

APPENDIX C
HTRW REPORT

UPPER MISSISSIPPI RIVER SYSTEM
ENVIRONMENTAL MANAGEMENT PROGRAM
MISSISSIPPI WATERWAY RIVER MILES 548.7-552.8

PLEASANT CREEK WILDLIFE AREA REHABILITATION
POOL 13, UPPER MISSISSIPPI RIVER
JACKSON COUNTY, IOWA

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)
DOCUMENTATION REPORT (HDR)

1. PURPOSE

The specific and relevant purposes of a hazardous, toxic, and radioactive waste documentation report (HDR) is to adequately document an appropriate inquiry into hazardous, toxic, and radioactive waste (HTRW) activities on potential project lands. This report documents the HTRW investigation for the Environmental Management Program (EMP) for the rehabilitation of the Pleasant Creek Wildlife Area. This inquest is required in order to minimize and prevent Federal liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and to reduce any threats to site workers and avoid costly delays associated with environmental abatement activities. HDR Appendix 1 contains a list of acronyms used in this report.

2. BACKGROUND

The policies and authorities outlined in ER 405-1-12 Real Estate handbook and ER 1165-2-132 Hazardous, Toxic, and Radioactive Waste (HTRW) Guidance for Civil Works Projects were developed to facilitate the early identification and the appropriate consideration of HTRW problems in all of the various phases of a water resources study or project. The guidance provides information on how these considerations are to be factored into project planning and implementation. It is the U.S. Army Corps of Engineers policy to avoid construction of Civil Works projects when HTRW is located within project boundaries or may affect or be affected by Corps Civil Work projects.

ASTM Standards E 1527-97 and E 1528-98 provide a comprehensive guide for conducting Phase I Environmental Site Assessments for the appropriate inquiry of HTRW issues on a parcel of commercial real estate. Phase I Environmental Site Assessments only use practically reviewable information to reach conclusions. Therefore, they are not an exhaustive assessment of a property, nor are the levels of assessment the same for each property, nor is all uncertainty eliminated from any assessment. Consistent with good commercial or customary practice, the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry. The screening methods and tools used to prepare the Phase I HTRW Environmental Site Assessment have been selected based on the site location, physical setting, and surrounding land uses.

The Pleasant Creek Wildlife Area Rehabilitation EMP project involves work on land which has historically been used for agricultural or left as a natural backwater area and not for any known or suspected industrial purposes. The techniques used to assess HTRW contamination within the project alignment consist of: informal interviews with project team members who had visited the

site, a review of current and historical maps and photographs, a library search, and a search of federal and state environmental data bases. The scope of inquiry was limited to investigating onsite HTRW potential within the project boundaries as well as offsite HTRW potential within a reasonable distance from the project.

3. SITE SAFETY

A formal Site Specific Safety and Health Plan (SSHP) was not prepared for this investigation. Investigators followed all generic requirements of U.S. Army Corps of Engineer's Safety and Health Requirements Manual (EM 385-1-1). The site information used by CEMVR-ED-DN was obtained from current aerial and still photographs and informal interviews with individuals that visited the site during the On-Site Inspection Team (OSIT) meeting. Assessment methods did not involve intrusive techniques such as the taking and analyzing of soil samples. Informal discussions between OSIT members from the U.S. Fish and Wildlife Service, the Iowa Department of Natural Resources, and the U.S. Army Corps of Engineers concluded, with the general consensus, that there were no observable indication of or recognized history of an association of hazardous substances at the site.

4. SITE DESCRIPTION AND BACKGROUND/SITE VISIT

Site Location. The Pleasant Creek Wildlife Area lies along the Iowa bank of the Mississippi Waterway RM 548.7-552.8 south of Bellevue, Iowa (see Figure 5, Appendix 6). The wildlife area is part of the Upper Mississippi River National Wildlife and Fish Refuge. The Refuge was established in 1924 to preserve the Upper Mississippi River for fish, migratory birds, and other wildlife. The Refuge includes acreage acquired by the U.S. Fish and Wildlife Service and land acquired during the 1930's by the U.S. Army Corps of Engineers for the construction of the 9-foot navigation channel. The planned rehabilitation of Pleasant Creek Wildlife Area falls entirely in Sections 1, 2, 3, 10, 11, and 12 of Washington Township in Jackson County, Iowa (see Figure 5, Appendix 6).

The U.S. Fish and Wildlife Service, in cooperation with the State of Iowa, have proposed the planning for this project and its features. There are six project features incorporated in this EMP: a Moist Soil Management Unit (MSMU), mast tree planting, addition of a new spillway, development of a water control plan, repairs to eroded banks, and addition of a new trash rack (see Figure 2, Appendix 6).

The MSMU consists of a cross dike constructed to form an enclosed area that is seasonally flooded with 18" of water. Water will be retained by a series of dikes constructed with soil from the borrow locations on Figure 2, Appendix 6. Water levels are to be managed by an electrical pump drawing out groundwater from a 70-foot deep well located near station 65+00. Electricity would be provided by an electrical line entrenched along the centerline of the dike from Station 0+00 to Station 65+00. Electricity would be provided by the nearest utility pole, on the west side of Highway 52, to a transformer positioned on a pole next to the pump at Station 65+00. A combination of overhead lines, direct-boring, and mechanical trenching will be used to install the power cable. This project feature is sensitive to any HTRW potential with building the dikes (soil borrow, general construction, etc.) or associated with the electric line placement (trenching, digging, boring, etc.).

The mast tree planting area is a seven-acre portion of an existing agricultural field. The planting area is labeled on Figure 2, Appendix 6. This project feature is sensitive to any HTRW potential associated with the digging and planting of mast trees.

The added spillway consists of constructing a third spillway in the wildlife area along Harris Slough, just upstream of stop log structures 2 and 5, as shown on Figure 2, Appendix 6. The spillway consists of a constructed low spot in the existing levee that allows water to pass, armored with concrete blocks. This project feature is sensitive to any HTRW potential associated with spillway construction (digging, construction, etc.).

The water control plan will be developed by an analysis of current water control structures and the manner in which they contribute to the benefit of the refuge. No new construction is anticipated to execute this feature, as this is an optimization procedure. This feature is not sensitive to any HTRW potential.

Erosion along the Mississippi River shoreline will be repaired by the use of rock protection. The proposed area of relief is shown on Figure 2, Appendix 6. The rock placement may extend up to 50 feet into the river, with a maximum linear distance of 1,500 feet. This project feature is sensitive to any HTRW potential associated with riprap placement (clearing, bank contouring, rock placement, etc.).

The proposed trash rack, consisting of a series of poles placed across Harris slough, will prevent debris from continuing onward (see Figure 2, Appendix 6). This project feature is sensitive to any HTRW potential in the slough sediment.

a. Land Cover/Vegetation/Stresses to Topography. The Pleasant Creek Wildlife Area is a 2,350-acre unit of bottomland woods intermixed with small lakes and sloughs. The wildlife area has been closed to public vehicular traffic and hunting for over 40 years. Besides common bottomland flora and fauna, this area contains a high population of deer, and active bald eagle nest, a heron rookery, and a 40-acre stand of the northern-most strain of wild pecan trees. The lands, which include the proposed MSMU as well as much of the surrounding area, are currently used for farming. It is assumed that pesticides and herbicides have been applied to the fields in order to control pests and weeds in a manner consistent with normal agricultural needs and practices. Pesticides and herbicides applied to lands during the course of normal agricultural activities are exempt from CERCLA and Resource Conservation and Recovery Act (RCRA) regulations. Contamination such as agricultural runoff of pesticides or herbicides is not considered HTRW, and is therefore a de minimus negative environmental condition. No superficial indications of HTRW contamination, such as unexplainable stresses to the ecosystem, were noted.

b. Utilities/Transportation Features. U.S. Highway 52 as well as the Chicago, Milwaukee, St. Paul, and Pacific Railroad bound the southwest corner of the EMP site. Easements with the Railroad Company may be necessary for the installation of electrical power to the MSMU water pump. Electricity is provided to the site by utility poles running along the west side of Highway 52. It is not known if any sewer or potable water lines are located at or near the Wildlife Area Rehabilitation site. No HTRW contamination is expected to originate from any of these utility or transportation features.

c. Estimated Quantities of Contaminants and Potential Hazards. Because the Refuge was established in 1924, no onsite endogenous HTRW potential should exist except for agricultural contamination created by pesticide and herbicide usage. Pesticides and herbicides applied to lands during the course of normal agricultural activities are exempt from CERCLA or RCRA regulations and are therefore exempt as a HTRW threat. However, deposition of HTRW contaminated river sediments during flood events do pose as an onsite exogenous HTRW source. Since flood deposits consists primarily of silts and other fines, it is possible for hazardous contaminants to bind to the

sediments. However, it is unlikely that sediment contamination has occurred since no environmental indicators, such as fish kills or stressed vegetation were noticed. Therefore, the potential for a hazardous condition to humans or the environment from sediment is minimal or non-existent.

