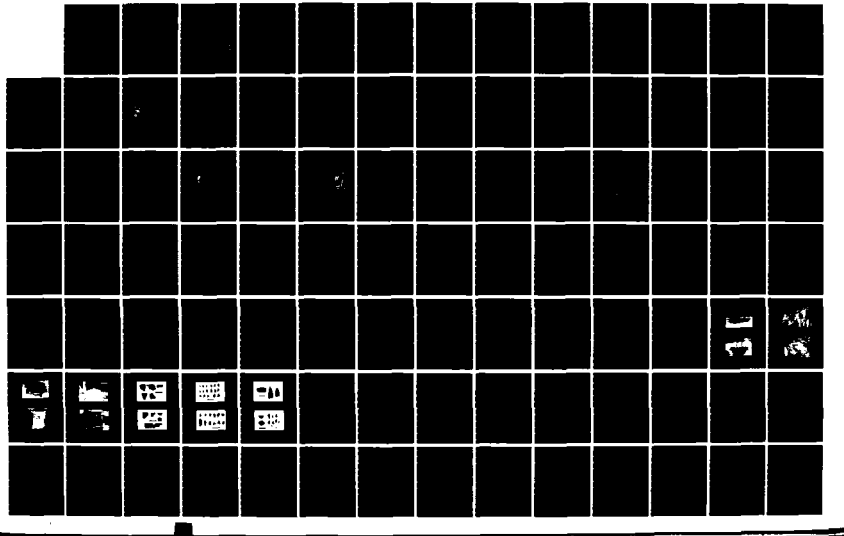
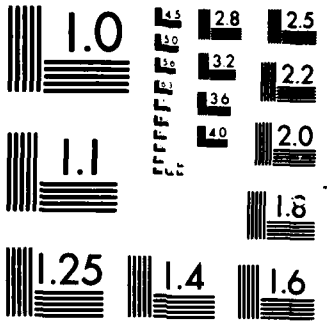
AD-A163 139 CULTURAL RESOURCES INVESTIGATION AT THE LAKE WINNIBIGOSHISH DAM SITE - 21 IC 4(U) MINNESOTA UNIV MINNEAPOLIS ARCHAEOLOGY LAB E JOHNSON ET AL. 1978 1/2

UNCLASSIFIED DACW37-77-C-0139 F/G 5/6 NL





CULTURAL RESOURCES INVESTIGATION AT THE LAKE WINNIBIGOSHISH DAM SITE - 21 IC 4.

Elden Johnson, Principal Investigator

Jeanne Schaaf, Field Director and Analyst

Archaeology Laboratory

University of Minnesota

Report prepared under contract DACW37-77-C-0139 with the

Department of the Army

St. Paul District, Corps of Engineers

1978

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A163	3. RECIPIENT'S CATALOG NUMBER 139
4. TITLE *(and Subtitle)* CULTURAL RESOURCES INVESTIGATION AT THE LAKE WINNIBIGOSHISH DAM SITE---21 IC 4.		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Elden Johnson, principle investigator Jeanne Schaaf, Field Director and Analyst		8. CONTRACT OR GRANT NUMBER(s) DACW37-77-C-0139
9. PERFORMING ORGANIZATION NAME AND ADDRESS Archaeology Laboratory University of Minnesota Minneapolis, MN 55455		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Engineer District, St Paul District 1135 USPO & Custom House St Paul, MN 55101-1479		12. REPORT DATE 1978
		13. NUMBER OF PAGES
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*		15. SECURITY CLASS. *(of this report)* Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

ARCHAEOLOGY
DAMS
LAKE WINNIBIGOSHISH (MINNESOTA)

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Archaeological field excavations were conducted a the Lake Winnibigoshish Dam Site (21 IC 4) to mitigate the effects of a planned bank stabilization project. 21 IC 4 is a multicompent site with prehistoric linear burial mounds, a habitation area, evidence of a historic fur trade, logging and dam construction activities. The mound construction is dated to app. A.D. 700-1000. Prehistoric components containing late Lauret, St. Croix and Brainerd ceramics also date to that period.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

ABSTRACT

Archaeological field excavations were conducted at the Lake Winnibigoshish Dam Site (21 IC 4) in the fall of 1977 to mitigate the effects of a planned bank stabilization project. 21 IC 4 is a multicomponent site with prehistoric linear burial mounds, a prehistoric habitation area, evidence of historic fur trade, logging and dam construction activities. The excavations were limited to the small portion of the site area designated for alteration during the bank stabilization activities. 21 IC 4 was also at one time a much more extensive site with perhaps 20 prehistoric burial mounds and a much more extensive prehistoric and historic habitation/activity site area. Dam construction at the close of the 19th century destroyed a portion of the site and subsequent water and wind erosion of the lakeside portions of the site have considerably reduced its size. The 1977 excavations included removal of the remnant of 1 prehistoric burial mound, partial excavation of a second burial mound, and excavation sampling of the habitation/activity area. The burial mound excavations showed a linear mound complex marginal to the Arvilla complex and like that reported previously at the Gull Lake Site (21 CA 27). The mounds excavated here had subsoil pit burials, no associated grave goods, and in one instance, a rectangular crib work overlying the burial pits. The mound construction is dated to approximately A.D. 700-1000. Prehistoric components containing late Laurel, St. Croix and Brainerd ceramics also date to that period. Examination of surface collections from the site showed succeeding Blackduck and Sandy Lake ceramics as well. The badly disturbed historic period soil horizon produced only scattered metal and ceramic artifacts and no features. The data do not allow the attribution of these artifacts to specific 19th century activities at the site.

Contents

Figures

Tables:

1. Introduction

Mitigation of segments of prehistoric burial mound and habitation area to be removed in a bank grooming and stabilization project were undertaken in the late fall of 1977 under contract with the Department of the Army, St. Paul District, Corps of Engineers. Mitigation funds were authorized on the basis of an evaluation of archaeological significance of the site. Excavation efforts were limited to those portions of the site lying within the area endangered by the bank grooming in a bank stabilization project. That endangered strip of land extending inwards 5m from the sharply eroded bank edge contained a portion of the habitation zone, a 5m segment of a previously partially destroyed linear burial mound, and the complete remnant of a second prehistoric burial mound. These limitations on the field research can be seen in the appended Scope of Work.

The project was undertaken with Jeanne Schaaf as the Field Director and with the cooperation of the Leech Lake Reservation Business Committee. Arrangements were made with Hartley White, Chairman of the RBC, to employ local members of his community to assist in the field excavations and to authorize a representative of the RBC, Edward Fairbanks, to monitor the excavations and arrange for the future disposition of any human skeletal remains and artifacts encountered. An agreement was reached allowin the contractor to analyze the human skeletal materials before returning them to the Leech Lake Reservation for reburial. All artifacts will be curated by the University of Minnesota under Archaeology Laboratory accession numbers 800 and 803 as the property of the federal government and will be made available to the Leech Lake Reservation Business Committee purposes of public interpretation at any time interpretative facilities are available. A copy of the letter of agreement with the Leech Lake RBC is appended to this report.

The archaeological problems to be examined in this research include a determination of the cultural affiliation of the linear burial mounds present at the site and a determination of the nature of a possible cultural unit intervening between the Laurel and Blackduck cultures of northern Minnesota.

External mound form is not a reliable indicator of cultural affiliation in most cases, but Johnson (1973) compiled data on the Arvilla complex where the linear accretional mounds are the dominant form and where mounds of that complex appear to extend across a wide strip of central Minnesota from the St. Croix valley to the Red River valley in the west. Previous excavations of the Gull Lake Dam site (21 CA 37) located in the same Headwaters reservoir system as Lake Winnibigoshish indicated a linear mound complex associated with net impressed pottery and apparently equivalent in time to the more southerly and westerly Arvilla complex (Johnson 1971). This Gull Lake complex burial overlay a habitation zone interpreted as Malmo (Wilford 1953).

Examination of the surface materials from the Lake Winnibigoshish Dam site and the cultural materials found in the habitation zone test pits during a previous year's survey (Johnson, Harrison, Schaaf, 1977), suggested the presence of multicomponents at the site with Late Woodland Blackduck and possibly Sandy Lake ceramics, suggestive ceramic evidence of a Laurel component, and most important, both net impressed Brainerd Ware and St. Croix dentate stamped pottery. These ceramic materials together with the linear mound form thus were suggestive of a possible Arvilla complex or modified Arvilla complex like that at Gull Lake present at the Lake Winnibigoshish site and the burial mound excavations were undertaken to examine that possibility.

The presence of Laurel, St. Croix, Brainerd and Blackduck ceramics in the habitation area offered the real possibility that a component intermediate

to the well known Laurel-Blackduck cultures of northern Minnesota might well be present. If this were so, the site would assume increased importance because all evidence to this time indicated a replacement of Laurel culture by Blackduck (Stoltman 1973) without the presence of any transitional cultural unit. Work in the habitation zone of the site thus was undertaken to test that possibility.

The results of the mitigation suggest that the dynamics of prehistoric utilization of the Lake Winnibigoshish site may be more complex than those suggestions listed above indicate. Like many limited excavations, however, the resultant archaeological sample is small and not necessarily representative of the site. Even so, the probabilities are that the basic questions raised are answered affirmatively, though new questions are raised.

The incomplete sampling of the site results from two factors. First, the Scope of Work necessarily limited excavations to the area to be impacted by construction. Only two of the five remaining burial mounds at the site were tested and only a small portion of the remaining habitation zone lay within the prescribed mitigation limits. More serious, however, is the second factor. A large portion of the site had eroded away through wind and water action over the 90 plus years since the construction of the outlet dam and subsequent raising of the lake levels. One large burial mound has disappeared completely, and the two mound segments excavated under this project were incomplete due to previous erosion. Thus the size and nature of the sample recorded here is indeterminate. It is probable that the remnant habitation zone represents an interior marginal portion of an area concentrated closer to the river outlet but now destroyed, and the burial mound segments excavated are obviously only fractions of what were larger (longer) mounds. Despite these limitations, the excavations produced important and interesting data and the field activities were well worth the effort.

A large number of individuals offered assistance to this project, either directly or indirectly. Most important are Hartley White, Edward Fairbanks, Paul Folstrom, Louis Boyd, Kevin Buckanaga, and Bill Bedeau of the Leech Lake Band who authorized and participated in the excavations. Robert F. Post, Daniel Bowman, and Audrey Thomas of the Environmental Resources Branch of the St. Paul District, Corps of Engineers, were most helpful. Irvin Seelye, damtender at Lake Winnibigoshish was also most cooperative. William Marshall of Grand Rapids made available for study his surface collection of artifacts collected from the beach area below the eroded edge of the site--a collection that first suggested the importance of the site.

In addition to the field crew members from Leech Lake Band, LuAnn Hudson, Timothy Ready and Homer Hruby were employed as crew members. Occasional, but important, crew volunteers included Carol Remus, Sarah Schmuck, Janet Anderson, Les Peterson and Scott Anfinson. Barbara O'Connell, Instructor in biological anthropology in the University of Minnesota, analyzed the human skeletal material and Orrin Shane, now Curator of Archaeology in the Science Museum of Minnesota, identified the non-human faunal remains. Preliminary identification of the Historic artifacts was made by Ted Lofstrom of the Minnesota Historical Society. The excellent maps and figures were drawn by Cathy Wolfgram. To all of these individuals we are indebted and offer our sincere thanks.

Elden Johnson

Jeanne Schaaf

Minneapolis, April 1978.

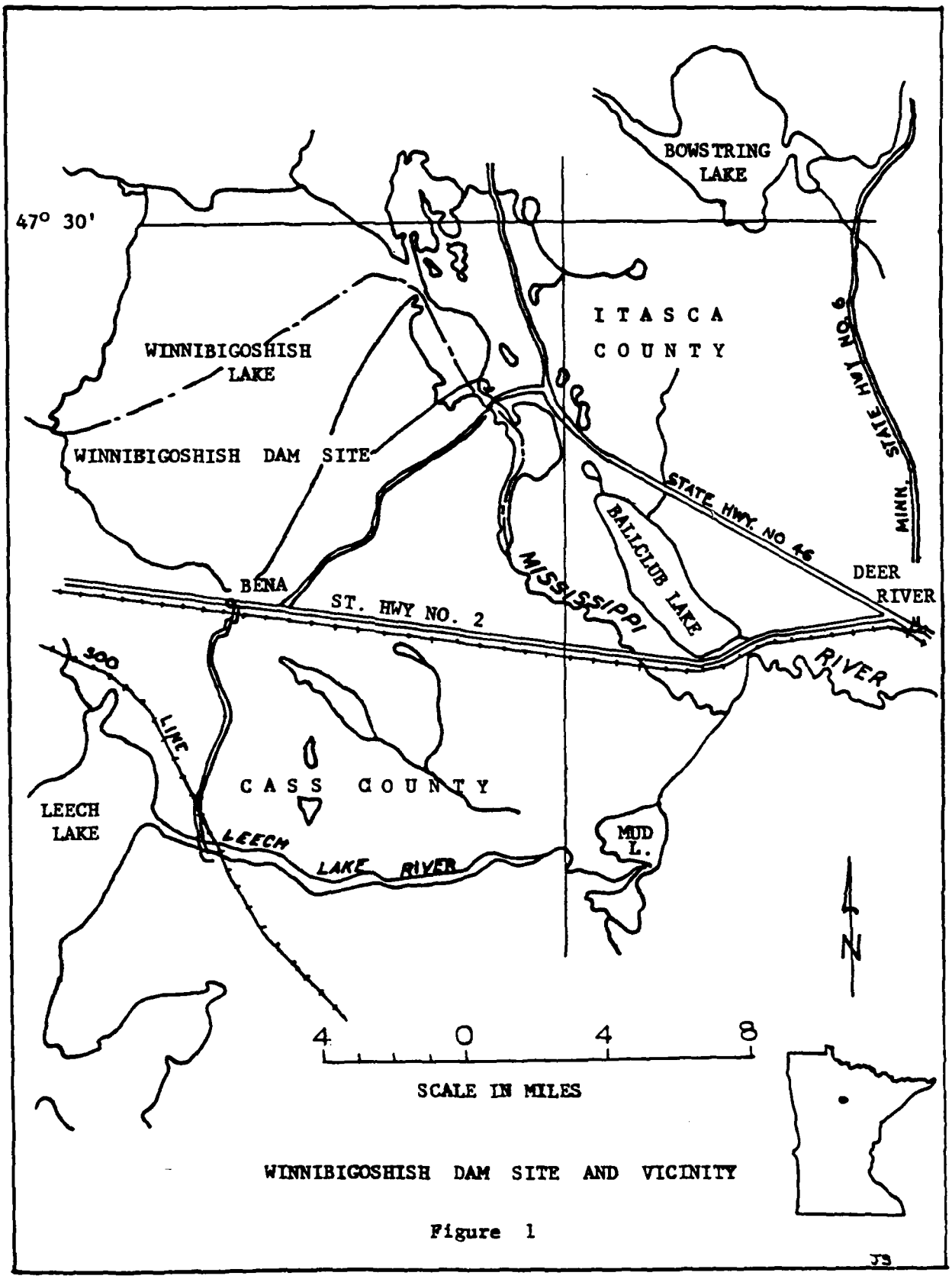
2. SITE DESCRIPTION

The Winnibigoshish Dam Site is a multicomponent habitation area and group of 5 burial mounds that are remnants of a larger site located on the east side of the Mississippi River outlet from the Lake Winnibigoshish reservoir (NW1/4 SW1/4 Sec. 25, T 146 N, R 27 W; Figure 1.) The site is on a narrow, curving peninsula adjacent to the U.S. Army Corps of Engineers dam, which was constructed beginning in the winter of 1881-1882 and completed in 1883. The land is maintained by the Corps of Engineers and is leased by them from the Leech Lake Reservation. The site also lies within the boundaries of the Chippewa National Forest.

The existing site is not disturbed by previous construction or development, but has been severly impacted by erosion caused and intensified primarily by the raised water levels of the reservoir. Prevailing northwesterly winds continue to erode the exposed upper portion of the bank. Two of the mounds (No.'s 3 and 5) are actively eroding, as is the habitation area between them (Figure 2, Plates 1 and 2). All of the mounds but the linear mound nearest the dam tender's home have been disturbed by unauthorized amateur excavations.

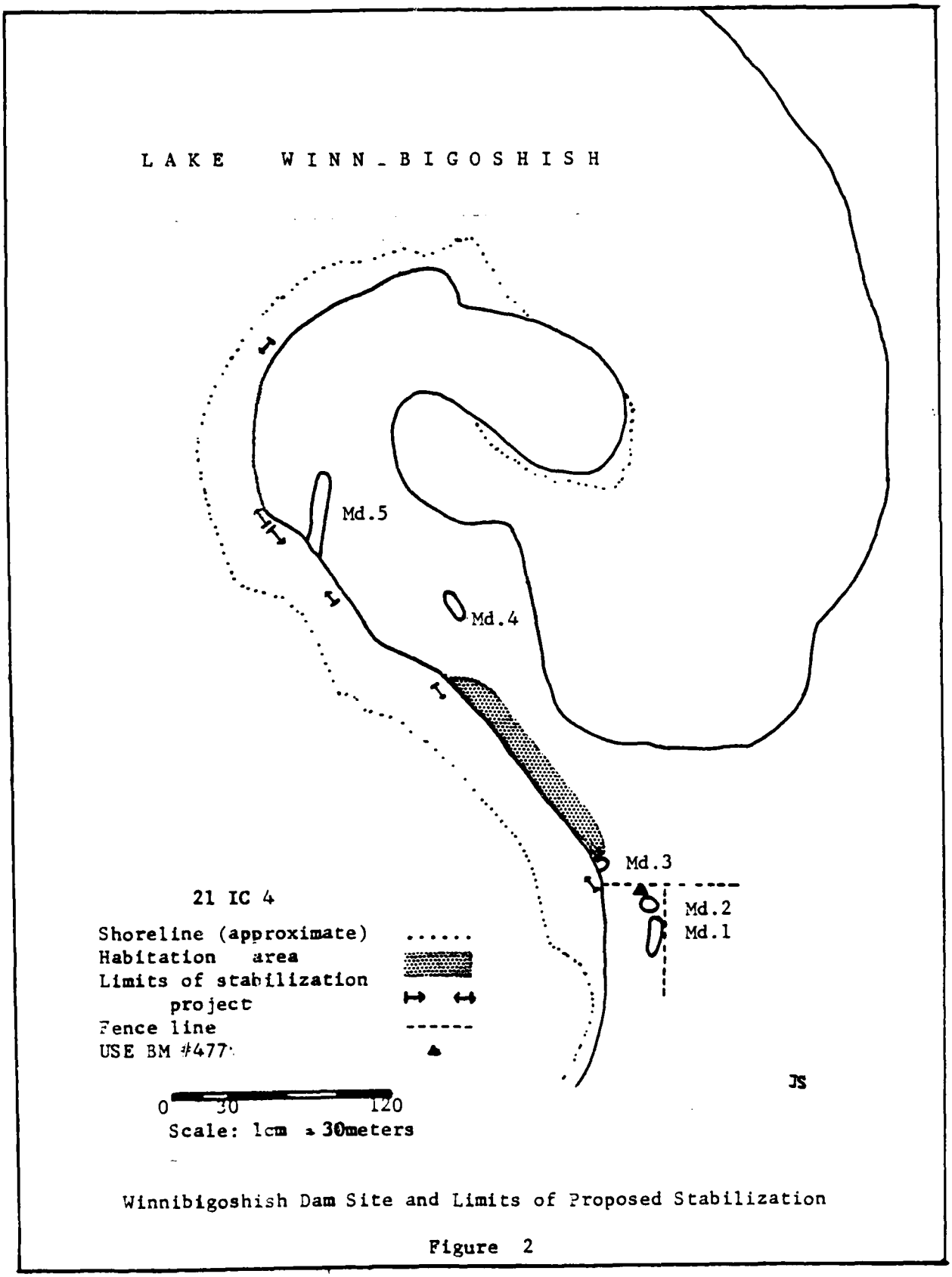
Early maps and records indicate that a number of mounds were destroyed at the east end of the dam, during its construction (Brower Notebook #6, p. 100, 102, 1898; also Winchell 1911, 366). Subsequent erosion eliminated at least one major mound (an irregular, linear mound) which paralleled the original bank edge immediately north of the dam (Figure 3). An historic Chippewa cemetery is reported to have been located just north of mound 5 (Figure 4 and Figure 5). No subsurface testing was conducted in this area, however surficial evidence and informant data indicate that these graves have entirely eroded away. Cultivated lands and another gravesite are presently submerged in the middle of Dam Bay according to historic records (Figure 5).

The site was also briefly occupied by a trading post owned by William



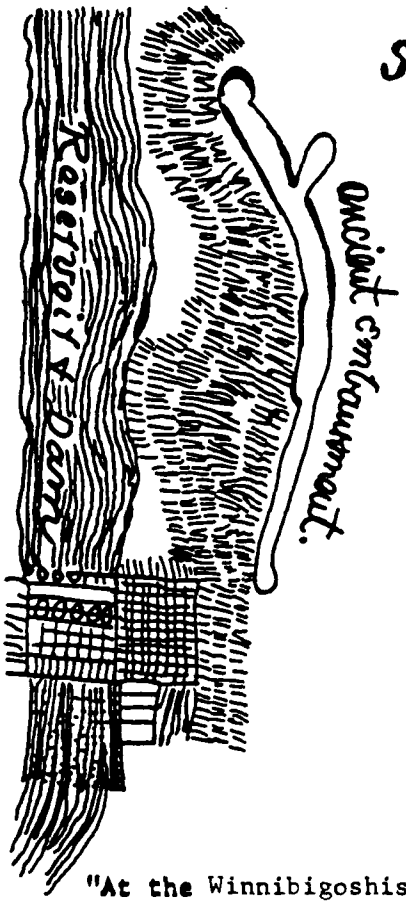
WINNIBIGOSHISH DAM SITE AND VICINITY

Figure 1



Winnibigoshish Dam Site and Limits of Proposed Stabilization

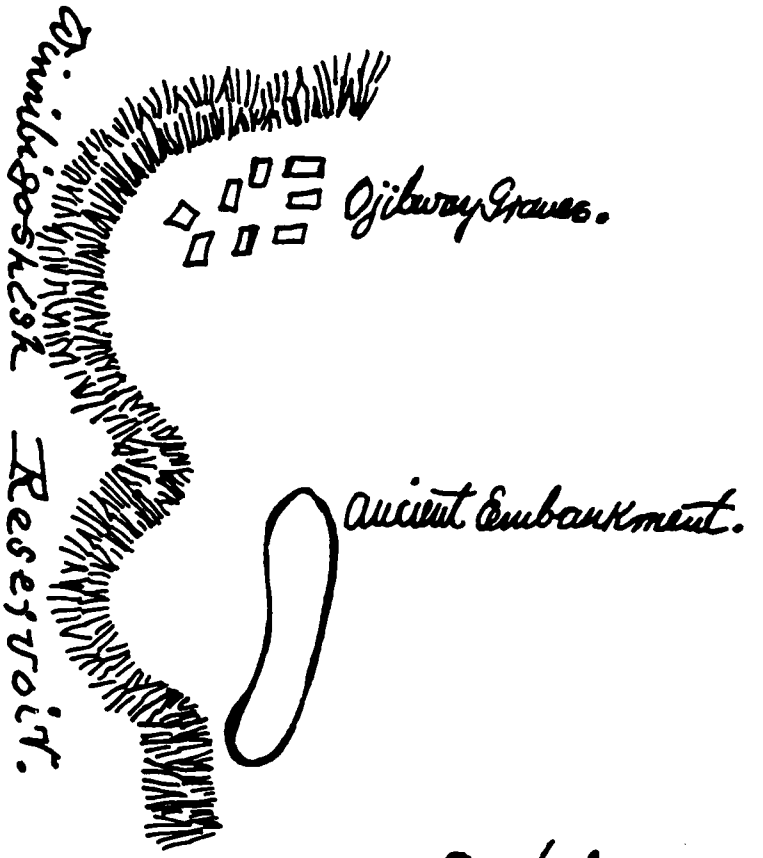
Figure 2



" I do not propose at this time to decide the exact character of this earthwork.
It is probable that a modification of its outlines occurred at the time the reservoir was constructed, and my examination of it was cursory and in considerable haste,....
It is possible that this ancient work was an Effigy."

"At the Winnibigoshish Reservoir dam upon sections 25 and 26, T 146, R 27. there are situated two groups of prehistoric mounds and embankments. The most important group is immediatly at the eastern extremity of the government dam, during the construction of which in 1884 ?, several of the mounds were, by excavation and the deposit of overplus excavated material, practically obliterated, modifying the group to an extent which is all too sufficient to prevent the making of a correct archaeological chart or any satisfactory survey of the premises. ... (T)he earth composing the mounds was used to construct this government earthwork. The mounds and embankments as originally located extended up the bank of the river nearly a fourth of a mile and to a point below the dam not far from a thousand feet. To the best of my belief,... there were in this group previous to the date of artificial modification about 20 mounds and embankments, some of which were large and important. The most important one left undisturbed is an embankment north from the eastern extremity of the dam, still north from which are several other undisturbed mounds, and an Ojibway place of burial." (Brower Notebook No. 6, pp.85-87, and p. 101, 1898).

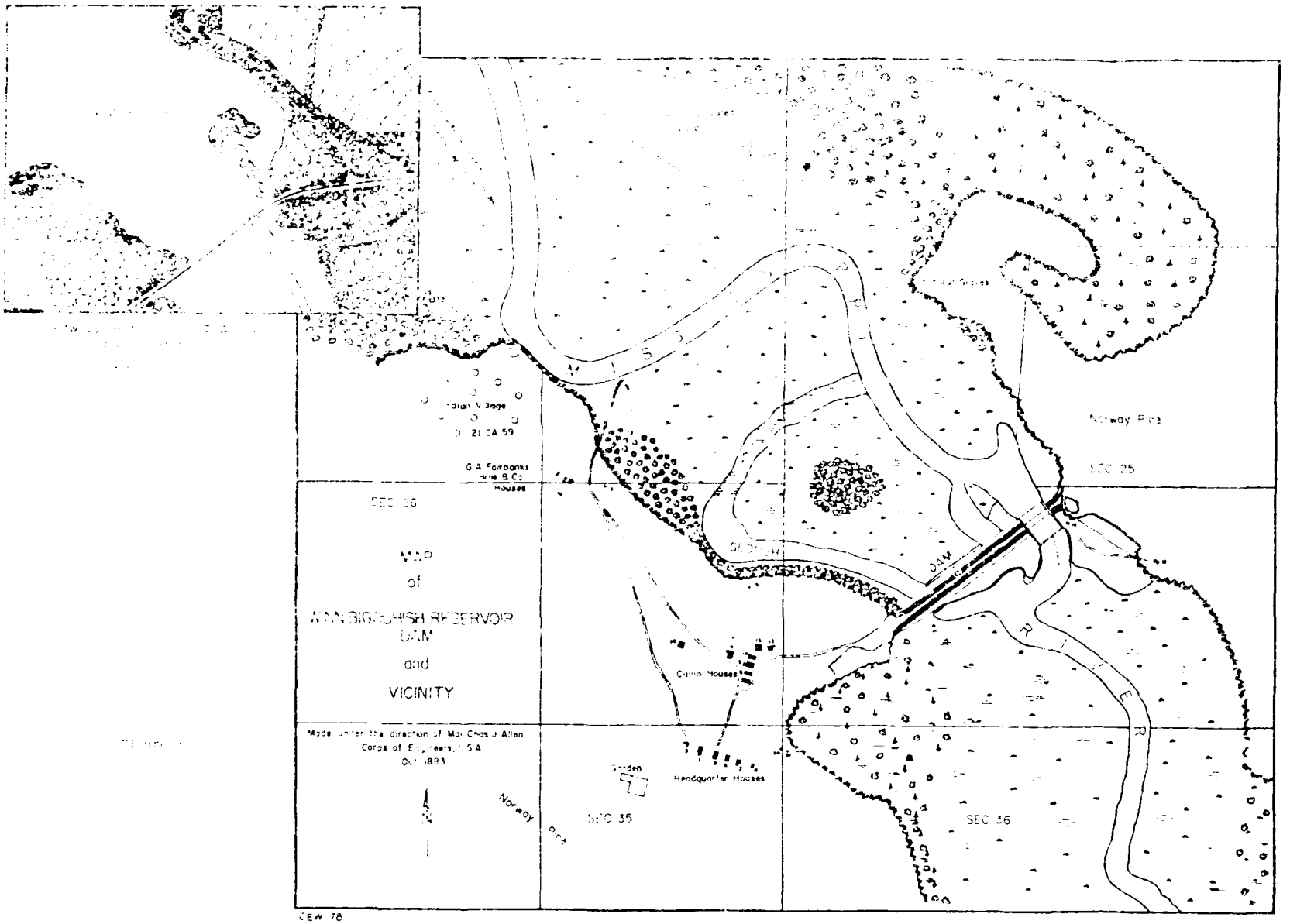
Figure 3



Sketch
of the most northern limit
of the
Groups of Mounds
at the
Winnibegoshish Reservoir Dam.

