduced in the 1820s. The technology represented by VLF positive target hit three allowed cans to be filled and covered leaving a small hole in the center of one end called the matchstick hole. The can was then heated to remove excess moisture. Once this was done the matchstick hole was sealed with a drop of solder (Rock: 1984:99). These hole-in-cap cans were a standard storage and shipping container for various types of food from the 1840s until about the turn of the 19th to the 20th century. Beginning in the early 1900s hole-in-cap cans were gradually replaced by a new technology called sanitary cans. Production of hole-in-cap cans had stopped by the early 1930s (Rock 1984:110; University of Utah 2001:471).

Finding these items on a mid-19th century U.S. Army site especially in proximity to a structure used as a commissary warehouse is expected. The Civil War saw significant use of canned food by the U.S. Army. The War Department purchased canned goods in large quantities

because they were relatively easy to store and ship to units spread across the North American continent (Busch 1981:96-98; George Elmore, personal communication 2018). According to Jim Rock in his work, *Cans in the Countryside*, (1984:102) hole-in-cap cans were a common staple of Army life during this period. He points out that Ezra A. Edgett of New York was supplying the Union Army with a variety of canned goods including vegetables and various meats by 1863. Rock also points out that canned fish was available during this same time (1984:102) as was condensed milk in cans (Busch 1981:97; Rock 1993; 2015). Also, work done by the Nation Park Service restoring a mid-19th century US Army Commissary Warehouse at the Fort Scott National Historic Site supports the prevalence of tin cans in such facilities (NPS 2016). This was confirmed by George Elmore, Chief Ranger at the Fort Larned National Historic Site George Elmore, personal communication 2020). He indicated that site has numerous hole-in-cap cans in their collection recovered during archaeological excavations and restoration work onsite (George Elmore, personal communication 2020).

Examples of similar food cans identified at other mid-19th century era US Army sites include at Fort Craig, New Mexico where Peggy Gerow (2004:199) reports the presence of holein-the cap cans. Fort Craig played a key role controlling the west end of the Rio Grande Valley during the Civil War and in post-war years was a stop on the major east-west road through the valley. Jensen et al. (2003) noted finding quantities of food cans when excavating a trash dump associated with the Union Logistics Depot at City Point, Virginia. This was a large supply base supporting Union Army operations in the Virginia theater of the Civil War. In another Civil War context Gregory Mikell identified can fragments that may be like VLF positive target hit one in a Union camp in the Florida panhandle. The camp was occupied by a mounted unit, either cavalry or mounted Infantry, in 1862 and associated with Union activities following the Confederate withdrawal from Pensacola, Florida (Mikell 2010:23, 32). In excavations at Forts Hoskins and Yamhill in Oregon, sites contemporary with the U.S. Military Post at Sauk Centre, Justin Eichelberger identified food canisters of varying sizes associated with excavations of the Officers' Quarters at both Forts (2019:122). These two sites include activity that predates the Civil War, but both closed in 1865 with the wars end so they do fit the time period (Eichelberger 2019).

VLF positive target hit one, when it came out of the ground, appeared to be pieces of rolled tin or sheet metal. Upon closer examination it became clear that some of the pieces had a machine rolled edge characteristic of the open end of a tin can (Rock 1984). However, the artifact is in such poor condition that we cannot make a determination as to type or function of the can.

VLF positive target hit three is a hole-in-the-cap can (see Figure 11). The hole-in-cap end is intact. Based on what we can tell about the original dimensions of the can it is likely a Number Three can and probably contained tomatoes (Bitting 1915:11). Tin cans are generally categorized according to size and that size is reflected in a can number system. The number does not reflect the capacity specifically; a Number Three can is not a three ounce, or three quart can. But all Number Three cans are the same size in terms of dimensions and capacity. The same is true for cans of other numbers (Bitting 1915:11). This numbering systems is based on what a 1915 *US Department of Agriculture Bulletin* (Bitting 1915) described as "trade customs." This appears to mean the numbering system for cans was adopted to facilitate manufacture by can makers and use by canners.

Finding VLF positive hits one and three where we did suggest our Google Earth Overlay Map (see Figure 7) is reasonably accurate. We believed this area of the site to be associated with the Pendergast Barn which, as has been pointed out elsewhere in this paper, was used by the Army as a Commissary Warehouse to support the U.S. Military Post at Sauk Centre. Figure 11 shows one of the hole-in-cap cans recovered from the site. Figure 12 shows the reconstructed US Army Commissary Warehouse at Fort Larned National Historic Site circa 1866. The cans in this photograph are reproductions of Figure 13. This is a hole-in-cap can with the label intact. It is reasonable to assume that the U.S. Army Commissary Warehouse at the U.S. Military Post at Saul Centre, circa 1864 or 1865, would have closely resembled Figure 12. The National Park Service goes to considerable lengths to ensure its reproductions are historically accurate and the Army regulated and standardized the operation of these warehouses (George Elmore, personal communication 2020; NPS 2016).



Figure 11. Hole-in-cap tin can recovered during the metal detector surveys of the Barn Area of the U.S. Military Post at Sauk Centre, Minnesota.



Figure 12. Reconstruction, circa 1866, US Commissary Warehouse at Fort Larned National Historic Site. Canned food is prevalent. The Commissary Warehouse at the U.S. Military Post at Sauk Centre would have looked like this. Circa 1865 (author personal photo).

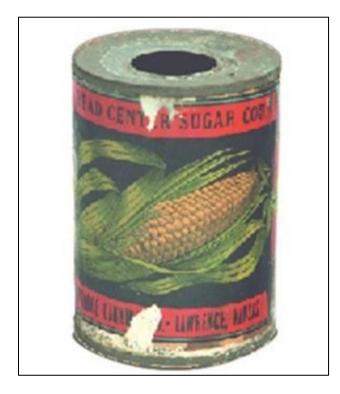


Figure 13. Intact example of a hole-in-cap can with an intact label. The can in Figure 11 would have looked like this. The cans displayed in Figure 12 are reproductions of this type can. Hundreds of these items containing various types of food stuff would have been stored in the Commissary Warehouse at the U.S. Military Post at Sauk Centre, Minnesota.

Turning to the Pulse Induction metal detector survey of the Barn/Commissary Warehouse Area; PI positive target hits 12-21 are the Pulse Induction metal detector finds dug (n = 10) in the Barn Area. These are also displayed in Table 2. PI positive target hit 12 included a cast iron artifact that might be a piece of a cast iron stove. However, efforts to specifically identify it have been inclusive. PI positive target hit 13 includes the remains of a tin can. The pieces appear to contain parts of a can rim that may show signs of being cut open (University of Utah 2001). But it has deteriorated such that there is not much more we can say about it. PI positive target hit 14 is also a tin can, in generally the same condition as PI positive hit 13. It is in pieces with evidence of a flattened rim and was probably a large can but beyond that there is little we can

accurately say. The presence of these two positive target hits supports the conclusions about the area of the site raised in the VLF discussion regarding the recovery of the tin cans.

PI positive target hit 16 is an intact sewing thimble. Attempts to identify it have been inconclusive. However, it does resemble an 18th-century children's thimble depicted in Figure 6 in Erica Hill's article *Thimbles and Thimble Rings from the Circum-Caribbean Region, 1500-1800: Chronology and Identification* (1995: Figure 6). It is probably not a Native American thimble bell because it does not have the characteristic hole punched in the top (Hill 1995:90-91) and we have no evidence of Native American presence at the U.S. Military Post at Sauk Centre or on the site before or after the Army's presence.

Tveskov and Rose (2019:46) also found thimbles in their excavations at Fort Lane in Oregon. On that site thimbles were recovered from both the Officers' Quarters and the Enlisted Quarters. McBride (1994:147) describes recovering a thimble during excavations of the headquarters complex area a Camp Nelson, Kentucky. Camp Nelson was a large US Army supply depot during the Civil War. While these examples do not necessarily suggest thimbles are common artifacts at Civil War period U.S. Army sites they clearly are found. It is certainly likely various soldiers at the U.S. Military Post at Sauk Centre had thimbles; most probably had sewing kits. But the citizens who came and went through the stockade would likely have also had such items.

Also recovered in the Barn Area was PI positive target hit 18 a horseshoe with a nail rusted into one of the nail holes. Research suggests it could be of 19th century origin. It appears similar to horseshoes recovered during archaeological surveys of Civ War battlefield sites in Kansas (Kansas State Historical Society 2019) and during archaeological surveys of the 19th century US military site, Fort Bowie, Arizona (Herskovitz 1978:83). Douglas Scott also reports finding horseshoes while conducting a metal detector survey in search of the Civil War era camp of the 1st Colorado Volunteer Infantry Regiment at Fort Union, New Mexico (Scott 2015:51). However, dating horseshoes is difficult. Changes that do occur are usually in shape and size and thickness of the individual shoe. Or, in the number of nails used to secure the shoe to the horse (Chappell 1973:100-102). These changes occurred usually because of the type and size of animals being shod and/or the local terrain where the horses were located. Some of these factors and the changes they trigger in horseshoes may not be readily apparent to later researchers. Also, an issue in the size and shape of horseshoes can be related to the skill of the blacksmith involved (Chappell 1973:102) as horseshoes were often locally made and frequently locally worked by the blacksmith. That horseshoes are difficult to date is illustrated by the fact that PI positive target hit 18 is like a type shoe from the 18th century shown in Figure 6, Illustration 15 (Chappell 1973:115). The comment about Illustration 15 indicates this type shoe was common from the late 18th-century and in to the 19th.

Where Chappell (1973) does provide some direct insight relevant PI positive target his 18 is on page 105 and the associated Figures 5.11 and 5.12. These concern horseshoes found with the skeleton of a Confederate cavalry horse presumed killed in fighting around Williamsburg in 1862. An examination of the horseshoes, illustrated in Figures 5.11 and 5.12, show artifacts remarkably like PI positive target hit 18. This adds credibility to the idea that PI positive target hit 18 dates form the mid-19th century. It also suggests that it could be related to the Army occupation of the site (Chappell 1973:105, 113).

The possibility that this was a mule shoe was considered. However, Chappell does not comment on distinctions between mule shoes and horseshoes. A literature search was inconclusive suggesting that there was little difference between mule shoes and horseshoes. One source did suggest that mules used in 19th century mines to pull ore carts wore shoes heavier than tradition horseshoes because of the hard rock nature of their environment. However, even if true that does not fit our circumstance. Since PI positive target hit 18 appears to be a traditional horseshoe. If there were mules at the U.S. Military Post at Sauk Centre, and we do not know if this were the case, they would have likely been used as pack animals or to pull wagons. Another possibility is that mules were used at times to mount infantry, but again there is no reference to this being done at the U.S. Military Post at Sauk Centre.

Where we find horseshoes, we usually find blacksmiths. Hildebrand (1993:22-23) reports by 1863 there were two local blacksmith shops in operation on the Sauk Centre town site about a quarter mile from the post. Both she said did significant contract work maintaining the Army horses (Hildebrand 1993:23). This suggests some amount of local horseshoe making and maintaining activity associated with the U.S. Military Post at Sauk Centre.

Where there are horseshoes there are shod horses, or mules. We know the U.S. Military Post at Sauk Centre had significant space for horses and mules (Howard 1931). We also know the stable area stood some distance from where we recovered the horseshoe (see Figure 7). We also know that before the Civil War Solomon Pendergast operated a stage stop on the trail between Saint Cloud and Fort Abercrombie and that the stage service he supported continued into the early 1870s (Gilman et al. 1979:70, 75, 78; Hildebrand 1993:20-23). Because no other structures stood on the site it is likely he operated this activity out of his house and barn. Stagecoach horses would have likely been shod because of the ground over which they traveled. We know Pendergast continued the stage stop from the stockade site throughout the period 1862-1865 (Mitchell 1915:351). We also know that after the Army left Pendergast occupied the site for some time and we think, although are not certain, that he continued the stage business. We know that by 1865 he had moved the store about a half-mile to the growing Sauk Centre town site. We do not know when stage service through Sauk Centre stopped but it must have been in the late 1860s as the railroad built west (Mitchell 1915:351).

Between 1861 and 1865 there would have been a considerable presence of shod horses on the site of the U.S. Military Post at Sauk Centre. Evidence of the presence of those horses, or possibly mules, is something we expected to find when we started surveying the site. However, considering we found positive VLF target hit 18 in close proximity to the barn it is likely that the that artifact it is associated with the use of that structure as a barn and stage stop by Solomon Pendergast rather than with the Army Stables which were located farther west on the Fort grounds.

