Interstate 74 Quad Cities Corridor Study

23rd Avenue in Moline, Illinois to 53rd Street in Davenport, Iowa
Rock Island County, Illinois and Scott County, Iowa
Project Number: IM-74-1(122)0-13-82

Final 4(f) Statement

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Note:

The terms “alignment,” “alignment alternative,” and “alternative” are used interchangeably in this 4(f) Statement. In this 4(f) document, their meaning is intended to convey alternatives investigated for their ability to meet the purpose and need, and avoid or minimize impacts to 4(f) resources.

SECTION 1

Applicability of Section 4(f)

This Final Section 4(f) Statement addresses the impacts of the highway improvement alternatives on certain resources eligible for review under Section 4(f) of the 1966 Department of Transportation (DOT) Act.[1] It was developed in coordination with the environmental impact statement because the project evaluation has determined that viable build alternatives would result in some impacts, or the "use" of Section 4(f) resources.

The Section 4(f) legislation as established in 1966 provides protection for publicly owned parks, recreation areas, historic sites, and wildlife or waterfowl refuges from conversion to transportation uses. Section 4(f) states that the Secretary of the U.S. DOT may not approve a project that requires the use of any publicly owned land from a public park, recreation area, wildlife or waterfowl refuge, or historic site of national, state, or local significance unless:

- There is no feasible and prudent alternative to the use of land from the property, and
- The action includes all possible planning to minimize harm to the property resulting from such use (23 CFR 771.135).

Section 6009(c) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109.59, required the U.S. DOT to issue regulations that clarify the factors to be considered and the standards to be applied in determining if alternatives that avoid the use of Section 4(f) property are feasible and prudent. On March 12, 2008, FHWA/FTA published a final rule updating the Section 4(f) regulations. The final rule became effective on April 11, 2008 and modifies the procedures for granting Section 4(f) approvals in a number of ways,[2] including:

- Clarifies the factors to be considered and the standards to apply when determining if an alternative for avoiding the use of a Section 4(f) property is feasible and prudent.
- States that if there are no prudent and feasible avoidance alternatives, only the alternative that causes the least overall harm (in light of 4(f) preservation purposes) and includes all possible planning to minimize harm to 4(f) property may be approved.
- Clarifies the factors to be considered when selecting a least harm alternative and explains that least overall harm is determined by balancing these factors:
    1. The ability to mitigate adverse impacts to each Section 4(f) property
    2. The relative severity of remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each property for Section 4(f) protection
    3. The relative significance of each Section 4(f) property

[1] In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C, Section 303. However, the regulation is more commonly known as "Section 4(f)."

[2] The March 12, 2008 final rule moves the Section 4(f) regulation out of 23 CFR 771.135 to its own place in 23 CFR 774.

4. The views of the officials with jurisdiction over each Section 4(f) property
5. The degree to which each alternative meets the project purpose and need
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)
7. Substantial differences in costs among the alternatives.

This Section 4(f) Statement provides the information required by the Secretary of the U.S. DOT to make the decision regarding the use of properties protected by Section 4(f) legislation under the preferred alternative identified in the I-74 Quad Cities Corridor Study Final Environmental Impact Statement (FEIS).

SECTION 2

Proposed Action

2.1 Project Description

The Iowa and Illinois DOTs, in conjunction with the Federal Highway Administration (FHWA), have undertaken planning and preliminary design studies for the improvement of I-74 in Scott County, Iowa, and Rock Island County, Illinois. The project begins at the I-74 interchange with Avenue of the Cities (23rd Avenue) in Moline, Illinois, and continues across the Mississippi River to one mile north of the I-74 interchange with 53rd Street in Davenport, Iowa (Figure 4(f)-1, *I-74 Iowa-Illinois Corridor Study Location Map*). The proposed improvements consider additional capacity on I-74, an improved Mississippi River crossing, improvements to existing service interchanges, enhancements to the connecting arterial roadway system, and opportunities for improved transit and intermodal connections.

2.2 Project History and Purpose and Need

2.2.1 Project History

Improving the I-74 corridor and the Mississippi River Bridge was a key finding of the *Quad Cities Mississippi River Crossing Major Investment Study* (MIS) (December 1998) conducted by the Iowa and Illinois DOTs. The outcome of the study was a recommendation for a three-point strategy to improve Mississippi River crossings in the Quad Cities, including an improved crossing for I-74. The MIS, and other transportation planning efforts in the Quad Cities stemming from it, have sought to determine ways in which the transportation system could address the growing congestion and mobility problems in the region. Specific recommendations to be incorporated into systemwide transportation improvements in the Quad Cities area include widening of the I-74 corridor, the previously noted construction of a new bridge to carry I-74 over the Mississippi River, transit service improvements, expansion of multi-use trail systems, and transportation system strategies.

2.2.2 Purpose and Need Summary

The purpose of the proposed improvements is to improve capacity, travel reliability, and safety along I-74 between Avenue of the Cities (23rd Avenue) in Moline and 53rd Street in Davenport, and to provide consistency with local land use planning goals.

The need for the proposed improvements to the I-74 corridor is based on a combination of factors related to providing better transportation service and sustaining economic development. In particular, the proposed action is intended to meet the following needs:

- Traffic demand and service
- Improved roadway geometry
- Improved safety considerations
- Improved dependability of travel

- Improved transportation connections
- Improved infrastructure condition
- Support economic development

Current travel performance reflects the combination of the older geometry and condition of the existing facility combined with the high traffic volumes along I-74 in the project corridor. In 2000, I-74 carried 74,000 vehicles per day near the river; in 2002, the number of vehicles per day increased to 77,800. Level of service (LOS) is used as a measure of performance and congestion levels of a highway facility. It is denoted in a range from A (best) to F (worst). Near the river crossing, the mainline of I-74 operated at LOS E in 2000 during the peak hour and continues to operate at LOS E, but near the threshold for LOS F. As a result, motorists in this area experience stop-and-go conditions and backups at interchange ramps. At this level of service, the dependability of travel through the corridor is impaired, resulting in unreliable connections to other modes of transportation in the Quad Cities. As traffic volumes increase over time, these conditions will only worsen.

Notable elements of I-74 study corridor geometry that contribute to the safety concerns include narrow lane and shoulder widths on the river-crossing structures and approaches; a series of reverse curves with tight radii (curves) on the Illinois approach to the river bridge; maximum vertical grades on both the Illinois and Iowa approaches; close interchange spacing; and shorter and steeper taper rates on ramps. Examination of the age and condition of the existing facility reveals that it is deteriorating. Major reconstruction or rehabilitation of the existing bridge may be required within the time period for construction of the proposed improvements.

The Quad Cities have strong ties to manufacturing and agriculture, a good location in the Midwest market, and good access to other modes of travel for moving freight and goods, including rail, air, and barge. Bettendorf and Moline have also invested heavily in developing and redeveloping their downtown areas, through which I-74 runs. Improving the performance of I-74 through the project corridor is not only compatible with local land use plans, it is also important to maintaining and enhancing the economic vitality of the riverfront areas.

Together, these needs form the basis for proposed improvements to the I-74 corridor. The alternatives developed to address these needs are discussed in Section 2 of the I-74 FEIS.

See Section 1 of the FEIS for more detailed information on the purpose of and need for the project.

2.3 Preferred Alternative

Following circulation of the DEIS, the project sponsors—the Iowa and Illinois DOTs, in consultation with the FHWA—identified a preferred alternative in the South, Central, and North sections of the project area. The preferred alternative was then refined based on information learned since publication of the DEIS. As only minor amounts of additional right-of-way would be required in either the South or North sections and no 4(f) properties are located within them, proposed work in those sections is not discussed in this 4(f) document. Only build alternatives and 4(f) impacts associated with the Central Section are

discussed in this 4(f) document. Full description and detail of the entire Preferred Build Alternative can be found in Section 2 of the FEIS.

Alternative F was identified as the preferred mainline alternative through the Central Section. This alignment shifts the mainline 780 feet east from the existing alignment between 7th Avenue in Moline and Kimberly Road in Bettendorf. A new bridge would be constructed over the Mississippi River, angled in a northwest-southeast alignment. In addition to the mainline alternative, the following design variation options were identified:

- In Moline, a split-diamond configuration, known as M1, was identified as the preferred interchange.
- In Bettendorf, a diamond configuration, known as B1, was identified as the preferred interchange.
- The Diagonal Connector was identified as the preferred local roadway design variation along U.S. 67 in downtown Bettendorf.
- The Holmes Street/Mississippi Boulevard underpass option in Bettendorf was identified to carry local traffic under the I-74 corridor.
- A new bicycle/pedestrian trail located on the new I-74 bridge over the Mississippi River was identified.

2.4 Alternatives Considered

A broad array of alternatives was considered to address the transportation needs and objectives defined in Section 1 of the FEIS for the I-74 project. These included both roadway and multimodal improvement strategies. Alternative improvements were considered for the I-74 mainline and six service interchanges between Avenue of the Cities (23rd Avenue) in Moline (south project terminus) and 53rd Street in Davenport (north project terminus), a distance of 7.4 miles.

Alternatives were developed for three different sections of the project area due to the different needs in those areas. (See Figure S-2, *Project Sections*, in the FEIS for a map showing the limits of these sections.) The three sections are:

- South Section (from Avenue of the Cities [23rd Avenue] to 12th Avenue in Moline)
- Central Section (from 12th Avenue in Moline to Lincoln Road in Bettendorf)
- North Section (from Lincoln Road in Bettendorf to 53rd Street in Davenport)

Proposed build alternatives included reconstructing and widening I-74 from Avenue of the Cities (23rd Avenue) in Moline to U.S. 6 in Davenport, realigning I-74 over the Mississippi River and constructing a new improved river crossing structure, and reconstructing I-74 from U.S. 6 to one mile north of 53rd Street in Davenport. Interchange modifications and improvements and associated local roadway improvements were part of the build alternatives as well. Where appropriate, multimodal improvements were incorporated into the build alternatives.

Within the Central Section, the build alternatives retained for detailed study represented the range of reasonable alternatives that best addressed purpose and need. Two principal alignment alternatives, E and F, were developed and considered. Both alignments are situated east of the existing bridge structures. A third alignment alternative, Alignment C, was considered. It represented all potential alignments west of the existing structures. Alignment C was not carried forward as it did not meet the purpose and need and engineering requirements. Therefore, impacts to 4(f) properties that would have been caused by Alternative C are not discussed. However, this alignment was used to demonstrate avoidance alternatives beyond build alternatives E and F.

In addition to the principal alignment alternatives retained for consideration within the Central Section, the following design variations were developed and considered:

- **Interchange design variations in downtown Moline and downtown Bettendorf.** In Moline, a split-diamond configuration (known as M1) was compared to a loop design (M2) (M1 is preferred). In Bettendorf, a diamond configuration (B1) was compared to a single loop design (B2). (B1 is preferred.) These variations are shown in pages 3–4, 6–9, and 11–12 in Appendix B of the DEIS.
- **Local roadway design variations along U.S. 67 in downtown Bettendorf.** Two designs were under consideration to carry U.S. 67 through the interchange area and reconnect it to existing U.S. 67 at each end: a 90-Degree Connector and a Diagonal Connector. (The Diagonal Connecter is preferred.) These variations are shown in pages 13–16 in Appendix B of the DEIS.
- **Underpass connections in Bettendorf.** An underpass was considered at either Kimberly Road or Holmes Street/Mississippi Boulevard to carry local traffic under the I-74 corridor (the Holmes Street/Mississippi Boulevard underpass is preferred). These variations are shown in page 14 in Appendix B of the DEIS.
- **Bicycle/pedestrian crossing variations over the Mississippi River.** The following options were considered: no accommodation, new trail connection along the existing Iowa-bound bridge, or new trail connection along new I-74 bridge (preferred). This option is shown in Figure 2-3, *Typical Proposed Cross Section* in the FEIS.

Generally, the 4(f) properties were located within the path of the mainline of the alignment alternatives. In these cases, the interchange variation chosen would not affect the impact to the 4(f) property. However, one exception where the interchange variations would impact the property differently is the C. I. Josephson House location. These variations are covered in more depth in Section 4 of this Section 4(f) Statement and Section 2 of the FEIS. As a result, with the exception of the C. I. Josephson House, the primary focus of this Section 4(f) Statement is on the impacts of alignment alternatives, not the design variations.

2.4.1 Mainline Alternatives

Build alternatives along mainline I-74 share roadway features, with the exception of the configuration of the I-74 horizontal alignment and location of the new I-74 Mississippi River Bridges (Alignment Alternatives C, E, and F called alternatives in the avoidance section of the document). Although Alignment Alternative C was developed as a representative westerly alignment, it was determined not to be reasonable for further consideration. The mainline

alternatives shown in Figure 4(f)-2, *Mississippi River Crossing Location Options*, are discussed briefly here, and in more detail in Section 5, *Avoidance Alternatives.* See Section 2 of the FEIS for details about the engineering features of the proposed I-74 mainline improvements.

Alignment Alternative C

Alignment C shifts I-74 to the west of the existing alignment. This alignment basically maintains the existing approach roadway geometry and includes a minimal westerly offset from the existing bridges to allow construction staging operations. Alignment C would result in proportionately lower impacts to commercial and residential properties in Moline and Bettendorf than other westerly alignments considered, and would avoid impacts to the Moline Water Treatment Plant and to McManus Park. However, Alignment C would have greater environmental and socioeconomic impacts than Alignment E or F. Further, it could not be built while maintaining traffic and therefore would not be able to meet the project's purpose and need.

Alignment Alternative E

Alignment E shifts the mainline roughly 230 feet east of the existing bridges. This alignment does not eliminate the series of reverse horizontal curves on the Illinois approach to the Mississippi River, however it reduces the sharpness of the curves and it makes them smoother to drive. Alignment E meets the project's purpose and need.

Alignment Alternative F (Preferred)

Alignment F eliminates the reverse curves between 7th Avenue and the Mississippi River on the Illinois approach, resulting in an easterly alignment shift of up to 780 feet from the existing centerline. Alignment F meets the purpose and need for the project and would have impacts similar to Alignment E.

2.4.2 No-Action Alternative

The No-Action Alternative is defined as no new major construction along the I-74 corridor other than short-term restoration work. It serves as a basis for comparison to the build alternatives rather than an actual feasible alternative, as it does not address purpose and need. Section 5 of this Section 4(f) Statement provides more information on the No-Action Alternative.

SECTION 3

Section 4(f) Properties

3.1 Definition of Corridor Study Boundaries

The logical termini of the I-74 Quad Cities Corridor Study were determined to be the Avenue of the Cities (23rd Avenue) in Moline (south project terminus) and 1 mile north of the I-74 interchange with 53rd Street in Davenport (north project terminus). Eastern and western boundaries were also identified for the purposes of looking at potential 4(f) properties. Arsenal Island, which is considered a historic district, was determined to be the westernmost point of the study area. Manufacturing sites, as well as the offices for the Rock Island Corps District and the Rock Island Fish & Wildlife Service, are located on the island. Moving the corridor farther west than Arsenal Island would require extensive out–of-distance travel and would not meet the purpose of and need for the proposed action. Therefore, it is not reasonable to consider 4(f) properties or alternatives beyond that boundary.

The eastern boundary extends roughly 1,600 feet from the I-74 roadway and is generally bounded by concentrations of residential neighborhoods and riverfront manufacturing and entertainment areas. Areas beyond this approximate eastern boundary include redevelopment areas for the cities of Moline and Bettendorf. Redevelopment in those areas is being pursued by both public and private entities.

To identify historic properties and recreational properties within the project corridor boundary, record searches were completed along with field investigations. The locations of the 4(f) resources discussed in this document are shown in Appendix 4(f)-1, *4(f) Resources Studied*. Seven 4(f) properties are discussed in depth in this 4(f) statement.

3.2 Methodology for Identifying Section 4(f) Properties within the Project Corridor

3.2.1 Parks and Trails

City land use maps and recreation plans for Davenport and Bettendorf in Iowa and Moline in Illinois were reviewed to determine location and ownership of parks and trails in the project corridor. Park and trail locations and uses were also verified in the field. The importance and role of the park sites and trails were discussed with the agencies with jurisdiction through coordination with the I-74 Project Advisory Committee, the members of which represented the communities governing the recreational facilities.

Five different parks or trails are located within the project area and were evaluated during the development of the DEIS. These recreational areas include the Great River Trail, Bettendorf Riverfront Trail, Duck Creek Parkway, Leach Park, and McManus Park. The first four were not evaluated in-depth in the Draft Section 4(f) Statement because they would be avoided by the proposed alternatives. McManus Park was evaluated in depth in the Draft

Section 4(f) Statement but is not included in this document because the proposed improvements no longer affect the property. In the Draft Section 4(f) Statement a temporary easement would have been required for construction of a retaining wall as part of the Holmes Street underpass variation. However, the alignment has been modified and a retaining wall is no longer needed, nor is any right-of-way required from the park property. As there is no longer an impact to the property, McManus Park is not discussed in this document.

A sixth park, Stevens Square Park, has been identified within the project corridor since the Draft 4(f) Statement was published. Stevens Square Park is located in the northwest quadrant of 7th Avenue and 19th Street in downtown Moline. It was donated to the Moline Parks Department, which currently owns the property. The property contains park benches and picnic tables, but it is not highlighted by the city as a prime recreational facility. It is largely used as an outdoor space for the adjacent Moline Activity and Senior Center.

Improvements are proposed for the 7th Avenue/19th Street intersection but do not require right-of-way from the park. The park is expected to remain available for use by the public and users of the Moline Activity and Senior Center. Therefore, it is expected that the Stevens Square Park will not be impacted by the proposed action.

3.2.2 Historic and Archaeological Properties

Records Searches and Research on Previously Conducted Field Work

A number of sources were consulted to identify known architectural and archaeological properties. The National Register of Historic Places (NRHP) was reviewed in August 2002 to determine which structures in the project area were listed. The NRHP is the inventory of properties administered by the Secretary of the Interior pursuant to the National Historic Preservation Act of 1966 that have been identified as worthy of preservation. Additionally, governmental and private institutions (such as public libraries, assessor's offices, and recorder's offices) were contacted for additional information regarding the historic nature of the properties in question.

Field Work

Intensive surveys and evaluations of architectural and historical properties within the I-74 Quad Cities Study Area were undertaken from November 2001 through July 2002, and reported in August 2002. The purpose of those studies was to locate, identify, and evaluate architectural and historical resources within the project corridor and to determine the impact that the proposed project would have on historic properties.

In Moline, 5 of 48 buildings investigated within the area potentially affected by the proposed project were found to be eligible for the NRHP. In Bettendorf, of 147 buildings investigated, 2 were determined to be eligible for the NRHP.

One archaeological site, located in Iowa, contained prehistoric artifacts, but none was intact, and there was no sign of cultural artifacts of historical significance. Therefore, the site was determined to be ineligible for the NRHP. No archaeological sites were found in Illinois.

Coordination with State Historic Preservation Officers

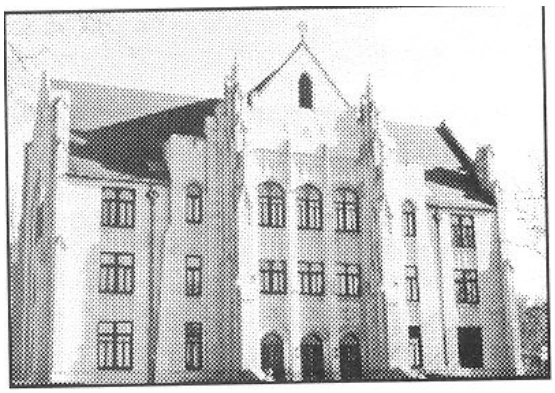
The results of the fieldwork and research were transmitted by each state DOT to their respective State Historic Preservation Officer (SHPO). More information about coordination with the SHPOs can be found in Section 8, *Coordination,* Appendix 4(f)-5, and Appendix 4(f)-6 of this 4(f) Statement.

3.3 Historic Properties Potentially Affected by Proposed Improvements

Appendix 4(f)-1 of this 4(f) document contains documentation for the following properties.

Scottish Rite Cathedral (Eligible)

The cathedral, located near the southbound I-74 on-ramp at 1800 17th Avenue, was built in 1930 at a cost of $450,000 for the Village of Moline Scottish Rite Masonry. It was designed by architect William H. Schulzke and is a well-preserved example of Gothic Revival architecture. The cathedral hall has large art glass windows and a pipe organ; its seating capacity is 1,260. The cathedral is eligible for the NRHP and has been designated a Local Historic Landmark. It is owned by the Scottish Rite Cathedral Association and is still used as a meeting location for the Masons. It should be noted that part of the cathedral's parking lot potentially affected by the project was not part of the original property on which the cathedral sits. It was acquired during the 1970s.



Scottish Rite Cathedral

C. I. Josephson House (Eligible)

The C. I. Josephson House, located at 1925 6th Avenue in Moline, is used as a residence. It is a well-preserved example of the Queen Anne architectural style in that part of Moline. It has a round turret on the southeast corner, a wraparound porch with ¾-height Tuscan columns, and a hip roof with lower cross-gabled ells. The original siding and some original windows, among other Queen Anne decorative details, are still present on the existing structure. As a result of its well-preserved Queen Anne style architecture, it is considered eligible for the NHRP.



C. I. Josephson House

Knights of Pythias Lodge Hall (Eligible)



Knights of Pythias Lodge Hall

The Knights of Pythias Lodge Hall, located at 2011 6th Avenue in Moline and currently converted to apartments and used for housing, portrays the qualities of an early twentieth century multiple family dwelling and the styles of Prairie and Craftsman architecture. It has a large hipped roof with a central hipped dormer on the front roof slope. Also of note are the many original Craftsman-type multi-pane over single pane double-hung windows, and the almost full-width open front porch with square half-height posts built on top of stucco-clad piers and skirt. In a previous survey of architecture in Moline, the building was emphasized as noteworthy. This survey specifically cites the fact that it is a well-preserved early twentieth century building. It is considered eligible for the NRHP because of its architectural significance.

Eagle Signal Building (Eligible)



Eagle Signal Building

Home of Spiegel Moving and Storage and located at 202 20th Street in Moline, the Eagle Signal Building is one of the few remaining factory buildings representative of twentieth century manufacturing structures that maintains much of its integrity. It is an example of the utilitarian industrial building design, especially the large windows on all four sides of the building indicating the need for natural light to illuminate factory operations. Its location next to the Quad Cities Convention and Visitors Center provides an in situ representation of the history of the railroad in the City of Moline for visitors to view. Since it is one of few remaining examples of early twentieth century industrial buildings and has retained its integrity, the Eagle Signal Building is considered eligible for the NRHP.

Davenport, Rock Island and Northwestern Railroad Depot (Eligible)



Davenport, Rock Island and Northwestern Railroad Depot

The Depot, located at 2021 River Drive in Moline, is occupied by the Quad Cities Convention and Visitors Bureau. It has been determined to be eligible for the NRHP and has been designated by the City of Moline as a Local Historic Landmark. It was built at the turn of last century and has a brick veneer in the Revival and the Prairie School styles. It has a raised parapet with an ornate clock

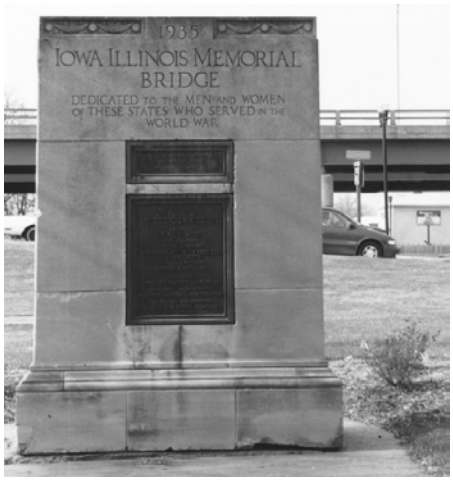
on the front gable adding a European edge to the design. Other features include the clay tile hipped roof and brick chimney constructed out of the roof apex. It is the last of Moline's train depots, though it has not functioned as a depot since passenger train service was discontinued in 1934.

Iowa-Illinois Memorial Bridge (Eligible) and Iowa-Illinois Memorial Bridge Monument (Contributing Element)

The Iowa-Illinois Memorial Bridge is a three-span, twisted-wire-strand steel cable suspension bridge that carries I-74 over the Mississippi River between Bettendorf, Iowa, and Moline, Illinois. It has six Warren stiffening trusses and six 22-foot deck truss approach spans. The total length of the bridge and approaches is 5,505 feet. The bridge was designed by Ralph Modjeski, a well-known and revered American bridge builder. The bridge opened on November 18, 1935. It was originally dedicated to American World War I veterans of Iowa and Illinois but subsequently came to memorialize veterans of following wars.



Iowa-Illinois Memorial Bridge



Iowa-Illinois Memorial Bridge Monument

The Iowa-Illinois Memorial Bridge Monument was placed at the foot of the bridge on the Iowa side to commemorate this dedication. "1935/Iowa Illinois Memorial Bridge/Dedicated to the Men and Women of these States who Served in the World War" is engraved on this large dressed stone monument. Originally, it was located on the west side of the bridge, but once the second bridge was built in 1959 to accommodate the increase in traffic, the monument was positioned in between the two bridges. Finally, it was relocated to the east of the bridges in the Bill Glynn Memorial Park after the bridge approaches and ramps were reconstructed in the 1970s to fit into the new interstate system. The monument was erected when the Iowa-Illinois Memorial Bridge was constructed. Because it has been moved twice previously, its current location has no historic significance. It is considered a contributing factor to the historic Iowa-Illinois Memorial Bridge, but the monument alone is not eligible for the NRHP.

The Iowa-bound I-74 Mississippi River bridge has been determined eligible for the NRHP because it is associated with a significant event—the most important federal works project in Iowa—and has a distinctive architectural characteristic and technological importance. The Illinois-bound bridge does not meet the age or the significance threshold to be identified as a historically important structure regardless of its age.

Iowana Farms Milk Company (Eligible)



Iowana Farms Milk Company

The Iowana Farms Milk Company, which is located at 1416 State Street/312 15th Street in Bettendorf, houses Knox Corporation and Interstate Brands. It was built during the time that the architectural styles Art Moderne and Art Deco were popular. The Iowana Farms Milk Company still retains the Art Deco decorative style with sufficient integrity to be considered eligible for the NRHP. Furthermore, its significance increases when consideration is given to the fact that it not only has remained standing while other businesses critical to the creation of Bettendorf as a city have been torn down, but it is also one of the only remaining buildings that once housed a successful business not owned by The Bettendorf Company.

TABLE 4(f)-1
Applicability of 4(f) to Properties in the Study Area

Property	Type of Property / Notes	Does 4(f) Apply?	Use of the 4(f) Property?*
Illinois Properties			
Scottish Rite Cathedral	Building. Eligible for NRHP.	Yes	Yes
C. I. Josephson House	Building. Eligible for NRHP.	Yes	Yes
Knights of Pythias Lodge Hall	Building. Eligible for NRHP.	Yes	Yes
Eagle Signal Building	Building. Eligible for NRHP.	Yes	Yes
Davenport, Rock Island, and Northwestern Railroad Depot	Building. Eligible for NRHP.	Yes	Yes
Iowa Properties			
Iowa-Illinois Memorial Bridge and Monument (currently located in Bill Glynn Memorial Park)	Bridge. Eligible for NRHP.	Yes	Yes
	Monument. Contributing factor for historic status of the bridge.		No
Iowana Farms Milk Company	Building. Eligible for NRHP.	Yes	Yes

* Impacts are calculated only by alternatives carried forward: Alternatives E and F.

SECTION 4

Impacts to 4(f) Properties

The 4(f) properties discussed in this section may be affected by the mainline, sideroad, or interchange variations of the alternatives carried forward—Alternatives E and F (Preferred Alternative).

The maps in Appendix 4(f)-2 show the locations of the properties potentially affected by the proposed project. Table 4(f)-2, *Location of Properties Potentially Affected by Proposed Improvements*, is an index to the maps in that appendix. Tables 4(f)-3*, Potential Impacts to 4(f) Properties in Moline,* and 4(f)-4*Potential Impacts to 4(f) Properties in Bettendorf*, provide shortened descriptions of the impacts to the 4(f) properties. Table 4(f)-3, *Potential Impacts to 4(f) Properties in Moline*, discusses the Moline properties, while Table 4(f)-4, *Potential Impacts to 4(f) Properties in Bettendorf*, discusses the Bettendorf properties. Appendix B of the FEIS (Aerial Photo Exhibit) shows the impacts of the alignments and interchange variations on an aerial photo base. Appendix 4(f)-2 of this document shows the effects for each potentially affected property.

TABLE 4(f)-2
Locations of Properties Potentially Affected by Proposed Improvements

Property	Location in Appendix 4(f)-2
Scottish Rite Cathedral	page 1
C. I. Josephson House	pages 2 & 3
Knights of Pythias Lodge Hall	pages 2 & 3
Eagle Signal Building	pages 4 & 5
Davenport, Rock Island, and Northwestern Railroad Depot	pages 4 & 5
Iowa-Illinois Memorial Bridge Monument	page 6
Iowana Farms Milk Company	page 6

Depending on the alignment and design variations, as many as seven 4(f) properties could be impacted by the project. The alignment alternatives and interchange variations result in the same impact to five of the seven properties. The exceptions are at the Eagle Signal Building where alignments E and F impact the property differently and at the C. I. Josephson House where M1 and M2 impact the property differently. A discussion of how each of the properties would be impacted by the proposed alignments and the interchanges associated with each alignment follows.

4.1 Properties Potentially Affected in Illinois

4.1.1 Scottish Rite Cathedral (Eligible for NRHP)

Access to southbound I-74 exists in this area at 7th Avenue. By relocating the southbound access to 19th Street, a more direct connection to I-74 from downtown Moline would be provided. For more discussion on this connection, see Section 5, *Avoidance Alternatives.* The southeastern corner of the Scottish Rite Cathedral property is within the footprint of a southbound entrance ramp at 19th Street in Moline. The ramp is included in all four mainline and interchange combinations. The potential impact would be limited to the property, primarily the parking lots, and would not affect the building directly.

TABLE 4(f)-3
Potential Impacts to 4(f) Properties in Moline, Illinois

	E Alignment	F Alignment (Preferred Alternative)
Scottish Rite Cathedral		
Affected	Yes	Yes
Affected ft^2 (of total)	4,754 (of 108,671)	4,754 (of 108,671)
Affected by interchange variation	M1, M2	M1, M2
Potential use	The southeastern part of the property would be used as a temporary construction easement for a retaining wall.	
C. I. Josephson House		
Affected	Yes, temporary easement only	Yes, temporary easement only
Affected ft^2 (of total)	550 (of 8,255) M1 8,225 (8,255) M2	550 (of 8,255) M1 8,225 (8,255) M2
Affected by interchange variation	M1, M2	M1, M2
Potential use	The eastern part of the property would be required temporarily to install drainage improvements associated with the project (Alignment F with M1). The southeastern part of the building and property would be incorporated into the 6th Ave. exit ramp and widening of 6th Ave. cross section (M2).	
Knights of Pythias Lodge Hall		
Affected	Yes	Yes
Affected ft^2 (of total)	10,964 (10,964)	10,964 (10,964)
Affected by interchange variation	M1, M2	M1, M2
Potential use	The building and property would be permanently incorporated into the mainline and 6th Ave. interchange.	
Eagle Signal Building		
Affected	Yes	No
Affected ft^2 (of total)	25,051 (25,051)	
Affected by interchange variation	M1, M2	
Potential use	The building and property would be incorporated into the mainline.	
Davenport, Rock Island, and Northwestern Railroad Depot		
Affected	Yes	Yes
Affected ft^2 (of total)	37,427 (37,427)	37,427 (37,427)
Affected by interchange variation	M1, M2	M1, M2
Potential use	The building and the eastern part of the property would be incorporated into the River Dr. entrance ramp; the western part of the property would be incorporated into the mainline.	

Note: Impacts are calculated only for the alternatives carried forward.

TABLE 4(f)-4
Potential Impacts to 4(f) Properties in Bettendorf, Iowa

	Iowa-Illinois Memorial Bridge and Monument[a]		Iowana Farms Milk Company	
	E Alignment	**F Alignment**	**E Alignment**	**F Alignment**
Affected:	Yes	Yes	Yes	Yes
Affected ft^2:	N/A	N/A	36,238 (36,238)	36,238 (36,238)
Affected by interchange variation:	N/A	N/A	B1, B2	B1, B2
Potential use:	The bridge would either be removed from the river passage, or it would be affected aesthetically by a new bridge.		The building and property would be incorporated into the Grant St. exit ramp.	

[a]The monument, currently located in Bill Glynn Memorial Park, is a contributing element to the historic bridge. It can be moved to another location.

Through the use of a retaining wall, it may be possible to minimize the impact so no permanent use of the property would be needed. (See discussion in Section 6, *Measures to Minimize Harm*.) If this happens, a temporary easement would be needed for use of the parking lot to accommodate construction of a retaining wall. However, given the grade separation of the retaining wall and the safety concerns and use restrictions associated with the wall, there may still be a permanent transportation use of the property.

Given the proximity of I-74, the proposed ramp would not introduce additional noise or vibration impacts to the Scottish Rite Cathedral. Construction of the proposed retaining wall would not require the use of piling, so construction-related vibration would be limited to the use of earthmoving equipment, which would have little noticeable effect.

4.1.2 C. I. Josephson House (Eligible for NRHP)

The C. I. Josephson House would be affected by both the M1 and M2 interchange variations for both Alternatives E and F. At the time the DEIS was published, the M1 interchange variation did not affect the site, but further design refinement of M1 has resulted in an impact to the property.

Under the M1 variation, the vertical profile of 6th Avenue, which is currently depressed under I-74, will be raised to be level with the surrounding ground to improve drainage. This work will include reconstructing the sidewalk as well as the roadway in front of the C. I. Josephson House. Some or all of the existing stairs connecting the C. I. Josephson front walk to the sidewalk will be eliminated and access to the property will be improved. A temporary easement would be required for earthwork.

