

ADDENDUM

TO

REPORT ON CULTURAL RESOURCE RECONNAISSANCE SURVEY

CONDUCTED ON LANDS LOCATED WITHIN

PORTIONS OF SECTIONS 16 AND 17, T33N, R18W,

POLK COUNTY, WISCONSIN

Prepared for:

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EXECUTIVE SUMMARY

In 2004, Edward Kraemer & Sons, Inc. retained Archaeological Research Services (ARS) to conduct a cultural resource investigation on three parcels located east of Dresser, Polk County, Wisconsin:

- **AREA A**, which encompasses the SW/4 NE/4 and the SE/4 NW/4 of Section 16, T33N, R18W;
- **AREA B**, which includes those portions of SW/4 NW/4 and NW/4 SW/4 Section 16 that are located east of a railroad corridor owned by Canadian National;
- **AREA C**, which includes those segments of SW/4 NW/4 Section 16 and SE/4 NE/4 Section 17 that are located between the railroad corridor and County Highway MM.

Together, the three parcels encompass approximately 153 acres of partially open, partially wooded, generally very rolling terrain with frequently exposed outcrops of basalt. Only small parts of Areas B and C include level land that could be cleared for agricultural use.

As the 2004 study area is located just a few miles east of the St. Croix River valley and approximately half a mile northwest of the Horse Creek drainage -- both of them areas with known Native American and early Euroamerican archaeological sites -- a cultural resource reconnaissance survey was considered to be an essential part of the Edward Kraemer & Sons, Inc. due diligence process.

Records and literature searches conducted at the Wisconsin and Polk County Historical Societies, as well as a subsequent field inspection, were all performed in a manner that met the requirements of the Secretary of the Interior's Standards for Identification and Evaluation of cultural resources. No archaeological resources were identified. The remains of a small quarry operation did not prove significant enough to warrant protection or further study.

In the spring of 2009, ARS staff was asked to review an additional parcel, i.e. **AREA D**, which is located to the immediate north of the western half of Area A where it encompasses all of SE/4 NW/4 Section 16 except for a 5 acre exclusion in the northern part. A field inspection was performed on April 17, with negative results. A supplementary records and literature review determined that no new survey and cultural resource information had been recorded within or adjacent to the project area since the 2004 survey.

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1.0 INTRODUCTION

In 2004, Edward Kraemer & Sons, Inc. retained Archaeological Research Services (ARS) to conduct a cultural resource investigation of three parcels located east of Dresser, Polk County, Wisconsin (Figure 1). All are shown in Figure 2:

- **AREA A**, which encompasses the SW/4 NE/4 and the SE/4 NW/4 of Section 16, T33N, R18W;
- **AREA B**, which includes those portions of SW/4 NW/4 and NW/4 SW/4 Section 16 that are located east of a railroad corridor owned by Canadian National;
- **AREA C**, which includes those segments of SW/4 NW/4 Section 16 and SE/4 NE/4 Section 17 that are located between the railroad corridor and County Highway MM.

Together, the three parcels encompass approximately 153 acres of partially open, partially wooded, generally very rolling terrain with frequently exposed outcrops of basalt. Only the western half of Area C and the extreme southernmost portion of Area B include level land that could be cleared for agricultural use.

A few miles to the west of these areas, the St. Croix River valley features a number of Native American and early Euroamerican archaeological sites. Approximately half a mile to their southeast is the Horse Creek drainage where Native American archaeological sites have been recorded on the shores of Lotus Lake and Horse Lake. Not only was the general area clearly of importance to Native American groups but these waterways also played a significant role during the period of early Euroamerican exploration and settlement.

Because of this historic information potential in the general area, a cultural resources reconnaissance survey was considered to be an essential part of the Edward Kraemer & Sons, Inc. due diligence process. Field reviews were completed on 8/3, 8/10 and 10/20 of 2004, following records and literature searches at the Wisconsin and Polk County Historical Societies.

The survey was performed in a manner that met the requirements of the Secretary of the Interior's Standards for Identification and Evaluation of cultural resources. No archaeological resources were identified and the remains of a small quarry operation are not significant enough to warrant protection or further study (Harrison 2005).

In the spring of 2009, ARS staff was asked to review an additional parcel located to the immediate north of the western half of Area A where it encompasses all of SE/4 NW/4 Section 16 except for a 5 acre exclusion in the northern part (Figures 3 to 5). A field

inspection was performed on April 17 as described below in Section 4.0. In addition, ARS conducted a supplementary records and literature review in order to assess whether any new survey and cultural resource information had been recorded since 2004.

