

## **Section 4(f) Statement**

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**Interstate 74 Quad Cities Corridor Study**  
**23<sup>rd</sup> Avenue in Moline, Illinois to 53<sup>rd</sup> Street in Davenport, Iowa**  
**Rock Island County, Illinois and Scott County, Iowa**  
**Project Number: IM-74-1(122)0-13-82**

**Draft 4(f) Statement**

**Submitted Pursuant to 49 USC 303**

**By:**

**U.S. Department of Transportation, Federal Highway Administration**

**Iowa Department of Transportation**

**Illinois Department of Transportation**

The following persons may be contacted for additional information concerning this document:

Philip Barnes, P.E.  
Division Administrator  
Federal Highway Administration  
105 6th Street  
Ames, IA 50010  
Telephone: 515-233-7300

James P. Rost, Director  
Office of Location and Environment  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, IA 50010  
Telephone: 515-239-1225

Gregory Mounts, P.E.  
District Engineer  
Illinois Department of Transportation, District 2  
819 Depot Ave.  
Dixon, IL 61021  
Telephone: 815-284-2271

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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.

# Proposed Action

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## 1.1 Project Description

Iowa and Illinois Departments of Transportation, in conjunction with FHWA, have initiated planning and preliminary design studies for the improvement of Interstate 74 in Scott County, Iowa, and Rock Island County, Illinois. The project begins at the I-74 interchange with 23<sup>rd</sup> Avenue in Moline, Illinois, and continues across the Mississippi River to the I-74 interchange with 53<sup>rd</sup> Street in Davenport, Iowa ([Figure 1, I-74 Iowa-Illinois Corridor Study Location Map](#), located after page 4(f)7-3 of this document).

The proposed improvements will consider additional capacity on I-74, an improved Mississippi River crossing, improvements to the existing service interchanges, enhancements to the connecting arterial roadway system, and opportunities for improved transit and intermodal connections.

## 1.2 Project History and Purpose and Need

### 1.2.1 Project History

Improving the Interstate 74 (I-74) corridor and the Mississippi River Bridge was a finding reported in the Quad Cities Mississippi River Crossing Major Investment Study (MIS)(December 1998) conducted by the Iowa Department of Transportation and the Illinois Department of Transportation. The outcome of this study was a recommendation for a three-prong 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 system-wide 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.

### 1.2.2 Purpose and Need Summary

The purpose of the proposed improvements is to improve capacity, travel reliability, and safety along I-74 between 23<sup>rd</sup> Avenue in Moline and 53<sup>rd</sup> 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
- Roadway geometry

- Safety considerations
- Dependability of travel
- Transportation connections
- Infrastructure condition
- 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 existing 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. In addition, an examination of the age and condition of the existing facility reveals that it is deteriorating. Major reconstruction or rehabilitation may be required within the time frame for the 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 travels. Improving the performance of I-74 through the project corridor is not only congruent with local land use plans, but is important to maintaining and enhancing the economic vitality of the riverfront areas, a fact that was noted in the *2000 Comprehensive Economic Development Strategy* prepared for the metropolitan region.

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 Draft Environmental Impact Statement \(DEIS\)](#).

See [Section 1 of the DEIS](#) for more detailed information on the project's purpose and need.

### 1.3 Proposed Alternatives

A broad array of alternatives is being considered to address the transportation needs and objectives defined in the Purpose and Need in [Section 1 of the DEIS](#) for the I-74 project. These include both roadway and multimodal improvement strategies. Alternative improvements are being considered for the I-74 mainline and six service interchanges

between 23<sup>rd</sup> Avenue in Moline, Illinois (south project terminus) and 53<sup>rd</sup> Street in Davenport, Iowa (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. The three sections are:

- South section (from 23<sup>rd</sup> Avenue to 12<sup>th</sup> Avenue in Moline)
- Central section (from 12<sup>th</sup> Avenue in Moline to Lincoln Road in Bettendorf)
- North section (from Lincoln Road in Bettendorf to 53<sup>rd</sup> Street in Davenport)

Proposed build alternatives include reconstructing and widening I-74 from 23<sup>rd</sup> Avenue in Moline, Illinois to US 6 in Davenport, Iowa, realigning I-74 over the Mississippi River and constructing a new improved river crossing structure(s), and reconstructing I-74 from US 6 to 53<sup>rd</sup> Street in Davenport, Iowa. Interchange modifications and improvements and associated local roadway improvements are part of the build alternatives as well. Where appropriate, multimodal improvements were also incorporated with the build alternatives.

Please see [Figure 2-7, Quad City Area Bicycle/Pedestrian and Rail Facilities](#), at the end of [Section 2, Alternatives](#), in the DEIS for a map showing the limits of these sections.

As no additional right-of-way would be required in either the South or North sections (as defined above), and as no 4(f) properties are located within these sections, proposed work in these sections will not be discussed. Therefore, only the Mississippi River Crossing section, associated build alternatives, and 4(f) impacts will be discussed in this 4(f) document. For a full description of the build alternatives in all three of the sections of the project area, see [Section 2 of the DEIS](#).

Within the Mississippi River Crossing Area (the area of impact for 4(f) properties), the build alternatives retained for detailed study represent the range of reasonable alternatives that best address purpose and need. Two principal alignment alternatives, E and F, were developed and considered east of the existing structures. A third alignment alternative, Alignment C, was considered. It represents 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. However, this alignment will be used to demonstrate avoidance alternatives beyond the other two build alternatives (E and F).

In addition to the principal alignment alternatives retained for consideration within the Mississippi River Crossing 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) is being compared to a loop design (M2). In Bettendorf, a diamond configuration (B1) is being compared to a single loop design (B2). These variations are shown on Pages 3-4, 6-9 and 11-12 in [Appendix B of the DEIS](#).
- Local roadway design variations along US 67 in downtown Bettendorf. Two designs are under consideration to carry US 67 through the interchange area and reconnect it to

existing US 67 at each end: a 90-Degree Connector and a Diagonal Connector. These variations are shown on Pages 13-16 in [Appendix B of the DEIS](#).

- Underpass connections in Bettendorf. An underpass is being considered at either Kimberly Road or Holmes Street/Mississippi Boulevard to carry local traffic under the I-74 corridor. These variations are shown in Page 14 in [Appendix B of the DEIS](#).
- Bicycle / pedestrian crossing variations over the Mississippi River. The following options are under consideration: no accommodations, new trail connection along existing Iowa-bound bridge, or new trail connection along new I-74 bridge. This option is shown on [Figure 2-3, Proposed Mainline I-74 Corridor Sizing](#), at the end of [Section 2, Alternatives](#), of the DEIS.

The interchange variations and bicycle / pedestrian variations could be applied to either build alignment alternative E or F. Similarly, variations in design for connecting local roadways in Bettendorf could generally be combined with either build alignment alternative or interchange variation.