Under the M2 variation, the 6th Avenue ramp associated with interchange variation (the loop interchange design) would require displacement of the structure and the transfer of the entire property to transportation use.

4.1.3 Knights of Pythias Lodge Hall (Eligible for NRHP)

All mainline and interchange combinations require the displacement of the structure and transfer of the property to transportation use. Under all four mainline/interchange combinations, the building and property is in the path of the proposed mainline and

southbound exit ramps connecting to 6th Avenue. The proposed relocation of the mainline across the Knights of Pythias Lodge Hall property would improve the curvature of the I-74 alignment in order to improve safety and operational characteristics along I-74, which are elements of the purpose and need.

4.1.4 Eagle Signal Building (Eligible for NRHP)

The Eagle Signal Building would be displaced and the entire property would be incorporated into transportation use by Alignment E, regardless of the interchange variation selected. The entire property, including the building, is located in the path of Alignment E. Alignment F and the two interchange variations associated with it would not affect the Eagle Signal building.

4.1.5 Davenport, Rock Island, and Northwestern Railroad Depot (Eligible for NRHP)

The Davenport, Rock Island, and Northwestern Railroad Depot is within the River Drive interchange of all mainline/interchange alternatives, specifically, where the entrance ramp for River Drive is proposed. Therefore, the entire property would be displaced by all build alternatives, which are designed to improve the curvature of the I-74 alignment.

4.2 Properties Potentially Affected in Iowa

4.2.1 Iowa-Illinois Memorial Bridge (Eligible for NRHP) and Monument (Contributing Element)

Alignment Alternatives E and F would both affect the Iowa-Illinois Memorial Bridge, in either of two different ways depending on the alternative chosen for handling a bicycle/pedestrian crossing of the Mississippi River. One option would convert the Iowa-bound (historic 1935) structure to a bicycle/pedestrian path. The other option would be to provide a bicycle/pedestrian path along the new I-74 bridge, and dismantle the existing historic bridge.

If the historic bridge were to be retained for a bicycle/pedestrian crossing, it might be affected visually by the presence of the new bridge to carry I-74 traffic. It is likely that the new bridge would cast a shadow over the historic bridge. Additionally, protective fencing would be required to enhance safety for bicyclists/pedestrians. Although the approach structures are not historic, modification of the approaches would be required to provide access from the trail system on either side of the Mississippi River.

If a bicycle/pedestrian crossing were provided along the new I-74 bridge, then the existing bridges would be dismantled, as it has been determined that no other transportation use is suitable. In order for the existing bridge to remain in place, U.S. Coast Guard requirements mandate that it be used for a transportation purpose and that it be held in public ownership. (That is, the bridge must be owned and maintained by the cities of Moline and Bettendorf or the counties of Rock Island and Scott counties. See Appendix 4(f)-5, *Correspondence*.)

The Iowa-Illinois Memorial Bridge Monument is considered a contributing element to the historic bridge. The monument is located in Bill Glynn Memorial Park (not a park under 4(f) criteria). All alternatives would affect Bill Glynn Memorial Park and the monument by incorporating the area into the mainline and interchange area. However, since the monument

has been moved twice in its history and it does not currently sit on its original site, relocation of the monument to a new location nearby is considered an acceptable option.

4.2.2 Iowana Farms Milk Company (Eligible for NRHP)

Given its proximity to both the I-74 mainline and the U.S. 67 interchange, the Iowana Farms Milk Company property would be affected by both proposed alignments and interchange variations B1 and B2. The proposed improvements are designed to address the steep grades and lack of storage on the exit ramp, resulting in cars backing up onto the mainline. The new mainline alignments are intended to eliminate the reverse curves on the Illinois side while maintaining traffic during construction. The building would be displaced by the exit ramp connecting to U.S. 67/Grant Street.

SECTION 5

Avoidance Alternatives

The locations of known and potential 4(f) properties were identified early in the project alternatives development process. This early identification allowed the development of alternatives that avoided recreational and historical resources wherever possible. (For a detailed description of the Build and No-Build alternatives and their development process, see Section 2 of the FEIS.)

During the course of developing and screening alternatives, 20 properties within the I-74 study corridor were identified as 4(f) properties. Five additional properties were studied but were determined not to be eligible for the NRHP. Alternative development efforts considered all these properties and attempted to avoid as many as possible. Based on the principle elements of the purpose and need for the project, it was not possible to avoid every 4(f) property with the range of reasonable and representative alternatives carried forward during project development, including alternatives outside of the I-74 corridor. Therefore, no single avoidance alternative avoids all 4(f) sites within this project corridor.

However, by identifying the location of known and potential 4(f) properties, it was possible to develop alternatives that avoided many of those 4(f) properties. Alternatives C, E, and F represent the least use of potential 4(f) properties and other sensitive resources in the corridor (see Section 2.4 of this 4(f) statement and Section 2 of the FEIS). For 4(f) properties that could not be avoided by alternatives C, E, or F, site-specific avoidance alternatives were considered and are discussed in Section 5.4 of this 4(f) Statement. The following sections describe and analyze the range of the four basic sets of avoidance alternatives that have been considered:

- No-Action Alternative
- Alternatives Retaining the I-74 Bridges and Roadway in Their Present Forms
- Build Alternatives: River Crossing Location Options
- Modifications to the Mainline Build Alternatives/Site-Specific Avoidance Alternatives

5.1 No-Action Alternative

The No-Action Alternative is defined as no new major construction along the I-74 corridor. Improvements implemented with the No-Action Alternative would be limited to short-term restoration activities (maintenance improvements) needed to ensure continued bridge and roadway pavement integrity. The design of the existing roadway, including its location, geometric features, and current capacity constraints, would remain unchanged. Some minor operational improvements could be anticipated, such as deployment of a traffic management system for the I-74 Mississippi River bridges, and minor improvements at high volume ramp intersections. It is assumed that committed and planned improvements (as detailed in Iowa DOT and Illinois DOT multiyear programs and in the 2035 LRP) would still be undertaken.

Under the No-Action Alternative, none of the 4(f) properties would be affected, but the alternative would not meet the project purpose and need. This alternative is being carried forward as a comparison to the build alternatives where impacts to 4(f) properties occur.

5.2 Alternatives Retaining the I-74 Bridges and Roadway in Their Present Form

The following broad range of alternatives was considered for their potential to avoid impacts to Section 4(f) resources in the I-74 corridor by retaining the I-74 bridges and roadway in their present form:

- Diversion of I-74 traffic to other area interstate facilities
- Diversion of I-74 traffic to the local road system to accommodate traffic with local destinations
- Transit and transportation system management strategies

These alternatives are discussed below.

5.2.1 Diversion of I-74 Traffic to Other Area Interstate Facilities by Revising Interstate Signing

More than 95 percent of the traffic on the Mississippi River bridges originates or ends in the study area. Therefore, given this high percentage of local traffic and the distance to other interstate facilities (roughly 7 miles to I-280 and 8 miles to I-80), only a small part of the existing traffic (less than 5 percent) would be diverted to adjacent interstate routes. Motorists who remain on I-74 would continue to experience congested conditions, safety issues, and poor travel dependability. Additionally, this alternative would not provide improved transportation connections and would not provide economic sustainability in the project corridor. It would not meet the project purpose and need because it would not improve capacity, travel reliability, or safety along I-74 in the study area. Therefore, it was not recommended for further detailed study.

5.2.2 Diversion of I-74 Traffic to the Local Road System

Diverting traffic to local routes was determined not to be a practical solution, given the high volume of river crossing traffic along I-74, regional travel patterns, and the lack of feasible alternative local road river crossings. Local roadway crossings of the Mississippi River are provided at the Arsenal Bridge (roughly 3 river miles west of I-74) and at the Centennial Bridge (roughly 4 river miles west of I-74). Long-range plans call for construction of a new local road river crossing between Bettendorf and East Moline (Bettendorf-East Moline Bridge, roughly 3 miles east of I-74). Diversion of interstate traffic to adjacent existing or planned local roadway crossings is not feasible because of design and capacity constraints on these river crossing bridges and local roadways, as well as the indirect travel routes that motorists would be required to take. Projected year 2035 traffic along I-74, which accounts for the removal of tolls from the Centennial Bridge in May 2003, has an average daily traffic count of 99,900 vehicles.

This alternative would not meet the purpose and need for the project. It would neither improve capacity or safety along the corridor, nor would it improve the dependability of travel. Therefore, it was not recommended for further detailed study.

5.2.3 Transit and Transportation System Management Strategies

Transit services in the Quad Cities are provided by Bettendorf Transit, the City of Davenport CitiBus, and MetroLINK. Ridership on the region's transit system totaled more than 3.8 million riders in 2004. Projected ridership is estimated to reach more than 6.6 million riders by 2035. With the expected growth in ridership, the *2035 Quad City Area Long Range Transportation Plan* (March 2006) identified maintaining the current level of service as the transit system's top priority. At the same time that the transit ridership is expected to increase on all three facilities, vehicle trips across the Mississippi River in the Quad Cities are forecast to increase from 172,400 (2005 ADT) to 238,700 (2035 ADT) (*2035 Quad City Area Long Range Transportation Plan,* March 2006).

Improving transit facilities was not retained for further consideration as a standalone alternative because it does not address the need to increase the capacity along I-74 or improve safety, operational, or infrastructure conditions. However, transit considerations have been included with proposed roadway alternatives, with the object of accommodating planned transit services and enhancing modal connections.

Several TSM strategies were investigated in previous regional studies. The TSM applications recommended were freeway and incident management systems, traveler information systems, traffic signal systems, and transit system enhancements. Although the TSM applications would improve the efficiency of the transportation system, they would not correct the safety, capacity, and condition deficiencies of the I-74 corridor. The TSM applications noted above should be included as an element of the alternatives to be considered; however, as they would not measurably correct the safety, capacity, and condition deficiencies along I-74, they would not meet the purpose and need for the project.

5.3 Build Alternatives: River Crossing Location Options

Alternative improvements were considered for the I-74 mainline and six service interchanges between Avenue of the Cities (23rd Avenue) in Moline (south project terminus) and 53rd Street in Davenport (north project terminus), a distance of 7.4 miles. Near the Mississippi River, the project corridor boundary extended roughly 1,600 feet to the east and west of the I-74 corridor. This boundary allowed consideration of a broad range of location options for an improved I-74 river crossing. The project corridor boundaries are shown in Appendix 4(f)-1.

A diverse array of alternatives was developed. As presented in Section 2.4, *Alternatives Retained for Detailed Evaluation,* only the Central Section is discussed here as it contains 4(f) properties that are potentially affected.

Location options were explored within a corridor extending from 12th Street (Bettendorf)/ 18th Street (Moline), which are streets that coincide with the Arsenal Island study boundary on the west and roughly 1,600 feet to the east, which is near the Isle of Capri Casino. Given the highly developed urban nature of the area, a broader study area was not deemed

reasonable. Tolerances for easterly and westerly alignment shifts were then tested by developing possible general alignment options and evaluating their potential environmental and community impacts. Alignment options that addressed the purpose and need, met the engineering requirements, and had the least impact to environmental and socioeconomic resources in the project corridor were carried forward with the build alternatives.

Ten Mississippi River crossing location options east and west of the existing river crossing were identified and considered (Alignment Options A through J). The ten options are represented by alignment alternatives C, E, and F. The alignments were revised to refine the design features and minimize the community impacts of the original alignments and carried forward as the best representatives of the original ten alignments. Alignment C is representative of other westerly alignment options (that is, A and B) and was revised to minimize environmental, community, and 4(f) impacts.

Alignment Alternatives C, E, and F are briefly evaluated below. The maps in Appendix 4(f)-1 show the three build alternatives designated as the three "bands" with boundaries from 12th Avenue in Moline northerly to near Lincoln Road in Bettendorf. In addition to the three alternative bands, the maps show important sites in the project corridor that were considered in developing the C, E, and F Alignment Alternatives. For the discussion below, the river crossing alignment alternatives are referred to as alternatives or alternative alignments.

5.3.1 Alternative Alignment C

Alternative C represents the minimum practical westerly alignment shift and was developed to minimize impacts to resources, major developments, and features west of I-74 (existing bluffs south of 7th Avenue, Scottish Rite Cathedral, LeClaire Hotel, Moline Water Treatment Plant, Deere & Co. offices and computer center, Leach Park, McManus Park, and multiple residential properties). Alternative C was determined to be unreasonable following a more detailed evaluation of construction staging requirements and environmental and socioeconomic issues. Specifically, to minimize impacts, Alternative C would cross I-74 at two locations on the Illinois approach.

Analysis of construction staging requirements revealed that it would not be practical to construct Alternative C while maintaining traffic along I-74 because of the elevation difference between existing and proposed profiles and the proximity to the existing structure. As discussed in Section 1, *Purpose of and Need for Action,* of the FEIS, maintenance of traffic during construction is critical to the economic stability of the downtown areas, as roughly 70 percent of traffic on this section of I-74 is destined for one of the two downtown areas.

Further, Alternative C has greater potential environmental and socioeconomic impacts than Alternatives E or F, including greater potential impacts to 4(f) properties and Section 106 properties. The LeClaire Hotel, Leach Park, and McManus Park would be impacted by Alternative C but not by Alternatives E or F. Alternative C would also likely displace the C. I. Josephson House whereas Alternatives E and F provide an opportunity to minimize impacts to the property. Alternative C is representative of the other westerly alignments with regard to land impacts. The I-74 Project Advisory Committee and federal/state regulatory and resource agencies reviewed this recommendation and agreed that Alternative C and any westerly alignment shifts should be eliminated as they were

unreasonable. However, Alternative C is evaluated as an avoidance alternative for Alternatives E and F in the Section 4(f) discussion.

5.3.2 Alternative Alignment E

Alternative E maintains the series of reverse horizontal curves on the Illinois approach to the Mississippi River, but reduces the sharpness of the curves and shifts the new river crossing roughly 230 feet east of the existing bridges. By increasing the horizontal radius (which produces a wider, less dramatic curve) and the tangent distance between the successive curves (increases the length of straight road between the curves so one curve is not immediately followed by another), the curve is smoother to the driver. The proposed alignment diverges from existing I-74 near 7th Avenue, proceeds in a northerly direction across the Mississippi River on a course parallel to and offset 230 feet to the east of the existing bridges. It would connect with the centerline near Kimberly Road in Iowa.

Alternative E impacts one more 4(f) property than Alternative F (Eagle Signal Building), but avoids numerous 4(f) properties, including the LeClaire Hotel, Leach Park, and McManus Park. Alternative E would also improve the horizontal and vertical alignment of I-74 to meet roadway criteria and facilitate construction staging in order to meet purpose and need.

5.3.3 Alternative Alignment F

Alternative F minimizes the reverse curves between 7th Avenue and the Mississippi River on the Illinois approach. The proposed alignment diverges from I-74 near 7th Avenue and proceeds in a northerly direction on tangent alignment across the Mississippi River. This results in an easterly alignment shift of up to roughly 780 feet from existing centerline. The proposed alignment meets the centerline near Kimberly Road in Iowa.

In addition to the avoidance of numerous 4(f) properties, including the LeClaire Hotel and the Eagle Signal Building, and Leach and McManus Parks, Alternative F would also improve the horizontal and vertical alignment of I-74 to meet roadway criteria and facilitate construction staging in order to meet purpose and need.

5.4 Modifications to the Mainline Build Alternatives / Site-Specific Avoidance Alternatives

This section discusses the avoidance options that were considered for the specific 4(f) properties. Avoidance alternatives were considered for each property potentially affected (Table 4(f)-5). The maps in Appendix 4(f)-1 depict the constraints that were considered during alternative development. The maps should be referred to in addition to the site-specific maps found in Appendix 4(f)-2 for a visual understanding of the avoidance alternative discussion. Most of the avoidance discussion focuses on shifts in the I-74 mainline. Where interchange variations made a difference in whether a property could be avoided, they are discussed.

Some avoidance options were determined to be unreasonable, because of performance or their inability to satisfy purpose and need. As noted, both Alternative C and the No-Action are regarded as unreasonable alternatives. They were retained for comparative avoidance options for specific 4(f) properties, but neither would meet the project's purpose and need.

TABLE 4(f)-5
Summary of Avoidance Alternatives for Specific Properties

Property	Avoidance Alternatives	Avoidance Alternative Carried Forward?
Scottish Rite Cathedral	Do not provide access to I-74 at 19th Street.	No
	Shift mainline eastward or westward	No
C. I. Josephson House	Eliminate improvements along 6th Avenue	No
Knights of Pythias Lodge Hall	Shift the mainline eastward or westward	No
Eagle Signal Building	Alignment F avoids the property	Yes
Davenport, Rock Island, and Northwestern Railroad Depot	Shift the mainline eastward or westward	No
Iowa-Illinois Memorial Bridge	Nonroadway improvement alternatives	No
Iowana Farms Milk Company	Eliminate U.S. 67 interchange	No
	Shift mainline eastward or westward	No

5.4.1 Scottish Rite Cathedral

Impacts to the southeastern part of the Scottish Rite Cathedral property would be caused by the redesign of the southbound I-74 entrance ramp at 19th Street. The impact could be avoided if access were not provided to I-74 there; however, this avoidance option would eliminate a current point of access to the interstate. It is not feasible to remove this access from downtown Moline.

It may be possible to avoid impact to the property if the entrance ramp were not relocated to 19th Street; however, keeping the entrance ramp at 7th Avenue would not serve purpose and need because of capacity and safety considerations. Serving as a north-south connector through Moline, 19th Street carries a significant volume of traffic destined for I-74. Traffic on 19th Street destined for I-74 must make a left turn at the 19th Street/7th Avenue intersection and then a right turn at the 7th Avenue/I-74 intersection. By relocating the ramp connection to 19th Street, left turn volumes at the 19th Street/7th Avenue intersection would be reduced (from a projected design hourly volume of 560 to 280), resulting in operational improvements and increased safety.

Because it is the ramp that impacts the property, choosing Alternative C would not change the impact of either Alternative E or F. A westerly shift in the mainline would actually increase impact to the property because the topography in the area would require considerably more grading. This would require the acquisition of more land from the 4(f) property at minimum, and possibly even affect the building in order to shift the mainline from its existing location. A shift in the mainline to the east would displace another 4(f) property—the Thomas/Lewis/Wilson House, require right-of-way from the First Congregational Church, and impact a 0.09-acre wetland and additional residential and commercial properties (see page 1 in Appendix 4(f)-1).

5.4.2 C. I. Josephson House

Impacts to the C. I. Josephson House are not a result of the mainline alignment options but rather interchange variations. In the draft document, variation M1 avoided impact to this property, but since the design has been refined, M1 no longer completely avoids impact to the site. Variation M1 (the preferred option) would require a temporary easement from the C. I. Josephson property for grading (see page 2 of Appendix 4(f)-2), associated with providing adequate drainage along 6th Avenue. Variation M2 would use the entire property as part of the 6th Avenue ramp improvements (see page 3 of Appendix 4(f)-2).

For variation M1, the property could be avoided if the improvements along 6th Avenue were eliminated, but this is unreasonable because appropriate drainage features would not be implemented. For variations M1 and M2, the property could be avoided if access were not provided to I-74 in this location, but this avoidance option would eliminate an existing point of access to I-74. It is not feasible to remove this access from downtown Moline.

For variations M1 and M2, the property could be avoided if the entire mainline alignment were shifted farther east. However, shifting the mainline to the east to avoid the property would increase the reverse curvature of the mainline/interchange alternative rather than lessen it. Removing or flattening the existing reverse curves and improving the roadway geometry is necessary to improve safety and operational characteristics of I-74, which is part of the purpose and need for the project. Therefore, shifting the mainline alignment to the east to avoid the property would not meet the purpose and need. The easterly shift, depending on the distance of the shift, could affect other properties, as well as the Thomas/ Lewis/Wilson House (a 4(f) property).

5.4.3 Knights of Pythias Lodge Hall

Shifting the mainline to the west or east to avoid the Knights of Pythias Lodge Hall was considered, as Alternatives C, E, and F all affect the property. Moving the mainline to the west would encroach on several properties, including up to six more 4(f) properties: the 1910 and 1935 Post Offices, the LeClaire Hotel (on the NRHP), the George Benson House, the B.P.O.E (Elks) Building, and the Scottish Rite Cathedral. The shift would also affect the John Deere Building, the Moline Treatment Plant, and up to roughly 20 commercial structures. The John Deere Building is actually a corporate campus consisting of the original building built in 1928, as well as a seven-story modern office building, 400-seat auditorium, and exhibition hall (Phase 1 cultural resource study, Quad Cities online Web page, last updated 2003). The Moline Treatment Plant, which treats 2 billion gallons of water a year, is undergoing $22,000,000 of renovation (City of Moline Web site, last updated April 4th, 2002). The cost to encroach on these sites is of such magnitude that encroachment is not prudent. A westerly shift would also encroach on the two lanes of traffic on the existing alignment that are required to remain open to traffic while construction of the new bridge occurs and would, therefore, not meet the purpose and need for the project.

Shifting the mainline to the east to avoid the Knights of Pythias building would increase the reverse curvature of the mainline/interchange alternative rather than lessen it. Removing or flattening the reverse curves and improving the roadway geometry is necessary to improve safety and operational characteristics of I-74, which is part of the purpose of and need for the project. Therefore, shifting the mainline alignment to the east, while avoiding the

property, would not meet the purpose and need. The easterly shift, depending on the distance of the shift, could affect up to roughly 20 properties, the Thomas/Lewis/Wilson House, and a 0.09-acre wetland.

5.4.4 Eagle Signal Building

Alignment F, with either interchange variation M1 or M2, would avoid impacts to the Eagle Signal Building. Alignment F and the two interchange variations serve the purpose and need by improving the reverse curves and approach geometry, providing increased capacity, and improving access to the downtown Moline area.

5.4.5 Davenport, Rock Island and Northwestern Railroad Depot

Impact to the Davenport, Rock Island and Northwestern Railroad Depot building would be avoided if Alignment C were chosen. Even under Alignment C, part of the west side of the property might be required for ramp construction. Alignment C was determined to be unreasonable, however, as it would not allow the maintenance of two lanes of traffic in each direction during construction and, thus, would not meet the purpose and need. Shifting the mainline farther west of C would affect up to six more 4(f) properties—the 1910 and 1935 Post Offices, the LeClaire Hotel (on the NRHP), the George Benson House, the B.P.O.E Building, and the Scottish Rite Cathedral, as well as the John Deere Building, the Moline Treatment Plant and up to roughly 20 commercial structures, depending on the distance of the shift. As noted, the cost to encroach on these sites is great enough that encroachment is not prudent.

Shifting the mainline farther east than Alternative E or F, which would impact the property, would cause more commercial and some residential impacts. A range of roughly 5 to 30 commercial buildings and residential buildings could be affected, depending on the distance of the easterly shift from the mainline. The area of impact could include the riverfront to be developed under the Moline Downtown Development Plan.

Shifting the mainline in either direction would not correct the reverse curves that the proposed alignments are designed to address. A westerly shift would emphasize the reverse curves, whereas a shift east of Alternative F would introduce new reverse curves. By maintaining or creating the reverse curves, the shifts would not meet the safety or operational characteristics of the project purpose and need.

5.4.6 Iowa-Illinois Memorial Bridge

The Iowa-Illinois Memorial Bridge would be avoided if the No Action or non-roadway improvement alternatives were chosen. Non-roadway improvement alternatives include diversion of I-74 traffic to other area interstate facilities, diversion of I-74 traffic to the local road system to accommodate traffic with local destinations, and transit and transportation system management strategies. As discussed in Section 5.2, however, these alternatives would not serve the project purpose and need.

5.4.7 Iowana Farms Milk Company

The Iowana Farms Milk Company would be affected by both Alternatives E and F with all interchange variations. Alternative C mainline avoids the property, but depending on the

interchange variation chosen, the property may still be affected. As this alignment was determined not to serve purpose and need, the interchange variations are not discussed in detail. Alternative C would affect Leach Park, a 4(f) property. Shifting farther west of C also has a direct impact of McManus Park (a 4(f) property) and the surrounding neighborhood, up to 20 to 30 homes, as well as commercial structures and up to 6 potentially contaminated sites.

Alignments east of the Iowana Farms Milk Company building would create a reverse curve along the alignment, which would compromise safety and traffic operations and, therefore, would not serve purpose and need. These alignments would also affect up to 14 additional contaminated sites: the Our Lady of Lourdes church, Bettendorf City Hall, Thomas Edison School, and two 4(f) properties—the Bettendorf Grocery/Improvement Co. Building/W. F. Bruhn & Son General Merchandise Store, and the Regina Coeli Monastery, which is listed on the NRHP. (See Appendixes A and B.)

Impacts to the property might be avoided if the U.S. 67 interchange, which provides access to Grant and State streets, is eliminated. Eliminating the U.S. 67 interchange would not be consistent with local land use planning, which includes the goal of improving access to the downtown area for economic stability. Additionally, as both the E and F mainline alignments reconnect to I-74 near this location, the building may be affected by construction of the mainline itself, because of the proximity of the Iowana Farms Milk Company to I-74. Therefore, eliminating the interchange may not necessarily avoid the impact.

SECTION 6

Measures to Minimize Harm

In addition to specific avoidance alternatives at each potentially affected property, minimization alternatives were considered when avoidance was not possible. The following discussion details the minimization actions considered. Where specific map diagrams are useful in understanding the minimization option, they are referenced (see Appendix 4(f)-3).

6.1 Minimization Measures for Specific Properties

6.1.1 Scottish Rite Cathedral

Use of the southeastern part of the Scottish Rite Cathedral property would be required for the redesign of the southbound I-74 entrance ramp at 19th Street. Placement of fill would be necessary to effect the elevation transition between 19th Street and elevated I-74, which consequently requires either a retaining wall or embankment slope. A retaining wall has been proposed between the I-74 mainline and the entrance ramp to minimize the impact that an embankment would cause. While an embankment would require the acquisition of permanent right of way from the Scottish Rite Cathedral, by using a retaining wall, it is likely that only a temporary easement would be needed during construction, thus avoiding permanent use of the property. If a temporary easement is required, the appropriate correspondence will be undertaken with the Illinois SHPO and the owners of the cathedral in accordance with the FHWA Section 4(f) Policy Paper.

6.1.2 C. I. Josephson House

In the Draft Section 4(f) Statement, alternative M1 avoided impact to the property. However, due to necessary design modifications, the M1 interchange configuration and associated improvements along 6th Avenue now affect the C. I. Josephson House by requiring a temporary easement for grading associated with correcting drainage along 6th Avenue. Therefore, consideration was given to minimizing this impact.

Minimizing the raise in the vertical profile could require regrading less of the property, but that would not correct the drainage problems along 6th Avenue. Further, even if the grade change were minimized and less property were required for temporary construction purposes, all but the two top steps of the staircase between the sidewalk and the property would still be eliminated. Although the stairs would be impacted, a reduction in the number of steps between the sidewalk and the property would represent an improvement in access to the property. Retaining walls to minimize impact to the property were also considered but deemed infeasible as they would still likely require a temporary easement. It would not be possible to incorporate steeper slopes than already proposed. Therefore, these further minimization options were not retained.

6.1.3 Knights of Pythias Lodge Hall

The Knights of Pythias Lodge Hall would be directly affected by mainline I-74 improvements (by both Alternative E, which would affect the northwestern corner of the property, and Alternative F, which would affect the entire property). As discussed in Section 5, impacts resulting from mainline improvements are unavoidable at this location.

The possibility of minimizing impacts with the E Alignment Alternative was considered. The proposed M2 interchange variation (loop-type interchange) would result in unavoidable impacts to the site. Shifting the ramp would leave the building within the interchange infield, where access would be prohibited because of FHWA policy. With the M1 interchange variation (split diamond type interchange), an option that changed the ramp divergence angle and alignment, thereby shifting the northbound entrance and southbound exit ramps east of the Knights of Pythias Lodge Hall to 21st Street was considered. To accommodate this shift, property from the Thomas/Lewis/Wilson House, another 4(f) resource, would be required at a minimum to accommodate the additional lanes along 21st Street. Because the Thomas/Lewis/Wilson House is located in close proximity to 21st Street, any improvements may in this area result in its displacement. Commercial properties along 21st Street may experience property impacts or displacements as well. Also, this option would introduce undesirable curvature to the improved I-74 ramps, causing potential safety issues. Therefore, these minimization options were not retained for further consideration because of their impacts and because they do not meet purpose and need.

6.1.4 Davenport, Rock Island, and Northwestern Railroad Depot

Impacts to the depot building would result from the proposed River Drive ramp improvements. Minimization options were explored both for the E Alignment Alternative (where the proposed northbound entrance ramp impacts the Depot building) and for the F Alignment Alternative (where the southbound exit ramp impacts the Depot building). Options considered include increasing and decreasing the ramp divergence angle, thereby shifting the ramps away from the Depot building. It should be noted that because the ramp is adjacent to the proposed alignment, the ramp divergence angle could not be decreased further; it has already been minimized to the least footprint (impact) possible. If the ramp divergence angle were increased, the building would be situated between the mainline and exit ramp. Access to the building would have to be eliminated per the FHWA policy that prohibits access to the infield area of interchanges. See page 3 in Appendix 4(f)-3. While this minimization option would avoid physically affecting the depot building, lack of access would render it unusable. Also, the shift of the southbound exit ramp with the F Alignment Alternative would result in the displacement of the Eagle Signal Building, a 4(f) resource, and the Kone elevator factory. Thus this option was not recommended for further consideration. Relocating the building was also considered, but no willing manager for the new site was identified. Therefore, this option was not carried forward for further consideration.

6.1.5 Iowa-Illinois Memorial Bridge

Minimization alternatives are those that may require a physical alteration to the existing bridges or that may affect the setting or aesthetic qualities of the existing bridges but that do not require demolition of the existing structures. The following options were considered for their potential to minimize the impact to the NRHP-eligible structure.

Reuse of Existing Bridges for I-74 Traffic with Construction of a New Structure Adjacent Them

This option would consist of converting the existing structures to carry I-74 traffic in one direction and construction of a new structure to carry I-74 in the other. Because of the potential impacts associated with alignment options to the west of the existing bridges, the new structure would need to be constructed to the east of the bridges. Therefore, the bridges would be used for southbound traffic and the new structure for northbound traffic. Because of the separation between the existing structures, a collector-distributor system would be employed to provide access to downtown Bettendorf and Moline. The westernmost structure would provide access to the interchanges in Bettendorf and Moline, and the easternmost structure would carry through traffic.

A review of trip patterns along I-74 revealed that this alternative would not address the need for capacity. Likewise the continued use of the narrow, two-lane bridges would not address the need for travel reliability. The narrow bridge decks, with their lack of shoulders, would not be improved. Routine maintenance operations and accidents would still require lane closures. This option would retain the reverse curvature on the approaches and the four reverse curves on the Illinois approach. All these issues were identified as needs in the purpose and need statement. As this alternative would not meet these needs, it was not considered further. More discussion of this alternative can be found in Section 2.2 in the FEIS.

Construction of a New Bridge on New Alignment for I-74 Traffic with Reuse of the Existing Bridges for Local Traffic

This option would involve the use of the existing bridges for local traffic only with the construction of a new bridge to carry through traffic on I-74. This option is unreasonable because a negligible amount of the traffic in the corridor has both an origin and a destination in the downtown areas, making it impractical to convert and maintain the existing crossing for local traffic.

Construction of a New Bridge on New Alignment for I-74 Traffic with Reuse of the Existing Bridges for Bus or Rail Transit

Rail Transit. This option would involve construction of a new bridge for I-74 traffic and convert one or both of the existing bridges to carry rail transit. The option is unreasonable for several reasons:

- There is no existing rail infrastructure in the area of the existing bridges capable of using them for a crossing.
- There is a rail corridor in the Quad Cities with a crossing of the Mississippi River.
- There is no other rail transit in the Quad Cities, and so none of the other needed infrastructure is in place to support this option.

Bus Transit. The demand for bus transit could easily be accommodated on a new structure. The expected volume of bus crossings per day would not be of a magnitude sufficient to support the continued use and maintenance of one or both of the existing I-74 bridges. At a meeting held with MetroLINK, that agency communicated it was unwilling to adopt jurisdiction over the existing bridge. See Section 5 of the FEIS for more information about this meeting.

Construction of a New Bridge on New Alignment with Reuse of One of the Existing Bridges for Bicycle / Pedestrian Traffic

This is one option for accommodating bicycle/pedestrian traffic in the corridor (see Section 2 of the FEIS for more information). This option would convert the Iowa-bound (historic) bridge to a bicycle/pedestrian path and build a new I-74 bridge for vehicular traffic. The Iowa DOT estimated that a path in this location would meet the 25 trips-per-day criterion in Iowa Trails 2000. Both states have trail systems generally following along the river through the Quad Cities and would logically connect to the converted I-74 bridge.

If the bridge were to remain in place, it would affect the placement and design of the new structure. The Coast Guard has indicated that if an existing structure were to remain in place, it would affect the pier placement of the new structure, as the existing navigational opening would need to be maintained. This may constrain design and increase costs for the new I-74 bridge. Further, this option could only be implemented if there were a commitment from a local public agency to assume jurisdiction, future liability, and financial responsibility for the bridge. The Coast Guard would require the bridge's removal if it will not be used for transportation. Project staff have contacted involved local agencies (Cities of Bettendorf and Moline, Scott County, and Rock Island County), and each of these agencies has indicated that they do not have interest in assuming jurisdiction over the bridge and the responsibilities it entails (see Appendix 4(f)-5).

There is also potential for a new structure to have an aesthetic impact on the historic structure, if the historic structure were to be used for the bicycle/pedestrian crossing. If the SHPO were to determine that an aesthetic impact would, in fact, occur, recommendation on effect would be made and coordination on mitigation would ensue. Preliminary bridge design concepts have been developed to include options that would complement the existing structures.

