HISTORICAL, ARCHAEOLOGICAL, AND GEOLOGICAL FEATURES INVENTORY, LAKE VIEW HILL COUNTY PARK, MADISON, WISCONSIN

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From April through June 2008, Great Lakes Archaeological Research Center (GLARC) conducted a historical, archaeological, and geological features inventory of the Lake View Hill County Park in Madison, Wisconsin. These investigations were conducted to construct a landuse history of the park property and to identify and document potentially significant historical and archaeological features within the park. The landuse history of the park property was constructed using existing and available historical records and interviews with knowledgeable individuals in an attempt to compile a complete and accurate account of the history of the property and its use through the years. Archaeological investigations of the property consisted of an archival and records search to identify previously documented archaeological resources on the property and on-ground documentation of all visible or potential cultural features. An archives and records search was conducted to identify potential geological features on the park property. When potential geological features were identified, attempts were made to interview knowledgeable individuals regarding the existence and location of these features.

The investigations of the historical, archaeological and geological features of the Lake View Hill County Park reveal that there are extant historical features that reflect its former use as a self-sustaining tuberculosis sanatorium. Investigations of the purported archaeological features located on the property confirm that these features are of recent historical origin and are also related to the use of the property as a sanatorium. Archival and records research raise the possibility of the presence of a natural cave complex on the property. No evidence of the caves or cave openings were identified on the park property.
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**PART I: INTRODUCTION AND PROJECT BACKGROUND**

**Introduction**

From April through June 2008, Great Lakes Archaeological Research Center (GLARC) conducted a historical, archaeological, and geological features inventory of the Lake View Hill County Park in Madison, Wisconsin. These investigations were conducted at the request of Dane County and the Friends of Lake View Hill County Park with the purpose of inventorying and documenting potentially significant historical and archaeological features within the park. The results of the study are to be used as an aid for the development of a comprehensive master plan for the park.

**Project Description**

The Lake View Hill County Park consists of 48 acres located in Section 25, Township 8 North, Range 9 East on land that was formerly the location of the Lakeview Tuberculosis Sanatorium (Figure 1.1). Currently, the former sanatorium buildings are utilized by Dane County as the location of its Department of Health and Human Services. The former sanatorium buildings are centrally located on a prominent hill near the eastern boundary of the park property. South of the buildings is a large grass lawn that slopes down to Northport Drive. A wooded area that has recently been acquired by the park (the Esch Addition) is located east of the grassy lawn. The area of the property north of the buildings is extensively wooded and traversed by a walking trail.

Prior to the beginning of the historical, archaeological, and geological features inventory of the Lake View Hill County Park, the Friends of Lake View Hill County Park provided a list of documented or potential sites of interest within the park boundaries. These sites include: the sanatorium buildings and associated features; possible pre-contact Native American archaeological sites; a possible road or trail located in the Esch Addition; and a natural cave network that is suspected to be located on the park property. Investigations of the park property focused on these features.

**Physical Setting**

**Physiography**

The Lake View Hill County Park is located in the portion of Dane County included in Martin’s (1965) Eastern Ridges and Lowlands physiographic province. The Eastern Ridges and Lowlands province corresponds with the portion of the state that was covered by the Green Bay lobe of the Wisconsin glaciation. The topography of the Eastern Ridges and Lowlands province is controlled by a series of parallel belts of northeast-southwest trending ridges or cuestas. The westernmost of these cuestas is the low, narrow Magnesian Cuesta formed by the resistant Lower Magnesian limestone; the eastern cuesta is the higher, broader Niagra Cuesta made up of Niagra limestone (Martin 1965:211). The eastern faces of these cuestas generally exhibit gradual gentle slopes while the western faces are steeper and more rugged. Relief within the Eastern Ridges and Lowlands is minor. Martin (1965:208) notes that “the dominant thing in eastern
Figure 1.1 Location of Lake View Hill County Park project area.
Wisconsin is the plain.” Drainage tends to follow the longitudinal axis of the cuestas although this may be due to the presence of morainic features as well.

Geologic maps of Dane County (Alden 1918) indicate that the underlying bedrock of the project area consists of dolomitic limestone of the Lower Magnesian formation. The Lower Magnesian formation outcrops in the western portion of the Eastern Ridges and Lowlands, where it is found overlying Cambrian sandstone (Alden 1918). Characteristics of Lower Magnesian limestone include color ranging from dull-grayish to dirty-buff, and an uneven crystalline structure ranging from dense compact grayish limestone to portions that are loosely aggregated (Alden 1918:80). Lower Magnesian formation limestone can be used for building, particularly as road materials, and as such has been quarried where the outcrops are near the surface. Lower Magnesian formation limestone is also subject to the effects of weathering, resulting in the formation of sink holes and caves as a result of the solvent action of underground water (Martin 1965:93). As a result of this weathering process, the Lower Magnesian formation seems to harbor more caves than other limestone formations in Wisconsin (Martin 1965:96).

**Soils**

In a broad regional perspective, soils of the project area are included within Hole’s (1976) Soils of the Southeastern Upland soil region. Lying within the area of the state once covered by the Green Bay and Lake Michigan lobes of the late Wisconsinan glaciation, soils of the Southeastern Upland are largely derived from Woodfordian glacial deposits. Nearly two thirds of the soils of the region are formed on glacial till, about a fourth on glacial outwash, and the remainder on glacio-lacustrine deposits (Hole 1976:61). About one third of the landscape area of the Southeastern Upland soil region is occupied by well drained soils, another third is made up of excessively drained (droughty) soils, and about 12 percent consists of moderately well drained soils. Approximately 10 percent of the region’s soils consist of peat and muck. The remaining 15 percent is comprised of wet lowland soils (Hole 1976:61). The landscape of the Southeastern Upland soil region is estimated to be about 13,000 years old. Soils in upland settings are the oldest in the region, wherever they have not been truncated by erosion or rejuvenated by wind blown deposits (Hole 1976:61). Soils found in depressions have been cumulative, consisting of organic materials where peat and muck have formed, or mixed mineral and organic materials in the loamy and clayey wetlands of the region. Since approximately 1850, erosion accelerated by land clearing and farming has resulted in the silting in of lowlands and bog fringes (Hole 1976:61).

A more detailed study specific to Dane County indicates that project area soils include those belonging to the Dodge-St. Charles-McHenry soil association (Glocker and Patzer 1978)(Figure 3.2). The Dodge-St. Charles-McHenry association includes well drained and moderately well drained, deep silt loams (Glocker and Patzer 1978). Typically, soils of the Dodge-St. Charles-McHenry association are found on varied landscapes characterized by drumlins and moraines. The landscape on which the association is found is primarily gently sloping to sloping, but there are areas on benches and in depressions and drainages that are nearly level and some areas that are moderately steep to steep. In is estimated that soils of the Dodge-St. Charles-McHenry association make up about 25 percent of the land area of Dane County (Glocker and Patzer 1978).
Current Land Use

Lake View Hill County Park consists of 48 acres located on the north side of Lake Mendota in the city of Madison. In 2006, all 48 acres of the former Lakeview Sanatorium, including the Lakeview Woods and the five acre Esch addition were placed in permanent conservancy by the Dane County Board of Supervisors. Currently the property is used by the public as a park offering walking trails and other forms of passive recreation. Buildings on the property are currently used by the Dane County Department of Human Services for offices and storage space.

![Generalized Soils of Dane County](image)

**Figure 1.2 Lake View Hill County Park relative to the soils of Dane County.**
PART II: METHODOLOGY

Archival and Literature Research Methodology

Pre-field research entailed a comprehensive review of the data housed at GLARC, at regional libraries and historical societies, and at the Wisconsin Historical Society in Madison. Archives and serial file systems were also searched for site-specific information. Published literature sources consulted include: *The Wisconsin Archeologist*, a quarterly journal of the Wisconsin Archaeological Society published since 1901; the *Wisconsin Magazine of History*, the journal of the Wisconsin Historical Society; and the *Wisconsin Historical Collections*, consisting of 20 volumes published between the years 1903 and 1920.

