Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • (217) 782-4836 • TTY (217) 524-7128

217/785-4997

CASS COUNTY
Boulevard Drainage & Levee District
12-acre dredge material placement site

PLEASE REFER TO:
IHPA LOG #950626008PCS
Halpin 12 acres 0 sites

September 15, 1995

Mr. Dudley M. Hanson, P.E.
Dept of the Army/Rock Island Dist/CoE
Chief, Planning Division
Clock Tower Building/Post Office Box2004
Rock Island, Illinois 61204-2004

Gentlemen:

Thank you for submitting the results of the archaeological reconnaissance. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

Our staff has reviewed the archaeological Phase I reconnaissance report performed for the project referenced above.

The Phase I survey and assessment of the archaeological resources appear to be adequate. Accordingly, we have determined, based upon this report, that no significant historic, architectural, and archaeological resources are located in the project area.

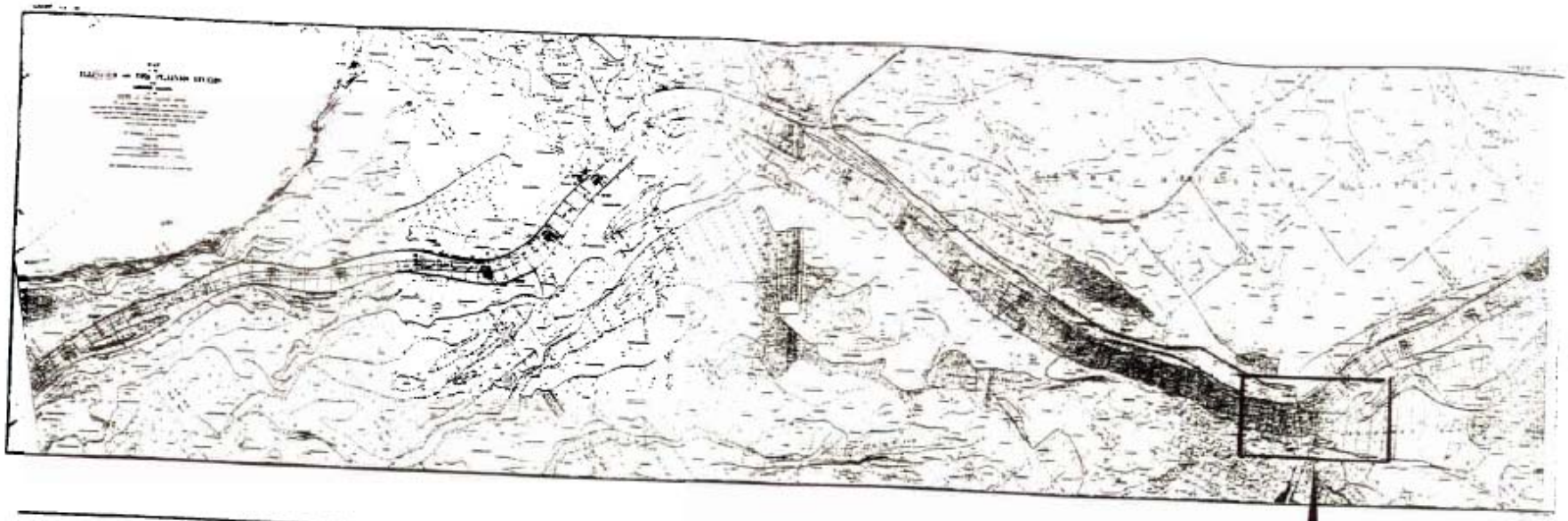
Please retain this letter in your files as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Sincerely,

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH:JSP

cc: Mr. David J. Halpin



General Project Location

MAP

of the

ILLINOIS AND DES PLAINES RIVERS

from

LOCKPORT, ILLINOIS,

to the

MOUTH OF THE ILLINOIS RIVER,

IN 58 SHEETS INCLUDING AN INDEX MAP.