Widening the Existing Structures to Accommodate Additional Lanes

The design of the existing structures does not allow widening. To do this would require dismantling the structures and completely reconstructing them. This work would require the closure of I-74 through the project area for the entire construction period. For these reasons, this alternative does not meet the purpose and need and was not carried forward.

Iowa-Illinois Memorial Bridge Monument

Because it is a contributing element of the bridge, and as its exact location is not considered critical to its historic status (it has previously been relocated), relocation of the Iowa-Illinois Memorial Bridge Monument from its current position in Bill Glynn Memorial Park has been considered acceptable. Coordination with the Iowa SHPO would be undertaken to determine where the monument might be relocated. Leach Park may represent a desirable relocation opportunity since it is next to the river and bridges.

6.1.6 Iowana Farms Milk Company

The proposed improvements to the northbound exit ramp at U.S. 67 (Grant Street) would result in direct impacts to the property. Several minimization options were considered. One option involved increasing the ramp divergence angle and shifting the ramp to east of the Iowana Farms property to an intersection with Grant Street near 15th Street (see page 4 in

Appendix 4(f)-3). While this option may avoid direct impacts to the property, existing access to the property would be eliminated because it is within the area between the mainline and entrance ramp. FHWA prohibits access to the infield area of interchanges. Access would only be permitted from State Street (located outside of the interchange area) across displaced Bill Glynn Memorial Park. However, this option would also require shifting the proposed northbound entrance ramp to the east to ensure smooth traffic flow through the interchange area. This would result in additional displacements along the realigned entrance ramp as well as eliminate access to the properties within the expanded infield area of the interchange. Further, access would be eliminated from U.S. 67 (Grant Street) for approximately 15 properties along U.S. 67 (Grant Street) east of the realigned ramps because of access-control requirements. Additional impacts to the local roadway system would include possible roadway closures or relocations causing further property and neighborhood impacts. For these reasons, it was not carried forward.

Another minimization option considered would provide a similar modification in ramp divergence angle and an easterly shift of the northbound exit and entrance ramps. However, the northbound exit ramp would intersect relocated State Street with a loop ramp. In addition to the concerns noted with the previous option, this would result in undesirable ramp curvature and steep grades, as well as inadequate storage and taper rates. Thus, this option would not meet the need to improve travel dependability and road geometry. Also, it would not provide the minimum railroad clearance height of 23 feet (see page 5 in Appendix 4(f)-3).

It should be noted that multiple interchange concepts were considered in downtown Bettendorf, including use of a northbound exit loop ramp to Grant Street. However, because of the proximity of the improved mainline I-74 roadway to the Iowana Farms property, these concepts would not minimize impacts to the property. These options were not carried forward for further consideration.

As can be seen from Table 4(f)-6, *Summary of Minimization Measures for Specific Properties*, potential impacts to three 4(f) resources can be minimized. Impacts to the Scottish Rite Cathedral can be minimized through the use of retaining walls and by reducing the underpass structure depth. Impacts to the C. I. Josephson property can be minimized by selecting interchange option M1, which requires only temporary use of the front of the property during construction. Finally, the Iowa-Illinois Bridge Monument can be relocated. These efforts could be implemented with either of the proposed build Alternatives E or F.

6.2 Mitigation

Mitigation for impacts to the four 4(f) properties that could not be avoided has been developed and is documented in the Memoranda of Agreement between FHWA and the states' SHPOs, in concurrence with the respective states' DOTs (see Appendix 4(f)-6). Mitigation was not developed for the two 4(f) properties from which temporary easements would be required because the proposed improvements would not adversely affect the properties. In Illinois, the Knights of Pythias Lodge Hall and Davenport, Rock Island & Northwestern Railroad Depot will be documented in accordance with the Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards, and coordinated through the Illinois DOT.

TABLE 4(f)-6
Summary of Minimization Measures for Specific Properties

Property	Minimization Measures	Carried Forward?
Scottish Rite Cathedral	Construct a retaining wall to avoid permanent use of Scottish Rite Cathedral property.	Yes
C. I. Josephson Property	Select Option M1, which requires only temporary use of the front of the property during construction.	Yes
Knights of Pythias Lodge Hall	All alternatives would affect the building directly.	Not applicable
	Minimization of impact to the building was not possible.	
Davenport, Rock Island, and Northwestern Railroad Depot	Increase or decrease the ramp divergence angle.	No
	Relocate the structure to a nearby property.	No
Iowa-Illinois Memorial Bridge and Monument	Reuse of the bridges for I-74 traffic with construction of a new structure adjacent to the existing bridges.	No
	Construction of a new bridge on new alignment for I-74 traffic with re-use of the existing bridges for local traffic.	No
	Construct a new bridge on new alignment for I-74 traffic, and reuse the existing bridges for transit.	No
	Construct a new bridge on new alignment, and reuse one of the existing bridges for bicycle/pedestrian traffic.	No
	Widen the bridges to accommodate additional lanes.	No
	Relocate the monument to another position near the bridge.	Yes
Iowana Farms Milk Company	Increase or decrease the ramp divergence angle.	No
	Adjust the ramp configuration.	No

In Iowa, the Iowa DOT will document the Iowana Farms Milk Company Building and the Iowa-Illinois Memorial Bridge in accordance with the recordation plan detailed in the memorandum of agreement. The Iowa Illinois Memorial Bridge Monument, which is considered a contributing element to the 1935 Iowa Illinois Memorial Bridge, will be moved to an appropriate public site in Bettendorf, preferably close to the original bridge site, to continue to commemorate the bridge.

SECTION 7

Least Overall Harm Analysis

Section 4 of this Final Section 4(f) evaluation analyzes the impacts of Alternatives E and F on seven historic resources. Because both alternatives use land from 4(f) resources, Section 4(f) regulations require that an analysis be performed to determine whether Alternative F or Alternative E results in the least overall harm to the 4(f) resources. The least overall harm is determined by comparing the impacts of Alternatives F and E to the factors listed below, which are found in 23 U.S.C. 774.3 (Section 4(f) Approvals):

- **The ability to mitigate adverse impacts to each Section 4(f) property.** The mitigation discussion in Section 6.2 indicates that there would be no difference between the mitigation concepts for Alternatives F and E.
- **The severity of the proposed impacts to the Section 4(f) properties after mitigation.** Alternative F affects six of the seven historic structures affected by Alternative E. The severity of the impact to the six historic structures affected by Alternatives F and E are the same. The notable difference between the two alternatives concerning this criterion is that Alternative F avoids the Eagle Signal building in Moline and Alternative E would displace it.
- **The relative significance of the Section 4(f) properties.** Because Alternative F affects six of the same historic buildings affected by Alternative E, there is no difference in the significance of the Section 4(f) properties affected by the two alternatives.
- **The views of agencies with jurisdiction over the 4(f) properties.** The FHWA signed separate memoranda of agreement with the Illinois and Iowa SHPOs in spring 2008. See Section 8 for more information.
- **The degree to which each alternative meets the project's purpose and need.** As noted in Section 1, Purpose of and Need for Action, in the project's Final Environmental Impact Statement, Alternatives F and E are equally able to meet the project's purpose and need.
- **The degree to which non-4(f) resources are affected by the alternatives after mitigation.** There are relatively minor differences between the alternatives' quantifiable impacts; Alternative F would affect approximately 2 fewer acres of wetlands than Alternative E and have one fewer commercial displacement. Alternative E would displace three fewer residences than Alternative F. After mitigation, those minor differences would essentially be non-issues. There is, however, a qualitative difference between Alternatives F and E that is worth noting. Alternative F would locate the I-74 bridge farther from Sylvan Slough where the federally endangered Higgins' eye pearly mussel is located. This location would also minimize the potential to contribute sediment loading to Sylvan Slough during bridge construction because sediment would have more time to disperse before being deposited on the river substrate. In their comments on the DEIS, USEPA requested that Alignment F be selected for this reason.

- **The cost differences between the alternatives.** There are no notable differences between the costs of Alternatives F and E.

The least harm comparison indicates that Alternatives F and E have similar effects on the project's historic buildings. However, by virtue of avoiding one historic structure (Eagle Signal building) that Alternative E would displace, Alternative F has the least overall harm to Section 4(f) resources. This finding confirms the thought process used in Section 2 to identify Alternative F as the project's preferred alternative.

SECTION 8

Coordination

As emphasized throughout this document, early identification of properties listed on or eligible/potentially eligible for the National Register of Historic Places contributed to the development of alignment alternatives that affect the fewest historic properties and parks in the project corridor. Following is a description of the interagency and public coordination conducted to identify and determine the significance of historic properties and recreational properties/parks in the area and impacts to them. (See Appendix 4(f)-5, *Correspondence,* and Section 5 of the FEIS for further information regarding the discussions held at Interagency and Public Coordination meetings.)

8.1 Coordination with the SHPO and Agencies with Jurisdiction

Coordination with the SHPO for both Iowa and Illinois occurred throughout the study process. The results of the historic and archaeological surveys were coordinated with the SHPO for each state to obtain concurrence for the properties under their jurisdiction. These concurrence findings reported on the types and locations of NRHP-eligible properties.

The Illinois SHPO was sent the historic structure report on October 7, 2002, and concurred with the findings on October 21, 2002. The Illinois archaeology report was sent to SHPO for review and concurrence was received on November 19, 2002. The Iowa archaeology and historic reports were sent to the Iowa SHPO on August 26 and September 9, 2002, respectively. The archaeology report received Iowa SHPO concurrence on September 25, 2002, while the historic structures report received concurrence by the stipulation of 30 days having passed without receiving a written objection.

In late 2007, Illinois DOT, the City of Moline, and Illinois SHPO evaluated the potential relocation of the Davenport, Rock Island, and Northwestern Railroad Depot as an impact minimization measure. However, no willing manager of the new site was identified and therefore, relocating the structure was dropped from further consideration.

Illinois SHPO concurred with Iowa DOT's findings of adverse effect on historic properties impacted by the proposed improvements on January 10, 2006. FHWA and the Illinois SHPO signed a Memorandum of Agreement on May 21, 2008 and May 13, 2008, respectively, regarding impacts to historic properties on the Illinois side of the project corridor and the appropriate mitigation measures to be taken. FHWA and the Iowa SHPO, on May 6, 2008 and April 18, 2008, respectively, signed a Memorandum of Agreement that identifies historic properties impacted on the Iowa side of the corridor and the appropriate measure to be taken to mitigate the impacts. FHWA notified the Advisory Council on Historic Preservation (ACHP) of the Finding of Adverse Effect on the four historic properties. ACHP responded with a determination that the agency's participation in the process for resolving adverse effects was unnecessary and that filing the MOAs and any related documentation with the ACHP would satisfy the requirements of Section 106 of the National Historic Preservation Act.

Similarly, coordination was undertaken with the representatives of the cities to assess the importance and uses of the recreational properties under their jurisdiction. This was accomplished primarily through the I-74 Project Advisory Committee process. Section 8.2 of this 4(f) document summarizes these discussions.

Publication of the DEIS and Draft Section 4(f) Statement have continued formal coordination with the public officials having jurisdiction over the Section 4(f) properties, and that coordination is documented in this Final 4(f) Statement.

8.2 I-74 Project Advisory Committee Meetings

An Advisory Committee was assembled with key representatives of the transportation agencies (Iowa DOT, Illinois DOT and FHWA) and involved communities and counties (the cities of Davenport, Bettendorf, and Moline; Rock Island County, Illinois; and Scott County, Iowa) to provide continual opportunity for communication throughout the process. The Bi-State Regional Committee was also represented by an ex-officio member. Eighteen I-74 Project Advisory Committee Meetings took place between January 2001 and September 2007. At seven of the meetings, the Section 4(f) properties in the project corridor were discussed. At the last meeting, the potential relocation of the Davenport, Rock Island, and Northwestern Railroad Depot was discussed.

During the early meetings, much time was spent discussing the historic bridge. In order for the historic bridge to remain in place, two conditions had to be met. First, the bridge had to have a transportation use. Through the development process, it was determined that bicycle and pedestrian accommodations were the only possible transportation use. Second, the bridge had to be owned and maintained by a public agency.[3] The cities of Moline and Bettendorf and the counties of Scott and Rock Island were asked if they would assume ownership of the bridge, but each indicated that it would not be able to own and maintain the structure. Therefore, retaining the existing structure is not possible. Coordination relating to the jurisdiction of the bridge can be found in Appendix 4(f)-5.

8.2.1 April 2001

The first meeting included a discussion of corridor features and constraints. As part of that discussion, it was determined that potentially historic structures and recreation features were present in the corridor and that they would be considered constraints as the alternatives process ensued.

8.2.2 June 2001

Among other topics discussed at the meeting, it was emphasized that consideration would be given to maintaining public recreational properties in the corridor as the alternatives process progressed. The option to reuse the bridge for alternative modes of transportation was also discussed. Determining future jurisdiction of the bridge maintained solely for bicycle/pedestrian use would be difficult because of excessive maintenance costs associated with the bridge.

[3] Illinois DOT and Iowa DOT would require a transfer of jurisdiction of the historic bridge; therefore, per Coast Guard, a local municipality or county would have to take ownership of the bridge.

8.2.3 March 2002

Findings of an early investigation of historic sites in the project corridor were presented. It was stated that the public would be involved throughout the development of the alternatives with regard to the potential impact of the alternatives on the historic properties.

8.2.4 June 2002 / November 2002

The meetings continued discussions on use options for the I-74 bridge, including funding options for maintenance of the bridge for bicycles or pedestrians. Following the meetings, letters were sent to the municipalities and counties asking if they would assume jurisdiction of the bridge in order to provide bicycle and pedestrian accommodations. Appendix 4(f)-5 contains copies of this correspondence.

8.2.5 September 2007

When the last Advisory Committee meeting was held, the City of Moline, the Illinois SHPO and Illinois DOT were exploring the option of relocating the Davenport, Rock Island and Northwestern Railroad Depot as an impact minimization measure. The relocation site analysis, cost evaluation, and coordination activities with SHPO and the City of Moline were presented.

8.3 Other Coordination Activities

Providing information and receiving feedback was a key element of the study process. Through a structured program that provided numerous opportunities for input, the I-74 Iowa-Illinois Corridor Study obtained the broadest participation at all levels: the public, interested groups, agencies, and elected officials.

8.3.1 Agency Input

In June 2001, a Concurrence Point (NEPA/404 Merger) Meeting was held. The purpose of the meeting was to review the concurrence point process and to determine lead agencies. Another meeting was held in December 2001 to discuss the study alternatives and to describe the associated impacts to the resource agencies in attendance (see Section 5 of the FEIS). Generally, the resource agencies were in agreement with the project purpose and need, and also regarding the impacts associated with the alternatives. They did not provide comments that indicate impact of a particular 4(f) resource under their jurisdiction. A third meeting was held in March 2005 to provide resource agencies with an update on the project's process, including the publication of the DEIS and identification of a preferred alternative. Impacts to resources, including historic properties, were presented. Agency and public comments on the DEIS were discussed, including the public's interest in the fate of the existing Mississippi River bridges. At the fourth meeting, in August 2007, information presented to the resource agencies included the fact that the Memoranda of Agreement with both states' SHPOs had been drafted. Concurrence on the Preferred Alternative was granted.

8.3.2 Public Input

Through roughly 25 meetings—including interest group meetings, two major public meetings, a public hearing, numerous advisory committee and resource agency meetings,

newsletters, Web site, and media—the residents of the Quad Cities had numerous opportunities to learn about the project and to provide input into the study process. Through this outreach effort, the study team gained a thorough understanding of the transportation issues facing the Quad Cities' residents.

Many of the comments received during the DEIS study emphasized frustration with growing congestion and safety concerns along the I-74 corridor, reflecting the need for major improvements. The study focused the transportation discussion on the major problems and potential solutions. While more information about the public meetings can be found in the *Coordination* section of the FEIS (Section 5), the following meeting summaries document the input received regarding the 4(f) properties, in particular the bridge.

8.3.3 Public Information Meetings 1 (July 2001) and 2 (July 2002)

During the first public meeting, the public expressed concern over the future of the historic bridge. Future use options for the bridge presented at the meeting focused on the fact that reuse of the bridge for other travel purposes, such as a new local roadway connection, transit corridor, or bicycle/pedestrian paths, would be considered, provided that the crossing would serve a transportation use and that a local agency would assume jurisdiction and responsibility for future maintenance of the bridge. It was explained that if there were no local interest in assuming jurisdiction of the bridge, the bridge would have to be removed.

At the second public meeting, comments continued to be solicited on use options for the Mississippi River bridges. Concern regarding the plans for existing and future Mississippi River crossings was again expressed at the public information meeting. It was explained that jurisdiction over the existing bridges for nontransportation use continued to be sought. Support for bicycle/pedestrian accommodations was again articulated in citizen comments.

8.3.4 Small Group Meetings with Save the Memorial Bridge Committee (January and April 2002)

At the January meeting, the Save the Memorial Bridge Committee emphasized concern over the prospect of retaining the existing bridges. The Committee emphasized the need for a local entity to take jurisdiction over the bridge. The Committee also suggested a reuse option for the existing bridges (reusing them for one direction of I-74 traffic). This option was then considered. At the April meeting, the Committee expressed concern that local municipalities were not seriously considering assuming jurisdiction of the bridge. (Coordination with the local communities continued through the DEIS and Draft Section 4(f) process and is now complete. No local entities are willing to assume jurisdiction of the bridge. See Appendix 4(f)-5 for community response regarding jurisdiction of the bridge.)

8.3.5 Bridge Workshop

In March 2002, a bridge workshop was held to address the status of the bridge. Elected officials, city/county employees, historians, transit providers, and interest group members attended a bridge workshop to obtain information on the alternatives for the bridges and to provide input on goals and concerns regarding the existing and proposed bridges.

8.3.6 Public Hearing

The Draft 4(f) Statement was made available to the public and resource/regulatory agencies as part of the DEIS public availability process, and copies were made available to local units of government for review and comment. Public Hearings were held on December 1 and 2, 2003, to discuss the project. Appendix 4(f)-5 contains copies of comment letters and correspondence received specific to 4(f) issues. Overall project correspondence letters can be found in the FEIS Appendix C.

At the public hearings, people continued to express concern about the existing bridges, noting that they are in structurally sound condition and relatively new compared to other bridges still in use. Comments expressed concern about demolishing the bridges because of their historic and local significance. There continued to be support for improvements along the I-74 corridor, desire that bicyclist and pedestrian needs be included within the planned improvements, and suggestions that other alternatives be considered to alleviate I-74 congestion. Full discussion and summary of public hearing comments can be found in Section 5 of the FEIS.

SECTION 9

Summary

This Final Section 4(f) Statement describes proposed improvements to the I-74 corridor between Moline, Illinois, and Davenport, Iowa. The proposed improvements will provide additional capacity on I-74, an improved Mississippi River Crossing, improvements to existing service interchanges, enhancements to the connecting arterial roadway system, and opportunities for improved transit and intermodal connections.

This 4(f) document establishes applicability of 49 U.S.C. 303 to the resources within the corridor under study listed in Table 4(f)-7, *4(f) Properties Potentially Affected*. It provides a record of coordination efforts with officials having jurisdiction over the resources cited, discusses alternative locations that avoid the use of the protected resources, identifies measures that will minimize harm to resources that cannot be avoided, documents that the Preferred Alternative is the least harm alternative, and describes mitigation that will be implemented.

TABLE 4(f)-7
4(f) Properties Potentially Affected

Illinois Properties	Iowa Properties
Scottish Rite Cathedral	Iowa-Illinois Memorial Bridge and Monument
C. I. Josephson House	Iowana Farms Milk Company
Knights of Pythias Lodge Hall	
Eagle Signal Building	
Davenport, Rock Island, and Northwestern Railroad Depot	

The purpose of and need for the proposed action is to improve capacity, travel reliability, and safety within the I-74 corridor. I-74 is an established transportation corridor within the Bi-State Metropolitan area in the Quad Cities, and as such is a critical surface transportation link. Section 4(f) properties were identified early in the project development process. The proposed alternatives were developed to avoid as many impacts as possible while still meeting the purpose and need. Of the 20 4(f) properties in or near the corridor, 13 were avoided through alternatives development and refinement. Other alternatives were considered, including diversion of traffic to other interstate facilities by revising interstate signing, diversion of traffic to the local road system, transit and transportation system management strategies, and alternative river crossing location options. Because those alternatives were determined not to meet the project purpose and need, they did not undergo detailed evaluation.

Specific avoidance alternatives were investigated for each of the seven potentially affected properties (Table 4(f)-5, *Summary of Avoidance Alternatives for Specific Properties*). Of the avoidance alternatives investigated for each site, only the following avoidance alternative was carried forward for further consideration:

- Eagle Signal Building—Selection of Alignment F avoids impact to the property. FHWA and Illinois SHPO, in concurrence with the Illinois DOT, determined that the proposed improvements would not adversely effect the Eagle Signal Building property (see Appendix 4(f)-6).

For the other six 4(f) properties that could not be avoided, suggested minimization measures for two properties were carried forward for further consideration (Table 4(f)-6, *Summary of Minimization Measures for Specific Properties*). These measures are summarized as follows:

- Scottish Rite Cathedral—Construction of a retaining wall will avoid permanent use of the cathedral property.
- C. I. Josephson Property—Selection of Interchange Alternative M1 avoids permanent use of any of the C. I. Josephson property. A temporary construction easement would be required for construction purposes.

FHWA and the Illinois SHPO, in concurrence with the Illinois DOT, determined that the proposed improvements would not adversely effect the Scottish Rite Cathedral and C. I. Josephson properties (see Appendix 4(f)-6).

The four remaining 4(f) properties could not be avoided. At these properties, mitigation will include the following:

- Knights of Pythias Lodge—The building will be documented in accordance with the Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards, and coordinated through the Illinois DOT. The memorandum of agreement is attached in Appendix 4(f)-6.
- Davenport, Rock Island & Northwestern Depot—The building will be documented in accordance with the Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards, and coordinated through the Illinois DOT. The memorandum of agreement is attached in Appendix 4(f)-6.
- Iowana Farms Milk Company—The Iowa DOT will document the building in accordance with the recordation plan detailed in the memorandum of agreement is attached in Appendix 4(f)-6.
- Iowa-Illinois Memorial Bridge and Monument—The Iowa DOT will document the structure in accordance with the recordation plan detailed in the memorandum of agreement, attached as Appendix 4(f)-6. The Iowa Illinois Memorial Bridge Monument, which is considered a contributing element to the 1935 Iowa Illinois Memorial Bridge, will be moved to an appropriate public site in Bettendorf, preferably close to the original bridge site, to continue to commemorate the bridge.

Based upon the above considerations, there is no feasible and prudent alternative to the use of lands from the Knights of Pythias Lodge, the Davenport, Rock Island & Northwestern Depot, the Iowana Farms Milk Company, and the Iowa-Illinois Memorial Bridge, and the proposed action includes all possible planning to minimize harm to the properties resulting from such use.

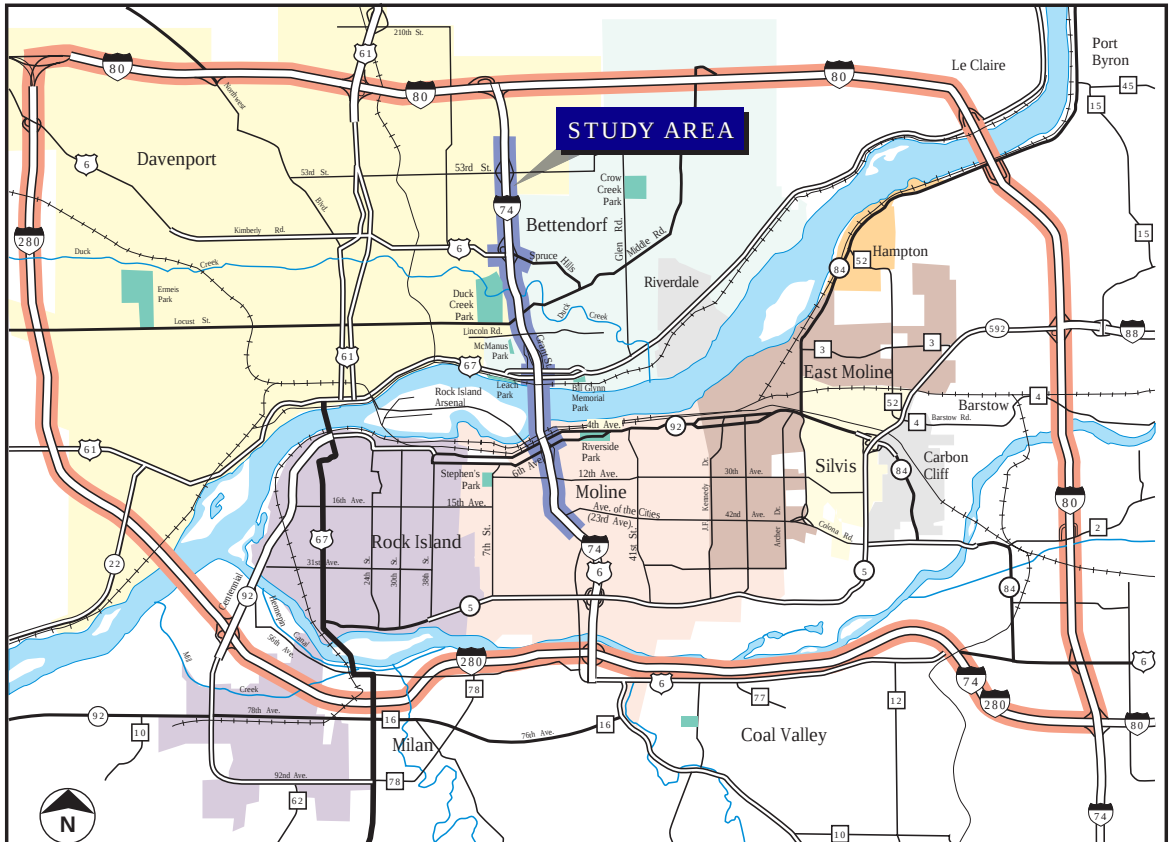


Figure 4(f)-1 I-74 Iowa-Illinois Corridor Study Location Map

Figure 4(f)-1
I-74 Iowa - Illinois Corridor Study
Location Map

T158835.AA.ES.06 Fig 3-2(Loc_Map) 3-19-03 lg

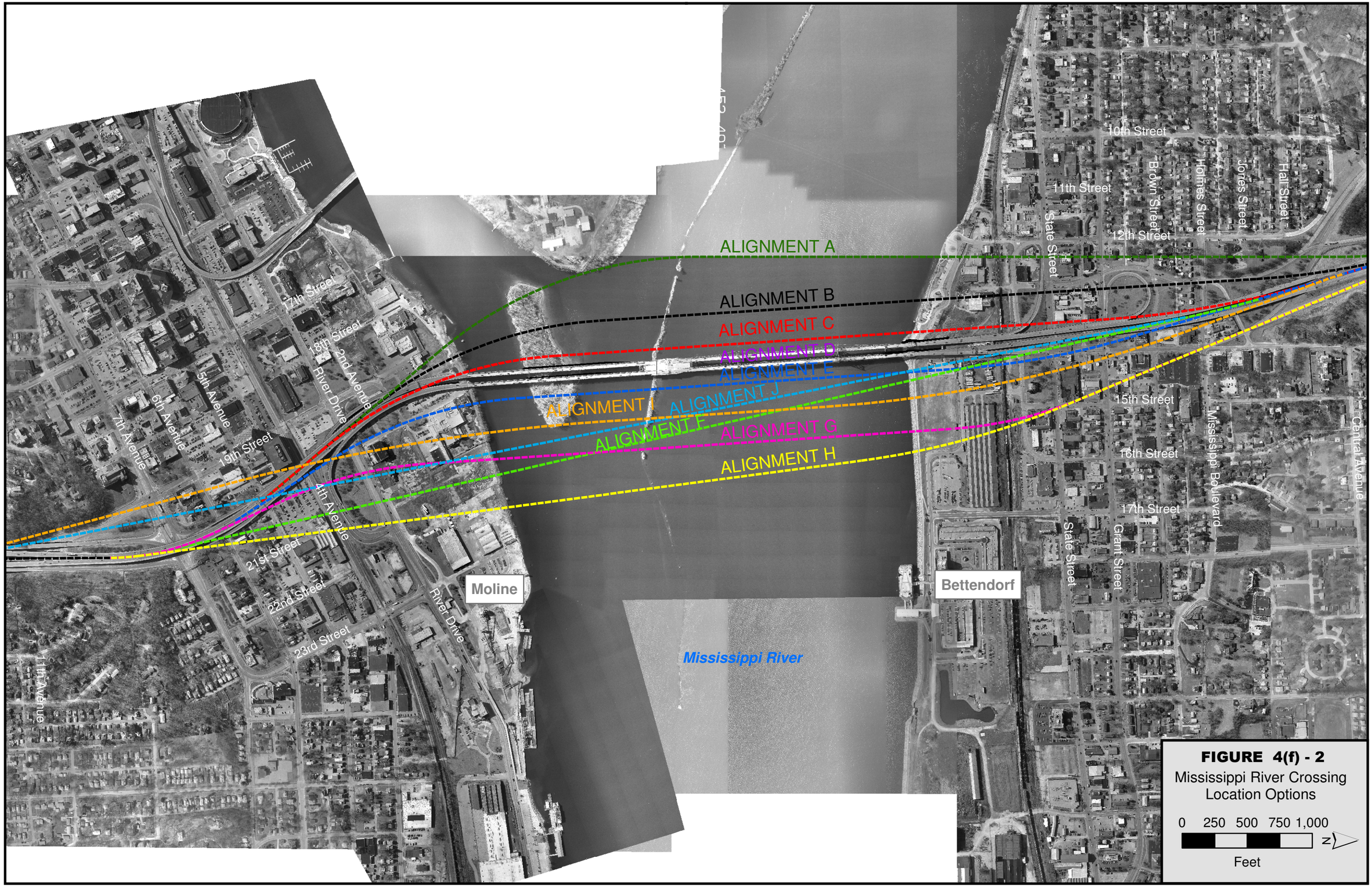


FIGURE 4(f) - 2

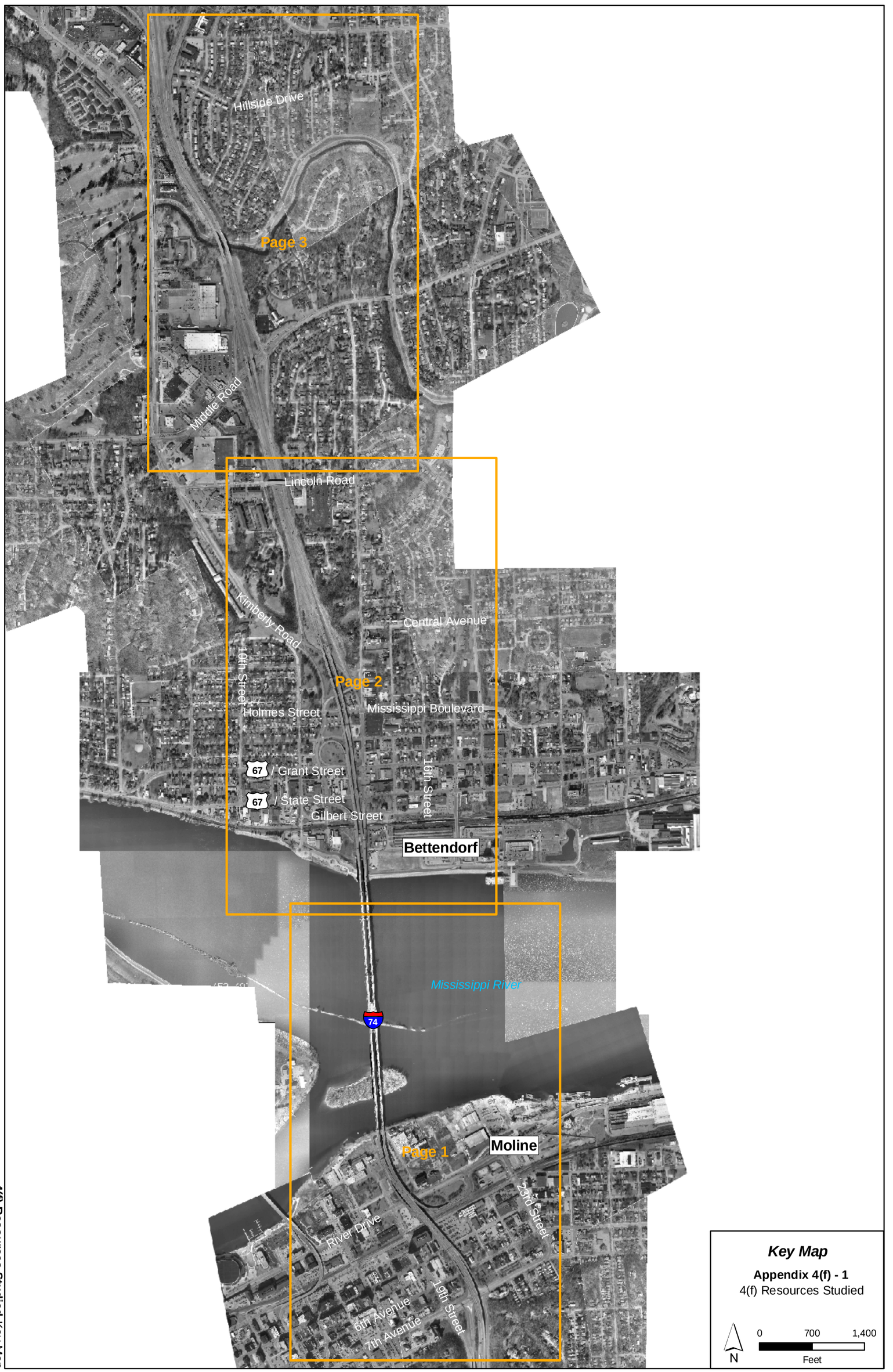
Mississippi River Crossing Location Options

