

Phase IA Archaeological Reconnaissance Investigation and
Phase IA Historic Architectural Reconnaissance Survey of
the Proposed Dam and Levee Removal Project, Monticello,
Sections 15, 16 and 22, T86N-R03W, Jones County, Iowa

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Technical Report
197



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Abstract

A Phase IA archaeological reconnaissance investigation and Phase IA historic architectural reconnaissance survey were conducted by the University of Iowa's Office of the State Archaeologist at the location of a proposed dam and levee removal project, Sections 15, 16, and 22, T86N-R03W, Jones County, Iowa. One previously recorded archaeological site, 13JN371, is within the 57.6-ha parcel. Soil data and historic documents suggest the proposed project area has limited archaeological potential and no further archaeological work is recommended for the current project area outside of 13JN371. No further archaeological work has previously been recommended for the portion of 13JN371 within the current project area, while avoidance or further archaeological testing was recommended for a possible nineteenth-century component of the site situated just north of the project APE. If continued avoidance of this portion of 13JN371 is not possible, additional archaeological testing of the early component may be necessary. The Phase IA historic architectural reconnaissance survey identified only one older property in the survey area. This property, the Mon-Maq Dam, is the only built resource identified in the survey area that appears to have some likelihood of National Register of Historic Places (NRHP) eligibility. The dam, built in the early twentieth century of stone and concrete, appears to retain a high degree of integrity from its period of construction. The mill and powerhouse with which the dam was formerly associated are no longer extant. Therefore, for the dam to be eligible, it must be eligible in its own right rather than as a contributing element in a mill-related historic district. If the Mon-Maq Dam is affected by the proposed project, an intensive level historic architectural survey and NRHP evaluation is recommended to determine whether or not the dam meets one or more NRHP eligibility criteria.

Introduction

The Office of the State Archaeologist (OSA) of the University of Iowa has prepared this report under the terms of a cultural resource survey agreement between the OSA and Barr Engineering Company of Minneapolis. This report records the results of a Phase IA archaeological investigation and Phase IA historic architectural reconnaissance survey of a proposed dam and levee removal project. This project area is situated along the Maquoketa River, in Sections 15, 16, and 22, T86N-R03W, Jones County, Iowa, in the northeastern corner of Monticello (Figures 1 and 2). The project area surveyed measures 3,300 x 500 m (10,800 x 1,650 ft) in maximum extent. The total area surveyed is ca. 57.6 ha (142.3 acres) (Figures 1–4).

The Phase IA archaeological investigation was conducted on October 8–9 by Bryan Kendall. The Phase IA historic architectural reconnaissance survey was conducted on October 14, 2015, by Richard J. Carlson. Melody Pope served as project director and Kendall and Carlson served as report authors.

The OSA is solely responsible for the interpretations and recommendations contained in this report. All records including maps and figures are curated in the OSA Archives. The National Archeological Data Base Form is included as Appendix I. The Historical Architectural Data Base is included as Appendix II.

Information contained in this report relating to the nature and location of archaeological sites is considered private and confidential and not for public disclosure in accordance with Section 304 of the National Historic Preservation Act (54 U.S.C. § 307103); 36 CFR Part 800.6 (a)(5) of the Advisory Council on Historic Preservation's rules implementing Sections 106 and 110 of the Act; Section 9(a) of

the Archaeological Resource Protection Act (54 U.S.C. § 100707) and, Chapter 22.7, subsection 20 of the Iowa Code.

Project Area Description

REGIONAL

The project area is in the Iowan Surface area of northeast Iowa. The Iowan Surface was formed during the Wisconsin period by intense cold-climate weathering and erosion on Pre-Illinoian landscapes, and is characterized by low relief, dendritic drainage systems, stepped hillslopes, and the widespread distribution of erratic boulders. Loess thickness is variable on the highly weathered erosional landscape. In northern sections, rock outcrops and karst topography are common surface features. Prominent elongated ridges and isolated elliptical hills called paha, oriented northwest-southeast parallel to river valleys, are scattered across the southern third of the region. The paha are erosional remnants of the Pre-Illinoian landscape on which thick strata of Wisconsin loess and sand accumulated. These eolian deposits are underlain by gray Yarmouth-Sangamon or reddish Late Sangamon paleosols developed in Pre-Illinoian till (Prior 1991:69–73).

Holocene alluvial valley fills in Iowa are subdivided on the basis of lithology and stratigraphic relationships into the Gunder, Corrington, Roberts Creek, and Camp Creek members of the DeForest Formation (Bettis and Littke 1987). Gunder Member alluvium and Corrington Member alluvial fans may contain Paleoindian through Woodland components; Roberts Creek Member deposits may contain Late Archaic through early historic components; and Camp Creek Member alluvium may contain buried and unburied historic archaeological components, and may bury older surfaces.

LOCAL

The project area is situated along the Maquoketa River. The area is in Sections 15, 16 and 22, T86N-R03W, Jones County, Iowa, in the northeastern corner of Monticello, at an elevation of 800 ft (Figures 1–4). At the time of survey, the project area was a mix of forest, grass and paved areas. The project area follows 3.7 km of the Maquoketa River from State Highway 38 to just below Mon-Maq Dam and an additional combined 0.7 km of two major tributaries. The project area is generally 90 m in width, periodically expanding to include two recent oxbow channels and the entire Mon-Maq Dam.

Soils of the project area are mapped as Chelsea, Perks, Chaseburg, Spillville, Coland, Nordness, Terril, and Waukegan (Figure 3; Artz 2005; Soil Survey Staff 2015). The project area is primarily mapped as Chaseburg-Perks complex which is developed in historic alluvium with shallow archaeological potential. Chelsea, Nordness, Waukegan, and Terril soils also have shallow archaeological potential. Coland and Spillville soils have buried archaeological potential but are restricted to the northern margin of the project area

The Landscape Model for Archaeological Site Suitability (LANDMASS) is a useful tool for predicting the suitability of a particular upland landform position for prehistoric habitation (Artz et al. 2006). The ranking is divided into four suitability rankings: low, moderately low, moderately high, and high; and is based on how often sites have been found in areas with topographically similar terrain. Based upon the model, the upland locations near the northern edge of the project area have a moderately high prehistoric suitability ranking. It is important to note that this predictive model is limited to upland landforms and does not include alluvial settings, such as river valleys and drainages.