Unfortunately, a significant amount of offsite HTRW potential does exist. Historical and contemporary land usage surrounding the Refuge convey an imaginable HTRW risk to the project. Historical HTRW sources, such as former communities, past land use and the Savanna River Proving Grounds will be discussed in Sections 5d and 5e.

This document does not address normal agricultural contamination for reasons explained above, nor does it investigate any potential for recent Savanna River Depot HTRW contribution due to a base closure recommendation from the 1995 Base Closure and Realignment (BRAC) Commission.

5. PERMITS, CLEANUP ACTIONS, CONTAMINATION, AND OTHER ENVIRONMENTAL ISSUES REVIEW

a. Envirofacts. The United States' Environmental Protection Agency's (USEPA) Envirofacts data base is a relational data base warehouse implemented in the Oracle Relational Database Management System (RDBMS) and is available through the Internet for public access. It contains data from the following data bases:

- AIRS/AFS - Aerometric Information Retrieval System/AIRS Facility Subsystem.
- CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System.
- GICS - Grants Information and Control System.
- PCS - Permit Compliance System.
- RCRIS - Resource Conservation and Recovery Information System.
- SDWIS - Safe Drinking Water Information System.
- TRIS - Toxic Release Inventory System.

In addition, the Envirofacts data base ties in with the Facility Identification Initiative (FII) and the Envirofacts master Chemical Integrator (EMCI). The FII data base links 23 facility identification data elements (industry codes, latitude/longitude, city, state, zip code, etc.) to the data bases listed above. This provides the power for multiple and complex queries to visually map facilities to their corresponding environmental data. The EMCI identifies the chemicals listed in the above data bases. This allows the user to learn details about a chemical substance, such as chemical names, discharge limits, and reported releases.

According to the Envirofacts query results (see Appendix 4), within a 5-mile radius of the proposed site: two facilities had reported air releases (AIRS/AFS) and there was one active hazardous waste handler (RCRIS). Of these sites, only the Savanna Army Depot, which is a closing Army ordnance depository permitted for handling hazardous substances, resides near the EMP site. Appendix 4 displays the results of these data base queries.

b. State of Illinois Environmental Protection Agency (ILEPA) Site Environmental Information Data System (SEIDS) List. The Illinois SEIDS list was reviewed for sites in Carroll and Jo Daviess Counties via an ILEPA Internet search. The SEIDS data base lists Leaking Underground Storage Tanks (LUST), Department of Defense sites (DOD), Site Remediation Programs (SRP), Resource Conservation and Recovery Act (RCRA) sites, and Comprehensive

Environmental Response, Compensation and Liability Information System (CERCLIS) sites. The query revealed that two RCRA sites, two SRP sites, one DOD site, and one LUST site were located near Savanna, Carroll County, Illinois. Only the Savanna Army Depot, a LUST and DOD site, resides near the project area. Appendix 5 displays the results of these data base queries.

c. ILEPA Leaking Underground Storage Tank (LUST) List. The query revealed that the nearest LUST sites were eight areas located at the Savanna Army Depot and four sites in Hanover, IL. The eight Savanna Army Depot sites are within a one-mile radius of the proposed EMP site. No sites are located within a one-half mile radius of the project. Although there is a potential for groundwater contaminant transport of leaked material to enter the project area, it is doubtful that HTRW contamination has occurred considering the transport distances involved and the natural attenuating environment of the river gallery.

d. Historical Sources, Maps, and Photos. Street maps, geological surveys, and aerial photographs provide an excellent source of historical property usage of the site and adjacent areas (see Figures 3 and 4, Appendix 6). Old maps of the Pleasant Creek Wildlife Rehabilitation Area, created by the Corps of Engineers in the 1930's, show the region primarily is agricultural in nature. Farms and farming communities, such as the homes around Pleasant Creek and Green Island, border the Wildlife Refuge. The maps show the Savanna Army Depot as artillery proving grounds. As a firing range, this implies a potential risk of HTRW contamination of the EMP site unexploded ordnance and/or explosives (OE) Further discussion of this risk is found in Section 5e. Modern aerial photos from 1996 show the continuing development of agriculture and the military along the riverfront. The photos show development of and organized military storehouse complex forming on the Savanna Army Depot land as well as the growth and sometimes abandonment of agricultural community features.

e. Interviews. There are only two historical sources for HTRW contamination, sanctioned agricultural usage and the Savanna Army installation. Since normal agricultural practices are not taken into account as important sources of HTRW contamination, the OSIT decided to interview persons expressing knowledge regarding any Savanna Army Depot activity. A telephone conversation with the Savanna Army Depot BRAC Environmental Coordinator (see Appendix 7) was instrumental in determining the HTRW risks the depot created for the Pleasant Creek EMP. Action taken after that conversation led to the discovery of an U.S. Army Corps of Engineers Archives Search Report (ASR) and the BRAC Environmental Baseline Survey (EBS) for Savanna Army Depot Activity. Historical and recent contributions of HTRW risks are summarized from the reports as follows:

Base Chronology

- The Savanna Army Depot performs many ordnance-related activities, including storage, testing, inspection, maintenance, and demilitarization.
- The Savanna Army Depot Activity began as a sub-installation of the Rock Island Arsenal in 1918. As the Savanna Proving Grounds, it was used as a post World War I artillery test range, firing mostly solid projectiles as well as some high explosive rounds and fuzzes.
- By 1921, the installation had transformed from a weapons proving ground to a weapon storage and renovation facility.
- The depot expanded during World War II due to funds authorized by President Roosevelt, in 1938, that made Savanna the largest ammunition storage facility. By the

end of WWII, the facility was manufacturing bombs, artillery rounds, small ammunition, and ammonium nitrate.

- The depot was drastically reduced in size after WWII (1945), leaving the storage magazines overflowing requiring outdoor storage of some ordnance. Despite the downsizing, the depot saw some periodic growth during the Korean Conflict (1950-1953), the assignment of a special weapons mission in 1961, and the Vietnam conflict (1950-1975).
- Although the depot workers put in long hours supporting the Gulf War (1991), the base was recommended for closure in 1995.

Archives Search Report (ASR) Ordnance and Explosive Issues

- Several graphics from the ASR (see plates 1-5, Appendix 8) show the extent of known and suspected OE zones on and around the depot. Examination of plate 1 in Appendix 8 indicates that the Pleasant Creek EMP intersects OE Zone K, an impact area associated with the 1918 proof program. Documents indicate that Savanna Proving Ground received many cannons and carriages for artillery tests in 1918 and 1919. Projectiles were fired for the proof program with varying amounts of propellant at varying elevations and traverses. According to the ASR, Zone K is over 7,000 acres and, as a worst case scenario, is likely to contain no more than 10 projectiles, 155mm or 75mm rounds, with live fuzes. Therefore, it is very unlikely that any unexploded ordnance (UXO) would be encountered within the Pleasant Creek EMP site. However, if any portion of the EMP does contain OE hazards, the round should lie very near the surface.
- Other significant HTRW environmental hazards in the ASR are: proof programs, weapons storage facilities, ordnance manufacturing facilities, some chemical warfare (mustard filled shell) storage pits, burning and demolition grounds, ordnance dumps and burial sites, and small arms training ranges. None of these hazards appear to influence the risk of HTRW contamination on the Pleasant Creek EMP site.

