102-Phase I Archaeological Assessment of the Riverfront Walk-Brookside Park Project, City of Otsego, Michigan

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DEPARTMENT OF ANTHROPOLOGY
WESTERN MICHIGAN UNIVERSITY

REPORT OF INVESTIGATIONS NO. 102
1993

PHASE I ARCHAEOLOGICAL ASSESSMENT OF THE RIVERFRONT
WALK-BROOKSIDE PARK PROJECT, CITY OF OTSEGO, MICHIGAN
(ER-930311)

WILLIAM M. CREMIN
A Report of Research
Conducted on Behalf of:

Ms. Jennifer Antel
Office of the City Manager
117 East Orleans
Otsego, Michigan 49078
INTRODUCTION:

Upon verbal receipt of authorization from Ms. Jennifer Antel of the Office of City Manager, Otsego, Michigan to conduct a Phase I archaeological survey along the Kalamazoo River in Section 23 of Otsego Township (T1N R12W) where the City proposes to create a recreational walkway, the Principal Investigator initiated a literature and site file search and his associated on 17 May undertook on-site evaluation of the project area in order to determine whether the proposed activity would adversely impact potentially significant archaeological resources. Two days later Ms. Antel and the Office of State Archaeologist, Bureau of History, Michigan Department of State were informed by phone of our research findings and recommendation. There follows a report of our program of research providing the basis for that recommendation, together with a restatement of our professional opinion that the proposed construction of the walkway along the river will not have an adverse impact on archaeological resources of any sort.

PROJECT PERSONNEL:

Principal Investigator - Dr. William M. Cremin, Professor of Anthropology, WMU and Owner, W.M. Cremin Consulting of Kalamazoo, MI

Field Supervisor - Ms. Sue Brown, M.A. Candidate in Anthropology, WMU
DESCRIPTION OF THE PROJECT AREA:

The research area of this study is a narrow winding strip of land 10 m wide and extending for approximately 1.7 km along the south side of the Kalamazoo River and its adjacent wetlands in Section 23 of Otsego Township (T1N R12W), Allegan County, Michigan (Figure 1). It commences on the west at the Farmer Street crossing and terminates in Brookside Park at the eastern limits of the downtown area of the City of Otsego. Along the proposed walkway are river and dam overlooks, a canoe launch, and scenic views of the wetlands which dominate the floodplain immediately to the north of the park at the eastern terminus of the project.

Formerly, the general area of the project supported oak and oak-hickory forest. Prominent among witness trees recorded along the river at the time of the Government Land Office survey in 1831 were the following: white oak, black oak, elm, box elder, ironwood, sycamore, and black ash. Less commonly observed by surveyors were sugar maple, butternut, sugar maple, beech, and plum. The Oakville Series soils of the area today support many of these same species, together with northern red oak, red pine, bigtooth and quaking aspen, American basswood, bitternut hickory, red maple, and white ash (Knapp 1987).

River elevation through Otsego has been altered by dams and ranges between 208.5 m ASL near Farmer Street to almost 210 m ASL less than a river kilometer upstream from this crossing. On the occasion of the Phase I survey, river's edge could not always be
easily defined as the channel margin was obscured by wetland vegetation. Standing water and/or water saturated soils did not permit evaluation of areas supporting marsh plant growth anywhere along the route of survey.

Additionally, the project area exhibited much recent disturbance in the form of filling and dumping of debris. This observation will be more fully addressed below.

PREVIOUS ARCHAEOLOGICAL RESEARCH IN THE GENERAL AREA:

There is no evidence to suggest that archaeological resources have ever been reported for the project area. The most recent site file printout provided by the Bureau of History (13 Apr 93) lists 825 sites for Allegan County. Of this number, 24 have been found in Otsego Township. However, only one site occurs in reasonably close proximity to the project, lying on the south bank of the Kalamazoo River about 1200 m downstream of Farmer Street in Section 22. The Grant Street site (20AE613), a Late Archaic encampment, was located during a survey of the City of Otsego's expanded wastewater treatment facility (Cremin 1978a) and tested in that same year (Cremin 1978b). Here, recent disturbance had destroyed the archaeological context, but cultural items, including a diagnostic artifact, attest to at least brief occupation of this river's edge location during the second millennium before Christ.