Made under the direction of a Board of Engineers consisting of Colonel O. H. ERNST, Lieut. Colonel CHAS. J. ALLEN (retired Jan. 8, 1904), Major THOS. L. CASEY, and Major JAMES L. LUSK (appointed April 26, 1904), all of the Corps of Engineers, United States Army.

by

J. W. Woermann, U. S. Assistant Engineer.

1902—1904.

LANDFORM SEDIMENT ASSEMBLAGE (LSA) UNITS IN THE ILLINOIS RIVER VALLEY AND THE LOWER DES PLAINES RIVER VALLEY

By

Edwin R. Hajic
Research Associate
Illinois State Museum
Springfield, Illinois 62703

VOLUME I

Prepared For

U.S. Army Corps of Engineers, Rock Island District
Clock Tower Building, Rock Island, Illinois 61204-2004
Contract No. DACW25-93-D-0014
Delivery Order No. 0025

By

Illinois State Museum Society
Archaeological Services
Dale R. Henning, Director

Illinois State Museum
Quaternary Studies Program
Technical Report No. 99-1255-16

May 2000

ENCLOSURE 3

material may have a shallowly buried (1-3 meters), relatively thin, upward fining increment of sand to silt loam at the top of the sequence, representing secondary flood channel alluvium (see Floodplain Type S [FFS] below). Locally, this coarser increment of alluvium usually mantles a truncated buried soil developed in the top of the FFC LSA. The thick fine-grained alluvium grades clearly to abruptly downward to unoxidized sandy loam, loamy sand, sand and pebbly sand in-channel alluvium. Uncarbonized organic matter and snail and bivalve shells are locally common inclusions. Other than the aforementioned buried soil, there are no other buried soils in the LSA. Evidence for pedogenic alteration associated with soil sola disappears with depth indicating perennial subaqueous deposition for the bulk of the LSA. In contrast, natural levee LSAs FN2 and FN3 both exhibit over-thickened (up to three meters thick) cumulic Bw horizons developed in very fine sandy loam to silty clay loam.

The bulk of the FFC LSA aggradation occurred between about 9700 and 3000 BP. Comparatively slow and limited sedimentation continued until artificial levees were constructed.

Much of the FFC LSA accumulated in permanent lateral lakes to intermittent shallow backwater lakes. The archaeological potential for these deposits is considered very low. There is some potential for Early Archaic and younger cultural deposits to be associated with former shoreline settings of the intermittent backwater lakes. Some of these locations are likely now buried. The greatest potential related to the FFC LSA is with associated natural levee LSAs. Cultural deposits as old as Middle Archaic potentially can be buried within the older FN3 LSA. Cultural deposits possibly as old as Late Archaic potentially can be buried within the younger FN2 LSA. Early Woodland and younger cultural deposits are common on both natural levee surfaces.

Floodplain Type B LSA (FFB)

Floodplain Type B LSA (FFB) consists of a series of narrow to broad flood basins and ridges that distinguishes it from the Type C LSA. The flood basins are chutes and represent locations of remnants of partially filled former channel chutes. The ridges are associated incipient natural levees overlapping parts of chutes. The natural levees are mapped as a distinct LSA (FN1). Ridge and swale morphology of the FFB LSA records a phase of lateral migration activity of the Illinois River. On aerial photographs, linear basins express the FFB LSA with dark tones alternating with linear ridges of light to intermediate tones. The FFB LSA occurs throughout the lower and lower-middle valley, and is associated with the Submodern Paleochannel system. Small fragments of the FFB LSA may be present in the upper-middle valley, but are largely under water. Where present, the Submodern Paleochannel system is situated between the FFC LSA and modern Illinois River. Its outer limit is often defined by the proximal side of the extensive natural levee LSA FN2 that interfingers with, and was deposited on, the youngest increments of the FFC LSA. The FN2 LSA continued to form during the early part of the Submodern Paleochannel system activity, and is probably coeval with development of the FFS LSA (see below).