Generally, the 4(f) properties are 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, there are two exceptions where the interchange variations would present avoidance options for the 4(f) properties – the C.I. Josephson House and the McManus Park. These variations are covered in more depth in [Section 4 of this Section 4\(f\) Statement](#) and [Section 2 of the DEIS](#). As a result, the primary focus of this Section 4(f) Statement will be on the impacts of alignment alternatives and not the design variations.

### 1.3.1 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 subsequently determined not to be reasonable for further consideration. The mainline alternatives shown on [Figure 2, Mississippi River Crossing Location Options](#), located after page 4(f)7-3 are discussed briefly in this section, but in more detail in [Section 4, Avoidance Alternatives](#), of this 4(f) Statement.

#### Alignment Alternative C

Alignment C shifts I-74 to the west of the existing alignment. This alignment essentially 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 purpose and need of the project.



### **Alignment Alternative E**

Alignment E shifts the mainline approximately 230 ft east of the existing bridges. While the alignment preserves the series of reverse horizontal curves on the Illinois approach to the Mississippi River, by reducing the sharpness of the curves, it makes the curves smoother to drive. Alignment E does meet the purpose and need of this project and it is under further consideration.

### **Alignment Alternative F**

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

See [Section 2 of the DEIS](#) for details about the engineering features of the proposed I-74 mainline improvements.

### **1.3.2 No-Action Alternative**

The No-Action Alternative is defined as no new major construction along the I-74 corridor other than short-term restoration activities. It will serve as a basis for comparison for the build alternatives rather than a viable stand-alone alternative as it does not address the purpose and need. [Section 4 of this Section 4\(f\) Statement](#) provides more information on the No-Action alternative.

## SECTION 2

# Section 4(f) Properties

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## 2.1 Definition of Corridor Study Boundaries

The logical termini of the I-74 Quad Cities Corridor Study were determined to be 23<sup>rd</sup> Avenue in Moline, Illinois (south project terminus) and 53<sup>rd</sup> Street in Davenport, Iowa (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 farthest west point of study. 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 and Need of the proposed action. Therefore, it is not reasonable to consider 4(f) properties or alternatives beyond this boundary.

The eastern boundary extends approximately 1,600 feet from the existing 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 both the City of Moline and the City of Bettendorf. Redevelopment in these 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 [Section 2](#) of this 4(f) document are shown in [Appendix 4\(f\)-1, 4\(f\) Resources Studied](#). Because of the multitude of 4(f) properties in the project corridor, this section of the 4(f) statement defines what properties were studied and determined to be 4(f). It also discusses which properties are not evaluated as 4(f) and the reasoning involved in addition to the 4(f) properties that were evaluated. Eight 4(f) properties will be discussed in-depth in this 4(f) statement.

## 2.2 Methodology for Identifying Section 4(f) Properties Within the Project Corridor

### 2.2.1 Parks and Trails

City land use maps and recreation plans for Davenport and Bettendorf in Iowa and Moline in Illinois were consulted to determine not only the location of parks and trails in the project corridor, but their ownership as well. Park and trail locations and uses were also identified through field observations. 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 are described in [Sections 2.3](#) and [2.4](#) of this 4(f) document.

## 2.2.2 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. A review of the National Register of Historic Places was conducted in August 2002 to determine which structures in the project area were already 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 were contacted (such as public libraries, assessor's offices, and recorder's offices) for additional information regarding the historic nature of the properties in question.

### Field Work

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

In Moline, Illinois, five out of 48 buildings investigated within the area potentially affected by the proposed project were found to be eligible for the National Register of Historic Places (NRHP). In Bettendorf, Iowa, of the 147 properties investigated, three were determined to be eligible. One archaeological site, located in Iowa, contained prehistoric artifacts, but none were 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 from each state's Department of Transportation to their respective State Historic Preservation Officer. More information about coordination with the SHPO's can be found in [Section 6, \*Coordination\*](#) and [Appendix 4\(f\) - 5](#) of this 4(f) Statement.

## 2.3 Properties not Evaluated in this 4(f) Statement

Generally, not all parks properties or historic structures are necessarily 4(f). Moreover, there are properties that are considered 4(f) properties but aren't impacted by the proposed action. These properties are important to mention but do not warrant substantial discussion in this 4(f) Statement. These properties are briefly described below with more discussion in the [Appendix 4\(f\)-4](#).

### 2.3.1 Park Sites 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. Bill Glynn Memorial Park does contain the Iowa-Illinois Memorial Bridge monument. More information on the monument can be found in [Section 2.4.2 of this 4\(f\) document](#) under “Iowa-Illinois Memorial Bridge and Iowa-Illinois Memorial Bridge Monument”.

### **2.3.2 Historic Sites Investigated but Determined Not to be 4(f) Properties**

Early on in the study process, there were several properties that were identified for study as historic properties. However, it was determined that they were not eligible for the National Register of Historic Places (NRHP). It is the listing on or eligibility for the NRHP that qualifies historic properties for protection under 4(f). Because these sites were determined to not be eligible for the National Register, they do not need evaluation as 4(f) properties as part of this 4(f) statement. More information about properties can be found in [Appendix 4\(f\)-4](#). A brief discussion of these properties follows (all the properties, unless otherwise designated, are in Moline).

#### **George Benson House**

The George Benson House in Moline was built at the turn of last century. It is reminiscent of the Prairie School and Classical Revival architectural styles of the early twentieth century. However, its loss of architectural features and additional of modern window treatments diminish the historical integrity of the house.

#### **John Deere Building Plow Works Company Warehouse and Office Building**

The John Deere Building was constructed in 1928. 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) is an elevator factory with newer and older buildings. It has historical significance to 20<sup>th</sup> 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.

#### **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.

### **2.3.3 Parks and Trails Avoided by Proposed Improvements**

There are several public recreational areas within the project corridor, but they were not evaluated in-depth in this 4(f) statement because they would be avoided by the proposed

project. These recreational areas include the Great River Trail, Bettendorf Riverfront Trail, Duck Creek Parkway and Leach Park.

### River Front Trails

The Great River Trail runs parallel to the Mississippi River through the Moline riverfront area. The Bettendorf Riverfront Trail is a paved trail that parallels the Mississippi River Bettendorf. See Pages 1 and 2 of [Appendix 4\(f\)-1](#) for the locations of these trails. Neither trail will be impacted by the proposed improvement as both fall under the bridge crossing.

### Duck Creek Parkway

Duck Creek Parkway is located in the North Section and runs along Duck Creek under the bridges (one each for north- and southbound traffic) that carry I-74 across Duck Creek and Duck Creek Parkway. However, as trail continuity and access will be maintained with the I-74 improvements, the FHWA determined that evaluation in this 4(f) statement is not necessary. 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.

