Results of Archaeological Reconnaissance Survey
for the University of Wisconsin Crew House,
Madison, Wisconsin

Midwest Archaeological Consulting Research Report Number 26

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ABSTRACT

During the summer of 1995 Midwest Archaeological Consulting of Madison, Wisconsin conducted an archaeological reconnaissance survey for the architectural design firm of Engberg Anderson of Milwaukee, Wisconsin. The reconnaissance survey involved the project area of a planned new crew house construction project on the University of Wisconsin campus in Madison. The survey found that abundant prehistoric cultural artifacts are present in the project area. These are believed to represent the previously recorded site known as 47-DA-124.
INTRODUCTION

The following brief report describes the results of an archaeological reconnaissance survey conducted by Midwest Archaeological Consulting at the site of a proposed new crew house on the University of Wisconsin-Madison campus in Dane County, Wisconsin (Figure 1). The survey was conducted for the Architectural Design firm of Engberg Anderson of Milwaukee, Wisconsin to fulfill the cultural resource management requirements of the planned construction. This project is identified by the State Historic Preservation Compliance Number 93-2156/DA. The goal of the archaeological survey was to locate and identify any archaeological resources present within the project area, and if any were found to present a preliminary assessment of their age, extent and condition.

As a result of the survey, evidence of prehistoric cultural activity believed to be associated with a previously recorded camp or village site was found in the project area. Various types of Indian artifacts were found throughout the project area. We believe that this cultural material is associated with the unnamed site recorded in the Wisconsin Archaeological Site Inventory at the State Historical Society of Wisconsin as 47-Da-124.

Upon completion of the survey, Engberg Anderson was briefly informed of the results in a letter (Appendix 1), and was also informed that we believed that the site within the project area has potentially intact prehistoric archaeological deposits. Telephone consultation between the University, the State Historical Society and the Principal Investigator resulted in an understanding that a brief report would be prepared for the Historical Society to review for concurrence with Midwest Archaeological Consulting's recommendation that further investigation of the site was warranted in order to determine the significance of the archaeological deposits. The following constitutes that report.
PHYSICAL SETTING

Local Physiography:

The project area lies on the south shore of Lake Mendota at the site of a small peninsula of land in University Bay. Lake Mendota is the largest of a chain of four large and several smaller lakes that occur on the Yahara River drainage in Dane county. Broad marsh lands border these lakes at a number of locations.

The lakes and marshes are the remains of Glacial Lake Yahara, which was formed during the retreat of the Wisconsin glacier by meltwater flowing along, and filling in the depressions adjacent to the ice margin. This flow of glacial meltwater formed the modern Yahara river drainage which begins northeast of Lake Mendota and winds slowly to the southeast with a very shallow grade through numerous lakes and extensive marshes, often without a clearly defined channel. The pre-glacial drainage of the Four Lakes district would have been deeply entrenched similar to the mature dendritic system of the driftless area. The bedrock contours beneath the glacial drift in Dane county show the existence of a major river channel that may have been the original pre-glacial route of the Wisconsin River (Michelson 1985).

The federal government land surveyors' records of the pre-European settlement vegetation cover of Wisconsin, as compiled by Finley (1976) indicate that the south shore of Lake Mendota in the project vicinity was a mixed oak deciduous forest comprised mainly white oak, black oak and bur oak. The grove of woods in the project area has several large mature black oaks, box elder, a few red pines and shrubbery.

The soils on the highest part of the project area are classified as Dodge silt loam, 2 to 6% slopes (Glockner and Patzer 1978). The Dodge series silt loams are formed under mixed hardwoods in loess over a sandy loam till. The surrounding flatter portions of the project area are classified as Colwood silt.
The Colwood series soils are usually poorly drained and develop on low benches and old lake basins. Soils in the project area were partially eroded.