During the 1920s and 1930s, artificial levees were constructed along the Illinois River in all reaches except the upper valley. Along most of their extent, planners took advantage of the FN2 LSA ridge and aligned the artificial levees with this natural levee. As a result, PSA of significant thickness is usually restricted to mantling LSAs between the artificial levees. Most

affected are the Type B floodplain LSA (FFBO), island LSA (FIO), and youngest natural levee LSA (FN1O).

The island LSA (FIO) is coeval with the FFB LSA. Where islands are large enough to have a distinguishable central flood basin and natural levees, they are mapped accordingly (i.e. FFBO, FN1O). Smaller islands are essentially mantled with overbank natural levee deposits, but they are distinguished as the FIO LSA.

Sediments associated with the FFB LSA are moderately thick, consisting of silty clay loam over silt and sand in chutes to very fine sand, silt and silt loam in the FN1O LSA. Tracts of this LSA that occur on the river side of the artificial levee system have a thin to moderately thick veneer of PSA consisting of very fine sandy loam to silty clay loam. In places, PSA is augmented by sandy dredge spoil.

The FFB LSA began to be deposited about 3000 BP, with most of the lateral channel movement believed to have occurred between about 3000 and 2500 BP. It is during this interval that the associated well-developed FN2 LSA flanking the FFB LSA was completed, and the fragments of FN1 LSA formed. The FFB LSA continued to be deposited, essentially into the early phases of Euro-American settlement, but it was restricted to overbank sedimentation with very limited lateral migration; the Illinois River channel has moved little since about 2500 BP.

Cultural deposits are associated with natural levee ridges of both FN2 and FN1 LSAs. Middle Woodland and younger sites occur on the ridges. Early Woodland cultural deposits are common on both FN2 surfaces and the lower inside flanks of natural levees. These latter are exposed only during extreme low water intervals. Currently, it is unclear whether these deposits are buried, being exposed through scour of the river bank, or surficial cultural deposits actually on the riverside of these natural levee deposits simply being exposed by the low water. There is no potential for cultural deposits within the swale fills of this LSA, although swale fill may overlap and bury cultural deposits on the flanks of the natural levee LSAs.

Floodplain Type S LSA (FFS)

The Floodplain Type S LSA (FFS) is characterized by a meandering to anabranching paleochannel pattern and associated deposits that flowed through and is superimposed on older flood basins. The paleochannel pattern generally is considerably narrower than the modern Illinois River. On aerial photographs, there are some cross-cutting channel relationships exhibited, and locally, narrow, linear, and parallel light and dark tones representing muted point bar ridges and swales. However, on the ground, these are usually imperceptible. The main channels usually occur as linear swales, and may be flanked by very slight rises representing natural levee (FNS) overbank deposits or crevasse splays. The FFS LSA is discontinuous, in part because of subsequent truncation by the FFB and younger LSAs, and in part because the paleochannel system incorporated a series of backwater lakes as it flowed through flood basins. Now drained, these backwater lakes generally lack the FFS LSA channel features on aerial photography. This paleochannel system is interpreted as a secondary flood channel system that funneled flood waters through emergent flood basins. The FFS LSA occurs discontinuously in the lower-middle valley and more or less continuously in the lower valley. Whether it is present in the upper-middle valley is unknown because of current water levels. This sediment

Illinois Historic
Preservation Agency

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217/785-4997

CASS COUNTY
South Beardstown Drainage & Levee Distri
Dredge Material Placement sites

PLEASE REFER TO:
IHPA LOG #960205001PCS

February 5, 1996

Mr. Dudley M. Hanson, P.E.
Dept of the Army/Rock Island Dist/CoE
Chief, Planning Division
Clock Tower Building/Post Office Box2004
Rock Island, Illinois 61204-2004

Dear Sir:

Thank you for requesting comments from our office concerning the possible effects of the project referenced above on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We have received and reveiwed your letter of January 26, 1996 and concur with your recommendations. Sites 1, 3, and 4 contain no historic properties and no further work or coordination is necessary. We further concur with your recommendation for an archaeological survey for site 2.