### Leach Park

Leach Park is a 4.3-acre park located along the Mississippi River waterfront. It is connected to the riverfront trail system, serving as the trailhead for the Bettendorf Riverfront Trail. The park has picnic shelters and tables, boat and jet ski docks, a boat ramp, a fitness trail, and fishing piers. Its location on the river also provides scenic vistas of the river. This park is included in local planning efforts for tourism. Although the park is impacted by Alternative C, it is not impacted by Alternative E or F, and therefore, will not be discussed in [Section 3, Impacts](#), of this 4(f) document.

## 2.3.4 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. Therefore, they will not be discussed in [Section 3, Impacts](#), of this 4(f) document. More information about these properties can be found in [Appendix 4\(f\)-4](#). For locations of these properties, see [Appendix 4\(f\)-1](#). The status of each property is indicated in parenthesis as either “eligible” for or “listed” on the National Register.

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

The B.P.O.E. (Elks) Building is located in Moline and currently houses the Community Christian Fellowship.

### Moline Post Office (1935) (Eligible)

This property 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.

**Moline Public Library (Eligible)**

The Moline Public Library, located to the west of the I-74 study area, was constructed in 1903. The Neo-Classical building was designed by architect, F. Borgolte, and has been declared by the City of Moline as a Local Historic Landmark in 1993 in addition to its eligibility for the National Register of Historic Places.

**Thomas/Lewis/Wilson House (Eligible)**

The Thomas/Lewis/Wilson House is currently owned by Trimble Funeral Homes, Ltd. and is used for a stationers business. 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.

**LeClaire Hotel (Listed)**

The LeClaire Hotel, located directly west of I-74 in Moline, was built in 1922 and named after a well-known early settler, Antoine LeClaire. It was designated by Moline as a Local Historic 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 on 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. 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 / Bettendorf Improvement Company Building / W.F. Bruhn & Son General Merchandise Store (Eligible)**

Bettendorf Grocery/Bettendorf Improvement Company Building is located in Bettendorf and currently houses J & M Window and Siding, Ed's Appliance, and apartment units. The W.F. Bruhn & Son General Merchandise Store located adjacent to the grocery houses Century Carpet Cleaners and Blake's Gunsmithing. The larger structure (the grocery) is a two-story, front-gabled frame commercial building and once housed the Bettendorf Improvement Company, an economically and socially important business on the development of Bettendorf in the early twentieth century. The attached structure is a two-story brick building.

**Regina Coeli Monastery (Listed)**

The Monastery, located on a bluff in Bettendorf to the east of I-74, 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. The Monastery was eventually sold and was transformed into a hotel, its current use. The Regina Coeli Monastery was listed on the National Register of Historic Places in 1994.

## 2.4 Properties Evaluated in this 4(f) Statement

### 2.4.1 Parks and Trails Potentially Impacted by Proposed Improvements

#### McManus Park

McManus Park is a 3.3-acre City-owned park on Holmes Street between 12th and 13th Streets in Bettendorf. It has available picnic shelters, picnic tables, barbecue grills, playground equipment, volleyball and basketball courts, and public washrooms. Located next to I-74, it is highly visible; this and its amenities make the park a valuable resource in the community. Page 2 in [Appendix 4\(f\)-1](#) shows the location of McManus Park and its proximity to the neighborhood.

### 2.4.2 Historic and Archaeological Properties Potentially Impacted by Proposed Improvements

Each of the following properties can be found in [Appendix 4\(f\)-1](#) of this 4(f) document.

#### Scottish Rite Cathedral (Eligible)

The Cathedral, located near the southbound I-74 on-ramp at 1800 17<sup>th</sup> 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 cathedral organ; its seating capacity is 1260. The Cathedral is eligible for the National Register of Historic Places and has also been designated as a Local Historic Landmark. It is currently owned by the Scottish Rite Cathedral



Scottish Rite Cathedral

Association and is still used as a meeting location for the Masons. It should be noted that the portion of the Scottish Rite Cathedral parking lot impacted by this project was not part of the original property on which the cathedral sits. It was acquired during the 1970s.



C. I. Josephson House

#### C. Ivar Josephson House (Eligible)

The C. Ivar Josephson House, located at 1925 6<sup>th</sup> Avenue in Moline, is currently used as a residence. It is a well-preserved example of the Queen Anne architectural style in this part of Moline. It has a round turret on the southeast corner, a wrap-around porch with  $\frac{3}{4}$ -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 National Register of Historic Places.

### **Knights of Pythias Lodge Hall (Eligible)**

The Knights of Pythias Lodge Hall, located at 2011 6<sup>th</sup> 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 as well as the almost full-width open front porch with square half-height posts built on top of stucco-clad piers and skirt.



Knights of Pythias Lodge Hall

In a previous survey of architecture in Moline, this 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 National Register of Historic Places because of its architectural significance.

### **Eagle Signal Building (Eligible)**

Home of Spiegel Moving and Storage and located at 202 20<sup>th</sup> 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 National Register of Historic Places.



Eagle Signal Building

### **Davenport, Rock Island and Northwestern Railroad Depot (Eligible)**

The Depot, located at 2021 River Drive in Moline, is currently occupied by the Quad Cities Convention and Visitors Bureau. It has been determined to be eligible for the National Register of Historic Places 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 as well as 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)



Davenport, Rock Island and Northwestern Railroad Depot

The Iowa-Illinois Memorial Bridge is a three-span, twisted-wire-strand steel cable suspension bridge that currently 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 5505 feet. The bridge was designed by engineer, Ralph Modjeski, a well-known and revered American bridge builder. On



Iowa-Illinois Memorial Bridge



Iowa-Illinois Memorial Bridge Monument

November 18, 1935, the bridge opened. It was originally dedicated to American World War I veterans of Iowa and Illinois, but subsequently came to memorialize veterans of following wars.

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.

This monument was originally 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 National Register.

The Iowa-bound I-74 Mississippi River bridge has been determined eligible for the National Register of Historic Places 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)

The Iowana Farms Milk Company, which is located at 1416 State Street/312 15<sup>th</sup> 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 National Register of Historic Places.

Furthermore, its significance increases when consideration is given to the fact that it not only has remained standing while other businesses also critical to the creation of Bettendorf as a city have been torn down, but it is one of the only remaining buildings that once housed a successful business not owned by The Bettendorf Company.