Environmental Baseline Survey (EBS)

- The Savanna Army Depot is a large-quantity generator, hazardous waste treatment facility, hazardous waste storage facility, and hazardous waste transport with RCRA interim status. No disposal of hazardous waste occurs on the installation. The closest facilities are four Hazardous Waste Storage units (EBS sites 62-65) and a Small Arms Range (EBS site 32). Because these sites are across the river from the Pleasant Creek EMP, they most likely do not add to any HTRW risk.
- Under CERCLA, a Preliminary Assessment of hazardous materials on the depot was performed in January 1984. The depot was listed on the final National Priority List in October 1984 with a Hazard Ranking System score of 42.2.
- Several other HTRW features include landfills, USTs and LUSTs, a wastewater treatment plant, several sanitary septic tanks and leach fields, fire training facilities, and contamination from various base services (garages, hospital, offices, etc). The EBS also identified many base service events resulting in HTRW contamination: PCB spills from large transformers, gasoline spills, hydraulic fluid spills, herbicide and pesticide spills and burial, departmental chemical storage, battery storage and maintenance, and railroad tie storage. For many of the features listed above, the level of HTRW risk is still unknown. Although none of these features reside within or adjacent to the

Pleasant Creek EMP, they may affect future U.S. Army Corps of Engineering projects in this area.

f. **Summary.** A review of the data for the EMP site indicates a strong potential for HTRW contamination within the project area. De minimus pesticide and herbicide contamination onsite and on neighboring agricultural fields and bottomland forests may exist, but is not considered a problem for any EMP features involving construction with local soil. Although there is significant RCRA, LUST, landfill, and chemical contamination present on the other side of the Mississippi River, it is too distant to effect any EMP features. However, due to Savanna Army Depot activities in the early 20th Century, a strong possibility of UXO exists within a small portion of the Pleasant Creek EMP project area. Despite the unlikely chance of UXO existing in this area, the threat is sufficient enough to warrant a change in EMP features in this area that would involve digging or heavy equipment.

6. RECORDS REVIEW

Appendix 2 contains the list of documents and records reviewed or referred in this report.

7. SUMMARY OF POTENTIAL HTRW SOURCES

Only one significant source of HTRW contamination was located within the EMP site plan construction limits at the time of this investigation. This does not preclude the idea that more HTRW contamination may exist within or surrounding the plan's boundaries. No environmental site assessment can absolutely eliminate uncertainty regarding the potential for recognized environmental conditions on a property. Unreported releases or storage of HTRW contamination may exist, but such information is doubtfully reasonably ascertainable or practically reviewable. For example, the EMP is located in a waterway with a noteworthy amount of upstream industrial activity. Unknown releases of hazardous constituents may contribute to isolated sediment contamination.

8. RECOMMENDATIONS

A serious, however unlikely, risk exists for encountering HTRW contaminants within and adjacent to the EMP site plan. Specifically, UXO may exist on a small corner of the project area. The present level of inquiry is appropriate to operation scale and revealed all recognizable environmental conditions. Some de minimis negative environmental conditions such as potential low level contamination from agricultural activities may exist. Because of the potential for UXO, further site investigation, such as UXO surface and subsurface surveys, or significant changes in EMP features is recommended. Until the potential for UXO is quantified, an ordnance avoidance zone should be implemented (see plate 4, Appendix 8) to meet the U.S. Corps of Engineers policy of HTRW avoidance. Relevant U.S. Corps of Engineers departments, the U.S. Fish and Wildlife Service (owner), and any other entity affected by the UXO needs to be contacted regarding this risk.

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APPENDIX 1
ACRONYMS

AIRS/AFS	Aerometric Information Retrieval System/AIRS Facility Subsystem
ASTM	American Society for Testing and Materials
BRAC	Base Closure and Realignment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
EMP	Environmental Management Program
DOD	Department of Defense
EMCI	Envirofacts Master Chemical Integrator
FII	Facility Identification Initiative
GICS	Grants Information and Control System
HDR	HTRW Documentation Report
HTRW	Hazardous, Toxic, and Radioactive Waste
ILEPA	Illinois Environmental Protection Agency
MSMU	Moist Soil Management Unit
LUST	Leaky Underground Storage Tanks
OE	Ordnance and Explosives
OSIT	On-Site Inspection Team
PCS	Permit Compliance System
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RDBMS	Oracle Relational Database Management System
RM	River Mile
SDWIS	Safe Drinking Water Information System
SEIDS	Site Environmental Information Data System List
SRP	Site Remediation Programs
SSHP	Site Specific Safety and Health Plan
TRIS	Toxic Release Inventory System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UXO	Unexploded Ordnance

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APPENDIX 2
REFERENCES AND ABSTRACTS

- ASTM E 1527-97, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.
- ASTM E 1528-98, Standard Practice for Environmental Site Assessments: Transaction Screen Process.
- U.S. Army Corps of Engineers, EM 385-1-1, Safety and Health Requirements Manual, 3 September 1996.
- U.S. Army Corps of Engineers, Rock Island District, ER 1165-2-1, Hazardous, Toxic, and Radioactive Wastes Guidance for Civil Works Projects, 26 June 1992
- U.S. Army Corps of Engineers, Policy Guidance Letter No. 34, CECW-PA, Non-CERCLA Regulated Contaminated Materials at Civil Works Projects, 5 May 1992.
- U.S. Army Corps of Engineers, ER 385-1-92, Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) and Ordnance and Explosive Waste (OEW) Activities, 18 March 1994.
- U.S. Army Corps of Engineers, ER 405-1-12, Real Estate Handbook, Chapter 8.
- U.S. Army Corps of Engineers, Archives Search Report Findings for Savanna Army Depot Activity, September 1997.
- U.S. Army Corps of Engineers, Archives Search Report Conclusions and Recommendations for Savanna Army Depot Activity, September 1997.
- U.S. Army Environmental Center, Environmental Baseline Survey (EBS), Savanna Army Depot Activity, Savanna, IL, October 1996.
- U.S. Fish and Wildlife Service, RF 32570-18, Upper Mississippi River National Wildlife and Fish Refuge: Pool 13 Map, 1992.
- U.S. Army Corps of Engineers, Rock Island District, Upper Mississippi River Ortho Photos, Pool 13, Sheet Nos. 551L1X-552CXX, 1995.

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APPENDIX 3
SITE SPECIFIC SAFETY AND HEALTH PLAN (SSHP)

A formal Site Specific Safety and Health Plan (SSHP) was not prepared for this investigation. Investigators followed all generic requirements of U.S. Army Corps of Engineer's Safety and Health Requirements Manual (EM 385-1-1).

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APPENDIX 4
USEPA DATABASE

EPA Geographic Information Query System (Version 97.1.8), June 23, 1999.
EPA Envirofacts Facility Databases Information.
Databases accessed via <http://www.epa.gov/r10earth/gisapps/zipsearch.html> and
<http://www.epa.gov/r10earth/gisapps/mapseries.html>.

Search Description:

Title: Pleasant Creek Wildlife Rehabilitation Area
Sub-title: Pool 13, Upper Mississippi River, Jackson County, IA
Requested Databases: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); Resource Conservation and Recovery Information System (RCRIS); Toxic Release Inventory (TRIS); Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS)/AIRS Facility Subsystem (AFS) Program System Database.

Results:

According to the Envirofacts query results, within a five-mile radius of the proposed site: two facilities had reported air releases (AIRS/AFS) and one facility is an active hazardous waste handler (RCRIS).

The remainder of this appendix contains a table, which summarizes the Envirofacts query, as well a plot that provides a computer representation of the query.

EPA Program	Program ID	Facility UIN	Facility Name	Facility Address
AFS/AIRS	IL0913178	ILD984816538	Metform Corp. Hot Formed Prods.	7024 IL RTE. 84, Savanna, IL 61074
AFS/AIRS	IL0817511	ILD984882514	Savanna City Hospital	North Fourth St., Savanna, IL 61074
RCRIS	IL3210020803	IL3213820803	Savanna Army Depot Activity	Highway 84N, Savanna, IL 61074

Table 1. USEPA Envirofacts Query Results.