If you have any questions, please contact Joseph S. Phillippe, Staff Archaeologist at 217/785-1279.

Sincerely,

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH:JSP

cc: Ron Deiss

ENCLOSURE 4

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR RENEE CIPRIANO, DIRECTOR

217/782-3362

July 1, 2003

Mr. Rick Schroll
City of Beardstown
105 West Third Street
Breadstown, IL 62618

Re: City of Beardstown (Cass County)
Marina Improvements
Log# C-1019-02 [CoE appl.# 433960]

CEMVR-OD-P

Dear Mr. Schroll:

We received your application for Section 401 water quality certification and supporting documents concerning the above referenced project on September 4, 2002. The documents, as submitted, have been reviewed by the Watershed Management Section staff, and based on that review, the following items are offered for your consideration and appropriate action.

1. Please specify the procedures and features of the site that will prevent the dredge material temporarily placed on the delta and associated drainage from dredging of the access channel from reentering the Sangamon River or the Illinois River. Please specify practices to be implemented to prevent violation of water quality standards.
2. Please indicate how the berm constructed of hydraulically dredged material across the inner part of the marina will be installed in order to insure the berm is constructed of sand or larger size material with less than 20% passing a U.S. #230 sieve. Please specify a water quality monitoring plan for TSS and NH_3 for the area on the river side of the constructed berm and silt curtains.
3. Please be advised that a permit will be required for the construction and operation of the disposal area. Please be advised that the return water discharge from the disposal area must meet the total suspended solid effluent standard of 15 mg/L. Please find enclosed the permit forms WPC-PS-1 and Schedule J for your use. For hydraulically dredged material a supernatant test is required for material with greater than 20 percent by weight passing a U.S. #230 sieve. Please submit appropriate supporting test results.
4. Please be advised that material produced by the mechanical dredging around the marina must be placed in an area with no return water discharge. If this dredge material will result in a return water discharge, please perform a sediment analysis for this dredge material according to the attached "Material Analysis for Dredge and Fill Activities." Please also test for PNAs.

Section 401 certification will be held in abeyance pending a review of the requested information. Upon receipt of a satisfactory written reply and supplemental information required, we shall finalize our review of this subject. Your response should be submitted to this office within thirty (30) days.

ROCKFORD – 4302 North Main Street, Rockford, IL 61103 – (815) 987-7760 • DES PLAINES – 9511 W. Harrison St., Des Plaines, IL 60016 – (847) 294-4000
ELGIN – 595 South State, Elgin, IL 60123 – (847) 608-3131 • PEORIA – 5415 N. University St., Peoria, IL 61614 – (309) 693-5463
BUREAU OF LAND - PEORIA – 7620 N. University St., Peoria, IL 61614 – (309) 693-5462 • CHAMPAIGN – 2125 South First Street, Champaign, IL 61820 – (217) 278-5800
SPRINGFIELD – 4500 S. Sixth Street Rd., Springfield, IL 62706 – (217) 786-6892 • COLLINSVILLE – 2009 Mall Street, Collinsville, IL 62234 – (618) 346-5120
MARION – 2309 W. Main St., Suite 116, Marion, IL 62959 – (618) 993-7200

Should you have any questions or comments regarding the content of this letter, please contact Matthew Talbert at the above telephone number and address.

Sincerely,

Bruce J. Yurdin
Manager, Watershed Management Section
Bureau of Water

Enc: Material Analysis for Dredge and Fill Activities
WPC-PS-1, Schedule J

cc: Records Unit
CoE, Rock Island, Wayne Hannel
Coe Rock Island, Michael Cox
IDNR, OWR, DWRM, Springfield