Iowana Farms Milk Company

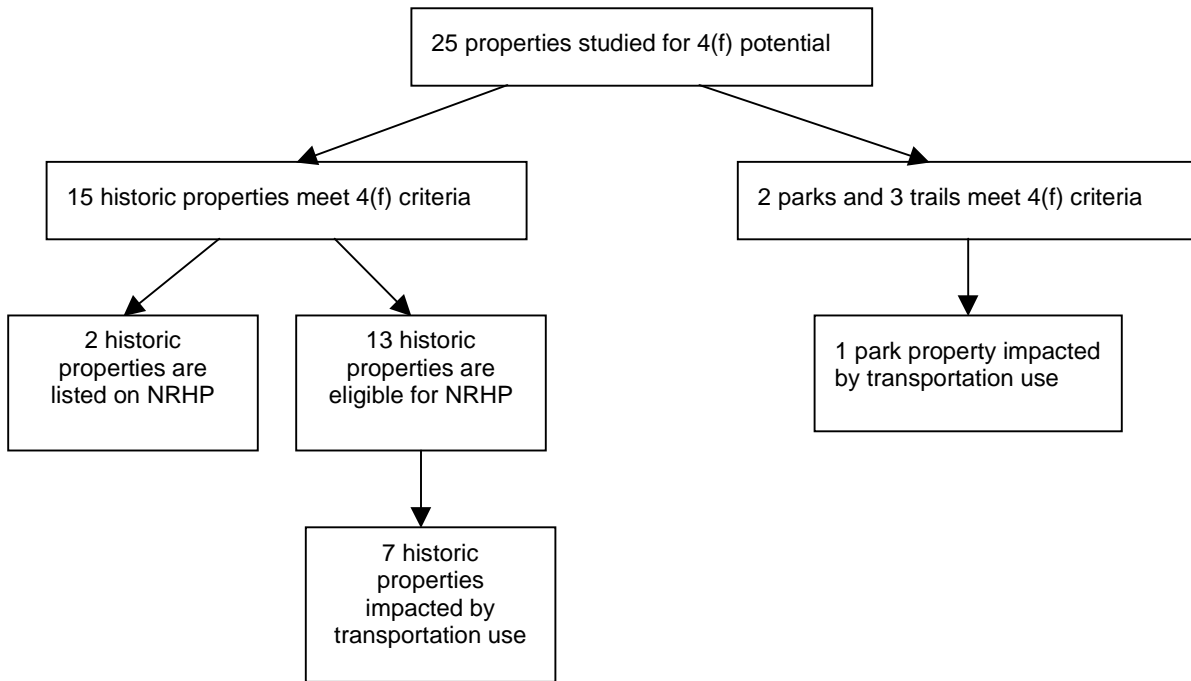
## 2.5 Summary

Potential 4(f) properties were identified early in the study process to ensure that alternatives could be developed to avoid as many properties as possible. The early identification was based on research, fieldwork, and coordination with officials with jurisdiction. As a result of this effort, a total of 25 properties were studied for their potential to meet the 4(f) criteria.

Based on continuing studies and coordination, fifteen of the historic properties surveyed, two city-owned parks, and three trails were determined to meet the definition of a 4(f) property. Two of the historic properties are listed on the NRHP, while the others are eligible for listing on the NRHP. [Table 1, \*Applicability of 4\(f\) to Properties in the Study Area\*](#), summarizes the results of the studies for applicability of Section 4(f) to properties within the corridor, including impacted properties required for further evaluation, while [Figure 3, \*Process for Determining the Applicability of Section 4\(f\)\*](#), located on page 4(f)2-10 outlines the process that was used to arrive at the conclusions in [Table 1, \*Applicability of 4\(f\) to Properties in the Study Area\*](#).

The remaining sections of this 4(f) document will discuss the eight properties that are potentially impacted by at least one of the proposed alternatives and possible means to avoid or minimize those impacts.

**FIGURE 3**  
Process for Determining the Applicability of Section 4(f)



**TABLE 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?
<b>Illinois Properties</b>			
Great River Trail	Recreational trail.	Yes	No.
George Benson House	Building. Not eligible for NRHP	No	n/a
John Deere Plow Works Company Warehouse and Office Building	Building. Not eligible for NRHP	No	n/a
Montgomery Elevator Co. and Moline Tool Co. Erecting Shop	Buildings. Not eligible for NRHP	No	n/a
Scottish Rite Cathedral	Building. Eligible for NRHP	Yes	Yes
B.P.O.E. (Elks) Building	Building. Eligible for NRHP	Yes	No
Moline Post Office (1935)	Building. Eligible for NRHP	Yes	No
Moline Public Library	Building. Eligible for NRHP	Yes	No
C. Ivar Josephson House	Building. Eligible for NRHP	Yes	Yes
Knights of Pythias Lodge Hall	Building. Eligible for NRHP	Yes	Yes
Thomas/Lewis/Wilson House	Building. Eligible for NRHP	Yes	No
LeClaire Hotel	Building. Listed on NRHP	Yes	No
Moline Post Office (1910)	Building. Eligible for NRHP	Yes	No
Eagle Signal Building	Building. Eligible for NRHP	Yes	Yes
Davenport, Rock Island, and Northwestern Railroad Depot	Building. Eligible for NRHP	Yes	Yes
<b>Iowa Properties</b>			
Iowa-Illinois Memorial Bridge and Monument (currently located in Bill Glynn Memorial Park)	Bridge. Eligible for NRHP Monument. Contributing factor for historic status of the bridge.	Yes	Yes No
Bill Glynn Memorial Park	Excess parcel owned by the Iowa DOT (Not classified as a park)	No	n/a
Leach Park	Recreational park	Yes	No
Bettendorf Riverfront Trail	Recreational trail	Yes	No
Duck Creek Parkway	Recreational trail	Yes	No
McManus Park	City-owned park	Yes	Yes
Archaeological site 13ST189	Archaeological site. Not eligible for NRHP.	No	n/a
Iowana Milk Farms Company	Building. Eligible for NRHP.	Yes	Yes
Bettendorf Grocery / Improvement Company Building / WF Bruhn & Son General Merchandise Store	Building. Eligible for NRHP.	Yes	No
Regina Coeli Monastery	Building. Listed on NRHP.	Yes	No
<b>Total number of properties studied: 25</b>			
<b>Total number of 4(f) properties: 20</b>			
<b>Total number of 4(f) properties requiring 4(f) evaluation*: 8</b>			

\* Impacts are only calculated by alternatives carried forward – Alternatives E & F

## SECTION 3

# Impacts to 4(f) Properties

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The 4(f) properties discussed in this section may be impacted by the mainline, sideroad, or interchange variations of the alternatives carried forward – Alternatives E and F. Impacts to 4(f) properties that would be caused by Alternative C will not be discussed in this section because Alternative C does not meet the purpose and need. Alternative C will be compared with the alternatives carried forward in the Avoidance and Minimization sections of this 4(f) document.

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

TABLE 2  
Appendix 4(f)-2 Location of Properties Potentially Impacted by Proposed Improvements

Property	Appendix Location
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
Iowana Milk Farms Company	Page 6
McManus Park	Pages 7 & 8

Depending on the alignment and design variations chosen, as many as eight 4(f) properties may be impacted by the project. The impacts are primarily direct impacts to historic buildings, as opposed to the property surrounding the building. A discussion of how each of the properties would be impacted by the proposed alignments and the interchanges associated with each alignment follows.

## 3.1 Scottish Rite Cathedral (Eligible for NRHP)

Access to southbound I-74 exists in this area at 7<sup>th</sup> Avenue currently. By relocating the southbound access to 19<sup>th</sup> Street, a more direct connection to I-74 from downtown Moline would be provided. For more discussion on this connection, see [Section 4, Avoidance Alternatives](#), of this 4(f) document. The southeast corner of this property is within the footprint of a southbound entrance ramp at 19<sup>th</sup> Street in Moline. This 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 impact the building directly.