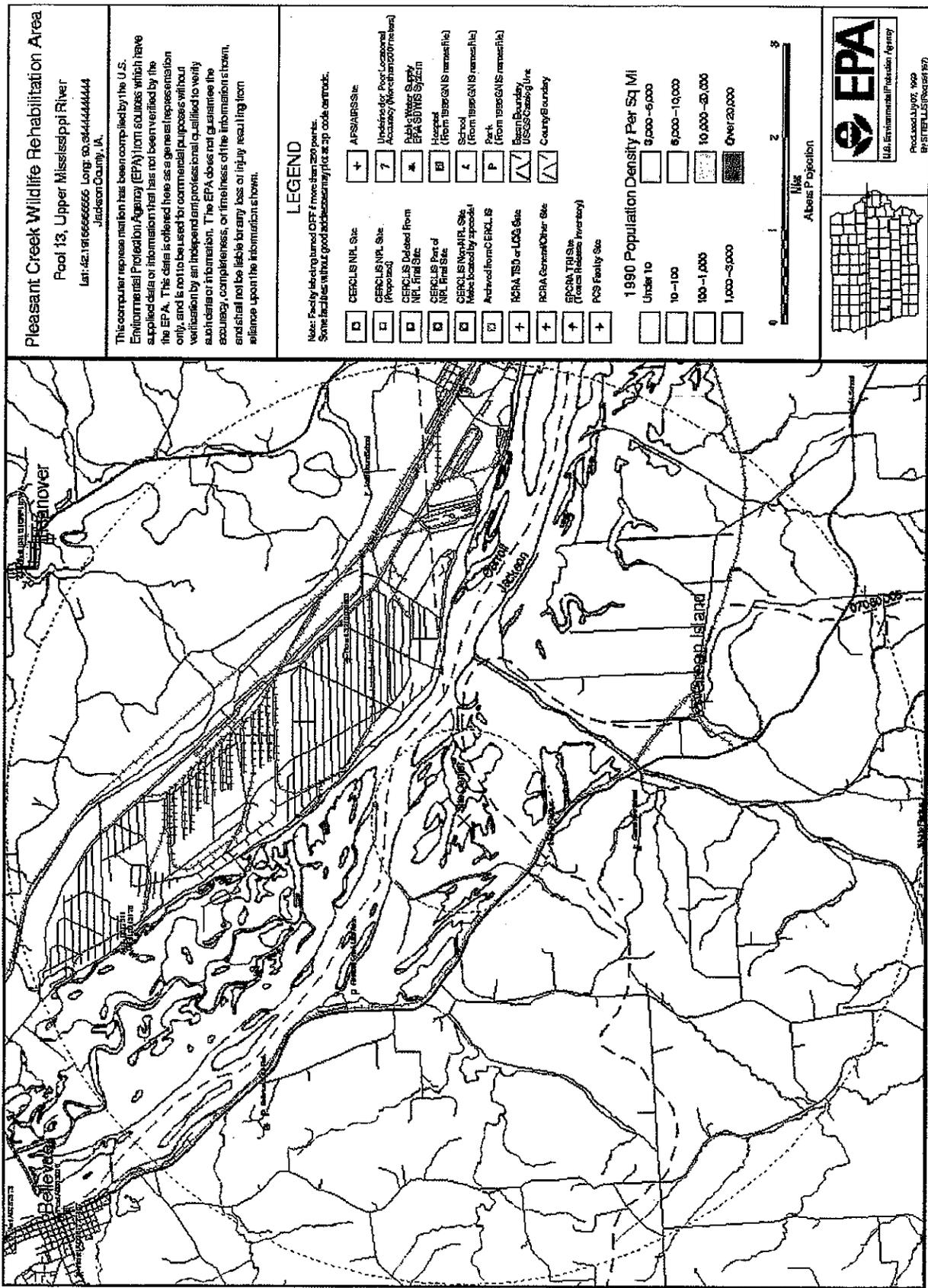


Figure 1. USEPA Results for Pleasant Creek

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APPENDIX 5
 ILLINOIS EPA DATABASES

1. **Illinois Environmental Protection Agency (ILEPA)**
Site Environmental Information Data System (SEIDS),
Database Accessed via <http://www.epa.state.il.us/land/seids>.

Search Description:

Selection Type: Select the County that contains the site.
 Selected: Carroll and Jo Daviess Counties.
 Requested Databases: Site Remediation Program (SRP), Department of Defense (DOD), Leaking Underground Storage Tanks (LUST), Resource Conservation and Recovery Act (RCRA), and Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites.

Results:

The query revealed that two RCRA sites, two SRP sites, one DOD site, and one LUST site were located near Savanna, Carroll County, Illinois. Only the Savanna Army Depot, a LUST and DOD site, resides near the project area.

Illinois Site ID	Facilty Name	Faculty Address	LUST	CERCLIS	DOD	SRP	RCRA
0150255029	Savanna Park Partners	251 South 4th St				X	
0158100002	Savanna Army Depot Activity	Hwy 84 North	X		X		X
0150250002	GNB	Kempter Road				X	X

Table 2. ILEPA SEIDS Query Results.

2. Illinois Environmental Protection Agency (ILEPA)
Leaking Underground Storage Tank (LUST) List.
Database Accessed via floppy disk copy received in 1997 from ILEPA.

Search Description:

Selection Type: Select the City or County that contains the site.

Selected: Nearby cities from Carroll and Jo Daviess Counties.

Requested Databases: IL LUST List.

Results:

The query revealed that the nearest LUST sites were eight areas located at the Savanna Army Depot and four sites in Hanover, IL. The eight Savanna Army Depot sites are within a one-mile radius of the proposed EMP site. No sites are located within a one-half mile radius of the project.

Illinois County	City	LUST Site Name	Site Address	Incident #	LUST ID No.	1 Mi Near Site?	1/2 Mi. Near Site?
Carroll	Savanna	Savanna Army Depot Activity	Crim Dr.	900502	0158100002	YES	NO
Carroll	Savanna	Savanna Army Depot Activity	HWY. 84 North	902962	0158100002	YES	NO
Carroll	Savanna	Savanna Army Depot Activity	Savanna Army Depot	912738	0158100002	YES	NO
Carroll	Savanna	Savanna Army Depot Activity	BLDG. #114	922225	0158100002	YES	NO
Carroll	Savanna	Savanna Army Depot Activity	Army Depot	901584	0158100002	YES	NO
Carroll	Savanna	Savanna Army Depot	BLDG. #807, Army Depot	913434	0150255016	YES	NO
Carroll	Savanna	Savanna Army Depot	Savanna Army Depot	932103	0150255020	YES	NO
JoDaviess	Savanna	Savanna Army Depot	BLDG. 2215, HWY 84N	971045	0858995002	YES	NO
JoDaviess	Hanover	Adam's Garage	211 Savanna Rd.	942546	0850250004	NO	NO
JoDaviess	Hanover	AT&T	7351 Blackjack Rd.	890216	850255003	NO	NO
JoDaviess	Hanover	Griffin Service	200 Washington	892362	0850255004	NO	NO
JoDaviess	Hanover	Zeal Service Garage	RT. 84	912483	0850255005	NO	NO

Table 3. ILEPA LUST Query Results.

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DOCUMENTATION REPORT (HDR)