Unpublished sources subjected to scrutiny were represented by four different formats: (1) serial entry files; (2) map files; (3) manuscript files; and (4) archaeological survey reports. Two serial file systems were consulted. The first of these is the Wisconsin Archaeological Site Inventory (ASI), copies of which are housed at the Museum Division, Wisconsin Historical Society. This file consists of an inventory of previously reported archaeological sites from both prehistoric and historic times and provides information relating to site locations, cultural affiliation, artifacts, and literature sources. The second file consulted is the Historic Preservation Division inventory file housed at the Historic Preservation Division, State Historical Society of Wisconsin. This file includes both archaeological sites and standing structures that have been identified as possessing architectural and/or historical significance.

Several map files were reviewed. They include: (1) The Charles E. Brown Archaeological Atlas; (2) George R. Fox Quadrangle Maps; (3) the General Land Office survey records; (4) local plat and deed maps; and (5) the Wisconsin Land Economic Inventory. The Charles E. Brown Archaeological Atlas provides the locations of sites on county plat maps. The prehistoric and historic sites include camps, villages, mounds, springs, rock art, workshops, quarries, cemeteries, trails and various other types of archaeological manifestations reported to Brown during his long tenure as editor of *The Wisconsin Archeologist* and as an employee of the State Historical Society of Wisconsin. The George R. Fox Quadrangle Maps are a series of early twentieth century USGS quadrangle maps that were maintained by George R. Fox prior to 1917. Each map depicts the location of archaeological sites he investigated over the course of several years. These maps were eventually given to Brown and apparently formed the foundation for, or were incorporated within Brown’s atlas.

The General Land Office (GLO) records consist of plats and survey notes that may provide information regarding pre-settlement vegetation, topography, and aquatic features, all important variables in determining potential site locations. In addition, dependent on the interests of individual land surveyors, cultural information such as the locations of Indian trails, camps and villages, maple sugar processing stations (“sugar bushes”), pioneer settlements, and early industrial improvements such as mills, roads, and early homes and farmsteads are frequently noted on these maps. Both map files are housed at the Archives Division, Wisconsin Historical Society and the latter is available on microfilm at various repositories.

Early plats and topographic maps were reviewed to assess historical settlement and development of the project environs. Plat maps for Westport Township were available for the years 1861, 1873, 1890, 1904, 1911, 1924, 1931, 1947, and 1953.

Finally, the Wisconsin Land Economic Inventory (WLEI) land cover map for the Town of Westport was examined. The WLEI (popularly known as the “Bordner Survey,” after its director, John Bordner) officially began in 1929, although it included work done as early as 1927. Its mission was to document the
current and potential use of land in all parts of the state of Wisconsin so that abandoned farms, cutover forests, and other “idle” land could be resettled, reforested, or otherwise put to productive use. The Inventory operated as part of the Wisconsin Department of Agriculture and Markets until 1937, when it was placed under the direction of the State Planning Board. In 1941, it went back to the Department of Agriculture. It officially ended in 1947, though some maps continued to be updated by the Department of Agriculture after that time.

Manuscript files investigated include the Charles E. Brown manuscript files, the Northwestern Archaeological Survey Fieldnotes (T.H. Lewis Notes) and the State Archaeologist’s county files. Both of these are housed at the Museum Division, Wisconsin Historical Society. The Brown manuscripts consist of 50 years of notes, correspondence, sketches, maps, and other data relating to historic and prehistoric archaeological sites. The notes of the Northwestern Archaeological Survey consist of detailed survey notes and plats for mound groups and archaeological sites surveyed by T.H. Lewis between 1883 and 1895 throughout the Upper Midwestern United States. Many of these sites have disappeared over the course of the last 125 years and the Lewis notes are the only detailed information available for resources that were destroyed prior to being recorded by state and federal agencies. The county files include reports (unpublished), photographs, sketch maps, letters, and information derived from the Museum’s highway archaeology program.

Archaeological Field Methodology

Methods and techniques utilized during the course of the Lake View Hill County Park archaeological, historical, and geological inventory were determined by the goals and scope of the study. Three different techniques were utilized in documenting the known archaeological, historical, and geological resources located on the property. These techniques included an initial walkover of the park property to identify potentially significant resources, detailed mapping of extant archaeological and historical features, and limited soil coring of suspected archaeological features to assess the soil development and potential age of the features.

Initial Walkover of Park Property

An initial walkover was conducted during the late spring of 2008 to get an initial assessment of known and potential resources located on the park property. GLARC personnel were accompanied on the initial walkover by Friends of Lake View Hill County Park board members Robert Birmingham and Nelson Eisman. Both Mr. Birmingham and Mr. Eisman offered considerable insight into the resources found on the property. Several resources were identified during the initial walkover that would require additional investigations and mapping. These included the hog barn facility, the retaining ponds and water fall system, as well as two potential prehistoric mounds.

Mapping of Extant Archaeological and Historical Features

Following the initial walkover survey, archaeological and historical features identified during the survey were further documented by compiling detailed maps of the features. Maps of historic and
archaeological features were compiled using a plane table and alidade and a surveyors transit. Map scales appropriate to the feature being mapped were utilized in all cases. For each feature mapped, a site datum point was established and assigned arbitrary coordinates. Details of each of the features were mapped in relation to the datum point. After the completion of mapping, the site datums were assigned coordinates in the Dane County coordinate system using a Global Positioning System receiver provided by the county.

Soil Coring

Limited soil coring was conducted at the locations of two potential prehistoric earthworks identified on the park property. Soil coring involved the extraction of sediment cores from these potential prehistoric features using an Oakfield-type soil probe. The soil cores were examined and described in the field to verify the presence/absence of developed soils on these features as well as to document the extent of disturbance at both locales. At both locations, the use of soil cores aided in the assessment of the age and cultural affiliation of the identified features.
PART III: RESULTS OF INVESTIGATIONS

Results of the Archives and Literature Review

Land Ownership

Land ownership was determined through plat books for Westport Township and examination of the original land patents. The ownership of the property seems to have been fairly consistent, at least on a decade by decade basis. The land was originally purchased by John Nicholas and Lucius Lyon in 1837. In 1855, the southern half of Section 25, Township 8 North, Range 9 East was subdivided by John Spear, John Nicholas and Behrend Veerhusen into the Hanover Plat. The title for the actual project area (principally parcels 9, 10, 11, 14, 15, 16) was under the ownership of John Spear by 1861. John Doyle purchased the Spear property sometime between 1861 and 1873 and maintained ownership until sometime before 1899. After 1899, the property was under the ownership of Henry Harbour or Harbort until it was sold to Dane County in 1929. The chain of ownership is summarized below.

1837 – John Nicholas and Lucius Lyon (original patentees)
1861 – John Spear (Figure 3.1)
1873 – John Doyle (Figure 3.2)
1890 – John Doyle (Figure 3.3)
1899 – Henry Harbour
1904 – Henry Harbour (Figure 3.5)
1911 – Harbort (same as 1904?) (Figure 3.6)
1923 – H. Harbort (Figure 3.9)
1929 – Lakeview Sanatorium
1931 – Lakeview Sanatorium (Figure 3.7)
Figure 3.1 1861 Plat map Section 25 Westport Township (Ligowsky 1861).
Figure 3.2 1873 plat map Section 25 Westport Township (Harrison and Warner 1873).

Figure 3.3 Tracing of 1890 plat map Section 25 Westport Township (Foote et al. 1890).
Figure 3.4 1904 plat map Section 25 Westport Township (G.R. Angell and Co. 1904).

Figure 3.5 Tracing of 1911 plat map Section 25 Westport Township (Cantwell Printing Co. 1911).
Figure 3.6 Tracing of 1931 plat map Section 25 Westport Township (Thrift Press 1931).
Archaeological Sites within Two Miles of the Project Areas

Archival and literature review of the project area resulted in the identification of 34 previously identified archaeological sites within two miles of Lake View Hill County Park of which only one site is reported as being within the project area (Figure 3.7, Table 3.1). The most frequently reported site type is mound sites (a total of 14) followed by (in descending frequency), campsite/villages (11), isolated finds (4), historic Euroamerican cemeteries (2), cabin/homesteads (1), workshop sites (1) and historic materials concentrations (1).