Brower Notebook No. 6, page 101, 1898.

Figure 4


MAP
of
ANN BIGGISH RESERVOIR
DAM
and
VICINITY
Made under the direction of Maj Chas J Allen
Corps of Engineers, U.S.A.
Oct 1883
SEC 36
SEC 35
SEC 25
Norway Pine
Headquarter Houses
Camp Houses
DAM
RIVER
CEW 78

Fairbanks. A number of historic artifacts and surficial features (i.e. ruts from an old wagon trail) bear witness to historic activity at this site. The following is exerpted from an interview of a local informant by Douglas Birk of the Minnesota Historical Society:

> "Fur trader William Fairbanks opened a trading post on Ravens Point (west shore, L. Winnie) in 1867, moving to the area of the Winnie dam tender's house in the spring of 1884. In the Spring of 1890, he moved to the east side of the mouth of the Cut Foot Narrows where he stayed until the summer of 1892. From there he moved to where the Cut Foot Sioux bridge on highway 46 crosses at the present CFS resort owned by Fred Williams. He moved back to the Winnie dam site briefly in 1899. He returned to the CFS resort location in 1900."
>
> (August, 1972)

The map reproduced in Figure 5 indicates a Fairbanks settlement on the west side of Dam Bay.

21 IC 4 lies in an area of inactive sand dunes formed during a period of climatic warmth and aridity. Beginning 8,000 years ago, this period peaked at 7000 years B.P. and continued until roughly 3,500 years B.P. It appears in the stratigraphic record as a 90 to 140 cm thick deposit of fine sand with silt sized particles concentrated at its base. It has as many as four discontinuous buried soil horizons representing the instability and irregularity of the land surface during that period. With the gradual return of climatic conditions more like the present, increased vegetation cover stabalized the landscape, though wind erosion continued to deposit fine sand over the land surface.

A more comprehensive summary of the paleoclimatic history of the stratigraphic sequence and pollen data is presented in the Cultural Resources Inven-

tory of Lands Adjacent to Lake Winnibogoshish (Johnson, Harrison, Schaaf 1977).

Figure 6 shows the profile of the upper 3 m of the stratigraphic sequence at the habitation area, where present ground surface is 8 m above the lake level. The surficial deposit is a fine eolian sand bearing organic lenses of interrupted humus development. The source of the sand is the exposed eroding bank below the site. This deposit lies above a dark, organic-rich paleosol which yields historic artifacts from its upper portion. This was the ground surface at the time the dam was constructed. Numerous conspicuous pieces of charcoal are characterietic of this strata and suggest the periodic occurrence of forest fires. Increased erosion initiated by the post dam raised water levels is clearly shown by the relatively rapid deposition of the uppermost bed. The top of the B horizon of the historic paleosol contains the prehistoric cultural artifacts. These are confined to a level approximately 20 cm below the ground surface and between 10 and 20 cm in thickness. The assemblage of artifacts recovered show multicomponent occupations at the site, though there is no natural stratigraphic separation of these temporally distinct occupations. This would appear to be the result of wind erosion of the exposed site after abandonment; the sand being removed settling the heavier artifacts in situ and allowing very little soil development between occupations.

Vegetation covering the site area is deciduous hardwoods dominated by oak. There are scattered young pines and a fairly dense shrub layer. Localized variations in the vegetation relevant to the site are: a) the habitation area is in a grassy clearing with partial brush cover, b) mounds 1 and 2 are near the dam tender's residence and short grass cover is maintained by the Corps of Engineers personnel, c) mound 3 is in an area of grass, shrubs, and light oak cover, and d) mounds 4 and 5 are in uninterrupted wooded cover. Throughout the

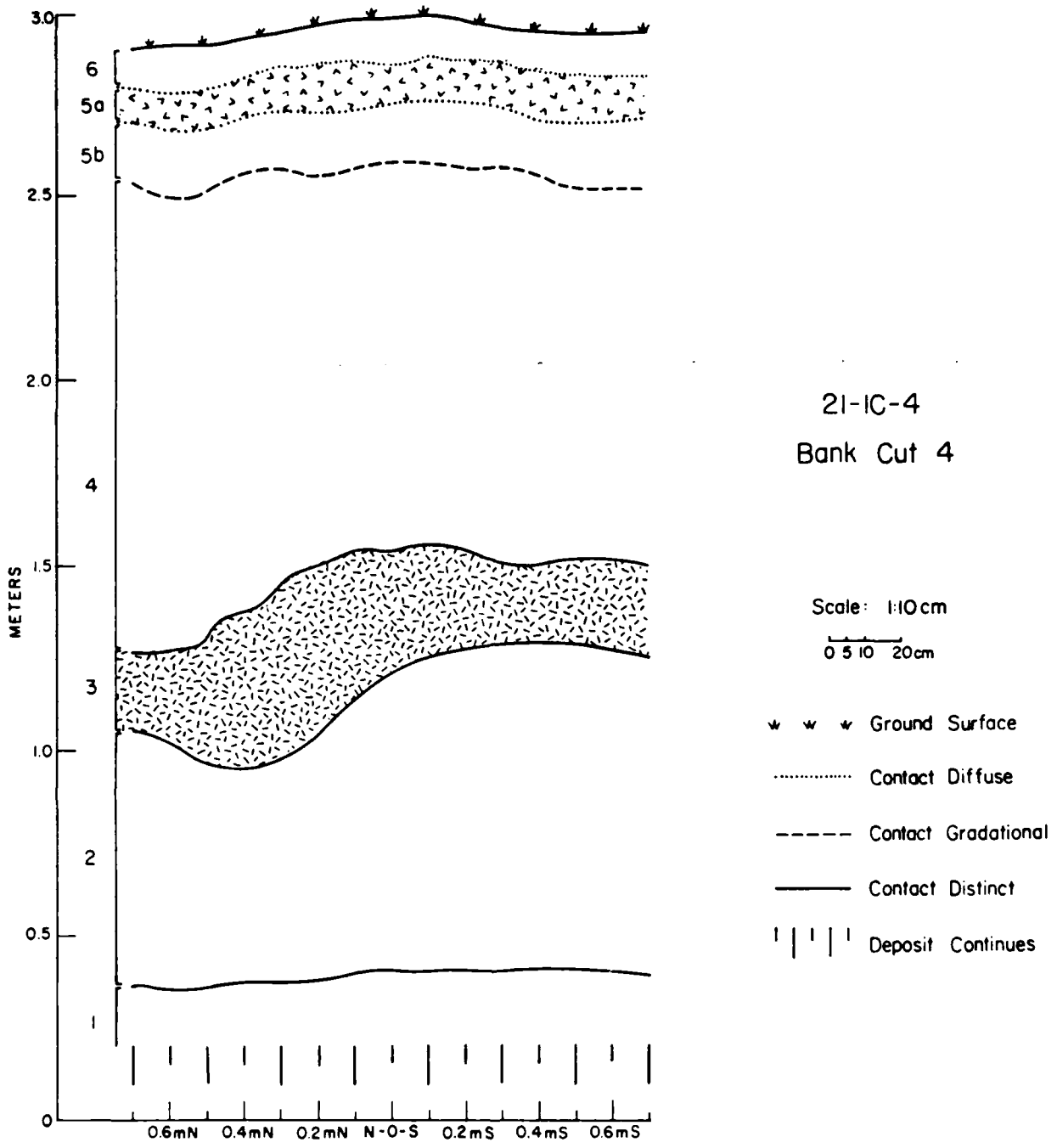


Figure 6

CEW '78

Bed 1: Planar bedded, fine glacial outwash sands.

Bed 2: Cross bedded, fine glacial outwash sands.

Bed 3: Iron rich, compacted fine sand deposit. Possible B2b horizon of original soil developed in the outwash sediment.

Bed 4: Unbedded eolian sand deposit containing four observed paleosols (not observed in this profile).

Bed 5b: B horizon of paleosol, Bed 5a. Upper portion bears prehistoric artifacts.

Bed 5a: Organic-rich paleosol, fine sand; bearing historic artifacts.

Bed 6: Post dam eolian sand deposit.

time of known prehistoric occupation of the site, the vegetation was essentially the same as now with the addition of more mature pines in the hardwoods association.

3. FIELD EXCAVATIONS AND PROCEDURES

Intensive surface reconnaissance and limited shovel testing of the site was conducted in 1976 during the shoreline investigation of Lake Winnibigoshish by the University of Minnesota. Surface survey of the beach below the eroding bank at the edge of the site produced very little cultural material. The shovel testing consisted of nine 1 x 1 m test units excavated (with screening) in the habitation area by University field school students (Figure 7). A description and results of that testing are described below.

Survey and testing data from the site were significant and the site was determined to be eligible for nomination to the National Register of Historic Places. This determination allowed funding to mitigate the impact on a portion of the site threatened by planned bank grooming and stabilization.

During the period of 10 October through 7 November, 1977, mitigation excavations were conducted within the threatened 5 m or 15 foot right of way along the bank edge. The excavation began with four vertical stratigraphic cuts, 2 m wide and 3 m deep, excavated in the eroding bank face at the habitation and mound 3 area. Two additional cuts were placed in the northwest facing bank at the northernmost limit of the project area. The purpose of the cuts was to define and interpret the stratigraphic history of the location. Of particular interest was the location of buried soil horizons in the stratigraphic sequence. Only one such paleosol was clearly visible above the initial post-glacial paleosol developed in cross-bedded outwash sands (Figure 6). One liter size soil samples for mechanical analysis were collected from each bed of each cut. Particle size distribution and tests for total organic carbon and calcium carbonate content were conducted by the Soils Survey Laboratory, University of Minnesota.

Following these strata cuts, sixteen 1 x 1 m test units were excavated in the known habitation area, beginning 10 m south of mound 3, and continuing north-northwest along the bank edge. Spacing of these units was 10 m and units alternated from 2 to 4 meters in from the bank edge. Unit #2 fell within the limits of mound #3 and was therefore excavated as part of the mound. Units 17 through 20 were 2 x 2 m and were placed in the area of highest artifact concentration determined by the 1 x 1 m sampling. Two of the larger units were extended by 1 m^2 to further delineate features exposed. All of these units were excavated following natural stratigraphy for levels 1 and 2. Subsequent levels were an arbitrary 10 cm and were excavated to 55 cm into culturally sterile deposits. All soil was removed skimming with a flat nose shovel and put through a 1/4" mesh hardward cloth. A 3 to 5 liter soil sample was taken from each level of every m^2 excavated. Profiles of the north wall of each excavation unit were drawn measuring from a line level.

The mounds were excavated using a different procedure. 5 m of mound 5 were removed and an additional 1 m of the remaining mound was undercut in order to reface the mound. The uneroded remaining portion of mound 3 was removed entirely. The original length of this mound is unknown but it was probably an elongate mound judging from the proportions of the remaining segment. Excavation of mound 3 was extended beyond the end of the mound by a 2 m square.

The procedure for the excavation of both mounds to the original soil surface was the same. In each case, erosion had undercut the mound, leaving an overhang. This was removed (and screened for artifacts) to obtain a verticle pro-

Table 1. Properties of stratigraphic deposits at 21 K4*

Particle Size Distribution (percent)

Sequence	Sand (mm)									Silt			Clay	Texture
	very coarse		coarse	medium		fine		very fine	Total	coarse	fine	total		
	> 2	2-1	1-.5	.5-.42	.42-.25	.25-.1	.1-.074	.074-.05					<.002	
Bed 1	0.0	0.0	0.0	0.0	2.0	81.6	12.1	2.9	98.4	0.3	.4	.7	1.1	Fine sand
Bed 2	0.0	0.0	0.0	0.0	2.7	80.1	11.6	3.2	97.4	0.6	1.0	1.6	1.0	Fine sand
Bed 3	0.0	0.0	0.0	0.0	.2	66.1	19.1	6.7	91.9	1.5	0.8	2.3	6.0	Fine sand
Bed 4	0.0	0.0	0.0	0.0	.7	42.2	34.8	18.0	95.5	1.1	0.6	1.7	2.9	Very fine sand
Bed 5b	0.0	0.0	0.0	0.0	1.3	49.6	23.2	13.2	86.3	7.8	3.7	11.4	2.5	Fine sand
Bed 5a	0.0	0.0	0.0	0.0	.7	45.6	27.7	15.8	89.5	7.0	1.5	8.5	2.1	Fine sand
Bed 6	0.0	0.0	0.0	0.0	.5	43.5	32.0	16.5	92.2	6.9	.1	6.9	1.0	Fine sand

Sequence	Total organic carbon a.	$CaCo_3$ b.
Bed 1	trace	0
Bed 2	0.6	7.0
Bed 3	0.1	0
Bed 4	0.1	0
Bed 5b	0.9	0
Bed 5a	1.7	0
Bed 6	1.0	0

* see figure 6 for depth of deposit

a. dry combustion with induction furnace

b. Manometric method

file of each mound (Plate 3). The original soil surface, depth of mound fill, intrusive pits and topsoil mantle were identified and mapped. A meter^2 grid was placed over the mounds, aligned with the long axis of each mound and 1 meter wide trenches were excavated perpendicular to the center axis of the mound. Initially, one half of each mound was excavated, taking out alternating trenches and mapping the wall profiles. The trenches were excavated in m^2 segments by natural levels to mound fill. The fill was taken out in arbitrary 10 cm levels because the original soil surface was difficult to define. The mound fill was massive and had no stratigraphic levels. The floor of each mound was skimmed to reveal any submound pits. Two features were encountered in each mound and were excavated separately. Maps and photo records were made at each level of the mound floor.

4. EXCAVATION RESULTS

Habitation Area.

Test excavations yielded a scatter of cultural material along the entire length of the ridge beginning just north of mound 3 and continuing 135 m northward to where the ridge slopes down to beach level. The 1976 testing indicated that the cultural deposit extends at least 14 m inland from the bank.

North of unit #8 (1977) the scatter is very thin, but fairly consistent. The 8 units excavated along this 80 m stretch yielded only 3 artifacts and 10.6 grams of pottery crumbs (smaller than 2 cm).

The highest concentration of artifacts came from the area extending 50 linear m north from mound 3. The beach and shallows below this area correspondingly yielded the greatest number of artifacts relative to the surface collection.

The area between unit #4 (1976) and #8 (1977) yielded a particularly dense concentration of artifacts, comprising more than 70% of the total. Included in this area was the only cultural feature excavated in the habitation area. (Located in the NW1/4 and m^2 extension of unit #17). It was a roughly circular, brown stain with a diffuse, poorly defined outlined. It was 1 m in diameter and appeared just below the historic paleosol. It extended in depth from 26 to 33 cm below the present ground surface. Contents were small flecks of charcoal and numerous small fragments of mammal bone, the latter all burned but two. The mammal bone included 1 beaver ulna, 2 unidentified bird bones, the proximal femur of a muskrat and 1 unidentified fish vertebra. The feature also contained 10 rim sherds, 50 body sherds and 146 grams of pottery crumbs, representing at least 3 vessels. Chipped stone artifacts associated include 2 cores and 204 grams of waste flakes from them, 1 scraper, 2 flake knives and 1 projectile point tip. Below the SW1/4 of this feature was a dark brown, oval stain measuring 25 x 50 cm and appearing first at 40 cm below the ground surface. The base of

this stain was diffuse and difficult to define, but appeared to be a shallow basin, 10 cm thick. This area contained a few charcoal flecks and no cultural material. Flotation analysis on a portion of the soil from this feature did not yield useful information concerning the nature of this feature. Perhaps when the entire sample is processed, important floral data may be recovered. It is possible that this was a refuse pit given the quantity and variety of artifacts confined to a m^2 area.

A m^2 extension of the NE corner of unit #19 was excavated to bisect a 1 m x 2 m x 30 m cm deep oval depression adjacent to the unit. Recent and historic artifacts were found at the base of the pit. No prehistoric artifacts were associated and the depression is obviously recent in origin.

Cultural material was consistently recovered from the top of the B horizon of the historic paleosol. 83% of the total number of artifacts recovered from test units were from an arbitary 10 cm level below the paleosol (Table 2). There was no stratigraphic separation of the cultural components, as explained earlier. This, in addition to the fact that there was a single cultural feature of indeterminate nature and the low frequency of artifacts, makes the interpretation of the habitation area difficult. It is certain that the site was used at times as a specialized activity camp, i.e. spring fishing during spawning season, and may have been inhabited during the burial mound construction. All evidence indicates that a significant portion of the habitation area has been lost to erosion.

Mound 3.

The remaining portion of mound 3 was 7.5 m wide at the bank and 7 m long; its long axis oriented east-west. At its highest point, it was 59 cm above the original soil surface (Figure 8). A 1.5 m diameter pit excavated into the north side of the mound at the bank edge during the early part of this century was

TABLE 2

Artifact distribution by level in Test Units.

Level	Pottery			Chipped Stone						Ground Stone[d]	Total	% Total
	Rims	Body[b]	Crumbs[c] grams	Points	Scrapers	Knives	modified flakes	unmodified flakes	Cores			
1		1	1.7					1			2	.6
2	1	15	29.7	1	3		1	13		1	35	9.7
3	15	113	195.9	3	3	1	16	140	2	7	300	83.0
4[a]		17	9.0					7			24	6.7
Total	16	146	236.3g	4	6	1	17	161	2	8	361	100.0

a. includes levels below excavation level 4

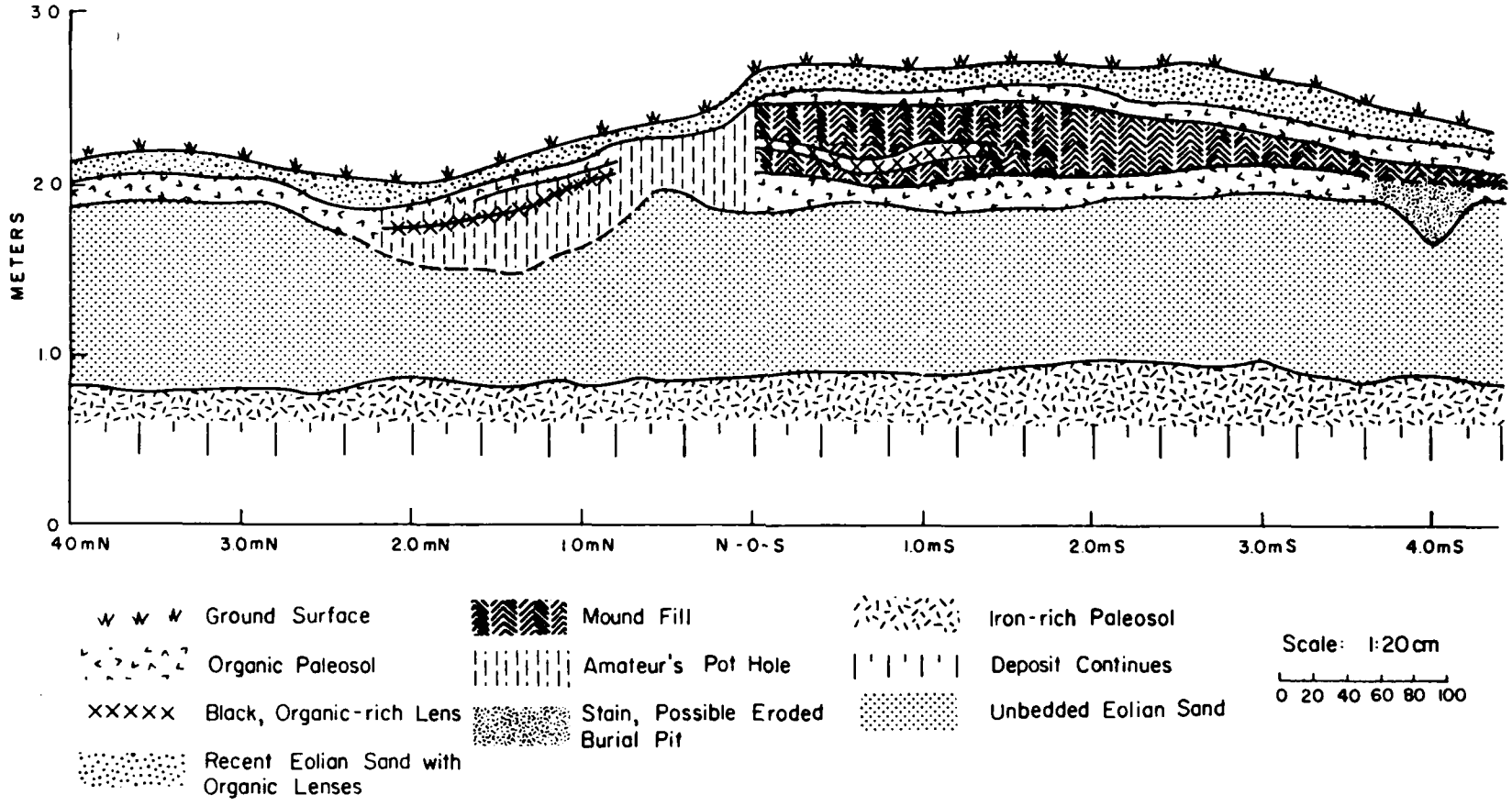
b. includes decorated body sherds

c. pottery smaller than 2 cm, not included in totals

d. minimum number, no complete tools

Level 1: post dam eolian deposit (10-19 cm thick)
= natural levels
Level 2: historic paleosol (9-24 cm thick)

Level 3: 'B' horizon of paleosol (10 cm thick)
= arbitrary levels
Level 4: Subsoil (eolian sand deposit) (10-25 cm thick)



21-IC-4

MOUND No. 3

Bank Profile, West Facing

CEW '78

Figure 8

later used as a trash pit, as recent items were recovered in the pit fill. Two additional smaller pits were also dug into the mound in recent times. One of these was at the northeast end and the other was adjacent to the south side of the large pit. The large pit was excavated to a depth below the original soil surface. Other than this, the mound floor was undisturbed save for one small oak in the NW corner, and gopher burrows. No human bones were recovered from the mound fill, nor was there any evidence of burial pits in the upper portion of the mound. Transverse and longitudinal profiles showed no interruption of the soil development over the surface of the mound except for the disturbed areas mentioned above. The mound fill is a homogeneous brown fine sand, mottled markedly only at the floor.

A double-walled, charred timber crib of pine lay on the original soil surface below the mound (Figure 9, Plate 4). The crib was 59 cm below the mound surface on the west end and only 10 cm below at the east end. It was rectilinear; 4.6 m in length with its center axis nearly in line with the center axis of the mound; 2.8 m wide and 15 to 20 cm thick. The timbers, some only partially charred, measured up to 25 cm across. A rectangular (1.6 x 1.1 m) charcoal concentration was located at the center of the north side of the crib and yielded numerous burned bone fragments of an unidentified mammal. Charcoal from this fired area was radiocarbon dated at 875 $\pm$ 115 C^{14} years B.P. or A.D. 1075 $\pm$ 115 (Geochron sample # GX-5299).

14 cm of mottled fill were skimmed off below the crib revealing 2 circular stains of sub-mound burial pits (Figure 9; Plate 5). Burial pit #1 was located below the center of the west end of the crib; pit #2, however, was 1 m outside both the cribbing and the visible outline of the mound. Charred logs appeared as extensions of the main crib, and extended towards pit #2, but did not cover it.