Specific Description of the Project Area

The crew house project area covers approximately 4.5 acres of land in the southwest quarter of section 15, T 7 N, R 9 E, in the City of Madison on land owned by the University of Wisconsin, formerly part of the University farm (Figure 2). It extends from the north wall of the University Natatorium to the small peninsula of land forming the southern cove of University Bay on the south shore of Lake Mendota.

The project area encompasses a grassy knoll and partially wooded area north of the Natatorium, the Schuman Shelter, parts of Willow Drive and the lake shore bike path, the Willow Creek Beach, gravel parking lot, a life guard tower and recreation area, and a small heavily landscaped and paved area north of the tennis courts. A portion of the grassy knoll in the southeast portion of the project area has been leveled with grading and fill to create a level fairway that had previously been maintained as a practice putting green. It is still used today by UW Golf classes as a “chipping green”. Three grounds maintenance sheds are located near the linear mound along the south edge of the project area, along with a gravel drive that bisects the woods.

The project plans for the proposed new UW Crew House call for two new buildings to be erected, a large facility to be built in the wooded grove between the Schuman Shelter and the grounds storage sheds and smaller building on the peninsula. The beach area would also be reconstructed. Figure 3 is a schematic of the proposed ground plan for the project.
Figure 2: Project Location on the Madison West 7.5 minute USGS map.
ARCHAEOLOGICAL BACKGROUND

Prior to field work a records and literature search was performed using the resources at the State Historical Society of Wisconsin. These included in part, the State Archaeological Site Codification Records and Maps, Burial Office files and records, historical Dane County plat maps, and, especially relevant, the Charles E. Brown Manuscripts.

In the sections surrounding the project area the majority of archaeological sites recorded were the highly visible and conspicuous mound groups of linear, conical and effigy mounds. In section 15 and the five surrounding township and range sections (14, 16, 21, 22 and 23), of twenty-five prehistorical archaeological sites recorded, eighteen of them are mound groups. Effigy mounds were abundant around the lake shores in the entire Four Lakes District.

Three partially overlapping campsites are reported from Picnic Point (Da-122, 123, 501) in section 15; another near Picnic Point (Da-128) in section 16. Little is definitely known about these campsites, but they are probably multicomponent.

Near Eagle Heights, half a mile south of Second Point a fluted point was found in a hillside field (Da-813) along with debitage and other lithic artifacts. Although Da-813 may be a multi-component site, it does indicate Paleo Indian occupation in the vicinity.

A possibly Archaic (?) campsite site (Da-531) is reported from the lake front at Francis Street in section 13, identified from water-worn braches.

In section 15, completely surrounding the project area is Da-124, a campsite/village site that once spread around the wooded knoll. Da-124 was reported by Charles E. Brown in 1905 as a camp and workshop site in a cultivated field east of the Willow Creek, and south and east of the Willow
Creek mounds (Da-119). The pasture containing two linear mounds sloped down to the creek bottom. In the field east of the pasture Brown reported boys had found arrow points and potsherds. These fields have been developed by the University into dormitories, parking lots, tennis courts and the Natatorium. In December of 1928 Charles E. Brown noted that a "wigwam site" (campsite) was indicated in the former University grove on the Lake Mendota shore near the University Creek Mound group. The University had begun using the wooded grove as a hog-yard and the animals had disturbed the forest sod exposing hearthstones. This site is assumed to be part of the same campsite or village previously reported east of the pasture. State Historic Preservation Site Codification maps broadly place Da-124 as an area at the southeast end of University Bay, bounded by Babcock Drive to the east and Observatory Drive to the south, completely surrounding the Willow Creek Mound Group Da-119. Except for the wooded knoll, the lake front terrace and a few isolated landscaped remnants all remaining portions of Da-124 have been disturbed.

