



1980

## 41-Phase One Archaeological Survey of the Leighton Township Facilities Plan, Green Lake Segment. (Project No. 7873), Leighton Township, Allegan County

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DEPARTMENT OF ANTHROPOLOGY  
WESTERN MICHIGAN UNIVERSITY

REPORT OF INVESTIGATIONS NO. 41

1980

PHASE ONE ARCHAEOLOGICAL SURVEY OF THE LEIGHTON  
TOWNSHIP FACILITIES PLAN, GREEN LAKE SEGMENT (PROJECT NO. 7873),  
LEIGHTON TOWNSHIP, ALLEGAN COUNTY, MICHIGAN

William M. Cremin

## INTRODUCTION:

Pursuant to a letter dated 11 Apr 80 from Mr. Bruce F. Kadzban, Moore and Bruggink, Inc., Grand Rapids, Michigan, authorizing an archaeological survey of a proposed sewer system corridor around Green Lake in Leighton Township, Allegan County, Michigan, a team of archaeologists from the Department of Anthropology, Western Michigan University undertook on-site assessment of the project area in order to ascertain whether the construction activities would impact cultural resources. There follows a report of fieldwork, together with appropriate background information, conducted on 21-22 Apr 80 and the recommendations based upon our findings.

## PROJECT PERSONNEL:

- Principal Investigator - Dr. William M. Cremin, Assistant Professor of Anthropology, WMU
- Field Supervisor - Paul McAllister, M.A. Candidate in Anthropology, WMU
- Field Assistants - R. David Hoxie, M.A. Candidate in Anthropology, WMU
- Michael J. Higgins, M.A. Candidate in Anthropology, WMU
- Donald Sleight, M.A. Candidate in Anthropology, WMU

All project participants have received formal training in archaeological field methods and have served as supervisory

personnel in various aspects of WMU's field research program. In addition, all have acquired considerable experience in CRM projects of this nature, both here at WMU and at institutions or firms located elsewhere in the Midwest.

#### DESCRIPTION OF THE PROJECT AREA:

The tract of land evaluated consists of a corridor 4.2 mi (6.8 km) long and varying in width from 25-100 ft (7.5-30 m). It is estimated to encompass about 28.6 acres (11.6 ha). The precise route along which surveyors sought cultural evidence is indicated on the attached map. Note that the corridor in question follows for the most part several roads which wind around the western, southern and eastern sides of Green Lake and virtually encircle adjacent Round Lake. Green Lake occupies most of the NW 1/4 of Section 10 and the SE 1/4 of Section 3, as well as portions of the NE 1/4 of Section 10; SW 1/4, Section 3; SW 1/4, Section 2 and the NW 1/4 of Section 11, Leighton Township, T4N R11W, Allegan County. Nearby Round Lake is in the NW 1/4, SE 1/4 of Section 10.

Examination of relevant topographic, geologic and soils maps indicates that the study area lies in morainal terrain and that Green Lake is a kettle pond, i.e. a depression created by melting ice blocks during the Wisconsin glaciation. Both bodies of water are today drained by Green Lake Creek, a small tributary of the Rabbit River. Soils of the Miami-Conover Association (USDA-SCS 1974) predominate in this area. They are medium textured soils occurring on gently sloping to rolling topography and developed in loam, silt loam and clay loam glacial till. They are well to poorly drained soils with medium permeability

rates. Miami soils support oak, ash, walnut, cherry, basswood, maple and other hardwoods, and the potential productivity of such soils is rated medium. Conover soils are associated with mixed hardwoods, especially beech, maple, elm and hickory. The potential productivity for soils of this series is lower than that recorded for Miami soils.

According to Kenoyer (1934) and Brewer (1979), the Green Lake area supported Beech-Maple Forest at the time of the original land surveys a century and a half ago. In addition, both of these sources note the very scattered occurrence of white pine and map areas of swamp or bog forest adjacent to the lake, itself. Surveyors encountered evidence for the latter while conducting fieldwork here, noting remnant marshes along the western side of the lake and low lying areas which had been built up with fill virtually everywhere that area residents had elected to construct their houses along the lake shore. Land filling and excavating into the sides of bluffs flanking the lake represent impacts which have clearly altered the natural landscape in recent years.