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 5, \*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 / use restrictions associated with the wall, there may still be a permanent transportation use of the property.

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

### **3.2 C. Ivar Josephson House (Eligible for NRHP)**

The C. Ivar Josephson House would be impacted by the 6<sup>th</sup> Avenue ramp associated with interchange variation M2 (the loop interchange design) for both alignment alternatives E and F. Construction of the M2 interchange variation would impact the entire property, including a direct impact to the building. The M1 interchange variation with either Alignment Alternative E or F does not impact the property.

### **3.3 Knights of Pythias Lodge Hall (Eligible for NRHP)**

The building is within the footprint of all of the mainline and interchange combinations. The entire property, including the historic building, would be impacted if any of the build alternatives were to be chosen. The impact is caused by the need to improve the curvature of the existing I-74 alignment, which is an element of the purpose and need for the project.

### **3.4 Eagle Signal Building (Eligible for NRHP)**

Eagle Signal Building and the property on which it stands would be impacted by Alignment E, regardless of the interchange variation selected. The impacts would be to the entire property, including the historic building. Alignment Alternative F and the two interchange variations associated with it would not impact the Eagle Signal building.

### **3.5 Davenport, Rock Island, and Northwestern Railroad Depot (Eligible for NRHP)**

Davenport, Rock Island and Northwestern Railroad Depot is within the River Drive interchange of all four mainline/interchange alternatives. Therefore, the entire property would be impacted if any of the build alternatives were chosen. This property would be affected by the new alignments proposed to the east, which are designed to address the need to improve the curvature of the existing I-74 alignment (as discussed in the purpose and need).

[Table 3, \*Potential Impacts to 4\(f\) Properties in Moline\*](#), on page 4(f)3-3 summarizes the impacts to properties located in Moline.

**TABLE 3**  
Potential Impacts to 4(f) Properties in Moline

	<b>E Alignment</b>	<b>F Alignment</b>
<b>Scottish Rite Cathedral</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	7,061 ( of 108,671)	7,061 (of 108,671)
Impacted by Interchange Variation:	M1, M2	M1, M2
Potential Use:	The southeastern portion of the property would be used as a temporary construction easement for a retaining wall.	
<b>C. I. Josephson House</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	8,225 (8,255)	8,225 (8,255)
Impacted by Interchange Variation:	M2 only	M2 only
Potential Use:	The southeastern portion of the building and property would be incorporated into the 6 <sup>th</sup> Avenue exit ramp and widening of 6 <sup>th</sup> Avenue cross section	
<b>Knights of Pythias Lodge Hall</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	10,964 (10,964)	10,964 (10,964)
Impacted by Interchange Variation:	M1, M2	M1, M2
Potential Use:	The building and property would be permanently incorporated into the mainline and 6 <sup>th</sup> Avenue interchange	
<b>Eagle Signal Building</b>		
Impacted:	Yes	No
Impacted Sq. ft. (of total):	25,051 (25,051)	
Impacted by Interchange Variation:	M1, M2	
Potential Use:	The building and property would be permanently incorporated into the mainline	
<b>Davenport, Rock Island, and Northwestern Railroad Depot</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	37,427 (37,427)	37,427 (37,427)
Impacted by Interchange Variation:	M1, M2	M1, M2
Potential Use:	The building and the eastern portion of the property would be incorporated into the River Drive entrance ramp; the western portion of the property would be incorporated into the mainline	

\*Impacts are calculated only for the alternatives carried forward. Alternative C was not carried forward because it did not meet the purpose and need for the project.

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

The Iowa-Illinois Memorial Bridge would be impacted by both of the Alignment Alternatives E and F. It may be impacted two different ways by the proposed improvements, depending on the alternative chosen for handling a bicycle / pedestrian crossing of the Mississippi River. One option would retain the existing Iowa-bound (historic) structure as a bicycle/pedestrian accommodation, which has been determined to be the only reasonable transportation use of the existing bridge if a new I-74 crossing is built (See [Section 2 of the DEIS](#)). The other option would require that the structures be dismantled.

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

If the historic bridge is retained for a bicycle / pedestrian crossing, the existing bridge may be visually impacted by the construction of a new bridge to carry I-74 traffic. It is likely that the new bridge would produce a shadow over the historic bridge. Additionally, protective fencing would be required along the sides of the bridge to enhance safety for pedestrians/bicyclists. 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. In either case, impact to the bridge has continually been a consideration in the determination of the alternatives to be carried forward for further consideration.

The monument, which is a contributing element to the historic bridge, is located in Bill Glynn Memorial Park. All mainline/interchange alternatives on the Bettendorf side would impact Bill Glynn Memorial Park (not a park under 4(f) criteria) by incorporating the area into the mainline and interchange area; therefore, the monument would be displaced. Changing the location of the monument does not impact the bridge as the monument has been moved twice before.

### 3.7 Iowana Milk Farms Company (Eligible for NRHP)

Given its close proximity to both the I-74 mainline and the US 67 interchange, the Iowana Farms Milk Company would be impacted by both proposed alignments and their interchange variations, B1 and B2, on the Bettendorf Side. The proposed improvements at this location are designed to address the steep grades and lack of storage on the exit ramp, resulting in cars backing up onto the mainline. As well, the new mainline alignments are intended to eliminate the reverse curves on the Illinois side while still maintaining traffic during construction. The entire property, including the historic building, would be impacted by the proposed improvements.

### 3.8 McManus Park

McManus Park would be impacted if the Holmes Street underpass variation were selected. A temporary easement would be required for the construction of a retaining wall at the edge



of the property. The retaining wall would be constructed to avoid a need for a permanent acquisition of park property. However, the grade separation between the park and the sidewalk that would be created by the underpass could potentially limit pedestrian access and create safety concerns, thus still constituting a permanent use of the property. The Kimberly Road underpass option would not impact the park, as it would be located away from the park boundary. Regardless of alternatives chosen, there would not be a significant change in noise levels, aesthetic conditions, vibration levels, or access to the park. I-74 is currently located adjacent to the park, which is surrounded by a combination of local roads and I-74 itself. Further, the existing alignment of I-74 would be maintained in this area and lane widening would be in the median rather than the outside edges of the roadway. Given the nature of the current setting and the proposed improvements, the aesthetic conditions within and outside McManus Park would be consistent with current conditions.

With respect to noise, most locations in the park would actually experience a slight decrease in noise levels, in the range of 1 to 2 dB, from improvements to mainline I-74. To accommodate the widening of the mainline of I-74, the two bridges carrying I-74 over Holmes Street will also need to be widened, which will require pile driving during construction. The pile driving may produce noise and vibrations that would be noticed within the park; however, the duration of pile driving will be short and not strong enough to affect outdoor recreation activities. Following construction activities, the vibration levels would be consistent with current conditions.