Within the project boundaries, but not in areas of currently planned construction or ground disturbance, are two prehistoric linear mounds of the Willow Creek Mound Group, 47-Da-119. This mound group has been referred to by various names in the literature including "Willow Drive Mounds" (State Site Codification Form), "University Group No.3" (Brown 1912), "Willow Drive Mound Group" (Mackinnon 1985), "Willow Drive Creek Group" (CEB Manuscripts) and "University Creek Group" (Metal plaque set in concrete on bird effigy). These mounds today no longer conform very well to the original map platted in September of 1909 by Charles E. Brown. Linear Mound No.1 was mapped as a squat club-shaped tapering mound 66 feet long with an odd bulge on one side of the thick end. Linear Mound No.2 was thinner and longer, 143 feet, tapering in the opposite direction roughly in alignment with Mound No.1. It had two appendages, one at the thick end opposite the bulge in Mound No.1, and another on the opposite side past the midpoint. The sod from the tapering tip of the longer mound had already been removed for a University project at the time of Brown's sketch. Both linear mounds were later excavated and reconstructed by Brown in 1937. The third mound in this group is a bird effigy south of Willow Drive west of the project area. It was mapped as having a body 100 feet long directly in line with Linear No.1. At
the time of Brown's first map a circular turnabout drive had cut into the tail, mutilated one of the wings, and altered the head in what Brown called "an inexcusable error in landscape engineering".

Charles E. Brown's excavation of the linear mounds and bird effigy in the Willow Creek Group provided some details on mound construction as well as a record of the human burials in the mounds and the artifacts recovered from the mound fill. Details of the excavations are available in the Charles E. Brown Manuscripts (Brown n.d.) and in Baerreis (1966). Because of their already disturbed provenience artifacts in the mound fill represented only accidental inclusions from the Effigy mound builder's borrow pits. What they do represent is a mixed sample of the previous occupations of the area, with a high probability of them coming from the surrounding site, Da-124. Included in the mound fill were flakes, projectile points, stone tools, pottery fragments and fire-cracked rock. From the mound fill of the bird effigy were recovered 1 Madison Side-notched, point, 1, Monona Stemmed point, 5 Waubesa Contracting Stem points, three scrapers, a core and an unspecified number of flakes of various colors. The Madison Side-notched would be called Raddatz-like today (see illustration in C.E.Brown, n.d. Vol 3:871). The Waubesa Contracting Stem points are often diagnostic of Early or Middle Woodland occupations. Potsherds found in the fill were called "brown ware", tempered with crushed rock, cord-marked on the exterior and black on the interior. One cord marked rimsherd was decorated with diagonal trailed lines and another thin rim was flattened at the lip.
BIOLOGICAL HAZARD BACKGROUND
AND ITS INFLUENCE ON THE PRESERVATION OF SITE 47-DA-124

One of the factors influencing the preservation of the wooded grove on the pasture of the old University Farm is concern over possible contamination of the soil with endospores of Bacillus anthracis. This possible contamination stems from two anthrax outbreaks among farm animals in the area. One, episode began in August of 1909 and extended into 1910. The second occurred in 1939.

A sand pit in a marsh pasture, possibly near the site of the present University of Wisconsin Hospital and Clinics (Clifford Goodhart, personal communication) was used as a garbage dump and received at least one improperly treated bovine carcass. A fence gate left open when sand was hauled allowed the University dairy cattle access. The first cow to die was found on August 15, 1909 following a severe thunderstorm. Thinking the cow had been struck by lightning it was skinned and the carcass buried in the sandpit. Two days later a young calf died and a post mortem microscopic examination of the spleen confirmed anthrax. Other cows in the herd were getting feverish and were quarantined. The first carcass was disinterred and examination revealed death due to anthrax infection. A general infection of the entire dairy herd soon resulted despite quarantine, vaccination and diligent efforts to disinfect the animal stalls, the burial site and to a lesser extent, the pasture. In the few days of the initial outbreak twelve cattle were dead. A considerable number of the herd sustained high fevers but managed to recover from the infection (which is unusual for anthrax). Two months later another cow died and in the fall and early winter several hogs all died of anthrax infection.