#### PREVIOUS RESEARCH:

A literature/documents search and examination of the Allegan County site files maintained by the Michigan History Division (and with a duplicate kept in the Department of Anthropology at WMU) clearly indicate that Leighton Township has received almost no prior archaeological attention. Although WMU has conducted systematic site survey in eastern Allegan County (Cremin and Marek 1978) and more recently initiated a program in adjacent Barry County (Cremin and McAllister 1980), we have accumulated

no site data for the area here under consideration. Be that as it may, the topographic setting makes it seem quite likely that prehistoric sites might be discovered and, more importantly, Johnson's (1880) History of Allegan and Barry Counties, Michigan indicates that Louis Campau, a noted French trader from Detroit, established a house and trading post just south of Green Lake in 1833 or 1834. The routing of the sewer system seemed potentially damaging to this early 19th century site, especially in light of the facts that the documented references as to the precise location were vague and that on-site survey to verify the location in the documents had never been undertaken.

#### FIELD PROCEDURES:

Inasmuch as ground surface visibility was generally quite low and modern residential impacts to the landscape very numerous, the survey team relied on shovel testing procedures with probe holes being located at 15 m intervals along the entire route and on both sides of the existing streets. Shovel testing intervals had to be frequently adjusted, given the closely spaced houses fronting on streets and the many extensive areas of blacktop and/or concrete associated with the residences and adjacent outbuildings. Tests were taken down to depths which showed either contact with culturally sterile subsoil or that former low-lying areas had subsequently been filled with recent debris to raise the level of a residential lot(s) to create a more suitable site for the location of a house. In addition, we spoke to a number of people residing along the route of survey, inquiring as to whether or not they had knowledge of the location(s) where cultural debris from the early historic period or prehistoric times had been

found in the Green Lake area.

#### RESULTS OF RESEARCH:

Despite abundance evidence for recent disturbance along the entire route of the proposed sewer system, surveyors accomplished a thorough and intensive evaluation of the corridor. Shovel probing and examination of recent exposures of slumping bluff provided ample opportunity to evaluate the depositional history of local soils and seek evidence for cultural context. Almost 300 shovel tests, ranging in depth from 20-30 cm to more than 70 cm, were placed wherever the spacing of recent structures (e.g. houses, garages, hard-surface drives) permitted, with the result being that not the slightest indication of an occupation predating standing structures was observed.

#### RECOMMENDATIONS:

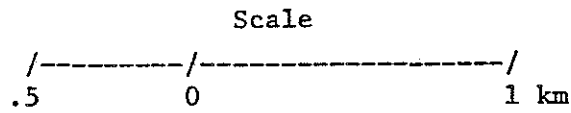
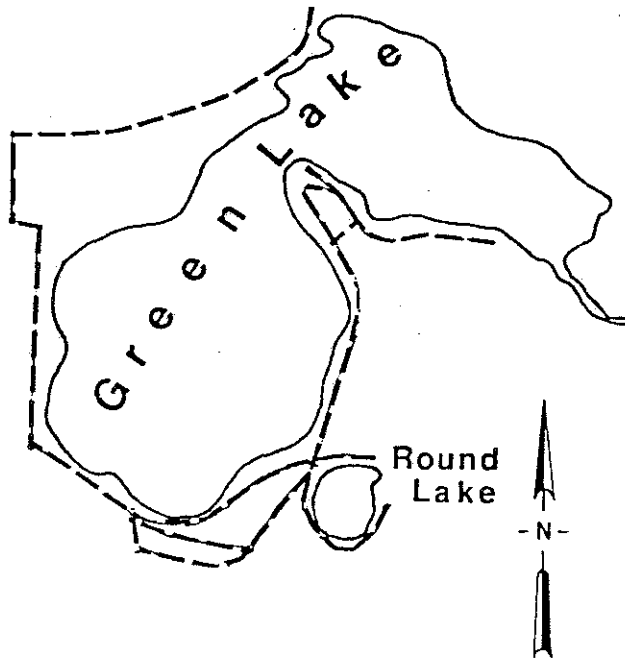
Although the Green Lake (and Round Lake) shoreline would appear to possess high archaeological site potential, and the southern area of the project might contain clues as to the precise location of Campau's Green Lake trading post, our on-site evaluation of the sewer system corridor shown in the accompanying map indicates only that this area has been significantly disturbed by recent landfilling and residential construction activities. Inasmuch as our research indicates that no significant archaeological resources appear to be threatened by the proposed land use, it is recommended that plans to construct the sewer system for the Green Lake residents be permitted to proceed as scheduled.

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GREEN LAKE ARCHAEOLOGICAL SURVEY,  
LEIGHTON TOWNSHIP, ALLEGAN COUNTY, MICHIGAN



Survey Corridor: - - - - .