Archaeological Assessment

METHODS

The Iowa Site Record at OSA, records of previous archaeological surveys nearby (OSA 2015), the National Register Information System web site (National Park Service 2015), the 1875 Andreas atlas (Andreas 1875) and Jones County histories and plat books (Burlingame 1877; North West 1893) were reviewed for this survey. The 1838 General Land Office survey map for the area was also consulted (ISUGISRF 2015).

RESULTS

Historic documentation revealed several structures associated with the Monticello Mill and Electrical Plant have been located within the project area though Mon-Maq dam is the only extant historic structure (Figure 4). A previous Phase I survey of the dam area by Whittaker (2008) identified 13JN371 as the remnants of the Monticello Mill and Electrical Plant. A portion of the site, a limestone foundation possibly associated with the 1857 mill, was recommended for avoidance or further archaeological testing. The 1838 GLO map and realignments of an 1839 military road map by R. C. Tilghman by Whittaker (2008) suggest the road likely passed through the project area to the west of the dam complex (Figure 4) although the precise location is not known. An additional previous survey for a levee project (Weichman 1974) overlaps a combined 23.9 ha of the current project area (Figure 4). No archaeological sites were identified within the current project area by Weichman, but the survey did not include any subsurface testing. There are nine archaeological sites recorded within one mile of the project area (Table 2).

The Maquoketa River Valley is uncharacteristically wide as the river passes through the City of Maquoketa. Plat maps and aerial photographs suggest the portion of the Maquoketa River within the project area has been very active historically (Figures 5–6) which is corroborated by the mapped soil types. This channel activity suggests the project area has likely been scoured historically and the area has very limited prehistoric archaeological potential. The lack of historic structures within the project area in plat maps and aerial photographs, with the exception of the structures associated with the Monticello Mill and Electrical Plant, would suggest the project area also has limited historic archaeological potential outside of 13JN371. The portion of 13JN371 possibly associated with the nineteenth-century mill is situated just north of the current project area (Figure 7). This component was recommended for avoidance or further archaeological testing by Whittaker (2008) and should continue to be either avoided or receive additional archaeological testing prior to any disturbances.

Historic Architectural Assessment

METHODS

The survey area, described above, extends along the Maquoketa River in and north of Monticello, Iowa, between the Iowa 38 bridge on the north and the Monticello city limits east of the Mon-Maq Dam on the south. The survey area also includes a limited amount of land on both banks of the river. Prior to the field investigation, detailed satellite photographs of the survey area available on Google Maps (Google 2015), together with Jones County Assessor's data on selected properties available online (Beacon 2015), were consulted in order to identify built resources within the survey area. This method was used to identify built resources because of the difficulty of a pedestrian survey of the full survey area. In particular, much of the land adjacent to the river was overgrown with thick brush and trees, and was often distant from a public right-of-way. As a result, the pedestrian survey was limited largely to areas

where built resources were shown on the available satellite photographs and assessor's records. Fieldwork was conducted on October 14, 2015.

RESULTS

As a result of the preliminary research and field investigation, it was determined that very few built resources are located within the survey area, and none of them has been previously evaluated. With the exception of the Mon-Maq Dam itself, all of the built resources identified in the survey are less than 50 years old and are very unlikely to be eligible for listing in the National Register of Historic Places (NRHP). The ineligible resources in the survey area include a handful of modern buildings, most of them associated with the Walnut Acres Campground at 22128 Highway 38, and two modern highway bridges that cross the Maquoketa River along Iowa 38 and Business U.S. 151 (N. Main Street).

The only built resource identified in the survey area that appears to have some likelihood of NRHP eligibility is the Mon-Maq Dam. The dam was built in the early twentieth century of stone and concrete and was used to help power the Monticello Electric Light Company power plant. The dam appears to retain a high degree of integrity from its period of construction, based on historical photographs available on the informational display "East Monticello Mill," prepared by the Jones County Conservation Board and located on the observation deck at the Mon-Maq Dam. The mill and powerhouse with which the dam was formerly associated are no longer extant. Therefore, for the dam to be eligible, it must be eligible in its own right rather than as a contributing element in a mill-related historic district.

Summary and Recommendations

The Phase IA archaeological survey by the OSA of a proposed dam removal project revealed the previously recorded archaeological site associated with the Monticello Mill and Electrical Plant (13JN371) is the only previously recorded archaeological site within the project APE. Historic documents and soil surveys suggest the project area has very limited prehistoric and historic archaeological potential with the exception of Site 13JN371. No further archaeological work has already been recommended for the portion of 13JN371 within the current project APE. Because of a lack of potential for significant intact deposits, no further archaeological work for this project is recommended. A portion of 13JN371 possibly associated with the nineteenth-century mill which has been previously recommended for avoidance or further testing is situated just to the north of the proposed project area. This component of 13JN371 should be avoided by the current project, but if avoidance of this portion of 13JN371 is not possible, additional archaeological testing of the component may be required.

The Phase IA historic architectural reconnaissance survey identified only one older property in the survey area. This property, the Mon-Maq Dam, is the only built resource identified in the survey area that appears to have some likelihood of NRHP eligibility. The dam, built in the early twentieth century of stone and concrete, appears to retain a high degree of integrity from its period of construction. The mill and powerhouse with which the dam was formerly associated are no longer extant. Therefore, for the dam to be eligible, it must be eligible in its own right rather than as a contributing element in a mill-related historic district.