0 250 500 750 1,000

Feet

Appendix 4(f) - 1

4(f) Resources Studied

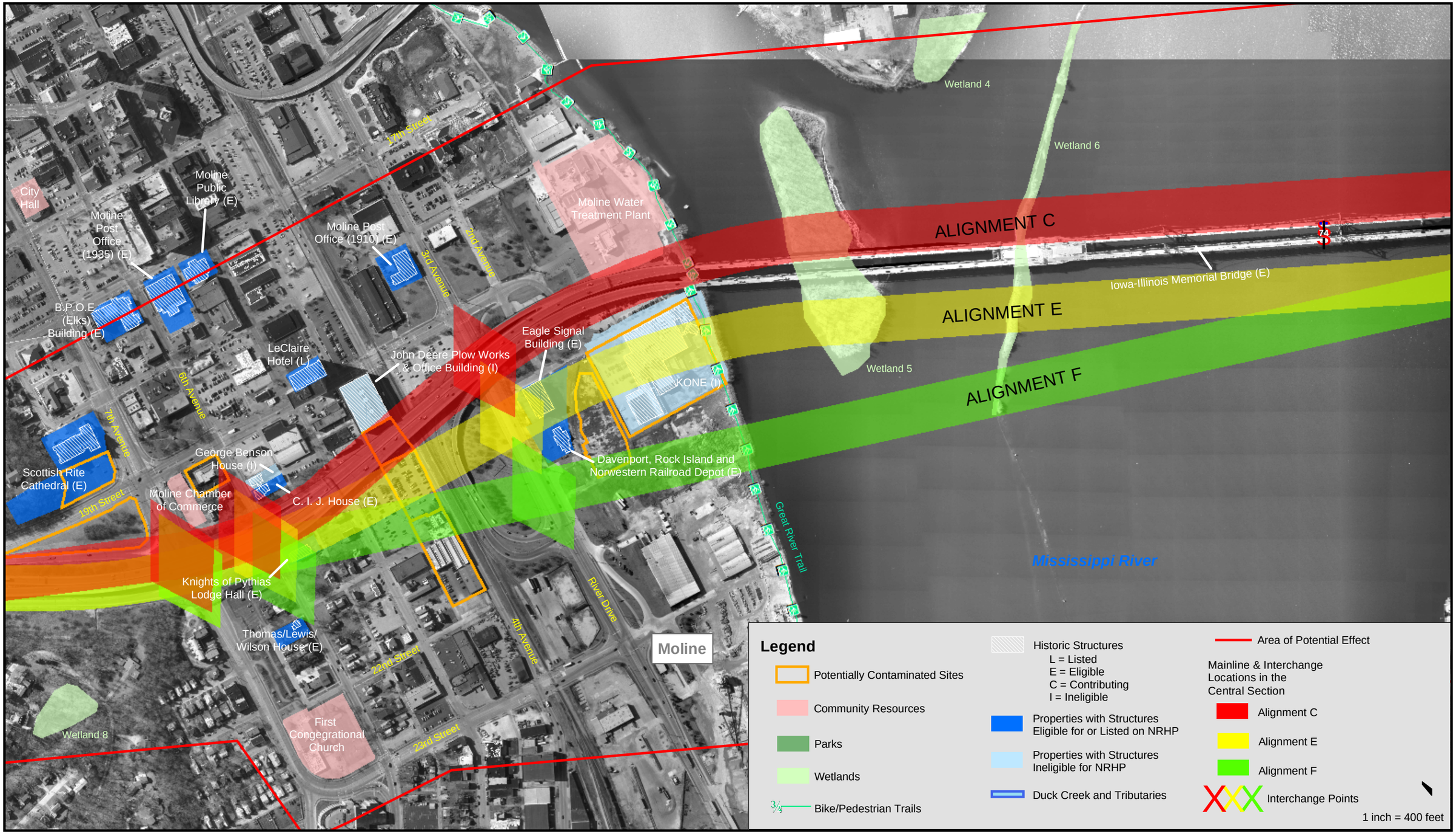


Key Map

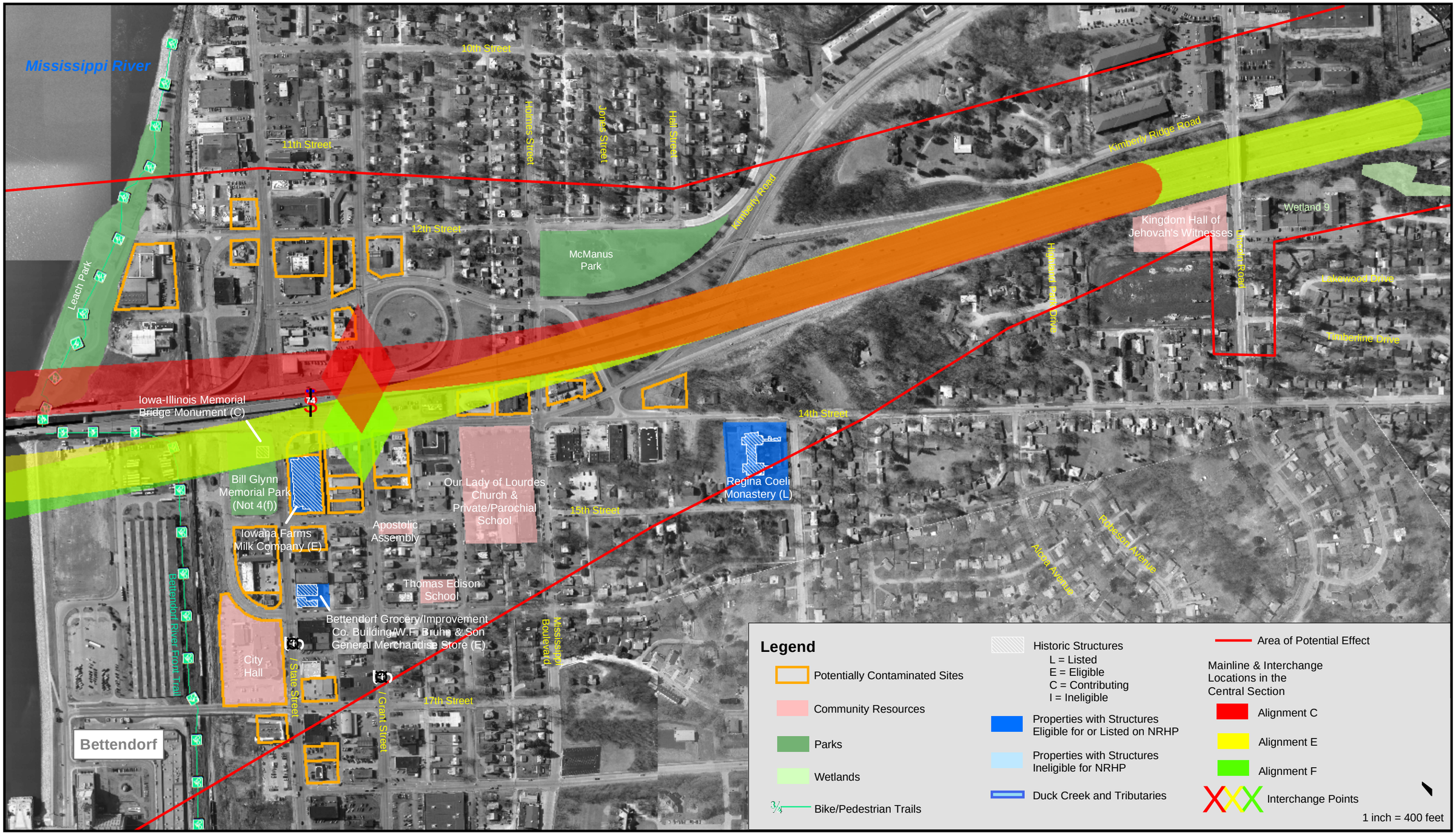
Appendix 4(f) - 1
4(f) Resources Studied

N

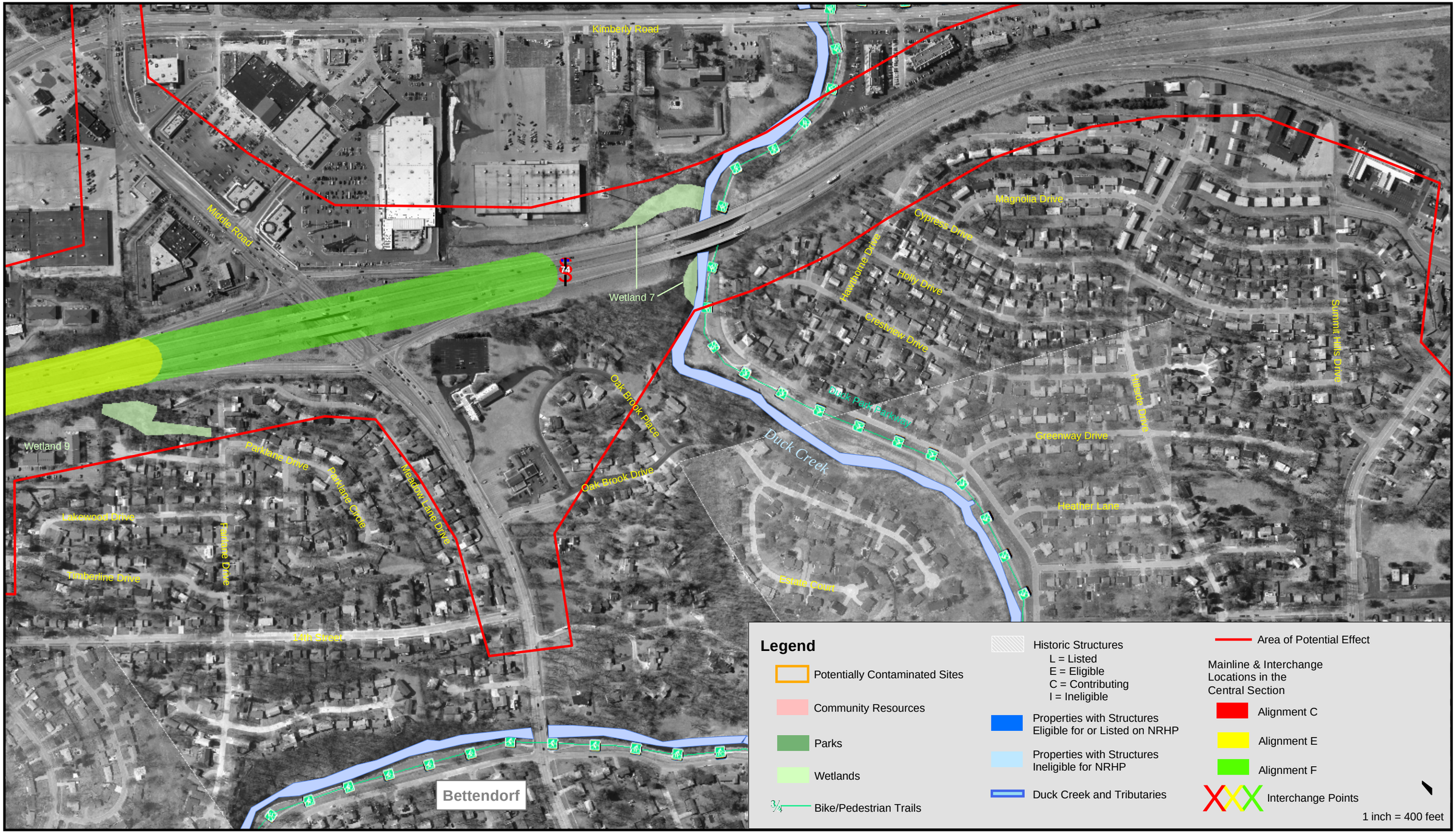
0 700 1,400
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Appendix 4(f) - 1
4(f) Resources Studied



Appendix 4(f) - 1
4(f) Resources Studied



Appendix 4(f) - 1
4(f) Resources Studied

Scottish Rite Cathedral
Alignment F with Split Diamond Interchange (Moline, IL) ..... Page 1

C. I. Josephson House, Knights of Pythias Lodge Hall
Alignment F with Split Diamond Interchange (Moline, IL) ..... Page 2
Alignment F with Loop Interchange (Moline, IL) ..... Page 3

Eagle Signal Building, Davenport, Rock Island & Northwestern Railroad Depot
Alignment E with Split Diamond Interchange (Moline, IL) ..... Page 4
Alignment F with Split Diamond Interchange (Moline, IL) ..... Page 5

Iowa-Illinois Memorial Bridge Monument, Iowana Farms Milk Company
Alignment E with Diamond Interchange (Bettendorf, IA) ..... Page 6

Appendix 4(f)-2
Properties Potentially Impacted



Properties Potentially Impacted Key Map



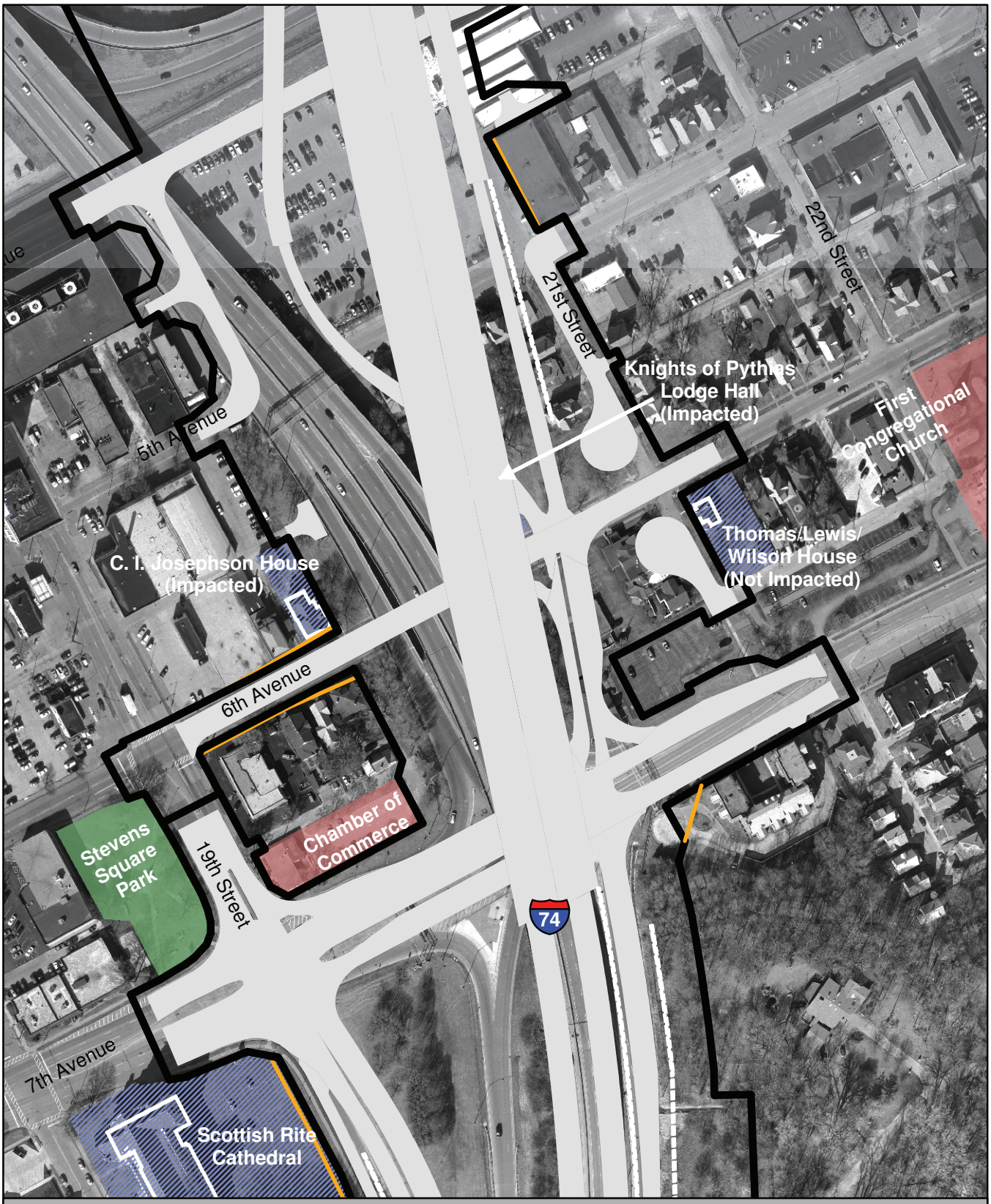
Scottish Rite Cathedral

Alignment F with M1 (Split Diamond Interchange in Moline, Illinois)*

*Impact to the Scottish Rite Cathedral property by Alignment F with M1 is representative of impact to the property by Alignments C and E with M1 and Alignments E and F with M2.

**Exact limits of land acquisition to be determined during final design.

Appendix 4(f) - 2
Properties Potentially Impacted



C.I. Josephson House, Knights of Pythias Lodge Hall

Alignment F with M1 (Split Diamond Interchange in Moline, Illinois)*

Appendix 4(f) - 2
Properties Potentially Impacted

*Impact to the Knights of Pythias Lodge Hall and C. I. Josephson House by Alignment F with M1 is representative of impact to the property by Alignments C and E with M1.

**Exact limits of land acquisition to be determined during final design.



C.I. Josephson House, Knights of Pythias Lodge Hall
Alignment F with M2 (Loop Interchange in Moline, Illinois)*

Appendix 4(f) - 2
Properties Potentially Impacted

*Impact to the Knights of Pythias Lodge Hall and C.I. Josephson House by Alignment F with M2 is representative of impact to the properties by Alignment E with M2.

**Exact limits of land acquisition to be determined during final design.

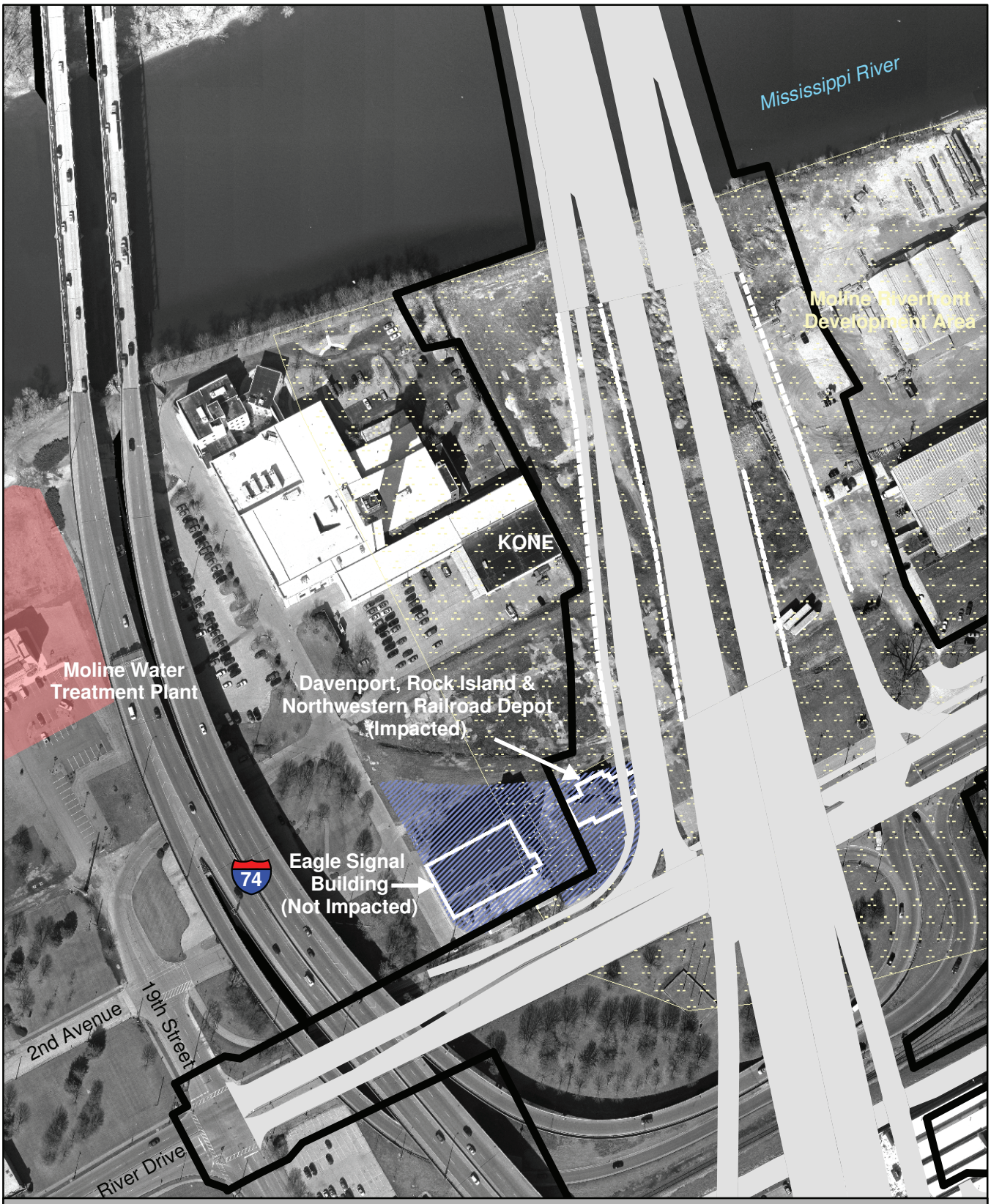


Eagle Signal Building, Davenport, Rock Island & Northwestern Railroad Depot
Alignment E with M1 (Split Diamond Interchange in Moline, Illinois)*

Appendix 4(f) - 2
Properties Potentially Impacted

*Impact to the Eagle Signal Building and Davenport, Rock Island and Northwestern Railroad Depot by Alignment E with M1 is representative of impact to the property by Alignment E with M2.

**Exact limits of land acquisition to be determined during final design.



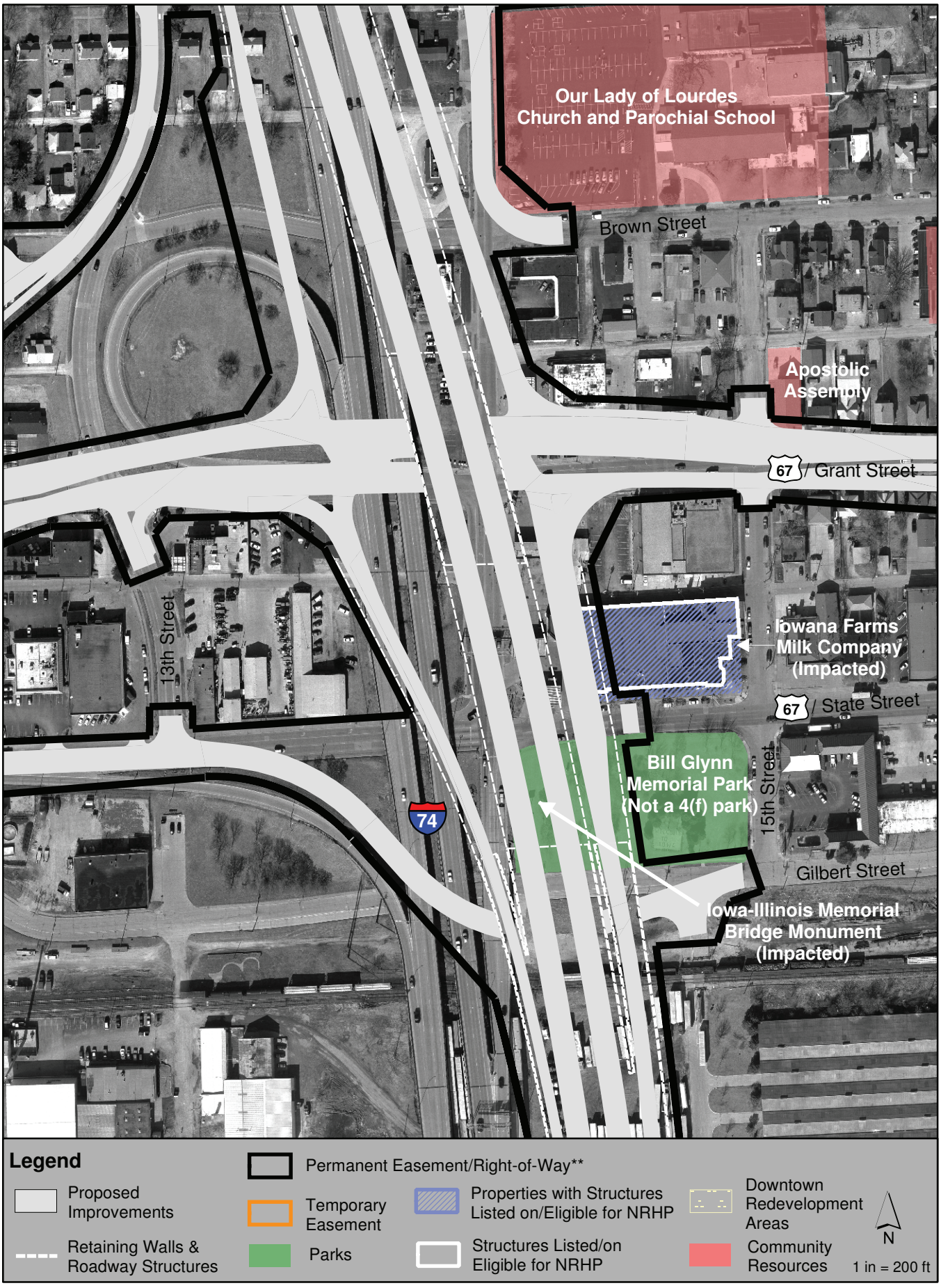
Eagle Signal Building, Davenport, Rock Island & Northwestern Railroad Depot

Alignment F with M1 (Split Diamond Interchange in Moline, Illinois)*

Appendix 4(f) - 2
Properties Potentially Impacted

*Impact to the Davenport, Rock Island and Northwestern Railroad Depot by Alignment F with M1 is representative of impact to the property by Alignment F with M2.

**Exact limits of land acquisition to be determined during final design.



Iowana Farms Milk Company and Iowa-Illinois Memorial Bridge Monument

Alignment E with B1 (Diamond Interchange in Bettendorf, Iowa)*

Appendix 4(f) - 2
Properties Potentially Impacted

*Impact to the Iowa-Illinois Memorial Bridge Monument and Iowana Farms Milk Company by Alignment E with B1 is representative of Alignment F with B1 and Alignments E and F with B2.

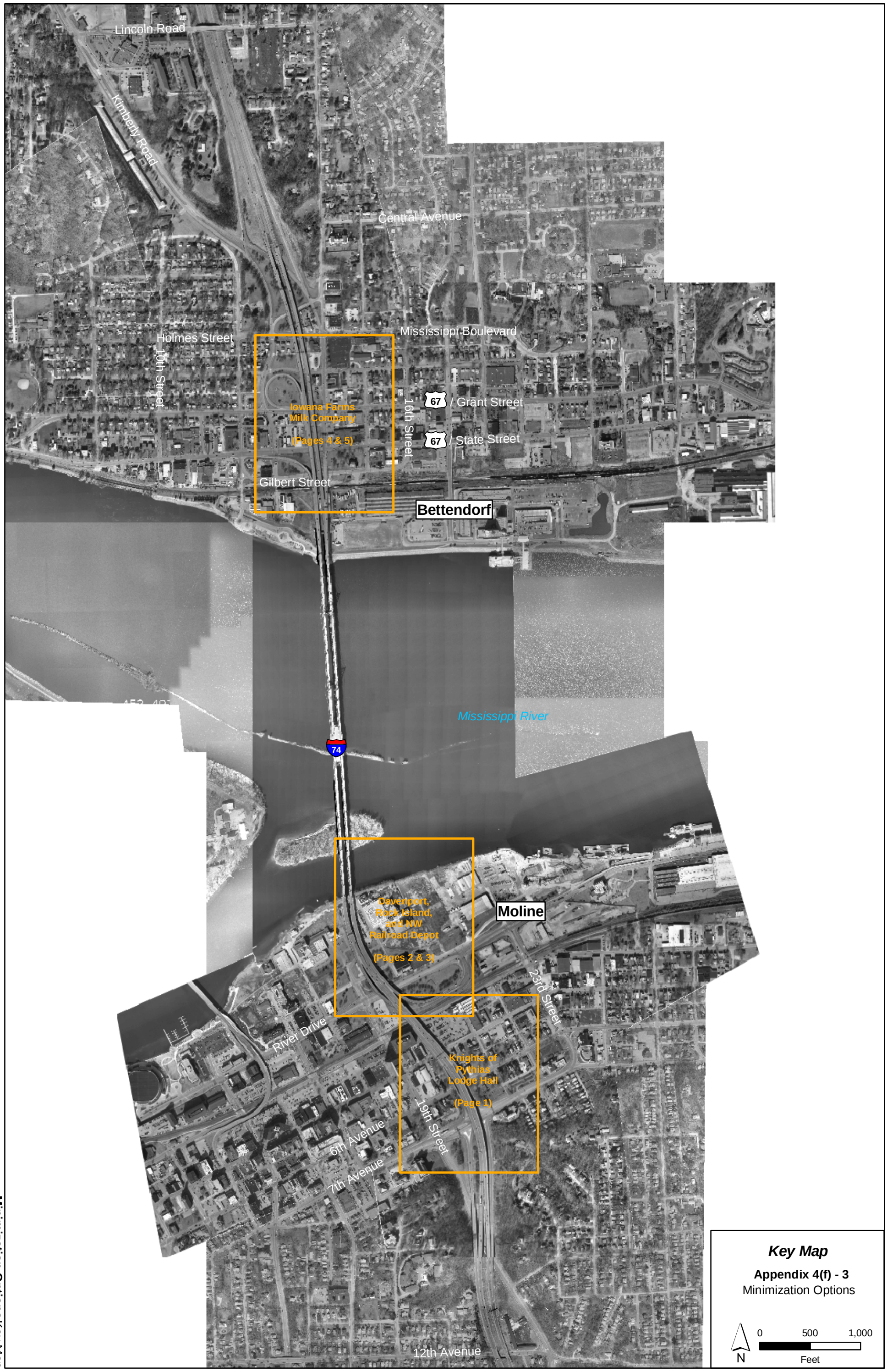
**Exact limits of land acquisition to be determined during final design.