The metal detector surveys of the Barn Area, resulted in the recovery of 19th century artifacts of the type of material objects we expected to recover, specifically the cans and the horseshoe. And, according to George Elmore, Chief Ranger at the Ft Larned, Kansas National Historic Site, are typical of items recovered at Fort Larned during archaeological excavations and restoration activities (George Elmore, personal communication 2019). Fort Larned was in use from the late-1850s through the late 1870s covering the period when the U.S. Military Post at Sauk Centre was also in use and both were garrisoned by U.S. Volunteers during Civil War. Thus, Larned is also a reasonable comparison site against which to analyze and assess artifacts recovered at the U.S. Military Post at Sauk Centre site. What this suggests is that our initial assumption that we were exploring the area along the north wall of the barn structure where activity associated with the various 19th-century uses of the structure might have taken place was probably correct because we found the type artifacts one would expect to find associated with a barn and food warehouse.. As can be seen from reviewing Table 1 and Table 2 the PI positive target hits are generally deeper than the VLF positive target hits. In the Barn Area the PI machines typically identified artifacts to a depth of 25 cm to 30 cm below surface. The VLF machines consistently identified items at depths of 15 cm to 20 cm below the surface. The PI finds include more 19th-century specific material than do the VLF finds which is consistent with anticipated results. We assumed materials related to modern occupation would be closer to the surface than material related to earlier occupation.

VLF Positive Target Hit		Depth Below Surface
1	tinned metal with folded rim (tin can)	18 cm
2	corrugated tin small roofing nail	15 cm
3	tin can (hole-in-cap can)	18cm
4	square nail fragment	13 cm
5	dented tin can lid-rolled edge probably modern/ stamped with rolled edge "pry off with screwdriver" stamped in lid	21 cm
6	1974 penny	6 cm
7	square nail	16 cm
8	wire nail Machine cut square nail	12 cm
9	carriage bolt with washer	6 cm
10	1975 penny	16 cm
11	1985 quarter	16.5 cm

Table 1. Metal Detector Survey VLF Positive Target Hits dug in the barn area. U.S. MilitaryPost at Sauk Centre, Minnesota.

	Description	Depth Below Surface
12	wire nails; square nails; cast iron fragment	33 cm
13	wire nails; square nails; tinned metal fragments (possible tin can)	25 cm
14	tin sheet metal with flattened rim (possible tin can); cast iron fitting with bolt	30 cm
15	square nail	19 cm
16	Thimble	10 cm
17	2000 quarter; Machine cut square nail	28 cm
18	Horseshoe; tin strapping	28 cm
19	Bolt; square nail fragment	25 cm
20	wire nail; tin foil fragment	14 cm
21	contemporary dime	5 cm

Table 2. Metal Detector Survey PI Positive Target Hits dug in the barn area. U.S. Military Postat Sauk Centre, Minnesota.

Metal Detector Survey of the Officers' Quarters Area

The other major area of the fort we opted to look at with the metal detectors was the Officers' Quarters. Based on the Army Plan Drawing (see Figure 3) the Officers' Quarters was one structure with four separate rooms measuring about 12 ft. by 16 ft. The Army Plan Drawing suggests that two of the rooms may have been slightly larger than the others, but this is not clear. It would not have been unusual for the post commander to have larger quarters than the other

officers. The officers would have probably been housed one or two to a room, depending on how may were assigned to the fort, with the Post Commander living by himself.

There is some evidence from the Veeder Memory Map (SF; SCHS, 2018c) that officers may have had families living at the fort. Veeder identifies the various structures at the fort and labels their use or identifies their occupants. The occupants of some of the Officers' Quarters rooms she identifies as women. It is possible that these people were civilians taking refuge in the Fort or stopping at the Fort while traveling the Red River Trail. But it is also possible they were the wives of officers assigned to the fort. We do have references, cited throughout this paper, that the stockade at Sauk Centre was intended as a place of refuge for area civilians and travelers on the Red River Trails. While we have archival evidence suggesting that civilians stayed at the fort, we have no corroborating evidence that any of the garrison's officers brought their families.

There was a sink (Latrine) located directly behind the Officers' Quarters apparently adjacent to the original north wall of the stockade. We assumed these structures were occupied by Officers and possibly others throughout the life of the fort. Thus, we expected to find some evidence of the structures as well as of human habitation.

When we created the overlay at Figure 7 it became obvious that the much the Officers' Quarters structure was in the back yard of the house at 631 Birch Street. We were certain based on the 1896 Plat Map Figure 6 and the Sauk Centre *Herald* (1947) article that this part of the site was relatively undisturbed from the time the Army left until the late 1940s.

The site was near the property line between 631 and 629 Birch and the area where it was located included underground utilities crossing the property close to where we needed to dig. We knew where this was because we had Minnesota One Call mark the area for utilities.

We used the Google Earth Overlay to generate grid coordinates referencing the southwest corner and northwest corner of the Officers' Quarters building, respectively. We also used grid coordinates from Google Earth to identify the center of the sink behind the Officers' Quarters and the location of the original stockade wall. We used the Trimble GPS unit to identify these points on the ground and from there used these as references from which to begin the metal detector surveys. In conducting the metal detector surveys of the Officers' Quarters we followed the same process as used in the Barn Area. We did a VLF sweep, marked positive target hits, excavated 25% of the VLF positive target hits, refilled the excavation holes and repeated the same process with the PI machines. The distribution of the positive target hits from the metal detector surveys of the Officers' Quarters Area in shown in Figure 11.

Results of the Metal Detector Survey of the Officers' Quarters Area

The results of the Officers' Quarters Metal Detector Survey are displayed in Table 3 and Table 4. The VLF survey resulted in 45 positive target hits of which 25% were dug for a total of 12. This was VLF positive target hits 32-43. The PI metal detector survey resulted in a total of 41 positive target hits with also 25% dug for a total of 11. This was PI positive target hits 44-54.

Table 3. Metal Detector Survey VLF Positive Target Hits dug in the Officers' Quarters Area.U.S. Military Post at Sauk Centre, Minnesota.

VLF Positive	Description	Depth Below Surface
Target Hit 32	Machine Cut Square Nail, Wire Nail, Ironstone Sherd	18 cm
33	Shot Gun Shell Cap	22 cm
34	Machine Cut Square Nail, Tin Can Lid	18 cm
35	Tin Container (machined end with a rim, and an opening with a rim), Wire Nails	10 cm
36	Wire Nails, Machine Cut Square Nails	8-20 cm
37	Machine Cut Square Nails, Tin Can Lid (partial tin can lid possibly part of a hole in-cap lid; appears to be a letter stamped in the lid)	18 cm
38	wire nail	11 cm
39	wire nail, Ironstone sherds	18 cm
40	Wire Nails, Unidentified Bone, Glass shard, Coal	12-18 cm
41	tin can (badly deteriorated with folded rim), Machine cut square nails	28 cm
42	cupreous buckle (possible sash buckle), glass shard, Machine Cut Square Nails, Unidentified Bone, Unidentified ceramic	18 cm
43	cupreous buckle (possible suspender buckle), Machine Cut Square Nails, Unidentified Bone, Coal	18 cm

Table 4. Metal Detector Survey PI Positive Target Hits dug in the Officers' Quarters Area. U.S.Military Post at Sauk Centre, Minnesota.

PI Positive	Description	Depth Below Surface
Target Hit 44	Pipe Wind Cap (cupreous metal), Unidentified Sheet Metal Object, Machine Cut Square Nails, Unidentified Bone, Wire Fragment, Mortar	32 cm
45	Wire nails, Stamped Can lid	13 cm
46	Unidentified Tin Can (badly deteriorated), Unidentified Tin Fragment, Buckle Frame	20 cm
47	Ironstone Sherds, Unidentified Piece of Tin Strapping with Nail Sticking through it	10 cm
48	Machine Cut Square Nails	16 cm
49	Iron Hook, Machine Cut Square Nails, Wire Nails,	24 cm
50	Machine Cut Square Nails	10 cm
51	tin pot parts with a bail (artifacts were together)	22 cm
52	1955 Penny, Stamped Copper Sheet (possible War Department Contractor's Information plate), Wire Nails, Machine Cut Square Nails, Unidentified Piece of Snipped Metal	32 cm
53	Wire Nail, Unidentified Bone, Machine Cut Square Nail, Shale Fragment, Unidentified Ceramic Sherd	27 cm
54	Unidentified Cast iron fragment, Flat and vessel glass, Machine Cut Square Nails	32 cm

VLF positive target hit 34 is a stamped tin can end (lid). According to James Rock (1984:102) a process for stamping can lids was invented about 1847. It involved using a single piece of metal and a press machine which created the shaped end lid complete with hole-in-cap and edges for sealing. The complete lid could then be fitted over the end of a can. This made the canning process faster. Rock's research shows this type can lid was common at the time the fort was in use by the Army (Rock 1984:101-102). VLF positive target hit 35 and 41 are also the deteriorated remains of tin cans. Neither are intact enough to allow conclusions about the specific type. VLF positive target hit 37 includes part of a hole-in-cap can lid of the Civil War period or later (Rock 1984:101-102).

As presented earlier in the section discussing the metal detector surveys in the Barn Area, we know that canned food stuffs were common to the Army during the Civil War (Busch 1981:97). We also know based on Eichelberger's work on Forts Hoskins and Yamhill that it was common for officers to have food stuffs in their quarters (Eichelberger 2019:119-120). He reports finding a variety of food canisters of varying sizes in the sites he looked at. These were quarters occupied by officers at the two forts. It is important to note that unlike the officers at the U.S. Military Post at Sauk Centre officers at Forts Hosking and Yamhill lived in individual houses (Eichelberger 2019:109-111). The officers at the U.S. Military Post at Sauk Centre lived in a large, we assume, wooden structure of either frame of log construction divided into individual rooms. As seen in Figure 3 the structure was divided into individual rooms approximately 16 feet by 12 feet. This means the officers at Sauk Centre would have had considerably less space to occupy than the officers at the comparison forts. Because of this limited personal space, the officers at Sauk Centre seemingly would have had fewer possessions, including food items, in their rooms than their contemporaries at Fort Yamhill or Fort Hoskins

had in their houses. But they would still have needed to eat so the presence of the remains of period appropriate food containers that would have contained non-perishable food is common to all three sites.

Among the more interesting of the VLF positive target hits is number 42; a cupreous buckle that appears to have been ornamental, Figure 14. We circulated a photograph of the artifact and got related but differing opinions. Both respondents identified it as a sash buckle, one as an ornamental military buckle and one as an ornamental civilian buckle (George Elmore, personal communication 2019; Ryan McNutt, personal communication 2019). Professor McNutt, who identified the buckle as military related, observed, sash buckles; "do not seem to be military issue, but they do seem to be an incredibly common and accepted personal item, especially during the American Civil War" (Ryan McNutt, personal communication 2019).



Figure 14. VLF Positive Target Hit 42, Possible Sash Buckle recovered in the Officers' Quarters Area of the U.S. Military Post at Sauk Centre, Minnesota.

VLF positive target hit 43, Figure 15 is also a cupreous metal decorative item. McNutt, (personal communication 2019) suggested this artifact is a suspender clip. He references an article reporting on excavations by Georgia Southern University at a Confederate prison camp site in the state of Georgia called Camp Lawton (McNutt 2018). Excavating an area believed to having been living quarters for troops guarding the camp they found a set of artifacts closely

resembling VLF positive target hit 43 (McNutt 2018:41). McNutt points out these troops were from the Georgia State Reserve. These were men older or younger than military age organized by the state for emergency defense duty (2018:6). These troops would be somewhat analogous to the Minnesota Mounted Rangers stationed at the U.S. Military Post at Sauk Centre at various times between 1862 and 1865.



Figure 15. VLF Positive Target Hit 43, Suspender Clip, recovered in the Officers' Quarters Area of the U.S. Military Post at Sauk Centre, Minnesota.

McNutt believes this distinction important because as he points out (Ryan McNutt, personal communication 2019) units like the Georgia State Reserve would have been only slightly disconnected from civilian life and would have been very likely to have items like nonmilitary suspender hooks, and possibly sash buckles. This observation also applies very directly to the Minnesota Mounted Rangers at Sauk Centre. They were organized quickly in September of 1862 directly from civilian life and served into 1863 (MNAGO Annual Report 1862:409).

It is possible to link VLF positive target hit 43 directly to a site at the U.S. Military Post at Sauk Centre that would likely have been occupied by the officers of the Minnesota Mounted Rangers. But this cannot be done with the same specificity that McNutt was able to do with the Georgia State Reserve Regiments at Camp Lawton. It is reasonable to assume the Minnesota Mounted Rangers officers lived in the post Officer 's Quarters at Sauk Centre. But the officers with other units assigned to and passing through the U.S. Military Post at Sauk Centre would also have occupied that same space, sometimes at the same time. We do know generally when the Minnesota Mounted Rangers were there, but we do not know which rooms they would have occupied. So, beyond a general link to the Officers' Quarters Area we cannot get much more specific.