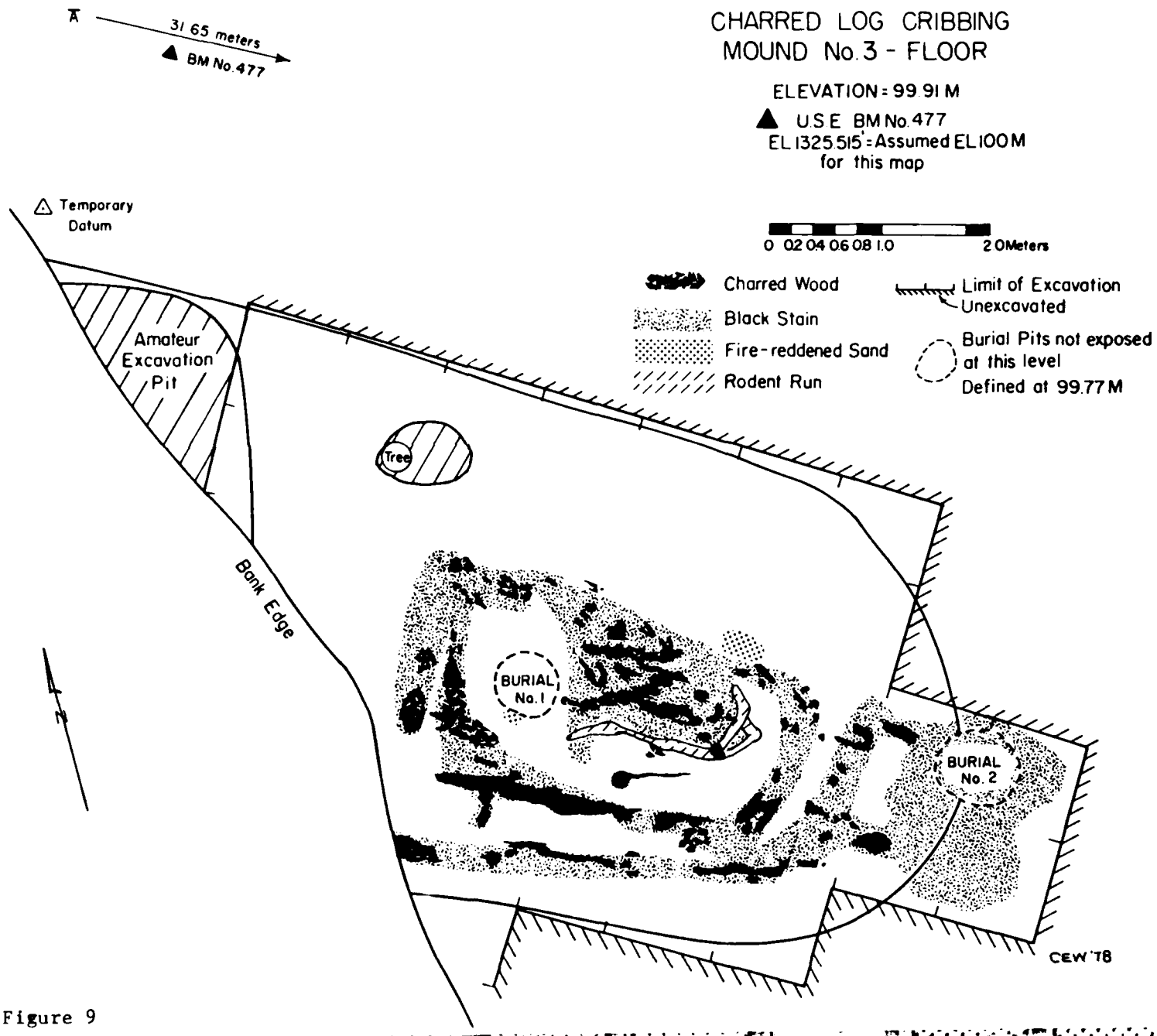

A
31.65 meters
BM No.477
CHARRED LOG CRIBBING
MOUND No.3 - FLOOR
ELEVATION = 99.91 M
U.S.E. BM No.477
EL 1325.515' = Assumed EL 100 M
for this map
Temporary
Datum
0 0.2 0.4 0.6 0.8 1.0 2.0 Meters
Charred Wood
Black Stain
Fire-reddened Sand
Rodent Run
Limit of Excavation
Unexcavated
Burial Pits not exposed
at this level
Defined at 99.77 M
Amateur
Excavation
Pit
Tree
Bank Edge
BURIAL
No.1
BURIAL
No.2
CEW '78

Figure 9

Burial Pit #1 had a circular outline, 1 m in diameter, which was clearly defined 14 cm below the timber crib. The burial pit was conical in shape and extended to 80 cm below the mound floor. At that point, it flared out forming a globular shaped base 35 cm across. At the bottom and to the side was a partial secondary burial representing an extremely fragmentary skeleton of a middle to old adult individual, consisting of only fragmentary portions of the following cranial bones: mandible, right temporal and right and left maxilla. Post-cranial remains consist of mid-shaft fragments of a left femur, left tibia and undetermined fibula, as well as a distal right femoral fragment. Age determination is based on tooth wear and therefore an approximate. The maxillary fragment retains all teeth excepting the left canine and exhibits a marked degree of shovelling on central and lateral incisors with central incisors exhibiting labial as well as lingual shovelling. The mandible fragments retains only the posterior dentition (premolars and molars) excepting the third molars.

The bones were removed and wrapped in aluminum foil and were not treated with a preservative. There were no associated grave items. The pit fill contained 5 ceramic rim sherds, 2 body sherds, 13 crumbs and a single lithic flake. The upper level of the pit had been recently tunneled in to by a rodent. Charcoal was not abundant in the pit except in the lower 50 cm. A radiocarbon date of charcoal recovered from the bottom of the pit was 1045 $\pm$ 130 C^{14} years B.P. or A.D. 905 $\pm$ 130. (Geochron Sample #GX-5297).

Burial Pit #2 was .85 m in diameter, with a slightly flaring upper portion, straight sides, and a flat base 75 cm across. It extended 1.27 m below the mound floor and was lined with charcoal (Plate 6). At the base and to the side

was an upright human skull, facing west and the incomplete skeleton of a young adult (25-30). Age determination is made on the basis of endocranial suture closure. Skeletal material consists of an incomplete cranium, a distal fragment of the right radius, 2 unidentifiable long bone fragments, a right navicular carpal bone and the 1st and 2nd cervical vertebrae. The maxillary fragment retains all the teeth excepting the incisors and left canine. The mandible retains all teeth except the right second premolar and the left second molar, the latter being lost pre-mortem as evidenced by the alveolar resorption. The maxillary first molars exhibit a moderate development of the Carabelli's cusp. Of particular interest is the markedly asymmetrical pattern of wear exhibited by both maxillary and mandibular dentitions. The right side shows a moderate degree of wear and cusp obliteration while the left side shows little or no wear and distinct cusp patterns. There is no evidence of peridontal disease and the fragmentary nature of the cranium does not permit observation of the temporal-mandibular joint. The right maxillary canine, second premolar and third molar show evidence of burning. Pathological observations revealed the presence of a large smooth walled lesion with smaller smooth walled pits on the sides of the lesion wall in the right half of the occiput fragment just posterior to the groove for the superior saggital sulcus. The only associated grave item was a slate palate with ochre deposits on both sides. Pit fill yielded 10 cord marked body sherds, 11 pottery crumbs and 1 modified flake. The lower portion of the pit yielded 5 waste flakes. A charcoal sample taken at the base of the pit was radiocarbon dated at 1250 ± 125 C^{14} years B.P., or A.D. 700 ± 125 (Geochron sample # GX-5298).

The mound fill yielded a total of 499 artifacts, including 40 rim sherds representing at least 18 vessels. 10 body sherds and 400 grams of pottery crumbs were also recovered. Lithic artifacts include 2 projectile points (1

equilateral side notched and 1 isosceles side notched), 4 scrapers, 5 knives, 11 utilized flakes, 12 ground stone tools (incomplete), and 5.06 kilograms of cracked rock. The mound fill was obviously obtained from the adjacent habitation area.

Mound 5.

The remaining portions of this linear mound measures 42.2 m in length and 5 m in width (Figure 10). Its long axis trends due north, taking a slight turn (9° E of N) at 25.8 m from the bank edge, and again (356°) at 35 m. The maximum height is 98 cm high and that amateur excavations along the mound's crest have built up the mound height with displaced fill (Figurell, Plate 7). Trenches and pits from unauthorized digging are common along the length of the mound, being more concentrated at the south end. The mound supports numerous small trees (oak and birch) with average dbh of 20 to 30 cm. Three trees were within the excavated portion of the mound, along the west side. These were left standing and the roots were cut away as the excavation proceeded.

A single pit burial was excavated from the mound. This was located at the eroding edge and is clearly outlined in the bank profile. No human bones were eroding from the pit, the burial being some 30 cm in from the edge. The upper portion of the pit had been disturbed and scattered human bone fragments were recovered from the fill in the immediate vicinity of the pit. This scattered material represents the fragmentary skeletal material of another individual on the basis of the presence of a second right 5th metatarsal and right zygomatic process of the malar. The individual is a middle to old adult. Age determination is based on a single pubic symphysis fragment which appears to represent Todd Phase IX (45-49). Additional skeletal material from a mottled stain 2 m north of the pit burial includes fragments of a right scapula,

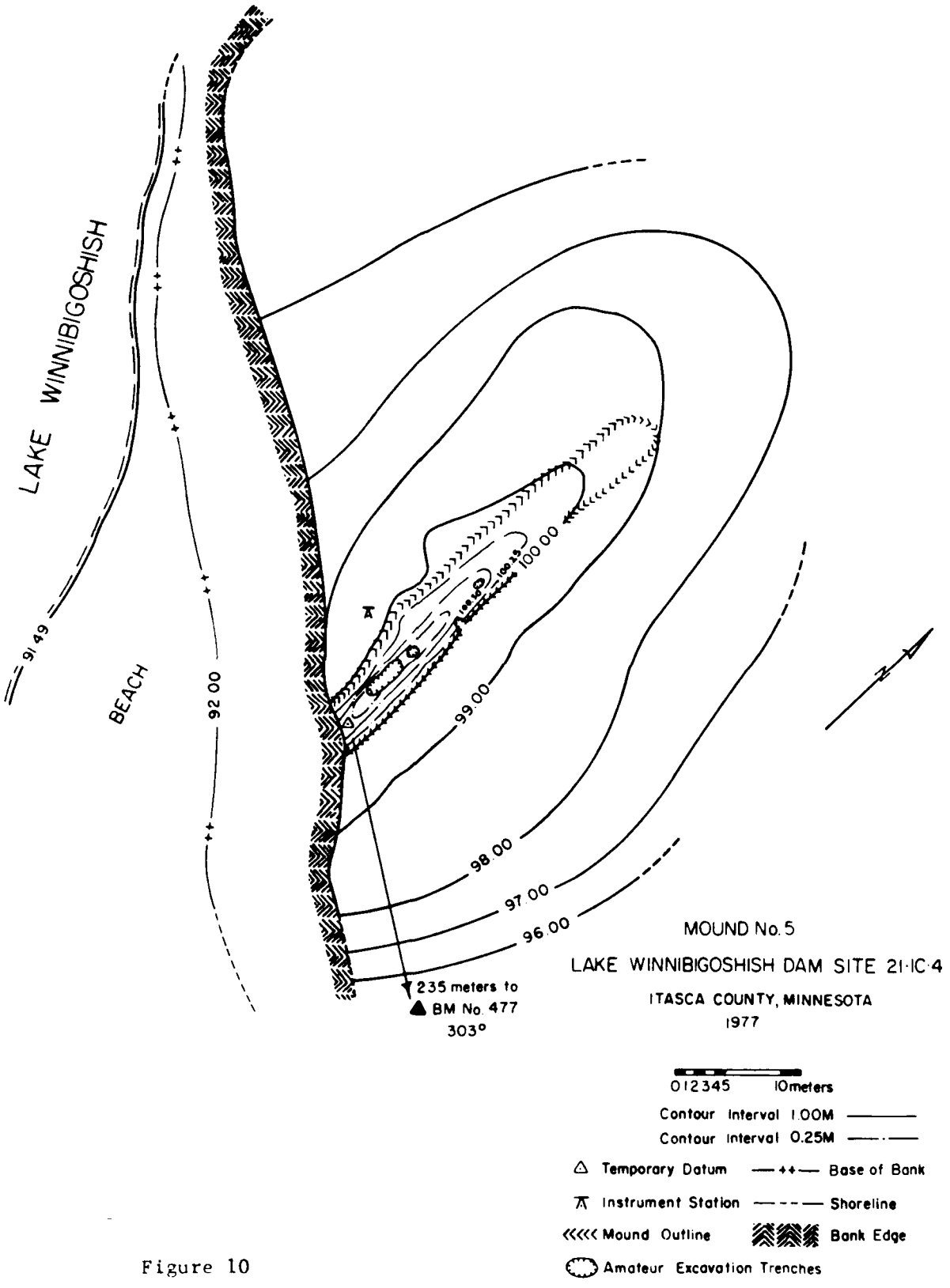
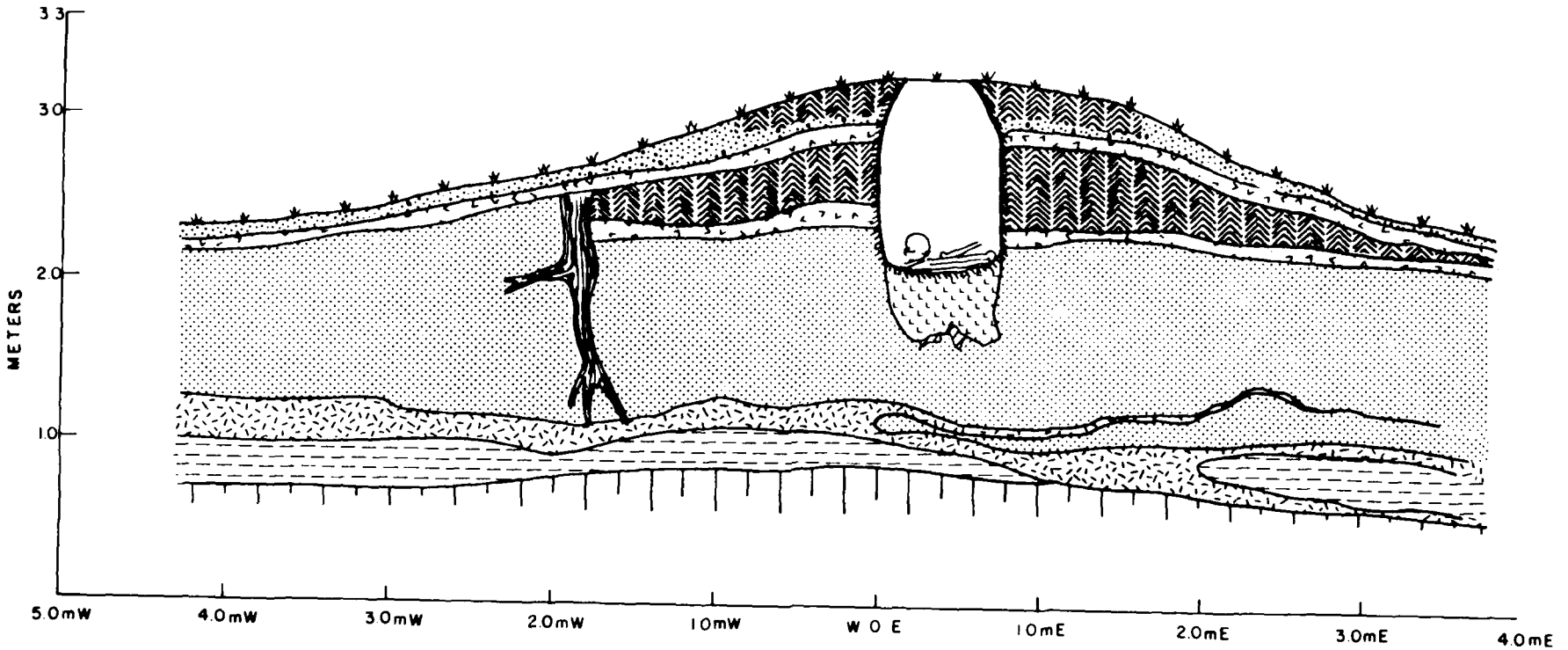

LAKE WINNIBIGOSHISH
91.49
BEACH
92.00
100.00
99.00
98.00
97.00
96.00
235 meters to
BM No. 477
303°
MOUND No. 5
LAKE WINNIBIGOSHISH DAM SITE 21-IC-4
ITASCA COUNTY, MINNESOTA
1977
0 1 2 3 4 5 10meters
Contour Interval 1.00M
Contour Interval 0.25M
Temporary Datum
Base of Bank
Instrument Station
Shoreline
Mound Outline
Bank Edge
Amateur Excavation Trenches
CEW 78

Figure 10



21-1C-4

CEW '78

MOUND No. 5

South Facing Profile

Figure 11

right radius, right ulna, a cervical vertebrae and a right navicular tarsal bone. A single maxillary left first molar exhibiting a high degree of wear is also present. An isosceles projectial point of slate was associated. This may have been a pit burial completely dispersed by illicit excavations. The transverse mound profile shows that the soil development over the mound surface above this has been completely obliterated.

Burial Pit in Mound 5.

This conical pit contained a single bundle burial at its base, 1.27 m below the present mound surface (or 90 cm below the original mound surface, Plate 8). A small piece of birch bark lay on top the burial. The skull lay tilted on its cranial vault at the side of the long bones. There were no associated grave artifacts. There was no charcoal associated with the pit nor any significant amounts anywhere in the excavated portion of the mound, in contrast to mound #3. The bone gelatin fraction of a femur from the burial was C^{14} dated at 1295 $\pm$ 140 years B.P. (C^{13} - corrected), or A.D. 655 $\pm$ 140. (Uncorrected age, 1220 years B.P. Geochron sample # GX-5296-G).

Mound 5 Burial 1 is the incomplete skeleton of an old adult (50^{+}) male. Sex determination is based on cranial morphology due to the fragmentary nature of the innominate. Age determination is based on endocranial suture closure. Skeletal material consists of an almost complete cranium, lacing portions of the face particularly portions of the right and left zygomatics and all of the maxilla including its dentition. The mandible retains the anterior dentition, the right first premolar and the left first and second premolar; all molars have been lost pre-mortem as evidenced by alveolar resorption. Post-cranial material is fairly extensively represented though incomplete. The innominates in particular are fragmentary, the vertebrae is represented by only 2 cervical and 3 thoracic

fragments, the ribs are fragmentary and incomplete and the fibulae are completely absent. Portions of the left hand and the right foot and a single left tarsal bone are present. Pathological observations reveal a grossly deformed proximal left tibia fragment exhibiting extensive remodelling and large drainage sinuses on the proximal condylar surface. The corresponding distal femoral condyles and patella are absent and therefore conclusions about the nature of this pathology are difficult to determine though the extent of the remodelling suggests trauma and secondary infection. The cervical vertebrae also exhibit osteophytic lipping of the bodies typical of age associated arthritis. Very few artifacts were recovered from mound 5, indicating that it had not been built on a habitation site. A total of 66 artifacts were recovered, including 3 rim sherds, 30 body sherds 65 grams of pottery crumbs, 2 projectile points, 1 scraper, 1 knife, 2 modified flakes, 24 waste flakes and 1 fragment of a ground stone tool.

The mound was temporarily refaced by undercutting the mound and slumping the sod down over a small tree brace. It was then backfilled. The amateur's trench closest to the excavated area was also backfilled.

5. ARTIFACTS

Ceramics

A total of 512 pottery sherds were recovered from the test units, mounds 3 and 5 and surface collections at 21 IC 4. 65 of these are rim sherds (plus 21 rim crumbs), 455 are body sherds (including 67 with decorations) and there are 786 grams of crumbs (sherds less than 2 cm in size). The crumbs were not included in the ceramic analysis. All of the pottery is grit tempered, ranging from sand to coarse crushed granite in temper size. Temper size in this sample did not appear to be related to surface treatment. Surface treatment of body sherds is cord impressed, 75%; smooth, 15%; and net impressed, 7%. Surface treatment on 2% of the body sherds was indeterminable due to weathering (Table 3).

TABLE 3

Distribution of Body Sherds (Including Decorated sherds) According to Surface Treatment

Treatment / Distribution	Cord	Smooth	Net		Indeterminate
			Single	Multiple	
Surface (erosional)	63	25	1	20	6
Habitation area (test units)	122	5	0	3	2
Mound 3 - fill (burial pit 1) (burial pit 2)	143 (1) (7)	33 (1) (0)	1 (0) (0)	8 (0) (0)	1
Mound 5	15	7	0	0	0
TOTAL	343	70	2	31	9
% TOTAL	75.4%	15.4%	7.2%		2%

Of the 67 decorated cherds, 33% were comb stamped; that is parallel horizontal rows of v-shaped impressions, occasionally with a stamped chevron. Cord wrapped dowel (cws) imprints comprise 28%, and rectilinear dentate stamp, 16% of the decorated sherds. Other decorative modes of lesser frequency are listed in Table 4 below. 84% of the decorated sherds are associated with cord marked surface treatment. Listed in order of greatest frequency, these a decorative modes are, comb stamp, cws, dentate and bossed. 5% are associated with net impressed sherds (combing) and 5% with a smooth surface (punctates, trailed line and reed imprints).

Nearly all of the 65 rim sherds (and the 21 rim crumbs) analyzed have straight to slightly flaring, unthickened and flat lips. The rims are discussed in categories based on exterior surface treatment.

Net Impressed: N = 1; 1.5% of total. 1 vessel.

Distribution of Decorated Body Sherds According to Surface Treatment*

Decoration / Treatment	Combed	Simple dentate	Comb stamp	Cord wrapped dowel	Bossed	Punctate	Trailed line	Reed impressed	TOTAL	% TOTAL
Net Impressed	3								3	5
Cord Impressed	1	11	22[a]	17	4[b]			1	54	84
Smooth						1	1	1	3	5
Indeterminate	3			1					4	6
TOTAL	7	11	22	18	4	1	1	2	64	
% TOTAL	11%	16%	33%	28%	6%	1.5%	1.5%	3%		100%

a. 2 with chevrons

b. 2 are combed

* 45 decorated sherds are less than 1 cm in size and were not included in this analysis. 38 of these are comb stamped and 7 are dentate.

A single rim is of the Brainerd net impressed type described by Johnson (1971). This sherd is multiple net impressed and has no decoration. The lip is unthickened, straight and slightly rounded. It has coarse grit temper and a body thickness of 7.2 mm. Temporal association is late middle woodland.

(Provenience Plate 9: surface)

Smooth: N = 10; 17% of total. 6 Vessels.

1. Two rims from the same vessel are straight, unthickened with flat lips. Devoit of decoration except for a single row of rectangular punctates (8.2 mm long and 3.6 mm wide, spaced 11 mm apart), placed 12.5 mm below the lip. Temper is coarse grit and body thickness is 8 mm.

This vessel is similar to middle woodland pottery types including Malmo-Kern to the south, Laurel to the north and Pokegma smooth to the south east (Wilford, 1966; Stoltman, 1973; Caine, 1969).

Provenience Plate 9: Mound 3, fill)

2. 1 rim is plain, straight and has an unthickened, flat lip. It has a double row of reed imprints immediately below the lip. Temper is coarse grit and body thickness is 6.5 mm.

Possible Middle Woodland affinity (Laurel).

(Provenience Plate 9: surface)

3. 2 rims are from a single vessel having a straight, unthickened, flat lip. Exterior decoration consists of oblique slashes spaced 7.7 mm apart, extending 19.5 mm below the lip. The sherds were broken along a horizontal band of closely spaced punctates, 19 mm below the lip, spaced 3.2 mm apart. Temper is coarse grit and body thickness is 4.9 mm.

Middle Woodland affinity (Laurel Incised).

(Provenience: Mound 3, fill, and burial pit #1)

4. 2 rims are from the same vessel and have no decoration. These are straight and unthickened and have flat lips. Temper is fine grit and body thickness is 6.7 mm.

Both sherds are too small to compare attributes with established pottery types. (Provenience: Mound 5, fill)

5. Combed over smooth surface: 2 rims representing 1 vessel have a straight unthickened flat lip. Decoration consists of oblique combing extending 17 mm below the lip, then vertical combing below. Immediately below the lip there are opposing oblique cws impressions, 5.7 mm long. The sherds have a coarse, grit temper and a body thickness of 7.4 mm. Unknown cultural affiliation. (Provenience: Plate 9, Mound 3 - fill)

6. 1 rim from a mortuary vessel. Curvature indicates an orifice diameter of 4.5 cm. This sherd has no decoration. It has a slightly rounded lip, straight to in-curving neck, suggesting a bowl shaped vessel. Body thickness is 3.2 mm and temper is coarse grit. Cultural affiliation is unknown.
(Provenience Plate 10: Mound 3 fill, 2; unit L-3 [1977], 1)

Cord: N = 26; 40% of total. Minimum of 9 vessels.

1. Dentate stamp: 3 rims representing 3 separate vessels. 1 large rim has horizontal rows of rectangular dentate stamping. The rows are spaced 6 mm apart. Alternating interior and exterior vertical stamping below the lip gives the lip a wavy or crimped effect. There is a row of bosses 14 mm below the lip, spaced 1 cm apart. Temper contains grit particles up to 8 mm in size. Body thickness is 5 mm. Middle woodland association, decoration similar to Laurel Dentate, bossed variety but most closely resembles St. Croix Dentate stamped. (age estimates A.D. 500-900, Johnson, 1973).

Provenience: 2 (incl. large sherd), Mound 3, fill; 1, unit 3, L-3 (1977))

2. Combed Stamped. N = 11

Decoration is rows of parallel horizontal and parallel oblique or verticle stamped decorations made with a notched instrument (like the teeth of a comb) applied at an angle leaving a v-shaped imprint (Cooper 1964). The flat lips are crimped by alternating vertical or oblique interior and exterior stamping. Lips are straight to slightly flaring and sometimes slightly thickened. Temper is coarse and paste is friable. Body thickness ranges from 2.7 to 6.6 mm.

(Provenience: surface 1; mound 3 fill, 4; U-17,5)

2 subvarieties are defined:

a. Comb stamp with bosses. N = 9

(Provenience: 1, surface; 1, U-4; 7, mound 3 - fill)

b. Comb stamp with punctates. N = 2.

(Provenience: U-17) (Plate 10)

Middle woodland association, St. Croix dentate variety. Similar to that found at the Altern site in Wisconsin and dated A.D. 340 ± 135. (Cooper, 1964).

3. Blackduck combed: 1 rim with flat over-hanging lip (not wedge shaped), oblique cws applied on lip, faintly in the interior and on the exterior, extendint 15.5 mm below the lip. Coarse grit temper and body thickness of 4.7 mm. Late woodland.

(Provenience: Mound 5 - fill)

Unclassified Rims: N = 9; 14% of total. 7 vessels.

Cultural affiliations unknown.

1. 2 rims from separate vessels, having straight, flat and unthickened lips. Oblique cws impressions on lip, interior and exterior surface below lip. Horizontal rows of cws impressions spaced 7.3 mm and 1.43 mm apart respectively. One has a row of bosses separated by an oblique cws imprint and the other had punctates separated by a deep, vertical cws indentation. Temper is coarse grit and body thickness is 6 mm.

(Provenience: surface 1; mound 3 fill, 1)

2. 2 rims from 2 separate vessels. 1 plain with lip notching and a single row of faint stamped impressions 4.5 mm below the rounded lip. 1 with oblique cws on lip, also with faint stamp below lip. Surface treatment is indeterminant. Temper is coarse grit and average body thickness is 5.3 mm.

(Provenience: Mound 3 - fill)

3. 4 waterworn and weathered rims representing 3 distinct vessels. 2 have flat, unthickened and slightly flaring lips and no decoration. Exterior surface treatment is indeterminant. 2 have rounded, straight lips, 1 with oblique cws below the lip on the exterior surface only. The other has a faint horizontal band of cws imprints, 5.3 mm below the lip.
(Provenience: surface)

4. 1 split rim, straight and flat. Interior oblique comb stamp and a punctate, 18.5 mm below lip. Coarse grit temper.
(Provenience: surface)

Rim Crumbs: N = 21. All less than 1 cm in size. All are flat lipped, 2 are slightly thickened, the rest are unthickened. 10 are slightly flaring. These include cord wrapped dowel, comb stamped or no decorations at or on the lip. (Provenience: surface, 1; mound 3 fill, 16; U-17, 2; U-20, 1; U-5 (1976), 1.)

Chipped Stone Artifacts

Projectile points: A total of 21 projectile points were recovered from the excavations (8) and from surface collections (13). In addition, 4 ovoid to triangular bifaces, assumed to be projectile preforms, and the tip of a broken point are also discussed within this class. These artifacts are divided into 5 categories on the basis of blade shape and type of hafting element. (Plate 11)

Side notched (N = 6)

Three of these points have straight bases, 1 is convex and 2 are slightly concave. All have straight edges and are biconvex in cross section. Blade shapes are triangular (isosceles, 3; equilateral, 2) and one has been reshaped such that it has an abbreviated, irregular blade. Materials used are quartzite (3), chert (2), and chalcedony. In length, the range is 1.46 to 3.07 cm (average = 2.23 cm); width is from 1.12 to 1.44 cm (average = 1.36 cm); thickness ranges

from .26 to .46 cm (average = .38 cm); and weight is between .7 and 2.3 grams (g) (average = 1.47g).

(Provenience: surface, 4; Mound 3 - fill, 1; Mound 5 fill, 1.)