APPENDIX 6
MAPS AND PHOTOGRAPHS

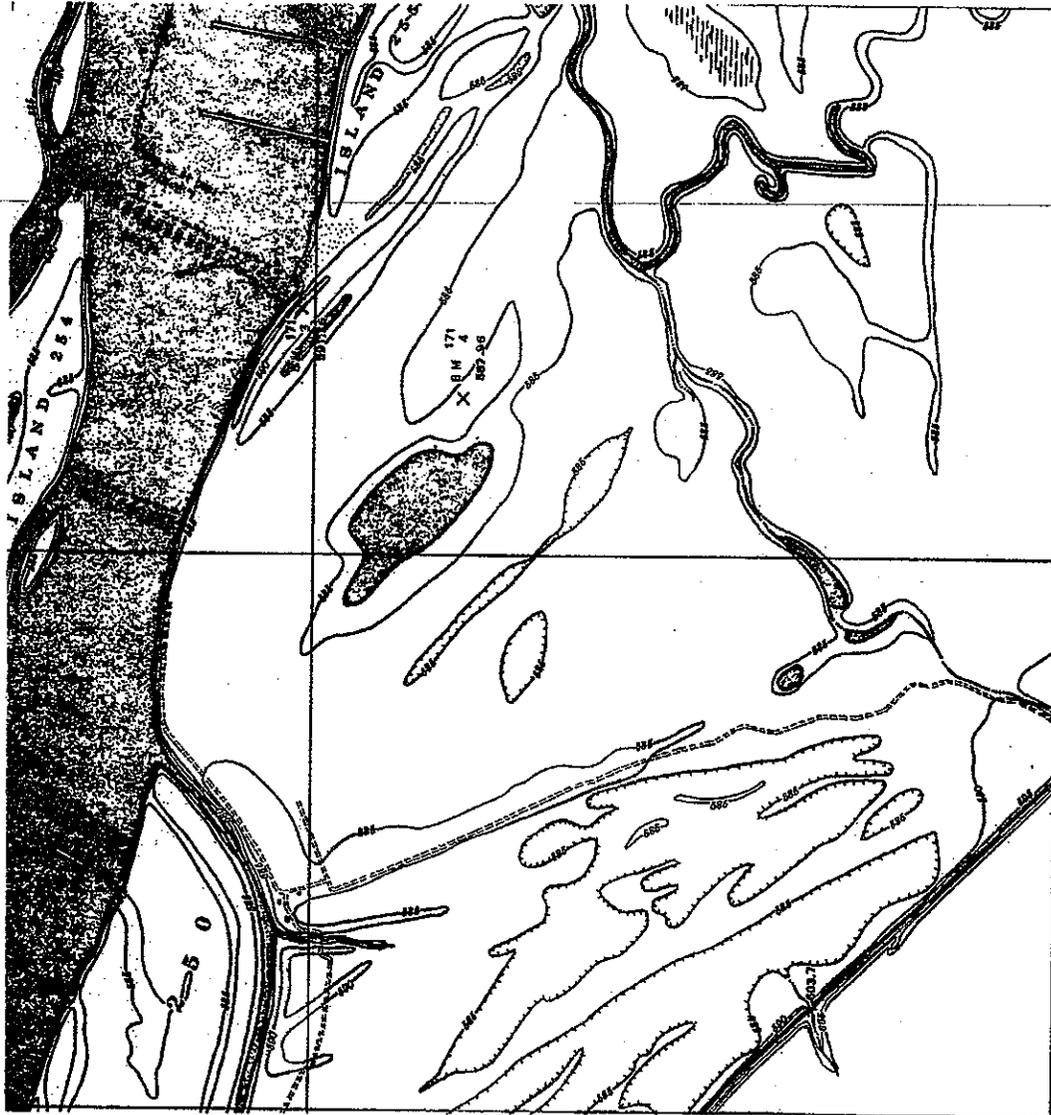


Figure 3. 1930's Brown's Map.

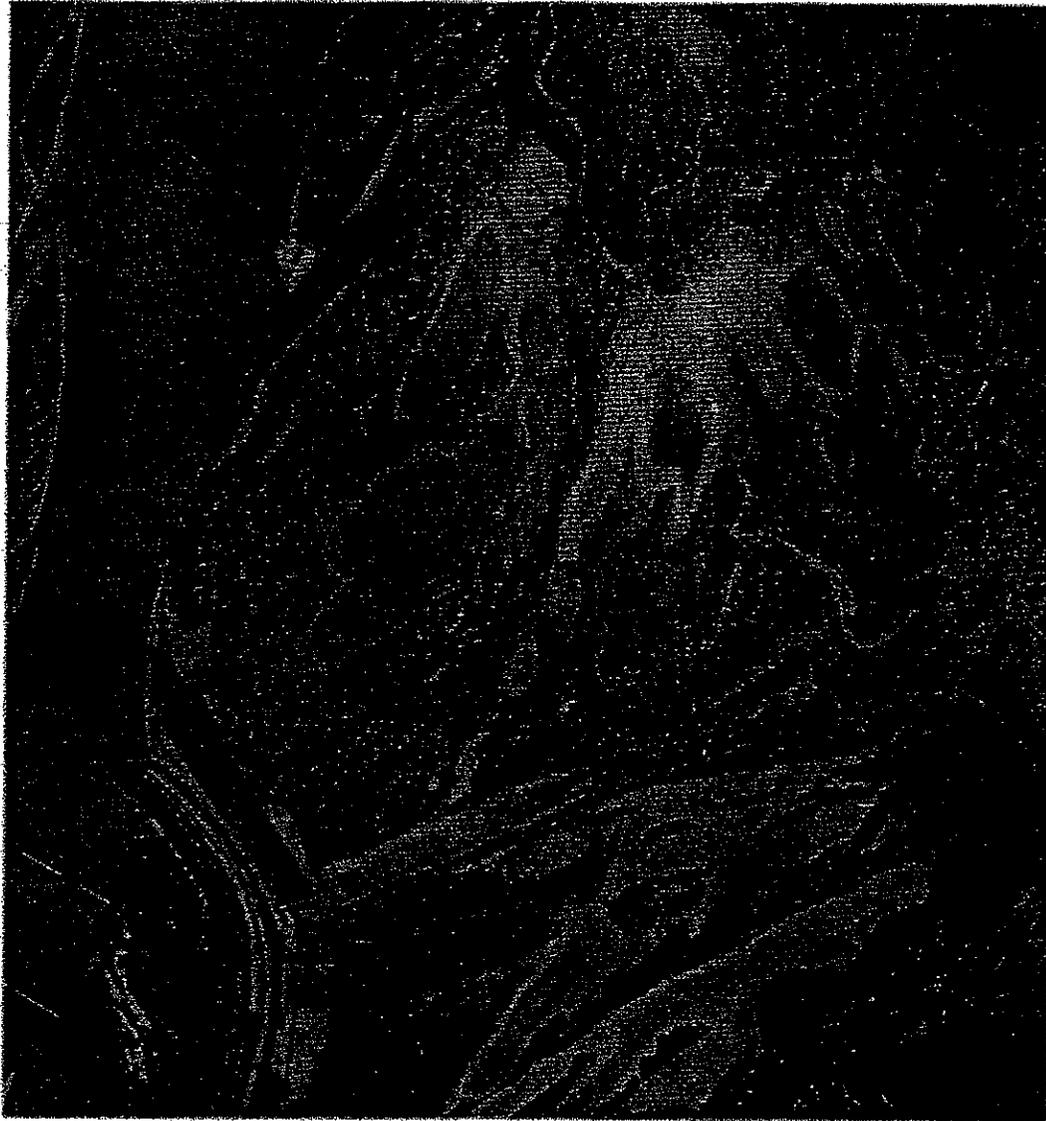


Figure 4. 1930's Brown's Photo.