That we found VLF positive target hits 42 and 43 in the area of the site we designated as the Officers' Quarters is significant. Both appear to be Civil War era related artifacts with military ties. They are among the only physical evidence recovered that links the U.S. Military of the Civil War period to the U.S. Military Post at Sauk Centre. McNutt's research at Camp Lawton links the suspender hooks directly to an area occupied as Officers' living quarters (McNutt 2018:41) by the officers of Georgia state (Confederate) regiment at the camp. In excavating the metal detector positive target hits from both surveys, we also uncovered small shards of flat glass and vessel glass and small sherds of ironstone ceramic. These items were recovered at a depth of generally 10 to 20 cm. The flat glass shards suggest the quarters may have had glass windows, but we do not have enough artifacts to draw a firm conclusion on this. McBride (1994), Eichelberger (2019) and others report finding various types of vessel glass on U.S. Army occupied Civil War era sites. Often these are identified as fragments of personal items such as table ware.

The ceramic sherds recovered in the metal detector survey excavations are identifiable as ironstone ware. The sherds are too small and too few to draw any conclusions about what type vessels they were. It is possible to say that ironstone ceramic is common to 19th century sites both military and non-military in North America. It included flatware and table service, it was sturdy and relatively inexpensive (Sutton and Arkush 2009:213-214). It was produced primarily in England beginning in the 1830s through the 1870s. Production facilities appeared in the United States in the 1870s (Maryland Archaeology Conservation Laboratory 2015a).

Ironstone was intended to look like more expensive porcelain. The individual white granite pieces were covered with a high temperature glaze which produced a glassy finish to the individual item. Ironstone was produced in plain versions, in molded versions with cast designs and in versions with printed/painted designs. The actual variations probably numbered in the hundreds. Potters produced tableware sets, tea sets and chamber ware sets. The former included place settings and serving dishes (Maryland Archaeology Conservation Laboratory 2015a).

George Elmore, Chief Ranger at the Fort Learned National Historic Site pointed out that company funds were often used by Army units to purchase ironstone ware items for use in the unit mess (George Elmore, personal communication 2020). Joseph Balicki (2000) describes recovering similar ironstone sherds in excavations at Fort C.F. Smith, one of the forts guarding Washington D.C during the Civil War. He points out (2000:141-142) that kitchen and table wear ceramics are non-military items often found on more permanent Civil War sites. He observes that most ironstone ware from military sites is undecorated white ware (2000:142). Related, McBride (1994:1 40-142) describes finding various ironstone sherds and intact and partially intact pieces in an investigation of the headquarters complex at Camp Nelson, Kentucky. He indicates that such artifacts are common on US Army Civil War sites (McBride 1994:140).

The presence of such items in Civil War era Officers' garrison quarters is also supported by Eichelberger's work at Fort Hoskins and Fort Yamhill (2019:113). It is important to note that Eichelberger recovered more intact or partially intact items while Balicki (2000) recovered ceramic sherds. The material recovered during the metal detector related excavations at the U.S. Military Post at Sauk Centre Officers' Quarters area was more similar to Balicki's finds than Eichelberger's. What this material suggests is that the officers brought with them to these remote frontier posts things, in this case table and kitchen ware, that represented Euro-American culture and civilization. That nicer items were recovered in the officers' quarters area, such as the evidence of yellow ware and Rockingham ware, than are typically recovered in the enlisted quarters suggests that living situations and in particular the dining setting reinforced the relative social status of officers' and enlisted soldiers (Baliki 2000: Eichelberger 2019; McBride 1994).

The PI metal detector survey excavations (positive target hits 44-54) revealed a few artifacts of contemporary origin. Most of these were found in the 8 to 10 cm level where the contemporary artifacts were found in the VLF survey. This survey also uncovered a similar collection of potential 19th century artifact to that uncovered by the VLF survey at about the 12 to 20 cm level. The most interesting is PI positive target hit 44 which has been identified as part

of a pipe wind cap (see Figure 16). This was a device used over the bowl of a pipe to allow the smoke out and to keep the tobacco ash in (Erika Johnson, personal communication 2018).



Figure 16. Positive PI Target Hit 44, Pipe Wind Cap recovered in the Officers' Quarters Area at the U.S. Military Post at Sauk Centre, Minnesota.

Such devices were introduced in the mid-19th century and are found at U.S. Military posts of the period. Pfeiffer (1982:203-204) describes wind caps found at Fort Vancouver Washington and Fort Robinson Nebraska and dated to this general time period. At both sites, the wind cap artifact was found in proximity to a briar pipe artifact. In a non-military context but still 19thcentury Erika Johnson reports finding several wind caps when conducting mitigation studies of a mining camp in Nevada (Erika Johnson, personal communication 2018; Johnson and McQueen 2017a:92, 2017b:384).

Pfeiffer associates these wind caps with briar pipes. A common item on the American frontier during this period. As noted, he (Pfeiffer 1982:203-204) describes several excavations at Fort Vancouver, Washington and Fort Robinson, Nebraska where briar pipes were recovered in living quarters and office space of the respective forts. Pierson (1987) in analyzing and describing the tobacco pipe collection in possession of the Fort Vancouver National Historic Site corroborates Pfeiffer's observation noting the number and diversity of the briar pipes most of which were recovered during excavations and restoration work at that site. She does note the prevalence of pipes, particularly briar pipes, in the social gatherings at the fort's bachelor Officers' quarters where contemporary observers described the smoke rolling out of the social room in the evenings (Pierson 1987). Balicki (2000:146) reports finding what appears to be a briar pipe carved to look like a union soldier wearing a kepi (soldier cap of the period) in excavations of Fort C. F. Smith in the Civil War Washington D.C. defenses. Carved briar pipes in various likeness are also noted in the Fort Vancouver collection by Pierson (1987).

That briar pipes were common during this time is also supported by excavations related to the wreck of the steamboat *Bertrand* which sank on the Missouri River in 1865 while in route from Saint Louis to Fort Benton, Montana (Switzer 2013:23). Annalise Corbin (2002:699) and Ronald Switzer (2013:343) describe the excavation and recovery of hundreds of briar pipes, among other artifacts, apparently being shipped to merchants along the boats route up the river. Pfeiffer (1982:203) puts the number at 212. Information in Corbin's book (2002:699) suggests the number of pipes on board was closer to 300. Finding the wind cap at the U.S. Military Post at Sauk Centre is consistent with the evidence presented above and with items recovered at other 19th-century U.S. Army sites associated both with the Civil War and the Frontier.

Other items of interest from the PI survey include positive target hit 51. Found at 22 cm below datum this appears to be parts of a tin pot. Items like this would probably have been used for serving food. We do not know if the officers ate in their quarters but the presence of items like this, and numerous tin cans that would have likely contained food suggests they did. PI positive target hit 49, a cast iron hook, is another of the artifacts that points to this conclusion. Research suggests it is an item used to suspend a cooking pot over an open-hearth fire. It appears similar to items of Army kitchen equipment from the period identified by DeVore and Hunt (1993:90) in their study of the Fort Union Nation Historic Site. It was likely used for suspending cooking pots over an open-hearth fire such as in a fireplace.

In both the VLF and the PI survey of the Officers' Quarters area we found evidence of 19th century occupation by Euro-Americans. The 19th century artifacts were generally, although not exclusively, at 20 plus centimeters below the surface. What we basically have appears to be the daily trash of the structure that stood on the site. This judgement is based on the idea that we found very few serviceable items but bits and pieces of broken things that were probably discarded and we found it at a consistent level. It is likely what we found is a sheet midden associated with the Officers' Quarter (Versaggi 2000:45-62).

A sheet midden is an informal scattering of trash often located just outside a door of a 19th-century structure. It is a place where daily trash from inside the building, such as fragments of a broken dinner plate, might be discarded (Versaggi 2000:45-46). Such features are relatively common with 19th century structures on the American frontier. What we can conclude from what

we found in this possible midden is limited but it suggests the structure was used as a residence (Versaggi 2000: 45). An examination of the Army Plan Drawing (see Figure 3) shows a door on the west side of the Officers' Quarters building. It would have likely open near to where were preforming the metal detector surveys. This supports the idea that what we found was likely a sheet midden from that building.

Both the material evidence and the archival evidence indicates that the metal detector surveys found the post Officers' Quarters area and the Barn Area. The metal detector surveys did not find material evidence of either structure, but they were not necessarily expected to. The intent was to find concentrations of artifacts that would suggest the location of the structures being sought.

In both cases, we found physical items indicative of the human activity associated with each. In the case of the Barn/Commissary Warehouse we found the horseshoe and discarded tin cans. The former is suggestive of the buildings use before the arrival of the Army, the latter of its use by the Army. In the case of the Officers' Quarters we found discarded personal items and indication of construction debris (this latter will be discussed in detail in the next section). Again, items we would expect to find associated with a structure used as a 19th-century residence (Versaggi 2000).

Analysis of Square Nails Recovered in the Site Metal Detector Surveys

The metal detector surveys also produced 49 machine cut square nails. This includes 16 unaltered, 15 pulls; 5 clinched; 13 fragments of indeterminate sizes. This information is displayed in Table 5. The preceding classifications were arrived at using Amy Young's (1991:18) definitions: an unaltered nail is straight and probably unused; a pull is gently arced; a

clinched nail is bent at a ninety-degree angle to increase its holding power. A fragment is a piece

of a machine cut square nail that is clearly not an intact nail.

Positive Target Hit	Provence	Туре	unaltered	pulls	clinched	?
4	Barn	VLF		1		
7	Barn	VLF	1			
8	Barn	VLF		1		
56	Barn	PI	1			
58	Barn	PI		1		
61	Barn	PI		1		
63	Barn	PI				1
32	Off Q	VLF	1			
34	Off Q	VLF	1			
36	Off Q	VLF	2(?)			
37	Off Q	VLF	2			1
40	Off Q	VLF	1		1	
41	Off Q	VLF			3	3
42	Off Q	VLF	1	1	1	2
43	Off Q	VLF		1		Ì
44	Off Q	PI				4
48	Off Q	PI		2		1
49	Off Q	PI	2(?)			
50	Off Q	PI		1		t
51	Off Q	PI	1	1		
52	Off Q	PI		2		$\left \right $
53	Off Q	PI	1			1
55	Off Q	PI	2	3		

Table 5. Square Nails Collected During Metal Detector Surveys. U.S. Military Post at SaukCentre, Minnesota.

Machine cut square nails are diagnostic of a 19th century wooden structure (Nelson, 1968; Young, 1991:4-5), especially on the American frontier where almost everything was of wooden frame or log construction. Machine cut square nails of varying sizes were employed to hold structures together. They were common throughout the 19th century in North America. They were cheap and easy to acquire and only required a hammer to use (Young 1991:11-12).

The nails considered in the assessment of the U.S. Military Post at Sauk Centre are machine cut square nails. Through the mid-to-late 18th century nails were hand made. In the United States machine cut nails (general straighter and of a more standard size) were introduced by the turn of the 18th to the 19th century. However, the nail head, the end for striking with the hammer, still had to be hand forged. This made nail manufacturing expensive and time consuming and nails a valuable commodity (Young 1991:10).

According to Young (1991:11) the US Patient Office issued a patient for an automatic nail heading machine in the 1830s. This step greatly increased nail manufacturing efficiency and the availability of machine cut square nails with good heads. In the United States machine cut square nails were in common use by the mid-19th century. They were cheap and produced in mass quantities making them easy to acquire and use (Young 1991:11-12).

This development coincided with the beginnings of large-scale migration west across the continent. As Euro-Americans came west they brought with them, among other things, machine cut square nails. Because wood was a common resource widely available for building construction in the America interior machine cut square nails arguably became a staple of the frontier and a sign of Euro-American presence (Nelson 1968).

Operating from the premise that machine cut square nails are common in the 19th century Young theorizes that the presence of certain types of machine cut square nails can tell us about the life history of a 19th-century building. This includes when it was built, if it was remolded/ repaired, if it was abandoned and allowed to deteriorate naturally or if it was torn down (Young 1991:5). She also suggests the presence of certain types of nails in particular concentrations on a 19th century site is indicative of whether it is the site of a building or a trash dump (Young 1991:17).

In carrying out her research Young interviewed a number of carpenters asking about construction techniques with wooden structures and nail use and recovery patterns (Young 1991:16-25). What she concluded was differences exist in what type nails to expect to find in different locations and in different phases of a wooden buildings' life history.