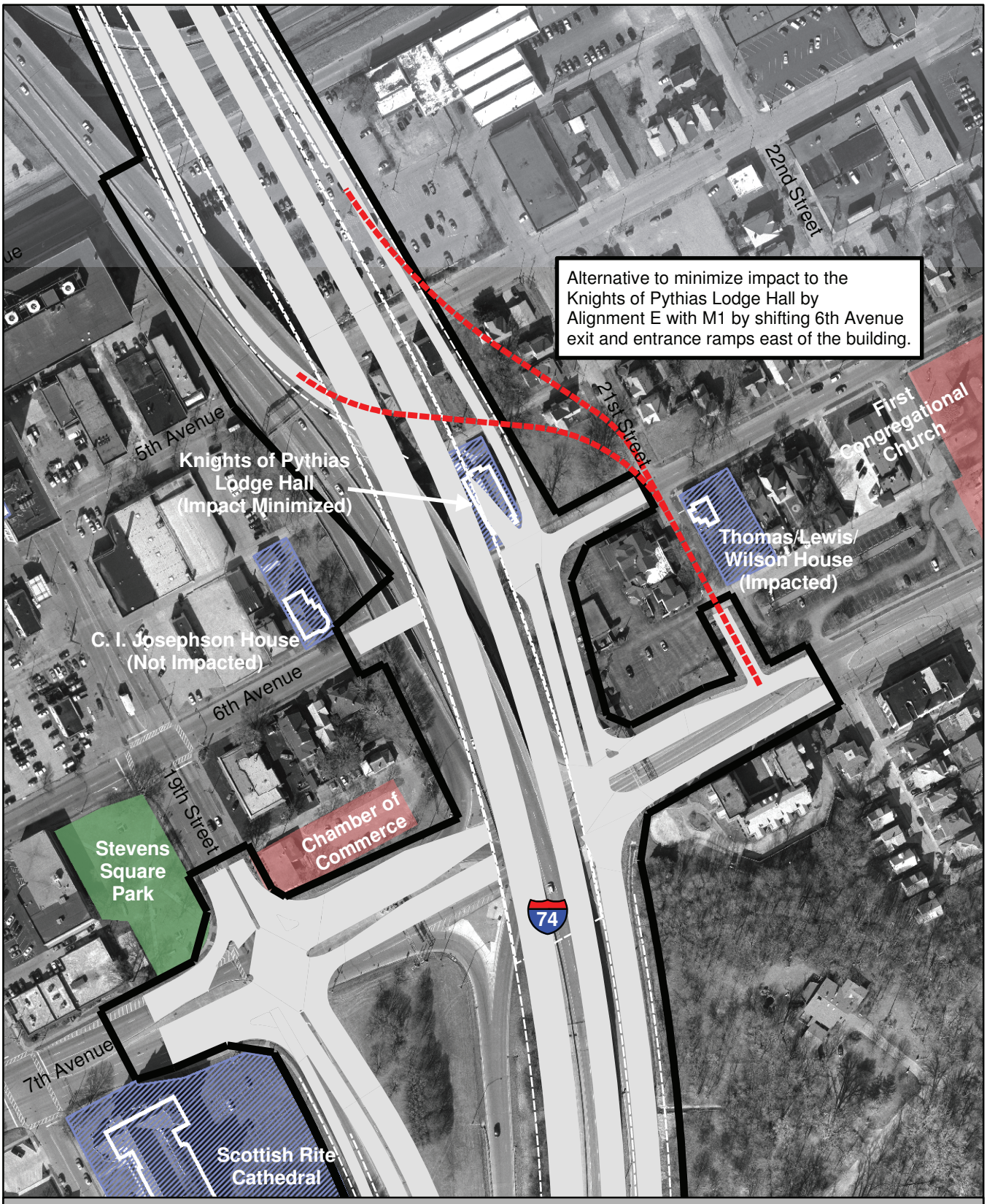
Knights of Pythias Lodge Hall
Shift Exit Ramps to the East of the Building (Moline, IL) ..... Page 1

Davenport, Rock Island & Northwestern Railroad Depot
Shift River Drive Entrance Ramp to the East of the Building (Moline, IL)..... Page 2
Shift River Drive Exit Ramp to the West of the Building (Moline, IL)..... Page 3

Iowana Farms Milk Company
Shift US 67 (Grant Street) Exit and Entrance Ramps to Near 15th Street (Bettendorf, IA) . Page 4
Shift US 67 (Grant Street) Entrance Ramp to the East & Subsitute US 67 (Grant Street) Exit Ramp with an Exit Ramp at State Street in a Loop Configuration..... Page 5

Appendix 4(f)-3
Minimization Options


Lincoln Road
Kimberly Road
Central Avenue
Holmes Street
10th Street
Mississippi Boulevard
16th Street
67 / Grant Street
67 / State Street
Iowana Farms Milk Company
(Pages 4 & 5)
Gilbert Street
Bettendorf
Mississippi River
74
Davenport, Rock Island, and NW Railroad Depot
(Pages 2 & 3)
Moline
23rd Street
River Drive
Knights of Pythias Lodge Hall
(Page 1)
19th Street
6th Avenue
7th Avenue
12th Avenue
Key Map
Appendix 4(f) - 3
Minimization Options
N
0
500
1,000
Feet

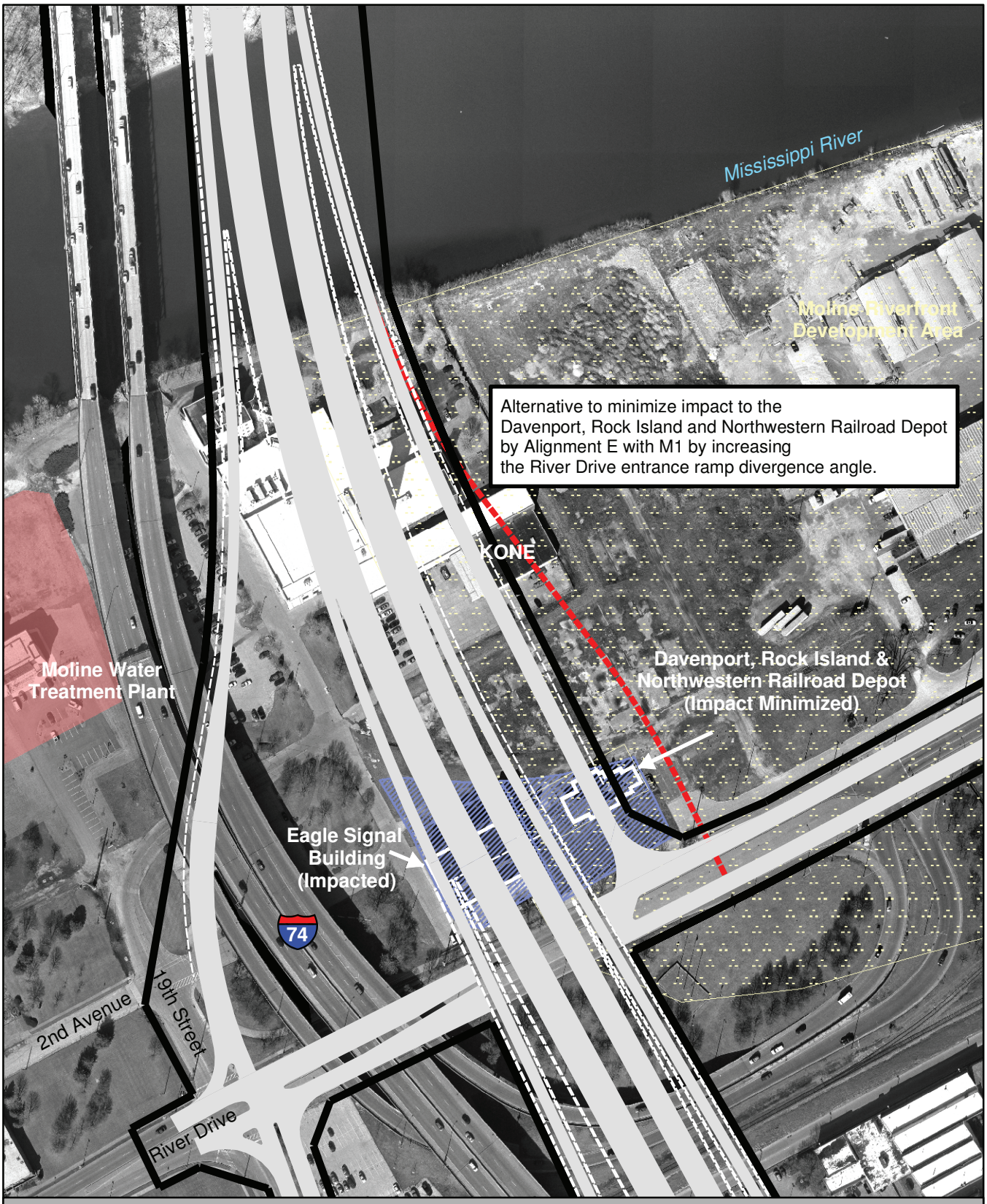


Knights of Pythias Lodge Hall

Alignment E with M1 (Split Diamond Interchange in Moline, Illinois)

Appendix 4(f) - 3
Minimization Options

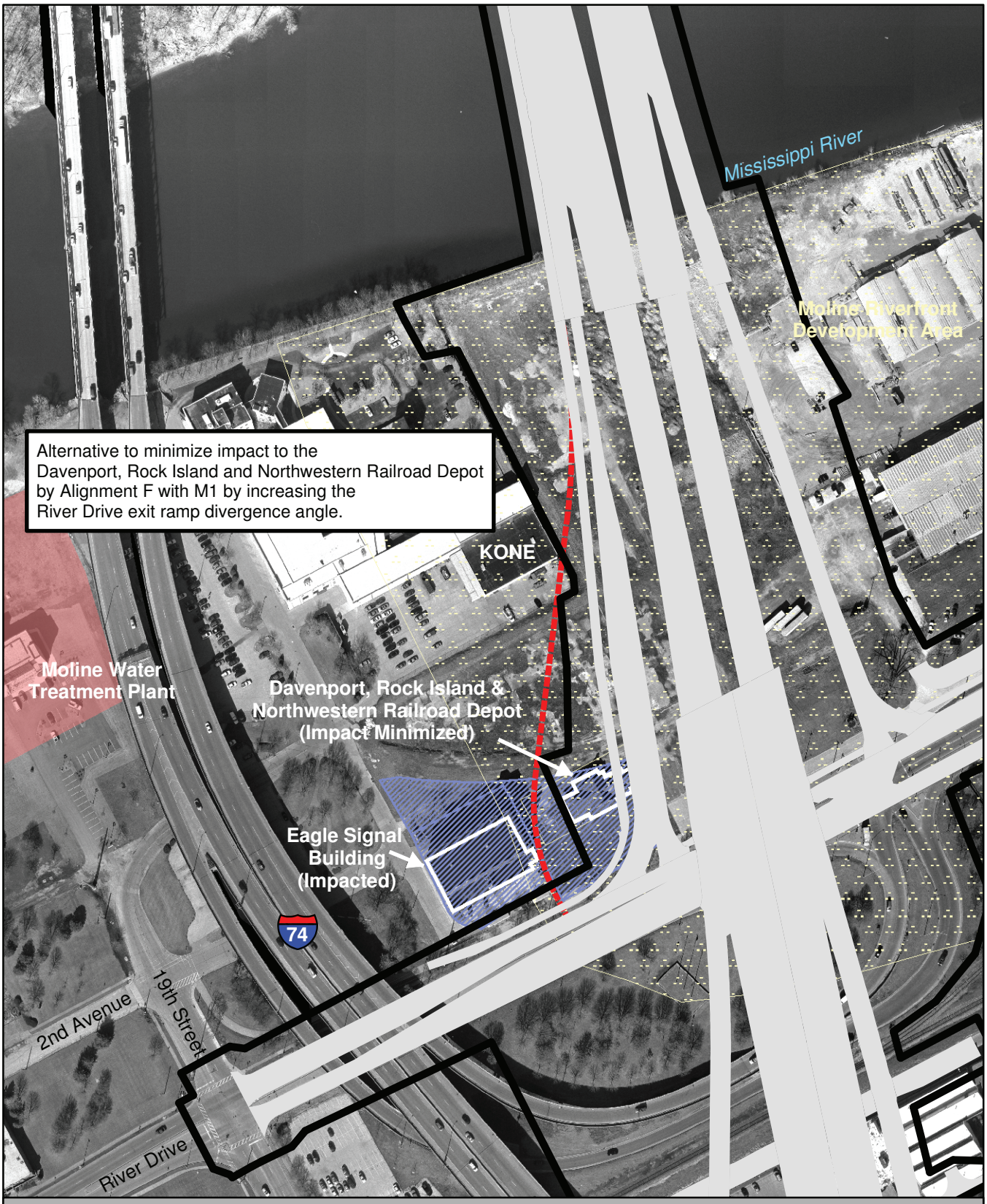
*Exact limits of land acquisition to be determined during final design.



Davenport, Rock Island & Northwestern Railroad Depot
Alignment E with M1 (Split Diamond Interchange in Moline, Illinois)

Appendix 4(f) - 3
Minimization Options

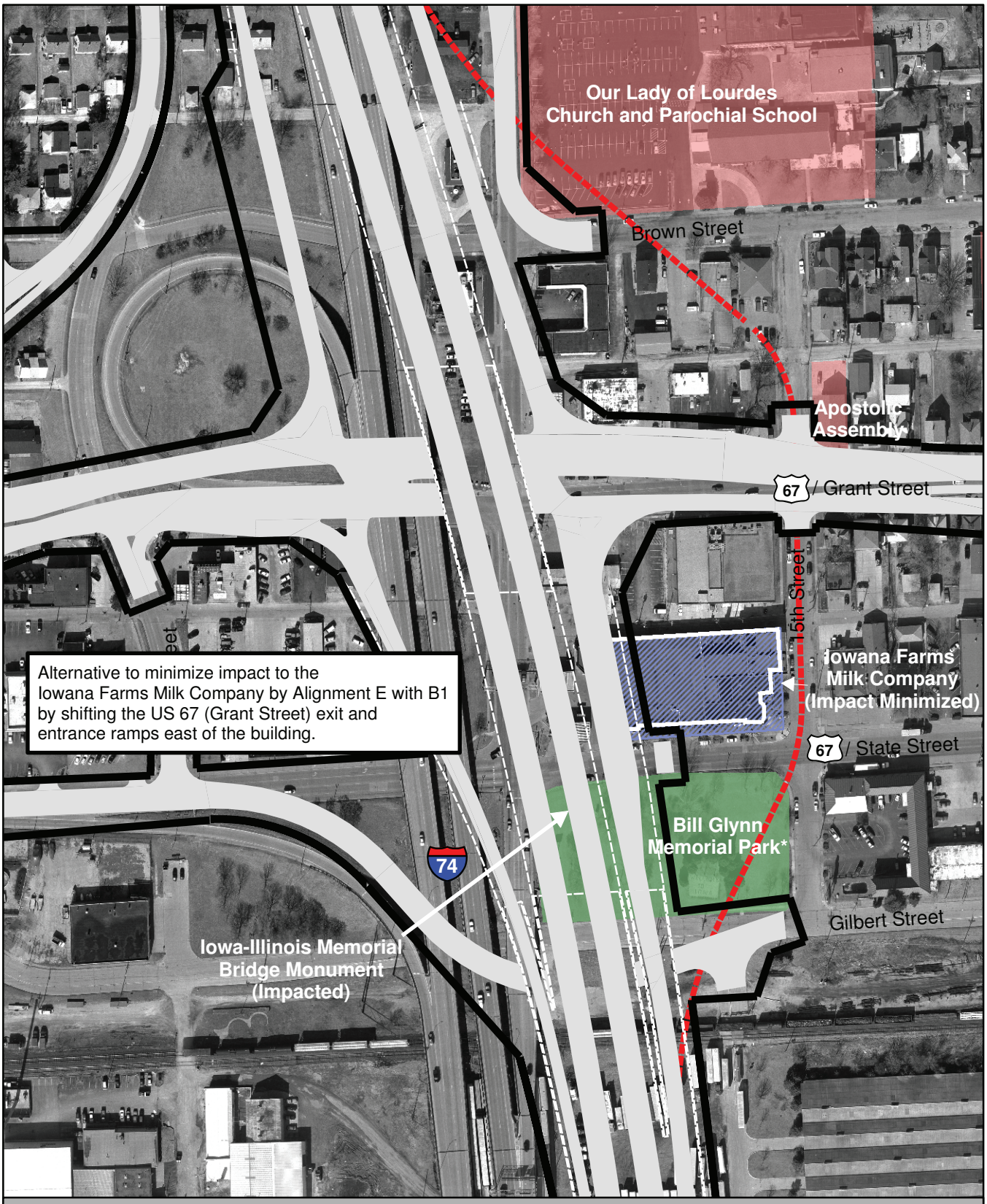
*Exact limits of land acquisition to be determined during final design.



Davenport, Rock Island & Northwestern Railroad Depot
Alignment F with M1 (Split Diamond Interchange in Moline, Illinois)

Appendix 4(f) - 3
Minimization Options

*Exact limits of land acquisition to be determined during final design.



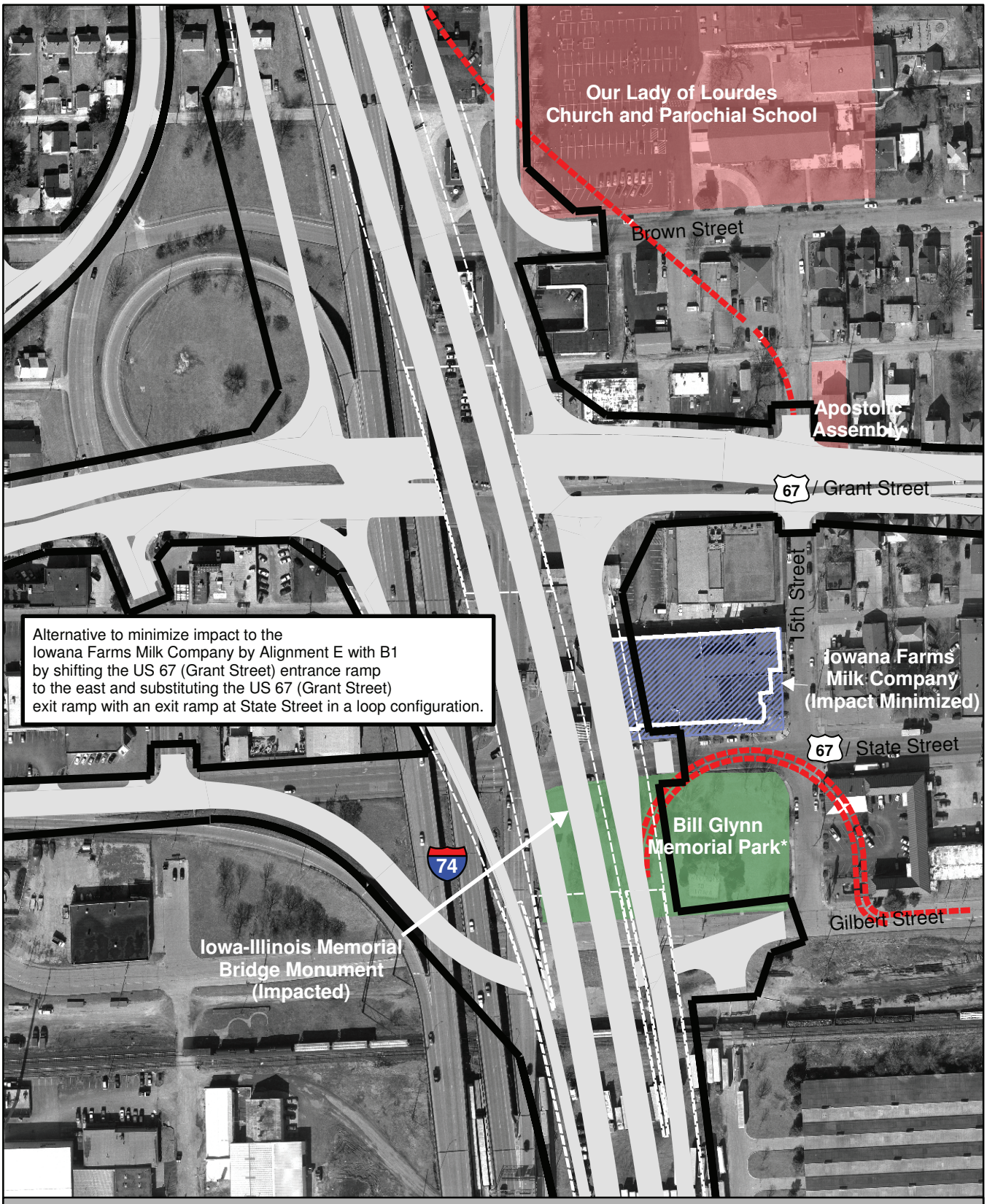
Iowana Farms Milk Company

Alignment E with B1 (Diamond Interchange in Bettendorf, Iowa)

*Bill Glynn Memorial Park is not considered a 4(f) property.
See Section 3.2.1 of the 4(f) Statement for more discussion.

**Exact limits of land acquisition to be determined during final design.

Appendix 4(f) - 3
Minimization Options



Iowana Farms Milk Company

Alignment E with B1 (Diamond Interchange in Bettendorf, Iowa)

*Bill Glynn Memorial Park is not considered a 4(f) property.
See Section 3.2.1 of the 4(f) Statement for more discussion.

**Exact limits of land acquisition to be determined during final design.

Appendix 4(f) - 3
Minimization Options

Appendix 4(f)-4
Additional 4(f) Property Descriptions

APPENDIX 4(f)-4

Site(s) Investigated But Determined Not To Be 4(f)

Bill Glynn Memorial Park

Although entitled as a "park," this property is actually an excess parcel owned by the Iowa Department of Transportation and leased to the City of Bettendorf. It is located adjacent to the US 67 interchange in Bettendorf. The Iowa Department of Transportation does not consider the site to be recreational in nature; it is an excess parcel remaining from highway construction. As a landscaped, but otherwise undeveloped excess parcel, it is not considered or intended to have recreational purposes. Public access to the property is not restricted. The current lease has expired, and should a future lease be enacted, it would contain a clause that the property has a transportation need and use. Therefore, the Bill Glynn Memorial Park was removed from consideration as a 4(f) property.

Bill Glynn Memorial Park also contains the Iowa-Illinois Memorial Bridge monument. More information on the monument can be found in Section 2.4.2 under "Iowa-Illinois Memorial Bridge and Iowa-Illinois Memorial Bridge Monument".

Parks and Trails Avoided by Proposed Improvements

Early resource studies and alternatives development focused on the early identification of potential 4(f) resources and avoiding those resources with the alternatives being developed. Several public recreational areas are within the project corridor, but were not evaluated for their 4(f) status because they would be avoided by the proposed project.

Great River Trail

The Great River Trail runs parallel to the Mississippi River through the Moline riverfront area. Its 26.7 miles extend from downstream in Rock Island to Port Byron upstream. It is generally used for recreation, but it also serves the community as a connection between residential, commercial, industrial and recreational areas.

Bettendorf Riverfront Trail

The Bettendorf Riverfront Trail is a paved trail that parallels the Mississippi River for 0.8 mile in Bettendorf. It is primarily used for recreation but also serves as a commuter facility for those traveling between residential areas and the commercial, industrial and recreational localities in the downtown area. The eastern trailhead is located in Leach Park.

Leach Park

Located on the Mississippi River, Leach Park is 4.3 acres and has available picnic shelters, picnic tables, boat and jet ski docks, a boat ramp, passive rest areas, a fitness trail, fishing piers, an information kiosk, and public washrooms. The Bettendorf-owned park is designated as a park by the City of Bettendorf and is shown in their comprehensive land use plan for 2000 to 2020. The property is open to the public. It is located along the Mississippi River waterfront in Bettendorf and is connected to the riverfront trail system.

Duck Creek Parkway

The Duck Creek Parkway is a Bettendorf-owned bicycle/pedestrian trail, which follows Duck Creek throughout Davenport and Bettendorf to Devil's Glen Park. The approximate length of the trail is 15 miles. The trail provides a connection to Middle Park and Palmer Hills Golf Course, which is located approximately one mile east of I-74, outside of the study corridor.

As trail continuity and access will be maintained, the FHWA determined on January 18, 2002, that a 4(f) evaluation is not necessary.

Stevens Square Park

Stevens Square Park is located in the northwest quadrant of 7th Avenue and 19th Street in downtown Moline. It was donated to the Moline Parks Department, which currently owns the property. The property contains park benches and picnic tables, but it is not highlighted by the city as a prime recreational facility; rather, it is largely used as an outdoor space for the adjacent Moline Activity and Senior Center.

Properties Investigated But Determined Not Eligible For The NRHP

Although they were identified early in the study process as having the potential for being a 4(f) resource, the following properties were investigated and determined to be not eligible for the NRHP. (See Appendix 4(f)-5, Correspondence.)

George Benson House

The George Benson House was built at the turn of last century at 1921 6th Avenue in Moline. Its two-story hip-roof and wrap-around open porch supported by Ionic posts is reminiscent of the Prairie School and Classical Revival architectural styles of the early twentieth century. However, the porte-cochere has lost its original classic Ionic columns, the picture window is incompatible with the original style of the house and the house has aluminum window frames. These factors diminish the integrity of the house and, therefore, contributed to the decision that it is not eligible for the National Register of Historic Places.

John Deere Building Plow Works Company Warehouse and Office Building

The John Deere Building was constructed in 1928 at 400 19th Street in Moline. Designed by John Deere Company's chief architect, it is representative of the development in the 1920s. The structure, however, has been altered to the extent that it no longer retains the integrity necessary to be considered eligible for the National Register of Historic Places.

Montgomery Elevator Company and Moline Tool Company Erecting Shop

KONE, Inc. (as it is currently named), located at 1 Kone Court in Moline, is an elevator factory with newer and older buildings and definitely has historical significance to 20th century Moline. However, a more thorough evaluation of the extant buildings revealed that the façade has been too altered to convey accurately its association with its importance as an early to mid-twentieth century manufactory in Moline. As such, it has been determined that this property is ineligible for the National Registry of Historic Places.

Illinois Archaeological Site(s)

No archaeological sites were found in Illinois during the intensive archaeological investigation.

Iowa Archaeological site

Archaeological site 13ST189 was identified as having indeterminate prehistoric artifacts. However, no artifacts were intact and the site did not contain culturally significant historical objects (see Appendix 4(f)-5, Correspondence).

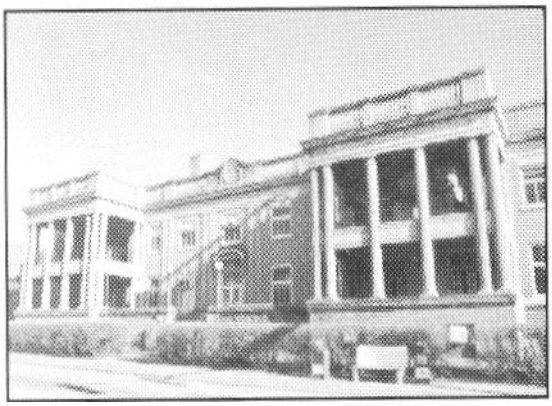
Historic Properties Avoided By Proposed Improvements

The following properties are located within the project corridor and were identified as 4(f) resources. As a result of the alternatives development process, which sought to avoid impacts to 4(f) properties, these properties would be avoided by the proposed build alternatives.

B.P.O.E. (Elks) Building (Eligible)

The B.P.O.E. (Elks) Building is located at 1706 6th Avenue in Moline and currently houses the Community Christian Fellowship. This Classical Revival style building designed for the Elks by local architect, William H. Schulzke, is considered eligible for the National Register of Historic Places.

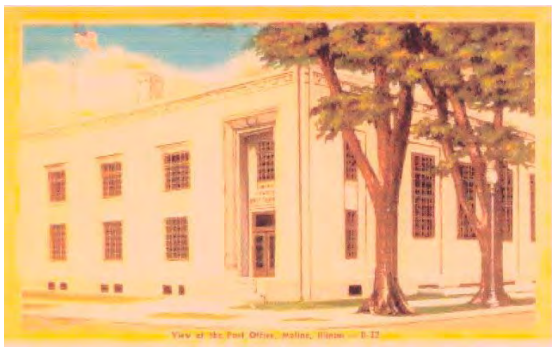
Although recognized as a site eligible for the National Register, it has not been listed as a local historic landmark.



B.P.O.E. (Elks) Building

Moline Post Office (1935) (Eligible)

This property is located at 514 17th Street and is currently used as Moline's main post office. It was built in 1935 when the post office operations outgrew the River Drive structure. William H. Schulzke designed this structure after the Moderne style. Notable characteristics of the exterior include a stone façade and a roofline with a carved decorative border. The lobby has marble features and raised plaster wall motives that extend up to the second floor ceiling. The wall is painted with a mural illustrating workmen making plows, representing Moline's history in the farm implement industry. This building is eligible for the National Register of Historic Places.



Moline Post Office (1935)



Mural in Post Office Lobby

The Moline Post Office (1935), while eligible for the National Register, has not been placed on the list of local historic landmarks by the City.

Moline Public Library (Eligible)

The Moline Public Library, located to the west of the I-74 study area at 504 17th, was constructed in 1903. The Neo-Classical building was designed by architect, F. Borgolte, and was mostly funded by philanthropist, Andrew Carnegie. The building, which features a large stone foundation, a full-height entry porch supported by four Ionic columns, and an open staircase reaching the building's three stories, has been declared by the City of Moline as a Local Historic Landmark in 1993. These characteristics also contribute to the structure's eligibility for the National Register of Historic Places.

Thomas/Lewis/Wilson House (Eligible)

The Thomas/Lewis/Wilson House, located at 604 21st Street, is currently owned by Trimble Funeral Homes, Ltd. and is used for a stationers business. The brick that the house is constructed out of was manufactured locally. Notable features include flanking brick chimneys and raised parapets. The house also features a denticulated friezeband and central doors that are flanked by single 6/6 double-hung windows that likely originate back to the house's construction.

This structure is considered eligible for the National Register of Historic Places, as it is a well-preserved example of the popular Greek Revival style. It is also possibly the oldest standing house in Moline.



Thomas/Lewis/Wilson House



Moline Public Library

LeClaire Hotel (Listed)

The LeClaire Hotel, located directly west of I-74 in Moline at 421 19th Street, was built in 1922 and named after a well-known early settler, Antoine LeClaire.

Its three-part vertical block design represents the Prairie School influence. The building is reminiscent of Moline's commercial development boom of the 1920s. Amongst its well-known guests are Presidents John F. Kennedy and Ronald Reagan. The Alexander Co. restored and converted the building into rental apartments in 1995-96. It is currently owned by Heartland-Moline LeClaire, LLC and used for residential and commercial space. It was designated by Moline as a Local Historic



LeClaire Hotel

Landmark in 1993 and was listed on the National Register of Historic Places in 1994.

Moline Post Office (1910) (Eligible)

The post office, built in 1910, is located at 1800 River Drive and housed Moline's Post Office until 1935. Montgomery Elevator Company took ownership of the building and it currently operates as a local office for KONE, Inc. When the company refurbished the building, it restored features that identified the building as an historic structure including the copper roof on the exterior and antique postal boxes, stamp windows, grills and counters to the original lobby area. The building was given a Preservation Award in 1990 for its maintenance of historic elements that identify with the original structure.

This post office is considered by Moline to be a Local Historic Landmark, perhaps because of the earlier construction date. The Moline Post Office (1910) is considered eligible for the National Register of Historic Places.

Bettendorf Grocery / Improvement Company Building / W.F. Bruhn & Son General Merchandise Store (Eligible)

Bettendorf Grocery/Bettendorf Improvement Company Building is located at 1536-1540 State Street in Bettendorf and currently houses J & M Window and Siding, Ed's Appliance, and apartment units. The W.F. Bruhn & Son General Merchandise Store is located at 1542-1546 State Street in Bettendorf and houses Century Carpet Cleaners and Blake's Gunsmithing. The larger structure is a two-story, front-gabled frame commercial building. The attached structure is a two-story brick building.

The two structures maintain the Classical Revival-inspired commercial brickfront with significant integrity to be considered eligible for the National Register of Historic Places. The larger building once housed the Bettendorf Improvement Company, an economically and socially important business on the development of Bettendorf in the early twentieth century.



Bettendorf Grocery / Improvement Company



W. F. Bruhn & Son General Merchandise Store

Regina Coeli Monastery (Listed)

The Monastery, located at 1401 Central Avenue on a bluff in Bettendorf to the east of I-74, is currently used for commercial purposes as the Abbey Hotel. It was constructed from 1914-1917 for the Sisters of Our Lady of Mount Carmel after the Sisters dismantled their original monastery in Davenport in 1912 and relocated themselves and the monastery to Bettendorf.

This Romanesque-styled building was constructed with gold-mottled brick in a double cruciform (cross) layout and is surrounded by a brick wall for the Sisters' privacy. Bedford stone trimmings line the building, the chapel features two angels on the roof at the entrance and stained glass windows with scenes containing Carmelite saints, which were subjects of Carmelite meditation.

The Monastery served the Sisters until 1975 when the Sisters felt it was too large for their purposes. The Franciscan Brothers of Christ the King took ownership of the monastery in 1978 and operated it as a retreat house. It was then sold to Joseph and Joan Lemon and their son, Joseph Jr., of Sausalito, California who transformed it into a hotel, which was identified as one of the "54 Best Inns in America" by National Geographic Traveler magazine (April 1999).

The Regina Coeli Monastery was listed on the National Register of Historic Places in 1994.



Regina Coeli Monastery

Concurrence on Architectural/Historical and Archaeological Surveys

Iowa Department of Transportation ..... August 26, 2002
Iowa Department of Transportation ..... September 9, 2002
Illinois Department of Transportation ..... October 7, 2002
Illinois Department of Transportation ..... November 19, 2002

Transfer of Iowa-bound I-74 Bridge Jurisdiction

Sverdrup (communication with U.S. Coast Guard) ..... May 9, 2002
Iowa and Illinois Departments of Transportation ..... November 26, 2002
Scott County Board of Supervisors ..... December 19, 2002
Rock Island County Board ..... January 9, 2003
Cities of Bettendorf and Moline ..... January 22, 2003

Comments on 4(f) Decision Process

United States Coast Guard ..... December 18, 2002
Iowa Department of Transportation ..... January 15, 2003

Concurrence on SHPO Roles in Relation to Proposed Project

Iowa Department of Transportation ..... February 4, 2003

Finding of Adverse Effect

Iowa Department of Transportation ..... December 7, 2005
Federal Highway Administration ..... March 7, 2006 (i.e., 2008)
Advisory Council on Historic Preservation ..... May 13, 2008

Appendix 4(f)-5
Correspondence

Concurrence on Architectural / Historical and Archaeological Surveys

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1097
515-239-1726 FAX

AUG 2 8 20
RECEIVE
SEP 3 0 20
OFFICE OF LOCATION & EN

August 26, 2002

Ref. No: IM-74-1(122)9-13-8
Scott
Primary

Mr. Douglas W. Jones
Review and Compliance
Bureau of Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319-0290

R&C: 980282048

Dear Doug:

RE: Phase I Archaeological Investigation of the I-74 Quad Cities Study Area
City of Bettendorf, Scott County, Iowa.

Enclosed for your review and concurrence is the Phase I Archaeological Investigation for the above-mentioned project. The study area investigated maybe potentially used for the construction of a new bridge crossing over the Mississippi River as well as the overall improvement of the interchanges along the entire project corridor. This investigation surveyed the Iowa side of the project area.

The area of potential effect encompasses a project corridor that exists primarily within the right of way of Interstate 74, however a fairly wide area will be needed for the footing of the bridge and any possible on-ramps. This area of potential impact varies from a minimum width of 300 ft. up to 500-700 ft., approximately 5 miles in length. A total of 305 acres was surveyed in this investigation.

This archaeological investigation was conducted using an extensive archival / records search. A pedestrian survey was also conducted along with shovel / auger tests, backhoe test trenches, and six test units. During this investigation, one previously unrecorded prehistoric archaeological site, 13ST189, was identified.

Site 13ST189 represents prehistoric artifact scatter, located underneath modern fill. An excavation of test trenches and units produced no evidence of intact features or cultural deposits. This site was concluded to be ineligible for the National Register of Historic Places and no further work was recommended.

Based on the results of these surveys, the determination is that **No Historic Properties Affected.** If you concur, please sign the concurrence line below, add your comments and return this letter. If you have any questions, please feel free to contact me.

Sincerely,

Matthew J. J. Donovan

Matt Donovan
Office of Environmental Services
Matt.Donovan@dot.state.ia.us

MJFD
Enclosure
cc:
~~Larry Jackson- District 5 Engineer~~
Leah Rogers- Principal Investigator / Tallgrass Historians L.C.

Concur Douglas W. Jones Date 9/25/2002
SHPO Archaeologist

Comments

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1097
515-239-1726 FAX

September 9, 2002

Ref. No: IM-74-1(122)9-13-8
Scott
Primary

Mr. Ralph Christian
Review and Compliance
Bureau of Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319-0290

R&C:_____

Dear Ralph:

RE: **Phase I Architectural / Historical Survey of the I-74 Quad Cities Study Area City of Bettendorf, Scott County, Iowa.**

Enclosed for your review and concurrence is the Phase I Architectural / Historical Investigation for the above-mentioned project. The study area investigated may be potentially used for the construction of a new bridge crossing over the Mississippi River as well as the overall improvement of the interchanges along the entire project corridor. This investigation surveyed the Iowa side of the project area.

The area of potential effect encompasses a project corridor that exists primarily within the right of way of Interstate 74, however a fairly wide area will be needed for the footing of the bridge and any possible on-ramps. This area of potential impact varies from a minimum width of 300 ft. up to 500-700 ft., approximately 5 miles in length. A total of 305 acres was surveyed in this investigation.