No technique is completely adequate to locate all archaeological materials, especially deeply buried ones. Therefore, should any cultural, historical, or paleontological resources be exposed as part of proposed project activities, the responsible agency must be notified immediately in accordance with the Protection of Historic Properties regulations of the Advisory Council on Historic Preservation [36 CFR Part 800.13(b)]. If human remains are accidentally discovered, Iowa burial law [Code of Iowa, Sections 263B, 523I.316(6), and 716.5; IAC 685, Ch.11.1] requires that all work in the vicinity of the finding be halted, the remains protected, local law enforcement officials notified, and the Bioarchaeology Director at

the OSA contacted immediately (319-384-0740). Archaeologists with the OSA (319-384-0937) and the State Historical Society of Iowa (515-281-4358 or -8744) are also available to consult on issues of accidental discovery.

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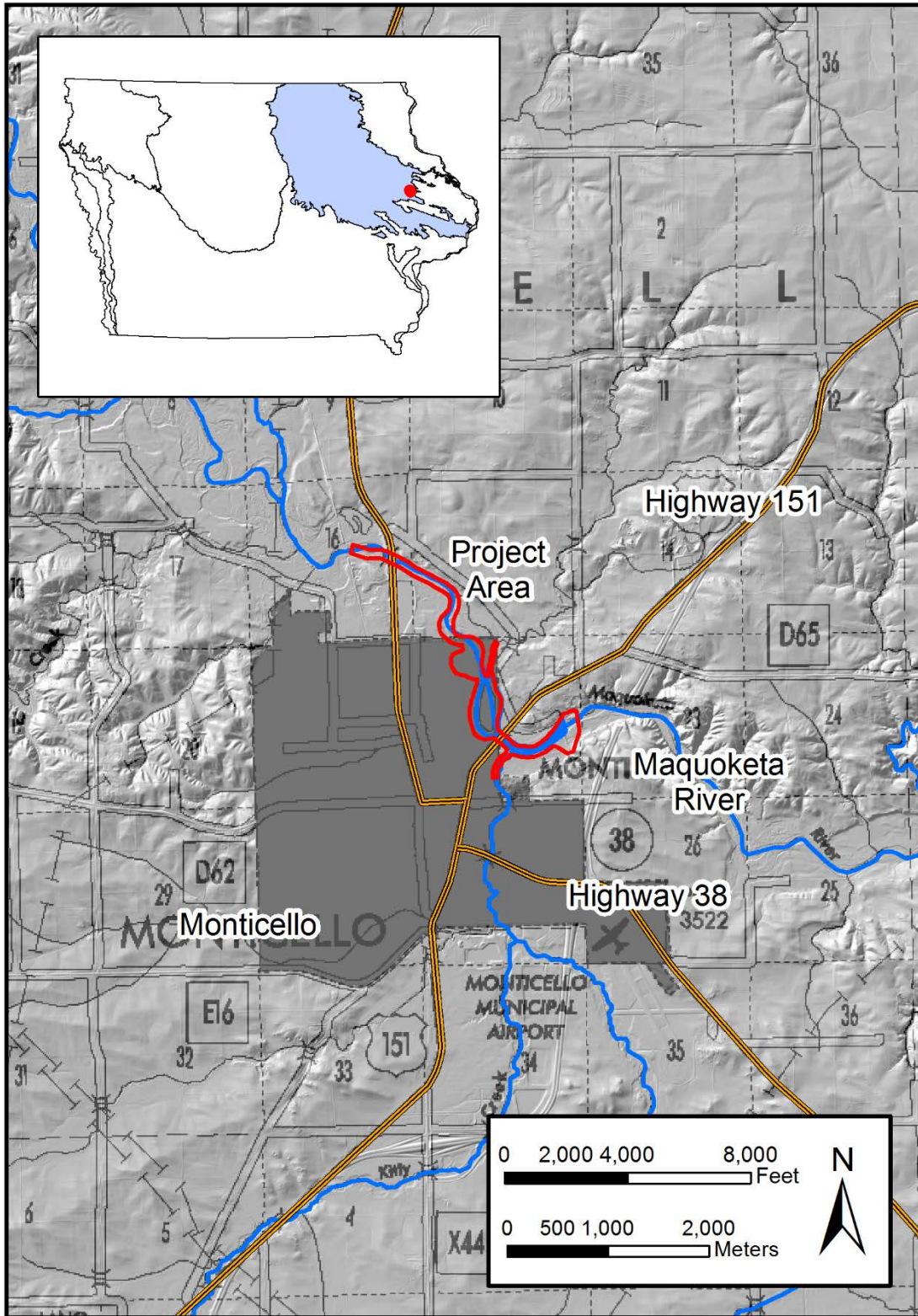


Figure 1. Project location.
From ISUGISSRF (2015).