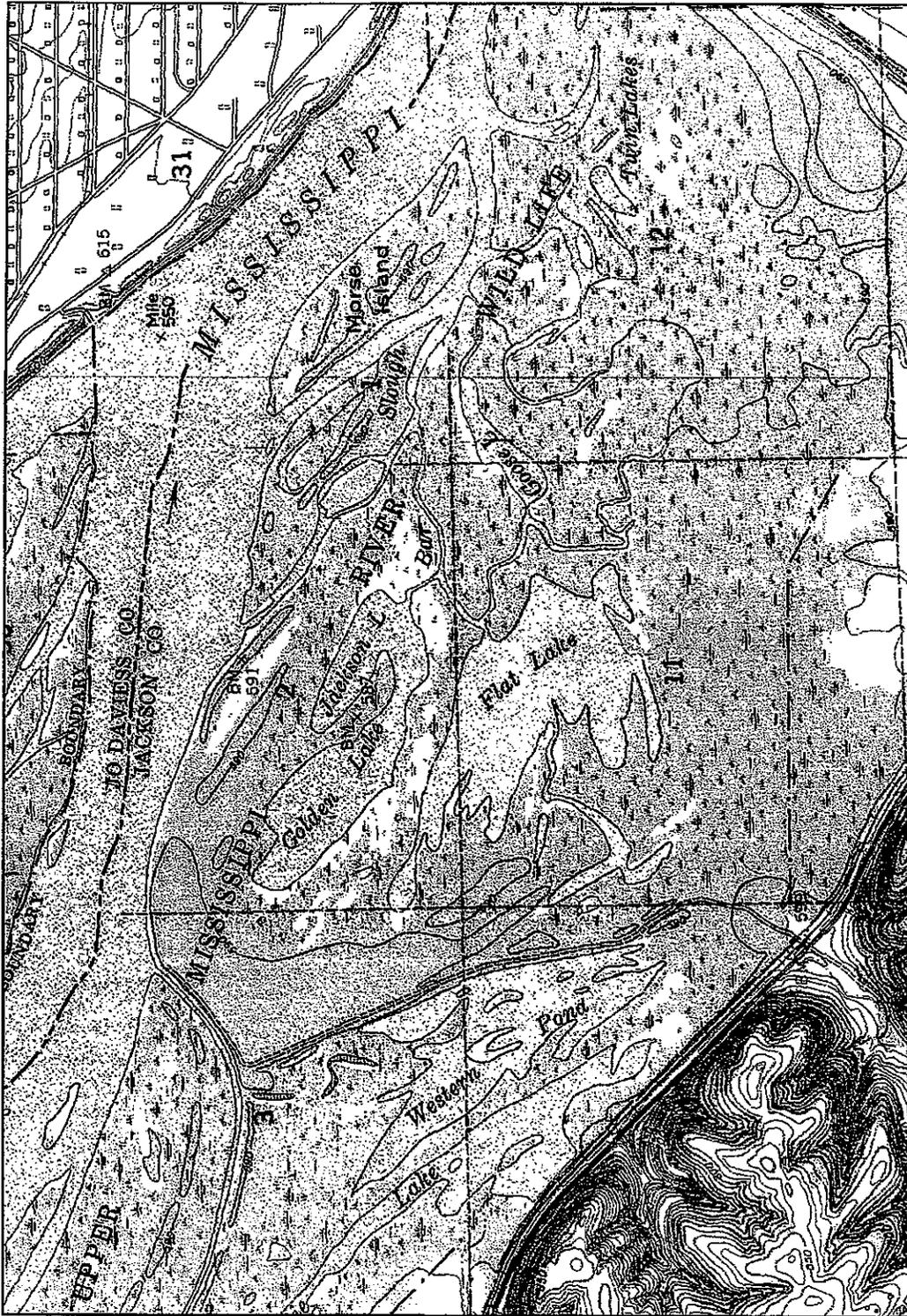


Figure 5. USGS Map.

UPPER MISSISSIPPI RIVER SYSTEM
ENVIRONMENTAL MANAGEMENT PROGRAM
MISSISSIPPI WATERWAY RIVER MILES 548.7-552.8

PLEASANT CREEK WILDLIFE AREA REHABILITATION
POOL 13, UPPER MISSISSIPPI RIVER
JACKSON COUNTY, IOWA

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)
DOCUMENTATION REPORT (HDR)

APPENDIX 7
CONVERSATION RECORDS

CONVERSATION RECORD		TIME 1620	DATE July 16, 1999
TYPE <input type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input checked="" type="checkbox"/> TELEPHONE			ROUTINE
			NAME/SYMBO
			INI
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU John Clarke, BRAC Coordinator		ORGANIZATION (Office, dept., bureau, etc.) Savanna Army Depot	TELEPHONE NO: 815-273-8827
SUBJECT Attached Fax: HTRW information regarding Savanna Army Depot Area			
SUMMARY			

I called Mr. Clarke to ask if he was aware of any Hazardous, Toxic, and Radioactive Waste (HTRW) issues surrounding the Savanna Army Depot. Specifically I asked him if there were any issues of concern for the Pleasant Creek Environmental Management Project (EMP) that Camie Knollenberg (ED-DN) is designing.

Mr. Clarke expressed that he could not give me any assurances that the Army Depot would contribute no further HTRW risk to the Pleasant Creek EMP. He specifically expressed the high possibility of ordnance existing on the Iowa side of the river from the depot, perhaps even around Camie's EMP. He suggested looking into some reports the U.S. Army Corps of Engineers, Rock Island District made for the depot regarding ordnance and HTRW issues.

ACTION REQUIRED

Find USACE Archive Search Report (ASR) on Savanna Army Depot Activity

NAME OF PERSON DOCUMENTING CONVERSATION MIKAEL BROWN, ED-DN	SIGNATURE	DATE July 19, 1999
--	-----------	-----------------------

ACTION TAKEN

Took above action. Found USACE ASR with the Defense Environmental Restoration Program

SIGNATURE	TITLE	DATE
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CONVERSATION RECORD

OPTIONAL FORM 271 (12-76)

UPPER MISSISSIPPI RIVER SYSTEM
ENVIRONMENTAL MANAGEMENT PROGRAM
MISSISSIPPI WATERWAY RIVER MILES 548.7-552.8

PLEASANT CREEK WILDLIFE AREA REHABILITATION
POOL 13, UPPER MISSISSIPPI RIVER
JACKSON COUNTY, IOWA

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)
DOCUMENTATION REPORT (HDR)

APPENDIX 8
PLATES

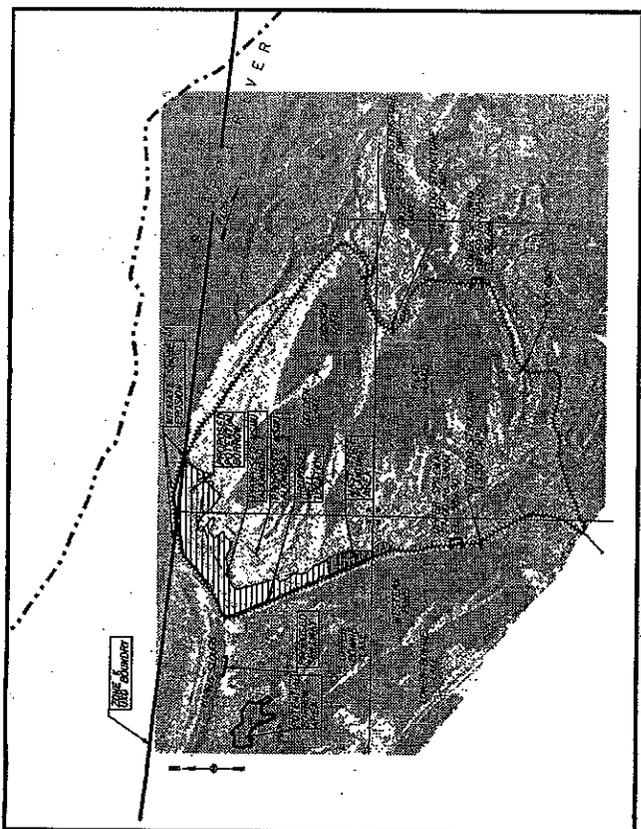
U.S. Army Corps of Engineers
 District Office
 New Orleans, Louisiana

Contract No.	DAAG49-80-0001
Task Order No.	01
Work Order No.	
Project No.	
Revision	

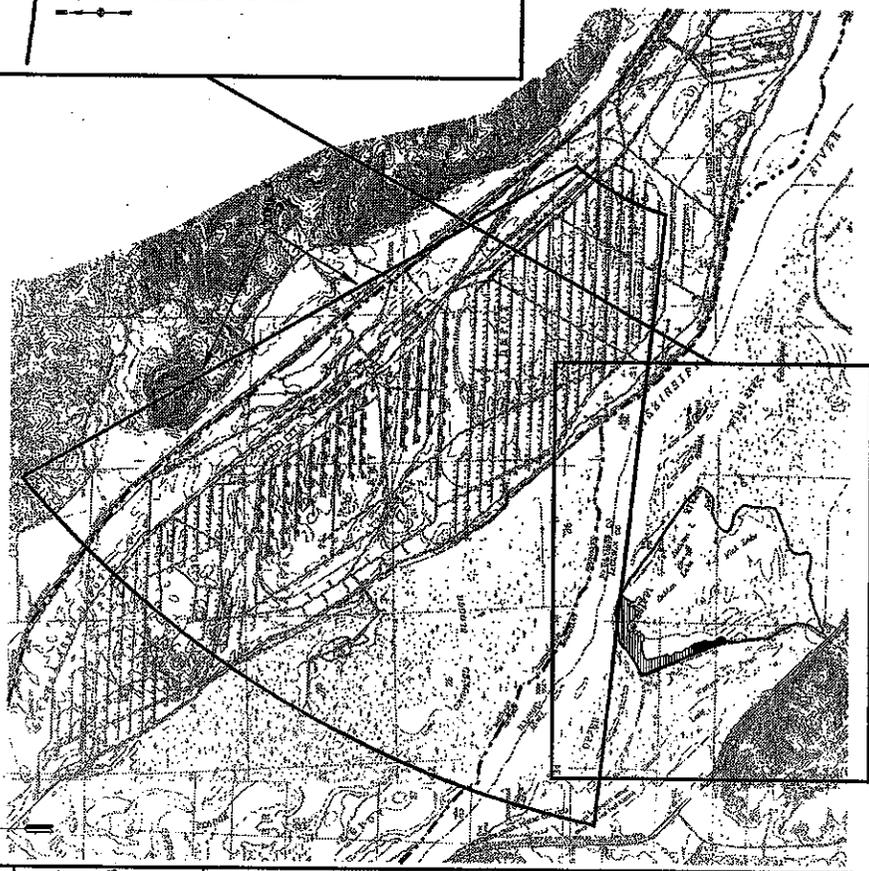
Contract No.	DAAG49-80-0001
Task Order No.	01
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Project No.	
Revision	