2.0 ENVIRONMENTAL SETTING (AS REPEATED OR SUMMARIZED FROM THE 2005 REPORT)

Less than four miles west of the study area are the scenic dells or dalles of the St. Croix River, a one-mile long and 300 feet deep valley initially carved by glacial meltwaters, then by a postglacial river through more than 100 feet of Cambrian sandstone into Precambrian Keweenaw basalt (trap rock). Within the latter, at least ten horizontal lava flows have been exposed in the narrow, rock-bound gorge (Ojakangas and Matsch 1982).

In general, the topography, soils and drainages of the uplands east and west of this segment of the St. Croix River owe their character to the spread and withdrawal of various stages of the Wisconsin glaciation, but the deposits of glacial till are often thin, barely mantling the underlying bedrock be it the horizontal sandstone or the more rugged and tilted ridges of basalt (Martin, 1965). Around Dresser, east of the dalles, the trap rock is again exposed, here smoothed by glacial scouring, wind and rain into rounded outcrops -- features very evident within the survey area.

The topographic variations were reflected in the historic vegetation patterns. At the time of initial Euroamerican settlement, higher portions of the till plains east and west of the St. Croix River were covered with "big woods" or "southern hardwood forest" -- woodlands dominated by oak, elm, basswood, ash and maple -- while most of the wetlands were conifer bogs (Curtis 1959; Marschner 1974). To the south, more sandy soils supported sparse oak savanna and prairie openings ("oak openings and barrens") while lower ground was described as expanses of wet prairie. The sheltered valley harbored deciduous river-bottom forest as well as some pine and arborvitae.

Pollen cores and macrobotanic evidence also attest to considerable diversity and quite dramatic changes in the regional environment throughout the postglacial period. A periglacial parkland of spruce and larch followed the retreat of the Wisconsin glaciers and the tundra vegetation associated with their margins but by 11,500 B.P., rapid climatic change had caused the spruce to be succeeded by pine forest (by approximately 10,000 B.P.) and then by a deciduous forest composed primarily of oak and elm. A warming and drying trend, which characterized the early to middle Holocene, peaked at 7000 to 6000 B.P., causing the prairie and its transitional prairie-woodland margin to expand some 75 miles north and east of their normal limits. Linked with these climatic warming trends were an increase in the frequency of prairie fires and a marked decline of the water table which caused many small

lakes to dry up completely (Anfinson and Wright 1990). The onset of cooler and wetter climatic conditions encouraged the return of woodlands and the development of the "big woods" until the beginning of Euroamerican clearing and settlement.

3.0 CULTURAL CONTEXT (AS DESCRIBED IN/UPDATED FROM THE 2005 REPORT)

Easy access to a wide range of habitats would have provided early inhabitants with a rich variety of plant and animal resources. Most of the lakes are deep enough for good fishing while others were shallow enough to contain wild rice and attract great numbers of migratory waterfowl. Linked by streams, they also provided an excellent network of canoe routes. Numerous archaeological sites have been recorded in western Polk County and in adjacent Chisago County, Minnesota, both around the lakes and streams of the till plains and along the St. Croix River with tributaries.

A majority of these sites date from the Woodland period which lasted from the first millennium B.C. to the beginning of Native American and Euroamerican contact in the 17th century A.D. -- a period characterized by the use of ceramics and the building of burial mounds as well as an increasing reliance on wild rice. Some of the recorded Woodland sites feature burial mounds along with habitation evidence (primarily lithic artifacts and chipping debris as well as ceramic sherds, fire-cracked rock and charcoal); others feature mounds alone or nothing but habitation materials. A few sites in the region date back to the earlier Archaic period (circa 5000 to 1000 B.C.), a time that preceded the use of mounds or ceramics but was characterized by highly successful Native American use of a great variety of natural resources. There is also some evidence, in the region, of even earlier occupations -- primarily finds of projectile points made during the late Paleoindian period (circa 8000-5000 B.C.).

A review of the Minnesota and Wisconsin Archaeological Site Inventories for Chisago and Polk Counties indicates that several sites are located in the St. Croix River valley near St. Croix Falls and Taylors Falls, including prehistoric habitation evidence in Interstate State Park immediately downstream. Some distance southeast of the survey area, such sites have also been recorded around Lotus Lake and Horse Lake.