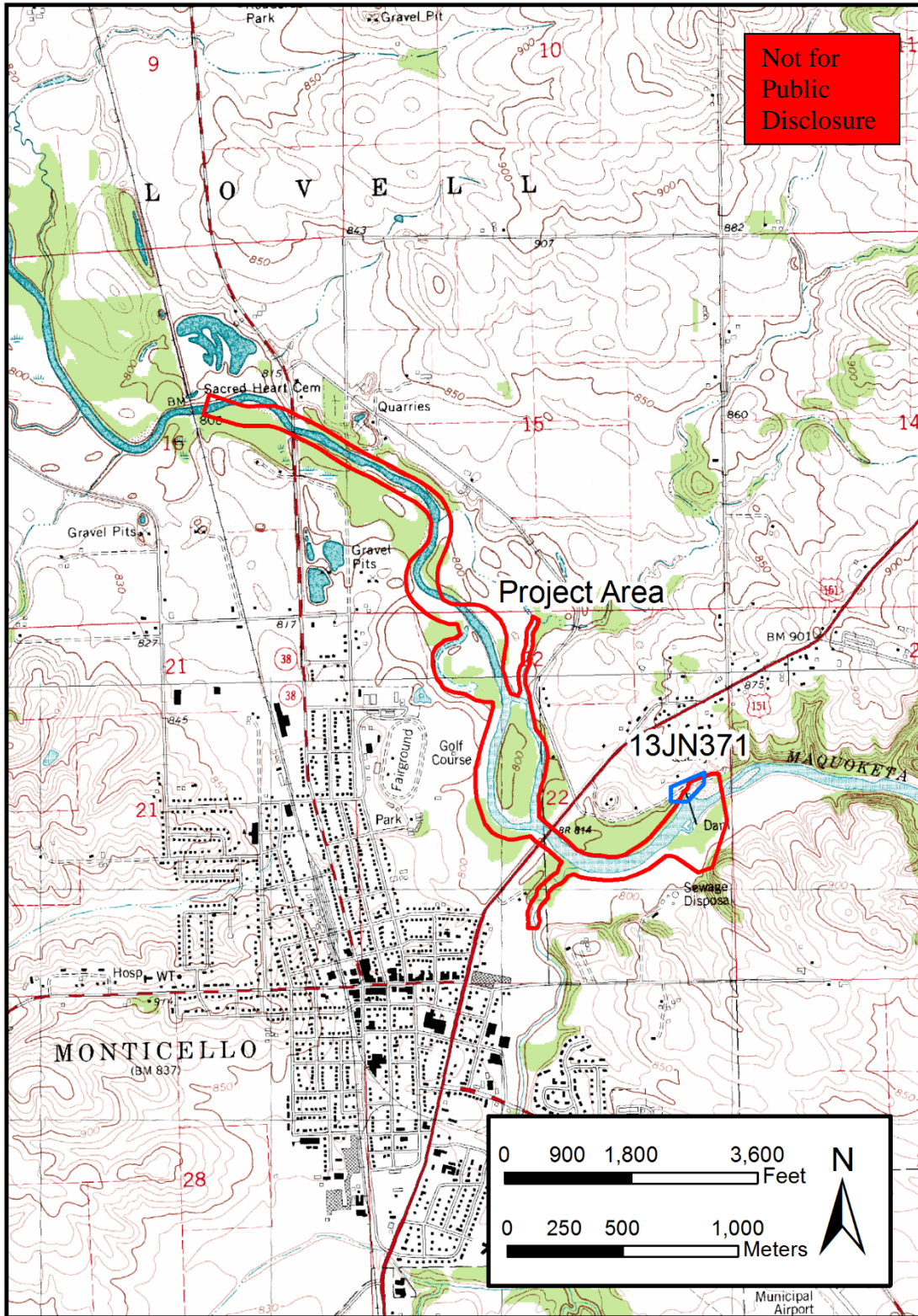


Figure 2. Project location in relation to surrounding topography.
From USGS Hopkinton E and Anamosa (1994), 7.5' series quadrangle map. Scale 1:24,000.

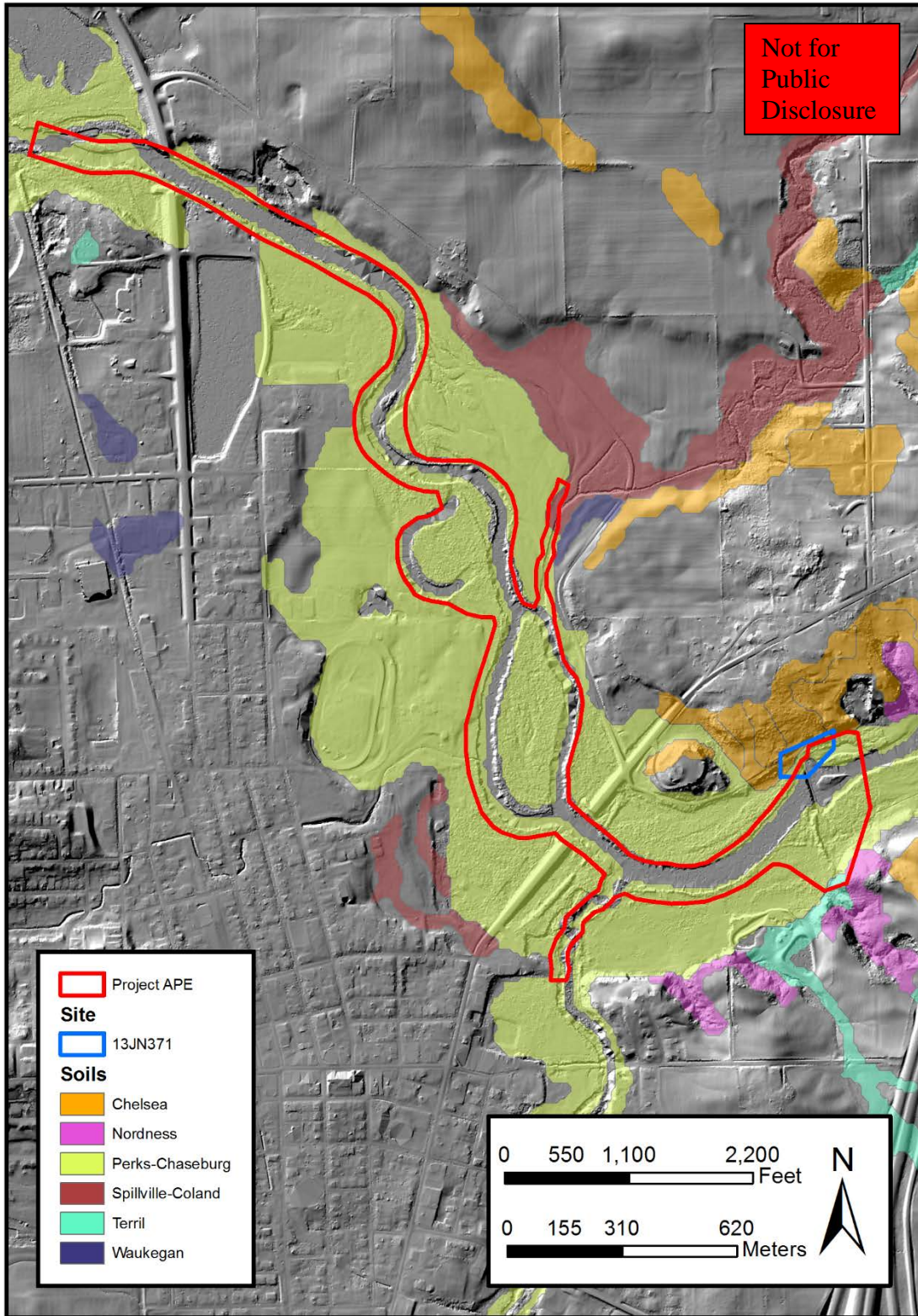


Figure 3. Project location in relation to soil type.
From Iowa Cooperative Soil Survey Digitization of Jones County, 1999. Base image is LiDAR 1-m topography (ISUGISSRF 2015).