This architectural / historical survey was conducted using an extensive archival / records search, along with site visits, black & white photographs, and completion of Iowa Site Inventory forms. This survey investigated 147 properties within the area of potential impact, of which four were determined to be eligible for the National Register. (Properties 82-05069, 82-05063, and 82-00111 / FHWA: 047280, and Property 82-05044)

Property 82-05069 represents a two-story, front-gabled frame commercial building, constructed circa 1890, with an attached two-story brick building, constructed in 1910. Both structures are eligible for the National Register under Criteria A and C. These buildings represent Classical Revival-inspired commercial store fronts and retrain sufficient integrity to be considered eligible for their architecture.

Property 82-05063 represents the Iowana dairy plant, built circa 1937. The plant represents the Art Moderne style of architecture and retains much of its original style, particularly the ice-cream factory. This property was determined eligible for the National Register under Criteria A and C.

Property 82-00111 represents the Iowa-Illinois Memorial Bridges. The 1935 bridge is a three-span, twisted-wire-strand steel cable suspension bridge with six Warren stiffening trusses and six 22-foot deck truss approach spans. Due to the increase of traffic volume, a second bridge was completed in 1959. The 1935 bridge was previously determined eligible for the National Register. The 1959 bridge, however, was determined not eligible for the National Register, and its removal will not affect the eligibility of the 1935 bridge.

Property 82-05044 represents the Iowa-Illinois Memorial Bridge Monument, located in the Bill Glynn Park, at the foot of the I-74 Bridge. This monument was dedicated to World War One veterans. The monument is a contributing factor to the I-74 Bridge (1935), but in itself is not eligible for the National Register.

The I-74 Bridge will be impacted by this project, however, it is not known what type of impact the project will have on the bridge. The I-74 Bridge will, however, not be used for interstate traffic, once the capacity improvement is constructed.

Once a determination has been reached on what the potential impacts to these properties are, they will be forwarded to your office for review and concurrence.

If you concur with the findings of this survey, please sign the concurrence line below, add your comments and return this letter. If you have any questions, please feel free to contact me.

Sincerely,

Matthew J. Donovan

Matt Donovan
Office of Environmental Services
Matt.Donovan@dot.state.ia.us

MJFD
Enclosure
cc: Kris Riesenberg- Location and Environment
Richard Kautz- District 6 Engineer
Tammy Nicholson- Location and Environment
Leah Rogers- Principal Investigator / Tallgrass Historians L.C.

Concur _____ Date _____
SHPO Historian
Comments

SHPO did not respond within 30 days to the information within this letter. Therefore, under 36 CFR 800, the agency official's responsibilities per the findings of this letter are fulfilled.

Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

OCT 2 9 2002
ENVIRONMENT SECTION

RECEIVED
OCT - 8 2002
02100800070WRI
Preservation Services

IHPA REVIEW
H/A Concur 10/21/02
AC ____ ____
AR ____ ____
File RI DOT

October 7, 2002

Ms. Anne E. Haaker, Deputy
State Historic Preservation Officer
Historic Preservation Agency
500 East Madison
Springfield, IL 62702

RE: FAI 74, I-74
Section 81B
Mississippi River Study
Moline
Rock Island County

Dear Anne:

Our staff has studied the enclosed volumes describing an architectural survey of the proposed corridor for the referenced project.

We find that the following properties—other than the existing bridges, which are being coordinated by the Iowa Department of Transportation—are potentially eligible for the National Register of Historic Places.

- Depot: Davenport, Rock Island and Northwestern RR, 2021 River Drive
- Eagle Signal Building, 202 20th Stret
- C. Ivar Josephson House, 1925 6th Avenue
- Knights of Pythias Lodge Hall, 2011 6th Avenue
- Thomas/Lewis/Wilson House, 604 21st Street

We agree with the consultant that other buildings described in the volumes are not potentially eligible. Also, we find that the George Benson House, 1921 6th Avenue, photos of which also are enclosed, is not potentially eligible. The consultant originally had assessed this property as potentially eligible, but has since admitted that it may not qualify. Please note the porte-cochere that has lost its original classic Ionic columns, the incompatible picture window, and the aluminum window frames.

We request your concurrence in our findings.

Very truly yours,

Michael L. Hine, Engineer of
Design & Environment

By: John A. Walthall, Manager
Cultural Resources Unit

Enclosure

JAW/JJ

xc: Kevin Marchek/Larry Hill
Mike Bruns

CONCUR

By: Anne E. Haaker
Deputy State Historic Preservation Officer

Date: 10/21/02

Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

November 19, 2002

Rock Island County
FAI-74, I-74
Section: 81B
Project: P-92-032-01

DOT Seq. # 9724
ITARP # 01094

FEDERAL 106 PROJECT

Ms. Anne Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
Springfield, Illinois 62701

Dear Ms. Haaker:

Enclosed are two copies of an Archaeological Report and Phase I documentation completed by University of Illinois personnel concerning archaeological properties and sites potentially to be impacted by the proposed project referenced above. A records search and archaeological survey in the 724 acre project area indicates that there are no previously recorded archaeological sites in the study corridor. Heavy urban disturbance has occurred over most of the study corridor and only areas near or on the bluff have any potential for intact archaeological deposits. Once final right-of-way plans are available any of these bluff areas with potentially intact prehistoric surfaces will be tested. There is no evidence of cemetery or burial sites nor archaeological properties subject to Section 4(f) of the 1966 National Transportation Act present in the study corridor.

In accordance with the established procedure for coordination of Illinois Department of Transportation projects, we request the concurrence of the State Historic Preservation Officer in our determination that no sites subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended, have been identified in the project area and that further testing of potential intact bluff areas will be necessary prior to the on-set of construction.

Very truly yours,

John A. Walthall, PhD
Cultural Resources Unit
Bureau of Design and Environment

CONCUR
By: Anne E. Haaker
Deputy State Historic Preservation Officer
Date: 11/19/02

Transfer of Iowa-bound I-74 Bridge Jurisdiction

Telephone Conversation Report

Date: May 9, 2002

By: Ernst Petzold

Project: I-74 Capacity Improvement Study

Job No.: C1X13500 (Sverdrup)

Subject: Navigation Requirements
Disposition of Existing Bridge

Participants:

Roger Wiebusch	US Coast Guard
Ernie Petzold	Sverdrup

Conversation Notes:

Navigation Requirements

Regarding the proposed navigation span arrangements forwarded by fax (April 23-Alignment 'E', April 24-Alignment 'F') Roger stated that the arrangements were acceptable. I asked that a written response be provided for the record and he agreed to provide such a response.

Disposition of Existing Bridge

The Coast Guard has no objection to retaining one of the existing bridges for use as a pedestrian walk / bike path. They consider that such use qualifies as a transportation function. Roger was concerned about the eventual ownership of the bridge, however. The Coast Guard wants the owner to be a "real" owner that is committed to maintaining the bridge as a viable transportation link. A major issue is the possible future removal of the structure should its use as an alternative transportation facility cease at some time in the future. Should the structure stop being used for transportation purposes, it ceases to be a "bridge", and the Coast Guard would require that it be removed. In the past, and currently, they are having difficulty with private owners complying with their order to remove structures. This occurs usually because the owner doesn't have the funds to pay for the removal. Roger is pushing for a change in the legislation that would require that the owner put up a bond to cover future removal, or a portion thereof, at the time of taking ownership. In the case of I-74, if one of the cities has ownership, he is less concerned since these are viable entities with the ability to obtain revenue through taxing authority. Such ownership would be preferable to one consisting of well intentioned, but underfunded, citizen's groups.

Also, the Coast Guard would expect that the alternative transportation use of the bridge would start in conjunction with the opening of the new facility or shortly thereafter. That is, they are

not interested in "stockpiling" the bridge for some nebulous future use that may never happen. If it is not clear that a viable plan exists to use the structure in the immediate future, they will request that the bridge be removed.

c: Participants (via E-mail)
Lidia Pilecky (via E-mail)
Miguel Rosales (via E-mail)
John McCarthy
Petzold (PF)

November 26, 2002

The Honorable Ann Hutchinson
City of Bettendorf
Bettendorf City Hall
1609 State Street
Bettendorf, IA 52722

Subject: I-74 Iowa-Illinois Corridor Study (IM-74-1(122)0—13-82)

Dear Mayor Hutchinson:

This letter is in regards to the ongoing I-74 Iowa-Illinois Corridor Study. Specifically, we are writing to assess your interest and commitment to maintain the Iowa-bound I-74 bridge over the Mississippi River for future use as a pedestrian/bicycle facility.

As you are aware, the Iowa Department of Transportation and Illinois Department of Transportation are jointly conducting an engineering and environmental study of I-74 extending from 23rd Avenue in Illinois to 53rd Street in Iowa. The study is being advanced under the guidance of the I-74 Project Steering Committee. The objective of this study is to develop a recommended plan for correcting the existing capacity, operational, and safety deficiencies along I-74 and at the existing Mississippi River bridges. Roadway construction alternatives under consideration include adding lanes to I-74, constructing new wider bridge(s) for I-74 over the Mississippi River, and improving existing interchanges and connecting local roadways. Other improvement features such as transportation system management strategies, transit and bike/pedestrian trail enhancements are also being considered in conjunction with proposed roadway improvements. A recommended improvement plan for I-74 will be identified in the Final Environmental Impact Statement (Final EIS) after the Draft Environmental Impact Statement (Draft EIS) has been circulated and comments received. The I-74 improvement plan will be approved in the Record of Decision (ROD).

In conjunction with our ongoing environmental studies, we are evaluating options for avoiding or minimizing impacts to sensitive environmental resources along the corridor. One of these resources is the Iowa-bound Mississippi River Bridge, which is a historic structure eligible for the National Register of Historic Places. We have considered several options for continued use of the existing I-74 bridges for interstate traffic, and have determined that they are not reasonable alternatives since they do not address the project purpose and need, particularly relating to roadway design and safety. Project build alternatives therefore include abandonment of the existing Mississippi River bridges for I-74 interstate traffic and the construction of a new improved I-74 structure(s).

Although we have determined that the existing Iowa-bound bridge cannot be re-used for interstate traffic, we continue to evaluate the viability of retaining the existing Iowa-bound bridge for other transportation uses such as for an exclusive bicycle/pedestrian crossing. As you are aware, we are considering the provision of a new bicycle/pedestrian crossing over the Mississippi River with the I-74 improvements in response to public interest in expanding trail connections in the region. We are evaluating three options in this regard:

- **Retaining and converting the existing Iowa-bound I-74 bridge to an exclusive bike/pedestrian crossing,**
- **Constructing a physically separated bike/pedestrian trail along the new I-74 bridge(s),**
- **Providing no new bike/pedestrian crossing over the Mississippi River.**

Both new crossing options would include construction of trail connections to the existing riverfront trails in Iowa and Illinois. Both new crossing options would require local support and participation.

As a first step, we must confirm the viability of retaining and converting the Iowa-bound bridge to an exclusive bike/pedestrian crossing. This option is reasonable and practical only if there exists a commitment from a local agency to assume jurisdiction, future liability, and financial responsibility for the bridge. In general, local financial responsibilities would include the following:

- Cost participation for initial structural modifications, as well as costs for any required connections to adjacent bicycle/pedestrian facilities. Initial structural modifications include both structural repairs as well installation of fencing, signage, and expansion joint coverage to allow safe use by bicyclists and pedestrians. Specific local agency cost sharing responsibilities for these modifications would be negotiated at a later date.
- Long term maintenance and operating costs, including operating expenses, liability costs, and ongoing structural inspections and repairs. The local agency would be 100% responsible for long term maintenance and operating costs.
- Any resultant incremental design and construction cost increases for a new I-74 bridge, which may be required to accommodate retention of the existing bridge. Incremental costs and specific local agency cost responsibilities would be developed and negotiated at a later date.

We have prepared a preliminary cost analysis for the initial structural modifications and long term maintenance and operating costs for this option. Cost estimates are summarized on the enclosed Table 1 (Iowa-Bound Bridge Re-Use Cost Estimate).

At this time, please advise us of your interest in potential bicycle/pedestrian accommodations at the I-74 Mississippi River crossing, as well as your interest and

commitment to maintaining the existing Iowa-bound I-74 Mississippi River bridge for continued use as a bicycle/pedestrian facility. Note that although both DOT's and the Federal Highway Administration have come to agreement in principal that a physically separated trail crossing could be constructed (with appropriate design provisions) along the new I-74 bridge, no decisions or commitments have been made in this regard. Therefore, all three bicycle/pedestrian crossing options remain under consideration. In order to avoid a possible need to revisit this issue in the future, we request your input on the continued use option on the premise that other bike/pedestrian options (i.e. construction of a trail along the new I-74 bridge(s)) prove to be unachievable. Under these circumstances:

1) Are you willing or able to assume jurisdiction and future liability for the Iowa-bound bridge and to operate the bridge as a bike/pedestrian facility? If your answer is no, skip to question #2.

   1a) Are you willing to assume all future maintenance and operating costs?

   2a) Are you willing to participate in the costs of the initial modifications and trail connections?

2) If the Iowa-bound bridge was removed, what measures do you think are appropriate to retain a historical record of the bridge?

We would appreciate your advisement of interest in bicycle/pedestrian accommodations at the I-74 Mississippi River crossing and your response to the above questions by December 27, 2002. If you have any questions or would like to discuss this matter further, please contact Tamara Nicholson of the Iowa Department of Transportation at 515/239-1797.

Sincerely,

Tamara Nicholson

Roger E Rocke

Tamara Nicholson, P.E.
Project Manager
Iowa Department of Transportation

Roger Rocke, P.E.
District Engineer
Illinois Department of Transportation

Cc: Becky Hiatt/Federal Highway Administration

Mr. Decker Ploehn/City of Bettendorf

TABLE 1: IOWA-BOUND MISSISSIPPI RIVER BRIDGE RE-USE PRELIMINARY COST ESTIMATE (1)

	Estimated Costs			Estimated Schedule
	2002 $	2% Inflation Rate (2)	4% Inflation Rate (2)	
Initial Construction & Structural Repairs				
Trail Connection Construction (3)	$2.1M	$2.4M	$2.9M	2010
Structure Improvements & Modifications (4)	$5.2M	$6.1M	$7.1M	2010
Structure Inspection & Repairs (5)	$8.9M	$10.4M	$12.1M	2003, 2010
Subtotal	**$16.2M**	**$18.9M**	**$22.1M**	
Cumulative Maintenance & Operating Costs				
Maintenance and Operations (6)	$5.1M	$12.0M	$27.7M	2011–2075 (annually)
Structural Inspections & Repairs (7)	$8.8M	$20.8M	$52.5M	2011–2075 (varying schedule)
Subtotal	**$13.9M**	**$32.8M**	**$80.2M**	
Total Estimated Cost	**$30.1M**	**$51.7M**	**$102.3M**	

(1) Estimated life-cycle costs for conversion of Iowa-bound I-74 bridge to exclusive bike/pedestrian facility. Analysis assumes opening of bike/pedestrian facility in 2011 and continued operation through 2075.

(2) Assumes constant 2% and 4% inflationary rates from 2002 through 2075.

(3) Construction costs only; assumes new trail connections would be constructed within existing public right-of-way.

(4) Includes installation of fencing, signage, and expansion joint coverage to allow use by bicyclists and pedestrians.

(5) Includes in depth main cable and remaining life study and miscellaneous structural repairs. Remaining cable life study ($300,000) would be completed in 2003 if decision is made to retain existing bridge.

(6) Includes operating expenses, routine maintenance, labor costs, and insurance costs.

(7) Includes regular structural and main cable inspections, structural repairs, and bridge washing and painting.

11/26/02 Letter Distribution:

1. cc all letters to Becky Hiatt/FHWA
2. bcc all letters to Tammy Nicholson/Iowa DOT and Kevin Marchek/Illinois DOT
3. four addresses as noted below with additional cc's.

City of Moline:

The Honorable Stan Leach
City of Moline
619 16th Street
Moline, IL 61265

Cc: Mr. Dale Iman
City of Moline
619 16th Street
Moline, IL 61265

City of Bettendorf:

The Honorable Ann Hutchinson
City of Bettendorf
1609 State Street
Bettendorf, IA 52722

Cc: Mr. Decker Ploehn
City of Bettendorf
1609 State Street
Bettendorf, IA 52722

Scott County:

Mr. Ray Wierson
County Administrator
Scott County
518 W. Fourth Street
Davenport, IA 52801

Cc: Mr. Larry Mattusch
Scott County
Courthouse Annex
518 W. Fourth Street
Davenport, IA 52801

Rock Island County:

Rock Island County Board
Attn: County Board Chairman
County Office Building
1504 Third Avenue
Rock Island, IL 61201

Cc: Mr. Gary Lange
Rock Island County
PO Box 797
851 W. 10th Avenue
Milan, IL 61264

BOARD OF SUPERVISORS
428 Western Avenue
Davenport, Iowa 52801-1004

Office: (563) 326-8749
Fax: (563) 328-3285
E-Mail: board@scottcountyiowa.com

Scott County

CAROL H. SCHAEFER, Chairman
JIM HANCOCK, Vice-Chairman
OTTO L. EWOLDT
PATRICK J. GIBBS
LARRY E. MINARD

December 19, 2002

Ms. Tamara Nicholson, PE
Project Manager, Administration
Iowa Department of Transportation
800 Lincolnway
Ames, Iowa 50010

Dear Ms. Nicholson:

The Board of Supervisors has discussed your letter relative to the I-74 Iowa–Illinois Corridor Study and appreciate your request for our input. The Board is concerned about the safety of this bridge and supports the need for a replacement and corridor improvements. However, Scott County is not willing or able to assume jurisdiction of the existing Iowa-bound bridge and to operate it as a bike/pedestrian facility.

If the bridge were removed, the Board would support efforts to retain a historical record of the bridge. We believe that photographs should be taken of the bridge, and if available, original architectural designs of the bridge be kept on file.

If you have any other questions relative to this project, please let us know.

Sincerely,

Carol H. Schaefer, Chairman
Board of Supervisors

CHS/cb

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A PART OF
QUAD CITIES USA

Rock Island County

Rock Island County...Build the future and improve the quality of life for our community

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County Board

Chairman
James E. Bohnsack

Vice Chairman
John Brandmeyer

Committee Chairpersons

Welfare
Phillip Banaszek

Forest Preserve
Ted E. Davies

Public Works
Catherine J. Wonderlich

Administration
Gary Freeman

Fee & Salaries
John Malvik

Finance & Economic Development
Tom Rockwell

Legislative
Connie Mohr-Wright

Board Members

William R. Armstrong
Steven Ballard
Karen Calvillo
John P. Dingeldein
Johnny Ellis
Frank R. Fuhr
Donald L. Jacobs
Ken Maranda
Virgil Mayberry
Patrick Moreno
LaVern Ohlsen
James Sallows
Fred W. Schultz
Wanda M. Sweat
Walter J. Tiller
Don "Whitey" Verstraete

Executive Assistant
Shelly L. Chapman

Payroll Supervisor
Carol A. Shradar

Direct line is now (309)558-3605

January 9, 2003

Ms. Tamara Nicholson
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear Ms. Nicholson:

The Rock Island County Board Public Works Committee has reviewed your letter regarding the I-74 Iowa-Illinois Corridor Study (IM-74-1 (122)0–13-82) and has determined that we are not willing or able to assume jurisdiction and future liability for the Iowa Bound bridge and to operate the bridge as a bike/pedestrian facility.

Thank you for the opportunity to respond.

Sincerely,

James E. Bohnsack

James E. Bohnsack
County Board Chairman

JEB/sc

cc: Ron Standley, Acting County Engineer

OFFICE OF THE
COUNTY BOARD
Rock Island County, Illinois
1504 Third Avenue, Rock Island, IL 61201
Phone: (309) 786-4451, Ext. 600 • Fax: (309) 786-4473

RECEIVED
JAN 27 2003
OFFICE OF LOCATION & ENVIRONMENT

January 22, 2003

Mr. Gregory Mounts, Dist. Engineer
Division of Highways, District 2
Illinois Department of transportation
819 Depot Avenue
Dixon, Illinois 61021-3500

Tamara Nicholson, P.E.
Project Manager
Iowa Department of Transportation
800 Lincolnway
Ames, Iowa 50010

Dear Mr. Mounts and Ms. Nicholson:

This letter is a joint response to the request for formal input regarding the provision of bike/pedestrian crossing on one of the existing I-74 spans. The request also notes that if this were to occur, a transfer of maintenance and jurisdiction of the span to a local jurisdiction would be required. The local jurisdictions are not interested in ownership of the span. However, we believe bike/pedestrian access should be provided by the Iowa and Illinois Departments of Transportation and the Federal Highway Administration on the new I-74 bridge(s), a federal and state facility.

One of the purposes of the I-74 Corridor project, as stated in recent public information, is to "improve opportunities for other modes of transportation". The construction of a new I-74 crossing will offer reliable transit access across the Mississippi River. Likewise pedestrian/bike access should be provided at this location, which is central to the Quad Cities. Although there are other locations for pedestrians and bikes to cross the Mississippi River, none meet AASHTO guidelines for bicycles. In addition, these other crossings are 3.5 to 4.0 miles away from this location. By scale, this is a significant distance off course for a pedestrian or cyclist that has a destination in the I-74 corridor area.

Analysis by CH2M Hill shows that a bike/pedestrian crossing on one of the existing I-74 spans would:

- Constrain design options for the new I-74 bridge(s),
- Potentially increase river flood elevations, and
- Cost 70 percent more in initial capital and three times more in operation/maintenance than bike/pedestrian access on the new I-74 bridge(s).

Further, the initial cost estimate for a bike/pedestrian access on the new I-74 bridge(s) would only constitute roughly 2.7 percent of the total estimated cost of the new bridge(s) and their initial interchanges in the downtown areas.

The Federal Highway Administration Final Guidance on Transportation Enhancement (TE) Activities, 23 U.S.C. and Transportation Efficiency Act of the 21st Century noted in the Policy statement the following:

> *Through the TE activities Congress provided innovative opportunities to enhance and contribute to the transportation system. This is being carried out in a non-traditional fashion through implementation of a specific list of TE activities. The focus of these actions is to improve the transportation experience in and through local communities.*

Further, the Project Development statement of the Guidance said:

> *State DOT's, MPO's and FHWA field offices have a responsibility to actively pursue TE opportunities during the development of individual transportation projects. Accordingly, future environmental approvals should specifically take into consideration the potential for implementing transportation enhancement activities as part of these overall projects. During their involvement in these projects, FHWA field offices should promote TE activities as a means to more creatively integrate transportation facilities into their surrounding communities and the natural environment. When appropriate, TE activities may be developed in cooperation with other State and local agencies and with private entities. However, the State DOT or other eligible transportation agencies shall remain responsible to the FHWA for the project.*

We would suggest that bike/pedestrian access, on the new I-74 bridge(s), falls under the jurisdiction of the States and the FHWA. Local governments in the Quad Cities have spent millions of dollars on trail access throughout the metropolitan area. The source of some of these funds has been TE dollars, but many have also been from local and state recreation dollars. As testimony to this, trail systems such as the Duck Creek and Riverfront Trails in the Iowa Quad Cities and the Great River and Kiwanis Trails in the Illinois Quad Cities were begun before ISTEA and the TE program existed.

We appreciate the past assistance of both DOT's in funding projects on the trail systems in the Quad Cities. We also recognize past examples of State involvement in establishing major trail crossings over rivers, such as with the soon to be completed West Rock River Bridge in the Illinois Quad Cities and the $21.5 million stand-alone bike/pedestrian bridge over the Missouri River in the Omaha metropolitan area.

The request to comment on this critical issue related to the I-74 Bridge and corridor improvements is appreciated. This project provides the chance to offer centrally located river crossing access to bike and pedestrian traffic. Major river crossing improvements are addressed infrequently in any community due to their significant cost. This opportunity should not be overlooked. Therefore, we feel that the States of Iowa and Illinois, along with the Federal Highway Administration, should include bike/pedestrian access as part of the new I-74 Bridge project.

Finally, with respect to an appropriate historical record of the existing I-74 Bridge, we believe that memorials should be erected on both sides of the river. There is strong sentiment that the memorials should include historical data relevant to the bridge and incorporate distinctive materials salvaged from the structure.

Again, thank you for the opportunity to provide input concerning these important issues. The construction of a new I-74 bridge linking the Cities of Moline, Illinois and Bettendorf, Iowa is of unparalleled importance for the future of our communities. We look forward to working closely with you to insure the success of this project.

Sincerely,

Mayor, Ann Hutchinson
City of Bettendorf

Sincerely,

Mayor, Stanley F. Leach
City of Moline

MH-SL\DB\sh
IntergovVLtr\LRP Trail Revision.doc

Comments on 4(f) Decision Process

U.S. Department of Transportation
United States Coast Guard

Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: obr
Phone: (314) 539-3900, Ext 2382
FAX: (314) 539-3755

16591.1/485.51 UMR
18 December 2002

Ms. Laura Lutz-Zimmerman
Iowa Department of Transportation
Office of Location and Environment
800 Lincoln Way
Ames, IA 50010

Subj: PROPOSED IOWA-ILLINOIS REPLACEMENT BRIDGE, MILE 485.5,
UPPER MISSISSIPPI RIVER

Dear Ms. Lutz-Zimmerman:

This is in reply to your memorandum of 21 November 2002, inviting us to comment on the 4(f) Decision Point Process for the subject project. Our specific interest in this project is the possible impact upon navigation on the Upper Mississippi River presented by the construction and operation of a new bridge or changes to any existing bridges. However, the Section 4(f) should have the following statement included:

> "There are no feasible and prudent alternatives and the proposed project includes all possible planning to minimize harm to Section 4(f) resources."

We appreciate the opportunity to comment on the project in this early stage. You can contact Mr. David Orzechowski at the above telephone number if you have questions regarding our comments or requirements.

Sincerely,

ROGER K. WIEBUSCH
Bridge Administrator
By direction of the District Commander

RECEIVED
DEC 23 2002
OFFICE OF LOCATION & ENVIRONMENT

Iowa Department of Transportation

800 Lincoln Way, Ames IA 50010

(515) 239-1010
(515) 239-1726 (fax)

January 15, 2003

Ref: Interstate 74 Quad Cities Corridor Study

Mr. Roger Wiebusch
Bridge Administrator
1222 Spruce Street
St. Louis, MO 63103-2832

Dear Mr. Wiebusch:

I am responding to your comments on the 4(f) decision point process documents that you received late last year. Our agency appreciates your interest in the navigational impacts of the project and will continue to work with you and your staff through project development. With regards to your specific comments on the 4(f) materials, the following statement will be included in the Final Section 4(f) Statement:

"There are no feasible and prudent alternatives and the proposed project includes all possible planning to minimize harm to the section 4(f) resources."

We appreciate your comments. If you have any further questions, please contact me or have Mr. David Orzechowski contact me at the phone number above.

Sincerely,

Laura Lutz-Zimmerman

Laura Lutz-Zimmerman
Office of Location and Environment

cc: Tamara Nicholson, Iowa DOT
Andy Wilson, FHWA

Concurrence on SHPO Roles in Relation to Proposed Project

FEB 0 6 2003

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010 515-239-1215, FAX 515-239-1726

February 4, 2003

Ref. No IM-74-1(122)9--13-82
Scott County, Iowa
Rock Island County, Illinois

Dr. Lowell Soike
Deputy SHPO
Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319

Ms. Anne Haaker
Deputy SHPO
Illinois Historic Preservation
500 E Madison
Springfield, Illinois 62702

Dear Dr. Soike and Ms. Haaker:

RE: I-74 Improvement across the Mississippi River at Moline, IL/Bettendorf, IA
Definition of Roles: *IASHPO R&C# 9802 82 041 8*

The Iowa Department of Transportation and Illinois Department of Transportation propose to jointly improve the Interstate 74 crossing of the Mississippi River between Moline, Illinois and Bettendorf, Iowa. The Iowa DOT and Iowa Division Office of the Federal Highway Administration (FHWA) are lead agencies for the planning, design, and construction of improvements to this transportation corridor. This construction will result in the removal of interstate vehicular traffic from the Iowa-Illinois Memorial (I-74) Bridge. The Iowa bound span of this suspension bridge has been determined eligible for the National Register of Historic Places. If another public owner and an alternate use is not found for this bridge, the project would ultimately result in the loss of this historic property.

In compliance with Section 106 of the Historic Preservation Act, the Iowa State Historic Preservation Officer (IASHPO) and Illinois State Historic Preservation Officer (ILSHPO) agree to maintain Section 106 review responsibilities for this project regarding historic properties within their respective jurisdictions. The IASHPO and ILSHPO also agree that the IASHPO will have Section 106 Review and Compliance responsibility for project effects upon the NRHP eligible Iowa bound span of the Memorial Bridge.

To signify that your agency is in accord with this definition of roles, please sign the concurrence line below. If you have any questions, please do not hesitate to contact me.

Sincerely,

Randall B. Faber
Office of Location & Environment
randall.faber@dot.state.ia.us

RBF

cc: Andrew Wilson, Federal Highway Administration
Richard Kautz, Iowa DOT, District 6
John Walthall, Illinois Department of Transportation

Concur: _____ 2-11-03 _____ 2-26-03
IASHPO Date ILSHPO Date

Finding of Adverse Effect

File

DEC 09 2005

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010 515-239-1215, FAX 515-239-1726

December 7, 2005

Ref. No IM-74-1(122)9--13-82
Scott County, Iowa
Rock Island County, Illinois

R&C# 9802 82 048

Mr. Ralph Christian
Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319

Dear Ralph:

RE: Finding of Adverse Effect for I-74 Improvements from 53rd St. in Davenport through Bettendorf, Iowa across the Mississippi River to 23rd Ave. in Moline, Illinois

A report with the results of a survey to identify historic properties that could be affected by this project was sent for your review in 2002 and we received your comments, October 16, 2002.

A variety of alternatives for construction of this project have been examined for feasibility, serviceability, and ability to provide for future traffic needs. Alternate "F" has been identified as the preferred alignment in part because more historic properties and other 4(f) resources are avoided then with other alternatives. However, this alignment will adversely affect the Iowana Milk Farms Company in Bettendorf and the Iowa -Illinois Memorial Bridge (northbound span), properties eligible for listing on the National Register of Historic Places.

The Iowana Milk Farms Company, property 82-05063, is located in close proximity to both the I-74 mainline and the US 67/State St. interchange. Major project improvements could not be designed for that location without affecting this property. The project will have an Adverse Effect on this historic property.

The Iowa-Illinois Memorial Bridge (north/Iowa bound span), property 82-00111, will be replaced by construction of this project. Several alternatives investigated options that would have retained the historic bridge. These included integrating the historic span and new bridges in a combined facility to carry interstate traffic across the river. Also considered was construction of a new I-74 bridge with transfer to local jurisdiction of the historic structure for local traffic use, pedestrian/bike use, or alternative transportation modes.

Infeasibility of design, Coast Guard restrictions regarding construction in and over the navigation channel of the river, and lack of jurisdictional interest in the historic span by local governments precluded use of any of these options for the historic bridge. Consequently, construction of the project will require its removal, an Adverse Effect to the historic property.

There will be No Adverse Effect by the project upon the W. F. Bruhn & Son General Merchandise Store, property 82-05069, which is eligible for the National Register. There will also be no Adverse Effect on the Regina Coeli Monastery, a property listed on the National Register in 1994.

If you agree with our findings and accept our request to consult for the purpose of drafting a memorandum of agreement which will stipulate a plan to mitigate the loss of the historic properties, please sign the concurrence line below. If you have any questions, please do not hesitate to contact me.

Sincerely,

Randall B. Faber

Randall B. Faber
Office of Location & Environment
randall.faber@dot.iowa.gov

RBF:
Encl.
cc: Mike LePietra, Federal Highway Administration
Richard Kautz, Iowa DOT, District 6

Concur: _____ 12/12/06
Date

Barnes B Kennedy Hiatt Wilson
LAST

Prelim. IM-74-1(122)9-13-82
Scott County

U.S. Department of Transportation
Federal Highway Administration

Iowa Division Office

105 6th Street
Ames, IA 50010

In Reply Refer To:
HDA-IA

March 7, 2006

Ms. Carol Legard
FHWA Liaison
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004

Dear Ms. Legard:

Notification of Finding of Adverse Effect for IM-74-1(122)9-13-82
Iowa-Illinois Memorial Bridge, Iowana Farms Milk Company, Scott County, Iowa
and
Rock Island & Northwestern Railroad Depot and Knights of Pyhias Lodge Hall, Illinois

This letter is to notify the Council of a Finding of Adverse Effect and to provide the summary documentation of that finding as specified in 36 CFR 800.6(a)(1) and 800.11(e). Please note that two of the properties are in Iowa and two are in Illinois. The Iowa DOT and FHWA Division Office will be working with the Iowa SHPO on the Iowa properties only. The Illinois DOT will coordinate the properties in Illinois.