The following spring four more young pigs died of anthrax. H. L. Russel, then Director of the Experimental Station chronicled the outbreak in his 1910 Report of the Director noting that the death of the hogs must have come from soil infection.
In the summer of 1938, safely away from what was considered the danger area, a trench silo was dug between the woods and the present day Natatorium in an experiment to determine the nutritional value and palatability of buried silage. Silage buried in the trench was dug up in 1943 and fed to Oscar Mayer Holsteins. Unfortunately ten days later one of the cows died of anthrax fever. The site of the trench silo was covered over and leveled by bulldozers.

The exact limits of the possible anthrax-infected area between the Natatorium and the lake road are not precisely known, but the undeveloped wooded area in the eastern portion of the current project area between the Shuman Shelter and the storage sheds is generally considered to be a possible location. As it is known that anthrax endospores can survive long periods of dormancy in the soil, the University has treated the vicinity with caution.

In 1990 the Department of Bacteriology at the University of Wisconsin-Madison obtained soil samples from the possible anthrax burial area in the woods between the Shuman shelter and the storage sheds. An effort was made to isolate and cultivate anthrax endospores from the soil samples and culture them in a favorable and sensitive medium. No active anthrax bacilli were positively identified or isolated in this experiment (Lindquist 1990).
FIELD METHODS

Archaeological field work associated with this project was conducted during a three day period from September 4 through 6, 1995 by personnel from Midwest Archaeological Consulting under the supervision of the senior author. The field method strategy utilized in this survey consisted of a plan to shovel test all possibly undisturbed ground in the project area along a measured 10 meter grid. An arbitrary datum was chosen at known distance from fixed landscape points. Site datum for the grassy knoll and woods was placed at the southeast corner of the project area, 15 meters due west of the end of an east-west hurricane fence separating two tennis courts and ten meters directly south (about 15 cm beyond the concrete curbing). Adjacent transects were staggered five meters so that the maximum distance between shovel tests was reduced to 11.2 meters compared to 14.1 meters for a 10 meter square grid. Transect and shovel test locations were measured in with tapes and compass with a fair amount of triangulation to insure accuracy. Figure 4 illustrates the project area with the location shovel tests. Shovel test excavations were between 35 and 40 cm in diameter and equally deep to insure penetration into the subsoil. Soil was passed through 1/4 inch mesh hardware cloth and all items that did not pass through the screen were examined.

The project area was divided into roughly four equal parcels defined in the field by ground cover and disturbances:

Parcel 1 was the open leveled part of the knoll in the southeast corner of the project area. Once part of a golf practice area with putting green this area is maintained in grass. At the edges of the knoll the stone breaks sharply down to the pavement. Shovel tests 1 through 30 were in the grass within parcel 1.

Parcel 2 was defined as the woods north of the grass and east of the gravel drive bisecting the woods and south of Willow Drive. It includes the land around the Schuman Shelter at the north end. Shovel tests 31 through 67 were in the heart of the area considered to have possible anthrax infestation.
Figure 4. Project Area with location of positive shovel tests.
Parcel 3 includes all the wooded area west of the gravel drive between the Natatorium and Willow Drive. Within parcel 3 are three storage sheds for grounds equipment and the remains of two linear mounds of the Willow Creek Group, Da-119. As the mounds were almost totally excavated and reconstructed by C.E. Brown in 1937, there seemed to be no reason to repeat the process on a much smaller scale. In the interest of preservation of the remains no shovel tests were dug into the mounds.

Parcel 4 included the remaining north end of the project area northwest of Willow Drive. It includes a gravel parking lot to a sand beach, a surrounding grassy recreation area and a small peninsula or spit of land that forms the cove at the end of University Bay. Shovel tests on the grass terrace east of the swimming beach were placed at ten meter intervals along two transects following the central open areas between the grade up to the bike trail and the slope to the lakeshore. Shovel tests on the peninsula were exploratory and encountered wet and black marsh soil. The southern part of parcel 4 has been severely disturbed by grading and road and bike path construction.
part of the transition zone. An inventory is presented in Table 1 below listing only those shovel test excavations positive for prehistoric archaeological material.