The extent of investigation at these archaeological sites varies from case to case and in many instances is very incomplete. However, 14 sites appear to have a prehistoric Late Woodland component, 13 sites have unknown prehistoric components, four sites have Historic Euroamerican components, two sites have Historic Native American components, two have Woodland components, two sites have Middle Woodland components, and the Middle and Late Archaic stages are represented at a single site.

The overall archaeological site density suggests that this region was intensively used during the later part of the prehistoric period, and several sites have revealed the presence of people in the general area as far back as 5000 BC. The distribution of sites within two miles of Lake View Hill County Park suggests that people were utilizing resources and areas that are in close proximity to water and wetlands. Lake View Hill County Park is situated on an upland area that is bounded on the south by Lake Mendota, on the west and northwest by the Yahara River and associated wetlands and on the northeast by low-lying wetlands. The project area is proximal to all of these areas, but is not immediately adjacent to any of them. In other words, areas that are, or were, more suitable for habitation are not particularly located within the project area. Based on the limited sample of archaeological sites within this area, Lake View Hill County Park would have a moderate to low probability of containing archaeological habitation sites. Any such sites would probably reflect short-term habitation or specialized resource procurement sites.

It has been noted for other parts of Dane County that mound/cemetery construction often occurs in elevated areas. In the area surrounding Lake View Hill County Park, there are numerous mound groups, but the preference for this particular area seems to have been for areas adjacent to water rather than elevated locations. Given the apparent predilection of Native American people to choose areas immediately adjacent to bodies of water, the probability of there being mound/cemetery sites within Lake View Hill County Park is low.

It should be noted that predictive modeling of site locations based on existing site inventories that have not been generated through systematic survey can only be used as a rough guide. The only way to ascertain the presence or absence of archaeological sites within a given project area is to conduct intensive Phase I Archaeological Reconnaissance.

A single site was listed in the Archaeological Site Inventory as being within the project area. This site is 47DA936 – Lakeview Woods Mound (47BDA569). This site was reported by Larry A. Johns on August 17, 1991 as part of the Dane County Mounds Identification Project (Salzer and Johns 1992). This particular site has been the focus of at least one other investigation (Mier et al. 1997) and will be treated at length in the discussion of the results of the fieldwork.
Figure 3.7 Previously identified archaeological sites within 2 miles of Lake View Hill County Park.
Table 3.1 Previously Reported Sites within Two Miles of the Lake View
Hill County Park Project Area.

<table>
<thead>
<tr>
<th>Site #</th>
<th>Site Name</th>
<th>Site Type</th>
<th>Cultural Study Unit</th>
<th>TRS</th>
<th>TRS 2</th>
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<td>Cabin/Homestead</td>
<td>Historic Euroamerican</td>
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<td>Unknown Prehistoric</td>
<td>8,9,E,36</td>
<td></td>
</tr>
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<td>Moore</td>
<td>Campsite/Village</td>
<td>Unknown Prehistoric</td>
<td>8,9,E,36</td>
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<tr>
<td>47DA0946</td>
<td>Cherokee Marsh Isolate &quot;A&quot;</td>
<td>Isolated Find</td>
<td>Unknown Prehistoric</td>
<td>8,9,E,23</td>
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<tr>
<td>47DA0947</td>
<td>Cherokee Marsh Isolate B</td>
<td>Isolated Find</td>
<td>Unknown Prehistoric</td>
<td>8,9,E,23</td>
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<td>47DA0948</td>
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<td>Isolated Find</td>
<td>Unknown Prehistoric</td>
<td>8,9,E,23</td>
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<td>Woodland</td>
<td>8,9,E,36</td>
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<tr>
<td>47DA0936</td>
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<td>Mound</td>
<td>Woodland</td>
<td>8,9,E,25</td>
<td></td>
</tr>
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</table>
Previous Archaeological Investigations of the Park Property

Archaeological Investigations prior to 1990

Early archaeological investigators who conducted work within the region (T.H. Lewis, George R. Fox and C.E. Brown) make no mention or depiction of archaeological sites or features associated with the Lakeview property (Figures 3.8 – 3.9). While there has been rumor of a collection(s) of spear and arrow points that have been recovered from the property, a definitive source for this information has been difficult to identify. In recent email correspondence between Pat Esch (a long-time resident of the area) and Robert Birmingham, Ms. Esch stated that she has “… NO arrowheads from the Lake View area and no one in my family does either as far as I know. I don’t remember anyone in the neighborhood who does. Sorry.” (Esch 2008a). While Ms. Esch’s statement cannot be taken as definitive for the entire property, her familiarity with the project area and the people in the neighborhood around Lake View Hill County Park suggest that if such a collection does exist, it has not been formally documented nor is it well known.

References to possible prehistoric mounds located on the property can be found in the patient newsletter, The Wheeze/Lake Views. One of these references is an account of patient Leslie Lawton, who describes what she believes to be a Native American mound on the top of the hill. The reference to the mound appears in a short article entitled “The Garden” (Lawton 1943:5). In that article Ms. Lawton describes the quality and location of the gardens that were maintained by fellow patients. She states that:

Our Sanatorium gardens are beautifully located on a gentle south slope overlooking the western edge of Lake Mendota. State Highway 113 runs along the lower edge. From the highway the gardens rise gently up the hillside for a distance of 130 yards, ending at the border of the front lawn of picturesque old St. Johannes Evan. Lutheran Kirche, erected in the year 1884. If you wish to continue on up the slope, through the well-kept church grounds and cemetery, you will eventually find yourself standing on top of one of the mounds left by the ancient Mound Builders, on the crest of the hill (emphasis mine). This slope, up which you have just come, marks the western edge of the Lake View Sanatorium Grounds.

(Lawton 1943:5)

The italicized statement is the only reference to a mound on the property and it is made without justification or support. There are a number of features located within the general vicinity that Ms. Lawton references that to the untrained eye could resemble Native American burial mounds. These features were examined during the fieldwork portion of this project and were found to contain historic debris and/or appear to be push piles from excavations that were clearly conducted during historic times. It is likely that this account represents the patient’s interpretations of landscape features on the property rather than accurate identifications of prehistoric features.

Another informant described a bird effigy mound south of the hill that could reportedly be seen from the main building. In an interview with Jon Becker (Friends of Lake View Hill County Park) Brian Graedel did not recall there ever being any mounds in what is now the park (Becker 2008). He did recall one near Lake Mendota, below the hill. It is likely that Mr. Graedel is referring to the Mendota Hills Bird Effigy (47DA409) located near the northern shore of Lake Mendota. This mound group originally contained a
Figure 3.8 George R. Fox Map including Section 25 of Westport Township (Brown Manuscripts).
Figure 3.9 C.E. Brown Atlas (Brown Manuscripts Dane County).
number of mounds but the last principal components (a linear mound and a bird mound) were excavated in 1954 prior to their destruction. It should be noted that there are a number of mound groups located immediately to the south of Lake View Hill County Park and any of those may be what Mr. Graedel is referring to. The most important part of Mr. Graedel’s information is that he did not remember their being any burial mounds on the Lake View property.

Archaeological Investigations since 1990

Beginning in the 1990s, a number of archaeological studies focused on the prehistoric resources of the Lake View Hill County Park property were conducted. The original source of information for Lakeview Woods Mound (47DA936) (the only previously reported archaeological site within the Lake View Hill County Park premises) is Robert Salzer and Larry Johns’ work for the Dane County Mound Identification Project which did not include subsurface testing, a map of the earthwork or a definitive identification of the earthwork as being of Native American construction (Salzer and Johns 1992).