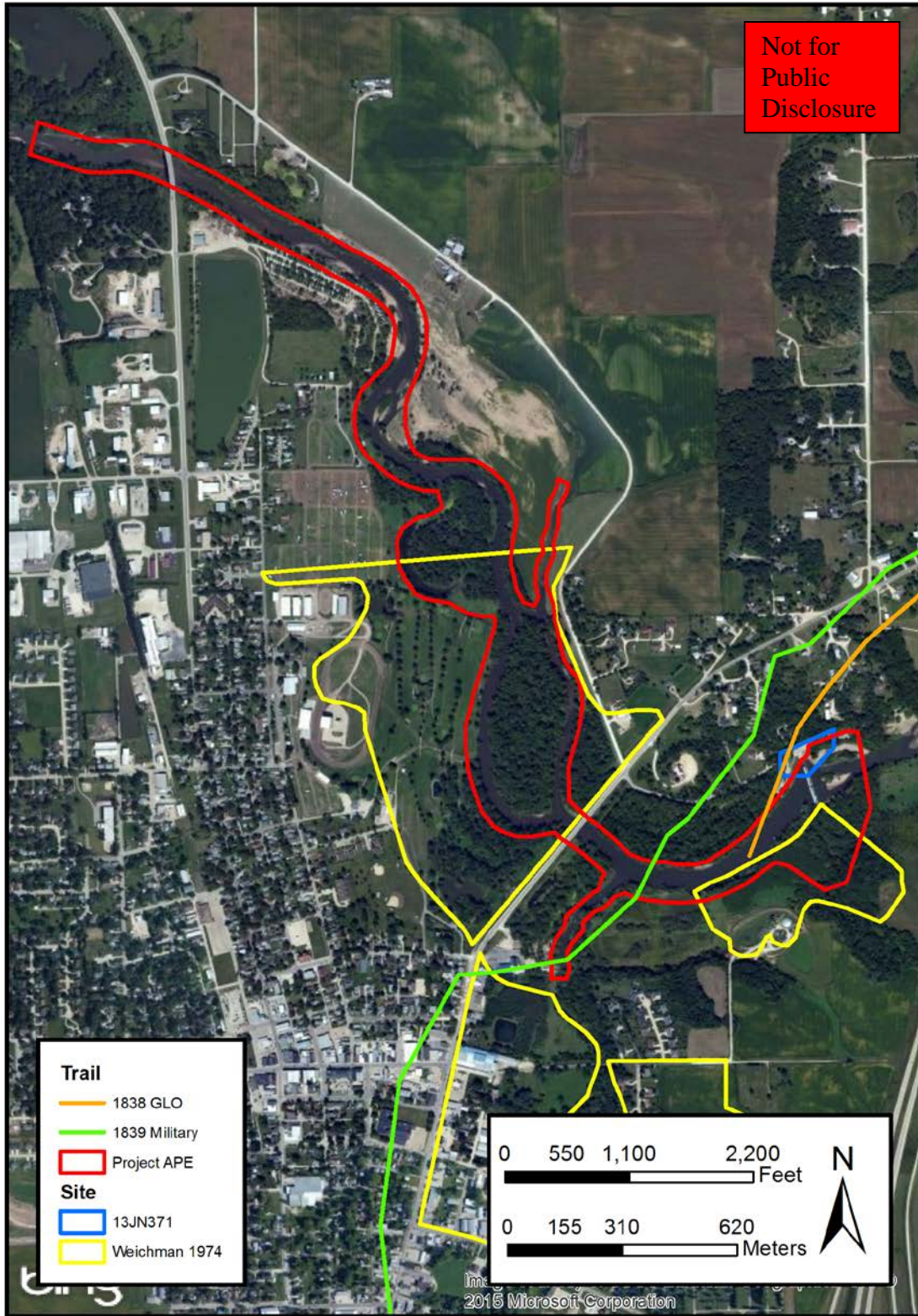


Figure 4. Detail map of project area including early trails.
Base aerial image from Bing (© 2010 Microsoft Corporation).