Equilateral triangular (N=5)

Characteristics shared by this group are straight bases approximately equal in length to the unnotched blade edges. Three of the specimens have straight edges and 2 have convex edges. Included in this category is a point which has been retouched on the lateral edges near the base such that it is a truncated ovoid in form. In cross section, 2 are plano-convex, 2 are biconvex, and 1 is biplanar. Two of the points are of quartz and 3 are quartzite. Length ranges from 1.36 to 2.52 cm (average = 1.86 cm); width from 1.15 to 1.67 cm (average = 1.46 cm); thickness from .33 to .44 cm (average = .37 cm) and weights are between .7 and 2.0 g (average = 1.44 g).

(Provenience: surface, 2; Mound 5 fill, 1; U-4 (1976), 1; U-16,1.)

Isosceles triangular (N=5)

These points have straight to slightly concave bases that are approximately half the length of the edges, which are not notched. Edges are straight to slightly convex and blade cross sections are biconvex (3), bevelled, and plano-covex. Materials used are slate, chert and quartzite (3). The lengths range from 1.89 to 2.47 cm (average = 2.18 cm); width from 1.33 to 1.57 cm (average = 1.47 cm); thickness from .35 to .46 cm (average = .42 cm), and weight is from 1.0 to 1.7 g with an average of 1.4 g.

(Provenience: surface, 3; Mound 5 floor, 1; U-4 (1976), 1.)

Eared (N=3)

Concave bases and shallow side notches producing a pinched corner at the base are characteristic of these points. Two have straight edges and on one, the edges are convex. Cross sections are biplanar, biconvex and bevelled. Ma-

terials used are quartzite chert and slate. The lengths range from 1.95 to 2.18 cm (average = 2.08 cm); width from 1.45 to 1.74 cm (average = 1.59 cm); and thickness is from .28 to .43 cm (average = .38 cm). The points weigh between 1.4 and 1.8 g with a mean of 1.6 g.
(Provenience: surface, 2; Mound 3 fill, 1.)

Corner notched (N=2)

Both of these points have straight bases and straight to slightly convex edges with the corner removed. The blades are biconvex and plano-convex in cross section. Materials used are brown chalcedony and white chert. They measure in length, 2.57 and 2.91 cm; width, 1.71 and 1.83 cm; thickness, .3 and .52 cm, and weigh, 1.7 and 2.5 g.
(Provenience: surface, 2.)

In addition, a tip from an unfinished point, broken during manufacture was recovered from the surface. It is of white quartz.

The 4 preforms are all biconvex in cross section and ovoid to triangular in outline. They are fairly uniform in size, roughly 2.75 cm long, 2.0 cm wide, and .65 cm thick. They weigh, on the average, 3.5 g. They show some utilization wear along the lateral edges. Materials used are quartzite (3) and chert. All were recovered from the surface.

Scrapers: There are 13 scrapers in the chipped stone assemblage. All are plano-convex having one or more marginally retouched edges. Retouching is absent on the planar surface, occurring only in the removal of the bulb of percussion. The convex surface of one specimen is retouched completely; the others have 2 or more large flake scars on this surface. Two of the scrapers have parallel flake scars on their convex surfaces, possibly representing a prepared (or prismatic)

core and blade technology. Seven are end scrapers, including one which has a lateral edge used as a spoke shave. Five have 2 or more working edges. On all the scrapers, the point of maximum width occurs at the working edge. These artifacts are grouped below according to outline. (Plate 12)

Triangular end scrapers (N=4)

This group includes 1 snub-nose scraper, which is markedly convex in cross section at its working edge. Working edges are straight to slightly convex and are perpendicular to the long axis of the tool on 2 of the scrapers. On the remaining 3, the working edge is positioned such that more than half of the edge is to one side of the long axis. Two have the bulb of percussion at the working edge (1 was removed); on one, the bulb is opposite this edge, and it is not present on one. Cross sections at the working edge are plano-convex (2) and triangular (2). Maximum thickness occurs at the scraping edge on 3 and is along the lateral edge of 1.

Materials used are white quartz, quartzite, jaspilite and chalcedony.

Length:	Range, 1.82 to 2.7 cm	Average 2.37 cm.
Width:	Range, 1.53 to 1.85 cm	Average 1.7 cm.
Thickness:	Range, .48 to .88 cm	Average .63 cm.
Weight:	Range, 2.25 to 3.4 g	Average 2.81 g
Angle of working edge:		
	Range, 55° to 76°	Average 64.5°

(Provenience: surface, 3; U-18, 1.)

Quadrilateral scrapers (N=5)

These are irregularly shaped, 4-sided scrapers including 2 end scrapers (1 snub nose) and 3 with 2 or more working edges. The bulb of percussion is

at the working edges on 2 (removed from 1) and is not present on 3. Scraping edges are straight to slightly convex. Two are triangular in cross section and 3 are trapezoidal.

Materials used are brown chalcedony (2), gray chert (2), and poor quality quartz.

Length:	Range, 1.63 to 3.11 cm	Average, 2.35 cm
Width:	Range, 1.19 to 2.12 cm	Average, 1.77 cm
Thickness:	Range, .38 to .95 cm	Average, .70 cm
Weight:	Range, 1.2 to 7.8 g	Average, 4.02 g
Angle of working edge:		
	Range, 60° to 67°	Average, 62.4°

(Provenience: surface, 3; Mound 3 fill, 1; Mound 5 fill, 1.)

Circular (N=2)

Both of these scrapers have 3 working edges, 1 with carefully prepared edges and 1 with irregularly retouched working edges. The bulb is at the working edge on one, and is not present on the other. Cross sections are plano-convex and trapezoidal. They are of jaspilite and chalcedony.

Length:	Range, 1.82 and 2.3 cm	Average, 2.06 cm
Width:	Range, 1.8 and 1.82 cm	Average, 1.81 cm
Thickness:	Range, .66 and .6 cm	Average, .63 cm
Weight:	Range, 3.4 and 3.6 g	Average, 3.5 g
Angle of working edge:		
	Range, 70° and 55°	Average, 62.5°

(Provenience: surface)

One jaspilite scraper is broken in half along the long axis. It has two working edges, is plano-convex in cross section and measures 1.92 cm in length and .42 cm in thickness.

Knives: Included in this class are 9 bifacially retouched flakes and blades, probably used as cutting tools. Twenty-two non-retouched flakes with bifacial utilization along a lateral edge are also included. Knives are grouped below according to blade form.

Triangular knives (N=4)

Two are complete with straight bases and straight to slightly convex edges, two are broken at the base. On one of these, a lateral edge has been dulled to form a backed knife.

Materials used are pink chert (heat treated), slate (2) and brown chalcedony.

Length:	Range, 5.15 to 8.95 cm	Average,	7.01 cm
Width:	Range, 2.32 to 3.95 cm	Average,	3.07 cm
Thickness:	Range, .5 to 1.15 cm	Average,	.77 cm
Weight:	Range, 1.4 to 37.5 g	Average,	17.85 g

(Provenience: surface) (Plate 13)

Ovoid (N=2)

Both of these knives are broken at the base. One is very thick and is probably a preform broken during retouch. Both are quartzite. Length is approximately 3.39 cm, average width is 2.58 cm, average thickness is .49 cm and the average weight is 7 g.

(Provenience: surface.)

Diamond (N=1)

A single diamond shaped knife was recovered from the excavation. It has one edge retouched to form a scraping edge. It is of quartzite and measures 2.37

cm in length, 1.43 cm in width, and .52 cm in thickness. Its weighs 1.5 g. (Provenience: U-8) (Plate 12)

Blade knives (N=2)

Both of these blades have been marginally retouched along one longitudinal edge. They are slightly curved and are of chert and brown chalcedony. The striking platform and bulb of percussion are present on both. The bulbs are less than 1/3 the length of the blade and the platforms measure 3.2 mm and 6.9 mm respectively. They measure 4.9 and 4.05 cm in length; 2.2 and 1.63 cm in width; .71 and .39 in thickness and weight 9.4 and 2.3 g.
(Provenience: surface) (Plate 12)

Flake Knives (N=22)

These are elongate or large flakes, irregular in shape, showing utilization and in some cases retouch along a longitudinal edge. Materials represented are clear quartz (5), chert (3), moss agate (2), chalcedony (2), slate, and quartzite. They range in length from 1.15 to 5.7 cm; width, .88 to 3.92 cm; thickness, .2 to .98 cm and weights range from .3 to 21.5 g.
(Provenience: surface, 8; Mound 3 fill, 9; Mound 5 fill, 1; U-17, 2; U-4 (1976), 2.)

Miscellaneous Bifaces: One celt of basalt was recovered from the surface. It is retangular in shape and it crudely retouched on both faces. It has shallow hafting notches on the lateral edges 1.7 cm below the distal end. The battered working edge is perpendicular to the long axis of the tool, and is a fairly straight edge. It is 7.1 cm long, 3.9 cm wide, .8 cm thick and weighs 61 g. (Plate 13)

A roughly shaped granite biface was recovered from unit 20. It is triangular in outline and biconvex in cross section. No utilization wear at its blunt point is evident. It is 5.4 cm long, 3.76 cm wide, 2 cm thick and weighs 41.1 g.

Gravers: A single graver is represented in the chipped stone assemblage. It is triangular in outline, with all sides being of equal length. A single flake has been removed from one edge to form an engraving point. It is made from grey quartzite and is 2.41 cm long, .36 cm thick and weighs 1.9 g. (Width is not measurable due to a lateral fracture.)
(Provenience: U-17.) (Plate 12)

Perforators and Punches: On an irregular quartzite flake, 2 points have been shaped for probable use in perforation. Unifacial retouch and utilization wear are present on the points as well as on all the lateral edges of the flake. The points appear to be smoothed, but water wear makes this difficult to distinguish. The flake is 2.32 cm x 2.57 cm x .48 cm and weighs 2 g.

A brown chalcedony waste flake has unifacial, marginal retouch forming an abrupt point, probably used as a punch or for perforation. It is 2.78 cm long, 1.67 cm wide and .5 cm thick, weighing 2 g.
(Provenience: surface; U-1 (1976).) (Plate 12)

Spoke shave: Only a single representative of this class was recovered from the site. It has one scraping edge and has been discussed in the scraper class. One lateral edge of this artifact has a groove 1.02 cm long and .22 cm deep in its center. This area has small step fractures from intense utilization. The opposite edge has been broken, leaving a large concave fracture scar. There is some utilization wear along this edge.
(Provenience: surface) (Plate 12)

Wedge: Again, there is only one artifact representing this class. It is a thick quadrilateral flake with a blunt bifacial working edge. Elsewhere there is minimal bifacial retouch on the artifact. It may have been used as a slotting tool, however the poor quality quartz of which it is made would not have

lent itself well to this function. It is 1.51 cm long, 2.44 cm wide and .9 cm thick, weighing 4.1 g.

(Provenience: U-17)

Utilized waste flakes: Fifty three of the waste flakes recovered were utilized, 12 bifacially and 41 unifacially. Quartzite flakes comprise the greatest percentage of both categories of utilized flakes (Table 5). (This category includes the flake knives described on page 44)

TABLE 5

Utilization of Waste flakes according to material.

	Quartz		Chert		Quartzite		Chalcedomy		Other	
	#	%	#	%	#	%	#	%	#	%
Bifacial utilization	1	2	3	6	5	9	1	2	2	4
Unifacial utilization	12	23	5	9	16	30	8	15	0	0

(Provenience: surface, 20; Mound 3 fill, 17; Mound 5 fill, 1; U-8, 1; U-17, 6; U-18, 1; U-19, 2; U-4 (1976), 4; U-5 (1976), 1)

Unused waste flakes: The 443 unmodified waste flakes from the site are categorized after Gibbon, 1975 and are divided into 4 groups:

Shatter flakes: Angular and cubical pieces of stone with no modification. These comprise 4% of the total (N=18).

Primary decortication flakes: Cortex covering one face of the flake. 5% of the total (N=24).

Secondary decortication flakes: Those with less than 1/3 of one face covered with cortex. 10% of the total (N=43).

Regular flakes: Having no cortex. 81% of the total (N=358).

The greatest percentage of unused flakes are of quartz and quartzite (40% and 41% respectively). Chert comprises 8% chalcedony, 5% and other materials including slate and jasper claim the remaining 6% of the total.
(Provenience: surface, 55; Mound 3 fill, 193; Mound 3, burial 1, 1; Mound 3 burial 2,8; Mound 5 fill, 24; U-%, 1; U-6, 1; U-7, 1; U-8, 4; U-10, 1; U-13, 1; U-17, 110; U-18, 9; U-19, 3; U-20, 7; U-4 (1976), 17; U-5 (1976), 4; U-7 (1976), 1; U-8 (1976), 1.)

Cores: Six core remnants were identified from the site. Two have been utilized as scrapers. Materials represented are quartzite (3), quartz, chert and basalt. They range in size from 5.22 to 4 cm long and from 3.5 to 5 cm across. Weight ranges between 27.2 and 149.9 g.
Provenience: surface, 3; Mound 3 fill, 1; U-17; U-20.) (Plate 14)

Ground Stone Artifacts

No complete ground stone tools were recovered. Twenty one fragments represent 1 celt, 3 hammerstones, 12 manos, 1 sandstone abrader and 3 are cracked rockes with battered edges. Most of these are small fragments of the original tool and use suggestions implied in the above list is based on observed battering, polish and striations on the fragments.

Alson, a section of a pipestem of ground stone was found on the surface. It is rectangular in cross section and is 3.45 x 1.87 x 1.54 cm. The drilled opening is .75 cm in diameter.
(Provenience: surface, 2; Mound 3 fill, 12; Mound 5 fill, 1; U-4, 2; U-19, 1; U-20, 3.)

A flat slate "palate" was excavated from the base of burial pit 2 of Mound 3. It is 12 x 6.2 x .88 cm and is roughly rectangular in shape. It has what appear to be red ochre deposits on one face. This face also has longitudinal

striations. The opposite face has yellow ochre deposits and circular scars left from spalls presumably removed by impact.

Bone Artifacts

A single bone artifact was discovered at the site. It is a drilled deer phalange, excavated from unit 19 (NW quad) from 25 to 28 cm below the ground surface. It measures 1.47 cm in length, 1.3 cm in width and weighs .8 grams. This was probably the 'cup' in the cup and pin game known from archaeological sites.

Historic Artifacts

Fifty eight historic items have been recovered from the site. Those which are chronological markers indicate a late 1800 to early 1900 occupation. They may coincide with several historic activities including very late Ojibwa cemetary construction, the Fairbanks Trading Post at the site, logging, and dam construction. Most appear to be associated with logging and dam construction activities. The artifacts are listed below according to provenience.

Location	Description
U-4 (1976, 30-40cm)	2 metal grommets, 4 metal snaps, 1 metal button, 2 buckles, 2 cut spikes (spikes are roughly from 1850 to 1910)
U-7 (1976, 0-45 cm)	1 section of cut spike
U-8 (1976, 10-20 cm)	1 cut spike
U-5, L-1	1 cut spike
U-6, L-1	1 stonewear fragment
U-17, NE, L-3	1 cut spike
U-17, ext, L-2	1 cut spike
U-18, NE, L-2	1 cut spike
U-18, SE, L-2	1 cut spike
U-18, SW, L-2	2 cut spikes

Location	Description
U-20, NE, L-2	1 large cut spike
U-20, SE, L-2	2 cut spikes
U-20, SE, L-2	1 fragment of stonewear
U-20, SE, L-3	1 fragment of stonewear, post late 1800's 1 fragment of whitewear, post 1850
U-20, SW, L-2	1 fragment of stonewear, 1 of whitewear
Mound 3 fill	1 fragment from stonewear bottle 1 metal can with rolled rim 1 shotgun shell, 40-82 W.G.F., W.R.A. Co.
Mound 3 fill	3 fragments from cast iron stove door 7 cut spikes 1 glass bottle, pre 1903
Bank strata cuts	Fragment from glass chimney of kerosene lamp, 1870's? 1 iron hardware item, unidentified
Surface	6 cut spikes 2 4-hole shell buttons, post 1840's? 5 shotgun shells S U M C H 33 55 U M C 32 S & W (3) Peters 38 S & W

6. FAUNAL REMAINS

A total of 325 non-human bone fragments were recovered; 110 from the excavated test units, 185 from the fill of Mound 3 and 29 from mound 5. Ninety-nine, or 30% of these were identifiable and are listed in the table below (Table 6).

Of the fragments too small to be identified, 213 were mammal (180 burned); 9 bird (all burned) and 4 fish (all burned).

Of the identified species, there is only one seasonal indicator. That is the single bone of an immature beaver which suggests a spring or summer occupation. The other species are available year round, with the exception of the turtle which would be unavailable in winter. The chipmunk in the sample is of recent intrusion. All the walleye bone are from the fill of Mound 3.

TABLE 6

Faunal Remains, minimum number of individuals and provenience.

Name	Total # and % of total	Burned	Minimum # individuals	Provenience
Castor canadensis, Beaver	3	yes	2	Md-3 L-2 U-5 (76) L-2 U-17 N W L-3
Tumias striatus, Chipmunk	3	no	1	Md-3, fill
Sylvilagus floridanus, Cottontail	1	yes	1	Md-3, fill
Ondatra zibethicus, muskrat	2	no	1	U-17 ext L-2 U-6 L-2
Chelydra serpentina Turtle (Snapper?)	33	no	?	Md-3 fill U-7 L-2, L-3 U-18 L-2 SW, SE
Stizostedeon vitreum Walleye	52	no	?	Md-3 L-2, fill
Odocoileus virgianus Whitetail deer	2	no	2	Md-3 - fill
Deer	4	no	1	Md-3 - fill U-19 L-2 NW,SE
TOTAL	99			

7. ANALYSIS AND CONCLUSIONS

The Winnibiboshish Dam Site was at one time much larger than the remnant present today. An examination of Figures 3, 4, and 5 clearly indicate the presence of additional burial mounds (Brower suggests 20 or more as noted previously), an historic Ojibwa cemetery, a "garden" area, and a larger land surface suggestive of a much more extensive prehistoric habitation zone. A comparison of the earlier maps with the map of the present site (Figure 2) shows that the area of the site marked by the historic Ojibwa graves has disappeared, the "garden" area is now submerged, and a major portion of the higher ground on which the burial mounds were located has disappeared or has been levelled through construction activities at the dam site in the latter 19th century.

The limitations of the Scope of Work prohibited sampling throughout the site area so that the excavation data presented here should not be viewed as representative of the original site or the remaining segments of the site. Small portions of two of the five remaining burial mounds were excavated and only a very small strip of the edge of the probable habitations zone was tested. With the horizontal distributional variation present in the original site, and the subsequent disappearance of much of those varied activity areas and components, generalizations about the entire site are impossible.

In the 1976 Lake Winnibigoshish shoreline survey, the collected site data were grouped into seven cultural periods beginning with an Early Prehistoric period extending from the terminal glacial period to 200 B.C.; a Middle Prehistoric period from 200 B.C. to A.D. 800; a Late Prehistoric period from A.D. 800 to A.D. 1600; an Initial Historic period from A.D. 1660 to A.D. 1750; a Fur Trade period from A.D. 1750 to A.D. 1880; an Intensive Resource Use period from A.D. 1880 to A.D. 1920; and the Recent period from 1920 to this date (Johnson, Harrison, Schaaf 1977:24). Data from the 1977 excavations represent components within

the Middle and Late Prehistoric, the Fur Trade, and Intensive Resource Use periods.

The preliminary analysis of the site data described here indicates that the portions of the site excavated in this project demonstrate the presence of several components in the habitation/activity area and a single component represented by the remaining burial mounds. The ceramics offer the best cultural evidence for the definition of these components within the prehistoric sequence and offer at least minimal ages for activities represented in the historic components. The prehistoric ceramics include a much wider range of wares than the previous year's reconnaissance survey data suggested. Those survey results indicated that "Cultural affiliations include both Blackduck and Sandy Lake (Johnson, Harrison, Schaaf 1977:48)" and it was further inferred that "It is probable that the habitation area post-dates the mound construction...(Johnson, Harrison, Schaaf 1977:48)." Both of these statements are incorrect and must be modified on the basis of the 1977 mitigation.

The fill of burial mounds #3 and #5 both contain debris from the habitation area indicating that the construction of these two mounds, or at least those portions of those mounds excavated, actually post-date one or more earlier site occupations. Further, those earlier occupations are represented by a mixed ceramic assemblage that includes smooth, cord marked, and net impressed surface treatment with predominant dentate and punctate decoration. Typological analysis of these sherds places them in three major wares: Laurel, St. Croix and Brainerd, but the mixed nature of the mound fill does not permit any determination of their possible contemporaneity or temporal separation. Data from the excavation units within the habitation area, where one would hope for some stratigraphic data impinging on this question, does not provide any answers. The alternative interpretation that would define a single component with a mixed ceramic assemblage consisting of northern Laurel and the more southerly Brainerd and St. Croix cera-

mic wares is perhaps most acceptable and the implications of that view will be examined later.

The historic ceramics are very few in number and all date from the 19th and early 20th century. The associations of this ceramic complex are not clear from the excavations where so little data are present and where severe disturbance of the upper soil levels existed. The 19th and early 20th century components of the site include Ojibwa Indian activities associated with the historic cemetary and "gardens" noted on the early Brower map; the somewhat elusive Fairbanks trading post; logging activities and activities associated with the construction of the dam. Excavation data produced no features from this time horizon with which the scattered 19th century ceramics or fragmentary metal artifacts can be associated.

The most complete and perhaps the most important cultural evidence comes from the burial mound excavations. One circular and three linear mounds comprise four of the five reamining mounds or partial mounds at the site. The third mound, the remaining portion completely excavated here, is most probably a remnant of a linear mound, though positive reconstruction of the mound form is impossible. The mound illustrated by Brower is also a linear mound, despite his suggestions that it may have represented an effigy form. The mounds in their external form, thus conform to the pattern seen at Gull Lake (Johnson 1971), Arvilla (Johnson 1972) and differ from the Laurel and Blackduck mound forms described for this northern area (Wilford, 1943, 1955; Stoltman 1972; Lugenbeal 1976). The latter mounds are always circular or oval. More than the external form is the nature of the mound construction over time. The mounds at the Winnibigoshish Dam site, Gull Lake, and Arvilla are frequently cumulative or accretional, but additions to the original mounds are made by extending the mound from one or both ends along the same axis. Subsequent additions to Laurel and Blackduck mounds are vertical accretions which serve to raise the height of the mound and enlarge

its circumference. The mound forms associated with the different cultural units also differ in the placement of burials with the circular Laurel and Blackduck mounds containing burials throughout the mound fill above the original subsurface and surface burials, while those associated with the Arvilla complex exhibit subsurface pit burials and only an occasional intrusive burial in the mound fill.

Blackduck mounds also occur with some frequency as isolated individual mounds, like that at the Osufsen site described by Wilford (1943). This mound, located on the Bowstring River at its inlet to Rice Lake, is less than 20 km from the Winnibigoshish Dam site but lies in the northern Rainy River drainage, not the Mississippi River drainage basin of Lake Winnibigoshish. The affinities of Osufsen are clearly Blackduck and Sandy Lake in burial mode, but the mound does exhibit a Brainerd net impressed component in the mound subsurface and lower mound fill. Isolated mounds like Osufsen occur on riverine locations within both drainage basins while linear mounds never occur in the Rainy River drainage basin nor do they occur as isolated single mounds.

The burial mode exhibited in those segments of mounds #3 and #5 reported here resemble most closely the mode seen at the Gull Lake site (Johnson 1971). The charred rectangular log crib placed above the pit burials of mound 3 at the Winnibigoshish Dam site differs from the Arvilla site burial modes, but is similar to the mode at at least two burials at the Gull Lake Site (Johnson 1971:49). The burials in areas B and C of mound #2 at Gull Lake were in pits like those described here and had charred wood fragments overlying the burial pits. A sample of human bone from the Gull Lake site, mound #8, was dated by Geochron (GX-5300-A) at A.D. 1055 ± 115.

This date, obtained on bone apatite fraction (no appreciable collagen was present) and C-13 corrected, is almost identical to that obtained on charcoal

(GX-5299) from mound 3 at the Winnibigoshish Dam site, but later than the two other charcoal dated samples (GX - 5297 and Gx-5298) from burials #1 and #2 from mound #3. It should be noted that the Gull Lake sample had been coated with alvar when excavated because of the extremely fragmentary nature of the bone. In the laboratory analysis of the specimen, Geochron noted that "Due to thinness of the bone fragments, the Alvar was not scraped off." The Gull Lake date is thus equivocal and most probably later than would be expected had an uncontaminated sample been present. The three dates from mounds #3 and #5 at the Winnibigoshish Dam site that cluster about A.D. 700-800 agree with an earlier estimate for Gull Lake and Arvilla of A.D. 500-900 (Johnson 1971; 1972). A minimum of six individuals comprise the human skeletal material from the site. The series includes 1 neonate, 1 young adult (25-30), 1 middle adult (45-59), 1 old adult (50+) and 2 adults of indeterminate age. The old adult is male and the rest are too fragmentary and incomplete for accurate evaluation.

Both the Gull Lake and Winnibigoshish Dam site linear mounds lack the associated grave goods characteristic of mounds in the Arvilla complex. Though a single pottery vessel was obtained in a burial pit at Gull Lake, all other burials were devoid of such objects. The association of grave goods with pit burials has been included in the definition of the Arvilla complex and it was earlier suggested that the Gull Lake mounds perhaps represented a more northern complex, contemporary with Arvilla and sharing some major characteristics, but not a part of that complex (Johnson 1971:61). The data from the Winnibigoshish mounds seem to confirm that suggestion.

The ceramics occurring in the mound fill and in some of the habitation area excavation units include a combination of St. Croix stamped and Brainerd ware sherds that is similar to the assemblage from the Gull Lake site, whereas Arvilla has St. Croix associated ceramics but lacks Brainerd ware sherds. This reinforces the suggested cultural similarity between Gull Lake and Lake Winnibigoshish.

A major difference exists in the total ceramic assemblage from the two sites, however, and that difference is exhibited by the presence of "Middle Woodland" Malmo-Kern ceramics antedating mound construction at Gull Lake. Such sherds are completely absent from the Winnibigoshish Dam site, but are replaced by Laurel ceramics. Laurel sherds are not present at Gull Lake. The evidence thus indicates that the culture antecedent to mound construction at Gull Lake was the Malmo-Kern of central Minnesota, and at this time, Gull Lake is the most northerly in Malmo-Kern ceramic distribution. Lugenbeal reported that Brainerd ware in northern Minnesota is contemporary with late Laurel (1976:11) and it may be that despite the equivocal stratigraphic evidence at the Winnibigoshish Dam site, the Laurel and Brainerd wares are contemporary and represent a culture transitional between Laurel and Blackduck. Both the stratigraphic evidence and the very small sample size at the present site prohibit any conclusive statement, but the presence of a transitional phase would fit the regional distributional and temporal evidence. There does appear to be a definite temporal gap between Blackduck and Laurel in northern Minnesota (Lugenbeal, n.d.:8).

While the Winnibigoshish Dam site data cannot provide solutions to the problems of the Laurel-Blackduck-Arvilla relationships, those data do provide very helpful clues. Excavations at what is the key site on the Lake Winnibigoshish reservoir, the Williams Narrows site (21-IC-23) described in the reconnaissance survey report (Johnson, Harrison, Schaaf 1977; 99-100), may provide the data necessary to the solution of the problems mentioned here.