Prairie du Chien formation chert comprised 24 of 28 pieces; only one flake showed definite signs of heat treatment. The remaining flakes were of Galena chert, one being heat treated.

The fire cracked rock showed the classic characteristics of concentric spalling and crenulated surfaces from fractures of expansion similar to those produced by dry heat in open fires. This is consistent with their proposed use as hearthstones.

The pottery came from three shovel tests. The pottery is grit tempered and cord marked or partially smoothed over on the exterior. The interiors are smoothed. Shovel test number 19 contained 33 sherds including a rim sherd with impressions along the interior lip from a cord-wrapped stick. The thickness of the measurable sherds from this shovel test (ST19) ranged between 6.3 and 8.5 mm. A cord marked body sherd from ST8 is very thin, 2.8 mm, and may have been from a miniature pot. A body sherd from ST 20 was 4.6 mm thick.

Table 1. Shovel Test Inventory for Parcel #1 Grassy knoll

<table>
<thead>
<tr>
<th>Shovel Test Number</th>
<th>Location</th>
<th>Flakes</th>
<th>Ceramics</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>20W 0W</td>
<td>17</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>50W 0W</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>59 10W</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>25 10W</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>15 10W</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>10 20W</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>40 30W</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>35 20W</td>
<td>23</td>
<td>10</td>
<td>1 rim w/CWS notched interior lip</td>
</tr>
<tr>
<td>70</td>
<td>35 30W</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>15 35W</td>
<td>2</td>
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<td>1</td>
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<tr>
<td>25</td>
<td>50 30W</td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>26</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>
Parcel 2. Woods east of gravel drive

The soil in parcel 2 was less compact and downbrodden and consequently easier to excavate than parcel 1. The A-horizon appeared partially eroded with a mottled gradual transition and did not exhibit a plowzone.

Eighteen of the thirty-seven shovel tests in parcel 2 contained prehistoric archaeological material. Two complete bifaces, a crude endscrapers and a piece of utilized shatter were also recovered. See inventory in Table 2 below.

Concentrations of lithic artifacts were noted at the southwest end of the parcel including part of a shingling station recovered in ST 57 (124 flakes). A biface fragment from ST 57 exhibits endshock fracture and was probably abandoned during manufacture. The biface from ST 43 is fairly small and made from a large flake of Prairie du Chien chert. It measures 40 x 24 x 8.8 mm thick. The biface from ST 52 is also small and made from the same material. It measures 32 x 13 x 6.2 mm thick. A large pyramidal piece of heat treated Galena chert shatter from ST 38 shows evidence of utilization along two adjacent edges. Small irregular microchips and noticeable rounding and polishing on the acute edges indicate significant use wear. A majority of the flake debitage was Prairie du Chien chert (106 pieces, 68 heat treated). The remainder included 17 pieces of Galena chert and one flake of a translucent chalcedony material. Five pieces of shatter reported are all Prairie du Chien chert.

The ceramics from parcel 2 came from four shovel tests (36, 42, 43 and 48) clustered west of the Schuman Shelter. The pottery is all grit tempered and cordmarked or smoothed over cordmarked on the exterior. One shoulder sherd is decorated with a parallel row of cord wrapped stick impressions. Thickness of the measurable pieces ranged from 4.4 to 6.8 mm. Eighteen pieces of fire cracked rock were also recovered in twelve shovel tests with fractures typical of hearthstones in an open fire.
Table 2. Shovel Test Inventory for Parcel #2 Woods east of access road.