In 1997, investigations of the location of Lakeview Woods Mound were conducted to ensure that the site would not be subjected to impacts from the construction of a proposed communications facility consisting of a cellular phone antenna, maintenance building, access road and lay-down area (Mier et al 1997). These investigations consisted of an intensive archaeological survey of the mound location and the one acre site of the proposed communications facility. As a result of the survey, Lakeview Woods Mound was mapped and a five foot buffer established around the mound. No archaeological materials were identified within the one acre tract of the proposed communications facility. The 1997 survey “raised questions regarding the age, cultural context, and mortuary affiliations of the so-called Lakeview Woods Mound” (Mier et al. 1997:i).

In the summer of 1999, Philip Salkin conducted what he called a Phase I Environmental Study of a portion of Lake View Hill County Park (Salkin 1999). This study consisted of a literature and records search and three field visits. The study suggested that the project area was not the location of any hazardous waste dumps or sites, leaking underground storage tanks or toxic spills (Salkin 1999:19-20). Salkin examined Lakeview Woods Mound (47DA936) and felt that the lack of older trees on the berm or within the enclosure was suspicious and that the berm may be twentieth century in age (Salkin 1999:18). Furthermore, he states that a long-time employee of the Sanatorium indicated that the berm was the result of the activities of pigs in a sty at that location (Salkin 1999:18). Given that Salkin was not able to excavate or confirm the age of the enclosure, he recommended that the earthwork be given a five foot buffer and that any disturbance to the mound be coordinated with the Burial Sites Preservation Office at the Wisconsin Historical Society in the event that it was the product of Native American construction.

Vegetation and Landuse History

The earliest description of the local environment for Lake View Hill County Park was made in the 1830s by land surveyor, Orson Lyons, working for the General Land Office. Lyons noted the presence of a number of oak trees and other vegetation suggestive of what is called Oak Openings with perhaps areas of mesic forest. Oak openings consist of isolated stands of burr and black oak trees intermixed with typical xeric prairie vegetation that appear to have been maintained (at least in part) through human intervention, namely the periodic purposeful setting of fires to create deer habitat. Rarely, mixed stands of burr and black
oak, shagbark hickory, large-toothed aspen and black cherry are found. Shrub species are more abundant in oak openings than on open prairies. Species producing edible portions include oak (acorns), shagbark hickory (nuts), black cherry, wild strawberry and frost grape (fruits), hawthorn and sumac (berries), false Solomon’s seal (rhizomes), bracken fern (greens) and milkweed (buds and pods) (Christiansen III, et al. 1999). Butterfly weed (for congestion) is the primary medicinal plant found in oak openings (Curtis 1974; Niering and Olmstead 1992).

There is no discussion of vegetation or landuse for the project area between 1834 and the late 1920s when the Wisconsin Land Economic Inventory was completed in the 1930s. The WLEI indicates that the area around the sanitarium had been cleared and was being used for crop land (Figure 3.10). This includes the area immediately behind the sanitarium buildings. There is a small area of oak-hickory forest adjacent to the northeastern corner of the sanitarium buildings that arcs around an area of cleared land immediately behind the buildings. A remnant of this wooded area is still present on the property, but it is in the northwestern portion of the currently wooded area.

The question of the extent of agriculture on the Lake View Hill County Park property is still somewhat open. It does appear that large portions of the property, with the exception of a portion of the currently wooded area, were at one time or another under the plow prior to the purchase of the land by Dane County. The WLEI plat is supported by testimony from a local resident that was recorded in an article by Paul Rasmussen (a sanatorium resident) entitled “Paul Rasmussen Presents History of Lake View and Surrounding Country” (Rasmussen 1946:4). In that article Mr. Rasmussen apparently interviewed Herman Weddig, a resident that had lived on the farm across the road directly in front of the Sanatorium. Rasmussen (1946) states:

If one will look down the front lawn to the large white house below, they will see directly to the left of it a line fence. Mr. Weddig tells us that this line fence at one time extended halfway up the lawn where it met another fence running east and west. North of this fence was a wooded area used for pasture. The grove of trees west of the San is now all that remains of this woods. On the strip of land below the trees and to the east, cultivated crops were raised. The land to the west of the fence and below the present grove was an orchard and today one apple and one pear tree still remain. Where these two trees stand once stood some farm buildings – several chicken coops, a barn and a one room house occupied by a bachelor. The remains of what was once a well can still be seen walking several rods southwest of the pear tree.

The description provided above indicates that at least half of the front lawn of the Sanatorium was used for cultivation and the other half was used as an orchard. Unfortunately, the description does not address the northern portion of the property behind the main sanatorium buildings. An article written by Pacholski (1943) entitled “On Looking Out the Window,” indicates that while looking out of a north-facing window “…you will see a forest of white and red oaks in a natural grove, a man-made terrace, and a waterfall overhung with thick foliage and underbrush” (Pacholski 1943:9). The early date of the observation along with the WLEI suggests that the grove of trees in the northern portion of the park has some antiquity.

Brian Graedel, grandson of Paul Graedel, Sr. (a Swiss immigrant after whom Graedel Court is named) remembers a livestock facility in the woods, a barn or slaughterhouse, with two sides, each serving one of
Figure 3.10 Wisconsin Land Economic Inventory map on Westport Township.
two 10-acre hog operations (perhaps cattle too) (Becker 2008). Mr. Graedel said the woods were criss-crossed with roads that were “paved” with furnace cinders, mostly between the sanatorium and the quarry. A number of borrow pits were also described. The overall impression of the woods area is that while it was wooded, it was also used for hog farming, dumping, borrowing and as access between the Sanatorium, the quarry off the western edge of the property and facilities located within the woods themselves. While it is likely that there are portions of the wooded area that continue to maintain intact soil profiles, it is also clear that a fair degree of disturbance has also occurred.

Fortunately, a series of soil profiles from a prior archaeological investigation of 47DA936 were provided in a recent report (Mier et al. 1997). Mier et al., indicate between 22 and 23 centimeters of very dark brown “A” horizon loam or dark yellowish brown “AB” horizon loam overlying a dark yellowish brown clay “B” horizon loam. The profiles containing the intact “A” soil horizon were located outside of the earthen enclosure of 47DA936 while the two profiles inside of the ring indicated that the majority of the “A” horizon had been stripped away to create the berm, leaving only the “A” to “B” transition soils within. The soil profiles provided by Mier et al. are limited and therefore not conclusive, but suggest little or minimal plowing in the portion of the wooded area adjacent to the water tower.

Regardless of the presence or absence of agricultural activities on the landscape prior to being purchased by Dane County, this should not be taken as being predictive of the presence or absence of significant (in the National Register of Historic Places (NRHP) sense of the word) intact archaeological materials in the northern portion of the park. Only a complete intensive archaeological survey can address that issue.

**Natural Cave Network**

Oral histories regarding Lake View Hill County Park have consistently included the presence of a natural bedrock cave system that underlies the property. The principle (and only known) written description comes from a 1966 article on Dane County caves in *The Wisconsin Speleologist*. The following description of the cave is provided by Norm Frater:

**Lakeview Cave**

SW/NE/SW/25/8N/9E Dane County

Waunakee Quadrangle

Now blocked, an entrance was once open at the head of a 30-foot deep ravine which directed drainage from the north side of the Lakeview Sanitorium hill into an opening next to Mandrake Road. Several fissures, which apparently connected to the cave, were opened in the old Veerhusen quarry. The cave is said to lead southeast nearly under Warner Field.

(Frater 1966:85)

Unfortunately, the entry is little more than a description of the location, there is no map, no verbal description and contains at least some hear-say. For the purposes of planning, there is relatively little to go on. A number of informants have provided some additional descriptions to the cave. Pat Esch (in correspondence with Robert Birmingham) wrote:
Well, there’s the cave in the quarry off Mandrake Rd which had an entrance that the city filled in with old mattresses. Someone built a house on it to their distress. Supposedly the local spelunkers explored the cave (before it was sealed) and wrote it up in their newsletter as just a fissure with no stalactites or stalagmites (wrong soil or rock or something). I think that there was another entrance down on Troy Drive somewhere. The person whom I remember, correctly or not, who found this info was Cliff Miller, a reporter who used to live on Longview (north of Lake View Ave) many years ago.