One interesting result of the 1977 excavations was the nearly complete absence of Blackduck and Sandy Lake ceramics in the habitation site excavation units. The survey report on the site suggested that these complexes formed the dominant prehistoric components of the site and that the burial mound construction preceded any habitation site occupation. This observation was based largely on the ceramics

in the surface collections examined and was partially corroborated in data from the test excavations. The almost complete lack of these ceramic components in the 1977 excavations indicate that the horizontal distribution of succeeding occupations at the site varied and that those associated with Blackduck and Sandy Lake were more restricted and closer to the original lakeshore. The results also indicate the difficulties in reconnaissance survey testing where the site limits are not known and where the test excavations do not represent a statistically valid sample. Generalizations from such data are hazardous at best.

It was unfortunate that more concrete evidence of the historic components of the site were not discovered in the 1977 excavations. This lack is probably a function of two things. First, the dam construction activities in the late 19th century undoubtedly disturbed much of any evidence of historic Ojibwa occupation or activities and possible fur trade remnants in the surface soil zones. Second, it is more probable that fur trade and/or logging activities may still be represented, however disturbed, in the immediate vicinity of the Dam tender's home located much closer to the lake outlet and dam.

The Winnibigoshish Dam site data form an important addition to the knowledge of cultural dynamics in this northern Mississippi River headwaters reservoirs region. Segments of both the remaining burial mounds and the habitation area remain and are assured of future protection and both offer the potential for future significant excavation. The 1977 mitigation at the site certainly confirmed the determination of cultural "significance" despite the eroded and disturbed nature of the site and serves as an excellent example of the value of the federal laws and regulations governing destruction of cultural resources.

8. REFERENCES

Caine, Christy A. H.

1969 "Archaeology of the Snake River Valley," Master's Thesis, University of Minnesota.

1974 "Excavations at the Henry Langer Site, 21 CA 58." Archaeology Laboratory, University of Minnesota.

Cooper, Leland R.

1964 "A Preliminary report on the Excavations of Two Late Middle Woodland Mounds in Northwestern Wisconsin." Journal of the Minnesota Academy of Science, 32:1:17-23.

Gibbon, Guy

1976 "The Old Shakopee Bridge Site. A Late Woodland Ricing Site on Shakopee Lake," in Minnesota Archaeologist, 35:2:2-56.

Grigal, D. I., R. C. Severson and G. E. Goltz

1976 "Evidence of eolian activity in north-central Minnesota. 8,000 to 5,000 years ago." Geological Society of America, Bulletin, 87:1251-1257.

Johnson, Elden

1971 "Excavations at the Gull Lake Dam (21CA37)," Minnesota Archaeologist, 31:44-69.

1973 The Arvilla Complex. (Minnesota Prehistoric Archaeology Series, No. 9.) St. Paul: Minnesota Historical Society.

Johnson, Elden, Christina Harrison, and Jeanne Schaaf

1977 Cultural Resources Inventory of Lands Adjacent to Lake Winnibigoshish. Archaeology Laboratory, University of Minnesota.

Lugenbeal, Edward

n.d. "The Blackduck Ceramics of the Smith Site (21KC3) and their implications for the history of Blackduck ceramics and culture in northern Minnesota." Mss.

Lugenbeal, Edward

1976 "Brainerd Ware: The occurrence of a newly recognized ware in northern Minnesota Blackduck sites and its chronological relationship to Laurel and Blackduck ceramics." Paper read at the 1976 Council for Minnesota Archaeology symposium.

1976 "The Archaeology of the Smith Site: A study of the ceramics and culture history of Minnesota Laurel and Blackduck." Ph.D. dissertation, University of Wisconsin.

Stoltman, James B.

1973 The Laurel Culture in Minnesota. Minnesota Prehistoric Archaeology Series, No. 8) St. Paul: Minnesota Historical Society.

Wilford, Lloyd A.

1943 The Osufsen Mound. Mss., Archaeology Laboratory, University of Minnesota.

1955 "A Revised Classification of the Prehistoric Cultures of Minnesota." American Antiquity, 21:130-142.

Winchell, N. H. (ed.)

1911 The Aborigines of Minnesota. St. Paul: Minnesota Historical Society.

Plate 1. View of eroding habitation area and mound 3 from opposite shore of Dam Bay. Dam at far right. Looking northeast.

Plate 2. Eroding habitation area. Looking north from mound 3.

Plate 3. Removing and screening the overhang of the eroding portion of mound 3.

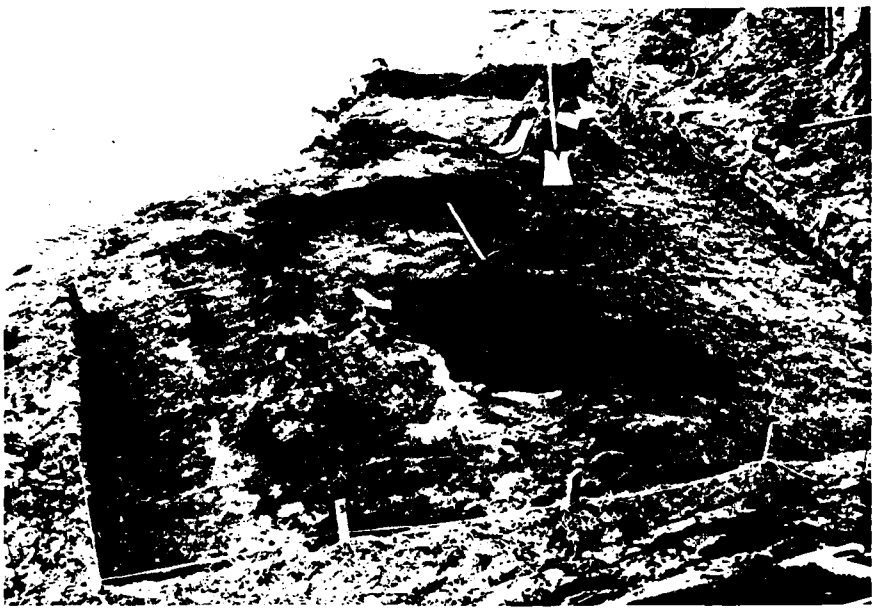


Plate 4. Charred log crib on the floor of mound 3.

Plate 5. Mound 3, submound features below log crib. Burial pit #1 at upper center, portion of burial pit #2 showing in lower right corner.

Plate 6. Mound 3, burial pit #2, showing skull in situ, lower left. Paleosol (bed 5a) shows above the pit overlain by bed 6 and backfill.

Plate 7. Mound 5 prior to excavation. Amateur excavation trench in foreground. Dam at far upper left. Looking south.

Plate 8. Mound 5, below floor level. Showing burial #1 in situ at bank edge. Dark stain at lower center represents disturbed burial.

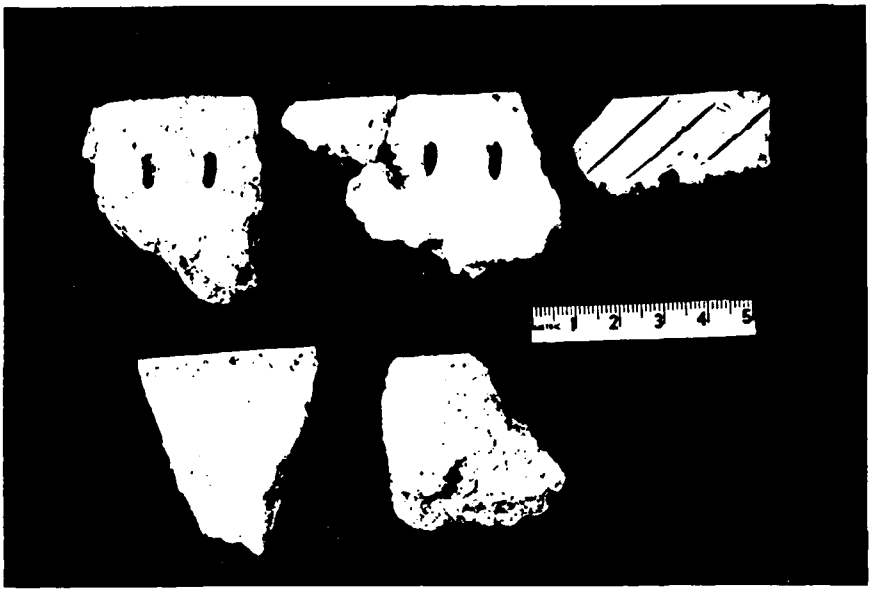


Plate 9. Rim sherds. Top row: Laurel bossed and incised
Bottom row: Combed and stamped; Brainerd net impressed.

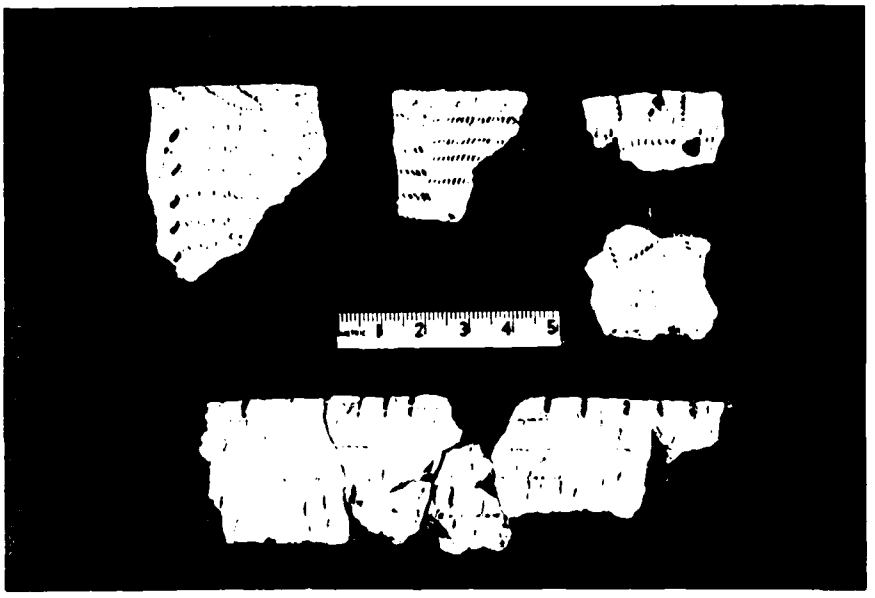


Plate 10. Rim sherds; St. Croix stamped.

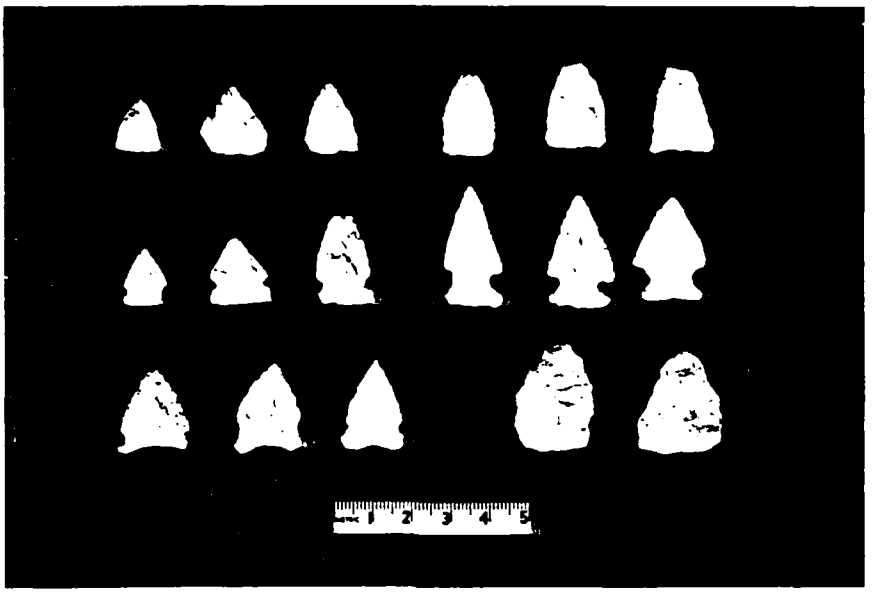


Plate 11. Projectile points. Preforms, bottom row, far right.

Plate 12. Left to right: Top row, diamond shaped knife and scrapers. Bottom row, blade knives, spoke shave, perforators and graver.

Plate 13. Large bifaces.

Plate 14. Quartzite cores and representative derived flakes.

Appendix A - Scope of Work

DRAFT SCOPE OF WORK FOR A CULTURAL RESOURCES INVESTIGATION OF THE LAKE WINNIBIGOSHISH DAM SITE (21-IC-4) ITASCA COUNTY, MINNESOTA

1. INTRODUCTION

1.01 The Contractor will conduct a cultural resources data recovery program at the Lake Winnibigoshish Dam Archaeological Site (21-IC-4) in Itasca County, Minnesota (see attached map). The St. Paul District, Corps of Engineers has proposed a slope protection project for the eroding bank adjacent to the site. This contract for professional, scientific data recovery from a limited portion of the site will mitigate the adverse impacts of the project on the cultural materials. This mitigation effort is partial fulfillment of the obligations of the St. Paul District regarding cultural resources, set forth in the Historic Preservation Act 1966 (P.L. 89-665), the National Environmental Policy Act of 1969 (P.L. 91-190), Executive Order 11593 for the Protection and Enhancement of the Cultural Environment (13 May 1971, 36 F.R. 8921), the Archaeological Conservation Act of 1974 (P.L. 93-291), the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Chapter VIII, Part 800), and EC1105-2-37 for the Identification and Administration of Cultural Resources (8 August 1975).

1.02 The above mentioned laws establish the importance of Federal leadership, by the various responsible agencies, in locating and preserving cultural resources within project areas. Specific steps to comply with these laws, particularly as directed in P.L. 93-291 and E.O. 11593, are being taken by the Corps "...to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished or substantially altered." A part of that responsibility is to locate, inventory and nominate to the Secretary of the Interior all such sites in the project area that appear to qualify for listing on the National Register of Historic Places. Archaeological Site 21-IC-4 was included in the Corps inventory of cultural resources at Lake Winnibigoshish and was recently determined eligible for the National Register.

1.03 The Lake Winnibigoshish Dam Site is a prehistoric American Indian burial mound and habitation site. Existing knowledge about the site is presented in the Cultural Resources Inventory of Lands Adjacent to Lake Winnibigoshish, a contract report submitted to the St. Paul District in June 1977. There is a multi-component habitation area which has been partially eroded and there are three linear and two conical burial mounds, one of each of which is partially eroded.

1.04 The Corps project is designed to stabilize the eroding slope and thus protect the remainder of the archaeological site. However, it is anticipated that 10 to 15 feet landward of the existing bank will be lost as a part of the project. The cultural materials contained in those 15 feet closest to the bank are the subject of this scope of work.

Encl 3

1.05 The data recovery program will focus on three areas of the site (see attached map):

a. That portion of Mound No. 3 within 5 meters of the existing bank.

b. That portion of the habitation site within 5 meters of the existing bank - approximately 50 meters along the bank north and west of Mound No. 3.

c. That portion of Mound No. 5 within 5 meters of the existing bank.

1.06 The cultural resources study has two objectives, one relating to the habitation site, the other to the burial mounds.

a. The objective of the work in the habitation site area is to recover data which would otherwise be lost and which will provide scientific information about the prehistoric inhabitants of the site.

b. The objective of the work on the two burial mounds is to insure that no human skeletal remains inadvertently erode from the mounds onto the exposed bank. The work on the mounds will be coordinated with the Bureau of Indian Affairs, the Minnesota Indian Affairs Intertribal Board, and the Leech Lake Reservation Business Committee.

c. As much of the site as possible will be left in an undisturbed condition, in which it will be preserved.

1.07 The minimum professional qualifications for the Supervisory Archaeologist are a graduate degree in archaeology, anthropology, or a closely related field, or equivalent training accepted for accreditation purposes by the Society of Professional Archaeologists, plus: (1) at least sixteen months of professional experience or specialized training in archaeology field, laboratory, or library research, including (a) at least four months of experience in general North American archaeology, and (b) at least six months of field experience in a supervisory role; (2) a demonstrated ability to carry research to completion, usually evidenced by timely completion of thesis, research reports, or similar documents. For work involving prehistoric archaeology, the Supervisory Archaeologist should have had at least one year of experience in research concerning archaeological resources of the prehistoric period.

1.08 The Contractor will utilize a systematic, interdisciplinary approach in conducting the study. The Contractor will provide specialized knowledge and skills during the course of the study, to include expertise in the disciplines of archaeology, paleontology, and other social and natural sciences as required. Methods and techniques used for the study will be consistent with current standards of professional knowledge and development.

1.09 Any samples obtained during the data recovery program that are suitable for carbon 14 dating will be handled under a separate contract.

1.10 The extent and character of the work to be accomplished by the Contractor will be subject to the general supervision, direction, control and approval of the Contracting Officer.

2. GENERAL PERFORMANCE SPECIFICATIONS

2.01 The Contractor will prepare a research design prior to beginning field work. The research design will address the potential of the site for containing multiple components of Late Prehistoric materials, material distinctive to occupation during particular seasons, and cultural material relating to earlier occupations which may be contained in buried soil horizons. The research design will specify methods and techniques for data recovery as well as the theoretical research objectives. The principal constraint on the research design will be the limitation of the work to those portions of the site adjacent to the existing bank - portions of the site which would otherwise be lost.

2.02 A separate plan will developed for the work on the burial mounds. The work will be carried out in a fashion consistent with the principals presented in Chapter 5, "Archeology and Native Americans," of The Management of Archeological Resources: The Airlie House Report, edited by Charles R. McGimsey III and Hester A. Davis and published in 1977 by the Society for American Archaeology. The possibility exists that human skeletal materials will be encountered in those portions of the mounds which are adjacent to the existing bank. The plan will identify several alternatives for dealing with this possibility. The alternatives will include the options of recovery and reburial with or without the involvement of professional archaeologists. A decision about which alternative will be carried out will be made by the Contractor, a representative of the Contracting Officer, and representatives of the several agencies mentioned in section 1.06. b. The burial mounds will be disturbed as little as possible, and all areas that are excavated will be landscaped to reduce further erosion.

2.03 The Contractor will make the opportunity available for the involvement of a group of Native Americans in the data recovery program.

2.04 The Contractor will keep standard field records which will include, but will not necessarily be limited to, field notebooks, field maps, stratigraphic profiles, and photographs.

2.05 The Contractor will be responsible for making curatorial arrangements for the material recovered from the site. These arrangements will be made with consideration of the desires of the agencies mentioned in section 1.06. b, with consideration of the interpretive potential of the recovered materials, and with the approval of the Contracting Officer.

3. GENERAL REPORT REQUIREMENTS

3.01 The Contractor will prepare a report detailing the work done, the study rationale, and the results of the data recovery program. The report will include, but will not necessarily be limited to, the following sections: an abstract, an introduction, a section on the methodology employed, a brief evaluative discussion of previous work in the area, a concise definitive summary, and references. The above items need not necessarily be discrete units but must be readily discernable to the reader.

3.02 The abstract will be a synopsis of the report, where the reader may find the general conclusions and recommendations resulting from the study.

3.03 The introduction will include, but will not necessarily be limited to, the following: the purpose of the data recovery program, delineation of the study boundaries, and a general statement on the nature of the study conducted.

3.04 The theoretical orientation of the principal investigator and his/her research bias and assumptions will be explicitly stated as they pertain to this cultural resources reconnaissance.

3.05 The methodology used for data collection and analysis will be described in sufficient detail so that a reviewer may understand what was done and why.

3.06 The body of the report will include:

a. A discussion of the regional environmental context in which cultural adaptations took place.

b. A discussion of regional cultural developments in their spatial and chronological dimensions.

c. A brief summary and evaluation of previous archaeological and historical studies of the region, including the date, extent and adequacy of the past work as it reflects on the interpretation of what has been recovered from the project area.

d. A discussion of any artifacts, features, or materials illustrating distinctive cultural processes which are potentially suitable for interpretive development for the public.

3.07 There will be a brief summary of the study findings and recommendations.

3.08 The report will include the vitae of the principal investigator, and other personnel involved in the data recovery program.

4. FORMAT SPECIFICATIONS

4.01 Text materials will be typed on bond paper, 8.5 inches by 11.0 inches, with a 1.5-inch binding margin on the left side, 1-inch margins on the top and right and 1.5-inch margin at the bottom.

4.02 Information will be presented in textual, tabular, and graphic forms, whichever is most appropriate, effective and advantageous to communicate the necessary information.

4.03 The title page of the report will carry an appropriate inscription indicating the source of funds used to conduct the work, the contract number, the name of the principal investigator, and the date.

4.04 All references cited and/or utilized will be presented in standard American Anthropological Association format. Contacts with individuals will also be cited.

4.05 The report must include references to accession numbers used for all collections, photographs and field notes obtained during the course of the study.

4.06 The locations of all features discussed in the text will be shown on an appropriate map.

4.07 All figures must be readily reproducible by standard xerographic equipment. Negatives of all black and white photographs contained in the final report must be included so that copies for distribution can be made.

5. MATERIALS PROVIDED AND CONTRACTOR SUBMITTALS

5.01 The Contractor will furnish the labor, supplies and equipment needed to complete the study and to produce the report on the data recovery program as outlined in this Scope of Work.

5.02 The Contracting Officer will furnish the Contractor with project design drawings and guidance as required in order to meet the objectives of the data recovery program.

5.03 The Contractor will submit reports according to the following schedule:

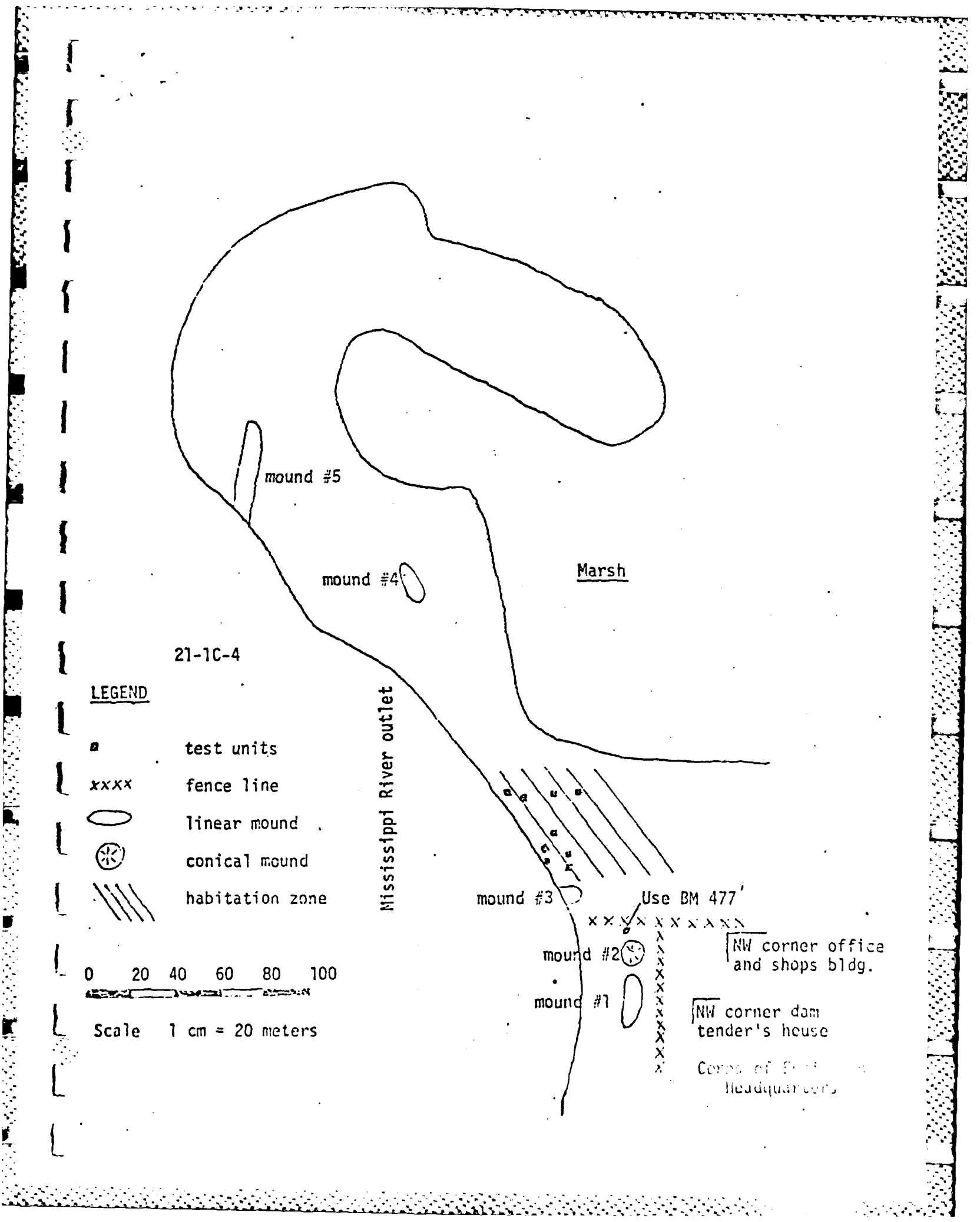
Field Report - One copy within two weeks following completion of the field work, in no case later than 18 November 1977.

Draft Final Report - 6 copies by 28 February 1978. The Contracting Officer will provide the Contractor with comments on the draft report within 45 days after receipt of the draft.

Revised Final Report - 10 copies, which will include appropriate revisions in response to the Contracting Officer's comments, within 30 days of receipt of those comments, and in no case later than 27 May 1978.

5.04 Neither the Contractor nor his/her representatives will release or publish any sketch, photograph, report, or other material of any nature obtained or prepared under this contract without specific written approval of the Contracting Officer.

5.05 The Contracting Officer will send copies of the draft report to the appropriate officers of the National Park Service and to the appropriate State Historic Preservation Officer and State Archaeologist for review. Copies of the revised final report will be provided to the above mentioned agencies and to the Library of Congress, Smithsonian Institution and, at the discretion of the Contracting Officer, to other State and local archaeological and historical societies, public interest groups, and any other State and Federal agencies, institutions, foundations or individuals with special interest or expertise in cultural resources.


mound #5
mound #4
Marsh
21-1C-4
LEGEND
test units
fence line
linear mound
conical mound
habitation zone
Mississippi River outlet
mound #3
Use BM 477'
mound #2
mound #1
NW corner office and shops bldg.
NW corner dam tender's house
0 20 40 60 80 100
Scale 1 cm = 20 meters

Appendix B - LLRBC letter of agreement

LEECH LAKE RESERVATION
BUSINESS COMMITTEE

BOX 308 • CASS LAKE, MINNESOTA 56633
218-335-2207

January 24, 1978

University of Minnesota
Jeanne Schaaf
Office of State Archaeoligist
215 Ford Hall
224 Church Street S.E.
Minneapolis, MN 55455

Dear Ms. Schaaf:

As per your letter of January 3, 1978, pertaining to the Winnibigoshish Dam site. (21-IC-4)

The Leech Lake Reservation Business Committee (L.L.R.B.C.) has considered your recommendations and has discussed these problems with Edward Fairbanks, field representative for the Winnibigoshish Project. Based on the needs of the Leech Lake People and the recommendations of yourself and Edward Fairbanks; the L.L.R.B.C. has implemented the following decisions:

1. All human remains will be returned to the Reservation by February 3, 1978, by the University of Minnesota.
2. All human remains will be reburied at the Winnibigoshish Site and the recommendations made by Jeanne Schaaf on the method of reburial have been approved and accepted for this situation. Edward Fairbanks and a chosen representative of the near by community will supervise all proceedings.
3. Jeanne Schaaf, Field Director, is granted the 60 day extension requested in the January 3rd. letter. All artifacts will be returned to the L.L.R.B.C. no later than April 3, 1978.
4. The L.L.R.B.C. has authorized Edward Fairbanks to meet and discuss the curation and display of the Winnibigoshish Site artifacts. After Edward Fairbanks has completed these meetings and made his recommendations to the L.L.R.B.C.; then the L.L.R.B.C. will rule on this issue.
5. The L.L.R.B.C. is interested in utilizing students of the University of Minnesota in the planning of the Winnibigoshish Artifacts and is requesting further information.
6. Permission is granted to Jeanne Schaaf to obtain Carbon Testing for age; but all material will be obtained and returned to the L.L.R.B.C. for reburial.

