1988

86-Phase I Archaeological Assessment of the Mosel Avenue Bridge Replacement and Riverview Drive Modification Project in Kalamazoo County, Michigan

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DEPARTMENT OF ANTHROPOLOGY

WESTERN MICHIGAN UNIVERSITY

REPORT OF INVESTIGATIONS NO. 86

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A Report of Research in Response
to ER-87037 and Prepared for:

Board of County Road Commissioners of Kalamazoo County
3801 East Kilgore Road, P.O. Box 2127
Kalamazoo, Michigan 49003

Attention:

Mr. Ronald R. Copping, Environmental Analyst

INTRODUCTION:

Upon receipt of authorization from Mr. Herbert O. Larkin, Engineer-Manager, Kalamazoo County Road Commission (contract dated 25 Jul 88)), for a Phase I archaeological study of the proposed improvements to the Mosel Avenue crossing of the Kalamazoo River and the adjacent road network in Kalamazoo Township, archaeologists in the Department of Anthropology at Western Michigan University initiated a site file search and literature review and on 24-25 Aug 88 conducted on-site evaluation of the project area in order to ascertain whether proposed construction activities would adversely impact potentially significant archaeological resources. There follows a report of our program of research, together with the recommendations derived from our examination of the study area.

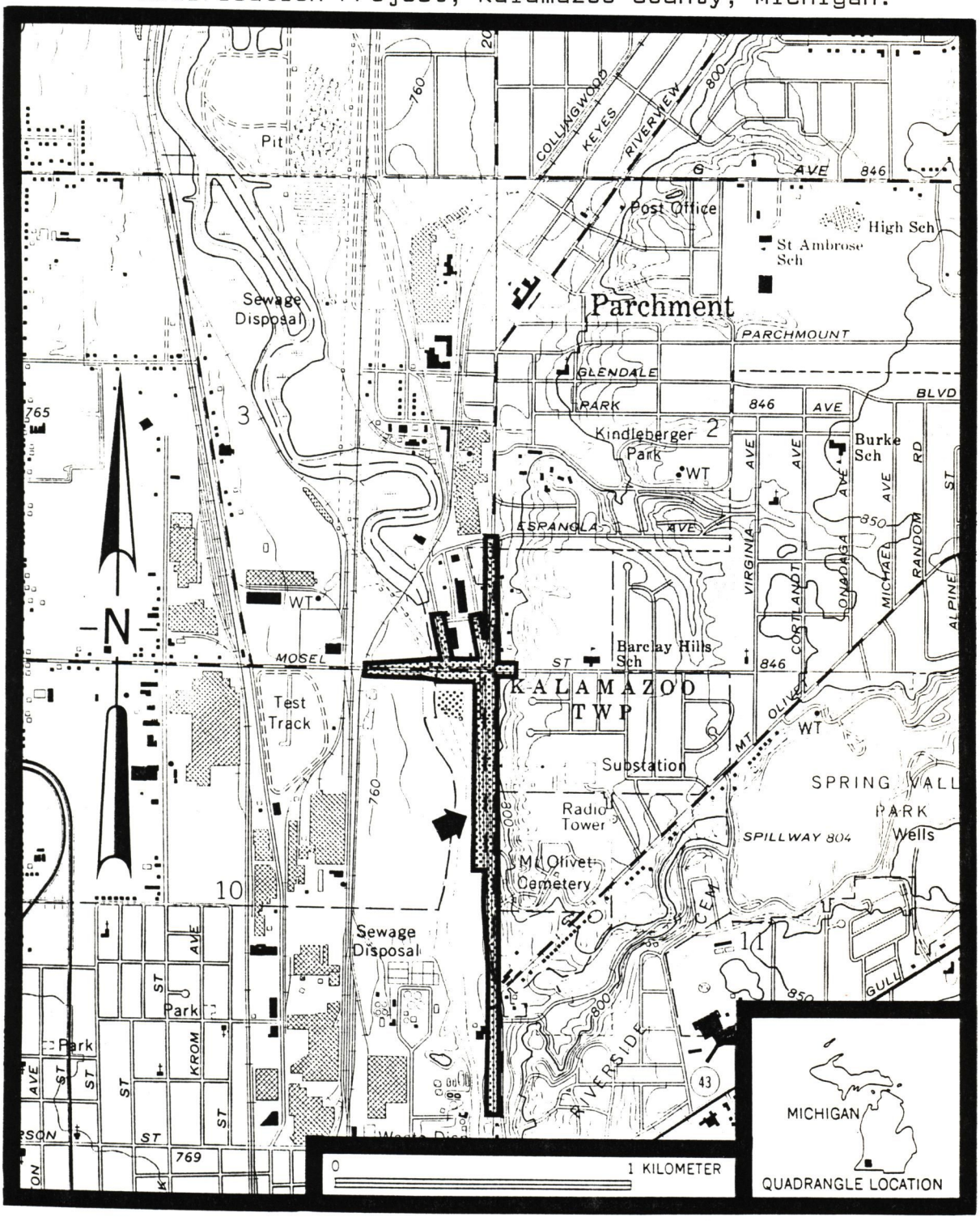
PROJECT PERSONNEL:

Principal Investigator	- Dr. William M. Cremin, Professor of Anthropology, Western Michigan University
Field Supervisor	- Mr. Dale W. Quattrin, M.A., WMU
Field Assistant	- Mr. Greg Walz, Graduate Student in Anthropology, WMU.

DESCRIPTION OF THE PROJECT AREA:

The research area of this study consists of road right-of-way, grading permits, and drainage easements, as well as a pond, along Mosel Avenue and Riverview Drive (both Upper and Lower) where the former crosses the Kalamazoo River near the corner of Sections 2, 3, 10, and 11, Kalamazoo Township (T2S R11W), Kalamazoo County, MI (Fig. 1).

Fig. 1: Mosel Avenue Bridge Replacement and Riverview Drive Modification Project, Kalamazoo County, Michigan.



The project commences on the west at the crossing of Mosel Avenue by the Conrail tracks and extends in an easterly direction along this road to a point some 60 m east of the intersection of Mosel and Upper Riverview Drive. The study area varies in width along Mosel and also includes ROW along Commerce Lane and Shoppers Street where these streets intersect Mosel from the north. Also included within the proposed area of impact is a segment of Riverview Drive (both Upper and Lower), commencing on the north at Espanola Avenue and terminating at a point some 100 m south of where the upper and lower drives come together to form a single road about 500 m south of Mosel Avenue. Again, the width of the ROW varies; and the narrow strip of wooded land separating the upper and lower drives is also scheduled for modification and required our attention. Finally, a 0.3 ha area in the river floodplain south of Mosel and between the river and Riverview Drive, where the Department of Natural Resources has requested that a pond be prepared to in part mitigate the loss of wetlands to ROW expansion, is a significant adjunct to the total project of road reconstruction proposed by the County Road Commission and was examined during our on-site study.

This segment of the Kalamazoo River Valley has long been under the impact of urban expansion, and natural contours are today quite rare. The remnant floodplain flanking either side of the river is low, with elevations varying between 226-229 m ASL. However, east of Lower Riverview Drive elevation rises to almost 253 m within 200 m of river's edge. In point of fact, the network of roads that here comprises Riverview Drive cuts into the steep contours that form the valley wall. Broad contours and bluff's edge are typically occupied by residential structures to the south of Mosel Avenue,

and to the north of Mosel on the east side of the river current land use represents a mix of residential and commercial properties fronting on Riverview Drive. To the contrary, land lying to the west of the river in the immediate environs of the project area can only be described as massively disturbed and "blighted"!