(Esch 2008b)

Following up on the information provided by Ms. Esch, Mr. Hagglund, and Mr. Graedel, historic aerial photographs housed at the University of Wisconsin Robinson Map Library were examined for additional details they might provide regarding the location and origin of the enclosure. Although most of the aerial photographs were taken at a scale that precludes in depth analysis of landscape features, the use of a magnifying glass allows some features to be discerned. In the case of the Lakeview Woods Mound, the aerial photographs were examined in an attempt to determine whether they provide any insight into when the enclosure may have been constructed. Scanned copies of the historic aerial photographs of the project area included in Appendix B of this document. The earliest aerial photographs of the property, taken in 1937 and 1949, show the area northwest of the water tower to be heavily wooded, indicating that the ice rink had not yet been built. On the 1950 air photo, both a clearing and berms forming the sides of the ice rink are visible in the area northwest of the water tower. The clearing is also visible on air photos up until about 1980, with the clarity of the clearing on the aerial images dependant on the time of year the photos were taken. The ice rink clearing is much more clearly seen on photos taken when trees are free of leaves.

Ms. Esch’s statements regarding the cave share similarities with those of Mr. Karl Hagglund who grew up in the neighborhood adjacent to Lake View Hill County Park. In correspondence with Mr. Nelson Eiseman on July 16, 2008, Mr. Hagglund wrote:

When I was a kid, there was a cave entrance at the base of the cliff/quarry that was filled in and sealed around 1970 or so after some kids were lost inside for a few days. When I was a kid, there were always rumors of a second entrance to the cave (supposedly larger than cave in the mounds... “big enough for one team of horses to pass another inside”). If there was actually a second entrance to this cave, it was likely sealed under the big piles of rock/boulder/cinder.

(Karl Hagglund 2008a)

Subsequent email correspondence with Mr. Hagglund by Dr. Watson provided additional details relating to the cave and other landscape features encountered by Hagglund in his youth:

I saw an entrance to the cave at the base of the quarry on Mandrake Rd immediately north of the cemetery (I think its Mandrake that runs north from northport just past Lake View
church... the nearest intersection is with Graedel ct. I cannot tell you the exact year, but would estimate that it was around 1970. At some point after this a fair amount of clean fill was brought in to make the backyard of the house that now has the quarry face in its backyard. When I saw the cave entrance it was blocked with a simple barricade, kind of like one end of a sawhorse with a 2x4 running to the ground on the other end... black and yellow, like a road might be blocked off with. This was a really long time ago, and I would have been 5 in 1970, so its not like it was yesterday.

I have also mentioned to Nelson that there was a somewhat extensive use of an area immediately north of the water tower as a landfill during my childhood. I have spoken with my parents and they believe the coal power plant may have still been in use when I was a kid. They continued to dump cinders here and on the trails in the woods as a gravel, and the road that turns to the north immediately north of the water tower and dead ends was another large cinder dump (not the second road which goes to the pig barns). If you poke around in this area a bit, you will notice that there are a couple of ravines that are filled with coarse cut limestone blocks that has been there since my childhood. My opinion is that this is heavy fill that was likely brought in for a reason, probably to fill in a cave entrance. The county workers responsible for the Sanitarium and grounds continued to use this as a dump for leaves, branches and organic debris into the 1980s, and I would estimate that there is fill about 4 or 5 m deep extending about 4 or 5 m from where the edge of the hill was when I was a kid.

In addition to that there is a dump that may or may not be at the location of a sinkhole. I have told Nelson about this one. It is east of the tree with the huge knot in it, the only large feature between this tree and the swimming pools. You can’t miss it. Put in a shovel test or two and it will turn up rusted metal, blue glass, and old medicine bottles with rubber septa. Don’t ask me why someone would put a random dump in the middle of the woods, but if I had to guess...

I also hear rumors of a 19th century news report of a wagon that fell through a sinkhole into the cave. This was told to me second hand by a metal detector person/collector in the late 1970s who was trying to find the spot and loot it for untold treasures.

If you have a scale map of the woods, showing the pig barn, pools and water tower, I can draw in the features I am talking about. If there is topo lines, I can do quite well. I was an archaeologist for ten years (MS from UWM etc.). Email me and I can fax you a modified map from my work.

(Karl Hagglund 9/3/08)

A copy of a topographic map of the grounds of Lake View Hill County Park was sent to Mr. Hagglund on which he referenced features described in his email correspondence (Figure 3.11 – Hagglund map). Mr. Hagglund’s map lends additional support to locations of features mentioned elsewhere in this document.

Both Pat Esch and Karl Hagglund report that an entrance to the cave was located in the old Veerhusen quarry that lies along the western edge of Lake View Hill County Park. Both reports also mention a second
Figure 3.11 Map annotated by K. Hagglund showing features he encountered in his youth.
entrance, but its location appears to have been obscured over time, Ms. Esch seems to recall an entrance on Troy Drive (to the south and west of the project area) while Mr. Hagglund seems to think an entrance may have been on the property and is now covered with boulders and debris. A third source for information on caves within the project area comes from Brian Graedel who informed Jon Becker that there was a fissure in the bluff, near the cemetery, into which his grandfather and father lowered beer to keep it cool. When pebbles were tossed down it, you could tell from the sound that it went on a ways. Mr. Graedel also mentioned that when the sanatorium was built, the foundation construction opened up another access to the cave. He recalled stories of the University of Wisconsin surveying this cave in the 1940s or 1950s, using sound/sonar, and establishing a connection between these two points (Becker 2008).

A follow up telephone conversation with Mr. Gradel conducted by Dr. Watson on September 4, 2008 confirmed the details of his earlier correspondence with Mr. Becker. Mr. Gradel also provided annotated maps of the park property showing the locations of features discussed in the phone conversation. A transcript of the phone conversation and copies of Mr. Gradel’s maps are provided in Appendix B.

Following up on the information provided by Ms. Esch and Mr. Hagglund, attempts were made to confirm details of their accounts. As part of this effort, the Department of Geology of the University of Wisconsin was contacted to see if they possessed any records related to the mapping of the Lakeview cave by the department at any point in the past. Correspondence with Professor Emeritus Robert H. Dott, Jr. revealed that no records pertaining to the mapping of the cave were to be found in the department’s files. Following another line of evidence, an in depth search of Madison and Wisconsin newspapers archived by NewspaperARCHIVE.com failed to find any contemporary accounts corroborating Mr. Hagglund’s recollection that youths may have become lost within the cave system. Until such corroboration can be found, this account must remain within the realm of hear-say.

It is apparent from the number of reports of a cave system under Lake View Hill County Park that it is likely that there is some sort of geological phenomenon occurring on the property. Unfortunately, the lack of documentation prevents further description or assessment of the significance of such a feature. The descriptions and anecdotal evidence of the cave system seem to place the entrance of the cave system west of the park property in the former quarry off Mandrake Road. Fieldwork conducted on park property did not reveal an obvious entrance. For the present time, the cave system should be considered a high probability and additional research might yield more definitive results.

Management Issues

1. There is a body of evidence to suggest that a system of natural caves underlies Lake View Hill County Park, but there is no written documentation of the extent or condition of the geologic features.

2. Dane County had the cave entrance sealed up, but it is possible that other entrances are located below the current ground surface.

Treatment Recommendations

1. An intensive archives search should be conducted in the Dane County files to obtain any additional data on the cave system. Any caves located on the property would be an attraction for the public and as such, is worth further exploration.
Figure 3.12 Patient map of Lakeview Sanatorium grounds.
Figure 3.13 Contributing and non-contributing buildings and structures at Lake View Hill County Park.
2. Access to the cave system might be possible from an off-site location, efforts should be made to identify any potential entrances located outside of the boundaries of Lake View Hill County Park.

3. Care should be taken in the installation of any facilities requiring extensive or intensive ground disturbance in the event that any underlying fissures are encountered.