The L.L.R.B.C., at this time, would like to thank all persons involved in the Winnibigoshish Project and assure them that the Knowledge and artifacts obtained in this type of project has been of the greatest benefit and will be utilized to their fullest.

If there are any questions pertaining to this letter, please contact Edward Fairbanks at 218-335-2991.

Mi-Qwitch, (Thank you)

Hartley White, Chairman
Leech Lake Reservation Business
Committee

Appendix C - Accession lists

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800-1-1	1 near rim sherd-grit, horizontal dentate, deep oblique slashes over cord	Test 1	0-20 cm	
"	800-1-2	4 decorated body sherds-cord wrapped stick(cws), grit	"	"	
"	800-1-3	4 body sherds-cord, grit	"	"	
"	800-1-4	1 utilized flake-brown chalcedony (a perforator)	"	"	
"	800-1-5	2 bone fragments-burned (.5 x .5 cm)	"	"	
"		7 cerami crumbs-saved, not accessioned	"	"	
"	800-1-6	2 decorated sherds-2 c.w.s., grit	"	20-30 cm	
"	800-1-7	3 body sherds-cord, grit	"	"	
"		3 ceramic crumbs-saved, not accessioned			

EPARTMENT OF ANTHROPOLOGY

UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800- 2-1	1 bone fragment- not human poss. lg. mammal tibia frag.	Test 2	0-20 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800-4-1	1 body sherd -smoothed cord grit	Test 4	30-40 cm	
"	800-4-2	1 small point -white quartz eastern triangular	"	"	
"	800-4-3	1 small point -dark chert eastern triangular	"	"	
"	800-4-4	2 retouched, utilized flakes- 1 white quartz 1 white quartzite	"	"	
"	800-4-5	3 utilized flakes- white quartzite	"	"	
"	800-4-6a	1 retouched flake- white quartz	"	"	
"	800-4-6	12 pes of debitage- 11 white quartzite 1 white quartz	"	"	
"	800-4-7	2 pieces of chert	"	"	
"	800-4-8	4 bone fragments- burned	Test 4	30-40 cm	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976		5 ceramic crumbs, grit saved but not accessioned	Test 4	30-40 cm	
"	800-4-9	11 historic goods- 2 metal grommets 4 metal snaps 1 metal button 2 metal buckles 2 cut spike nails	"	"	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800-5-1	1 rim sherd- oblique , incised line on interior & exterior lip. Flat lip, cord marked body	Test 5	below 30 cm	
"	800-5-2	6 decorated sherds- cws, grit	"	"	
"	800-5-3	10 body sherds- 5 cord, grit 5 smoothed, grit	"	"	
"	800-5-4	2 retouched flakes- white quartz	"	"	
"	800-5-5	4 flakes- white quartz	"	"	
"	800-5-6	1 beaver tooth	"	"	
"	800-5-7	3 bone fragments	"	"	
"	800-5-5-8	2 round nails, 20th C. discarded	Test 5	below 30 cm	
"	-	24 ceramic crumbs- grit saved but not accessioned	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800-6-1	1 shoulder sherd- (combed, grit)	Test 6	25 cm & below	
"	800-6-2	1 body sherd- grit, net impressed	"	"	
"	800-6-3	1 retouched flake- chert	"	"	
"	800-6-4	13 bone fragments	"	"	
"	-	6 ceramic crumbs- grit	"	"	
	-				

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800- 7-1	3 body sherds- 1 cord, grit 2 smooth, grit (1a crumb)	Test 7	0-45 cm	
"	800- 7-2	1 small flake- clear quartz	"	"	
"	800- 7-3	1 round nail, 20th C. -discarded 1 sect. of a cut nail (1850-1910)	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 1976	800-8-1	2 pieces of shell	Test 8	10-20 cm	
"	800-8-2	1 small rodent jaw	"	"	
"	800-8-3	1 bone fragment	"	"	
"	800-8-4	2 historic goods- 1 cut nail 1 clock hand	"	"	
"	800-8-5	8 body sherds- cord, grit	"	20-30 cm	
"	800-8-6	1 minute chip- chert	"	"	
"	-	6 ceramic crumbs- saved but not accessioned	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 12 Oct 77	803- 1-1	1 bone fragment	Unit #1 Level 2	15-22 cm	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4	803-2	This test unit is part of mound 3 and was unexcavated			

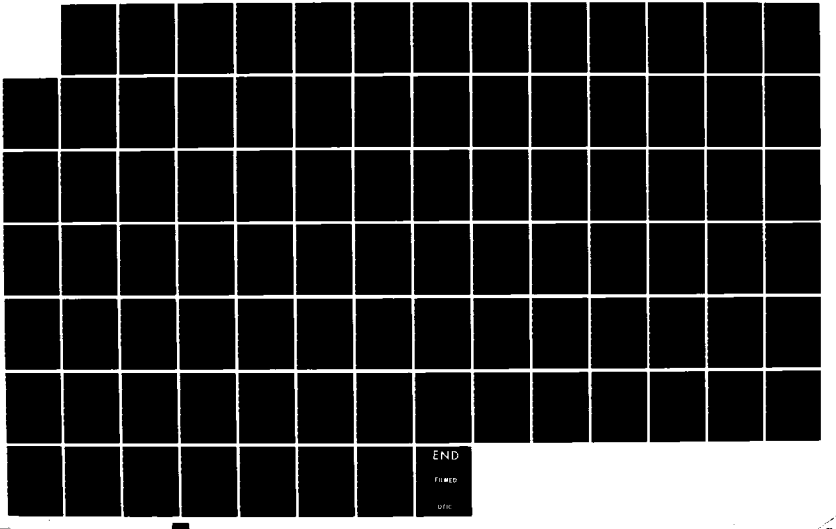
EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

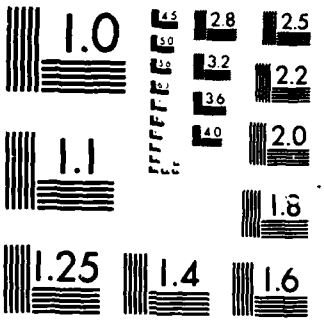
(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC04 12 Oct 77	803-3-1	1 body sherd grit, crumb	Unit #3 Level 2	15-24 cm	
"	803-3-2	6 bone fragments	"	"	
"	803-3-3	1 piece of metal plus charcoal fragments - discarded	"	"	
"	803-3-4	1 rim sherd-decorated dentate, red slip	" Level 3	" 24-34 cm	
"	803-3-5	3 body sherds- cord, grit 2 crumbs	"	"	
"	803-3-6	1 cracked rock plus 1 small natural flake	"	"	
"	803-3-7	1 cracked rock cortex smoothed	Level 4	34-44 cm	
"	803-3-8	1 rock, natural flake granite	Level 5	44-54 cm	

AD-A163 139 CULTURAL RESOURCES INVESTIGATION AT THE LAKE WINNIBIGOSHISH DAM SITE - 21 IC 4(U) MINNESOTA UNIV MINNEAPOLIS ARCHAEOLOGY LAB E JOHNSON ET AL. 1978 2/2

UNCLASSIFIED DACW37-77-C-0139 F/G 5/6 NL





EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 12 Oct 77	803- 4-1	2 pieces of sandstone	Unit #4 Level 2	15-22 cm	
"	803- 4-2	3 pieces of metal -discarded	"	"	
"	803- 4-3	1 round nail -discarded	"	"	
"	803- 4-4	2 rim sherds- decorated 1 bossed, cws over cord 1 net, plain	Level 3	22-32 cm	
"	803- 4-5	1 body sherd-cord/grit plus 12 crumbs includes 3 decorated sherds	"	"	
"	803- 4-6	1 waste flake-quartz plus 1 basalt flake	"	"	
"	803- 4-7	1 cracked rock with util. edge 2 cracked rocks, granite 1 fragment of ground stone tool, polished	"	"	
"	803- 4-8	1 body sherd-cord crumb + 1 granite flake	Level 4	32-42 cm	
"	803- 4-9	5 rocks, amorphous	Level 5	42-54 cm	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 13 Oct 77	803-5-1	7 Nails- 1 square 6 round -discarded	Unit #5 Level 2	16-27 cm	
"	X	1 piece of wire -discarded		"	
"		2 pieces of thin metal -discarded		"	
"		1 shotgun shell -discarded		"	
"	803-5-2	1 body sherd- possibly fabric impressed	Level 3	27-37 cm	
"	803-5-3	1 waste flake-quartz	"	"	
"	803-5-4	2 rocks	Level 4	37-47 cm	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 13 Oct 77	803-6-1	1 historic pottery sherd -discarded	Unit 6 Level 1	0-14 cm	
"	803-6-2	1 piece of red rubber -discarded	"	"	
"	803-6-3	1 body sherd- crumb	Level 2	14-33 cm	
"	803-6-4	1 waste flake, white quartz	"	"	
"	803-6-5	1 rodent tooth and partial jaw	"	"	
"	803-6-6	1 cracked rock, granite	"	"	
"	803-6-7	5 pieces of red rubber - discarded	"	"	
"	803-6-8	15 small pieces of reddened sandstone -discarded	Level 4	43-47 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 12 Oct 77	803-7-1	31 turtle shell fragments	Test Unit #7 Level 2	11-19 cm	
"	803-7-2	1 thin metal piece (discarded)	"	"	
"	803-7-3	1 metal staple -discarded	"	"	
"	803-7-4	7 turtle shell fragments	Level 3	19-23 cm	
"	803-7-5	4 body sherds- all cord, grit plus 21 crumbs	Level 4	23-33 cm	
"	803-7-6	1 waste flake-quartz	"	"	
"	803-7-7	16 body sherds- all cord/grit Plus (7 crumbs)	Level 5	33-43 cm	
"	803-7-8	1 waste flake -white quartz	Level 6	43-53 cm	
"	803-7-9	1 rock, natural flake	"	"	

EPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 12 Oct 77	803-8-1	7 pieces of a clay pigeon -discarded	Unit #8 Level 1	0-14 cm	
"	803-8-2	1 rock fragment	Level 2	14-30 cm	
"	803-8-3	1 round nail -discarded	"	"	
"	803-8-4	1 flake knife, diamond - quartzite 1 utilized flake-chalcedony	Level 3	30-40 cm	
"	803-8-5	4 waste flakes -3 quartzite 1 quartz	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 14 Oct 77	803-9-1	1 body sherd-crumb grit	Unit #9 Level 3	40-52 cm	
"	803-9-2	5 cracked rocks from same parent rock	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 14 Oct 77	803- 10-1	1 waste flake-quartz	Unit #10 Level 4	36 cm	
"		also pieces of charcoal	"	"	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
1-IC-4 14 Oct 77	803- 13-1	1 waste flake-quartz	Unit #13 Level 3	20-30 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 15 Oct 77	803-14-1	2 body sherds-cord crumbs	Unit #4 Level 4	30-40 cm	
	803-14-2	3 rocks- (1 smoothed)	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 15 Oct 77	803- 15-1	16 body sherds- all crumbs 1 decorated	Unit 15 Level 2	10-20 cm	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
1-IC-4 16 Oct 77	903- 16-1	1 triangular projectile point-quartz	Unit 16 Level 2	10-15 cm	

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803-17-1	2 round nails -discarded	Unit 17 2 x 2 #1 Level 2 NW Quad	15-26 cm	
"	803-17-2	1 metal ring (hardware) -discarded	"	"	
21-IC-4 25 Oct 77	803-17-3	3 rim sherds- all decorated with comb stamp; from same pot all less than 1.5 cm	2x2 Level 3 NW quad	26-29 cm	
"	803-17-4	9 body sherds + 54 crumbs all cord/grit + 7 decorated-horizontal comb- stamp (6 are crumbs)	"	"	
"	803-17-5	1 core, white quartzite	"	"	
"	803-17-6	20 waste flakes Most from core #803-17-5 (4 white quartz)	"	"	
"	803-17-7	1 piece burned bone	"	"	
"	803-17-8	3 bone fragments (1 burned)	"	"	
"	803-17-9	1 rim sherd-decorated comb stamp. Same pot as 17-3	2x2 Level 3B NW quad	29-36 cm	

DEPARTMENT OF ANTHROPOLOGY

UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
1-IC-4 25 Oct 77	803-17-10	12 body sherds- cord, grit same as 17-4. + 10 sherds, decorated-horizontal stamp ~~-comb (2 cr)~~	Unit #17 2x2 #1 Level 3B NW quad	29-36 cm	
"	803-17-11	24 waste flakes 6- dark grey chert (heat) 1- white quartz 17-white quartzite	"	"	
"	803-17-12	2 cracked rocks	"	"	
"	803-17-13	18 burned bone fragments	"	"	
"	803-17-14	24 bone fragments - 3 small vertebra (some burned)	"	"	
21-IC-4 26 Oct 77	803-17-15	1 body sherd-cord crumb	2x2 Level 4 NW quad	36-46 cm	
"	803-17-16	1 bone fragment, burned	"	"	
21-IC-4 19 Oct 77	803-17-17	1 bone fragment	Unit #17 2x2 #1 Level 2 NEquad	15-29 cm	
"	803-17-18	2 sandstone rocks	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803-17-19	1 button -discarded	Unit#17 2x2 #1 Level 2 NE quad	15-29 cm	
"	803-17-20	1 shot gun shell -discarded	"	"	
"	803-17-21	6 round nails -discarded	"	"	
"	803-17-22	1 bolt -discarded	"	"	
21-IC-4 25 Oct 77	803-17-23	2 body sherds-cord, grit crumbs	2x2 #/ Level 3 NE quad	29-32 cm	
"	803-17024	1 utilized waste flake -quartzite	"	"	
"	803-17-25	2 cracked rocks 1 sandstone 1 granite (pebble-sized)	"	"	
"	803-17-26	1 cut nail (1850-1910)	2x2 #/ Level 3B NE quad	32-37 cm	
21-IC-4 19 Oct 77	803-17-27	2 waste flakes -quartzite	2x2 #1 Level 2 SE quad	12-24 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803- 17-28	1 round nail -discarded	Unit #17 2x2 #1 Level 2 SE quad	12-24 cm	
21-IC-4 25 Oct 77	803- 17-29	4 body sherds, crumbs 1 cord, grit like 17-10 3 split	2x2 Level 3 SE quad	24-27 cm	
"	803- 17-30	3 utilized flakes - 1 chert 1 quartz(possible wedge) 1 quartzite	"	"	
"	803- 17-31	6 waste flakes 5-white quartzite 1-chert	"	"	
"	803- 17-32	5 cracked rocks- 4 from same parent rock -friable granite, smoothed cortex	"	"	
"	803- 17-33	1 waste flake-quartzite	2x2#1 Level 3B SE quad	27-35 cm	
"	803- 17-34	2 rim sherds-decorated 1-horiz. comb stamp flat lip 1-same dec., round lip	2x2#1 Level 3 SW quad	20-23 cm	
"	803- 17-35	5 body sherds-all cord like 17-10 12 of these are decorated -horiz. combstamp (Plus	" 33 crumbs)	"	
"	803- 17-36	1 discoidal fleke spall, quartzite	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 25 Oct 77	803-17-37	2 utilized flakes -brown chalcedony & quartzite	Unit #17 2x2 #1 Level 3 SW quad	20-23 cm	
"	803-17-38	25 waste flakes + 1 bone fragment (4 wht. quartz, 20 wht. quartzite 1 porous quartzite)	"	"	
"	803-17-39	1 body sherd -cord same temper as 17-10 plus 10 crumbs	2x2 #1 Level 3B SW quad	23-32 cm	
"	803-17-40	2 waste flakes-quartzite 1 heat treated	"	"	
21 IC-4 26 Oct 77	803-17-41	1 body sherd	2x2 #1 Level 4 SW quad	32-42 cm	
"	803-17-42	3 body sherds- crumbs same temper as 17-10	1x1 1A extension NW ¼ Level 2	to 23 cm	
"	803-17-43	1 waste flake	"	"	
"	803-17-44	1 bone fragment	"	"	
"	803-17-45	2 shotgun shells -discarded	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 26 Oct 77	803-17-46	1 cut nail	Unit #17 extension 1x1 1A of NW ¼ Level 2	to 23 cm	
"	803-17-47	2 pieces of thin metal -discarded	"	"	
"	803-17-48	1 clay pigeon fragment -discarded	"	"	
"	803-17-49	1 button -discarded	"	"	
"	803-17-50	4 body sherds cord, grit same temper as 17-10	extension 1x1 1A of NW ¼ from wall SE corner	26-33 cm	
"	803-17-51	3 rim sherds-decorated horiz. comb stamp	1x1 1A Level 3	23-27 cm	
"	803-17-52	10 body sherds all cord same temper as 17-10 *plus 16 (12 are crumbs) decorated sherds-horiz stamp (+ 47 crumbs)	"	"	
"	803-17-53	24 waste flakes (22 wht. quartzite) include: 1 scraper 1 flake knife 1 retouched flake	"	"	
"	803-17-54	1 burned bone fragment	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
1-IC-4 26 Oct 77	803-17-55	1 fish vertebra	Unit #17 extension 1x1 1A NW¼ Level 3	23-27 cm	
"	803-17-56	1 rim sherd-decorated comb stamp, punctate	1x1 1A Level 3B	27-36 cm	
"	803-17-57	9 body sherds-cord/grit this includes 1 c.w.s. decorated sherd plus 13 crumbs	"	"	
"	803-17-58	1 triangular graver, -quartzite	"	"	
"	803-17-59	2 waste flakes 1 core	"	"	
"	803-17-60	6 bone fragments-burned	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803-18-1	1 body sherd-cord crumb	Unit #18 2x2 #2 Level 2 NW quad	10-21 cm	
"	803-18-2	1 'retouch' waste flake-brn chalcedony	"	"	
"	803-18-3	1 waste flake-quartzite	"	"	
"	803-18-4	3 bottle glass fragments -discarded	"	"	
"	803-18-5	2 round nails -discarded	"	"	
"	803-18-6	1 metal shot-lead -discarded	"	"	
"	803-18-7	2 waste flakes- dark quartzite grey chert	2x2 #2 Level 3 NW quad	22-34 cm	
"	803-18-8	1 cut nail	2x2 #2 Level 2 NE quad	9-22 cm	
"		2 round nails-discarded	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77		1 thin copper rod discarded	Unit#18 2x2 #2 Level 2 NE quad	9-22 cm	
"		1 safety pin discarded	"	"	
	803-18-9 to 11	not assigned			
"	803-18-12	1 body sherd-split crumb	2x2 #2 Level 3 NE quad	22-36 cm	
"	803-18-13	1 waste flake chert	"	"	
"	803-18-14	1 shot -discarded	"	"	
"		3 round nails-discarded	"	"	
"	803-18-16	1 ochre pebble	"	"	
"	803-18-17	(not assigned)	"	"	
21-IC-4 25 Oct 77	803-18-18	2 waste flakes slate	2x2 #2 Level 4 NE quad	36-45 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803-18-19	1 turtle shell fragment	Unit #18 2x2 #2 Level 2 SE quad	11-21 cm	
"	803-18-20	1 cut nail	"	"	
"	803-18-21	5 round nails (discarded)	"	"	
"	803-18-22	1 sandstone pebble	"	"	
"	803-18-23	1 body sherd-decorated comb stamp and chevron grit, red slip	2x2 #2 Level 3 SE quad	21-36 cm	
"	803-18-24	1 body sherd- crumb, cord	2x2 #2 Level 1 SW quad	0-10 cm	
"	803-18-25	1 body sherd- cord, crumb	2x2 #2 Level 2 SW quad	10-21 cm	
"	803-18-26	1 end scraper- snub nose grey chalcedony	"	"	
"	803-18-27	3 waste flakes, white quartz 1 possibly utilized	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803-18-28	1 turtle shell fragment	Unit #18 2x2 #2 Level 2 SW quad	10-21 cm	
"	803-18-29	1 cracked rock	"	"	
"	803-18-30	1 bone fragment	"	"	
"	803-18-31	2 cut nails	"	"	
"	803-18-32	1 round nail(discarded)	"	"	
"	803-18-33	8 thin metal fragments -discarded	"	"	
"	803-18-34	2 body sherds-cord crumbs	2x2 #2 Level 3 SW quad	21-32 cm	
" 21-IC-4 25 Oct 77	803-18-35	1 piece of purpled bottle glass (charcoal also found) -discarded	extension 1x1 NE of 2x2 Level 2	7-18 cm	
"	803-18-36	2 pieces of clear bottle glass -discarded	extension 1x1 NE of 2x2 Level 3	18-28 cm	

DEPARTMENT OF ANTHROPOLOGY

UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 25 Oct 77	803- 18-37	1 Metal can -discarded	Unit #18 extension 1x1 NE of 2x2 Level 3	18-28 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 26 Oct 77	803-19-1	4 pieces of clear glass (discarded)	Unit #19 2x2 #3 Level 1 NW quad	0-14 cm	
"	803-19-2	1 body sherd- split grit	2x2 #3 Level 2 NW quad	14-25 cm	
"	803-19-3	7 pieces of clear glass (discarded)	"	"	
"	803-19-4	1 clay pigeon fragment (discarded)	"	"	
"	803-19-5	1 round nail (discarded)	"	"	
21-IC-4 27 Oct 77	803-19-6	2 body sherds- split grit, crumb	2x2 #3 Level 2(b) NW quad	25-28 cm	
"	803-19-7	1 bone fragment	"	"	
"	803-19-8	1 round nail -discarded	"	"	
"	803-19-9	1 piece of thin metal -discarded	"	"	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 27 Oct 77	803- 19-10	1 small pebble discarded	Unit #19 2x2 #3 Level 2(b) NW quad	25-28 cm	
"	803- 19-11	2 waste flakes- 1 chert 1 rhiolite(?)	2x2 #3 Level 3 NW quad	28-45 cm	
21-IC-4 28 Oct 77	803- 19-12	1 smooth rock- possibly a fragment of a grinding stone	2x2 #3 Level 4 NW quad	38-50 cm	
21-IC-4 26 Oct 77	803- 19-13	2 body sherds decorated- cws	2x2 #3 Level 2 NE quad	19-28 cm	
"	803- 19-14	1 waste flake- quartz	"	"	
"	803- 19-15	2 rocks- granite	"	"	
21-IC-4 27 Oct 77	803- 19-16	1 flake quartzite	2x2 #3 Level 2(b) NE quad	28-35 cm	
"	803- 19-17	2 pieces of glass 1 clear 1 brown discarded	"	"	
21-IC-4 28 Oct 77	803- 19-18	3 waste flakes 1-clear quartz 1-quartzite 1-?	2x2 #3 Level 3 NE quad	35-44 cm	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 28 Oct 77	803- 19-19	2 grinding stone fragments	Unit #19 2x2 #3 Level 3 NE quad	35-44 cm	
"	803- 19-20	4 cracked rocks 2-pebble size, discarded	"	"	
21-IC-4 26 Oct 77	803- 19-21	1 tiny quartzite chip	2x2 #3 Level 1 SE quad	0-15 cm	
"	803- 19-22	1 shotgun shell -discarded	"	"	
"	803- 19-23	5 body sherds-all crumbs 4 cord, grit	2x2 #3 Level 2 SE quad	15-20 cm	
"	803- 19-24	1 utilized waste flake (quartz) 1 chert flake	"	"	
"	803- 19-25	1 tooth	"	"	
"	803- 19-26	2 bone fragments	"	"	
"	803- 19-27	1 piece of clear glass (discarded)	"	"	

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 26 Oct 77	803- 19-28	2 shells- 1 shotgun (discarded)	Unit #19 2x2 #3 Level 2 SE quad	15-26 cm	
"	803- 19-29	1 piece of thin metal (discarded)	"	"	
"	803- 19-30	5 pieces of rubber(?) (discarded)	"	"	
" 21-IC-4 27 Oct 77	803- 19-31	1 body sherd - cord plus 2 crumbs, grit	2x2 #3 Level 2(b) SE quad	26-32 cm	
"	803- 19-32	1 burned bone fragment	"	"	
"	803- 19-33	1 cracked rock	"	"	
21-IC-4 28 Oct 77	803- 19-34	1 body sherd-decorated	2x2 #3 Level 3 SE quad	32-46 cm	
"	803- 19-35	1 cracked rock	"	"	
21-IC-4 26 Oct 77	803- 19-36	3 body sherds- cord, grit plus 2 crumbs	2x2 #3 Level 2 SW quad	11-26 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 26 Oct 77	803-19-37	1 bone fragment	Unit #19 2x2 #3 Level 2 SW quad	11-26 cm	
"	803-19-38	1 round nail (discarded)	"	"	
21-IC-4 27 Oct 77	803-19-39	3 body sherds- cord, grit crumbs	2x2 #3 Level 2(b) SW quad	26-35 cm	
"	803-19-40	1 burned bone fragment	"	"	
"	803-19-41	3 bone fragments	"	"	
"	803-19-42	1 cracked rock	"	"	
21-IC-4 28 Oct 77	803-19-43	4 cracked rocks 1 a frag. of ground stone	2x2 #3 Level ##3 SW quad	35-45 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 29 Oct 77	803- 20-1	1 body sherd · cord, grit plus 1 crumb	Unit #20 2x2 #4 Level 1 NW quad	0-15 cm	
"	803- 20-2	1 tiny granite flake natural	"	"	
"	803- 20-3	2 body sherds- crumbs 1 cord, grit 1 split	2x2 Level 2 NW quad	15-27 cm	
"	803- 20-4	1 waste flake white quartz	"	"	
"	803- 20-5	3 cracked rocks smoothed cortex, poss. frags. of ground stone tool	"	"	
21-IC-4 30 Oct 77	803- 20-6	1 cracked rock less than 1 cm	2x2 Level 4 NW quad	35-50 cm	
21-IC-4 29 Oct 77	803- 20-7	1 pebble 1 natural flake, granite	2x2 Level 1 NE quad	0-16 cm	
"	803- 20-8	1 possible biface, granite	2x2 Level 2 NE quad	16-27 cm	
"	803- 20-9	1 large cut spike	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 29 Oct 77	803-20-10	1 round nail (discarded)	Unit #20 2x2 #4 Level 2 NE quad	16-27 cm	
"	803-20-11	1 piece of roofing, tar -discarded	"	"	
"	803-20-12	3 cracked rocks all less than 2 cm	"	"	
"	803-20-13	1 waste flake quartz	2x2 #4 Level 3 NE quad	27-38 cm	
"	803-20-14	1 cracked rock less than 1 cm	2x2 #4 Level 3 NE quad	"	
"	803-20-15	1 piece of purpled bottle glass -discarded	2x2 #4 Level 1 SE quad	0-16 cm	
"	803-20-16	1 round nail -discarded	"	"	
"	803-20-17	1 waste flake white quartz	2x2 #4 Level 2 SE quad	16-29 cm	
"	803-20-18	2 cut Nails	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 29 Oct 77	803- 20-19	1 round nail (discarded)	Unit #20 2x2 #4 Level 2 SE quad	16-29 cm	
"	803- 20-20	1 piece of historic pottery	"	"	
"	803- 20-21	3 pieces of friable granite	"	"	
"	803- 20-.	1 cracked rock plus 5 natural flakes less than 1 cm	"	"	
"	803- 20-23	2 rim sherds- cord, grit from same pot, net imp. less than 1 cm	2x2 #4 Level 3 SE quad	29-42 cm	
"	803- 20-24	1 body sherd, multiple net plus 2 crumbs cord, grit	"	"	
"	803- 20-25	2 pieces of historic pottery 1 is stone wear, post late 1800 ~~1 is white wear, post 1850~~	"	"	
"	803- 20-26	1 bone fragment	"	"	
"	803- 20-27	4 cracked rocks 1 basalt core	"	"	