Supporting Documentation is enclosed for your information. The enclosed documents include:

1. Iowa Department of Transportation letter dated February 25, 2008
2. Project Description
3. Project Location Map
4. Cultural Resources Correspondence

Please advise our office of your decision regarding participation in this project. If you have any questions, please contact me at (515) 233-7302

Sincerely,

Michael G. La Pietra
Environment and Realty Manager

Enclosures

cc:
Randy Faber (Iowa DOT)
MGLaPietra:ckl 3.7.08
G:\LONG\ML\Iowa-Illinois Bridged-file.doc

MOVING THE AMERICAN ECONOMY

Preserving America's Heritage

May 13, 2008

Mr. Michael G. La Pietra
Environment and Realty Manager
U.S. Department of Transportation
FHWA Iowa Division
105 6th Street
Ames, IA 50010

Ref: *Proposed Reconstruction of I-74 from 53rd Street in Davenport, IA to 23rd Avenue in Moline, IL*
Ref. No. IM-74-7(122)9-13-82
Scott County, Iowa and Rock Island County, Illinois

Dear Mr. La Pietra:

The Advisory Council on Historic Preservation (ACHP) recently received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on the Iowa-Illinois Memorial Bridge, Iowana Farms Milk Company, Scott County, Iowa and the Rock Island & Northwestern Railroad Depot and Knights of Pythias Lodge Hall, Illinois; properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), affected Indian tribe, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Iowa SHPO, the Illinois SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require our further assistance, please contact Carol Legard at 202-606-8522 or via e-mail at clegard@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing and Assistance Section
Office of Federal Agency Programs

Appendix 4(f)-6
Memoranda of Agreement

MEMORANDUM OF AGREEMENT

Between
The Federal Highway Administration
and
The Iowa State Historic Preservation Office

Regarding
Removal of the Iowa-Illinois Memorial Bridge
across the Mississippi River
and
the Iowana Farms Milk Company Building
in Bettendorf, Iowa

Scott County, Iowa IM-74-1(122)9-13-82
the I-74 Quad Cities Project
R&C# 980282048

WHEREAS,the Federal Highway Administration (FHWA) has determined that the replacement of the Iowa-Illinois Memorial Bridge (FHWA structure #047280) and the removal of the Iowana Farms Milk Company building in Bettendorf, Iowa in order to construct a new bridge over the Mississippi River and associated improvements to Interstate 74 in Bettendorf, Iowa, would have an adverse effect upon these properties, which are eligible for listing on the National Register of Historic Places (NRHP), and has consulted with the Iowa State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800 regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f).

WHEREAS, the consulting parties agreed that it is in the public interest to expend funds to implement this project through documentation of the historic properties thereby mitigating the adverse effects of the project;

WHEREAS, the consulting parties have determined that the proposed action will not adversely effect the significant properties, the W. F. Bruhn & Son General Merchandise Store, 1542-46 State Street and the Bettendorf Grocery/Improvement Company Building, 1536-40 State Street in Bettendorf, Iowa; and

WHEREAS, no other resources, historical, architectural or archaeologically eligible for the National Register will be impacted by the proposed project;

WHEREAS, the Iowa Department of Transportation (Iowa DOT) will let and

construct the proposed undertaking, and have participated in the consultation with FHWA and Iowa SHPO and both have been invited to participate in this Memorandum of Agreement;

WHEREAS, the Iowa SHPO and the Illinois SHPO have entered into an agreement that the Iowa SHPO has the lead responsibility for the Iowa Illinois Memorial Bridge, with documentation of that historic property covered under the Memorandum of Agreement between FHWA and the Iowa SHPO;

WHEREAS, pursuant to Section 106(2)(c)(3)(iv) of the National Historic Preservation Act, the American Religious Freedom Act (42 U.S.C 1996; hereinafter AIRFA), and Section 3(c) of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-13; hereinafter NAGPRA), FHWA has consulted with Indian Tribes that may attach religious or cultural importance to sites in the project area and they have raised no objections to the proposed work;

WHEAREAS, to the best of the Consulting Parties knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001), are expected to be encountered during project related activities;

NOW, THEREFORE,FHWA shall ensure that the following terms and conditions, including the appended Iowa Historic Properties Study – Bridges and Iowa Historic Properties Study – Factory will be implemented in a timely manner and with adequate resources in compliance with the National Historic Preservation Act of 1966 (U.S.C.470).

STIPULATIONS

FHWA will ensure that the following measures are carried out:

A. Documentation of the Iowa-Illinois Memorial Bridge

1. The Iowa DOT shall document the structure in accordance with the recordation plan ***Iowa Historic Property Study: Bridge*** attached to the MOA as Appendix A.

2. The Iowa DOT shall carry out this documentation plan, as approved by the Iowa SHPO, in a manner consistent with applicable criteria for meeting the Secretary of Interior's four standards for architectural and engineering documentation (48FR4431) and by a person or firm whose education and professional experience meets the Secretary of the Interior's Professional Qualification Standards (48FR44738-9) for historians.

3. The Iowa DOT may proceed with demolition of the bridge after the Iowa SHPO has approved the photos of the bridge and other field information gathered at the bridge site.

4. The Iowa DOT shall notify the Iowa SHPO within 30 days of the demolition of the

bridge.

5. The Iowa DOT shall submit the draft version of the documentation, attached as Appendix A, to the Iowa SHPO for review within 12 months of SHPO's approval of the photos and gathered information. If Iowa SHPO does not provide comments within 45 days of receipt, the author may proceed to finalize the document.

6. The Iowa DOT shall provide copies of the final documentation in paper form plus PDF format on a CD to signatories of this MOA and paper copies to the local historical societies and the Bettendorf and Moline Public Libraries, and the local high school libraries.

7. The Iowa Illinois Memorial Bridge Monument, which is considered a contributing element to the 1935 Iowa Illinois Memorial Bridge, shall be moved to an appropriate public site in Bettendorf, preferably close to the original bridge site to continue to serve as a commemoration of this bridge.

B. Documentation of the Iowana Farms Milk Company Building, Bettendorf, Iowa

1. The Iowa DOT shall document the building in accordance with the recordation plan ***Iowa Historic Property Study: Factory*** attached to the MOA as Appendix B.

2. The Iowa DOT shall carry out this documentation plan, as approved by the Iowa SHPO, in a manner consistent with applicable criteria for meeting the Secretary of Interior's four standards for architectural and engineering documentation (48FR4431) and by a person or firm whose education and professional experience meets the Secretary of the Interior's Professional Qualification Standards (48FR44738-9) for historians.

3. The Iowa DOT may proceed with demolition of the building after the Iowa SHPO has approved the photos of the building and other field information gathered at the building site.

4. The Iowa DOT shall notify the Iowa SHPO within 30 days of the demolition of the building.

5. The Iowa DOT shall submit the draft version of the documentation, attached as Appendix B, to the Iowa SHPO for review within 12 months of SHPO's approval of the photos and gathered information. If Iowa SHPO does not provide comments within 45 days of receipt, the author may proceed to finalize the document.

6. The Iowa DOT shall provide copies of the final documentation in paper form plus PDF format on a CD to signatories of this MOA and paper copies to the local historical societies and the Bettendorf and Moline Public Libraries, and the local high school libraries.

7. If it is found that there are architectural or other features on the interior or exterior of the building that are deemed worthy of salvage, curation, public education, or re-use, the City of Bettendorf shall be afforded at least 30 days before demolition to retrieve these elements.

C. Unexpected Discovery

Archaeology

If construction work should uncover previously undetected archaeological materials, the Iowa DOT will cease construction activities involving subsurface disturbances in the area of the resource and notify the Iowa SHPO of the discovery and proceed with the following procedure.

1. The Iowa SHPO, or an archaeologist retained by the Iowa DOT that meets the Secretary of the Interior's Standards for archeology, will immediately inspect the work site and determine the extent of the affected archaeological resource. Construction work may continue in the area outside the archaeological resource as defined by the Iowa SHPO or by Iowa SHPO in consultation with the Iowa DOT's retained archaeologist.

2. Within 14 days of the original notification of discovery, the Iowa DOT, in consultation with the Iowa SHPO, will determine the National Register eligibility of the resource. The Iowa DOT may extend this 14-day calendar period one time by an additional 7 days by providing written notice to the Iowa SHPO prior to the expiration date of said 14-day calendar period.

3. If the resource is determined eligible for the National Register, the Iowa DOT shall submit a plan for its avoidance, protection, recovery of information, or destruction without data recovery to Iowa SHPO for review and comment. The Iowa DOT will notify all consulting parties including interested tribes of the unanticipated discovery and provide the proposed treatment plan for their consideration. The Iowa SHPO and consulting parties will have 7 days to provide comments on the proposed treatment plan to the Iowa DOT and FHWA upon receipt of the information.

4. Work in the affected area shall resume upon either:

a. the development and implementation of an appropriate data recovery plan or other recommended mitigation procedures, or

b. the determination by Iowa SHPO that the newly located archaeological materials are not eligible for inclusion on the National Register.

Human Graves

In the event that human remains or burials are encountered during additional archaeological investigations or construction activities, the IDOT shall proceed with the following process:

1. Cease work in the area and take appropriate steps to secure the site.

2. Notify the Office of Location and Environment, Office of the State Archaeologist and the Iowa SHPO.

3. If the remains appear to be ancient (i.e., older than 150 years), the state agency responsible for ancient burials shall have jurisdiction to ensure NAGPRA and the implementing regulations (43CFR10) are observed. The deposition of the remains will be determined in consultation with the culturally affiliated tribe(s) if known.

4. If the remains appear to be less than 150 years old, the remains may be legally protected under either Iowa Code, Chapter 566, with the Iowa Department of Health would be notified.

D. Vibrations

The Iowa DOT shall evaluate and document the pre-construction condition of identified NRHP-listed or eligible structures and objects within the APE prior to commencement of construction activities. The Iowa DOT shall monitor and assess vibration that could have reasonably foreseeable adverse effects in accordance with the plan attached as Appendix C to this agreement. At any time vibration from a construction activity exceeds the previously established monitoring threshold, the activity shall be halted and a less intensive method shall be implemented.

E. Administrative Conditions

1. Modifications, amendments or termination of this agreement as necessary shall be accomplished through consultation and written agreement of all the signatories.

2. Disputes regarding the completion of the terms of this agreement shall be resolved by the signatories. If the signatories cannot agree regarding a dispute, any one of the signatories may request the participation of the Council to assist in resolving the dispute according to 36 CFR 800.7.

3. If the terms of this agreement have not been executed with five (5) years, it shall be reviewed to determine if revisions are needed.

Execution of this Memorandum of Agreement by FHWA, Iowa DOT, and the Iowa SHPO is evidence that FHWA has taken into account the effects of the undertaking on historic properties.

This agreement is binding upon the signatories hereto not as individuals, but solely in their capacities as officials of their respective organizations, and acknowledges proper action of each organization to enter into the same.

Signatories:

By: Michael LaPietra 5/6/08
FHWA, Iowa Division Date

By: Barbara A. Mitchell 4/18/08
Iowa State Historic Preservation Officer Date

Concur:

By: James Rost 4/8/08
Iowa Department of Transportation Date
Office of Location and Environment

Appendix A
Iowa Historic Property Study: Bridge

Iowa Illinois Memorial Bridge

The documentation identified below is for Iowa bridge properties of state and local significance. It is to be written for a broad public audience--kept simple, direct, and free of technical and academic jargon. The information is to be presented (i.e., edited, cataloged and packaged) in accordance with Historic Preservation Bureau guidelines. In its content, quality, materials, and presentation, the study will meet the Secretary of Interior's four standards for architectural and engineering documentation (48 FR 44731).

The purpose of the report will be to place the bridge in engineering and historical perspective. Emphasis is to be on its local or state historical context because the specific engineering qualities of the bridge have already largely been covered in the statewide 1993 Historic Bridge Inventory, prepared by consultant Fraserdesign for the Iowa Department of Transportation. Of course, new research information that modifies or corrects previous survey findings will be cited.

The research emphasis will be placed on recovering information about local or state context surrounding the building of the bridge based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not to elaborate engineering description or structure photography, but to amplifying what is known about the story of the bridge as grasped through research in local newspapers, courthouse records, etc. The test of responsiveness to documentation projects under this historic property study series will be more on the depth of local historical sources consulted than on the numbers of site photographs produced.

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's collections must meet the requirements below. The Society's historic preservation office retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number, Historical Architectural Data Base Number, and Photograph (black and white film roll number and color slide sheet) Numbers:* Three kinds of project reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc. The second number refers to the

number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix. The third class of numbers are film roll numbers and color slide 20-slot sheet number to be obtained from the State Historical Society's Inventory Coordinator so that images can be cataloged into the agency's file system and cross-referenced to Iowa Site Inventory Forms.

2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view made with both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The minimum number and kind of views taken will be in accord with those assigned in diagrams for recording bridge details illustrated by bridge historian, James C. Hippen, as much as feasible given the physical and safety constraints to access of certain views of this large Mississippi River bridge. Other views will include at least two contextual views showing the bridge's placement on the landscape plus, as needed, special shots of the particular bridge in order to adequately illustrate what is significant or valuable about the structure(s).

3. *Existing drawings* of the bridge either as built or altered, if available, will be selected and appropriately reproduced.
4. *Available historic photographs or illustrations* that reveal the bridge under construction or in later use will be selected and appropriately reproduced.

5. *Basic bridge facts* about its origins, design and construction features will be handled by attaching as the lead element of the appendix of the report a copy of the completed survey and HAER inventory forms contained in the 1993 Historic Bridge Inventory, prepared by consultant Fraserdesign for the Iowa Department of Transportation.

6. *Narrative Report*, printed on archival bond paper, of approximately ten pages. Statements within the narrative are to be footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:
Includes report title, governmental entity or source of support for sponsoring the survey, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable) This might include acknowledgment of valuable oral informants, or recognition of those who provided useful research leads, tendered special library assistance or helped locate and access useful courthouse archives.

Table of Contents

Introduction:
Describes purpose of project, time frame when research and field work occurred, and limitations of the project.

Part I: The Bridge Today takes the reader to the property, describing where it is situated, its general appearance, and important physical characteristics of its setting and landscape features that have influenced the way things developed.

Part II: Historical Background steps back to explain the bridge's time of original construction. Based on newspaper and other available sources, the narrative will seek to explain such developments as:
1. The impetus for construction of the bridge (e.g., local landowners, new transportation route, destruction of previous bridge);
2. The reason for designing or placing this particular kind of bridge at this location (e.g., a particular design preferred by the county engineer, a particular bridge company favored by contracts)
3. Selection of this particular bridge and its fabricator.

Part III: Construction history documents the physical evolution of the bridge and subsequent alterations.

Aspects to bear in mind include:

1. Story of building the bridge and by whom it was done. Special emphasis will be on significant events in the building process, such as technical or financial problems faced, construction delays, and the need to redesign details or re-fabricate elements.
2. Later changes to the bridge, identifying what was done and why it was made necessary.

Part IV: Significance of the bridge. State in what way the bridge helps interpret local and state development in transportation or contribute to understanding how a type, period or method of construction developed, or exemplify the achievement of person(s) who designed or built it.

This might address such matters as:

1. The role that this bridge played in local transportation and political, industrial or social history. Indicate, if known, how its completion was received and recognized as important by the public as gleaned through notices of celebrations, picnics, orators present at the opening of the structure for use.
2. The relative place of the bridge designer/bridge company in local and state history.
3. The bridge as a demonstration of new, innovative, or typical bridge design practices and uses of material. Available photographs, illustrations, or site plan will be integrated into the narrative as needed to help convey the property's interpretive value.

Part V: Reference Sources
A paragraph or two about the quality and quantity of information consulted, its

location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials

Part VI: Appendices

The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A copy of the completed survey and HAER inventory forms contained in the 1993 Historic Bridge Inventory, prepared by consultant Fraserdesign for the Iowa Department of Transportation.
2. A site plan drawing showing the bridge's relation to immediate landscape and river/road configuration.
3. Map(s) showing location in county/town, changes in property size, etc.
4. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to bridge name, Iowa Site Inventory Number, and roll/frame number with a No. 1 (soft) pencil or archival pen, and placed in Print-File (574P), or equivalent, sleeve. Photographs on paper that will not accept pencil marks (including certain resin-coated papers) may be labeled with an archivally stable, permanent audio-visual marking pen, as per instructions on page 65 of *National Register Bulletin 16A*.
5. A "Photograph Catalog Field Sheet" for each sleeve of black and white negatives and for each 20-slot sleeve of color slides.
6. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
7. A contact print for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
8. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory Number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sleeves.
9. Completed Iowa Historical Architectural Data Base (HADB) form.
10. Other relevant information (e.g., photocopy of biographical information about the bridge builder).

Appendix B
Iowa Historic Property Study: Factory

Iowana Farms Milk Company Building

The documentation identified below is for Iowa factory properties of state and local significance. It is to be written for a broad public audience--simple, direct, and free of technical and academic jargon--with the information presented (i.e., edited, cataloged and packaged) in accordance with State Historical Society of Iowa guidelines. The character of the documentation produced--its content, quality, materials, and presentation--will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the factory in architectural and historical perspective, explaining how the story of this factory played out against the background of its related local, state or national trends. The research emphasis will be placed on recovering information about the construction, growth and evolving emphases of the factory based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not to elaborate architectural description or structure photography, but on amplifying what is known about the story of the factory as grasped through research in local archives, courthouse records, and with persons knowledgeable about the factory's past. The test of responsiveness to documentation projects under this historic property study series will be more on the depth of local historical sources consulted than on the numbers of site photographs produced.

ctories vary in complexity and importance. Some are intact and filled with machinery; others are empty or in partial ruins. Nevertheless certain historical questions should always be answered: What was the layout?; What was made or done at the property?; How did the factory work (relevant machinery and its relationship to tracing the industrial processes carried out)?; Why did the structures and buildings take the shape they did in relation to the functions?; and, how did the site change over time?

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's records must meet the requirements below. The Society retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number, Historical Architectural Data Base Number, and Photograph (black and white film roll number and color slide sheet) Numbers:* Three kinds of project reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and

be identified on photographic prints, slides, etc. The second number refers to the number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix. The third class of numbers are film roll numbers and color slide 20-slot sheet number to be obtained from the State Historical Society's Inventory Coordinator so that images can be cataloged into the agency's file system and cross-referenced to Iowa Site Inventory Forms.

2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view taken in both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The purpose of the number and kind of views taken will be to sufficiently illustrate what is significant or valuable about the factory as if one were intending the views to be used in a brief visual presentation on the story of the facility. For each factory element, the following views will be minimally taken:

a. Overall factory. At least two contextual views showing the facility's placement on the landscape.
b. Main factory building. Exterior perspective views, including a general view from the distance showing its environment and landscaping. For the interior, include views that reveal the building's method of construction and other details that help impart its construction history.
c. Office Building (if applicable). Exterior perspective views, a general view from the distance showing its environment and landscaping, and views of significant interior or exterior details.
d. Other outbuildings and structures in the assemblage of factory workplaces. Views showing the exterior facades of each plus, if noteworthy, significant interior or exterior details.

3. *Drawings:* Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 8 1/2 by 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall dimensions, and the date sketched. The drawings include:

a. Factory site plan to which the buildings and structures are keyed.
b. Factory building floorplans sufficient to illustrate:
    (1) the organization and arrangement of spaces, including exterior dimensions;
    (2) the location of machinery
    (3) the flow of materials and manufacturing processes through the industrial structure.

4. *Available historic photographs or illustrations* that reveal the factory or its individual buildings under construction or in later use, or is a flow chart of a significant industrial process or a schematic of how an important machine functions, will be selected and appropriately reproduced.

5. *Narrative Report* printed on archival bond paper of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:
Includes report title, governmental entity or source of support for sponsoring the survey, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable)
This might include acknowledgment of valuable oral informants, or recognition of helped locate and access useful courthouse archives.

Table of Contents

Introduction:
The project's purpose is described, including the time frame when research and field work occurred, and limitations of the project.

Part I: The Factory Today describes where it is situated, its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that have influenced the way things developed.

Part II: Historical Background steps back to describe the development of this kind of industrial activity and broad trends in the location and character of such manufacturing in the state, region, or nation. Relevant innovations in the design of products or changing market conditions that fostered a rise or fall in the demand for such products would be identified.

Part III: Factory History narrates the particular factory's story of creation, growth, and change that brought it to what we witness today. In examining the life of the factory, periods of particularly informative activity may be found in:

- Changes in ownership, management, or internal organization;
- The influx of new, innovative blood;
- The introduction of new machinery, products or processes--patented and otherwise--at the site and its effects: --on others (e.g., subsequent adoption by competitors) --on the internal organization of work, on the labor force, on productivity, on profitability
- The effect of changes in the regional or national economy--recessions, depressions, etc.;
- Changes in the size of the labor force in response to changing product lines, economic downturns, changes in ownership, etc.

Part IV: Construction history documents the physical evolution of the factory and its leading periods of construction activity, major changes in terms of buildings that

have been demolished, replaced, or when new kinds of buildings were introduced. The description would also note specific features the factory or its individual buildings share with other known properties (e.g., similarities in plan, materials, construction techniques, and subsequent alterations). Aspects to bear in mind include:

- Site constraints and opportunities (e.g., obstacles that affected design or limited expansion, convenience of transportation ties to the outside--rail, water, or road;
- Community incentives offered to promote development of this site;
- Sequence of construction, alterations, additions, replacement, demolition, or losses due to fire at the site;
- Individuals who designed, engineered, or built the assemblage of factory buildings and structures;
- Materials used in construction;
- Form that the buildings took in relation to their functions;
- The relative importance of individual buildings at the site to the factory's activities, with the least important meriting minimal study and documentation;
- Machinery and systems housed in the factory (including function, date of fabrication, and manufacturer, if known);
- Sources of power used to drive the machinery and how it was transmitted throughout the structure

Part V: Significance explains how the factory's story helps explain the course of local or state manufacturing, pointing to how the characteristics of the property and the company's history informs us about important industrial trends, entrepreneurs, innovations, or markets served. Also, if applicable, of how its buildings illustrate new, innovative, or typical design practices and uses of material. Photographs, illustrations, or site plan may be integrated into the narrative as needed to help convey the property's interpretive value.

Part VI: Reference Sources
A paragraph or two about the quality and quantity of information consulted, its location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials.

Part VII: Appendices
The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A site plan drawing showing the factory's relation to its immediate landscape configuration.
2. Map(s) showing location in county/town, changes in property size, etc.
3. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to building/structure name, view taken, and roll/frame number with a No. 1 (soft) pencil, and placed in Print-File (57-4P), or equivalent, sleeve.

4. A "Photograph Catalog Field Sheet" completed for each sleeve of black and white negatives and color slides.
5. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
6. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
7. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20slot sheet sleeves.
8. Completed Iowa Historical Architectural Data Base (HADB) form.
9. Other relevant information (e.g., photocopy of biographical information about a noteworthy owner, architect or builder associated with the factory, remaining sketch plans and drawings that were not integrated into the report).

Appendix C
Vibration Assessment and Monitoring Plan

The Bettendorf Improvement Company Building at 1536-40 State Street and the W.F. Bruhn & Sons General Merchandise Store at 1542-46 State Street are buildings that qualify for the National Register of Historic Places. These buildings are near the proposed Grant Street diagonal connector east of the bridge.

Ground vibration can be generated by several types of construction and demolition activities, such as but not limited to, the demolition of bridges, pile driving and pavement breaking and compacting. Energy in the form of waves travels away from the source through the ground which may damage nearby structures and/or disrupt sensitive activities.

To assure the I-74 Bridge replacement project will take care not to adversely affect the W. F. Bruhn & Son General Merchandise Store and the Bettendorf Grocery/Improvement Company Building a with ground borne vibration from construction activities, shall create a management plan to reduce vibration risk and monitor the affects of construction.

Vibration Risk Management Plan

Prior to construction letting, the District in cooperation with OLE shall develop a risk management plan that will assess the risk of vibration damage, determine ways to reduce the vibration risk, establish a protective peak particle velocity (PPV), determine the existing condition of the historic properties, and establish monitoring procedures. The risk management plan will be filed with SHPO. Elements that may be included in a plan are:

1. Complete a pre-condition survey of historic structures within a susceptible range from vibration causing activities.
2. Determine the Peak Particle Velocity allowable and a trigger threshold at the susceptible structure.
3. If warranted, determine the potential number and location for seismograph monitoring equipment. Set up a telephone alarm system in the event of exceeding the trigger threshold. Establish procedures in the event the alarm should sound - to stop work, evaluate the cause, establish modifications in the work methodology prior to resumption of work.
4. If warranted establish other methods of monitoring changes in the condition of the structure, i.e. crack gages.
5. If needed, complete a post-condition survey.
6. If damage occurs to historic properties, stabilize and repair damages in accordance with the Secretary of Interior's Standards.

MEMORANDUM OF AGREEMENT
BETWEEN FEDERAL HIGHWAY ADMINISTRATION, AND
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER
CONCERNING THE I-74 QUAD CITIES PROJECT FROM 23RD AVENUE IN MOLINE, ILLINOIS, TO 53RD STREET IN DAVENPORT, IOWA, INCLUDING A NEW BRIDGE CROSSING OF THE MISSISSIPPI RIVER
IN THE CITY OF MOLINE, ROCK ISLAND COUNTY, ILLINOIS

WHEREAS, the Federal Highway Administration (FHWA), U.S. Department of Transportation, has determined assisting the Illinois Department of Transportation in approving plans for the construction of the I-74 Quad Cities Project will have an adverse effect upon two properties deemed eligible for inclusion in the National Register of Historic Places (NRHP) and has consulted with the Illinois State Historic Preservation Officer (SHPO) pursuant to the regulations (36 CFR Part 800) and implementing Section 106 of the National Historic Preservation Act (17 U.S.C. 470f); and

WHEREAS, the Illinois DOT has participated in consultation and has been invited to concur in this Memorandum of Agreement;

WHEREAS, the Illinois SHPO and the Iowa SHPO have entered into an agreement that the Iowa SHPO has the lead responsibility for the Iowa Illinois Memorial Bridge, with documentation of that historic property covered under a Memorandum of Agreement between FHWA and the Iowa SHPO;

NOW, THEREFORE, the FHWA and the Illinois SHPO agree that the undertaking shall be implemented in accordance with the following stipulations to take into account the effect of the undertaking on historic properties.

Stipulations

FHWA, in coordination with the Illinois DOT shall ensure that the following measures are carried out.

A. **Davenport, Rock Island & Northwestern Depot, Moline, Illinois**

1. The subject building will be documented in accordance with the Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards attached to the MOA as Appendix A.

2. The IL HABS Documentation Project will be coordinated through the IL DOT. The selected IL HABS contractor will consult with the SHPO prior to initiation of work for mutual agreement on document formatting and specific graphic generation issues. Level III IL HABS Documentation will be required.

B. **Knights of Pythias Lodge Hall, 2011 6th Avenue, Moline, Illinois**

1. The subject building will be documented in accordance with the Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards attached to the MOA as Appendix A.

2. The IL HABS Documentation Project will be coordinated through the IL DOT. The selected IL HABS contractor will consult with the SHPO prior to initiation of work for mutual agreement on document formatting and specific graphic generation issues. Level III IL HABS Documentation will be required.

Execution of the Memorandum of Agreement and implementation of its terms evidences that the IL DOT has afforded the IL SHPO an opportunity to comment on the construction of the I-74 Quad Cities Project in the City of Moline, Rock Island County, Illinois, and has taken into account the effects of the proposed undertaking and the subject buildings in compliance with the Act.

Signatories:

FEDERAL HIGHWAY ADMINSTRATION

By: Michael LaPietra DATE 5/21/08

ILLINOIS HISTORIC PRESERVATION AGENCY

By: Anne E. Haaker DATE 5-13-08

Concur:

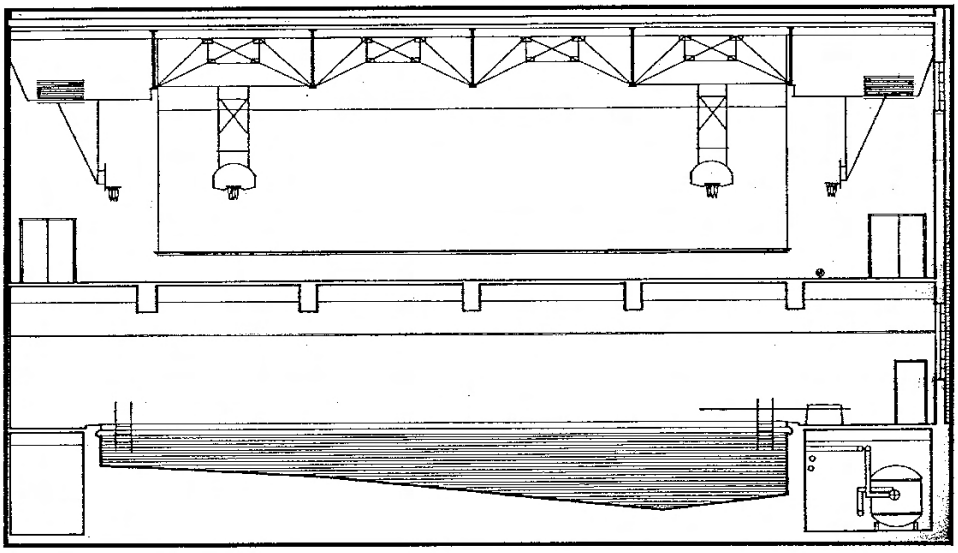
ILLINOIS DEPARTMENT OF TRANSPORTATION

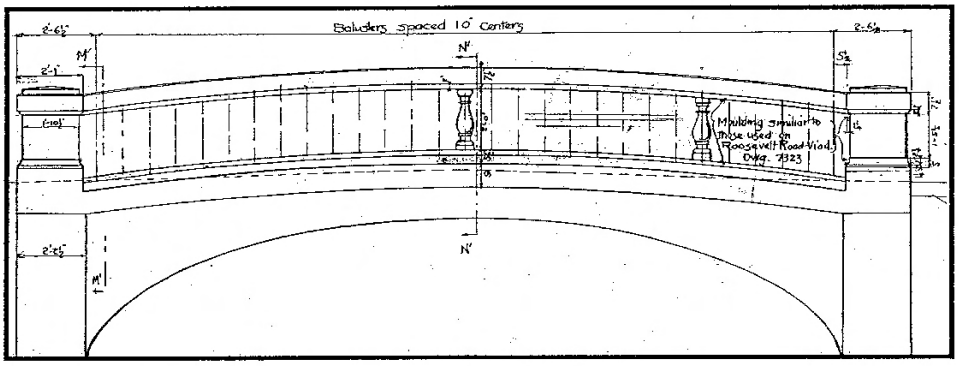
By: Ellen Ha DATE 5-14-08

APPENDIX A

Illinois Historic American Building Survey/Historic American Engineering Record (IL HABS/ HAER) standards

THE ILLINOIS HISTORIC PRESERVATION AGENCY'S STANDARDS AND GUIDELINES FOR HISTORICAL, ARCHITECTURAL AND ENGINEERING DOCUMENTATION: IL HABS/HAER STANDARDS





Illinois Historic American Buildings Survey/
Historic American Engineering Record
Preservation Services Division
Illinois Historic Preservation Agency
Springfield, Illinois 62701

January 1999

Illinois Historic Preservation Agency

Director	Susan Mogerman

Preservation Services Division

State Historic Preservation Officer	William L. Wheeler
Deputy SHPO	Anne E. Haaker
IL HABS/HAER Program Coordinator	

Illinois State Historical Library

Director	Kathryn Harris
Chief of Acquisitions	Gary Stockton
Microfilm Librarian	Cheryl Pence

Preservation Services, a division of the Illinois Historic Preservation Agency, administers the state cultural resources program and is responsible for the Illinois Historic American Buildings Survey/Historic American Engineering Record (IL HABS/HAER) Program of documentation of historic buildings, sites, structures, and objects located in the State of Illinois. IL HABS/HAER Documentation includes measured drawings, large-format photographs, and written contextual histories and descriptions. The Illinois State Historical Library Archives is the repository for these documents.

PREFACE

This document outlines the Illinois Historic Preservation Agency's Preservation Services Division's Standards for Historical, Architectural and Engineering Documentation -- commonly known as the IL HABS/HAER Standards.

These performance standards define the criteria for IL HABS/HAER projects acceptable for accession in the IL HABS/HAER Collection located at the Illinois State Historical Library Archives.

Acceptable IL HABS/HAER documentation often includes:

* Measured Drawings
* Large-Format Photographs
* Detailed Historical Context Development and Physical Descriptions in a Prescribed Written Outline Format

These standards are intended to be used in conjunction with the accompanying guidelines for historical, architectural and engineering documentation. Other publications listed in the bibliography should be consulted.

These standards will be used:

* In preparation of documentation to fulfill mitigative requirements in accordance with the Illinois State Agency Historic Resources Preservation Act [20 ILCS 3420/1 et seq] and Section 106 of the National Historic Preservation Act of 1966, as amended.
* In preparation of voluntary documentation to be submitted for inclusion in IL HABS/HAER Collection.

William L. Wheeler
State Historic Preservation Officer
Illinois Historic Preservation Agency

ILLINOIS HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (IL HABS/HAER) PROGRAM STANDARDS

for

HISTORICAL, ARCHITECTURAL AND ENGINEERING DOCUMENTATION

The IL HABS/HAER Standards address the development of documentation for historic buildings, sites, structures, and objects. IL HABS/HAER documentation provides relevant graphic and written information on a property's significance for use by scholars, researchers, preservationists, architects, engineers, and others interested in preserving and understanding historic properties. IL HABS/HAER documentation is important for several reasons. It provides for accurate repair or reconstruction of parts of a property, records existing conditions for easements and preserves information about a property that is to be demolished or altered.

The IL HABS/HAER Standards are intended for use in developing documentation to be included in the IL HABS/HAER Collection located at the Illinois State Historical Library Archives. The Illinois Historic Preservation Agency has defined specific requirements for meeting these standards.

STANDARD 1: Documentation Shall Adequately Explicate and Illustrate What is Significant or Valuable About the Historic Building, Site, Structure, or Object.

The historic significance of the building, site, structure, or object identified in the evaluation process should be conveyed by the drawings, photographs, and written materials that comprise the documentation. The historical, architectural, engineering, or cultural values of the subject property, in conjunction with the purpose of the documentation, will determine the level and methods of documentation.

STANDARD 2: Documentation Shall be Prepared Accurately from Reliable Sources with Limitations Clearly Stated to Permit Independent Verification of the Information.

The purpose of documentation is to preserve an accurate record of historic properties that can be used in research and other preservation activities. To serve these purposes, the documentation must include information that permits assessment of its reliability.

STANDARD 3: Documentation Shall be Prepared on and Submitted in Materials that are Readily Reproducible, Durable, and in Standard Sizes.