**Results of the Archaeological Fieldwork**

*Sanatorium Buildings and Associated Features*

The 48 acres of the Lake View Hill County Park were formerly the grounds of the Lakeview Tuberculosis Sanatorium, which was in operation from the 1930s to the 1960s. At the height of its operation, the sanatorium consisted of: a main building; workers dormitories; site superintendent’s residence; a power house; a pump house and water tower; hog barns and butchery area; ponds; gardens; and a waterfall fed by a system of water collection cisterns (Figure 3.12). In 1993, most of the major extant sanatorium buildings and architectural features were listed in the National Register of Historic Places. Contributing buildings and structures include the main sanitorium building, dormitory for help, maintenance building (original power house), water utility building, and water tower. Non-contributing buildings and structures include the power house, garage, and power house. A map detailing the locations of contributing and non-contributing buildings and structures on the property is provided as Figure 3.13. Other non-extant buildings and features associated with the sanatorium, specifically the remnants of the hog barn and water collection cisterns, were documented as part of the present study.

**Hog Barn Facility**

The foundation remnants of the reported sanatorium hog barn and butchering facility are located in the wooded area north of the main sanatorium buildings. The remnants of the hog barn consist of concrete slab floors surrounded by low poured concrete walls (Figure 3.12, 3.14). Brian Graedel remembers a livestock facility in the woods, a barn or slaughterhouse, with two sides, each serving one of two 10-acre hog operations (perhaps cattle too). That seems to match the concrete foundation-and-fence poles, north of the main east/west trail. Most of the north wall of the barn facility has fallen over. A large amount of cut animal bone was found strewn around the remnants of the hog facility.

Documentation of the sanatorium hog barn and butchering facility consisted of the completion of a plane table map of the remaining foundation walls and concrete floors of the facility. A rail imbedded in one of the foundation walls at the west side of the facility was used for a site datum for mapping. This datum was later assigned coordinates in the Dane County coordinate system using a Global Positioning System receiver provided by the county.

**Management Issues**

1. The ruins of the Hog Barn Facility in and of itself would not be considered significant from an
NRHP perspective as the structure is no longer standing.

2. The Hog Barn Facility ruins were not included in the NRHP nomination form in 1992, but may be important to consider as part of a potentially significant landscape under Criteria A within the context of the history of health care.

**Treatment Recommendations**

1. The ruins should be evaluated by a specialist in landscape architecture history and considered as part of an addendum to the current National Register property.

2. The ruins should not be razed without further consideration of their potential to add to the National Register status of the property.

3. Invasive species that are threatening the integrity of the remains should be carefully removed by hand.
4. The ruins should be considered for inclusion on a guided walking tour of the property. Additional research and photographs could be integrated into informative signs and/or a guide book that would enhance a public guided walking tour of Lake View Hill County Park.

5. The ruins could also be highlighted on an interactive map of the property accessible through the internet.

*Water Fall and Collection Cisterns*

One of the more notable features associated with the Lakeview Tuberculosis Sanatorium was a waterfall and stream system that was fed from water collected in two cisterns. Water from the cisterns flowed over the falls (located on the northern edge of the parking lot) through pipes under the parking lot and then followed a stream course between the main building and dormitory down slope to Sputum Pond (not extant). Remnants of the waterfall and cisterns were clearly visible on the grounds of the Lake View Hill County Park. These included two concrete lined collection pools, a concrete stream course, and a portion of the falls.

Documentation of the waterfall and stream system consisted of the completion of a plane table map of the concrete collection pools, stream course, and waterfall north of the main building (Figure 3.12, 3.15). A nail placed between the two collection pools was used as a datum point for mapping. This datum point was later assigned coordinates in the Dane County coordinate system using a Global Positioning System receiver provided by the county.

*Management Issues*

1. The ruins of the Water Fall and Collection Cisterns in and of themselves would not be considered significant from an NRHP perspective.

2. The Water Fall and Collection Cisterns ruins were not included in the NRHP nomination form in 1992, but may be important to consider as part of a potentially significant landscape under Criteria A within the context of the history of health care.

*Treatment Recommendations*

1. The ruins should be evaluated by a specialist in landscape architecture history and considered as part of an addendum to the current National Register property.

2. The ruins should not be razed without further consideration of their potential to add to the National Register status of the property.

3. Invasive species that are threatening the integrity of the remains should be carefully removed by hand. This would allow for the ruins to be stabilized for the present time.

4. The ruins should be considered for inclusion on a guided walking tour of the property. Additional research and photographs could be integrated into informative signs and/or a guide book that would enhance a public guided walking tour of Lake View Hill County Park.

5. The ruins should also be highlighted on an interactive map of the property accessible through the internet.
Figure 3.15 2008 archaeological field map of the Cistern and Waterfall.
Possible Pre-Contact Native American Archaeological Sites

Lakeview Woods Mound (47DA936)

Archaeological investigations conducted as part of the present study focused on addressing some of the questions regarding the age and cultural affiliation of the Lakeview Woods Mound raised by the 1997 survey. These investigations consisted of the construction of a plane table map of the enclosure, limited soil coring to determine whether soil development has occurred, and interviews with individuals with knowledge of the feature.

Mapping of the enclosure was completed in the spring of the year when visibility was at a peak before the emergence of vegetation. A plane table was set up over a datum point in the middle of the enclosure and all measurements were taken in relation to the datum. The datum point was later assigned coordinates in the Dane County coordinate system using a Global Positioning System receiver provided by the county. Mapping of the mound revealed it to be somewhat oval in shape with openings on its northwest and southeast sides (Figure 3.16). Oakfield soil probes collected within the enclosure show little development of an A horizon, with a thin O horizon over a B horizon (Figure 3.17). The materials removed from the inside of the enclosure appear to have been used in creating the low berms of the enclosure. Soil probes placed into the berms revealed these to be made up of mixed soils with little soil development. The lack of soil development within the enclosure and on the berms documented by the soil probes supports the view of Mier et al. (1997) that the feature is of recent cultural origin.

The most convincing evidence that the enclosure is of recent origin is provided by Pat Esch who informed Bob Birmingham that the earthwork represents the containment walls for an ice rink that was constructed by a former superintendent of the Lakeview Sanatorium for his daughters (Esch 2008c). The ice rink was created by leveling an oval area on top of the hill and using soils from the inside of the oval to create berms surrounding the ice rink. When Karl Hagglund was growing up in the neighborhood, he “...remembers that the ice rink was a clearing that was entirely in grass and mowed by the grounds keepers. There were tulips planted at either end. They stopped mowing around 1980 or so, and it became rapidly overgrown.” (Hagglund 2008).

Ms. Esch and Mr. Hagglund’s statements support data gathered from the mapping and soil cores, and provides the most compelling proof that the enclosure is a recent feature and not of Native American origin. The Archaeological Site Inventory (ASI) form for the site has been updated to reflect this conclusion. While this conclusion may be disappointing to some, it represents an interesting facet of the history of the sanatorium. The importance of community, fresh air, physical exercise and interpersonal interaction is demonstrated by the fact that the superintendent built the rink for his daughters who lived on-site within the community. The fact that it was an ice-rink stresses a novel approach to tuberculosis treatment that involved fresh air and moderate exercise. This ice rink is clearly more than an earthen berm reflecting the whimsy (or dedication) of a father, it is symbolic of an emphasis on community and dedication to treatment that extended beyond the confines of a hospital.

Management Issues

1. The earthwork designated as Lakeview Woods Mound (47DA936) is not a burial site, it is the remains of an ice rink that was built by a former superintendent of the sanatorium.

2. The remains of the ice rink in and of itself would not be considered significant under any of the National Register criteria.
Figure 3.16 2008 archaeological field map of 47DA936 Lakeview Woods Mound.
3. The ice rink was not included in the NRHP nomination form in 1992, but may be important to consider as part of a potentially significant landscape under Criteria A within the context of the history of health care.

**Treatment Recommendations**

1. The ruins should be evaluated by a specialist in landscape architecture history and considered as part of an addendum to the current National Register property. The ice rink should not be razed without further consideration of its potential to add to the National Register status of the property.

2. Invasive species that are threatening the integrity of the remains should be carefully removed by hand. This would allow for the ruins to be stabilized for the present time.