PROJECT FIELD PROCEDURES:

The very experienced two-person survey crew quickly surmised that walkover procedures would not prove useful in assessing the walkway corridor and therefore opted for intensive and systematic
shovel testing along transects where recent disturbance did not effectively prohibit examination for the presence of archaeological sites. Shovel tests, where excavated, were taken to a depth of 40-50 cm on a routine basis, with several being excavated to a greater depth to permit examination of the natural soil profile. In every instance, the depth to which shovel tests were excavated was judged to be more than adequate to reveal the presence of subsurface archaeological deposits and/or features should these exist in the survey corridor.

In Figure 1 the survey corridor is broken into segments in order to facilitate discussing the changing conditions encountered by the survey team and adjustments made by the team in the search for evidence of the presence of archaeological remains. Segments 1-5 follow the precise route of the proposed walkway. Inasmuch as Segment 5 could not be surveyed, lying as it does in wetlands where standing water prohibited evaluation, a sixth segment is illustrated to show where surveyors followed the edge of the wetlands as a precautionary measure in their search for evidence.

Survey work commenced in Segment 1, extending from Farmer Street to the upstream end of Island No. 2 in the Kalamazoo River. A handful of shovel tests placed here to examine soil stratigraphy quickly confirmed the visual observation that the land surface had been recently remodeled by filling with gravel and/or covering with a cement pavement. Elsewhere, the ground surface had been cleared and graded with heavy equipment following deposition of brush, rubble, and woodchip mulch. Virtually total disturbance in this corridor segment rendered systematic and intensive shovel testing unnecessary.
Segment 2 exhibited much less surface disturbance and surveyors established two parallel transects within the corridor and placed a series of shovel tests at intervals of between 10-15 m along each line of survey. Shovel tests and observation of the riverbank here confirmed earlier attempts to stabilize the bank with fill and partially buried slabs of concrete, especially in the vicinity of a dam across the river.

Segment 3 could not be shovel tested due to the low-lying and swampy nature of land within the corridor. Some evidence of filling and leveling in this area of the project was also noted by surveyors.

Shovel testing along a single line of survey was resumed in Segment 4 of the corridor. Here, the riverbank is undisturbed save for a footpath. Testing well into the subsoil underlying a loosely compacted silty sand topsoil revealed no evidence for the presence of archaeological materials along a line of survey varying about 5-7 m from river's edge.

As previously noted, Segment 5 of the walkway corridor extends out into the wetlands, prohibiting evaluation by the survey team. As an alternative, surveyors elected to follow the edge of the wetlands, placing a series of shovel tests along what is shown as Segment 6 in Figure 1. Here, visual observation showed the ground surface to be littered with recent trash, including broken glass, china, brick fragments, and miscellaneous particles of metal. This is probably the former location of a historic structure; however, no conclusive evidence of a foundation was noted. This historic debris scatter extends about 10 m to the south from the riverbank and follows the bank for a distance of approximately 55 m.

In aggregate, visual examination of the project area was...
augmented by establishment of almost 40 shovel test stations where surveyors either excavated a single or two probes to a depth ensuring good contact with culturally sterile subsoil. Occasionally, deeper tests were employed to make sure that buried deposits of potential cultural significance were not present. But, generally, sedimentation which might contribute to earlier occupation surfaces being buried was not anywhere in evidence along the walkway corridor.

RESULTS OF THE SURVEY AND RECOMMENDATIONS:

By the aforementioned procedures, the Riverfront Walk-Brookside Park project area was systematically and intensively examined for the presence of archaeological resources. Recent disturbance in the form of filling and trash deposition was encountered virtually throughout the corridor, with only a few limited areas warranting application of shovel testing. Where recent disturbance was not observed, the survey team was often prohibited in their application of shovel testing procedures by wetland vegetation and standing water. Where shovel tests could be excavated, surveyors found nothing to report. Therefore, we can only conclude that construction of the walkway will not adversely impact potentially significant archaeological resources, and we recommend that this project be permitted to proceed as planned.

REFERENCES CITED:

Cremin, W.M.

1978b A report of archaeological investigations undertaken to determine the extent and cultural significance of the Grant street site (20AE613), city of Otsego, Allegan
Knapp, B.D.