The size and quality of documentation materials are important factors in the preservation of information for future use. Selection of materials is based on the length of time expected for storage, the anticipated frequency of use, and a size convenient for storage and document management.

STANDARD 4: Documentation Will be Clearly and Concisely Produced.

In order for documentation to be useful for future research, written materials must be fully developed, legible and understandable. Graphic materials must contain scale information and location references.

ILLINOIS HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (IL HABS/HAER) GUIDELINES

for

HISTORICAL, ARCHITECTURAL AND ENGINEERING DOCUMENTATION

Introduction

The IL HABS/HAER Guidelines link the IL HABS/HAER Standards for Historical, Architectural and Engineering Documentation with more specific guidance and technical information. They describe the general approach for meeting the Standards for Historical, Architectural and Engineering Documentation. Agencies, organizations, and individuals proposing to undertake the production of IL HABS/HAER Documentation in a different manner will need to review and gain approval of their strategy with the IHPA IL HABS/HAER Coordinator prior to the execution of a contract for or the initiation of production of IL HABS/HAER Documentation.

The Guidelines are organized as follows:

* Definitions
* Goal of Documentation
* The IL HABS/HAER Collections
* Standard 1: Content
* Standard 2: Quality
* Standard 3: Materials
* Standard 4: Presentation

Definitions

The following definitions are used in conjunction with these guidelines:

Documentation -- Measured drawings, photographs, contextual histories, physical descriptions, inventory cards, or other media that provide graphic and written information on historic buildings, sites, structures, or objects.

Field Photography -- photography other than large-format negatives, intended for the purpose of producing documentation, usually 35mm.

Field Records -- notes of measurements taken, field photographs, and other recorded information intended for the purpose of producing documentation.

Large-Format Photographs -- photographs made from 4x5" negatives. Appropriate techniques are to be implemented to correct perspective distortion.

Measured Drawings -- drawings produced on IL HABS/HAER acceptable materials depicting historic or existing conditions and other relevant features of the subject. Measured drawings are produced in ink on archivally stable mylar.

Photocopy - a photograph, with large-format negative, of a photograph or drawing.

Select Existing Drawings - drawings of original construction or later alterations that portray or depict the subject's historic value or significance.

Sketch Plan - a floor plan, generally not to exact scale although often drawn from measurements, where the features are shown in proper relation and proportion to each other.

Goal of Documentation

The IL HABS/IL HAER Program is the historical, architectural and engineering documentation program of the Illinois Historic Preservation Agency that promotes the incorporation of accurate graphic and written documentation into the IL HABS/HAER Collection located in the Illinois State Historical Library Archives. The goal of the IL HABS/HAER Collection is to provide historians, architects, engineers, scholars, and interested members of the public with comprehensive documentation of buildings, sites, structures, and objects significant in Illinois' history.

IL HABS/HAER Documentation often consists of measured drawings, photographs, and written data that provide a detailed record of a property's significance. Measured drawings and properly executed photographs act as a form of insurance against fires and natural disasters by permitting the repair and, if necessary, reconstruction of historic structures damaged by such disasters. IL HABS/HAER Documentation is sometimes used to provide the basis for enforcing preservation easements. In addition, IL HABS/HAER Documentation is often the last means of preservation when a historic property is to be demolished or permanently altered. IL HABS/HAER Documentation provides future researchers access to valuable information that would otherwise be lost.

IL HABS/HAER Documentation is developed as a result of two separate catalysts. First, the Illinois Historic Preservation Agency, pursuant to the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et seq] and Section 106 of the

National Historic Preservation Act of 1966, as amended, requires recordation of historic properties to be demolished or substantially altered as a result of adverse undertakings conducted on those properties (referred to as mitigation projects). Secondly, individuals and organizations, on their own initiative, can prepare documentation according to IL HABS/HAER Standards and donate that documentation to the IL HABS/HAER Collection. Required Documentation Levels will vary.

IL HABS/HAER Standards describe the fundamental principles of the development of IL HABS/HAER Documentation. The IL HABS/HAER Guidelines listed under each of the following IL HABS/HAER Standards provides basic information about developing documentation for the IL HABS/HAER Collection. The IL HABS/HAER Guidelines are augmented by more specific graphic and written documentation requirements which are included here as supplemental information. Additional specific information concerning the production of IL HABS/HAER Documentation is included in a separate document entitled IL HABS/HAER Program/Technical Commentary.

Documentation prepared for the purpose of inclusion in the IL HABS/HAER Collection must meet the requirements listed below. The IHPA IL HABS/HAER Coordinator retains the right to refuse documentation for inclusion in the IL HABS/HAER Collection when that documentation does not meet IL HABS/HAER requirements specified in this document.

Standard 1: Content - IL HABS/HAER Documentation shall adequately explicate and illustrate what is significant or valuable about the historic building, site, structure, or object being documented.

Guidelines

Documentation shall meet one of the following documentation levels to be considered adequate for inclusion in the IL HABS/HAER collections.

1. Documentation Level I
    a. Drawings: a full set of measured drawings depicting existing or historic conditions.
    b. Photographs
        (1) large-format (4x5") negatives and 5x7" prints of exterior and interior views
        (2) photocopies with large format (4x5") negatives of select existing drawings, site plans or historic views
    c. Written Data
        (1) contextual history(ies)
        (2) architectural/site description

2. Documentation Level II
    a. Drawings: original drawings photographically reproduced on archivally stable IL HABS/HAER mylar.
    b. Photographs
        (1) large-format (4x5") negatives and 5x7" prints of exterior and interior views
        (2) historic views
    c. Written Data
        (1) contextual history(ies)
        (2) architectural/site description

3. Documentation Level III
    a. Drawings: sketched floor plan
    b. Photographs
        (1) large-format (4x5") negatives and 5x7" prints of exterior and interior views
    c. Written Data
        (1) contextual history(ies)
        (2) architectural/site description

The IL HABS/HAER Program retains the right to refuse any documentation of buildings, sites, structures or objects lacking historical significance. Buildings, site, structures, or objects must be listed on or eligible for listing on the National Register of Historic Places to be considered for inclusion in the IL HABS/HAER Collection.

The type and amount of documentation should be appropriate to the nature and significance of the properties being documented. Similarly, the aspect of the property that is being documented should reflect the nature and significance of the property.

Standard 2: Quality - IL HABS/HAER Documentation shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of information.

Guidelines

For all levels of documentation, the following quality requirements shall be met:

1. Measured Drawings

    Measured drawing shall be produced from recorded, accurate measurements. Portions of buildings or structures that are not accessible for measurement should not be drawn on the measured drawing but clearly labeled as not accessible or drawn from available construction drawings or other sources, and so identified. No part of the measured drawings shall be produced from hypothesis or non-measurement related activities. Documentation Level I

measured drawings shall be accompanied by a set of field notebooks in which measurements were first recorded. Other drawings prepared for Documentation Levels II and III, shall include a statement describing where the original drawings are located.

2. Large-Format Photographs

   Large-format photographs shall clearly depict the appearance of the property and areas of significance of the recorded building, structure, site, or object. Each view shall be perspective-corrected and fully captioned.

3. Written Contextual History(ies) and Physical Descriptions

   Written contextual history(ies) and physical descriptions for documentation Levels I and II shall be based on primary sources to the greatest extent possible. For Level III, secondary sources may provide adequate information; if not, primary research will be necessary. An assessment of the reliability and limitations of sources shall be included. Within the written contextual history(ies), statements shall be footnoted or endnoted as to their sources, where appropriate. The written data shall include a methodology section specifying research strategy, names of research staff, dates of research, sources searched, limitations of the project and a project information statement.

The reliability of the IL HABS/HAER Collection is dependent upon high quality documentation. Quality is not easily prescribed or quantified, but it derives from a process in which thoroughness and accuracy play a large part. The principle of independent verification of IL HABS/HAER documentation is critical to the IL HABS/HAER Collection.

Standard 3: Materials - IL HABS/HAER documentation shall be prepared on materials that are readily reproducible for ease of access, durable for long storage, and in standard sizes for ease of handling.

Guidelines

For all levels of documentation, the following material requirements shall be met.

1. Measured Drawings

   Ink on translucent, archivally stable materials in standard size of 24x36".

2. Large-Format Photographs

   Black and white film only, printed on archival paper, mounted on properly labeled archival board; 4x5" negatives will accompany prints; print size will be 5x7".

3. Written History(ies) and Physical Description

   Text contained within the IL HABS/HAER Written Outline Format; submitted on 8.5x11" archival bond paper.

4. Field Records

   Field notebooks and field photography; photo identification sheet will accompany 35mm negatives and contact sheet; no archival requirements; submitted field records must fit into 9.5x12" folding file.

5. 95% Submittals

   95% review documentation can be submitted on non-archival materials.

6. 100% Submittals

   All 100% IL HABS/HAER documentation accepted by the IL HABS/HAER Program Coordinator must be submitted in the standard, archival formats.

All IL HABS/HAER Documentation is intended for reproduction. Although field records are not intended for quality reproduction, it is specified that they be used to supplement the formal documentation. Field records are not required to meet the archival standard, but are maintained as a courtesy to the collection user. The basic durability standard for IL HABS/HAER Documentation is 500 years.

Standard 4: Presentation - IL HABS/HAER documentation shall be clearly and concisely produced.

Guidelines

For all levels of documentation, the following requirements for presentation will be met.

1. Measured Drawings

   Level I measured drawings will be lettered mechanically (i.e. Leroy or similar) or in a hand-printed equivalent

style. Adequate dimensions shall be included on all sheets. Levels I and II title sheet(s) shall include state, local, and site maps; property significance statement; project information statement; and drawings index listing. Level III sketch plans shall be neat and orderly.

2. Large-Format Photographs

   5x7", black and white, fiber paper prints will be mounted on archival card stock, and labeled in the appropriate manner.

3. Written History(ies) and Physical Description

   Data shall be typewritten on 8.5x11" archival, bond paper using the required IL HABS/HAER outline format and follow accepted rules of grammar and notation.

Sources of Technical Information for IL HABS/HAER Documentation

Burns, John A. Recording Historic Structures. Washington, D.C.: The AIA Press, 1989.

Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. Chicago: University of Chicago Press, 1987.

A Manual of Style. Chicago: University of Chicago Press, 1980.

HABS Field Instructions for Measured Drawings. Washington, D.C.: HABS/HAER, National Park Service, 1981.

HABS Historical Reports. Washington, D.C.: HABS/HAER, National Park Service, 1995. (Draft)

HABS Historian's Procedures Manual. Washington, D.C.: HABS/HAER, National Park Service, 1983.

HAER Field Instructions. Washington, D.C.: HABS/HAER, National Park Service, 1981.

IL HABS/HAER Program IHPA Program/Technical Commentary. Springfield, IL: IL HABS/HAER, Illinois Historic Preservation Agency, 1999.

Manual for Preparing Historic American Buildings Survey/Historic American Engineering Record Documents. Omaha, NE: Great Plains Systems Office, National Park Service, 1996. (Draft)

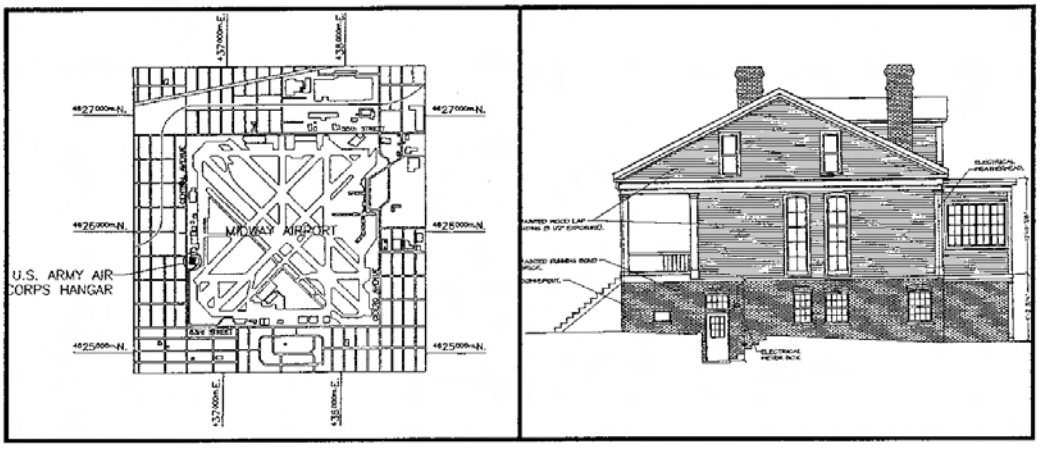
Photographic Specifications for the Historic American Buildings Survey and the Historic American Engineering Record. Omaha, NE: Great Plains Systems Office, National Park Service, 1996.

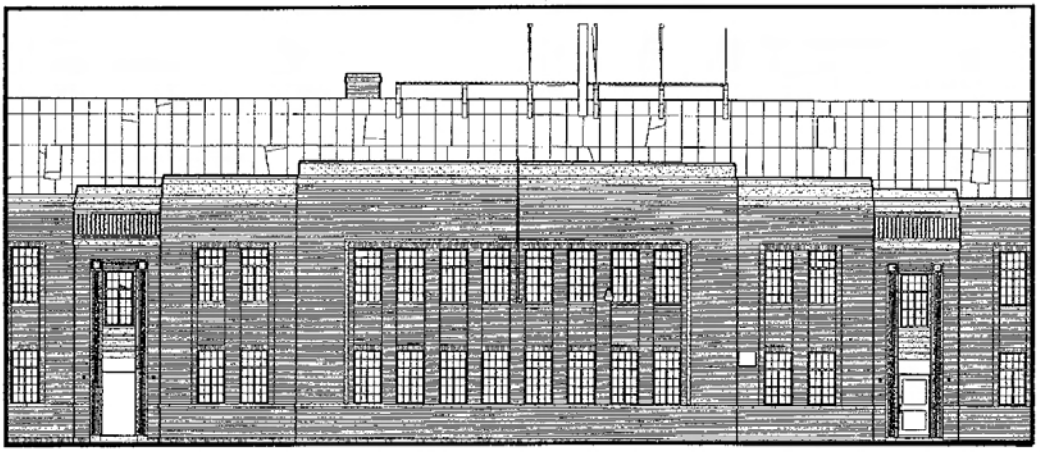
Transmitting Documentation to HABS/HAER WASO. Washington, D.C.: HABS/HAER, National Park Service, 1995. (Draft)

Effective Date: 21 January 1999

ILLINOIS HISTORIC AMERICAN BUILDINGS SURVEY/ HISTORIC AMERICAN ENGINEERING RECORD

IL HABS/HAER Program/Technical Commentary





Illinois Historic Preservation Agency

Springfield, Illinois

January 1999

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Preface

It is the goal of the Illinois Historic Preservation Agency (IHPA) to administer the IL HABS/HAER recordation process and collection in a manner that guarantees documents of the highest quality and content are produced and made available to the public.

Since the establishment of the IL HABS/HAER program in 1990, those involved in preparing IL HABS/HAER Documentation often inquire as to the degree of documentation required and preparation methods to be employed. IHPA has determined that some administrative details should be clarified.

The following are IHPA's general comments on the methodology of the selection of the appropriate level of documentation required for a historic property, as well as brief discussions of technical issues often overlooked or deleted from IL HABS/HAER Documentation submitted for acceptance.

METHODOLOGY OF DOCUMENTATION LEVEL SELECTION

The primary reason IL HABS/HAER Documentation is produced is to comply with state and federal historic preservation statutes. IL HABS/HAER Documentation may be required pursuant to the Illinois State Agency Historic Resources Preservation Act [20 ILCS 3420/1 et seq] or Section 106 of the National Historic Preservation Act of 1966, as amended.

IHPA's Preservation Services Division's Review and Compliance staff, who review and comment on statute required submittals, determine which level of recordation documentation is appropriate for each property. IHPA's documentation level selection varies depending on the significance of a property. The IHPA IL HABS/HAER Program Coordinator will determine the specific scope of work for each IL HABS/HAER project. The scope of work will be stated within the body of the general project Memorandum of Agreement or within other project correspondence. The end result of the documentation process is to provide users of the IL HABS/HAER Collection clear and concise documentation which is easily interpreted.

There are three levels of documentation within the IL HABS/HAER system. Level I or II documentation is often deemed appropriate for buildings/structures that exhibit an example of specific architectural style or element of engineering. Properties associated with noted architects, engineers, other significant persons or properties integrating the use of significant construction materials are also considered for Level I or II documentation. Level III documentation is often adequate for building/structures of lesser significance, or that can easily be interpreted graphically through large-format photography.

The written history and architectural/engineering description is an important, constant element of each level of documentation. IL HABS/HAER graphic documentation is meaningless without sufficient development of the subject property's historical contexts and precise physical description. The length and number of the historical context(s) to be developed for a property is determined by known information and the speculated relationship a property could have within a local, state or national context. Although IHPA strives to define specific context parameters for each recording project, other contextual issues are often discovered during primary and secondary source research and should be addressed. IHPA stresses the need to identify the who, what, when, where, why and how concerning the subject property and within primary and secondary context development.

TECHNICAL COMMENTS

Recordation Numbering System

Every IL HABS/HAER project is assigned an IL HABS/HAER number for the records of Preservation Services Division (PSD) and cataloging by the Illinois Historic Library Archive Section. The IL HABS/HAER numbering system contains elements that designate the county location of the property, the year that the documentation project was assigned, and the project number. For example, IL HABS/HAER No. G-1993-4 indicates that it is the fourth documentation project assigned in Gallatin county in calendar year 1993.

An example of the numbering system for a complex or multi-property IL HABS/HAER project in Cook County is as follows:

IL HABS No. CK-1999-1 = Complex or Multi-property Cover Document

IL HABS No. CK-1999-1-A = Building/Structure #1
IL HABS No. CK-1999-1-Z = Building/Structure #26
IL HABS No. CK-1999-1-EE = Building/Structure #31

Photographs for IL HABS/HAER submittals will be assigned decimal point designators and appear as follows:

IL HABS No. CK-1999-1.5 = Fifth Site/Streetscape Photo
IL HABS No. CK-1999-1-A.19 = Nineteenth Photo of Building /Structure #1

Measured Drawings

When Level I measured drawings are stipulated as part of the recordation process, the IL HABS/HAER Program Coordinator will specify drawings that are required. Generally, drawings of buildings will consist of all exterior elevations, sub-level to attic floor plans, and large-scale examples of distinctive architectural elements, such as windows, cornice lines, and decorative stone/woodwork. Drawings of structures such as bridges and industrial sites shall include elevations along with engineering features that define significance.

If original drawings of a property exist, and Level II recordation is stipulated by PSD, it is often necessary to supplement the original drawings with large-scale distinctive feature drawings as determined by PSD. Original drawings for Level II may also need to be retraced due to discrepancies which would prevent the quality standard from being met. The procedure for reproduction of drawings consists of a photographic process using lithographic negatives and subsequent transfer to archivally stable mylar. Level II reproductions must also be sized to fit within the standard IL HABS/HAER title block format mylar sheets.

Level I and II drawings will be required on 24"x36" IL HABS/HAER standard title block formatted mylar sheets. During the initial IL HABS/HAER Program Coordinator/IL HABS/HAER Contractor consultation regarding scope of work requirements, the contractor will be issued, at cost, one mylar sheet for template purposes. It will be the contractor's responsibility to reproduce the required number of IL HABS/HAER formatted mylar sheets, incorporating the appropriate drawing surface.

Each set of Level I and II drawings will have a **Title Sheet** that includes the name of the building/structure/complex, a state map with the subject county in bold borders, a USGS area location map, a site plan, the subject property's significance statement, a project information statement, and an index of the accompanying drawing sheets.

The following technical requirements must be met:

1. Ink - type intended for use on plastic film, Pelikan-T or equivalent.

2. Scale of Drawings - uniform scale for plans, elevations, and sections within each set of drawings. Recommended scales are 1/8", 3/16", and 1/4" = 12". Details should be drawn at uniform but correspondingly larger scales with a minimum of 1/2" scales for door and window elevations and 1/2" scale for detail sections.

3. Line Weights - varying line weights are to be employed to give the illusion of depth. The range of pen weights should be limited to six or less. A wider range results in a loss of detail when drawings are reduced for reproduction. Recommended pen weight range, .19mm to .56mm.

4. Lettering - plain gothic (the standard Leroy style). Sizes designated in Field Instructions for Measured Drawings.

5. Title Blocks - completed as indicated in Field Instructions for Measured Drawings. For IL HABS/HAER Documentation, IL HABS/HAER numbers will be placed in the survey number block.

6. Graphic Scales - will be drawn on each sheet. English and metric scales are required.

7. Unknowns - it is not necessary to speculate where areas of construction are not known. Inaccessible areas should be labeled as such and left blank.

Field notes used in editing the drawings are included in the documentation submitted to IHPA. Field notebooks offer the most complete and accurate record of the buildings/structures recorded. It is imperative that all sketches and dimensions be legible and accurate. Sketches should be large enough so that the dimensions are not crowded. All field notebook covers and individual pages will be completely and neatly labeled and numbered.

Thirty-five millimeter black-and-white field photographs should be taken by the contractor to aid in the preparation of measured drawings and the written physical description. Field photographs must be labeled and submitted to IHPA, since they are used in the editorial review of drawings and the written description, and are transmitted to the Illinois State Historical Library as a part of the field notebook. A field photo identification sheet must also accompany submitted photos.

Thirty-five millimeter **color slides** must be submitted for each building or structure that is being recorded. Additional slides addressing building/structure details, the general site, etc. may be requested by IHPA. These slides may be used for educational or promotional lectures.

Check Prints - When the first drawings are near completion, prints will be sent to PSD for review and editing. Write any questions directly on the prints. Include photographs of the subject of each drawing. Prints and photographs will be reviewed and returned promptly. The same procedure will be used for other drawings until PSD approves the final drafts.

Sketch Plans

Sketch floor plans required as part of the Level III process should be simple, straight forward line drawings no larger than 8.5x11" in size. They can be freehand or hardline on 8.5x11" archival bond paper. They are generally not to scale, although elements should be drawn in correct proportion to one another. Property name, location, IL HABS/HAER number, north arrow, overall dimensions, name of person preparing the sketch, and the date drawn are required. IHPA recommends the submittal of Computer Assisted Drafting (CAD) floor plans for all submittals.

Computer Assisted Drafting (CAD)

The substitution of CAD submittals in place of hand produced Level I or II drawings will be acceptable, provided the IL HABS/HAER Consultant presents examples of CAD quality to be incorporated and gains the approval of the IL HABS/HAER Program Coordinator prior to the initiation of work.

Acceptable CAD IL HABS/HAER Documentation must demonstrate accurate depth and dimension through the implementation of variable line weights. Areas examined for accuracy will include the setback of

elevation features, such as roof lines, cornices, windows, porches, additions, truss systems, and the depth of features within cross-sections. Individual details will also be examined for depth and dimensional accuracy.

CAD drawings for title sheets, site plans and floor plans are acceptable for all levels of IL HABS/HAER Documentation. Lettering for CAD submittals must duplicate or be a close approximation of the plain gothic font.

PHOTOGRAPHIC SPECIFICATIONS

Photographs that are part of IL HABS/HAER documentation must be produced and presented according to the criteria stipulated in Photographic Specifications for HABS/HAER, available from PSD. Basic requirements are as follows:

1. Equipment -- Large-format view camera capable of producing 4x5" negatives; black and white safety film, no film packs.

2. Views required -- The IL HABS/HAER Program Coordinator will consult with the IL HABS/HAER Consultant to determine the specific views to be photographed. It is often required that photocopies of historical views be submitted as part of the photographic documentation. Persons preparing the written documentation are more likely to locate pertinent historic photographs; when different individuals are producing photographic documentation and written reports, they should coordinate their efforts to procure and reproduce selected historic views.

3. Submission -- One original 4x5" black-and-white negative and one good quality, properly formatted, approximately 1/4" border, 5x7" print shall be submitted of each photograph. All prints must be on polyfiber base paper. Resin-coated papers are not archivally stable and will not be accepted.

IL HABS/HAER acceptable 100% photographic submittals must meet the following guidelines:

1. Arranging and Indexing Photographs

   All mounted photographs are combined with the written data and 8.5x11" graphic documentation in the Photo-Data set. Photographs should be arranged in a logical and consistent manner. The preferred arrangement is as follows:

   a. Exterior Views/Details

   b. Interior Views/Details

   c. Photocopies

   Photographs shall be keyed to a site or building plan.

   Each view is assigned a sequential number starting with .1 and continuing until all photographs and photocopies have been numbered. An example of the sixth photo of a Coles County project would be CO-1994-1.6. This number is used in print, negative, mount card, and photo index labeling.

2. Photographic Index Sheet and Photographic View Key

An 8.5x11" archival bond photographic identification sheet is required and is labeled "Index to Photographs." The photo index sheet identifies the property recorded, all large-format photographic documentation available, the photographer, and lists captions for the photographs.

Photo angles will be keyed to a site or building plan on 8.5x11" archival bond paper and entitled "Photographic View Key". Individual view decimal numbers will be inserted in a photographic angle symbol indicating the position angle the view was taken from.

3. Mounting and Labeling Photographs

One 5x7" print mounted on an 8.5x11" archival photo mount card. Photo mount cards are available through archival materials suppliers. The information shown below is typed or printed in pencil in capital letters in the upper right corner when card holes are on the left margin:

IL HABS or HAER No. (V-1993-7)
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

Each photograph is labeled on the back. Use a No. 1 pencil and write on a hard surface so that the emulsion does not crack. In the upper right-hand corner, list the IL HABS/HAER No. with the sequential caption number.

5. Negatives and Negative Storage Sleeves

The IL HABS/HAER number for the property must be labeled on each negative. Use a Rapidograph pen with acetate ink and print the number in the margin on the <u>base</u> (shiny) side of the negative. The negative is submitted in an acid-free paper archival sleeve that is labeled with the appropriate IL HABS/HAER number. Type or print in pencil the number in the upper right corner of the negative sleeve.

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

The IL HABS/HAER historical and architectural/engineering data is compiled as a research source. It is not a definitive study or formal stylistic analysis of the subject property. The completed report is designed to provide IL HABS/HAER Collection users with basic graphic and contextual property information and to reference other sources for additional information.

The written history/architectural description is just one element of the total documentation. There is no need to include lengthy verbal physical descriptions which are better illustrated in required photographs or drawings. Simply refer the user to the appropriate graphic document. Primary features to include in the written report are property characteristics not apparent in the visual documentation, such as historical information, data on alterations and additional materials of construction, structural and mechanical systems, and a thorough annotated bibliography. It is more important to mention the significance of a feature than to merely describe it, such as decorative wood detailing based on a 19th-century pattern book design.

The IL HABS/HAER Outline Format is the applicable format for all IL HABS/HAER written documentation. This format insures program standardization and that data compiled is readily accessible. IL HABS/HAER Outline Format templates will be used as a checklist to insure that all necessary information is included in the submitted data. IL HABS/HAER Outline Format templates are available from the IL HABS/HAER Program Coordinator.

Guidelines

1. General

   Be consistent within the entire project. Once an editorial decision is made, stick to it.

   Indicate sources for all information.

   Use A Manual of Style or A Manual for Writers of Term Papers, Theses, and Dissertations, both published by the University of Chicago Press, for general editorial practices.

   Referenced sources within the body of IL HABS/HAER Documentation text must be properly footnoted or endnoted. Parenthetical notation is not acceptable. Endnotes for IL HABS/HAER Outline Format Introduction and Parts I/II text will follow Part II.

2. Assigning Name of Structure

The primary name shall be the historic name and will be listed in capital letters in the identification information section. Secondary names are also listed parenthetically following the historic name. If the historic name cannot be determined, the address is used as the primary name.

It is required that the name on each piece of documentation; drawings, photos, photo mount cards, and written be identical.

3. Location

The exact location of the recorded property must be carefully identified and indicated. For metropolitan buildings and structures, this includes number and street, city or town, county, and state. Although the format is constant, urban and rural location information requirements are somewhat different.

The recorded property is required to be located on a 7.5' USGS topographic map section and submitted on 8.5x11" archival bond, unless represented on an accompanying IL HABS/HAER 24x36" mylar Title Sheet. The appropriate USGS quadrangle map name and Universal Transverse Mercator (UTM) coordinates are to be included in the General Information/ Identification section of the written document.

4. IL HABS/HAER Outline Format

The required outline format for IL HABS/HAER written documentation is divided into six primary sections:

1. Introduction - General Information/Identification
2. Part I - Historical Information
3. Part II - Architectural/Engineering Information
4. Part III - Sources of Information
5. Part IV - Methodology of Research
6. Part V - Project Information Statement

The format will be as indicated in the IL HABS/HAER Outline Format template available from the IL HABS/HAER Program Coordinator:

Historic Information; Historic Context Section, Part I(B) - IHPA will designate historic contexts to be elaborated on, in addition to the general history of the recorded property. When required, these contexts are included to demonstrate property linkage to a larger complex, specific governmental agency, taxing body, architectural/engineering styles/methods, urban/corporate development, etc.

Part I(B) may be produced in the narrative form, provided individual contexts and sub-contexts are indicated by centered headings.

Methodology of Research Section, Part IV - This section is intended to provide users of the written report background on the preparer's research approach and project staffing.

Project Information Statement Section, Part V - The language for this section will be provided by the IHPA Cultural Resource Manager reviewing the statutory submittal or the IL HABS/HAER Program Coordinator. The Project Information Statement verbiage will be duplicated in the appropriate section of the Title Sheet if any 24x36" IL HABS/HAER mylars are required.

7. Supplemental Materials

Often while researching a property for recordation purposes, property-related informational and graphic documents are located. This information will be of interest to the end users of the IL HABS/HAER Collection, and copies should be included for reference purposes. The two types of reproductions acceptable as part of the collection are:

Photographic Print with Negative - Important visual materials such as historic views, architectural drawings, and site plans. These must be submitted according to IL HABS/HAER standards and guidelines for photography. A complete bibliographical citation is required for each photocopy.

Clear Photocopy of Primary and Secondary Source Written Material - Copies of relevant written materials such as deeds, inventories and construction specifications can be submitted. Included items must be photocopied on 8.5x11" archival bond and included as appendices to the written report. Full bibliographic citation is required.

Supplemental Materials must be labeled and accompanied by an index sheet identifying the inclusions.

Supplemental materials may also be included in the field materials submitted for deposit. These submittals do not have to meet archival standards, but full bibliographic citations and source locations must be included.

100% SUBMITTALS

IL HABS/HAER 100% Documentation must be formatted and submitted as follows:

1. Level I, II or, as required, Modified Level III IL HABS/ HAER 24x36" Archival Mylars

Submitted in a 26" crush-proof mailing/storage tube.

2. Level I, II and III 5x7" Photographic Negatives

Contained in properly labeled, archivally stable, paper sleeves and placed in a labeled, archivally stable 4x5" clamshell box.

3. Level I, II and III 8.5x11" *Cover Sheet*, Written Text, Maps, Site Plans, Floor Plans, Drawings, Supplemental Materials and Photographic Elements

Cover Sheet - use an 8.5x11" archival mount card without slits or 8.5x11" archival card stock.

Label as follows:

In the upper left-hand corner type or print with pencil the name of the building/structure and any secondary names, address (or vicinity), city or town, and county, each on a separate line. For example:

Guy Grand House (Magic Christian Headquarters)
1269 Abbey Road
Eddyville
Pope County

Place the IL HABS/HAER for the building/structure in the upper right-hand corner.

In the center of the cover sheet, type or print with pencil in capital letters the kinds of information that are included in the complete set. This includes photographs and written historical and descriptive data.

Presentation - Format is as follows:

1. Cover Sheet
2. IL HABS/HAER Outline Format Text
3. USGS 7.5' Location Map Section
4. Site Plan
5. Floor Plans

6. Drawings
   A. Elevations
   B. Details
   C. Mechanicals
7. Photographic Identification Sheet
8. Photographic View Key
9. Mounted Photographs
10. Supplemental Materials

Packaging - Submitted in a labeled 9x12" archivally stable clamshell box of sufficient depth.

ADMINISTRATIVE PROCEDURES AND ASSISTANCE

If IL HABS/HAER recordation is required within a mitigative memorandum of agreement, a section of the recordation stipulation will require the contractor or sub-contractors to consult with the IL HABS/HAER Program Coordinator prior to producing the required documentation. This consultation is required in order to define the specific scope of work for the contracted undertaking. The IL HABS/HAER Program Coordinator will be available throughout the recordation process for clarification of procedures and requirements in order to produce quality 100% documentation.

A 95% draft of drawings, photographs and written documentation will be submitted to the IL HABS/HAER Program Coordinator for approval before they are reproduced to archival materials. All final documentation must meet IL HABS/HAER standards and guidelines for quality, content, materials, and presentation prior to acceptance.

Each IL HABS/HAER project is required to be microfiched upon acceptance by IHPA. The IL HABS/HAER Program Coordinator can assist contractors in fulfilling this requirement by delivering acceptable 100% IL HABS/HAER Documentation to Midwest Microfilm of Springfield for this process. Midwest Microfilm has proven ability in the completion of this process and is competent in the handling of archival materials. Fees of approximately $25 for this process are billed by Midwest Microfilm directly to the contractor. The IL HABS/HAER Program Coordinator will retrieve the microfiched IL HABS/HAER Documentation and transfer it to the collection repository at the Illinois State Historical Library.

A list of suppliers of IL HABS/HAER archival presentation materials is available from the IL HABS/HAER Program Coordinator upon request.

SOURCES OF TECHNICAL INFORMATION

Burns, John A. Recording Historic Structures. Washington, D.C.: The AIA Press, 1989.

Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. Chicago: University of Chicago Press, 1987.

A Manual of Style. Chicago: University of Chicago Press, 1980.

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Specifications for the Production of Photographs. Washington, D.C.: HABS/HAER, National Park Service, 1984.

Transmitting Documentation to HABS/HAER WASO. Washington, D.C: HABS/HAER, National Park Service, 1995. (Draft)

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