3. The ruins should be considered for inclusion on a guided walking tour of the property. Additional research and photographs could be integrated into informative signs and/or a guide book that would enhance a public guided walking tour of Lake View Hill County Park.

4. The ruins should also be highlighted on an interactive map of the property accessible through the internet.
**Possible Road or Trail in Esch Addition**

At the onset of the present study, it was suggested that a road-like depression identified adjacent to the southeast portion of the project area may be the remnants of an early road or trail. This feature extends several hundred feet down-slope in the Esch Addition, in a southwesterly direction. Although early plats of the project area, such as the 1836 General Land Office survey map, the 1855 plat map, and the 1873 plat map do not show this road-like feature, it is clearly discernible on historical aerial photographs. A primary goal of the present study was to determine the identity of this feature, both in the historical records and on the ground.

Historical records of the project area provide little additional information into the presence or location of the road-like feature in the project area. The 1861 plat map of the area shows an unimproved road running north-south in the center of the section and appears to have been an unimproved access road to properties and structures located in Section 24 to the north (the properties of H. Hays, G. Diebold, and W. Wells) (Figure 3.1). It should be noted however, that the 1861 road is depicted as running north/south while the road fragment observed in the Esch Addition runs in a southwesterly direction. When asked about this possible road or trail in the Esch Addition, Pat Esch stated that there was a feature called “The Old Tote Road” (which is what her old neighbors called it) when her parents moved into the neighborhood in the 1940s. She said that it is visible running diagonally across the northern part of the Esch Addition to Lake View Hill County Park. In addition, she related to Bob Birmingham that she had tried to find it on maps at the Historical Society, but was unsuccessful. Her conclusion was that “…it wasn’t anything major, a short cut maybe” (Esch 2008d).

On the off-chance that the feature was a Native American path, the C.E. Brown Atlas was consulted as Brown recorded the historically known Native Paths based on GLO plat maps. The Westport plat indicates that there are Native American paths in the township, but that these paths are located adjacent to the larger waterways (Figure 3.18).

Based on oral testimony and visual inspection, there are numerous unimproved roads that are present within Lake View Hill County Park and the adjacent properties. These roads were undoubtedly used as temporary access to the various sanatorium facilities during the operation of the hospital. There may be other roads that were used to haul materials from the nearby Veerhusen Quarry as well.

Archaeological investigations of the road-like feature consisted of limited shovel probes along the location of the feature. An aerial photograph was used as a guide in locating the feature in the field. Once located, shovel probes were placed at arbitrarily selected locations in an attempt to identify any archaeological signatures of the road or trail. No indications of a road bed or hard surface was identified in any of the shovel probes, suggesting that if the road had existed in this portion of the project area, it does not appear to have been permanent or well defined.

**Management Issues**

1. The road feature is poorly defined on the ground.

2. The road feature is not significant under any of the National Register criteria.
Figure 3.18  C.E. Brown Atlas of Westport Township highlighting known Native American trails in the township.
Treatment Recommendations

1. No further recommendations.

Potential Mound – South of the Dormitory for Help

A second potential mound was identified during the initial walkover of the Lake View Hill County Park property. This potential mound was located in a wooded area south of the dormitory building, approximately half way between the building and Northport Drive. Archaeological investigations of the potential mound consisted of the construction of a plane table map and limited soil coring to determine whether soil development has occurred. In mapping the mound, a temporary datum point was established in the middle of the mound and tied to a second datum point placed near the base of a telephone pole located to the east (Figure 3.19). The datum point next to the telephone pole was later assigned coordinates in the Dane County coordinate system using a Global Positioning System receiver provided by the county.

Following the mapping of the mound, an Oakfield soil probe was used to assess the soil development on top of the mound. The Oakfield probe failed to penetrate very deeply into the surface of the mound, owing to the presence of cinders. Subsequent soil probes placed elsewhere in the mound also documented the presence of cinders throughout the mound. Based on the soil probing of the mounds, it appears that the possible mound identified in the initial walkover survey is made up largely of cinders with about five centimeters of soil on top of the cinders. A conclusion is thus drawn that the mound is actually a degraded cinder pile with a small amount of soil on top of it. The cinder pile is likely related to the use of the property as the grounds of the sanatorium.

Management Issues

1. The potential mound south of the Dormitory for Help is not a Native American burial mound.

Treatment Recommendations

1. No further recommendations.

Summary

A review of relevant archival sources and records housed at various repositories has revealed that the property of the Lake View Hill County Park has not been the focus of intensive archaeological investigations prior to the 1990s. As a result, no archaeological sites or features were identified on the property in the early archaeological records of Westport Township, although numerous sites are identified elsewhere in the township. The only archaeological site identified on the property is Lakeview Woods Mound (47DA936),
Figure 3.19 2008 archaeological field map of the cinder mound south of the Dormitory for Help.
a purported prehistoric earthen enclosure reported by Salzer and Johns (1992) for the Dane County Mound Identification Project. A Section 106 compliance driven study conducted by Mier et al. in 1997 cast considerable doubt on the identification of site 47DA936 as a prehistoric enclosure (Mier et al. 1997). Archaeological investigations conducted as part of the present study lend additional support to the skeptical view of the prehistoric origin of the earthwork. Soil profiles from the interior of the enclosure document that the “A” horizon has been removed and used to build the surrounding berm. A soil core placed in the berm itself supports this view. While the archaeological evidence provides support for the view that the enclosure is not of prehistoric origin, the most convincing evidence supporting this argument comes from the recollections of Ms. Esch, that the enclosure was an ice rink built for the children of a former superintendent of the sanatorium.

A second potential mound on the property was also mapped and investigated as part of the present study. This feature was revealed to be comprised nearly entirely of cinders and is interpreted as a cinder pile with a thin “A” horizon stabilized on top of the cinders. It is probable that the cinder pile relates to the use of the property as the sanatorium grounds.
From April through June 2008, Great Lakes Archaeological Research Center (GLARC) conducted a historical, archaeological and geological features inventory of the Lake View Hill County Park in Madison, Wisconsin. These investigations were conducted to construct a landuse history of the park property and to identify and document potentially significant historical and archaeological features within the park. The results of the investigations reported in this document were conceived as part of a larger project, namely the master plan currently in development for the Lake View Hill County Park.

Historical research indicates that the park property was privately held by a number of individuals prior to its development as the grounds of the Lakeview Tuberculosis Sanitorium in the 1930s. During the period of private ownership, portions of the property were under cultivation, while other portions remained primarily wooded. The use of the property as the Lakeview Tuberculosis Sanitorium lasted from the 1930s to the 1960s and left an indelible mark on the landscape. Features associated with this period include: the sanitorium buildings; the power plant; a pump house and water tower; the remains of a hog barn; the water collection and waterfall system; the remains of an ice rink built for the superintendent’s daughter; paths; and walkways.

No prehistoric archaeological sites were identified as a result of pre-field archival research or field investigations. Although archaeological sites were not previously documented on the park property and none were identified during field investigations, it does not necessarily mean the property is devoid of archaeological resources. Archival records indicate that the property has not been the focus of systematic archaeological survey, and the current study focused on confirming the presence of only those potential archaeological sites that have been previously identified on the property. Research conducted as part of the present study confirmed that the two potential prehistoric archaeological sites identified on the property are not of prehistoric origin, but rather date to the use of the property as the sanatorium grounds. One of these potential archaeological sites, codified in the state ASI as DA-0936, is not a prehistoric earthwork as had been previously maintained, but is instead the remnants of the earthen berms of an ice rink that was built for the daughters of a former sanatorium superintendent. Similarly, a potential mound identified south of the dormitory building was found to be a grassed over cinder pile that likely also dates to the use of the property as the grounds of the sanatorium.

Written and oral accounts of a cave complex or caves located on the property could not be corroborated by the present study. While there is a single reference to the presence of possible caves on the property in the historical literature (Frater 1966), this reference provides scant insight into the potential location of caves. Oral interviews and recollections of neighbors of the property also bring up the possibility of caves on the grounds, but these accounts vary considerably in whether they identify actual caves or fissures and whether these features were located on the property itself or nearby. No account of a person actually entering a cave on the property could be found in either the written literature or oral interviews.