<table>
<thead>
<tr>
<th>Shovel Test Number</th>
<th>Location</th>
<th>Fences</th>
<th>Ceramic Item</th>
<th>FGR</th>
<th>Tools</th>
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</thead>
<tbody>
<tr>
<td>31</td>
<td>60N 60W</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>32</td>
<td>60N 60W</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>36</td>
<td>60N 10W</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>60N 50W</td>
<td>1</td>
<td></td>
<td></td>
<td>1 utilized shatter</td>
</tr>
<tr>
<td>41</td>
<td>60N 20W</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>47</td>
<td>50N 20W</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>48</td>
<td>50N 20W</td>
<td>2</td>
<td>14</td>
<td></td>
<td>1 biface 40.0 x 20.0 x 8.8 mm</td>
</tr>
<tr>
<td>44</td>
<td>50N 20W</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>47</td>
<td>50N 30W</td>
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<td>46</td>
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<td>1</td>
</tr>
<tr>
<td>51</td>
<td>50N 40W</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>52</td>
<td>50N 40W</td>
<td>4</td>
<td></td>
<td></td>
<td>1</td>
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<td>56</td>
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<tr>
<td>57</td>
<td>100N 50W</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>1 biface frag 1 shatter</td>
</tr>
<tr>
<td>58</td>
<td>100N 50W</td>
<td>5</td>
<td></td>
<td></td>
<td>1</td>
</tr>
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<td></td>
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<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>174</td>
<td>24</td>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

Parcel 3. Woods west of gravel drive

Seventeen shovel tests were excavated in the woods of the project area west of the gravel drive. No shovel tests were dug in the gravel drive or in an obviously disturbed gravel area northeast of the storage sheds. Shovel tests were dug adjacent to, but not immediately on the rebuilt prehistoric mounds. Thirteen of the seventeen shovel tests contained prehistoric archaeological material. All in all, 42 chert flakes, 28 sherds of pottery, 23 pieces of fire cracked rock, 2 complete bifaces, a utilized flake and a core were recovered. See inventory in Table 3 below.

The soil profiles in parcel 3 appeared similar to parcel 2, with a gradual mottled transition from the A-horizon to the subsoil. No sharp demarcation between horizons was observed that would indicate a plowzone.
Two complete bifaces and a utilized secondary thinning flake were recovered from ST 84, immediately north of Linear mound #1. These are pictured in Figure 6. Both bifaces were manufactured from Galena chert, neither heat treated. They are thick and crudely flaked measuring 30.1 x 31.5 x 11.6 mm and 70.3 x 34.2 x 15.5 mm, respectively. The utilized flake is a white and waxy Burlington chert with a few fine brown speckles. The acute lateral edges show random microflake removals from use and edge rounding and polishing. This utilized flake is partially illustrated in Figure 6.

The debitage assemblage is predominantly Prairie du Chien chert, represented by 27 pieces, 3 heat treated. Galena chert accounts for 10 pieces, 1 heat treated. Five white fine-grained chips of Burlington chert stand out in the assemblage. The core is a blocky piece of heat treated Prairie du Chien chert with multiple striking platforms.

Grit tempered cord marked pottery was encountered in three shovel tests, numbers 70, 74 and 84. The measurable pieces from ST 70 were consistently 7.2 mm thick. The sherd for ST 74 measured 8.8 mm thick. The two sherds from ST 84 were quite thin, measuring 2.3 and 2.8 mm thick. Nine shovel tests contained fire cracked rock, typically with spalled heat fractures of expansion.
Table 3. Shovel Test Inventory for Parcel #3 Woods west of access road.