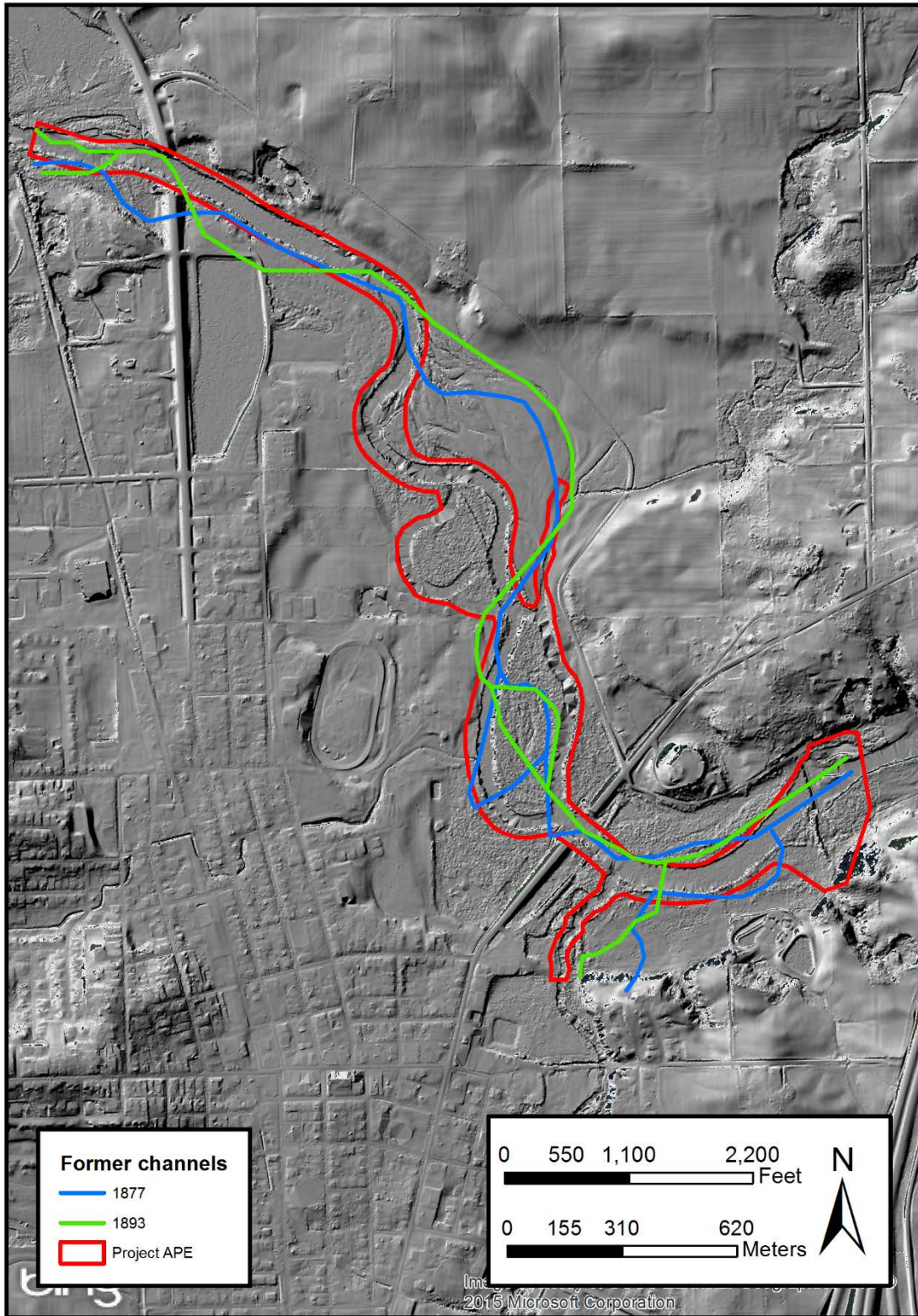


Figure 5. Project location in relation to former river channels.
From Iowa Cooperative Soil Survey Digitization of Jones County, 1999. Base image is lidar 1-m topography (ISUGISSRF 2015).