The research detailed in this report has resulted on the inventory and documentation of several extant cultural features on the grounds of the Lake View Hill County Park. All of these features reflect the use of the property as the grounds of the Lakeview Tuberculosis Sanitorium.
Management Recommendations

Detailed discussions of management issues and recommendations for each of the features investigated in 2008 are presented in the discussion of the individual features in Section III of this report. Relevant issues and recommendations should be consulted on a feature by feature basis. In addition to the specific feature recommendations, we also make the following general recommendations:

1. The Lake View Hill County Park property should be evaluated by a landscape architect historian familiar with the National Park Service’s history of health care context. This evaluation will help to determine if certain features that were inventoried during this project are significant and whether they should be submitted as an addendum to the current NRHP property or as a separate landscape nomination.

2. Should any of the features inventoried during this project be determined significant, or if the landscape is determined eligible, an addendum should be made to the NRHP form for the Lake View Sanatorium or a separate nomination should be submitted. At the present time, the Lake View Sanatorium is listed on the NRHP on the basis of the architecture of the Main Sanatorium Building and the facilities contribution to health/medicine in the way that patients were treated. Part of that unique treatment involved fresh air, moderate activity, and the creation of community. Patients were not simply locked away in rooms, but instead were provided an environment of hope and interaction. The landscape that created that aspect of patient care is still present and should be the focal point of future planning.

3. The present inventory takes into account archaeological features that are visible on the surface. This does not eliminate the possibility of subsurface deposits. The only way to ensure a complete inventory of cultural resources on the property is to conduct an intensive Phase I Archaeological Survey whereby the entire property is tested at regular intervals.

4. The resources that were inventoried during the course of this project are visible to those who have knowledge of their existence, but would probably not be identified as important or significant without being highlighted. All of the landscape features that were encountered in 2008 can now be placed into a single context that is conducive to a self-guided public tour and/or presented in the form of an interactive web site. We recommend the web format utilized by the Lakeshore Nature Preserve at the University of Wisconsin–Madison.
REFERENCES CITED

Alden, William C.

Becker, J.
2008 Email correspondence with Robert Birmingham, regarding Lake View Hill County Park.

Christiansen III, G. W., A. L. Rosebrough and D. A. Cain

Curtis, J. T.
1959 The Vegetation of Wisconsin – An Ordination of Plant Communities. The University of Wisconsin Press, Madison.

Esch, P.
2008a Email correspondence with Robert Birmingham, regarding Arrowheads from Lake View
2008b Email correspondence with Robert Birmingham, regarding caves on Lake View.
2008c Email correspondence with Robert Birmingham, regarding Lake View Hill County Park Property.
2008d Email correspondence with Robert Birmingham, regarding Lake View Hill County Park Property.

Frater, N.

Glocker, C. L. and R. A. Patzer

Hagglund, K.
2008a Email correspondence to Nelson Eisman, regarding Landscape features at Lake View Hill County Park.
2008b Email correspondence with Robert Watson, regarding Landscape features at Lake View Hill County Park.
Hole, Francis D. 

Lawton, L. 

Pacholski, M. 

Rasmussen, Paul 

Mier, L. , Paige Luft, and David F. Overstreet 

Niering, W. and N.C. Olmstead 

Salkin, P.H. 

Salzer, R. and L. Johns 
APPENDIX A: PERMIT
Wisconsin Public Lands Field Archaeological Permit, 2008
Required to conduct archaeology on all non-federal public lands under Wis. § 44.47
Wisconsin Historical Society

Name/Organization: Contact Robert J. Watson Telephone: 414-481-2093
Address: 427 East St. Mary's Ave. City: Milwaukee State: WI Zip Code: 53207
Email Address: rwatson@wisem.com FAX: 414-481-2701

Institutional Affiliation: Great Lakes Archaeological Research Center Occupation: Principal Investigator

Location of work:
Highway: Hwy Rd: County:

Project Begin: Project End:

Other Projects: County: Dane Civil Town: Town: SN: Range: SE: Section: 21

Quarter Sections (minimum 1) E1/2, SW

Name of Park, Wildlife Area, Lake, River, Hill, County, Park, Site Name: Lakeview Woods, Mount St. John's Evangelical Lutheran Cemetery Site Number: DA-0936/BDA-0167

Type of fieldwork: (circle) Phase I Survey, Phase II Testing, Phase III Excavation, Other

Purpose of the fieldwork: (circle) Federal Compliance, State Compliance, Education, Other

Period of field work beginning on March 24, 2008 and ending on May 30, 2008

What institution will curate recovered artifacts, notes, and records? UW-Milwaukee

Signature of Archaeologist: ___________________________ Date: March 26, 2008

Print name: Robert J. Watson

[ ] continuation sheet for site attachments

[ ] Maps and/or letters of explanation can accompany this application

____________________________________
Landowner or custodian name (print) Dane County Phone: 608-224-3611
Signature of Landowner: ___________________________ Date: 3/26/08

Permit Approved: ___________________________ Date: 4/14/08

John H. Breunig
State Archaeologist
Wisconsin Historical Society
FAX: 608-264-6504 / PH: 608-264-6496

Conditions:
1) Two copies of the final report must be submitted to the Division of Historic Preservation – Public History.
2) All artifacts, notes and records must be curated in an appropriate facility that is staffed by trained personnel.

This permit does NOT cover removal of human remains under Wis. § 157.70.
APPENDIX B: CORRESPONDENCE
APPENDIX C: PHOTOGRAPHS
Soil core of cinder pile south of Dormitory for Help.

Telephone pole used as datum for mapping of cinder pile.
Cinder pile, view to west

Cinder pile, view to west
Cinder pile, view to west

Hog barn, view to the west.
Hog barn, view to southwest.

Hog barn, view to southeast.
Hog barn, view to east.

Cut bone pile associated with hog barn.
Hog barn view to northwest.

USGS benchmark located in woods on Lake View Hill County Park property.
Ice rink berm view to southwest.
Upper cistern of waterfall system, view to southwest.

Upper cistern of waterfall system, view to northwest.
Upper cistern of waterfall system, view to northwest.

Upper cistern of waterfall system, view to northeast.
Lower cistern of waterfall system, view to southeast.
APPENDIX D: HISTORIC AERIAL PHOTOGRAPHS
APPENDIX E: NRHP REGISTRATION FORM
APPENDIX F: BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORTS
WHS/SHSW #  ___  COUNTY: Dane

AUTHORS: Christiansen, III, George W. and Robert J. Watson

REPORT TITLE: Historical, Archaeological, and Geological Features Inventory, Lake View Hill County Park, Madison, Wisconsin

DATE OF REPORT (MONTH AND YEAR): July 2008

SERIES/NUMBER: Report of Investigation 695

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
T8N,R9E, Section 25

U.S.G.S. QUAD MAP(S): DeForest

SITE(S) INVESTIGATED: 47DA0936

ACRES INVESTIGATED: 48  AGENCY # ___

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

☐ Avocational Survey  ☐ Chance Encounter  ☐ Controlled Surface Collection
☐ Faunal Analysis  ☐ Floral Analysis  ☐ Geomorphology
☐ Historical Research  ☐ Interview/Informant  ☐ Land Use History
☐ Literature Background Research  ☐ Major Excavation  ☐ Mechanical Stripping
☐ Monitoring  ☐ Osteological Analysis  ☐ Phase I-Surface Survey
☐ Phase II  ☐ Phase II-Corridor Only  ☐ Phase III
☐ Phase III-Corridor Only  ☐ Records/Background  ☐ Records/Background (Pred. Model)
☐ Remote Sensing  ☐ Shovel Testing/Probing (Inten)  ☐ Soil Core
☐ Surface Survey (Intensive)  ☐ Test Excavation  ☐ Traditional Knowledge
☐ Vandalism  ☐ Walk Over (Reconnaissance)  ☐ Unknown
☐ Other: ___

ABSTRACT:  ☑ Included in report  ☐ Written in space below

Office of the State Archaeologist  BAR # _____________