<table>
<thead>
<tr>
<th>Shovel Test Number</th>
<th>Location</th>
<th>Flakes</th>
<th>Ceramics</th>
<th>PCG</th>
<th>Tools</th>
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<td>55N 70W</td>
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</tr>
<tr>
<td>72</td>
<td>56N 60W</td>
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<td></td>
</tr>
<tr>
<td>73</td>
<td>45N 60W</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>56N 90W</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>08 90W</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td>76</td>
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</tr>
<tr>
<td>77</td>
<td>25N 90W</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>35N 90W</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>45N 90W</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>30W 100W</td>
<td>13</td>
<td>1</td>
<td></td>
<td>1 core</td>
</tr>
<tr>
<td>82</td>
<td>45N 100W</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>5N 110W</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>25N 110W</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2 knives 50.1 x 31.5 x 11.6 70.3 x 34.2 x 15.5 1 utilized flake</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>42</td>
<td>23</td>
<td>23</td>
<td>3</td>
</tr>
</tbody>
</table>

Parcel 4. Lake Shore and beach area

The majority of parcel 4 has been previously disturbed by road and beach construction. Flat terrace areas on each side of the beach are the only undeveloped portions of the parcel.

The grassy terrace east of the beach was shovel tested at 10 meter intervals along transects set in line with the open flat area. This area exhibited "natural", but eroded, soil profiles with a 10-16 cm A-horizon and a gradual mottled transition to the B-horizon subsoil.

The peninsula west of the beach is wet and marshy and largely disturbed. Only four shovel tests were gingerly excavated in this area.

Two of the six shovel tests east of the beach contained archaeological material. See inventory in Table 4 below. Shovel Test 85 contained three pieces of ceramics ranging in thickness from 7.2 to 9.1 mm. Shovel Test 89 contained eight pieces of debitage and a utilized secondary thinning flake of Galena.
chert. The utilized flake exhibits microchipping and edge rounding along one of its acute lateral edges. This utilized flake appears in Figure 6. Five of the eight flakes were of Prairie du Chien chert and three were Galena.

Table 4. Shovel Test Inventory for Parcel #4 Lake Shore.

<table>
<thead>
<tr>
<th>Number</th>
<th>Location</th>
<th>Flakes</th>
<th>Ceramics</th>
<th>FCR</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td></td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>1 utilized flake</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

In total, 416 artifacts associated with prehistoric Indian activities at Da-124 were recovered from the archaeological reconnaissance survey. These are summarized in Table 5:

Table 5. Summary of Artifact from Da-124.

<table>
<thead>
<tr>
<th>Stone Flakes</th>
<th>Ceramics</th>
<th>FCR</th>
<th>Stone Tools</th>
<th>Other Stone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel 1</td>
<td>20 26 12</td>
<td>16 6</td>
<td>0</td>
<td>S matter</td>
</tr>
<tr>
<td>Parcel 2</td>
<td>179 24 3</td>
<td>18 5</td>
<td>3 1 core</td>
<td>S matter</td>
</tr>
<tr>
<td>Parcel 3</td>
<td>45 22 5 23</td>
<td>3</td>
<td>1</td>
<td>S matter</td>
</tr>
<tr>
<td>Parcel 4</td>
<td>8 5 1</td>
<td>1</td>
<td>1</td>
<td>S matter</td>
</tr>
<tr>
<td>Total</td>
<td>257 76 21 47</td>
<td>9</td>
<td>6</td>
<td>S matter</td>
</tr>
</tbody>
</table>
Figure 6. Select artifacts from Da-124.
SUMMARY AND RECOMMENDATIONS

The phase 1 reconnaissance survey of the project area located abundant indications of prehistoric Indian site Da-124. Some soil profiles within the project area exhibit a degree of erosion, however, there is no evidence of disturbance by plowing. Disturbances resulting from modern development have impacted the archaeological deposits in some portions of the project area, but these impacts appear to be localized, and do not effect all portions of the project area or the archaeological site. Moreover, there does not appear to be any major portion of the project area that lacks the presence of artifacts.

It is recommended, therefore, that further archaeological investigations be undertaken to determine the significance of this site, and the location of intact archaeological deposits within the project area.
REFERENCES CITED

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Brown, Charles E.