ZONE K
 UPPER MISSISSIPPI RIVER
 ENVIRONMENTAL MANAGEMENT PROGRAM
 FLEASING CREEK HABITAT
 REHABILITATION AND ENHANCEMENT

PLATE 1



LEGEND:
 - - - - - PROJECT BOUNDARY
 - - - - - DE PROJECT BOUNDARY
 [Hatched Box] PROPOSED FEATURES ARE THOSE WITH BOXED LABELS
 [Stippled Box] EXISTING FEATURES HAVE UNBOXED LABELS
 [Wavy Line] EXISTING LOW LEVEL DIKE/MAINTENANCE ROAD



U.S. Army Corps of Engineers
 District Office
 New Orleans, Louisiana

DE EVALUATION DE PRESSE

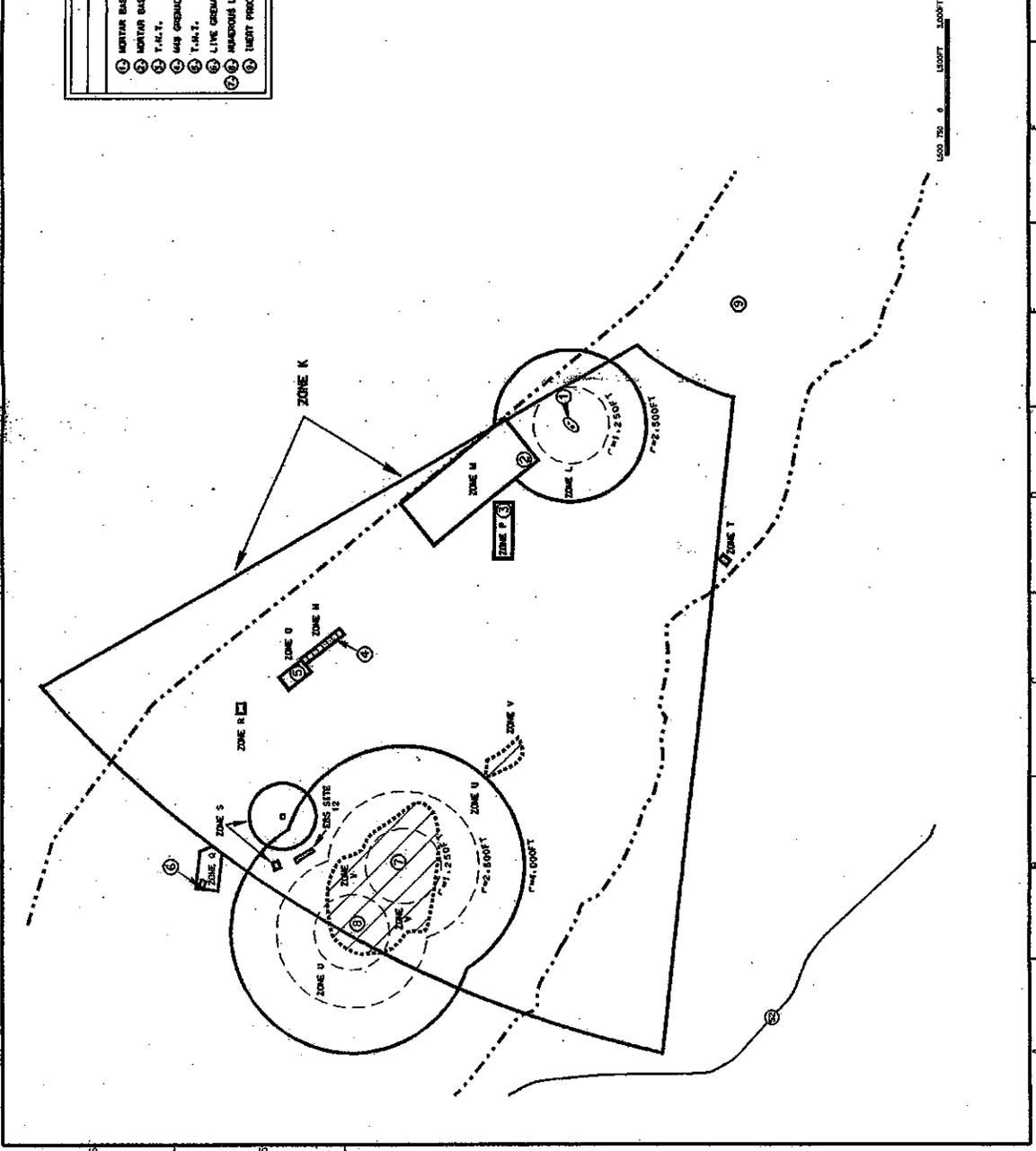
①	MORTAR BASE PLATE, FUSES, SHORT TON SHRAPNEL
②	MORTAR BASE PLATE, GRENADE SPONGES
③	T.M.T.
④	M49 GRENADE CREDITS
⑤	T.M.T.
⑥	LIVE GRENADES
⑦	UNKNOWN LIVE GRENADE
⑧	LIGHT PROOF ROUNDS

LEGEND

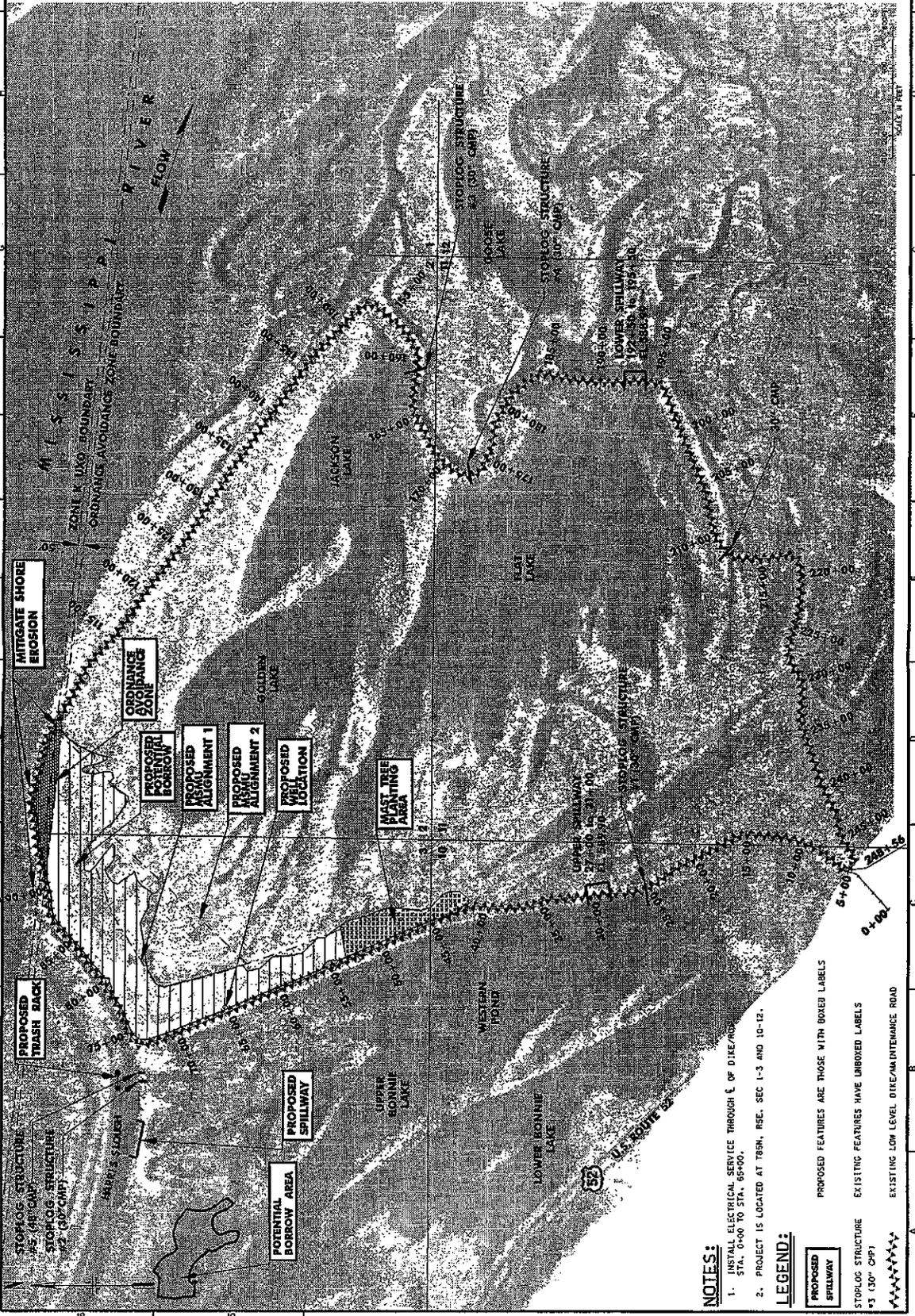
- PROJECT BOUNDARY
- - - DISTANCE INDICATOR
- DE PROJECT BOUNDARY
- SITE 12

NOTES

MESSAGE REPRESENTS DITCH-
 SOILS AND/OR DEBRIS
 NOT IN PROJECT ZONE BOUNDARY
 AND / OR TOTAL OF MULTIPLE ZONES
 WITH SAME IDENTIFICATION.