Vegetation in the immediate area of the project is quite varied, and its composition certainly reflects the disturbances which this segment of the valley has experienced as a result of urban expansion and growth. The modern floodplain supports a mosaic of water tolerant trees interspersed with stands of tall grasses, shrubs, and forbs. There is also some evidence of field succession near the railroad tracks north of Mosel Avenue. Along the valley margin fronting Lower Riverview Drive, both north and south of Mosel, properties are well landscaped for the most part with various dwelling flora (Copping 1988).

PREVIOUS ARCHAEOLOGICAL RESEARCH IN THE GENERAL AREA:

Although no sites have ever been reported for the project area, and only a single research program, Western Michigan University's Phase I survey of the Kalamazoo wastewater treatment plant located a short distance upstream of the project (Kingsley 1977), conducted in this segment of the river valley produced negative results, land in agricultural use both above and below Kalamazoo and its neighboring communities has yielded prehistoric sites when surveyed (for example, see Cremin, Hoxie, and Marek 1979). Thus, assuming that this project included within its limits some land subjected to only minimal urban impact, it seemed reasonable to anticipate that we might encounter evidence of archaeological resources that might shed

some light on prior occupation of this segment of the Kalamazoo River Valley. With this in mind, we proposed and carried out the following program of research on 24-25 Aug 88.

PHASE I SURVEY FIELD PROCEDURES:

The purpose of our Phase I study was to conduct a systematic and intensive survey sufficient to conclusively determine whether potentially significant archaeological resources would be impacted by proposed construction activities. To this end, and in light of the total absence of appropriate surface visibility anywhere in the study area, the field team employed shovel testing along transects to achieve the desired coverage.

Depending on the width of the ROW and/or grading permits and drainage easements along the roadway, one or two transects were established on either side of extant pavement and shoulder or berm. Shovel tests were placed at intervals of 20 m along each line of survey, with the spacing being reduced to 10 m as the surveyors approached to within 80-100 m of the river crossing. The shovel tests were routinely excavated to a depth of 50-60 cm below the surface wherever disturbance in the form of landfilling was not in evidence. And some were taken down to a meter or more for purposes of examining the local soil profile. Nowhere in the project area did shovel tests result in the recovery of cultural items that could not be attributed to recent dumping and/or filling activities related to maintenance of roadbed. Nor did surveyors observe any subsurface soil deposits that might be interpreted to represent cultural middens. In fact, we have concluded that the areas of study flanking the roadways comprising the project are entirely

disturbed!

With respect to the proposed pond in the floodplain south of Mosel Avenue and east of the river, surveyors here fought their way through dense tree cover, undergrowth, and water saturated soil (when not actually encountering standing water), not to mention a sizable garbage dump, to evaluate this portion of the study area. Surface observations and a few judiciously placed shovel tests served to establish beyond a reasonable doubt that this lowlying area could not have supported potentially significant settlement in the past, given the propensity for seasonal inundation. Figure 2 shows the approximate locations of 183 shovel tests placed in the area of the pond and along the roadways within the limits of this project.