Finley, Robert W.
1976 Original Vegetation Cover of Wisconsin. North Central Forest Experiment Station, U.S. Forest Service, St. Paul, Minnesota. [map]

Glocker, Carl and Robert A. Patzer

Linguist, John A.

MacKinnon, Jeffery

Martin, Lawrence
Mickelson, David M.

Russel, Harry L.
APPENDIX A

Project Correspondence
May 4, 1995

Clifford P. Goodhart
U.W.-Madison
Facilities Planning and Management
WARF Office Building, Rm. 954
Madison, WI 53705

Re: UW-Madison Crew House

Dear Mr. Goodhart:

Thank you for informing me of the upcoming May 11 meeting regarding the above referenced project. I plan to attend. Also, I apologize for not responding sooner with comments on the new location option for the new crew house facility. My comments are as follows.

As indicated in our letter of February 1, 1994, this crew house location option is contained within an area identified in the Wisconsin Inventory of Historic Places as archeological site Da-124. The site is identified as a workshop/campsite. Your most recent map showing the location of the latest new crew house location option is totally within the area identified as containing this site. Prior to construction, an archeological survey of all previously undisturbed ground within the project area should be undertaken to locate the archeological site, if it is extant. After reviewing the archeological report, depending upon the site’s significance, if located, we will recommend further action.

Additionally, we believe that the new building would not adversely affect the Willow Mound Group, a Native American Burial mound complex, which is located south and west of the proposed new facility. However, we believe that the Willow Mound Group should be identified and encircled with a fence (temporary snow-type is sufficient) to protect it from any inadvertent activity related to the construction.

We believe that this crew house location option is least likely of all proposed options to adversely affect historic properties. From an historic preservation perspective, this location should be given priority consideration.
8 September 1995

Russell E. LaFromboise, AIA
Engberg Anderson
611 North Broadway
Milwaukee, WI 53202

RE: Results of UW Crew House Archaeological Survey
Engberg Anderson Project No. 95544

Dear Mr. LaFromboise:

We have completed the archaeological field work associated with this project. I was unable to reach you by telephone today to discuss the results. I will summarize them here.

There are prehistoric archaeological materials distributed over virtually all of the project area. Stone tools, pottery and chipping debris were recovered in half of our shovel tests. If these materials are in an undisturbed condition, it is likely that the site would be eligible for listing on the National Register of Historic Places.

With regard to the condition of the archaeological deposits, it appears that only the immediate area of the putting green, the swimming beach parking lot, and the existing buildings are disturbed. This judgement, however, is based on survey only. A determination of the more precise age, condition, and distribution of archaeological deposits is generally made through a second phase of investigation referred to as testing. This second phase involves controlled test excavations, and is intended to determine whether the site is eligible for listing on the National Register.

We will need to know whether you want us to proceed with preparation of the report describing our survey work for the State Historical Society, or whether you wish to have us conduct test excavations and incorporate the results of both phases into one report. The advantage of having a separate report for survey alone is that the Historical Society will review it and give you an outside opinion regarding the need for further work. On the other
If this location is chosen for construction of the new crew house, please contract with a qualified archaeologist to conduct the archaeological survey. When it has been completed, please forward two copies of the report, identified with our identification number (SWSW # 93-2156/DA), to our office for our review and comment.

With any questions, please contact me 254-6508. Thank you for your continued attention to this matter.

Sincerely,

[Signature]

Clap Harry L. Brown III, J.D.
State Compliance Coordinator

cc: Donald C. Gerhard, UW System Administration
    Charles Quagliaa, DOA/DFD
hand, there is also an advantage to allowing us to proceed with further work under a contract amendment. That is, one report is cheaper than two.

I will be out of the office until September 25th, however Ken Karstens, my Research Associate, may be able to answer your questions. Ken supervised the field work for this project, and is most familiar with the archaeological results.

Please let us know if you need any further information.

Sincerely,

[Signature]

Lynn Rusch
Director

cc: Cliff Goodhart, UW-Madison Dept. of Planning and Construction