 U.S. Army Corps of Engineers District Office Rock Island, Illinois	SHEET NO. 4 OF 4	PROJECT NO. 65-000 DRAWING NO. 65-000-10-12	DATE: 10 MAY 1969 DRAWN BY: JCS CHECKED BY: JCS DESIGNED BY: JCS APPROVED BY: JCS	ORDNANCE AVOIDANCE ZONE REHABILITATION AND ENHANCEMENT PROJECT AREA ROCK ISLAND, ILLINOIS U.S. ARMY ENGINEER DISTRICT DISTRICT OFFICE ROCK ISLAND, ILLINOIS	PLATE 4
	SHEET NO. 4 OF 4	PROJECT NO. 65-000 DRAWING NO. 65-000-10-12	DATE: 10 MAY 1969 DRAWN BY: JCS CHECKED BY: JCS DESIGNED BY: JCS APPROVED BY: JCS	ORDNANCE AVOIDANCE ZONE REHABILITATION AND ENHANCEMENT PROJECT AREA ROCK ISLAND, ILLINOIS U.S. ARMY ENGINEER DISTRICT DISTRICT OFFICE ROCK ISLAND, ILLINOIS	PLATE 4

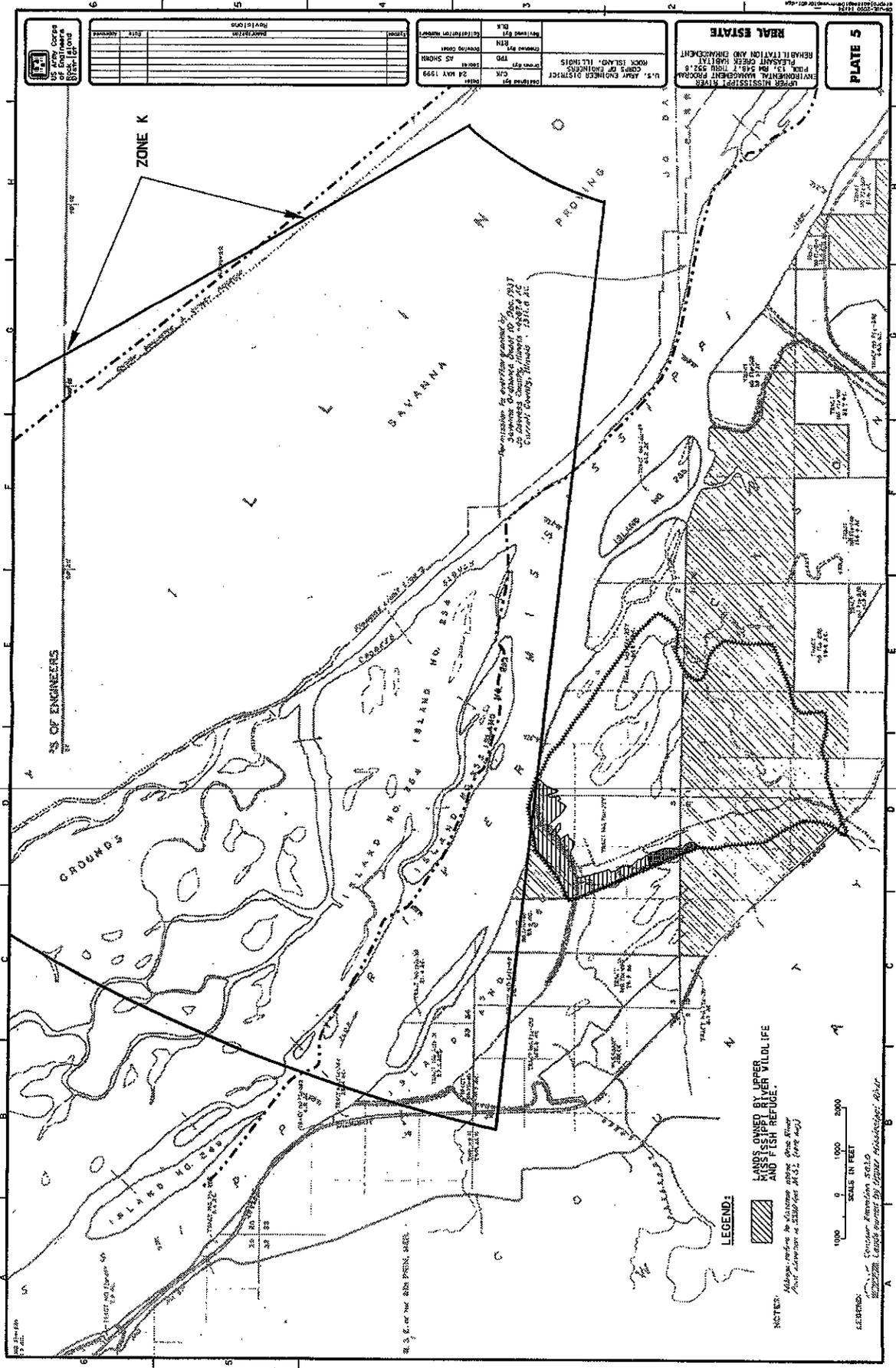


NOTES:

1. INSTALL ELECTRICAL SERVICE THROUGH E OF DIKE/PROJECT AREA, STA. 0+00 TO STA. 65+00.
2. PROJECT IS LOCATED AT TSPM, BSE, SEC 1-3 AND 10-12.

LEGEND:

- PROPOSED SPILLWAY
- STOPLOG STRUCTURE #3 (30" CHP)
- EXISTING LOW LEVEL DIKE/MAINTENANCE ROAD
- PROPOSED FEATURES ARE THOSE WITH BOXED LABELS
- EXISTING FEATURES HAVE UNBOXED LABELS



NO.	DESCRIPTION	DATE

Address No.	
City	
State	
Zip	
Project No.	
Scale	
Date	
Author	
Checked	
Approved	

REAL ESTATE
 UPPER MISSISSIPPI RIVER
 REHABILITATION AND ENHANCEMENT
 PLANNING AND DESIGN
 U.S. ARMY ENGINEERS DISTRICT
 ROCK ISLAND, ILLINOIS
 CONSTRUCTION DIVISION
 24 MAY 1998

PLATE 5

LEGEND:
 [Diagonal Hatching] LANDS OWNED BY UPPER MISSISSIPPI RIVER WILDLIFE AND FISH REFUGE.
 [Cross-hatching] LANDS OWNED BY U.S. ARMY ENGINEERS DISTRICT.

NOTES:
 1. All areas shown on this map are subject to change without notice.
 2. For information, see also the following maps:
 a. U.S. Army Engineers District, Rock Island, Illinois, 1998.
 b. U.S. Army Engineers District, Rock Island, Illinois, 1998.

SCALE IN FEET
 0 1000 2000
 SOURCE: U.S. Army Engineers District, Rock Island, Illinois, 1998.

U.S. OF ENGINEERS
 DISTRICT OF MISSOURI
 ROCK ISLAND, ILLINOIS

ZONE K

SAVANNAH
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PROJING

UPPER MISSISSIPPI RIVER
 REHABILITATION AND ENHANCEMENT
 PLANNING AND DESIGN
 U.S. ARMY ENGINEERS DISTRICT
 ROCK ISLAND, ILLINOIS
 CONSTRUCTION DIVISION
 24 MAY 1998