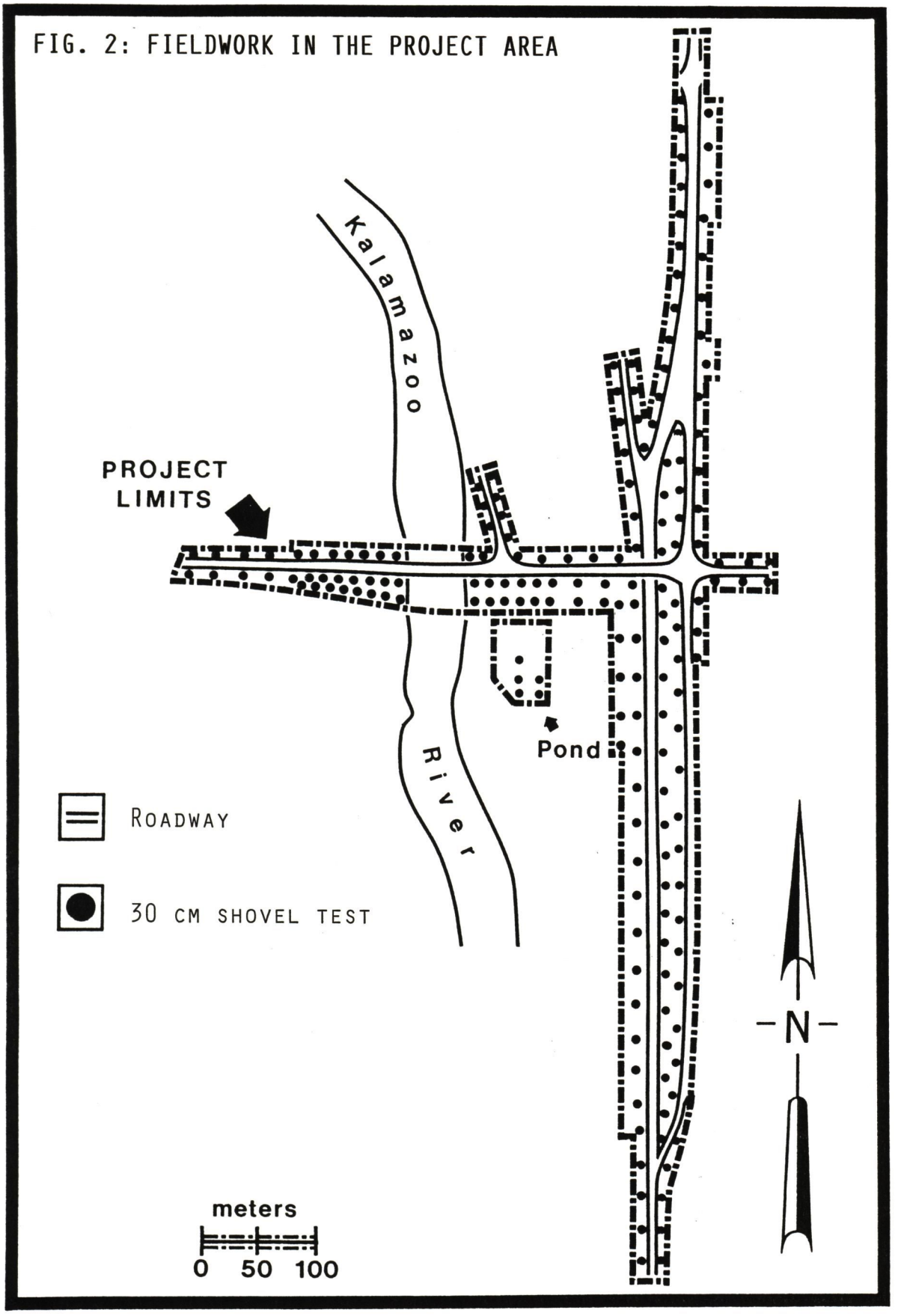
RESULTS AND RECOMMENDATIONS DERIVED FROM THE PHASE I STUDY:

Based upon a thorough on-site evaluation, together with a review of the relevant literature and site file search, it is my professional opinion, without reservation, that the proposed project will not negatively impact potentially significant archaeological resources. Therefore, I recommend that construction work in the project area be permitted to porceed as proposed.

REFERENCES CITED:

Copping, R.
1988 Environmental assessment/section 4(f) evaluation for proposed improvements of the Mosel avenue crossing of the Kalamazoo river and the adjacent road network. A report prepared by the Kalamazoo County Road Commission for the U.S. Department of Transportation, Federal Highway Administration and the Michigan Department of Transportation.

FIG. 2: FIELDWORK IN THE PROJECT AREA



Cremin, W.M., R.D. Hoxie, and J.F. Marek
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