During construction and use stage the most common type nails that are likely to appear in the archaeological record are pulls (nails removed and discarded for some reason during construction) and unaltereds (unused nails lost during construction). The carpenters Young interviewed pointed out there is little effort to conserve and reuse nails because they are cheap and plentiful (Young 1991:17-18). She suggests (1999:51-59) that it is normal to drop nails in the process of construction and little to no effort is usually expended to recovered them. This is because even on the Northwest frontier of 1862-63 nails were relatively cheap and plentiful.

During the decay/deterioration phase nails, most clinched nails, are most left on a site. This is because they fall from the wooden remains of the structure as it deteriorates (Young 1991:18). If a structure is torn down pulls are most frequently deposited on the site, lost/dropped during the process of removing the building (Young1991:19). And it is likely that if these type deposits exist on a site they will likely overlap to some extent. But, if it is possible to identify stratification in the deposits it may, depending on what is recovered, be possible to tell where you are in the buildings' life history.

Another aspect of Youngs' research that is relevant to the U.S. Military Post at Sauk Centre site, is distinguishing between a dump site and a construction site based on types of nails recovered. Young determined from her interviews that it was likely on a construction site to find mostly unaltereds and pulls if the building was eventually torn down or unaltereds and clinched if the building was allowed to rot naturally (Young 1991:24-25). On a dump site the most frequent finds would be pulls and clinched. This assumed that the debris from a torn down building, including pulled nails and removed boards, was hauled to a dump site. It also assumed that some clinched nails remained in the discarded boards and that they fell out in the dump site as the boards rotted (Young 1991:19-25).

Considering Young's research, it was expected to have some number of unaltered machines cut square nails (probably lost during construction) on the site. This is consistent with what we know about the construction of these buildings. They were built by soldiers in the fall and winter of 1862-63. These men were probably wearing mittens and trying to drive square nails into fairly hard wood. Given the environment and the work task it is likely the unaltered nails recovered at Sauk Centre, especially those found in the Officers' Quarters area, were dropped/lost nails during construction. Most of these were found at 10 cm to 18 cm below surface.

As noted in Table 5 in the metal detector surveys of the Barn Area, we found six intact nails and one fragment. There were two unaltered nails and four pulled nails. Considering Young's research, it is difficult to determine if these artifacts represent anything other than possibly the general presence of the site, meaning we were on or near a wooden structure from the 19th century, because there are so few specimens.

Considering the square nails recovered in the metal detector surveys of the Officers' Quarters we have a little more to work with in applying Young's research findings. The VLF survey found 1 unaltered nail and the PI survey found 15 unaltered nails. These artifacts were recovered form depths ranging from 12 cm to 30 plus cm below surface. The two surveys also recovered 11 pulls from depths ranging from 10 to 30 cm: and 4 clinched nails ranging in depths from 10 to 12.

It is of significance we primarily recovered unaltered and pulled nails. Young noted that this is probably indicative of a construction site, using her research it is reasonable to conclude that a wooden building once stood here (Young 1991:18-21). The deeper unaltereds and the pulls probably represent the construction and use maintenance phase of the structure. It is also likely that the shallowed pulls and clinched nails represent the demolition phase. These distribution patterns would be consistent with Young's arguments (Young 1991:18-21).

Using Young's theories as a guide it is likely that in the metal detector surveys of the Officers' Quarters area, we found the structure, or at least the west end of it. This analysis is consistent with the archival record. The depth distribution of square nails and the types of square nails recovered (VLF artifacts at a relatively shallow level and the PI artifacts deeper) is consistent with what Young suggests we should find when looking for a mid-19th century wooden structure.

Additional Comments about the Metal Detector Survey

As noted earlier, one of the objectives of the project was to explore the use of metal detectors when studying urban archaeological sites. We were able to use the two types of metal

detectors, Very Low Frequency (VLF) and Pulse Induction (PI), to explore the Barn Area and Officers' Quarters Area of the site with minimal disturbance to the site. We were able to look deeper with the PI machines (30 plus cm) than with the VLF machines (20 cm). This allowed us to identify with reasonable certainty the location of two of the fort's structures. And, as will be discussed below to focus the more invasive aspects of the survey in ways that were least likely to damage people's yards (Scott 2015:11).

Shovel Test Pits

Based on the results of metal detector surveys of the Officers' Quarters Area we opted to put in a shovel test pit (STP1) in that area. The decision not to put a shovel test pit in the Barn Area was based on Figure 7 which showed most of the barn structure under 7th Street. Focusing the reaming work in the Officers' Quarters Area where Figure 7 (the Google Earth Overlay Map) showed significant parts of the structure unblocked by modern construction seemed a better use of our time. The location of STP1 was referenced against our site datum in accordance with procedures established in the Minnesota Office of the State Archaeologist survey manual (2011:35-36). STP 1 was situated near what we believed to be the northwest corner of the Officers' Quarters structure. This was based on grid coordinates taken from Figure 7.

It was a 40 cm by 40 cm square pit with a depth of 31 cm. The dirt was screened with quarter inch hardware cloth (Minnesota Office of the State Archaeologist 2011:36). Artifacts recovered were individually numbered, and logged, and described in field notes. Examples of artifacts recovered are shown in Figure 17.

One piece of ironstone ceramic had a partially intact Registry Mark (see Figure 17). Registry Marks date from the early 19th century. As English pottery adopted the techniques of mass production potters (both individuals and companies) adopted the idea of marking their creations. The idea was to protect the intellectual property of the firm, or individual, producing a particular design. Thus, the idea of Registry Marks emerged in the 1840s as a way of identifying a piece of ceramic-the mark indicated where the item was made and when and by whom. The marks also became a sign of quality as English ceramics were highly regarded. A genuine English potters Registry Mark became a sign of a quality item and different companies had different and unique marks. These marks were registered with the British Patent Office. They were stenciled or stamped or sometimes embossed on every ceramic item produced by a specific company (Stelle 2006).

The Registry Mark found at the U.S. Military Post at Sauk Centre is diamond shaped. Analysis of the two types of 19th century diamond shaped Registry Marks recorded at the British Patent Office during this period suggests the ironstone item this was originally part of was made sometime between 1842 and 1867, Figure 17 (Stelle 2006). This dates the item from the general period of the fort.

We know of limited Euro-American presence on or near the site prior to the arrival of the Army, there were settlers in the region and Pendergast had the store (Hildebrand 1993:21-22). After the Army departed civilian presence increased steadily although not on the exact location of the fort and not on the part of the site where we found the ironstone sherd with the partially intact Registry Mark. It is therefore likely that the ceramic item from which the piece pictured in Figure 17 came dates from the Army presence on the site.

At 31 cm we encountered what appeared to be a feature, Figure 18. This was located in the eastern half of STP 1 in the appropriate location to possibly be a construction trench or the foundation for the west wall of the structure. We back filled STP 1 and opened STP 2 slightly south of and in line with STP 1 as noted on the U.S. Military Post at Sauk Centre Site Map, Figure 8. The thought was we were following the feature noted in STP1. However, we took STP 2 down to 36 cm and did not find evidence of the feature. We screened the removed soil through 1/4" hardware cloth and did recover additional square nails, ceramic sherds, glass shards and personal items. All items were bagged, identified in the log and in field notes (Minnesota Office of the State Archaeologist 2011:36).

Reflecting on the results of the metal detector surveys and the Shovel Test Pits we concluded that we were likely on, or near to, the site of the post Officers' Quarters. This was based largely on the artifacts recovered and the presence of the feature noted in STP 1. Other US Army Officers' Quarters sits of this period yielded similar artifacts. Specifically, Eichelberger, in his excavations at Forts Hoskins and Yamhill found ceramic vessels, including ironstone, of various kinds appropriate to the period (Eichelberger 2019:108-112). Balicki's work at Fort C. F. Smith (1994:141) in the Washington D.C. defensive line found a significant presence of ironstone sherds in kitchen and mess areas. These would have been areas more frequented by enlisted soldiers than officers. But both studies establish the idea that ironstone ceramics are common on US Army Civil War era sites. Balicki's finds at Fort C.F. Smith are probably more like what we found in STP1 and STP 2 than are Eichelberger's finds at Forts Hosking and Yamhill. This is explained in both cases by the possibility that we had hit a midden, Balicki says he likely hit a midden at Fort C.F. Smith (1994).



Figure 17. Artifacts recovered from Shovel Test Pit 1, Officers' Quarters Area, at the U.S. Military Post at Sauk Centre Site. In order from top to bottom: Machine cut square nail fragment; pulled machine cut square nail; unaltered machine cut square nail. Bottom row 3 ironstone sherds, middle sherd shows partially intact Registry Mark described in the text.



Figure 18. STP1 Showing the feature referred to in the text. U.S. Military Post at Sauk Centre, Minnesota.

Units

Based on the results of the metal detector surveys and the shovel test pits we decided to put in a unit referenced primarily on the STPs at the Officers' Quarters Area. Using the Google Earth Overlay Map at Figure 7 we decided to put in a second unit a few meters north of the suspected site of the Officers' Quarters. This unit was an attempt to find the original stockade wall built by the Militia in September of 1862. Using the Figure 7 Google Earth Overlay Map references we concluded the original wall stood about 10 to 15 feet or less behind and separated from the Officers' Quarters structure. This put it near the property line between 631 Birch and 629 Birch. We located spots on the ground based on grid coordinates generated off the overlay.

According to the archival descriptions the search for the stockade wall meant looking for a line of post holes each about two feet in diameter and set directly next to each other, probably touching (Howard 1931). These would be set in a builders' trench and the disturbance from the trench excavation would provide evidence of the wall structure.

With the Officers' Quarters building we assumed this was a wooden frame structure. We were looking for evidence of a foundation, probably brick or stone, or piers, or other structural features, or lack of soil disturbance to suggest where the building once stood. Using the grid coordinates for the stockade wall determined from Figure 7 we laid out Unit One as a standard one-meter by one-meter excavation. If the estimated location were correct a unit of standard size would find not only the wall but also evidence of construction activities such as a trench for setting and supporting posts. The estimated location was also referenced against our site datum. We excavated the unit in 10 cm levels. All dirt was screened using quarter inch hardware cloth. Artifacts recovered were individually numbered and bagged for analysis in the lab. Unit One was taken down to 40 cm below datum.

Table 6 displays the artifacts recovered in the excavation of Unit One. As can be seen in Table 6, Unit One, Levels Two and Three contained evidence of 19th century occupation. Level Two (10 cm to 20 cm below datum) yielded 34 machine cut square nails, mostly fragments and Level Three (20 cm to 30 cm below datum) yielded 39 machine cut square nails, again mostly fragments.

Table 6. Unit 1 Artifacts Recovered During Excavation of the Original North Stockade Wall.U.S. Military Post at Sauk Centre, Minnesota.

Unit/level	Unit/level Description		Comments		
Unit 1-level 1			0-10 cm below datum		
	wood fragment	1			
	bone	1			
	Glass shard	1			
Unit 1-level 2			10 to 20 cm below datum		
	square nails	34	1 flared end, 1 fishhook		
	wire nails	3			
	screw	1			
	wire fragments	2			
	metal fragments	6			
	bone	8			
	button	1			
	flat glass shards	12	aqua-appears to be modern		
	vessel glass shards	11	4-aqua;7-non colored		
Unit 1-level 3			20 cm to 30 cm below datum		
	large ceramic sherd	1	blue and gold design		
	small bone fragments	4	Includes prosser pie crust button mis- identified in the field.		
	large bone fragments	9			
	ironstone sherds	34			
	ceramic sherd	1			
	metal bottle cap	2			
	metal fragments	5			
	vessel glass shards	11	includes large fragment possible stopper		
	flat glass shards	7	1 dark olive/6 aqua		
	wire fragments	3			
	screw	1			
	tack	1			
	staple	1			
	wire nails	6			
	square nails	39			
Unit 1-level 4			30 cm to 35 cm below datum		
	flat glass shards	2	aqua		
	Ironstone ceramic sherds	2	blue/white		
Unit 1-Level 5					
	no artifacts recovered		closing depth 40 cm below datum		

Because most of the machine cut square nails recovered in Unit One are fragments it is not appropriate to apply Young's (1991) model to these findings. The analysis on which she bases her model relies on intact nails for interpretation. It would seem unusual to find such large nail residue on a site that was not a building structure. As we were not excavating a structure applying her model to the machine cut square nail artifacts recovered in Unit One would be inappropriate.

Level Two yielded no ironstone sherds, but Level Three yielded 34. While it is possible to identify these fragments as ironstone the majority are too small to determine what type pf item they originally were. But these sherds do reflect the likely presence of ironstone table and serving ware on the U.S. Military Post at Sauk Centre site. Both were common on the American frontier of this period and used extensively by the U.S. Army (Sutton and Arkush 2009:214). Finding Ironstone sherds while excavating what we thought was the original stockade wall seemed somewhat out of context. Unit One, Level Two also yielded an intact iron button which will be discussed below.