DEPARTMENT OF ANTHROPOLOGY

UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 30 Oct 77	803- 20-28	2 waste flakes clear quartz quartzite	Unit #20 2x2 #4 Level 4 SE quad	42-50 cm	
21-IC-4 29 Oct 77	803- 20-29	1 body sherd- cord crumb	2x2 Level 1 SW quad	0-16 cm	
"	803- 20-30	1 cracked rock friable granite	"	"	
"	803- 20-31	2 body sherds-grit 1 cord 1 split, crumb	2x2 Level 2 SW quad	16-31 cm	
"	803- 20-32	2 pieces of historic pottery (stone wear and white wear)	"	"	
"	803- 20-33	3 bone fragments from same bone	"	"	
"	803- 20-34	2 round nails (discarded)	"	"	
"	803- 20-35	1 rock , natural flake	"	"	
"	803- 20-36	1 decorated body sherd- cws horiz. dec.	2x2 Level 3 SW quad	31-45 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 29 Oct 77	803- 20-37	3 body sherds cord, grit plus 3 crumbs	Unit #20 2x2 #4 Level 3 SW quad	31-45 cm	
"	803- 20-38	1 waste flake clear quartz	"	"	
"	803- 20-39	2 cracked rocks	"	"	
21-IC-4 30 Oct 77	803- 20-40	1 waste flake clear quartz	2x2 #4 Level 4 SW quad	45-50 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 10 Oct 77	803- 21-1	2 body sherds- smooth + 9 crumbs &3split	Md#3 A-5 Level 3		
"	803- 21-2	4 rodent bones- 3 skull fragments 1 long bone	"		
"	803- 21-3	1 round nail -discarded	A-6 Level 2		
"	803- 21-4	1 rim sherd bossed, comb stamp	A-6 Level 3		
"	803- 21-5	3 body sherds- 1 cord 1 smooth + 1 dec. cws +13 split,crumbs	"		
"	803- 21-6	2 waste flakes- quartz 1 lithic flake-prob. natural shatter	"		
"	803- 21-7	1 historic pottery frag. from stone wear bottle	"		
"	803- 21-8	1 body sherd- split crumb, grit	A-7 Level 1		
"	803- 21-9	1 body sherd- smooth, grit	A-7 Level 3		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 10 Oct 77	803- 21-10	2 cracked rocks	Md#3 A-7 Level 3		
21-IC-4 18 Oct 77	803- 21-11	1 piece of thin metal -discarded	B-4 Level 2	16-24 cm	
"	803- 21-12	1 rock- granite flake	"	"	
"	803- 21-13	3 crumbs- 2 split 1 cord	B-4 Level 3	24-40 cm	
"	803- 21-14	3 waste flakes- chert (1 utilized) 1 cracked rock- basalt	"	"	
"	803- 21-15	1 clay- hardened plug	"	"	
"	803- 21-16	1 decorated sherd - dec w/ stamp 1 split(crumb)	B-4 Level 4	40-55 cm	
"	803- 21-17	1 small piece friable granite	"	"	
21-IC-4 19 Oct 77	803- 21-18	4 crumbs-grit 1 smooth 3 split	B-4 Level-60 cm original soil surface	55-60 cm	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803- 21-19	1 rim sherd- combed obliquely	Md #3 B-4 Level- floor	60 cm	
"	803- 21-20	4 body sherds- 1 cord 3 split all crumbs	"	"	
"	803- 21-21	2 waste flakes- 1 quartz, 1 chert (+ charcoal)	"	"	
21-IC-4 21 Oct 77	803- 21-22	2 rim sherds- 1 finger pot 1 plain, crumb	B-5 Level 3		
"	803- 21-23	4 Body sherds -1 cord 3 split + 32 crumbs	"		
"	803- 21-24	1 possibly utilized waste flake- chert	"		
"	803- 21-25	4 waste flakes- + 1 possible quartz core + 1 cracked rock, basalt flake	"		
"	803- 21-26	1 body sherd-crumb (3 split-crumbs)	B-5 Level 4		
"	803- 21-27	1 rock- granite, natural flake	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-28	2 body sherds- smooth/grit 8 split& crumbs	Md #3 B-5 Level 5		
"	803- 21-29	1 cracked rock- granite	"		
"	803- 21-30	1 rim sherd(broken in two pieces)- cws crumb	B-6 Level 2		
"	803- 21-31	2 body sherds-crumbs 1 cord 1 dec-	"		
"	803- 21-32	1 waste flake- quartz	"		
"	803- 21-33	1 waste flake white quartz	B-6 Level 4		
"	803- 21-34	1 cracked rock- granite	"		
"	803- 21-35	3 pieces of friable granite	B-6 Level 5		
"	803- 21-36	1 fragment of ground stone implement- surface shows striations & polishing	"		

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-37	1 waste flake- quartz	Md #3 B-7 Level 1		
"	803- 21-38	12 fish bone fragments- 4 vertebra	"		
"	803- 21-39	1 round nail -discarded	"		
"	803- 21-40	1 body sherd- smooth crumb, grit	B-7 Level 2		
"	803- 21-41	32 fish bone fragments- 14 vertebra	"		
"	803- 21-42	2 rocks- smooth cortex	"		
"	803- 21-43	1 rim sherd- comb stamp	B-7 Level 3		
"	803- 21-44	2 body sherds- crumbs 1 cord 1 split + 3 crumbs	"		
"	803- 21-45	2 waste flakes chert, chalcedony	"		

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-46	1 cracked rock- granite natural flake	Md.#3 B-7 Level 3		
21-IC-4 18 Oct 77	803- 21-47	1 cracked rock (smooth, flat quartzite pebble)	C-3 Level 1		
"	803- 21-48	2 cracked rocks- granite	C-3 Level 2		
"	803- 21-49	2 small, decorated sherds - 1 trailed line 1 dentate	C-3 Level 3		
"	803- 21-50	15 body sherds- all cord +49 crumbs	"		
"	803- 21-51	1 quartz flake knife 1 chert flake	"		
"	803- 21-52	1 tiny portion of finger pot 1 small frag- rim- 1 crumb w/dentate 2 multiple net body sherds 8 crumbs- cord	C-3 Level 4		
"	803- 21-53	2 waste flakes- quartz	"		
21-IC-4 19 Oct 77	803- 21-54	1 body sherd- cord crumb	C-3 Level-floor		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803- 21-55	1 rock - granite natural flake	Md #3 C-3 Level-floor		
21-IC-4 19 Oct 77	803- 21-56	1 waste flake- quartz	C-4 Level 2	15-27 cm	
"	803- 21-57	6 body sherds- 3 cord 3 fabric or multiple net + 2 crumbs	C-4 Level 3	25-35 cm	
"	803- 21-58	4 waste flakes- 3 quartz 1 chert	"	"	
"	803- 21-59	3 cracked rocks all small natural flakes	"	"	
"	803- 21-60	2 body sherds- combed both crumbs	C-4 Level 4	35-48 cm	
"	803- 21-61	2 body sherds- all cord 1 split+ 8 crumbs	"	"	
"	803- 21-62	2 waste flakes- quartz	"	"	
"	803- 21-63	3 friable granite pebbles	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803- 21-64	2 body sherds- 1 cord 1 multiple net- (3 crumbs)	Md #3 C-4 Level- 51 cm-leveling ~~floor~~	48-51 cm	
"	803- 21-65	2 waste flakes- 1 quartz 1 chert	"	"	
"	803- 21-66	2 rocks- cracked small natural flakes	"	"	
21-IC-4 20 Oct 77	803- 21-67	2 rim sherds- 1comb stamp 1 " and bossed	C-5 Level 3	20-30 cm	
"	803- 21-68	3 decorated sherds- cws (very faint) 2-comb stamp	"	"	
"	803- 21-69	4 body sherds- 2 cord 2 smooth +2 crumbs	"	"	
"	803- 21-70	6 waste flakes- 5 quartz 1 chert	"	"	
"	803- 21-71	2 bone fragments	"	"	
"	803- 21-72	1 tooth fragment	"	"	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-73	1 rim sherd- dentate and bosses	Md #3 C-5 Level 4	30-36 cm	
"	803- 21-74	1 decorated body sherd- dentate	"	"	
"	803- 21-75	2 body sherds- cord (1 split, crumb)	"	"	
"	803- 21-76	2 waste flakes, chert	"	"	
"	803- 21-77	1 small granite flake	"	"	
21-IC-4 21 Oct 77	803- 21-78	3 rim sherds- dentate	C-5 Level 5	36-45 cm	
"	803- 21-79	3 decorated body sherds- dentate	"	"	
"	803- 21-80	2 body sherds- cord (+ 8 crumbs)	"	"	
"	803- 21-81	1 nat. flake	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-82	3 body sherds- 2 cord 1 smooth + 11 crumbs	Md #3 C-6 Level 3	20-30 cm	
"	803- 21-83	1 waste flake- quartz	"	"	
"	803- 21-84	2 cracked rocks small natural flakes	"	"	
"	803- 21-85	1 friable granite rock	"	"	
"	803- 21-86	4 rim sherds- 1 cws and bosses 1 dentate and bosses 2 cws	C-6 Level 4	30-40 cm	
"	803- 21-87	9 body sherds- decorated 1 dentate 2 comb stamp and bossed 6 " (all from same pot but 1)	"	"	
"	803- 21-88	1 body sherd - (comb imp. interior) 1 smooth + 6 crumbs	"	"	
"	803- 21-89	10 waste flakes- 9 quartz 1 chert + 1 pebble	"	"	
"	803- 21-90	lead shot- discarded	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-91	11 small natural flakes + 1 pebble	Md#3 C-6 Level 4	30-40 cm	
"	803- 21-92	1 rim sherd, plain cws on lip, red slip	C-6 Level 3-4 (from tree	20-40 cm stump)	
21-IC-4 1 Oct 77	803- 21-93	1 body sherd - cord(crumb) + 2 crumbs	C-6 Level 5		
"	803- 21-94	1 waste flake- quartz + 1 cracked rock, nat. flake	"		
21-IC-4 20 Oct 77	803- 21-95	1 round nail	C-7 Level 2	10-20 cm	
"	803- 21-96	1 body sherd- multiple net & smoothed	C-7 Level 3	20-30 Cm	
"	803- 21-97	6 body sherds- 1 smooth + 3 split from same sherd + 4 crumbs	"	"	
"	803- 21-98	1 waste flake- quartz	"	"	
"	803- 21-99	1 possible sandstone abrader fragment	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-100	2 cracked rocks friable granite	Md#3 Level 3 C-7	20-30 cm	
"	803- 21-101	1 body sherd - 1 multiple net (+ 4 crumbs)	C-7 Level 4	30-40 cm	
"	803- 21-102	1 waste flake- quartz scraper edge	"	"	
"	803- 21-103	1 possible sandstone abrader fragment	"	"	
"	803- 21-104	2 acorns, charred	"	"	
"	803- 21-105	5 pebbles- 2 friable granite	"	"	
21-IC-4 21 Oct 77	803- 21-106	1 body sherd - cord (~~24~~ crumbs)	C-7 Level 5		
"	803- 21-107	2 small pieces sandstone (same material as 21-103 21-99)	"	"	
"	803- 21-108	1 small cracked rock	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 17 Oct 77	803- 21-109	1 body sherd- cord, grit	Md #3 D-3 Level 1	0-15 cm	
"	803- 21-110	1 waste flake quartzite	D-3 Level 2	15-25 cm	
"	803- 21-111	2 body sherds- 1 smooth 1 split, crumb	D-3 Level 3	25-35 cm	
"	803- 21-112	1 end scraper brown chalcedony	"	"	
"	803- 21-113	8 waste flakes 3-quartz 5-chert	"	"	
"	803- 21-114	10 cracked rocks 8- nat. basalt flakes 2-granite	"	"	
21-IC-4 18 Oct 77	803- 21-115	1 body sherd- split, crumb	D-3 Level 4	35-45 cm	
"	803- 21-116	1 waste flake- quartz	"	"	
"	803- 21-117	2 fragments of ground stone tool	"	"	

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 17 Oct 77	803- 21-118	3 crumbs	Md#3 D-4 Level 1	0-13 cm	
"	803- 21-119	1 cracked rock, granite	"	"	
"	803- 21-120	3 waste flakes all quartz	D-4 Level 3	25-35 cm	
21-IC-4 18 Oct 77	803- 21-121	1 body sherd - 1 smooth 2 split crumbs	D-4 Level 4	35-43 cm	
"	803- 21-122	1 side notched point- straight base	"	"	
"	803- 21-123	1 clear bottle glass fragment -discarded	"	"	
"	803- 21-124	2 cracked rocks (+ charcoal)	"	"	
21-IC-4 19 Oct 77	803- 21-125	1 body sherd - cord + 1 crumb	D-4 Level-floor	43 cm	
"	803- 21-126	2 waste flakes (1 utilized) quartz, chert	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 19 Oct 77	803- 21-127	3 cracked rocks	Md#3 D-4 Level-floor	43 cm	
21-IC-4 21 Oct 77	803- 21-128	1 rim sherd-cws, crumb 3 body sherds- 1 boss 2 comb stamp, bossed	D-5 Level 4		
"	803- 21-129	3 body sherds- cord, grit + 24 crumbs	"		
"	803- 21-130	8 waste flakes- 5 quartz 1 chalcedony 2 ~~utilized- chalcedony~~	"		
"	803- 21-131	2 bone fragments, burned	"		
"	803- 21-132	4 cracked rocks-	"		
"	803- 21-133	2 rim sherds- comb stamp	D-5 Level 5		
"	803- 21-134	1 decorated body sherd comb stamp	"		
"	803- 21-135	4 body sherds- 2 cord 2 net (+22 crumbs)	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-136	3 waste flakes quartz	Md.#3 D-5 Level 5		
"	803- 21-137	1 clear bottle glass fragment discarded	"		
"	803- 21-138	1 rock- granite + 1 small piece shale	"		
"	803- 21-139	4 bone fragments	"		
"	803- 21-140	18 thin metal fragments -discarded	D-6 Level 2		
"	803- 21-141	1 body sherd - +9 crumbs	D-6 Level 3		
"	803- 21-142	2 flake knives- quartz	"		
"	803- 21-143	3 waste flakes- 2 quartz 1 chalcedony	"		
"	803- 21-144	2 bone fragments	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-145	3 cracked rocks (1 a small natural flake)	Md#3 D-6 Level 3		
"	803- 21-146	# not assigned	D-6 Level 4		
"	803- 21-147	3 body sherds- 1 cord 2 smooth (+12 crumbs)	"		
"	803- 21-148	4 waste flakes-all quartz + 1 scraper-chert	"		
"	803- 21-149	8 rock fragments	"		
21-IC-4 20 Oct 77	803- 21-150	1 body sherd- (crumb)	D-7 Level 3	21-30 cm	
"	803- 21-151	1 waste flake- quartz probably natural	"	"	
21-IC-4 19 Oct 77	803- 21-152	1 body sherd-split (crumb)	E-3 Level 2	9-22 cm	
"	803- 21-153	1 rock - granite natural flake	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 18 Oct 77	803- 21-154	2 body sherds- cord (+ 13 crumbs)	Md #3 E-3 Level 3		
"	803- 21-155	3 waste flakes- 1 chalcedony 1 quartz 1 chert	"		
"	803- 21-156	3 pebbles- granite (discarded)	"		
"	803- 21-157	1 body sherd- cord + numerous crumbs from same	E-4 Level 2 sherd	7-15 cm	
21-IC-774 20 Oct 77	803- 21-158	1 body sherd- decorated (crumb)	E-4 Level 3	15-40 cm	
"	803- 21-159	3 body sherds- cord + 5 crumbs	"	"	
"	803- 21-160	3 waste flakes- 1 quartz 2 chert- utilized	"	"	
"	803- 21-161	1 body sherd- smooth, crumb + 1 crumb	E-4 Level-floor	40 cm	
"	803- 21-162	1 waste flake-	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-163	2 pebbles (discarded)	Md #3 E-4 Level-floor	40 cm	
"	803- 21-164	1 rim- cord, bosses	E-5 Level 3	20-38 cm	
"	803- 21-165	1 rim- oblique dashes punctates	"	"	
"	803- 21-166	4 rims comb stamp	"	"	
"	803- 21-167	# not assigned	"	"	
"	803- 21-168	3 decorated sherds- 1 cws 1 bosses and comb stamp 1 comb stamp	"	"	
"	803- 21-169	7 body sherds- 6 cord 1 smooth +20 crumbs	"	"	
"	803- 21-170	3 waste flakes- quartz	"	"	
"	803- 21-171	3 bone fragments	"	"	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-172	5 cracked rocks	Md #3 E-5 Level 3	20-38 cm	
"	803- 21-173	2 body sherds- crumbs 1 decorated 1 cord + 11 crumbs	E-6 Level 2	13-15 cm	
"	803- 21-174	9 thin metal fragments -discarded	"	"	
"	803- 21-175	2 bone fragments	"	"	
"	803- 21-176	1 rim sherd- plain with linear punctates	E-6 Level 3	15-29 cm	
"	803- 21-177	1 decorated sherd- cws	"	"	
"	803- 21-178	1 body sherd.- smooth + 16 crumbs	"	"	
"	803- 21-179	1 utilized flake, quartz	"	"	
"	803- 21-180	1 bone fragment burned- unidentifiable	"	"	

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803-21-181	1 thin metal fragment -discarded	Md #3 E-6 Level 3	15-29 cm	
"	803-21-182	2 thin metal fragments -discarded	E-7 Level 1	0-16 cm	
"	803-21-183	50 pieces of clear bottle glass (from one bottle) (discarded)	E-7 Level 2	16-16 cm	
"	803-21-184	2 rocks- smooth 1 a small pebble	"	"	
"	803-21-185	1 body sherd- decorated (crumb) comb stamp	E-7 Level 3	16-27 cm	
"	803-21-186	3 body sherds- cord + 2 crumbs	"	"	
"	803-21-187	1 waste flake- quartz	"	"	
"	803-21-188	11 pieces of clear bottle glass (discarded)	"	"	
"	803-21-189	1 pebble (discarded)	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 18 Oct 77	803- 21-190	1 body sherd - cord + 3 crumbs	Md #3 F-3 Level 3		
"	803- 21-191	11 waste flakes - 4 quartz 1 chert 1 quartzite 4 granular + 1 utilized flake	"		
"	803- 21-192	6 cracked rocks (1 is dense, smooth-probably a fraction of hammerstone)			
"	803- 21-193	3 pottery crumbs- 2 cord 1 smooth	F-4 Level 2		
"	803- 21-194	1 piece friable granite (less than 5 cm) (discarded) 1 possible basalt flake	"		
"	803- 21-195	3 body sherds-split, crumbs (+ charcoal- discarded)	F-4 Level 3		
"	803- 21-196	4 body sherds- cord all crumbs	F-4 Level- Moundfill		
"	803- 21-197	1 waste flake- quartz	"		
"	803- 21-198	1 acorn shell fragment	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-199	2 body sherds- 1 cord 1 smooth	Md#3 P-5 Level 3	16-26 cm	
"	803- 21-200	3 waste flakes- 2 quartz 1 chert	"	"	
"	803- 21-201	1 tin can (rolled rim)	"	"	
"	803- 21-202	2 rim sherds- 1 smooth with incising 1 laurel with linear punctates	P-5 Level 4	26-35 cm	
"	803- 21-203	1 body sherd (reed impressed)	"	"	
"	803- 21-204	2 body sherds- both split +10 crumbs	"	"	
"	803- 21-205	5 waste flakes- 1 has been utilized & broken (2 qtz, 1 chert, 1 mossagate)	"	"	
"	803- 21-206	2 burned bone fragments unidentifiable	"	"	
"	803- 21-207	1 clay plug + 3 fragments- unfired-pure clay several small(gravel-size) pieces friable granite- discarded 1 piece saved	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21=IC-4 21 Oct 77	803- 21-208	1 shell (gun)	Md #3 F-6 Level 1	0-15 cm	
"	803- 21-209	1 rock-granite	"	"	
"	803- 21-210	1 body sherd- cord	F-6 Level 2	15-26 cm	
"	803- 21-211	1 waste flake- quartz	"	"	
"	803- 21-212	5 bone fragments- 2 burned 3 tiny fragments (unidentifiable)	"	"	
"	803- 21-213	1 cracked rock - granite	"	"	
"	803- 21-214	1 body sherd cord+ 10 cord crumbs	F-6 Level 3	26-cm (leveled off)	
"	803- 21-215	4 waste flakes- 2 chert 2 chalcedony	"	"	
"	803- 21-216	7 bone fragments- burned, unidentifiable	"	"	

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 21 Oct 77	803- 21-217	2 cracked rocks- 1 friable granite 1 granite- solid	Md#3 F-6 Level 3	26 cm (leveled off)	
"	803- 21-218	4 body sherds- 1 cord 3 net	F-7 Level 2	15-27 cm	
"	803- 21-219	5 clear bottle glass fragments (discarded)	"	"	
"	803- 21-220	numerous thin metal fragments -discarded	"	"	
"	803- 21-221	4 small natural flakes 1 granite cracked rock, smooth cortex	"	"	
"	803- 21-222	1 body sherd- smooth	F-7 Level 3	27-31 cm	
"	803- 21-223	13 bone fragments- burned-unidentifiable	"	"	
"	803- 21-224	1 rock- friable granite same as 803-21-17	"	"	
21-IC-4 18 Oct 77	803- 21-225	4 pottery crumbs- 3 cord	G-3 Level- unknown (mound fill)		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 18 Oct 77	803- 21-226	2 waste flakes- 1 quartz-utilized & broken 1 chert	Md.#3 G-3 Level-unknown (mound fill)		
"	803- 21-227	2 body sherds-1 smooth 1 cord + 1 crumb	G-4 Level 2	15-18 cm	
"	803- 21-228	1 small knife or scraper	"	"	
"	803- 21-229	1 waste flake- quartz (+ 1 small gneiss fragment -discarded)	"	"	
21-IC-4 19 Oct 77	803- 21-230	1 body sherd- cws (crumb)	G-4 Level 3		
"	803- 21-231	1 body sherd- cord (+ 1 crumb)	"		
"	803- 21-232	1 waste flake- quartz	"		
21-IC-4 20 Oct 77	803- 21-233	1 body sherd - cord + 2 split/crumb	G-5 Level 3		
"	803- 21-234	1 waste flake- quartz	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-235	1 rock- friable granite	Md#3 G-5 Level 3		
"	803- 21-236	parts from a cast iron stove door late 19th early 20th?	G-6 Level 2	10-22 cm	
"	803- 21-237	thin metal fragments ? -discarded	"	"	
"	803- 21-238	6. body sherds- cord/grit + 21 crumbs	G-6 Level 3	22-31 cm	
"	803- 21-239	6 waste flakes- 3 quartz 1 chalcedony 2 quartzite	"	"	
"	803- 21-240	1 quartz core	"	"	
"	803- 21-241	1 waste flake- quartzite	G-7 Level 2	10-22 cm	
"	803- 21-242	32 round nails discarded	"	"	
"	803- 21-243	7 cut nails	"	"	