### 3.9 Summary

Out of a total of 20 4(f) properties located within the project corridor, as many as eight, including the Iowa-Illinois Memorial Bridge and monument, could potentially be impacted by one or more of the proposed build alternatives. Five of these properties are located in Moline and two are located in Bettendorf, with the bridge spanning between the two states.

With the exception of potential impacts to the Scottish Rite Cathedral property, where impacts to the surrounding properties occur, it is generally the buildings themselves that would be impacted by the proposed alternatives. In Moline, the following structures, in addition to the Scottish Rite Cathedral, are potentially impacted: the Davenport, Rock Island and Northwestern Railroad Depot; C.I. Josephson House, Knights of Pythias Lodge Hall, and the Eagle Signal Building. For the Depot, Knights of Pythias Lodge, and Scottish Rite Cathedral, both interchange variations that are under consideration would impact these 4(f) properties. The Eagle Signal Building, however, would not be impacted if Alternative F is chosen. Likewise, the C.I. Josephson House would not be impacted if interchange variation M1 is chosen.

In Bettendorf, the Iowana Milk Farms Company building would be impacted by both alignments and their interchange variations. McManus Park would be potentially impacted if the Holmes Street underpass variation were selected. The Iowa-Illinois Memorial Bridge would also be impacted by both alignments. The impacts to the bridge are dependent on the options still under consideration – remove the historic bridge or reuse the bridge for bicycle and pedestrian traffic, which would not require removal of the bridge. For the bridge to remain in place, the US Coast Guard will require that the bridge maintain a transportation purpose and be owned and maintained by a public agency.

**TABLE 4**  
Potential Impacts to 4(f) Properties in Bettendorf

	<b>E Alignment</b>	<b>F Alignment</b>
<b>Iowa-Illinois Memorial Bridge and Monument*</b>		
Impacted:	Yes	Yes
Impacted Sq. ft.:	N/A	N/A
Impacted by Interchange Variation:	N/A	N/A
Potential Use:	The bridge would be impacted in one of two potential ways. It would either be removed from the river passage or it would be aesthetically impacted by a new bridge.	
<b>Iowa Milk Farms Company</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	36,238 (36,238)	36,238 (36,238)
Impacted by Interchange Variation:	B1, B2	B1, B2
Potential Use:	The building and the property would be incorporated into the Grant Street exit ramp	
<b>McManus Park</b>		
Impacted:	Yes	Yes
Impacted Sq. ft. (of total):	2,485 (172,934)	2,485 (172,934)
Impacted by Interchange Variation/Local Road Improvement:	Holmes Street Underpass	Holmes Street Underpass
Potential Use:	Construction easement to build a retaining wall at edge of property; may impact use in periphery of property; may restrict bicycle/pedestrian access to 12 <sup>th</sup> Street	

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

## SECTION 4

# Avoidance Alternatives

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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 DEIS](#).)

During the course of developing and screening alternatives, a total of 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 National Register. Alternative development efforts have considered all of these properties and have sought to avoid as many as possible. Based on the principle elements of the purpose and need for this project, it is 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 can avoid all 4(f) sites within this project corridor.

However, by identifying the location of known and potential 4(f) properties, it is possible to develop alternatives that avoid 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 1.3 of this 4\(f\) statement](#) and [Section 2 of the DEIS](#). For 4(f) properties that cannot be avoided by alternatives C, E, or F, site-specific avoidance alternatives have been considered and are discussed in [Section 4.4 of this 4\(f\) Statement](#). The following sections will describe and analyze the range of the four basic sets of avoidance alternatives that have been considered:

- No-Action,
- Alternatives retaining the I-74 bridges and roadway in their present forms,
- Build alternatives, and
- Modifications to the build alternatives.

## 4.1 The 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. Under this alternative, 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.

Under the No-Action Alternative, it is assumed that committed and planned improvements (as detailed in Iowa DOT and Illinois DOT multiyear programs and in the 2025 RTP) would still be undertaken.

Under this alternative, none of the 4(f) properties would be impacted; however, this alternative does not meet the purpose and need. This alternative is being carried forward as a comparison to the build alternatives where impacts to 4(f) properties occur.

## **4.2 Alternatives to Retain the I-74 Bridges and Roadway in Their Present Form**

The following broad range of alternatives have been considered for their potential to avoid impacts to the Section 4(f) resources in the I-74 corridor by retaining the I-74 bridges and roadway in their present form. By doing so, they avoid potential impacts to all 4(f) resources within the project area.

- 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.

These alternatives are discussed in further detail below:

### **4.2.1 Diversion of I-74 Traffic to Other Area Interstate Facilities by Revising Interstate Signing**

Over 95 percent of the traffic on the Mississippi River bridges have either an origin or a destination in the study area. Therefore, given this high percentage of local traffic and the distance to other interstate facilities (approximately 7 miles and 8 miles to I-280 and I-80, respectively), only a small portion of the existing traffic (less than 5 percent) would be diverted to adjacent interstate routes. Motorists that 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. This alternative 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, this alternative is not recommended for further detailed study.

### **4.2.2 Diversion of I-74 Traffic to the Local Road System**

Diverting traffic to local routes is not a practical solution given the high volume of river crossing traffic along I-74, regional travel patterns, and the lack of viable alternative local road river crossings. Presently, local roadway crossings of the Mississippi River are provided at the Arsenal Bridge (approximately three river miles west of I-74) and at the Centennial Bridge (approximately four river miles west of I-74). Long-range plans also call for construction of a new local road river crossing between Bettendorf and East Moline (Bettendorf-East Moline Bridge, approximately 3 miles east of I-74). Diversion of interstate traffic to adjacent existing or planned local roadway crossings is not viable due to 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 2025 traffic along I-74, which accounts for the removal of tolls from the Centennial Bridge in May 2003 and assumes construction of a new Bettendorf-East Moline Bridge, has an Average Daily Traffic Count of 78,000 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, this alternative is not recommended for further detailed study.

### 4.2.3 Transit and Transportation System Management Strategies

Transit services in the Quad Cities are currently provided by Bettendorf Transit, the City of Davenport CitiBus, and MetroLINK. Ridership on the region's transit system totaled over 3.7 million riders in 1999. Projected ridership is estimated to reach over 7.8 million riders by 2025, at an increase of 2.9 percent compounded annually. With the expected growth in ridership, the *2025 Quad City Area Long Range Transportation Plan* (March 2001) 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 more than double on all three facilities, vehicle trips across the Mississippi River in the Quad Cities are forecast to increase from 150,300 (1999 ADT) to 223,000 (2025 ADT) (*2025 Quad City Area Long Range Transportation Plan*, March 2001).

Improving transit facilities has not been carried forward for further consideration as a stand-alone 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 will be included with proposed roadway alternatives, with the objective of accommodating planned transit services and enhancing modal connections.

Several TSM strategies have been investigated in prior 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 existing 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 do not in and of themselves meet the purpose and need.