Also, of interest from Unit One, Level Three was a "pie crust" type Prosser button (Marcel 1994; Sprague 2002:112). Prosser buttons were ceramic buttons made with a process developed in England in the early 1840s and quickly exported to the United States. Processor buttons were available in the United States from that time until the early part of the 20th century.

The name Prosser comes from the process used to make the buttons (developed by Richard Prossor). The clay was put into a mold to form the button. Prior to going into the mold, the clay was mixed with ceramic dust or highly refined quartz. Once this was done the button was fired at high temperatures. The firing was at sufficient temperature to allow the button to achieve the level of porcelain. Often, after the first firing a color glaze was applied and the button was re-fired (Sprague 2002:111-112). The result was a durable high-quality button widely used on men's and women's clothing after 1840. The pie crust design was one of several "fancy" buttons produced through this process (Sprague 2002:111). Its chief characteristic was that on the front side the outer rim had a fluttery or pie-crust pattern. Prosser buttons were in common manufacture and sale in the United States from 1841 to the early part of the 20th century (Sprague 2002:111).

That this button was recovered in an excavation of what we thought was the original stockade wall again raises the question of context. We expected to find such items on the site just not in this location. Its presence does suggest that someone who lived on the site had a nice civilian garment with nice buttons on it. Or, had a sewing kit with nice spare buttons. If we assume, as suggested by Eichelberger (2019), a social class difference between Army officers of the period and enlisted soldiers of the period it is likely this item came from a civilian garment belonging to an officer living in the nearby Officers' Quarters at the U.S. Military Post at Sauk Centre. However, we know civilians passed through the fort in some number and it is possible the button was lost by a non-military individual (SF: SCHS 2018b).

The decrease in the number of artifacts recovered in Level Four, as opposed to Level Two and Three, is striking and Level Five had a complete absence of artifacts. This clearly suggests the occupation levels for this part of the U.S. Military Post at Sauk Centre site are Levels Two and Three.

Two features, four and five, Figure 19, did emerge during the excavation of Unit One. Feature Four was a tree root. Feature Five appears to be an intriguing roughly circular soil stain that could represent a post, or post mold, of about the size we were looking for. However, for this to be the original stockade wall there should have been a line of similar post holes extending east and west for some distance and evidence of a construction trench. We found neither.

In assessing next steps in the search for the original stockade wall it appeared Unit One might be south of that site. Consequently, Unit Three went directly north of Unit One. It was a standard 1m by 1m unit. Earth removed was screened through quarter-inch hardware cloth and all items recovered were numbered and bagged for later analysis. Unit Three was taken down to a depth of 40 CM below the site datum.

Unit Three, Level One yielded 11 artifacts. Five of which, two machine cut square nails and three ironstone sherds, are datable to the 19th century. Levels Two and Three in Unit Three, as with Levels Two and Three in adjacent Unit One, show an increase in the number of artifacts recovered over units above and below. Levels Two and Three in both units cover a depth from 10 cm to 30 cm below the site datum. Information on artifacts recovered in Unit 3 is displayed on Table 7-1 and Table 7-2.

Level Two contained 42 machine cut square nails, primarily fragments and not complete nails. Level Two also contained 28 ironstone sherds, including two possible rim sherds. This indicates the possible presence of flat ware. Level Two also contained an iron button fragment which will be discussed below. Level Three contained 41 machine cut square nails, again mostly fragments and Two ironstone sherds, again with Two possible rim fragments. As with Unit One these are items that reflect 19th century Euro-American occupation.

Unit/level Description Number Comments Unit 3-level1 0-10 cm below datum Unidentified Bone fragments 1 3 Ironstone sherds 1 tooth Machine Cut Square Nails 2 Wire Nails 2 Wire 1 Vessel Glass 1 Unit3-level 2 10-20 cm below datum Ironstone Sherds 28 one appears to be burned; two rim sherds Unidentified ceramic sherd 1 Screw 1 Metal fragment 3 Tack 1 Metal Strip with Tack Inserted 2 Unidentified Ceramic Shard 1 Button 1 fragment small metal button Small Spring 1 Unidentified Bone Fragments 4 3.0g Flat Glass Shards 15 Vessel glass shards 12 Vessel glass shards-dark 1 yellow; 2 dark olive 3 Wire nails 10 Machine Cut Square Nails 42 Plaster/mortar 17 14.0g

Table 7-1. Unit 3, Level 1, and Level 2; Artifacts Recovered During Excavation of the Original North Stockade Wall. U.S. Military Post at Sauk Centre, Minnesota.

Table 7-2. Unit 3, Level 4 and Level 5; Artifacts Recovered During Excavation of the Original North Stockade Wall. U.S. Military Post at Sauk Centre, Minnesota.

Unit/level	Description	Count	Comment
Unit 3-level 3			20-30 cm below datum
	.22 shell case	1	.22 short
	Unidentified Bone fragments	22	
	Wire Nails	8	
	Machine Cut Square Nail Fragments	41	
	Braided Wire	1	
	Metal Fragments	5	
	Tack	1	
	Unidentified Metal Strip with Tack Inserted	1	
	Brick	1	
	Metal Bar	1	
	Unmodified Stone	1	
	Ironstone Sherds	22	2 rim pieces
	Flat Glass Shards-aqua	14	
	Vessel Glass Shards	16	bottle neck
	Sewer pipe	2	
	Unidentified Shell (?)	4	
	Mortar	14	
	Screw	1	
Unit 3-level 4			30-35 cm below datum
	Unidentified Bone Fragments	4	
	Rubber Fragment	1	
	Flat Glass Shard	1	
Unit 3-Level 5			35-40 cm below datum
	No Artifacts Recovered		

Unit Three also yielded a feature which was labeled one. As with Feature Five, Feature One appears to be an irregularly shaped post, or most mold. It is located about where we expected the wall but the absence of other, similar, features or a construction trench suggests it is not part of the wall. Feature One and Feature Five are probably large posts several feet in diameter. Because there is no evidence of a construction trench and because of the apparent irregular placement of the two features it is unlikely they are part of the wall we were looking for. What they are is unclear. Given their apparent proximity to where we think the original wall stood, they could be supports for a banquet, a walkway, that would have run several feet below the top of the wall for the soldiers to stand on and fire over the wall or through loopholes in the wall if the fort were attacked. According to Dennis Hart Mahan (2017[1862]) banquets were contemporary doctrine in the construction of U.S. Army defensive positions. However, there is no evidence, archaeological or archival, the U.S. Military Post at Sauk Centre had one. It is also possible that Feature One and Feature Five have something do to with bracing the original stockade wall, but again there is no evidence that such a bracing system existed. Determining what Feature One and Feature Five additional study.

In Unit One, Level Two we recovered one intact iron button and in Unit Three, Level Two we recovered an iron button fragment. In comparing these items to photographs of similar items from other sites it became apparent they resembled buttons recovered by McNutt at the Confederate Camp Lawton prison site. McNutt characterizes his items as standard Army iron buttons of the period (McNutt 2018:28, Figure 6). Balicki (2000:140) reports similar items in the excavation of Fort C.F. Smith. McBride (1994:146, Figure 7.4) displays similar items from Camp Nelson. This does not conclusively prove a connection to a 19th century U.S. military site.

It does however offer one more piece of evidence that the items recovered from Unit One and Unit Three at the U.S. Military Post at Sauk Centre Site are typical of artifacts found on 19th century U.S. military sites.

As far as the ceramic pottery sherds recovered one is of particular interest. We recovered a small sherd of Rockingham-like pottery (Sutton and Arkush 2009:214). This type pottery dates from the mid-19 century and was reasonably common on the American frontier during the years the Army was at the Sauk Centre site, and afterward. The name Rockingham refers to the glaze which is dark brown mottled and streaked often with patches of the vessel body showing through (Maryland Archaeology Conservation Laboratory 2015b). Rockingham ware originated in England in the late 18th century. By the early 19th century it was it was in common use their and spreading to the United States with the immigration of English potters. Production started in the United States by 1830 and by the early 1840s Rockingham ware was in common use in this country. Basically, this name characterizes an inexpensive mass-produced ceramic ware which included kitchen and table service and common household items such as ink wells, soap dishes, and tobacco jars (Maryland Archaeology Conservation Laboratory 2015b). One of the most common items of Rockingham ware made was the teapot with the characteristic dark brown mottled glaze but also with a design featuring a woman drawing water from a well. Referred to as "Rebecka at the Well" these were common items in American homes from the mid-19th century into the early 20th century (Maryland Archaeology Conservation Laboratory 2015b). The Rockingham ware sherd recovered in at the U.S. Military Post at Sauk Centre Site could be part of a teapot spout.

Considering the rest of the ironstone sherds recovered, Balicki (2000:141) reported similar findings in his excavations of Fort C.F. Smith and McBride also reported similar findings in his excavations of the Camp Nelson headquarters complex (McBride 1994:140-142). George Elmore, Chief Ranger at the Fort Larned National Historic said research there confirms that ironstone was not government issue at this time, but it was common for units to purchase ironstone ware, both serving ware and table ware, from unit funds provided by the War Department (George Elmore, personal communication 2020). It is important to note that ironstone serving ware, and table ware sherds are also common to non-military 19th century Euro-American frontier sites so finding this material at the U.S. Military Post at Sauk Centre, while not surprising does not prove a link to the U.S. Army on the site. It is however, from the general time period when the Army was on the site.

What we do know is both Unit One and Unit Three revealed an artifact rich layer at between 10 cm below datum and 30 cm below datum and that most of the artifacts in this layer are datable to the 19th century. We know from the archival evidence the area we were working in saw limited Euro-American occupation before the Army came. After the Army left the area around the site, we were excavating saw increased Euro-American occupation but the specific area we were working on was relatively untouched from the mid-19th century until the 1940s. The Plat Map, Figure 6, shows the area unoccupied by structures in the late 1890s and we know the first actual construction on the site was in 1947 (Sauk Centre *Herald* 1947).

This suggests the material we found is related to the Army occupation of the site. But the material is somewhat out of context as mentioned earlier. The specific location we were excavating was supposed to be a log stockade wall not living quarters. The material we found is indicative of a 19th century Euro-American living quarters.

Knowing that the Officers' Quarters structure was close by it is possible what we found is a midden of some sort. We have virtually no intact items but broken pieces of things. It may well be the generic daily trash deposited outside the Officers' Quarters, more of the sheet midden noted earlier in the metal detector discussion. Although it is a bit distant from where we think the Officers' Quarters building stood. It may also be trash deposited as the Army cleaned up and abandoned the fort in 1865 or it may be trash deposited as the fort was torn down (Versaggi 2000:45-62).

We do not know anything about the Army's departure from the site. The Sauk Centre *Herald* (1947) article refers to a ditch around the site into which trash from the stockade was pushed when the structure was demolished. That was at least 25 years after the soldiers left. However, the article, in part based on an interview with a local resident who was a child at the time the Army occupied the stockade, implies the ditch was outside of the wall. That we hit this ditch seems unlikely. First there was no evidence we were in a ditch from the excavation. Second, based on the Google Earth Overlay (see Figure 7) it is doubtful we were outside the stockade walls. Third, there is no evidence of the ditch other than the Sauk Centre *Herald* article. It is more likely we ran into some sort of midden related to the occupation of the site.

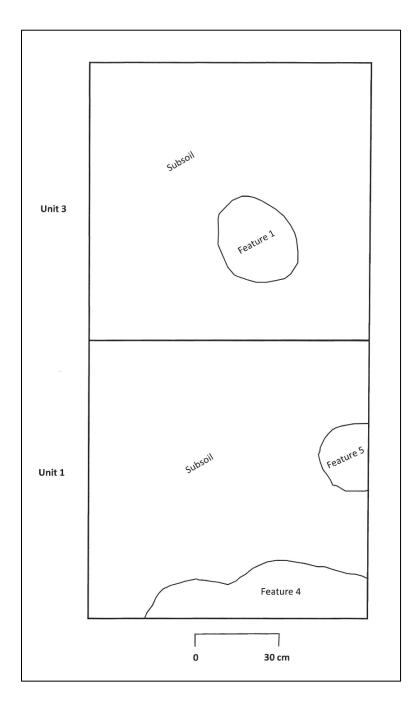


Figure 19. Unit 1 and Unit 3 Plan View Map. U.S. Military Post at Sauk Centre, Minnesota The excavation of Units One and Three confirmed the 19th century presence of Euro-Americans on this site. We found artifacts characteristic of but not unique to U.S. Army occupation of a 19th century site on the American frontier. It is likely we were slightly south of

the original wall. It likely runs from Ash Street on the east through, or very near to, the house at 629 Birch and into the front yard of that lot and on across Birch Street to at least the alley between Birch and Maple and perhaps slightly beyond. The best way to find the original wall, and the expansion wall, is probably to move any follow-up excavations to the front yard of 629 Birch (provided permission to work there is obtained). This area appears to be relatively undisturbed by post Army occupation construction and is relatively free of underground utilities.