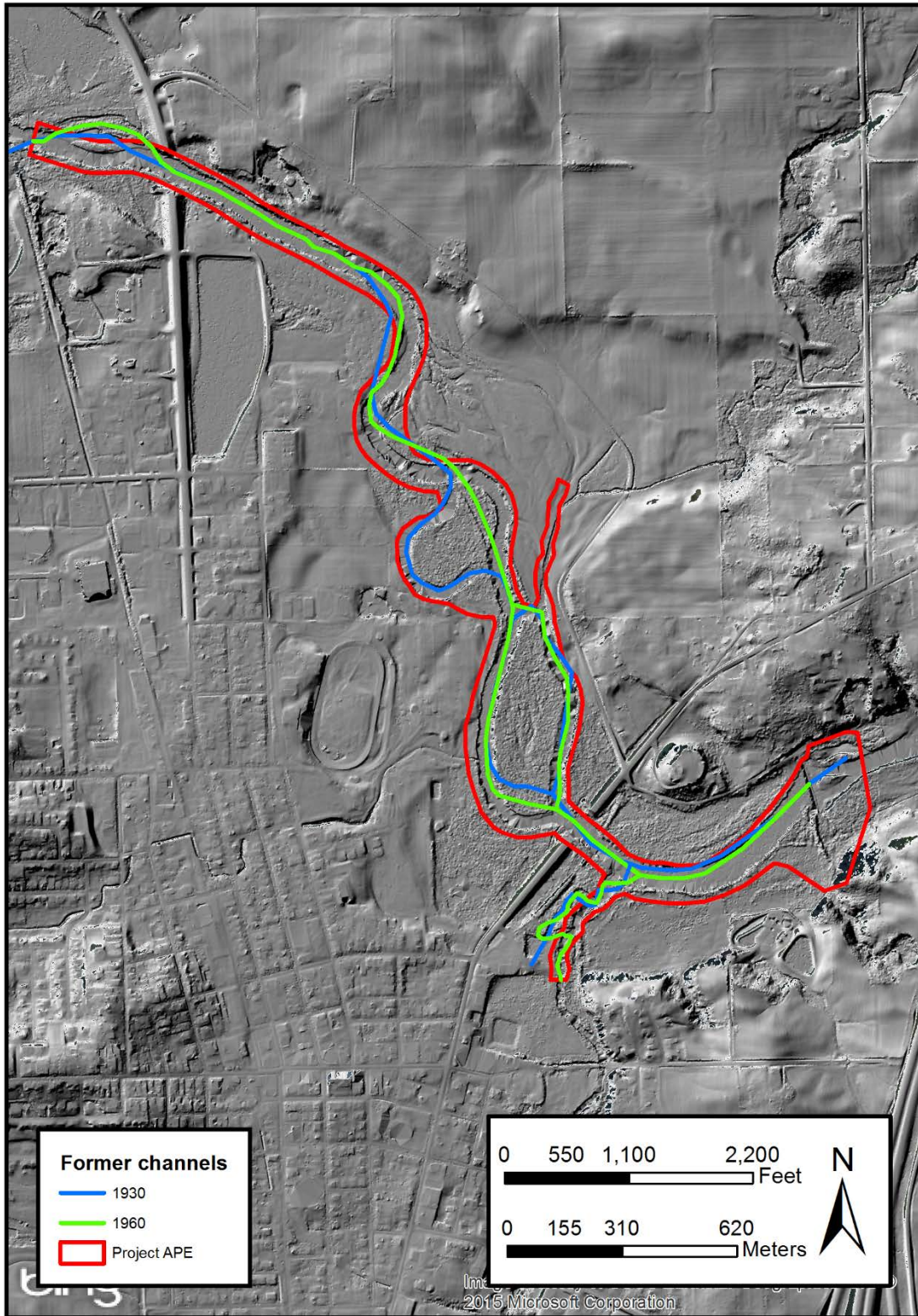


Figure 6. Project location in relation to former river channels.
From Iowa Cooperative Soil Survey Digitization of Jones County, 1999. Base image is lidar 1-m topography (ISUGISSRF 2015).

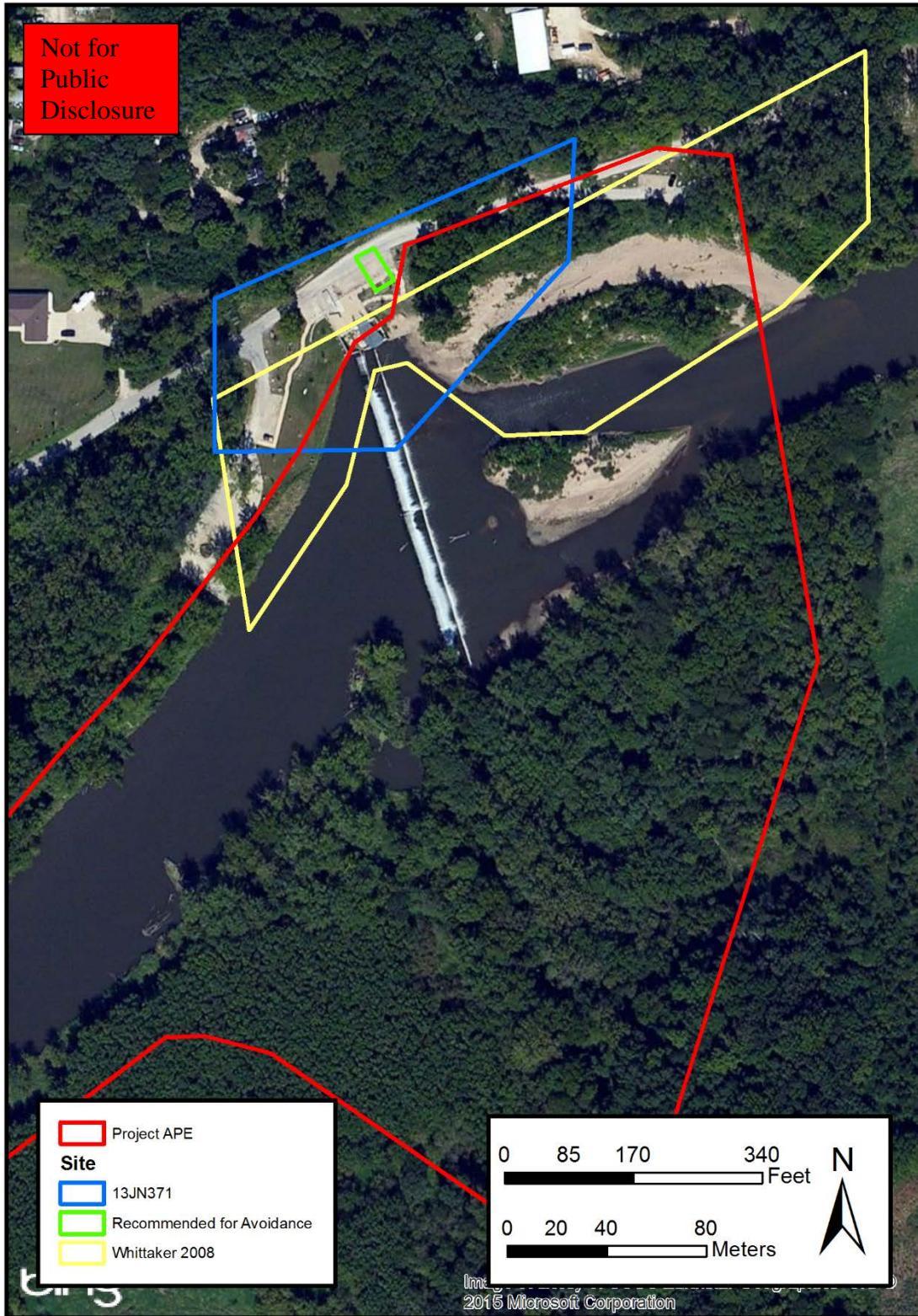


Figure 7. Site 13JN371 in relation to project area.
Base aerial image from Bing (© 2010 Microsoft Corporation).

Table 1. Soil Series Summary.

Soil Name	Landform	Parent Material	Native Vegetation	Typical Pedon
Chaseburg	floodplains and drainageways	alluvium	woodland	Ap-E-Bt1-Bt2-Bt3-Bt4-2Bt5-2Bt6-2C
Chelsea	slopes	eolian sand	woodland	A1-A2-E1-E2-E3-E and Bt
Coland	floodplains	alluvium	prairie	Ap-A1-A2-AB-Bg1-Bg2-Cg
Nordness	slopes	bedrock	woodland	A-BE-Bt1-2Bt2-3R
Perks	floodplains	alluvium	woodland	Ap-C1-C2
Spillville	floodplains	alluvium	prairie	A1-A2-A3-C
Terril	slopes and fans	colluvium	prairie	Ap-A1-A2-A3-A4-Bw1-Bw2-BC
Waukegan	slopes	loess	prairie	Ap-A-Bw1-Bw2-Bw3-2BC-2C

Table 2. Nearby Previously Recorded Archaeological Sites.