## 4.3 Build Alternatives - River Crossing Location Options

Alternative improvements were considered for the I-74 mainline and six service interchanges between 23<sup>rd</sup> Avenue in Moline, Illinois (south project terminus) and 53<sup>rd</sup> Street in Davenport, Iowa (north project terminus), a distance of 7.4 miles. In the vicinity of the Mississippi River, the project corridor boundary extended approximately 1600 feet to the east and west of the existing 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 were developed to address identified design, traffic and safety needs in the corridor, to meet established planning and design criteria and standards, to avoid or minimize impacts to the environmental resources, and to sustain economic development opportunities along the I-74 corridor. Given the differing nature of improvement requirements through the corridor, the study area was divided into three separate analysis sections; the South Section (from 23<sup>rd</sup> Avenue to 12<sup>th</sup> Avenue), the Central Section (from 12<sup>th</sup> Avenue in Illinois to Lincoln Road in Iowa), and the North Section (from Lincoln Road to north of 53<sup>rd</sup> Street). Early identification of environmental and community constraints was used to develop location alternatives that would avoid or minimize environmental impacts. The Mississippi River Crossing Area segment is being emphasized in this section as it includes the area of impacts for this Section 4(f) Statement.

Location options were explored within a corridor extending from 12<sup>th</sup> Street (Bettendorf)/18<sup>th</sup> Street (Moline), which are streets that coincide with the Arsenal Island study boundary on the west and approximately 1600 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 amount of impact to environmental and socio-economic resources in the project corridor were carried forward with the build alternatives.

A total of ten Mississippi River crossing location options east and west of the existing river crossing were identified and considered (Alignment Options A through J). These ten alignment options are represented by the alignment alternatives C, E, and F. These 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 (i.e. A and B) and was revised to minimize environmental, community, and 4(f) impacts.

As noted here and discussed in [Section 2 of the DEIS](#), a thorough alternatives development process was undertaken. The alternatives were developed considering a range of constraints including the identification of potential 4(f) properties as well as the City of Moline Water Treatment Plant, Our Lady of Lourdes Church, Island of the Capri Casino, John Deere Building Plow Works Company Warehouse and Office Building, Montgomery Elevator Company and Moline Tool Company Erecting Shop (Kone, Inc.), and the planned redevelopment areas for Moline and Bettendorf. Also, parks, wetlands, potentially contaminated sites and additional community resources were considered in the development process.

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 12<sup>th</sup> Avenue in Moline northerly to near Lincoln Road in Bettendorf. In addition to the three alternative bands, the maps show important sites, as noted above, 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 will be referred to as alternatives or alternative alignments.

### 4.3.1 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 7<sup>th</sup> Avenue, Scottish Rite Cathedral, LeClaire Hotel, Moline Water Treatment Plant, Deere & Co. offices and computer center, Leach Park, McManus Park, and multiple residential properties). Revised Alternative C was determined to be unreasonable following a more detailed evaluation of construction staging requirements and environmental and socioeconomic issues. Specifically, in order to minimize impacts, Alternative C would cross existing I-74 at two locations on the Illinois approach.

An analysis of construction staging requirements revealed that it would not be practical to construct Alternative C while maintaining traffic along I-74 both due to the elevation difference between existing and proposed profiles and close proximity to the existing structure. As discussed in the *Purpose and Need* section of the DEIS (Section 1), maintenance of traffic during construction is critical to the economic stability of the downtown areas, as approximately 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 alignments alternatives E or F, including greater potential impacts to 4(f) properties and Section 106 properties; both the LeClaire Hotel and Leach Park would be impacted by Alternative C but not E or F. 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 were in agreement that Alternative C and any westerly alignment shifts should be eliminated as they are unreasonable. However, Alternative C will be evaluated as an avoidance alternative for Alternatives E and F in the Section 4(f) discussion.

In addition to the avoidance of numerous 4(f) properties, Alignment Alternatives E and F would also improve the horizontal and vertical alignment of I-74 to meet roadway criteria and to facilitate construction staging in order to meet purpose and need. The design criteria for each build alternative is described as follows:

### 4.3.2 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 approximately 230 ft to the 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 the other), the curve is smoother to the driver. The proposed alignment diverges from existing I-74 near 7<sup>th</sup> Avenue, proceeds in a northerly direction across the Mississippi River on a course parallel to and offset approximately 230 ft to the east of the existing bridges. It would connect with the existing centerline in the vicinity of Kimberly Road in Iowa.

### 4.3.3 Alternative Alignment F

Alternative F eliminates the reverse curves between 7<sup>th</sup> Avenue and the Mississippi River on the Illinois approach. The proposed alignment diverges from existing I-74 in the vicinity of 7<sup>th</sup> Avenue and proceeds in a northeasterly direction on tangent alignment across the Mississippi River. This results in an easterly alignment shift of up to approximately 780 ft from existing centerline. The proposed alignment meets the existing centerline in the vicinity of Kimberly Road in Iowa.

## 4.4 Modifications to the Mainline Build Alternatives/Site-Specific Avoidance Alternatives

This section discusses the avoidance options that were considered during project development for the specific 4(f) properties impacted. Avoidance alternatives were considered for each property potentially impacted. The maps in [Appendix 4\(f\)-1](#) depict the constraints that were considered during alternative development. These maps should be referenced in addition to the site-specific maps found in [Appendix 4\(f\)-2](#) for a visual understanding of the avoidance alternative discussion. The majority of the avoidance alternatives 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.

In some cases, the avoidance options were determined to be unreasonable, either due to performance or their inability to meet the purpose and need. In other cases, the avoidance alternatives may have been retained for further consideration. As discussed previously in this section, Alternative C and the No-Action alternative were both considered as avoidance alternatives but neither meet the purpose and need. They are, however, used for comparing avoidance options for the specific 4(f) properties. Alternative C represents the westerly alignments, but has the fewest impacts when compared with the other possible westerly alignments. The following discussion considers westerly alignment shifts in the mainline, including Alternative C. More information about the alternatives can be found in [Section 2 of the DEIS](#).

### 4.4.1 Scottish Rite Cathedral

Impacts to the southeast portion of the Scottish Rite Cathedral property would be caused by the redesign of the southbound I-74 entrance ramp at 19<sup>th</sup> Street. The impact could be avoided if access were not provided to I-74 in this location; however, this avoidance option would eliminate a current point of access to the interstate. It is not viable 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 19<sup>th</sup> Street; however, keeping the entrance ramp at 7<sup>th</sup> Avenue does not meet the purpose and need because of capacity and safety considerations. Serving as a north-south connector through Moline, 19<sup>th</sup> Street carries a significant volume of traffic destined for I-74. Presently, 19<sup>th</sup> Street traffic destined for I-74 must make a left turn (at the 19<sup>th</sup> Street/7<sup>th</sup> Avenue intersection) and then a right turn (at the 7<sup>th</sup> Avenue/I-74 intersection). By relocating the ramp connection to 19<sup>th</sup> Street, left turn volumes at the 19<sup>th</sup> Street/7<sup>th</sup>



Avenue intersection would be reduced (from a projected volume of 560 Design Hourly Volume (DHV) to 280 DHV), resulting in operational improvements and increased safety.