Assuming the stockade sat on the site as indicated in Figure 7 lengths of both the original and the second wall must be in the front yard of the house at 629 Birch. Based on the 1896 Plat Map (see Figure 6) it appears that a house has been on the lot at 629 Birch in approximately the location of the current house since sometime in the 1890s making it unlikely the front yard area has been seriously disturbed since.

Units Two and Four were sited based on the metal detector surveys, the Shovel Test Pits and the Google Earth Overlay (see Figure 7) in an attempt to locate the west end of the Officers' Quarters. The information from the Google Earth Overlay Map (see Figure 7) gave us an approximate location based on the 19th century Army Plan Drawing (see Figure 3). The results from the metal detector surveys and STP1 and STP2 suggested we were in an area that had seen 19th century occupation by European-Americans and that a wooden structure of some sort had stood on or very near to where we surveyed. These conclusions were based on the fact that we recovered square nails, considerable ironstone sherds, vessel glass shards and flat glass shards as well as some personal artifacts such as buttons.

We started Unit Two looking specifically for evidence of the west wall of the Officers' Quarters structure. We believed this to be a wooden structure, although we did not know whether it was of frame or log construction, we suspected it was wooden frame based on John Howards' various comments (Howard 1931; SCH 1928) and the recovery of the machine cut square nails in the area during the metal detector surveys. The Army Plan Drawing (see Figure 3) gave us some idea of the size and general orientation of the structure.

Unit Two was a standard one meter by one-meter test unit as prescribed by the Minnesota Office of the State Archaeologist (2011:238-239). It was oriented on a north axis. All dirt removed was screened using ¼ inch hardware cloth and all items recovered bagged by level on site. Unit Two went to a depth of 40 cm below site datum. Because we opened Unit 4 on our last day on site, we opted to set it up as one-half meter by one-meter unit (see Figure 20). Otherwise we followed the process as prescribed by the Minnesota Office of the State Archaeologist (2011:238-239). Unit 4 went down to 43 cm below site datum. The items recovered from Unit 2 and unit 4 are displayed in Table 8 and Table 9.

Table 8. Unit 2, all Levels. Artifacts Recovered During Excavation of the Officers' Quarters. U.S.Military Post at Sauk Centre, Minnesota.

	Artifact Description	Number	Comments
Unit 2/Level 1			10-20 cm Below Datum
	Ironstone Sherds	19	
	Unidentified Shell	6	
	Yellowware Sherd	1	
	Unidentified Ceramic Shard	1	
	Unidentified Bone	5	
	Unidentified Bone	6	
	Unidentified Bone	18	
	Terracotta Flowerpot Sherd	1	
	Vessel Glass Shards	7	5-blue green; 1 dark olive; 1 clear
	Unidentified Bone	20	
	Unidentified Metal Fragments	2	
	Machine Cut Square Nails	5	
	Wire Nails	9	
	Tack	1	
	Wire Fragments	3	
Unit 2/Level2			20-30 cm Below Datum
	Unidentified Metal Fragments	13	
	Vessel Glass Shards	8	3 olive; 1 amber
	Flat Glass Shards	12	aqua
	Shot Gun Shell Cap	1	Remington, possibly from the 1930's
	Wire Nails	7	
	Staple	2	
	Tack	2	one large one small
	Unidentified Wire	2	
	Machine Cut Square Nails	34	
	Unidentified Bone	23	
	Ironstone Sherds	14	
	Unidentified Item	1	possibly bone
	Unidentified Item	1	possibly pewter
	Vessel Glass Shard	1	possible light glass shard
	Vessel Glass Shard	1	embossed with floral design-aqua
	Vessel Glass Shard	1	embossed with floral design
Unit 2/Level3			30-40 cm Below Datum
	Unidentified Bone	1	
	Ironstone Sherds	4	
	Flat Glass Shard	1	
	Wire Nail	1	
	Wire	1	
	Unidentified Metal Fragments	2	

Table 9. Unit 4, all Levels; Artifacts Recovered During Excavation of the Officers' Quarters.U.S. Military Post at Sauk Centre, Minnesota.

Unit 4- Officers' Quarters	Artifact description	Number of Pieces	Comments
Level 1			10-20cm Below Datum
	Unidentified Bone	2	
	Shards of Flat Glass	8	
	Shards of Vessel Glass	2	
	Ironstone Sherds	5	
	Unidentified Ceramic Sherds	2	
	Blue/white Ceramic Sherd	1	
	Unidentified Metal Fragment	1	
	Unidentified Rubber Fragment	1	
	Unidentified Wire Fragments	10	
	Machine Cut Square Nails	13	
	Fragments		
	Wire Nails	2	
Level 2			22-33cm Below datum
	Machine Cut Square Nails	13	
	Fragments		
	Unidentified Metal Fragments	2	
	Ironstone Sherds	7	
	Unidentified Bone	2	
	Flat Glass Shard	1	
	burned bone, unidentified	2	
	Vessel Glass Shards	3	
	Unidentified Wire Fragment	1	
	Unidentified Ceramic Shard	1	
Level 3	No Artifacts Recovered		33-43 cm Below Datum

As can be seen in Figure 20 we did uncover a feature (three) along the east edge of Unit Two. We were unable to determine what that feature might be but assume it is related to the presence of the Officers' Quarters structure. We opened Unit Four in an attempt to follow Feature Three and as can be seen from Figure 20, Feature Three does extend into Unit Four. It appears Feature Three is a roughly circular soil stain that could be a large post like Feature One and Feature Five. It seems likely that Feature 3 is related to the Officers' Quarters structure although determining how requires further investigation. In the process of excavating Unit Four, Feature Two emerged. It is noted in Figure 20. This is a square soil stain covering the east one third of Unit Four making it about one meter by one/half meter in size. The assumption is Feature Two is also related to the Officers' Quarters structure but determining how requires further study.

Table 8 displays the artifacts recovered from Unit Two by level and Table 9 displays the artifacts recovered from Unit Four by level. They are terribly like what we found in STP 1 and STP 2 and the metal detector surveys of the area. Between about 10 cm below datum and 35 cm below datum there is a zone rich with 19th century artifacts reflecting Euro-American site occupation.

In Unit Two we excavated 21 ceramic sherds:19 ironstone, 1 possible yellow ware sherd and one terracotta sherd all in Level 1 at 10 to 20 cm below our datum. In Level Two, at between 20 and 30 cm below our datum, we uncovered 14 ironstone sherds. In Level Three at 30 to 40 cm below datum we found 3 ironstone sherds. The fact that this was the only unit where we found substantial 19th-century artifacts in Level One suggests how undisturbed the accessible parts of the site may actually be. The possible yellow ware sherd is from the Officers' Quarters Area and is consistent with the idea that we are on or near a structure that was used for a 19th century living quarters by Euro-Americans. Yellow ware was a "highly-fired earthen ware with a buff to yellow past" relatively common in North America at the mid-point of the 19th century (Maryland Archaeology Conservation laboratory 2015c). Yellow ware vessels came in a variety of forms, but most were for food preparation or other similar utilitarian functions. Yellow ware was in large scale production by North American potteries from the early 19th century through the 1930s (Maryland Archaeology Conservation Laboratory 2015c). If, as we have concluded, the officers at the U.S. Military Post at Sauk Centre routinely ate in their quarters it is likely that yellow ware food preparation vessels would have existed in one or more of those quarters. This would have been a personally owned item by someone as it is not a military issue item. The other non-ironstone sherd is fragment of a terracotta flowerpot. Ceramic ware of this class is usually unglazed, relatively course and fired at low temperatures (Sutton and Arkush 2009:209).

In excavating Unit Two and Unit Four we also found 69 machine cut square nails or fragments of machine cut square nails. Most of these artifacts were found in Unit Two Level One (36 fragments) and in Unit Four Level One (13 fragments) and Level Two (13 fragments). In Unit Two Level One we found 27 intact clinched nails. This suggests, according to Young's model (1991:18) that we found a site where at least part of a structure was allowed to deteriorate and collapse in place. What happened to the fort after the Army left is unclear.

The Sauk Centre *Herald* (June 1928) published a stockade days edition in June 1928. They interviewed people in town who remembered the fort including several veterans who were stationed there. But there is no reference to what ultimately happed to the structure. The only specific reference to the destruction of the fort is in a 1947 Sauk Centre *Herald* (September 1947) story about finding artifacts from the fort during construction of the house at 631 Birch. This story describes the stockade as torn down in the 1880s and the debris being deposited into the ditch that surrounded the fort and then being filled in. There is, however, no record of a ditch surrounding the fort other than this reference in the Sauk Centre *Herald*.

The presence of the machine cut square nails, especially the number of clinched nails, the limited variety of ceramics, but still variety, and Feature Two and Feature Three suggests we were on, or very near, the site of the Officers' Quarters structure. The question is which way to go to find evidence of the structure itself. Figure 11 shows the distribution of metal detector survey positive target hits in the Officers' Quarters Area. That distribution lies to the east of Unit Two and Unit Four. This suggests a concentration of artifacts of some sort in that area. However, if we assume there might be a limited number of artifacts directly under the structure, we are looking for then it seems likely the best direction would be to the south (NPS 2019).

In these excavations we found considerable evidence of the people who occupied the U.S. Military Post at Sauk Centre. We found three circular features that may be post molds and are likely associated with the fort although in what way we do not know. There have been no other structures in the area of our excavations for these features to be associated with. We also found Feature Two which could be a pit of some sort and associated directly with the Officers' Quarters structure. There is also little doubt that all four of these features are human made. However, to understand what each was requires additional exploration.

The available evidence does suggest that with Unit Two and Unit Four we were near to the Officers' Quarters structure. An alternative explanation does exist for at least some of what we found in Unit Two and Unit Four. If we enlarge Figure 3 it becomes clear there is a west facing door in the Officers' Quarters structure. It has been suggested several times in this discussion that at least part of what we excavated was a midden of some sort related to that structure.

That west door to the Officers' Quarters structure would have opened near to where we put in Units Two and Four. It is possible what we found in these two units is part of the sheet midden created by three years of discarding trash from the Officers' Quarters structure at least the room on the west end (Versaggi 2000:45-62). Although the presence of the larger numbers of machine cut square nails, especially the clinched nails, argues that there is more to this possible midden than the residue of three years of residential occupation of the structure. However, that also requires additional research.

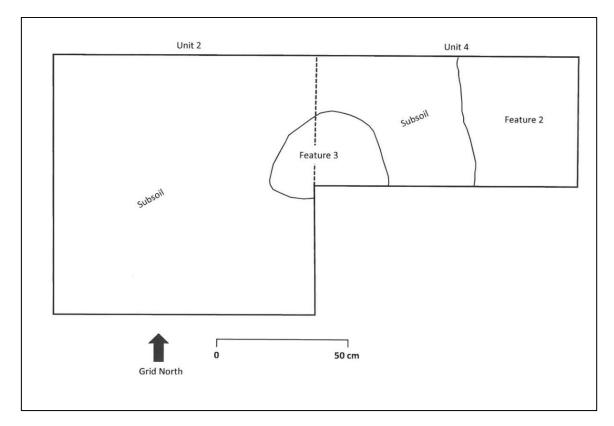


Figure 20. Unit 2 and Unit 4 Plan View Map, U.S. Military Post at Sauk Centre, Minnesota.

Stratigraphy

According to the United States Department of Agriculture (2020) the soil at the site of the U.S. Military Post at Sauk Centre is Arville Sandy loam and Till Prairie with 0 to 2% slope. This is broadly typical of the western part of Stearns county Minnesota where the site is located.

The stratigraphy of the U.S. Military Post at Sauk Centre Site is not especially complex. As can be seen in Figure 21 there is are basically three levels. Stratum A is about 5 to 6 cm thick and is a black sandy loam. Stratum B is between about 19 cm to 23 cm thick. It is also a black sandy loam with a thin lens (3-5 cm thick) of gravel and pea gravel running roughly through the middle of Stratum B (see Figure 22). Stratum C was encountered between about 26 and 28 cm below surface and is a culturally sterile dark yellowish brown, sandy loam with some pea sized gravel and mottles of black sandy loam.