A records search was conducted for ARS by the Mississippi Valley Archaeology Center at University of Wisconsin-La Crosse. The results indicate that no Native American or Euroamerican archaeological or historic sites are located within or adjacent to the current survey area. Closest -- but still well outside it -- are three sites north of Lotus Lake: PK-0150, a Woodland period habitation site; PK-0151, precontact period American lithic artifact scatter; PK-0042, a mid-19th century Ojibwe/Eastern Dakota Indian battle site. All are located well south of the proposed project area, on high ground adjacent to the lake.

Although the St. Croix River valley was visited by French and British explorers already in the 17th and 18th centuries, a more continuous Euroamerican presence was not felt until after the area had come under the jurisdiction of the United States. The upper valley was ceded by the Ojibwa Indians to the government under a treaty negotiated at Fort Snelling in 1837; the rest of their lands were ceded in 1842.

Already in 1837, the first Euroamerican settlement was established at St. Croix Falls, on a main trail from Fort Snelling to La Pointe on Lake Superior. Eight years before the land was surveyed by the U.S. Government, a group of lumbermen and business entrepreneurs made a claim and squatted on the land; already the following year, the St. Louis Company was formed to carry on a general lumbering, manufacturing and trading business, building a dam, a saw mill, stores and residences. In 1844, a few miles downstream, a settlement sprung up around another saw mill: Osceola Mills, now Osceola. In 1853, Osceola became the county seat of newly formed Polk County, and held on to that position until 1899, when the county government moved to Balsam Lake (information from the files of Polk County Historical Society).

For three-four decades, lumbering was a major business in the county as extensive stands of white pine were harvested for the booming construction industry. The cleared lands were soon settled and proved themselves well suited for dairy farming and for specialty crops like potatoes and vegetables which, along with dairy products, could be easily marketed to the rapidly growing Twin Cities area across the St. Croix River.

The earliest communities, built along the river, were served by steamboats that travelled as far upstream as Taylors Falls. By the 1880s, however, the arrival of the railroads had ended commercial steamboat traffic and encouraged the growth of inland villages and towns. Dresser began in that decade as a small settlement along the Soo Line railroad that was built in 1887 between Minneapolis and Sault Ste. Marie, with a spur extending from Dresser Junction (now Dresser) up to St. Croix Falls. Another line was later added to serve the stretch between the latter city and Duluth (Minnesota Transportation Museum publication, no date).

Regular passenger traffic along the Soo Line was discontinued in 1961. In the 1980s, the line to Sault Ste. Marie -- the segment that bisects the survey area -- was cut at Amery. The segment from Dresser to Minneapolis is now owned by Canadian National and used predominantly to transport crushed trap rock from a large quarry north of Dresser. (Since 1913, the mining of trap rock has been an important industry in Dresser. Crushed into various sizes, this grey and red, hard volcanic rock is still sold to the construction industry, highway departments and railroad companies.) This line is also used by the Osceola & St. Croix Valley Railway to run vintage passenger trains. The railroad segment from Dresser to the Lotus Lake area is now used by the Canadian National as staging area for railroad cars.

4.0 SURVEY METHODOLOGY AND RESULTS

The western half of the current survey area encompasses level land that has been cleared for farming and until recently has been in agricultural use (Figures 4 and 5). Like much of Areas A, B and C, the rest of the parcel is either wooded or fairly open but marshy. Most of it is quite rugged, with numerous outcrops of basalt, separated by step slopes and narrow ravines that reflect the rather angular, structural composition of the trap rock formations (Figure 3). The crests of the outcrops, largely exposed except for shallow pockets of soil, are largely open, while slopes and depressions are wooded or brushy.

Within the surveyed parcel, there are no reasonably level and undisturbed areas that overlook significant bodies of water and therefore would be very likely to have Native American archaeological potential. Higher ground adjacent to a small, intermittent drainage in the southwestern part was at first thought to have some archaeological potential but visual inspection of patches of disturbed and eroding shallow soil above bedrock proved negative.

Within the cultivated western part, the amount of mineral soil that is mixed into the topsoil suggest that the area has been cultivated long enough for plow disturbance to reach well into the subsoil and bring to the surface a sample of any archaeological evidence that may be present in the fields. Consequently, visual inspection of the surface at approximate ten meter intervals provided sufficient survey coverage.

Wooded or grassy areas were visually inspected for cultural surface anomalies such as Native American burial mounds or more recent man-made features, e.g. historic roads and foundations. As slopes generally are too steep to have invited historic use and as high, level areas generally feature either exposed bedrock or very shallow soil deposits, there was no need to conduct any subsoil testing.

5.0 CONCLUSION

Judging by the negative results of this survey, there are no archaeological or historic cultural resources within the study area.

6.0 REFERENCES

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