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 20 Oct 77	803- 21-244	thin metal fragments -discarded	Md#3 G-7 Level 2	10-22 cm	
"	803- 21-245	1 rock- granite natural flake	"	"	
"	803- 21-246	2 body sherds- cord, crumbs + 2 crumbs	G-7 Level 3	22-28 cm	
"	803- 21-247	1 waste flake- quartzite	"	"	
"	803- 21-248	1 portion of ground-stone tool- axe(?) hafting evidence	"	"	
21-IC-4 27 Oct 77	803- 21-249	1 decorated sherd	H-4-5 ext. 1x2		
"	803- 21-250	3 body sherds- cord + 5 crumbs	"		
"	803- 21-251	1 waste flake- quartzite	"		
"	803- 21-252	3 pebbles- discarded	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 2 Nov 77	803- 21-253	1 bone fragment, long bone joint	Md#3 ext. E of 1x2 ext. from G-4 (I-4-5) from top eolian & buried paleosol interface (at 15 cm)		
	803- 21-254	1 rim sherd- cws	charcoal conc. in center of N. wall of timber alignment Floor level 1		
	803- 21-255	3 pottery crumbs- 1 cord 1 smooth 1 split	"		
	803- 21-256	1 blade- quartz	"		
	803- 21-257	25 burned bone fragments	"		
	803- 21-258	3 rocks- granite	"		
21-IC-4 24 Oct 77	803- 21-259	3 decorated sherds- 1 punctate 2 dentate + 4 fragments	timber crib- Floor Level 1		
	803- 21-260	6 body sherds- 4 cord (2 are crumbs) 2 smooth +10 crumbs and 1 lump unfired clay	"		
	803- 21-261	3 quartz flakes	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 24 Oct 77	803- 21-262	50 burned bone fragments	Md#3 timber crib- Floor level 1		
"	803- 21-263	1 cracked cobble fragment of hammerstone	"		
"	803- 21-264	25 pebbles (discarded)	"		
21-IC-4 26 Oct 77	803- 21-265	3 decorated sherds- 2 dentate 1 cws	timber conc. skimming off charcoal layer Floor level 2 8 cm below Lev 1		
"	803- 21-266	9 body sherds- 2 cord 5 smooth + 6 crumbs	"		
"	803- 21-267	1 waste flake- quartz 1 utilized flake- quartz	"		
"	803- 21-268	4 cinders (black sand)	"		
"	803- 21-269	2 cracked rocks (1 possibly a fragment of hammerstone)	"		
21-IC-4 28 Oct 77	803- 21-270	6 rim sherds- comb stamp and bossed	timber alignment, floor & skimming off at 5 cm below level 2. Floor level 3		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 28 Oct 77	803- 21-271	9 decorated sherds- 7 comb stamp and bossed 1 dentate several fractured from same pot	Md#3 timber alignment, floor, skimming at 5 cm below level 2. Floor level 3		
"	803- 21-272	11 body sherds- 9 cord 2 smooth + 51 split, crumbs	"		
"	803- 21-273	1 projectile point- eared,	"		
"	803- 21-274	1 utilized flake- brown chalcedony	"		
"	803- 21-275	21 waste flakes- 14 quartz 6 chert 1 gneiss schist-possibly utilized	"		
"	803- 21-276	6 burned bone fragments	"		
"	803- 21-277	1 strip of innertube (from top of burial pit #1) -discarded	"		
"	803- 21-278	1 burned acorn shell fragment(?)	"		
"	803- 21-279	5 cinders burned sand-black	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 28 Oct 77	803- 21-280	19 cracked rocks cracked from 3 different parent rocks 2 are possibly ground stone tools	Md#3 timber alignment, floor, & skimming off 5 cm below level 2. Floor level 3		
21-IC-4 28-29 Oct 77	803- 21-281	5 body sherds- decorated 1 punctate & cws 4 cws , comb stamp	timber alignment below level 3. Floor level 4	5cm	
"	803- 21-282	11 body sherds- 9 cord 2 smooth + 42 split, crumbs	"		
"	803- 21-283	chipped stone tool, bifacially worked, broken on 2 lateral edges- quartzite	"		
"	803- 21-284	1 hammerstone	"		
"	803- 21-285	59 waste flakes- 11 quartz 2 chalcedony 43 flakes from 1 granular rock ~~2 quartzite~~ 1 chert	"		
"	803- 21-286	7 burned bone fragments	"		
"	803- 21-287	1 charred substance (bark?)	"		
"	803- 21-288	3 fragments of ground stone tools	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 28 Oct 77 29 Oct 77	803- 21-289	2 pebbles of reddened sand	Md#3 timber alignment 5 cm below Floor level 4	level 3.	
"	803- 21-290	25+ cracked rocks heat fractures noted	"		
21-IC-4 30-31 Oct 77	803- 21-291	7 body sherds- 6 cord 1 smooth	timber crib Floor level 5		
"	803- 21-292	1 possibly utilized flake	"		
"	803- 21-293	7 waste flakes- 1 quartz 1 chalcedony 2 heat spalls 2 chert 1 jasper grey chert	"		
"	803- 21-294	125 stone flakes from one stone cortex polished	"		
"	803- 21-295	25 cracked rocks	"		
"	803- 21-296	1 burned bone fragment	"		
21-IC-4 29 Oct 77	803- 21-297	1 rim sherd- cws (crumbd)	mound floor, bulk bording timber crib, leveling to level 4		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 29 Oct 77	803- 21-298	1 rim sherd bosses, dentate	Md#3 mound floor, bulk bordering timber crib, leveling to level 4		
"	803- 21-299	6 body sherds- 5 cord 1 smooth +39 crumbs (1 net)	"		
"	803- 21-300	7 flakes- 5 quartz (2 utilized) 1 chert 1 large, granite flake-utilized	"		
"	803- 21-301	4 burned bone fragments	"		
"	803- 21-302	20 cracked rocks	"		
21-IC-4 3 Nov 77	803- 21-303	2 body sherds- cord +1 crumb	floor at tree trunk last level		
"	803- 21-304	1 waste flake- quartz	"		
"	803- 21-305	1 cracked rock- friable granite	"		
21-IC-4 30 Oct 77	803- 21-306	4 decorated sherds- 1 punctate 3 comb stamp	floor level 4 burial #1		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 30 Oct 77	803- 21-307	1 body sherd - cord 11 split	Md#3 Burial #1 floor level	4	
"	803- 21-308	1 waste flake, basalt	"		
"	803- 21-309	1 burned bone fragment	"		
"	803- 21-310	1 strip of innertubing recent rubber (from top of burial pit#1) -discarded	"		
"	803- 21-311	2 rocks- granite	"		
21-IC-4 31 Oct 77	803- 21-312	1 body sherd- cord	burial #1 floor level	5	
"	803- 21-313	1 rim sherd- smooth, oblique incisions, drilled hole	burial #1 from 75 cm below level	4	
"	803- 21-314	1 body sherd - smooth +2 crumbs	"		
21-IC-4 26 Oct 77	803- 21-315	1 rim sherd- square, combed	area N. of timber structure to bank cut		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC*-4 26 Oct 77	803- 21-316	2 body sherds- 1 combed 1 multiple net	Md#3 area W. of timber structure to bank cut		
"	803- 21-317	4 body sherds- 2 cord 2 smooth +10 crumbs	"		
"	803- 21-318	2 waste flakes (chips)	"		
"	803- 21-319	5 cracked rocks	"		
"	803- 21-320	1 clear window glass fragment (discarded)	pot hunter's pit on N. side of bank cut		
21-IC-4 31 Oct 77	803- 21-321	10 body sherds- 7 cord 3 split, 10 crumbs	grid 1x2- pit off G-4 level 60-122 cm G-H-burial #2	60-122 cm	
"	803- 21-322	2 waste flakes- quartz	"	"	
21-IC-4 3 Nov 77	803- 21-323	1 body sherd- cord crumb	burial #2 pit bottom with bones		
"	803- 21-324	1 fragment of broken biface quartz	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 3 Nov 77	803- 21-325	5 waste flakes- 2 quartz 1 chalcedony 2 chert	Md#3 Burial #2 pit bottom with bones		
"	803- 21-326	1 palate with striations	"		
21-IC-4 13 Oct 77	803- 21-327	9 pottery crumbs- 4 cord 5 split	bank cut 2-3		
"	803- 21-328	3 waste flakes	"		
"	803- 21-329	1 sandstone abrader	bank cut 3-4	30 cm (approx)	
"	803- 21-330	6 body sherds- 1 cord 5 smooth +28 crumbs	bank cut 4-5		
"	803- 21-331	2 bone fragments- all burned	"		
"	803- 21-332	1 cracked rock- friable granite	"		
"	803- 21-333	11 pottery crumbs- 2 smooth 9 split	bank cut 5-6		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 13 Oct 77	803- 21-334	1 bone fragment- burned	Md #3 bank cut 5-6		
"	803- 21-335	1 decorated sherd- cws	bank cut 6-7		
"	803- 21-336	1 body sherd- cord + 6 crumbs	"		
"	803- 21-337	1 rock- granite	"		
"	803- 21-338	2 body sherds- 1 cord 1 split	bank cut 7-8		
"	803- 21-339	2 waste flakes- 1 quartz (utilized)? 1 chalcedony	"		
"	803- 21-340	7 small vertebra	"		
"	803- 21-341	clear window glass fragments (discarded)	" (potter's pit)		
"	803- 21-342	2 waste flakes- 1 quartz 1 slate	bank cut 8-9 (potter's pit)		

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 13 Oct 77	803- 21-343	3 clear window glass fragments (discarded)	Md#3 bank cut 8-9 (potter's pit)		
"	803- 21-344	1 glass bottle early 20th C. pre-1903	"		
"	803- 21-345	1 metal scoop, aluminum recent -discarded	"		
"	803- 21-346	1 possible groundstone tool fragment	"		
"	803- 21-347	1 clear window glass fragment (discarded)	bank cut 9-10		
"	803- 21-348	1 cracked rock	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 3 Nov 77	803- 22-1	1 waste flake	Md# 5 A2,A3,A4 Level 3		
"	803- 22-2	1 lead shot -discarded	"		
"	803- 22-3	2 body sherds- split +11 crumbs	A2,A3,A4 Level 4 Plus extension material from disturbed pit		
"	803- 22-4	3 bone fragments	"		
"	803- 22-5	3 rocks-1cracked 1 fragment of groundstone tool	"		
"	803- 22-6	1 waste flake	A2,A3,A4 level 5		
"	803- 22-7	2 bone fragments	"		
"	803- 22-8	8 cracked rocks	"		
21-IC-4 4 Nov 77	803- 22-9	2 waste flakes- 1 quartz 1 chert	intrusive pit at A4 taken to (disturbed burial p floor level		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 4 Nov 77	803-22-10	4 tooth fragments (reburied)	Md#5 intrusive pit at A4 taken to Floor level	(disturbed burial pit)	
"	803-22-11	18 bone fragments (reburied)	"		
21-IC-4 3 Nov 77	803-22-12	1 body sherd - cord +4 crumbs	B2,B3,B4 Level 2 (mound fill) divided in ½		
"	803-22-13	1 waste flake	"		
"	803-22-14	1 pebble	"		
"	803-22-15	1 waste flake	B2,B3,B4 Level 3 (second ½ of mound fill)		
"	803-22-16	3 waste flakes- 1 quartz 1 chert 1 ?	"		
21-IC-4 4 Nov 77	803-22-17	1 projectile point tip	B2,B3,B4 Level 4		
"	803-22-18	3 waste flakes	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 4 Nov 77	803- 22-19	1 cracked rock- granite	Md#5 B7,B6,B5 plus exten. to strat. cut Level 1		
"	803- 22-20	16 bone fragments- human (reburied)	B7 Level 1		
"	803- 22-21	1 lead shot -discarded	"		
"	803- 22-22	1 projectile point- chert, side notched, one corner is broken off	B-7 Level 2		
"	803- 22-23	7 bone fragments- human (reburied)	"		
"	803- 22-24	1 waste flake	B-7 trench Level 3		
"	803- 22-25	1 fish bone	B-7 trench Level 4		
21-IC-4 2 Nov 77	803- 22-26	1 waste flake- quartz	C2,C3,C4 Level 5		
"	803- 22-27	1 bone fragment	C2,C3,C4 Level 7		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 2 Nov 77	803- 22-28	1 body sherd:- cord + 6 crumbs	Md#5 B-C-4 trench Level 3		
"	803- 22-29	1 biface- broken on one side. no util noted 1 waste flake- quartz	"		
"	803- 22-30	1 retouched flake	B-C-4 to 76 cm Level 6	76 cm	
"	803- 22-31	1 utilized waste flake	"	"	
"	803- 22-32	2 bone fragments	B-C-4 Level 7		
21-IC-4 5 Nov 77	803- 22-33	1 bone fragment	B-C-7 trench Level 1		
"	803- 22-34	2 cracked rocks	"		
"	803- 22-35	3 body sherds- 1 cord, split 2 smooth	B-C-7 trench mound fill below level 2		
"	803- 22-36	3 waste flakes- 1 quartz 1 chert 1 chalcedony	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 5 Nov 77	803- 22-37	1 cracked pebble	Md#5 B-C-7 trench mound fill below level 2		
21-IC-4 3 Nov 77	803- 22-38	1 lead shot -discarded	D-4,D3,D2 Level 2		
"	803- 22-39	1 cracked rock- friable granite	D4,D3,D2 Level 3		
"	803- 22-40	2 waste flakes- 1 chert	D4,D3,D2 Level 4		
"	803- 22-41	3 cracked rocks	"		
"	803- 22-42	1 body sherd- smooth	D4,D5,D6 Level 5		
"	803- 22-43	1 thumb scraper- chert	"		
"	803- 22-44	2 waste flakes	"		
"	803- 22-45	1 burned bone fragment	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 3 Nov 77	803- 22-46	3 rocks- 2 friable granite	Md#5 D4,D3,D2 Level 5		
21-IC-4 4 Nov 77	803- 22-47	8 body sherds- 8 cord 42 split	D5,D6,D7 Level 3		
" "	803- 22-48	2 rocks	"		
"	803- 22-49	1 waste flake- quartzite	D5,D6,D7 Level 4		
"	803- 22-50	2 body sherds- cord(1 crumb) +2 split	D5,D6,D7 intrusive pit taken out separately		
"	803- 22-51	5 bone fragments	"		
"	803- 22-52	1 pebble	"		
"	803- 22-53	1 rim sherd- cws and combed	E4,E3,E2 Level 2		
"	803- 22-54	1 decorated sherd- punctates	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 4 Nov 77	803- 22-55	2 rim sherds- smooth	Md#5 E4,E3,E2 Level 4		
"	803- 22-56	1 body sherds punctates	"		
"	803- 22-57	7 body sherds- 2 cord 1 smooth 4 split	"		
21-IC-4 2 Nov 77	803- 22-58	2 body sherds- cord	D-E-4 Level 2		
"	803- 22-59	5 body sherds- 2 cord 1 smooth 2 split	E4,E5,E6,E7 Level 3		
21-IC-4 5 Nov 77	803- 22-60	1 body sherd- cord	E7,- G7 Level 2		
"	803- 22-61	1 waste flake- agate	E7,-G7 Level 3		
"	803- 22-62	3 pebbles	"		
	NOTE	from undercut area when refacing mound, 1 crumb & 1 cracked granite rock recovered. DISCARDED	mound fill		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4 Oct 1977	803-22	C 14 sample 377 g non-burned human femur- complete, circular pit burial-mound #5 Sent for dating	Mound #5 Burial #1		
"	803-23	C14 sample 10.0 grams charred wood Mound #3, Burial #1 Sent to Geochron 4 grams retained	1 m below timber cribbing on mound floor		
"	803-24	C14 sample 22.0 grams charred wood Mound #3 Burial #2 Sent to Geochron. 13 grams retained	"		
"	803-25	C14 sample 65.7 g charred wood from fire ass. w/ timber crib Md#3. Sent to Geochron 35 g retained	50 cm below present ground surface - on mound floor		
"	803-26	C14 sample 277.7g charred wood from SE corner of timber alignment-Md #3 not sent for dating	"		

DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4	803-27-1	1 historic(?) object of hammered iron	Bank cut #2	15-30 cm	
"	803-27-2	1 fragment from glass lamp chimney (1870's?)	Bank cut #3	15-35 cm	
"	803-27-3	1 utilized waste flake	Bank cut #4	15-30 cm	
21-IC-4 12 Oct 77	803-27-4	1 decorated sherd- dentate	Bank slump under Md#3		
"	803-27-5	1 pottery crumb- smooth	"		
"	803-27-6	2 waste flakes	"		
21-IC-4	803-27-7	human skull fragments (reburied)	along beach line under Md#3		
"	803-27-8	2 rim sherds- 1 cws and punctate 1 cws (waterworn)	Shallows Below Md#3		
"	803-27-9	2 decorated sherds- cws 1 push-pull 1 cws	"		

DEPARTMENT OF ANTHROPOLOGY — UNIVERSITY OF MINNESOTA

(1) FIELD SPECIMEN SHEET OR
(2) PHOTOGRAPHIC DATA SHEET

SITE & DATE	NO.	(1) DESCRIPTION AND ASSOCIATION (2) SUBJECT AND DESCRIPTION	LOCATION	DEPTH	(1) FIELD (2) NEG. FILE
21-IC-4	803-27-10	18 body sherds- 3 smooth 9 cord 1 stamped 2 net over combed 3 net +4 crumbs	Shallows under Md#3		
"	803-27-11	1 end scraper, quartz crudely worked	"		
"	803-27-12	21 waste flakes	"		
"	803-27-13	not assigned	"		
"	803-27-14	1 vertebra- human	"		
"	803-27-15	2 bone fragments- human	"		
"	803-27-16	1 core- quartzite 1 mano fragment or groundstone implement	"		

Jeanne Marie Schaaf
3125 Freemont Avenue South
Minneapolis, Mn.
(612)825-0261

Summer 1978 address:
c/o Dr. Kenneth Ames
7305 North and South Highway
Lewiston, Idaho 83501

Born: Columbus, Nebraska, May 23, 1953

Education:

Creighton University, 1971-73
University of Minnesota, 1973-75 B.A. 1975
University of Minnesota, 1975-present M.A. candidate

Research experience:

1974 University of Minnesota Archaeological field school
1974 Archaeological lab assistant, U of M
1975 University of Minnesota field research assistant
1975 Corps of Engineers, St. Paul District, Assistant Archaeologist
1976 Field Assistant Lake Winnibigoshish Cultural Resource Survey.
1976-77 University of Minnesota Graduate Research Assistant
1977 Field Director, Lake Winnibigoshish Dam Site mitigation.
1977-78 University of Minnesota Graduate Research and Teaching Assistant

Publications:

co-author: "Cultural Resource Investigations of the Lake Winnibigoshish Reservoir." Archaeology Laboratory, University of Minnesota, 1977.

ABBREVIATED RESUME

Elden Johnson
Professor of Anthropology
Department of Anthropology
University of Minnesota
215 Ford Hall
224 Church St. S.E.
Minneapolis, Minnesota 55455
(612) 373-0221

3620 Coolidge St. N. E.
Minneapolis, Minnesota 55418
(612) 789-4966

Born: Brookings, South Dakota, 24 October 1923

Professional employment and offices:

1953-55	Curator of Anthropology, Science Museum, St. Paul, Minnesota
1955-58	Assistant Professor of Anthropology, University of Minnesota
1958-59	Director of Science Museum and Assistant Professor, University of Minnesota
1959-65	Associate Professor, University of Minnesota
1965-to date	Professor of Anthropology, University of Minnesota
1963-78	State Archaeologist, Minnesota
1972-75	Chairperson, Department of Anthropology, University of Minnesota
1977-	Chairperson, Department of Anthropology, University of Minnesota

Education:

1940-41	University of New Mexico
1945-48	University of Minnesota
1948-50	University of Minnesota
1950-53	Yale University

Field Research:

1949	Standing Rock Reservation, North Dakota, ethnology
1952-53	Thailand/Cambodia, ethnology
1953-56	Spring Lake, Minnesota, archaeology and ethnohistory
1959-76	Minnesota, North Dakota, annual archaeological research
1967	Paleolithic site survey, Pakistan

Professional Associations:

American Anthropological Association, Fellow
Society for American Archaeology
American Association for the Advancement of Science
Sigma Xi

LIST OF PUBLICATIONS

Elden Johnson
University of Minnesota

1954 Review: Walam Olum or Red Score: The Migration Legend of the Lenni Lenape or Delaware Indians, Indiana Historical Society. Minnesota History, Vol. 34, No. 4, p. 160.

1955 "Carl Bodmer Paints the Indian Frontier." Indian Leaflets, No's. 8, 9, 10. The Science Museum, St. Paul.

"A Human Effigy Pipe from North Dakota." Plains Anthropologist, No. 5, p. 11, December 1955.

"Indian Houses." Gopher Historian, Vol. 10, No. 5, pp. 16-17.

Review: The Micmac Indians of Eastern Canada, by Wilson D. and Ruth Wallis. Minnesota History, Vol. 34, No. 6, p. 257.

1956 "Spring Lake Archaeology: The Lee Mill Cave," (with Philip S. Taylor). Science Bulletin, No. 3, Pt. 2. Science Museum, St. Paul.

Review: The Atlatl in North America, by James H. Kellar. American Antiquity, Vol. 22, No. 1, p. 86.

1957 "The Minnesota Archaeological Site File." Minnesota Archaeologist, Vol. 21, No. 2, pp. 14-16.

"Indians before History in the Upper Mississippi Valley," (and Louis H. Powell). Guide Pamphlet, No. 3. Science Museum, St. Paul.

"Hopewell Burial Mounds in St. Paul." Park Leaflets, No. 3. Science Museum, St. Paul.

Review: The Indian Tipi, by Reginald and Gladys Laubin (University of Oklahoma Press, 1957). Minnesota History, December, pp. 376-377.

1958 Annual Report of the Director. Science Museum, St. Paul.

1959 "Spring Lake Archaeology: The Sorg Site." Science Bulletin, No. 3, Pt. 3. Science Museum, St. Paul.

"An Archaic Horizon Cache from Southern Minnesota." Proceedings, Vol. 27. Minnesota Academy of Science, pp. 3-5.

Review: Araucanian Child Life and Its Cultural Background. Smithsonian Miscellaneous Collections, Vol. 133. By Sister M. Inez Hilger, 1957. American Anthropologist, Vol. 61, No. 3, p. 530.

Review: New Light on Old Fort Snelling, by John Callender. Minnesota Historical Society. Minnesota History, June, p. 230.

1960 "Cambria Burial Mounds in Big Stone County." Minnesota Archaeologist, Vol. 23, No. 3, pp. 53-81.

"Glacial Lake Agassiz and Prehistoric Man." Minnesota Archaeological Newsletter, No. 1, pp. 4-7, March 1960.

"A Statistical Analysis of Some Mississippian Projectile Points," (with Craig Henrikson). Proceedings, Vol. 28, pp. 89-92. Minnesota Academy of Science.

Atlas for Anthropology, (with Robert F. Spencer). W. C. Brown, Dubuque.

Review: Hidden America, by Roland Wells Robbins. Minnesota History, Vol. 37, No. 1, pp. 30-31.

Review: Indian Life in the Upper Great Lakes, 11,000 B.C. to A.D. 1800, by George I. Quimby, 1960. Minnesota History, Vol. 37, No. 4, p. 174, December 1960.

1961 Review: Indian Life in the Upper Great Lakes, 11,000 B.C. to A.D. 1800, by George I. Quimby. American Antiquity, Vol. 27, No. 2, p. 250.

1962 "An Archaic Burial Site in Minnesota." Minnesota Archaeologist, Vol. 14, No. 4, pp. 92-101.

"Notes on the Mdewakanton Bark House." Minnesota Archaeologist, Vol. 14, No. 2, pp. 49-52.

Manual for Introductory Anthropology, (with Evelyn Hatcher). Burgess Publishing Co., Minneapolis.

"The Prehistory of the Red River Valley." Minnesota History, Vol. 38, No. 4, pp. 157-165.

Review: Indian Rock Paintings, by S. Dewdney and K. Kidd (University of Toronto Press). Minnesota History, Vol. 38, No. 2, p. 87.

1963 "The Prehistory of the Red River Valley." Minnesota Archaeologist, Vol. 25, No. 4, pp. 146-155 (Reprint of 1963 article in Minnesota History).

1964 "Copper Artifacts and Glacial Lake Agassiz Beaches." Minnesota Archaeologist, Vol. 26, No. 1, pp. 4-21.

"Twenty New Radiocarbon Dates from Minnesota." Minnesota Archaeologist, Vol. 26, No. 2, pp. 35-49.

"Sandy Lake Ware and its Distribution," (with Leland R. Cooper). American Antiquity, Vol. 29, No. 4, pp. 474-479.

"Introduction," in J. D. Holmquist and A. H. Hillman, eds, Diving into the Past, p. 19. Minnesota Historical Society, St. Paul.

1965 "Tribes of the Northeast." In R. F. Spencer and J. D. Jennings, eds., The Native Americans, pp. 384-401. Harper and Row, New York.

"Tribes of the Great Plains." In R. F. Spencer and J. D. Jennings, eds., The Native Americans, pp. 337-384. Harper and Row, New York.

"MORRC and Archaeology." Minnesota Archaeological Newsletter, No. 7.

1966 "An Archaeology Program for Minnesota." Minnesota Outdoor Recreation and Resources Commission Report No. 5. St. Paul.

Manual for Introductory Anthropology, (with Evelyn Hatcher). (Revised and reissued.) Burgess Publishing Co., Minneapolis.

1967 "An Unusual Copper Knife." Minnesota Archaeologist, Vol. XXIV, No. 4, pp. 104-105.

"Prehistory in our State Parks." Conservation Volunteer, Vol. 30, No. 173, pp. 13-17.

"An Unusual Burial from Grant County." Minnesota Archaeologist, Vol. 29, No. 2, pp. 48-51.

1968 Atlas for Anthropology, (with Robert F. Spencer). (Revised Edition.) W. C. Brown, Dubuque.

1969 "Decorative Motifs on Great Oasis Pottery." Plains Anthropologist, Vol. 14, No. 46, pp. 272-276.

"Burial Mounds of Central Minnesota," (with Lloyd A. Wilford and Joan Vicinus). Minnesota Prehistoric Archaeology Series, No. 1. Minnesota Historical Society, St. Paul.

"Archaeological Evidence for the Utilization of Wild Rice." Science, 163, pp. 276-277.

"Preliminary Notes on the Prehistoric Use of Wild Rice." Minnesota Archaeologist, Vol. 30, No. 2, pp. 31-43.

"The Birch Lake Mound Group," (with M. Q. Peterson and Jan Streiff). Journal of the Minnesota Academy of Science, 36:1, pp. 3-8.

Review: The Hitchell Site, by Richard Johnston. Plains Anthropologist, pp. 166-167.

"The Prehistoric Peoples of Minnesota." Minnesota Prehistoric Archaeology Series, No. 4. Minnesota Historical Society, St. Paul.

1970 "Prehistoric Archaeology and Public Interpretation." Minnesota History, Vol. 42, No. 4, pp. 153-154.

"Introduction." In Lloyd A. Wilford, "Burial Mounds of the Red River Headwaters." Minnesota Prehistoric Archaeology Series, No. 5, pp. v-ix. Minnesota Historical Society, St. Paul.

1970 "Prehistoric Archaeology and Public Interpretation: A New Approach." Minnesota History, Vol. 42, No. 3, pp. 153-154. Reprinted in: Historic Preservation in Minnesota, by Donn Coddington. Minnesota Historical Society, 1971.

1971 "Archaeology and American Indian Protest." Man in the Northeast, Vol. 2, pp. 89-92.

Review: The First American: A Story of North American Archaeology, by C. W.Ceram. Minnesota History, Vol. 42, No. 8, pp. 310-311.

"The Northern Margin of the Prairie Peninsula." In Richard B. Johnston, Editor, The Prairie Peninsula and its Relationships to the Middle Missouri. Journal of the Iowa Archaeological Society, Vol. 18, pp. 13-21.

"Excavations at the Gull Lake Dam." Minnesota Archaeologist, Vol. 31, No. 2, pp. 44-69.

"Recommendations of the State Archaeologist." In Donn Coddington, editor, Historic Preservation in Minnesota. Minnesota Historical Society, St. Paul.

1972 Review: From Whole Log to No Log, by E. Letterman, Dillon Press. Plains Anthropologist, Vol. 17, p. 78.

1973 "Professional Responsibility and the American Indian." American Antiquity, Vol. 38, No. 2, pp. 129-130.

"Interesting Archaeological Reading." Minnesota Archaeologist, Vol. 32, No's. 1 and 2, pp. 113-114.

"Notes on a Paleolithic Site Survey in Pakistan." Asian Perspectives, Vol. 15, pp. 60-65.

"The Arvilla Complex." Minnesota Prehistoric Archaeology Series, No. 9. Minnesota Historical Society, St. Paul.

1974 Editor, Upper Great Lakes Anthropology: Essays in Honor of Lloyd A. Wilford. Minnesota Prehistoric Archaeology Series, No. 11. Minnesota Historical Society, St. Paul.

"Lloyd A. Wilford and Minnesota Archaeology." In E. Johnson, Editor, Upper Great Lakes Anthropology: Essays in Honor of Lloyd A. Wilford. Minnesota Prehistoric Archaeology Series, No. 11, pp. 1-8. Minnesota Historical Society, St. Paul.

1975 "An Early Woodland Pottery Vessel from Minnesota." Scientific Publications, New Series, Vol. 2, No. 4. Science Museum of Minnesota (G. J. Hudak, co-author).

1977 "Tribes of the Northeast." In R. F. Spencer and J. D. Jennings, eds., The Native Americans, 2nd edition, revised, Harper and Row, New York.

"Native Americans and Archaeology," compiler, in Guidelines for the Profession special publication of the Society for American Archaeology, Washington.

"Archaeological Guidelines," with Timothy Fiske, Reprinted in Minnesota Archaeologist, 36:3:101-105. St. Paul.

Cultural Resource Inventory of Lands Adjacent to Lake Winnibigoshish. Archaeology Laboratory, University of Minnesota 135 pp., 6 figs., 22 maps, 46 plates. Minneapolis.

END

FILMED

3-86

DTIC