As can be seen from the data displayed in the Tables, Stratum A contained a mix of modern artifacts and 19th-century artifacts. Stratum B was where most of the 19th century artifacts were found, and we found no artifacts in Stratum C. As was pointed out earlier in this chapter, there is an artifact rich zone which overlaps somewhat with the lower part of Stratum A and all of Stratum B. That area is from about 10 to 15 cm below datum to about 30 to 35 cm below datum and contains most of the 19th-century artifacts on the site.

This interpretation is reinforced by the metal detector surveys. In the VLF survey of the Barn Area most 19th -century artifacts were recovered between about 12 cm below surface and about 20 to 25 cm below surface. The same is true with the VLF Survey of the Officers' Quarters Area, although one dig did go to 41 cm below the surface. In the PI surveys of both areas most 19th-century artifacts were recovered at 12 to 30 cm below the surface. This overlapped Strata A and B. Below about 40 cm was sterile soil.

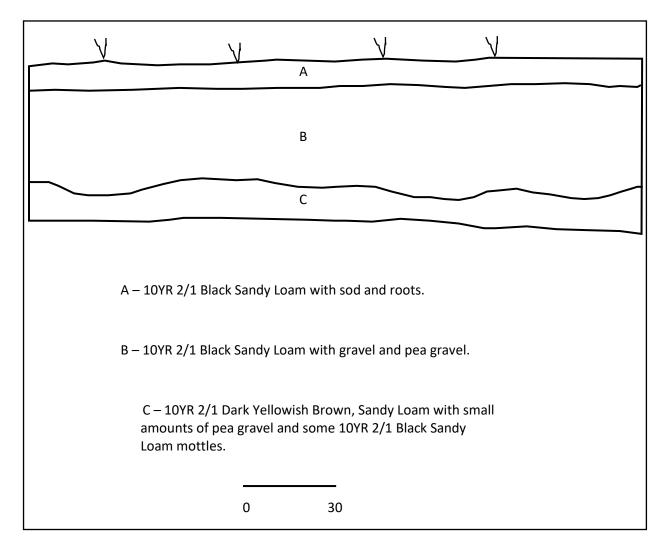


Figure 21. Profile of the north wall of Unit 2 and Unit 4 showing the various stratigraphic levels.



Figure 22. Photograph of the North wall of Unit 2 and Unit 4.

Chapter VIII: Conclusion

The analysis offered in this paper sought to address the following questions:

- Can we find physical evidence on the suspected site of the U.S. Military Post at Sauk Centre conclusively showing that the U.S. military stockade once stood there?
- As we seek to answer the core question, we will also address the following supporting research questions.

Supporting Research Question 1: If we find physical evidence of the U.S. Military Post at Sauk Centre is it characteristic of mid-19th century American Military activities and can we discern the horizontal and vertical limits of these deposits?

Supporting Research Question 2: If we find physical evidence of the U.S. Military Post at Sauk Centre does it allow us to draw any conclusions about the Sauk Centre garrison and specifically about the daily life of the individual soldiers stationed here?

Supporting Research Question 3: In the process of identifying the site we will address, primarily through archival research, the following questions:
When was the federal garrison established?
How big was the federal garrison?
What units were assigned to the federal garrison?
What did the federal garrison do (military operations and daily activities)?
When did the federal garrison leave?

During the inquiry, an additional research question evolved regarding the use of Pulse Induction

and Very Low Frequency metal detectors in researching an urban historical archaeology site.

Considering the core research question: Can we find physical evidence on the suspected

site of the U.S. Military Post at Sauk Centre conclusively showing that the U.S. military stockade

once stood there? The archival research phase of the project produced considerable evidence

pointing to the location of the fort. This included the interviews and writings of John Howard

(Howard 1931; Sauk Centre Herald 1928a and b). Howard was an officer in one of the regiments

stationed at the U.S. Military Post at Sauk Centre. We also had the report of the Sauk Centre

Militia Company Commander (NA: DC, SC, SCHM 2018). And, we had the boulder identified in Figure 1. But no photos of the fort existed. However, there were several contemporary drawings made while the Army was there and at least one painting of the stockade made after the Army left. We did, as pointed out in the narrative, use this and other information to determine what the fort looked like and how the fort sat on the site.

Specifically working from the Army Plan Drawing (see Figure 3) and the Google Earth Overlay (see Figure 7) we conducted VLF and PI metal detector surveys of the site and we did detect artifact concentrations consistent with our assumed site plan (see Figure 3 and see Figure 7). Using the metal detector surveys as a foundation we conducted shovel testing at two locations and again identified artifacts consistent with the structure we thought stood on the location being tested. Based on this evidence we put in two test units looking for the Officer 's Quarters. We again found artifacts characteristic of the structure we were looking for. We also found Features Two and Three. Feature Three is a roughly circular soil stain that could be a post mold. It is likely associated with the structures of the fort. Feature Two is a square soil stain that is probably a pit, or some other component, associated specifically with the Officers' Quarters structure. Additional investigation is required to clarify what Feature Two and Feature Three are.

Concurrent with the search for the Officers' Quarters we also undertook a search for the original stockade wall. Based on archival research (Howard 1931) we believed the wall to have been made of 12 to 18-foot tamarack logs sunk vertically into the ground to a depth of at least two feet.

Using our archival research to estimate the location of the wall we put in two test units 1 and 3. Again, we found artifacts characteristic of the type of site occupation we knew had occurred during the early 1860s. We also found Feature One, Feature Four, and Feature Five.

Feature Four is a tree root. Feature One and Feature Five are circular soil stains that are likely both post molds. They are of the right size to be part of the wall identified by Howard (1931) but they are too far apart to be part of the wall and we found no evidence of a construction trench which would have been used by the soldiers building the wall to set the logs vertically.

Feature One and Feature Five represent something other than the wall, but something certainly associated with the stockade. As noted in the discussion there has been nothing else on the site, we were excavating except the stockade wall. The discussion offers several ideas about the purpose of Feature One and Five but again clarification of their purpose requires additional research.

In addition, we also discovered that in the part of the site we called the Officers' Quarters Area there is, between about 15 cm below the site datum and 35 cm below the site datum, an artifact rich layer. Most of these artifacts are 19th-century in origin. This include machine cut square nails, ironstone ceramic sherds, sherds of other period ceramics, period buttons, and a small number of personal items. These are all the types of things found on other U.S. Army sites of the period (Balicki 2000; DeVore and Hunt 1993; Eichelberger 2019; Gerow 2003; McBride 1994; McNutt 2018; Tveskov and Rose 2019; George Elmore, personal communication 2020). Of these general artifacts recovered all are also characteristic of civilian 19th century Euro-American frontier sites. Two of the personal items however may offer a link to the U.S. Army's time on the site.

As noted in the discussion, Ryan McNutt (personal communication 2019) suggested that VLF Positive Target Hit 42 (see Figure 14) is a non-military issues sash buckle commonly used by Civil War officers of both sides. In a research article (McNutt 2018) the same individual reports finding artifacts similar to VLF Positive Target Hit 43 (see Figure 15) in a site used by officers of Georgia state troops guarding a Confederate prison camp. He describes the items as suspender clips. McNutt argues (2018:6, 41) that finding civilian items such as suspender clips in a site where state troops lived is not unexpected because the state troops had closer ties to civilian life than did the volunteer soldiers of either Army. They usually served for brief intermittent periods and often had very non-standard uniforms or no uniforms.

This presents, as pointed out in the earlier discussion, an interesting link to the U.S. Military Post at Sauk Centre. We know there were Minnesota State Troops at the U.S. Military Post at Sauk Centre specifically in the fall of 1862 and into the winter and spring of 1863 and again in the summer and fall of 1863, this was the Minnesota Mounted Rangers (MNAGO Annual Report 1862:240).

The Minnesota troops, like their Georgia counterparts on the other side, would have more direct links to civilian life than the U.S. Volunteers also at the fort. That we recovered VLF Positive Target Hit 43 in the Officers' Quarters Area lends credence to McNutt's observations and to the possibility that this item and VLF Positive target Hit 42, also recovered in the Officers' Quarters Area, are evidence of the U.S. military presence on the site. These are items from civilian life of the period likely carried into the military setting. But they are not military issue items.

So, the test units did reveal features that are likely linked to the U.S. Military Post at Sauk Centre stockade and the structures it enclosed. To understand exactly what those features are and what purpose they served requires additional investigation. In the metal detector surveys we did find artifacts that suggest the presence of U.S. troops on the site during the period in question. Turning now to supporting research question 1: If we find physical evidence of the U.S. Military Post at Sauk Centre is it characteristic of mid-19th century American Military activities and can we discern the horizontal and vertical limits of these deposits? We did find evidence of 19th century occupation by Euro-Americans. That is displayed in the Tables. There is evidence, as noted above, that links the Officers' Quarters Area to Civil War era U.S troops. There is also evidence, that will be reviewed below, linking other parts of the site with activities consistent with how we believe the Army used a particular area.

The vertical distribution of the artifacts recovered is generally consistent in the limited area of the site where we did test units. We found contemporary items beginning at the surface down to about 10 to 20 cm. Below that for about 20 cm to about 40 cm we generally found 19th century items. At about 40 cm we stopped finding anything. In the 20 cm to 40 cm range is where we found VLF Positive Target Hits 42 and 43 which are our primary physical artifacts noting the presence of U.S. forces on the site during the Civil War. We did find other artifacts in the Barn Area, notably hole-in-cap cans, in this same depth range. Since we know the U.S. Army used the barn as a Commissary Warehouse from 1862-1865 these items also tend to support U.S. Army occupation of the site during the years 1862 to 1865.

As to horizontal distribution, we did not do a systematic survey of the entire site. In the areas we did survey, 3.5 meters excavated in test units and another 15 or 20 meters surveyed with metal detectors we found artifacts concentrated generally where we expected based on the Google Earth Overlay (see Figure 7). That is near buildings and in areas where there would have been concentrated human activity. A complete survey of the site is not possible because of the modern construction.

What we do not have are any artifacts specifically identifiable as United States Army in origin. In a discussion with George Elmore, Chief Ranger at the Fort Larned National Historic Site (personal communication 2020), I confirmed that what we found is typical of a 19th-century U.S. Army frontier site. I raised the issue of the lack of army specific artifacts such as coat/blouse buttons, hat emblems and belt buckles and the like. He said the fact that we did not have belt buckles and hat insignia was not unusual. Such items were closely accounted for. He said the absence of lost uniform buttons was a little unusual but not totally unexpected since we had not been able to excavate the Enlisted Quarters Area. Based on what we know about site occupation the specific areas where we dug were only occupied by the Army. There has been no post-Army construction on these parts of the site. There has of course been disturbance associated with utility lines, nearby construction, landscaping and like activities (Kleinvachter, personal communication 2018).

In response to Supporting Research Question 2: If we find physical evidence of the U.S. Military Post at Sauk Centre does it allow us to draw any conclusions about the Sauk Centre garrison and specifically about the daily life of the individual soldiers stationed here? The physical evidence recovered on site allows for several observations about the daily life of the soldiers assigned there. During the metal detector survey of the Barn Area we found several hole-in-cap cans and several tin cans deteriorated to the point we can offer no other observation than that they were probably tin cans. But, based on what we know about U.S. Army Commissary practices of this period and about canning practices of period it is possible to conclude the soldiers probably ate canned fruits and vegetables and drank at least some condensed milk. As was discussed earlier, canned food was introduced well before the Civil War and used extensively by the War Department during the War (Bitting 1915; Busch 1981; Rock 1984; 1993). All post maintained some sort of Commissary Department Warehouse facility for storing and disbursing the subsistence items stored there (NPS 2016).

We also know that at least some of the soldiers at the U.S. Military Post at Sauk Centre, most probably the officers, dined on ceramic table service. The Ironstone sherds and other ceramic sherds recovered in the vicinity of the Officers' Quarters clearly suggests this. This would have likely been personally owned items. Units would have been able to use unit funds furnished by the War Department to purchased ironstone mess items (table and kitchen wares) for the organized unit mess (George Elmore, personal communication 2020). It is unlikely that officers would have had access to these items.

We know that there were at least a few specific civilian items of table ware in use at the Fort. We have the Rockingham ware sherd recovered in the Officers' Quarters Area. Study of the sherd concluded it is possibly part of a Rockingham ware teapot spout (Maryland Archaeology Conservation Laboratory 2015b). Because this was recovered in a test unit where we were looking for the original stockade wall and not in one of the test units in the Officers' Quarters Area it is possible this item is linked to occupants other than of the Officers' Quarters. However, that is unlikely. Enlisted soldiers would probably not have had items like a Rockingham teapot at a remote site like the U.S. Military post at Sauk Centre. That the officers would have had such items reflects the findings of Tveskov and Cohen (2014) and Eichelberger (2019) and Tveskov and Rose (2019) about social differentiation between officers and enlisted soldiers at U.S. Army frontier posts in the mid-19th century.