Site	Distance	Cultural Affiliation	Site Type	Landform
13JN4	240 m south	Prehistoric	Lithic scatter	Bluff
13JN204	475 m northeast	Woodland	Prehistoric scatter	Terrace
13JN207	275 m east	Prehistoric	Habitation	Upland
13JN208	350 m east	Prehistoric and Historic	Scatter	Terrace
13JN209	600 m northeast	Historic	Historic scatter	Terrace
13JN212	275 m south	Prehistoric	Isolated find	Upland
13JN371	0 m	Historic	Mill	Terrace
13JN396	1000 m east	Rockshelter	Archaic-Woodland	Slope
13JN397	1000 m east	Rockshelter	Archaic-Woodland	Slope
13JN398	970 m east	Rockshelter	Archaic-Woodland	Slope

Appendix I:

National Archeological Data Base - Reports: Data Entry Form

Database Doc Number: _____

1. R and C #: _____
 2. Authors: Bryan Kendall and Richard J. Carlson
 Publication Date: 2015
 3. Title: Phase IA Archaeological Reconnaissance Investigation and Phase IA Historic Architectural Reconnaissance Survey of the Proposed Dam and Levee Removal Project, Monticello, Sections 15, 16 and 22, T86N-R03W, Jones County, Iowa

4. Report Title: Technical Report
 Report #: 197
 Publisher: University of Iowa Office of the State Archaeologist
 Place: Iowa City, Iowa

5. Unpublished
 Sent from: _____
 Sent to: _____
 Contract #: _____

6. Federal Agency: _____

7. State: Iowa
 County: Jones
 Town: _____

8. Worktype: 86 [PHASE IA]

9. Keyword: 0-Types of Resources/Features 1-Generic Terms/Research Questions 2-Taxonomic Names 3-Artifacts Types/Material Classes 4-Geographic names/ Locations 5-Time Periods 6-Project name/Study Unit 7-Other Keywords
 142.3 acres surveyed [7] Historic [0]
 Iowan Surface [4] 1850s []
 Maquoketa River Basin [4] []

10. UTM Zone: 15 Easting: Northing:
15 Easting: Northing:
15 Easting: Northing:
15 Easting: Northing:

=====

11. Township: 86N
Range: 03W

Other Publication Types

12. Monograph

Name:

Place:

13. Chapter

In: _____ First: _____ Last: _____

14. Journal

Volume: _____ Issue #: _____ First: _____

Last: _____ ISSN: _____

15. Dissertation PH.D. LL.D. M.A. M.S. B.A. B.S. Institute: _____

16. Paper

Meeting:

Place:

17. Other

Reference:

=====

18. Site#: 13JN371

=====

19. Quad Map #: Hopkinton E and Anamosa (1994) 7.5' USGS

Appendix II:
Historical Architectural Data Base Form

53-019

Historical Architectural Data Base

Data Entry Form for Studies and Reports

Doc. No.: 53-019

Source of Study: Certified Local Government Project Section 106 Review & Compliance Project
 Historical Resource Development Program Project Other

Project Reference #: _____

Authors/Editor/Compiler/Originator:

Kendall, Bryan, and Richard J. Carlson

Author Role: Consultant Private Researcher/Writer Teacher Student
 Project employee/volunteer Site Administrator Other: _____

Title of Work:

Phase IA Archaeological Reconnaissance Investigation and Phase IA Historic Architectural Reconnaissance Survey of the Proposed Dam and Levee Removal Project, Monticello, Sections 15, 16 and 22, T86N-R03W, Jones County, Iowa

Year Issued: 2015

Type of Work Performed:

(check one only)

Survey:

- Windshield survey minimum level documentation
- Reconnaissance survey to make recommendations for intensive survey(s).
- Intensive survey
- Mixed intensive and reconnaissance survey

Plan:

- Planning for Preservation/Survey
- Community Preservation Plan

Property Study:

- Iowa Historic Property Documentation Study
- Historic American Building Survey (HABS)
- Historic American Engineering Record (HAER)
- Management or Master Plan
- Historic Structure Report
- Feasibility/Re-use Study
- Architectural/Engineering Plans and Specs.

National Register:

- Multiple Property Documentation Form

Other (e.g., private research, school project, video): _____

Phase IA Archaeological Reconnaissance Investigation and Phase IA Historic Architectural Reconnaissance Survey of the Proposed Dam and Levee Removal Project, Monticello, Sections 15, 16 and 22, T86N-R03W, Jones County, Iowa

53-019

Kind of Work Produced:

(fill in one section only: Report or Monograph or Chapter, etc.)

Report: Published/produced by: Office of the State Archaeologist

Place issued: Iowa City

Client: Barr Engineering

If applicable, include:

Series Title: Technical Report

Volume #: _____ Report #: 197

Monograph: Publisher Name: _____

Place: _____

Chapter: In: _____ First pg. #: _____ Last pg. #: _____

Journal: Name: _____ Vol. _____ No. _____ Pages: _____ to _____

Thesis: Degree (check one): Ph.D. LL.D. M.A. M.S. B.A. B.S.

Name of College/University: _____

Paper: Meeting: _____

Place: _____

Other: _____

Geographic Scope of Study:

City/town Township(s) County Region of Iowa Statewide Other: _____

State: IA IA _____ _____

County: Jones Jones _____ _____

Town: Monticello _____ _____ _____

Township: _____ 86N _____ _____

Range: _____ 3W _____ _____

Time Focus: (check any decades that receive particular attention)

before 1830 1830s 1840s 1850s 1860s 1870s 1880s 1890s

1900s 1910s 1920s 1930s 1940s 1950s 1960s 1970s 1980/later

Keyword: (Index of any subjects, topics, or people given prominent attention in the report)

Dams, hydroelectric _____

Monticello, Iowa _____

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