In terms of their personal lives the physical evidence recovered on-site also suggests that at least one person at the fort smoked. One of the most interesting artifacts recovered from this site is shown in Figure 16, this item is the pipe wind cap. This would have likely fit a briar pipe and we know, as was discussed previously in this paper, briar pipes were relatively common at frontier forts in the mid-19th century (Pfeiffer 1982:203-205; Pierson 1987:iii-vi, 21-24). Pierson (1987) suggest that while briar pipes were common to Army sites from about 1860 through the end of the 19th century clay pipes remained popular among enlisted soldiers, most likely because of their relatively low cost. Diane Zentgraf's recent work (2018) analyzing clay smoking pipe distribution and Forts Hoskins and Yamhill in Oregon also supports this conclusion.

Wind caps appear to have been introduced about the middle of the 19th century and specifically used with briar pipes (Pfieffer 1982:204). Pierson's comments (1987:21-24) about the extent of pipe smoking in the Officers' Quarters at Fort Vancouver Washington suggests how popular pipes were on U.S. Army posts during this period. This makes a broken wind cap something that we would expect to find discarded in or around a 19th century structure occupied by American military personnel.

We also know something about the living arrangements for the soldiers at the U.S. Military Post at Sauk Centre. Based on archival research (we were unable to complete the planned exploration of the enlisted quarters) we know the they lived in 15 feet by 26 feet rooms with some number of other soldiers. In the 19th century U.S. Army units often bunked in company size (50 to 100 person) barracks bays. The Enlisted Quarters rooms shown on the Army Plan Drawing of the site (see Figure 3) are too small to accommodate that many men in one room. Figure 3 shows two barracks blocks with five rooms each 15 feet by 26 feet. Clearly the living space for the Enlisted men was communal.

With the officers the living space would have been communal to some degree but not as communal as the life of an Enlisted soldier. The Officers' Quarters building shows four rooms, two are 12 feet by 12 feet, and two are 16 feet by 15 feet. It is likely the smaller rooms were for

lieutenants and the larger rooms for a captain, or the post Commander. Occupancy would have likely depended on the number of units assigned to the post. Based on what we know (Babcock 1963:280-281) there was always one company sized unit at the Fort-100 enlisted soldiers at full strength and 3 officers. Most Civil War era units were never at full-strength. If there was one company at the Fort each officer would have likely had a single room, maybe with one or more vacant rooms. If there was more than one company, the officers might have double-up on rooms depending on the strength of the company. But, still not as communal as with the enlisted men.

Supporting research question three is really a set of questions that pertain to why the Fort was built and why the soldiers were stationed where they were. Specifically:

- 1. When was the federal garrison established?
- 2. How big was the federal garrison?
- 3. What units were assigned to the federal garrison?
- 4. What did the federal garrison do (military operations and daily activities)?
- 5. When did the federal garrison leave?

These are answered primarily through archival research.

What became the U.S. Military Post at Sauk Centre was built in the fall of 1862 and enlarged in the winter and spring of 1863. It, along with several other posts, was as part of a line of forts across Minnesota intended to separate the white settlement in Minnesota from the Dakota (Clodfelter 1998:72-73; MNAGO Annual Report 1866:339:186). It became a Federal garrison in late September 1862 when the 25th Wisconsin Volunteer Infantry Regiment took over the site from the Sauk Centre Militia Company. The Militia Company had been working on building the stockade structure the 25th Wisconsin continued that effort along with taking up active patrolling along the Red River Trail route between Sauk Centre and Alexandria where there was another stockade. In October 1862, the 25th Wisconsin was relieved by the 8th Minnesota Volunteer Infantry Regiment. The 8th Minnesota continued work on the fort expanding it by spring 1863 to look like the drawing in Figure 3. The 8th Minnesota also continued active patrolling west along the trail to Alexandria. The 8th Minnesota remained at Sauk Centre until early 1864 when it was relieved by the 2nd Minnesota Volunteer Cavalry. The 2nd Minnesota stayed at Sauk Centre until the end of the Civil War (Babcock 1963:276-280; Carley1976:87; Clodfelter 1998:72-74).

At several points during this period the Volunteer troops of the regular Army were augmented by Minnesota State troops. These latter were military units under the control of the state. Called the Minnesota Mounted Rangers they were at Sauk Centre from the fall of 1862 to spring 1863 and from mid-summer 1863 through the end of that year. In both deployments the state troops were under orders to cooperated with the federal forces already at Sauk Centre (Clodfelter 1998:73; MNAGO Annual Report 1866:195-196). It appears that there was usually no more than a company of federal troops (about 100 soldiers) at Sauk Centre at any one time. The size of the Minnesota Mounted Rangers units is not known but it is unlikely they exceeded 100 members.

Throughout the time the U.S. Military Post at Sauk Centre was garrisoned the primary mission of the troops there was to keep the Dakota west of the line of the central Minnesota forts. This primarily entail patrolling between the forts along the line. The soldiers at Sauk Centre patrolled south to Paynesville and west to Alexandria. They met patrols from those two garrisons at predetermined way points and turned back (Howard 1931).

The volunteer troops left the central Minnesota forts in 1865. The exact date the forts were shut down is not clear and it probably varied some from location to location. There are references to Minnesota State Troops continuing to patrol parts of the Red River Trails into 1866 (Clodfelter 1998:75). But this was farther west than Sauk Centre. We do not know the exact date the last soldier, federal or state, left the U.S. Military Post at Sauk Centre but it was probably sometime between late 1865 and mid-1866 (Howard 1931). We do not know but believe once the soldiers left the stockade stood vacant for some time. As the town of Sauk Centre grew up around it is likely that parts of the structure, window frames, door frames and such, was dismantled and incorporated into other buildings in the new town. However, we do not have evidence archival or archaeological suggesting this happened. The only reference to the structure's demolition we have is a comment in a 1947 newspaper article (Sauk Centre *Herald* 1947) that the stockade was torn down in the 1880s. This would be consistent with when development began to expand in that part of Sauk Centre.

As noted at the beginning of this section during the inquiry into this project an additional research question evolved regarding the use of Pulse Induction and Very Low Frequency metal detectors in researching an urban historical archaeology site. One of the questions we found ourselves asking was not knowing for sure the location of the stockade on the site how would we know where to dig? Using the Army Plan Drawing (see Figure 3) as a guide and knowing where certain structural features stood on the landscape was a huge help. But, based on the literature regarding metal detectors we concluded that deploying metal detectors on the site would likely help us identify artifact concentrations that would facilitate our excavations in a residential neighborhood of Sauk Centre, Minnesota.

Using the maps and drawings we identified three locations on the fort the Barn and the Officers' Quarters and the Enlisted Quarters. In the Barn Area we expected to recover artifacts characteristic of the types of activities that occur in such a structure (Tables 1 and 2). The tables display artifacts such as hole-in-cap cans characteristic of a United States Army Commissary

warehouse operation of the mid-19th century (George Elmore, personnel communication 2018). Table Three and Four display artifacts recovered such as ironstone sherds and vessel glass shards from the Officers' Quarters area. This latter group of artifacts is suggestive of sheet midden commonly found outside a 19th century residence such as the Officers' Quarters (Versaggi 2000:42-65). We viewed this material as basically confirming that were in the general vicinity of the structures we were seeking. We did preliminary work in the Enlisted Quarters Area but eventually stopped that work concluding we were in the wrong location.

While we were still required to dig holes in people's yards, we dug smaller holes than we might otherwise have needed to do to excavate the metal detector finds. Based on those metal detector finds and the maps and drawings of the site we were able to target our follow up excavations (shovel testing and units) so as to do minimal damage to the settings. The data from the metal detector surveys is displayed on Figure 8, Site View Map and in Figure 9, Barn Are View Map and in Figure 10, Officers' Quarters Area View Map.

We found that the VLF machines gave us a good view down to about 20 cm below surface. We found the PI machines gave us a good view down to about 35-40 cm below surface. In the case of the Barn Area the finds in the two metal detector surveys caused us to conclude that we had found the site of Solomon Pendergast's barn and the U.S. Army Commissary Warehouse, In the case of the Officers' Quarters Area the metal detector surveys caused us to conclude we had located the Officers' Quarters structure for the U.S. Military Post at Sauk Centre. The follow-up decision in the latter case was to sink Shovel Test Pits and test units which verified that conclusion. In the former case the follow-up decision was to do no additional exploration for the Barn Area because we believe most of the structure itself to be under 7th Street. The metal detectors probably saved us time and helped us focus our efforts in places on the site where we were likely to find something.

The archaeological evidence has told us that the fort existed, given us some idea of where the structures that made up the fort stood and what they were used for and yielded evidence of the daily life of the soldiers stationed there. There is more archeological work to be done at this site if it is to be completely understood. The archival research has told us who, as in what military units, were at the fort and what they did and how long they stayed.

What we have is a picture of the U.S. Military Post at Sauk Centre. It had a very brief active life. But, for the brief period it was active it played a key role in projecting United States military power into a remote part of the national frontier. The presence of the fort and its soldiers helped calm white citizens of central Minnesota during a period of significant conflict with the Dakota and the Ojibwe. The presence of the fort and its soldiers helped convince the Dakota that additional resistance to Euro-American advancement into Minnesota was probably futile and the loss of their lands was permanent. Did the presence of the fort and its soldiers helped convince the British that the United States could protect its far-flung borders even in a time of civil war? That is less clear, but it probably helped.

This project has elevated a dimension of the US-Dakota War of 1862 and the Minnesota home front not well understood. There were really two official responses to the US-Dakota War of 1862. One was in August-December of 1862 and directly a reaction to the hostilities between the Dakota and the Euro-Americans in the Minnesota country. It ended with the executions in Mankato in December 1862.

The other was a more deliberate response involving the deliberate deployment of federal troops and the deliberate construction of substantial federal military facilities along a frontier line

in western and central Minnesota. The purpose was to ensure everyone, Euro-American, Native American, foreign national recognized alike United States sovereignty, and arguably hegemony, over the Minnesota country.

As to the U.S. Military Post at Sauk Centre, there is additional archeological research that could be done. On site, we were close to the stockade wall and the Officers' Quarters structure. Moving the excavations for the former to the front yard of 629 Birch might yield a construction trench and associated evidence of the wall. Analyzing the metal detector Positive Target Hits in the Officers' Quarters Area might provide an idea of what direction to take the search from Unit Two and Unit Four. It would also be worthwhile to secure permission and do a complete metal detector survey of the site. The point would be to look for clusters of Positive Target Hits that match the location of structures associated with the fort. Limited excavation of some of those Positive Target Hits might help verify the structure locations. Finally working with the community to develop better site signage and interpretation is something to consider.

The community values this site, or at least a segment of the community does. During our time in Sauk Centre numerous people stopped by the site to watch and ask about our progress. Most, although not all, were probably over fifty. For an older segment of the community the stockade is part of the Euro-American immigrant heritage of the area. It is important to note that this focus is primarily on the role of the settlers' stockade built by the Militia Company as a rallying point for area citizens during the August 1862 fighting. Vince Botz (2014), Mitchell (1915) and others have chronicled the story of the Militia Company building the stockade in 24 hours while the women and children rolled bandages safe inside Solomon Pendergast's store. There is some archival evidence supporting this story (SCHS SF 2018a). It is embedded in the origins of the local community.

In preparation for our work at Sauk Centre, Dr. Mann and I made a presentation at the Sauk Centre Historical Society in the Spring of 2018. The presentation was reasonably well attended but as noted above, most of the attendees were over fifty. Most were deeply interested in what we had to say. We laid out what we saw as the history of the site and asked about people's experiences with the area. We got some feedback and learned more details about the 1947 (Sauk Centre *Herald* 1947) incident where a construction crew starting the house at 631 Birch uncovered artifacts related to the stockade.

During our time on site, as noted, we had visitors both at the summer and the fall digs. In the summer Dr. Mann talked to the local newspaper. In the fall we both spoke with the local public access cable channel. In the fall we also returned to the Sauk Centre Historical Society to report on what we found.

Throughout people were genuinely interested in the site and wanting to know more about its history. In addition to what is outlined in this paper the establishment of the U.S. Military Post at Sauk Centre probably played a role in ensuring Sauk Centre became a permanent settlement and the largest settlement in northern Stearns county. At a time when Euro-Americans were moving into the region in increasing numbers the fort at Sauk Centre and the other garrisons along the central Minnesota line were centers of stability and safety for the new residents. That reasonably prosperous communities grew up around many of them is thus not surprising and is an aspect of the early Minnesota statehood period that should be preserved.

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