Further, if the ramp would not be relocated to 19<sup>th</sup> Street, there would still be a need to improve 7<sup>th</sup> Avenue to accommodate projected traffic demand, including the heavily-traveled SB to EB left turn movement. These improvements could still impact the Scottish Rite Cathedral property in the SW quadrant of the intersection.

Because it is the ramp that impacts the property, choosing Alternative C would not change the impact of either E or F. A westerly shift in the mainline would actually increase the 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 an impact to the building in order to shift the mainline from its existing location. A shift in the mainline to the east would cause impacts to another 4(f) property – the Thomas/Lewis/Wilson House, the First Congregational Church, and 0.09 acre of wetland as well additional residential and commercial properties. See Page 1 in [Appendix 4\(f\)-1](#).

#### 4.4.2 C. I. Josephson House

Impacts to the C. I. Josephson House are not dependent on the mainline alignment that is chosen – either E or F. Instead, the impacts are dependent on the interchange variation. In downtown Moline there are two interchange variations under consideration:

- **Variation M1 (split diamond type)** provides an improved full access interchange with ramp connections at 7th Avenue/19th Street and at 6th Avenue (IL 92 EB), as well as an improved half diamond type partial interchange at River Drive.
- **Variation M2 (loop type)** provides an improved full access interchange with ramp connections at 7th Avenue/19th Street, at 6th Avenue (IL 92 EB), and at 4th Avenue (IL 92 WB), as well as an improved half diamond type partial interchange at River Drive.

This property would be avoided if interchange variation M1 were chosen with either alignment E or F (See Page 2 of [Appendix 4\(f\)-2](#)). Traffic analyses reveal that both interchange variations would operate at an acceptable level of service and would provide improved connections to IL 92. Interchange variation M1 provides improved access to the downtown area of Moline, improves the interchange geometry, ramp storage capacity, and traffic demand and service, all elements of the purpose and need. However, variation M2 provides optimal direct connections between I-74 and the existing IL 92 one-way couple system. For a depiction of these variations, see Pages 3-4 and 8-9 in [Appendix B of the DEIS](#).

As M1 interchange variation meets the purpose and need, it is being carried forward as an avoidance alternative.

#### 4.4.3 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 impact the property. Moving the mainline to the west would encroach on several properties, including up to 6 additional 4(f) properties – the 1910 and 1935 Post Offices, The LeClaire Hotel, the George Benson House, the B.P.O.E (Elks Building), and the Scottish Rite Cathedral. The LeClaire Hotel has actually been listed on the National Register. The shift would also cause impacts to the John Deere Building and the

Moline Treatment Plant and up to approximately 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 webpage, last updated 2003). The Moline Treatment Plant, which treats approximately 2 billion gallons of water a year, is undergoing renovation at approximately 22 million dollars (City of Moline website, last updated 4/4/02). The costs to encroach on these sites is of such a 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 structure is occurring, and would therefore not meet the purpose and need.

Shifting the mainline to the east to avoid the Knights of Pythias building would increase the existing 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, while avoiding the property, would not meet the purpose and need. The easterly shift, depending on the distance of the shift, could impact up to approximately 20 properties, the Thomas Lewis Wilson House (a 4(f) property), and 0.09 acre of Palustrine Forested/Unconsolidated Bottoms Wetland.

#### **4.4.4 Eagle Signal Building**

Impacts to the Eagle Signal Building would be avoided by Alignment F with either interchange variation M1 or M2. Variation M1 is a split diamond type interchange while variation M2 is a loop-type interchange. Alignment F is farther east of existing I-74 than Alignment E. (See Pages 8 and 9 in [Appendix B of the DEIS](#) for a depiction of these interchanges and alignment locations).

Alignment F and the two interchange variations meet the purpose and need by improving the reverse curves and approach geometry, providing increased capacity, and improving access to the downtown Moline area. Therefore, they are being carried forward. This is the only property protected by 4(f) that is not impacted by both the E and F alignment alternatives. Typically, this condition alone would be sufficient to determine that there is a feasible and prudent avoidance alternative to the use of the property. However, when considering the global impacts of both of the alignments, there is the possibility for Alignment F to have considerably larger social and economic impacts to the local area. These impacts could be large enough in magnitude that Alignment F would be determined not prudent. Comments will be solicited through the public availability of the DEIS / Draft Section 4(f) Statement and the public hearing. After the comments are received, the use of this property will be analyzed along with all the global impacts for the two alignment alternatives to determine whether there is a feasible and prudent alternative to the use of this property.

#### **4.4.5 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. A portion of the west side of the property may, however, 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, therefore, would not meet the purpose and need. Shifting the mainline further west of C would impact up to 6 additional 4(f) properties – the 1910 and 1935 Post Offices, The LeClaire Hotel, the George Benson House, the B.P.O.E (Elks Building), and the Scottish Rite Cathedral as well as the John Deere Building, the Moline Treatment Plant and up to approximately 20 commercial structures, depending on the distance of the shift. As described above, under the Knights of Pythias Lodge discussion, it is not prudent to impact these buildings. Further, the LeClaire Hotel is the only property that is actually listed on the National Register of Historic Places.

Shifting the mainline further east than Alternative E or F, which would impact the property, would cause more commercial and some residential impacts. A range of between approximately five to twenty or thirty commercial buildings and residential buildings could be impacted, depending on the distance of the easterly shift from the mainline. Additionally, the area of impact could include the riverfront that is to be developed under the Moline Downtown Development Plan.

Further, 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, while a shift east of Alternative F would introduce new reverse curves. By maintaining or creating the reverse curves, these shifts would not meet the safety or operational characteristics as discussed in the purpose and need.

#### 4.4.6 Iowa-Illinois Memorial Bridge

The Iowa-Illinois Memorial Bridge would be avoided if the No Action or non-roadway improvement alternatives discussed earlier in this section 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 4.2](#) of this 4(f) document, however, these alternatives would not meet the project purpose and need.

#### 4.4.7 Iowana Milk Farms Company

The Iowana Milk Farms Company would be impacted by both alignments E and F with all interchange variations. Alternative C mainline avoids the property, but depending on the interchange variation that is chosen, the property may still be impacted. As this alignment was determined to not meet the purpose and need, the interchange variations will not be discussed in detail. Alternative C would impact 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 approximately 20 to 30 homes, as well as commercial structures and up to six potentially contaminated sites.

Alignments that are located to the east of the Iowana Milk Farms Company building would create a reverse curve along the alignment, which would compromise safety and traffic operations, and would therefore not meet the purpose and need. These alignments would also impact 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 has been listed on the National Register (See [Appendix 4\(f\)-1](#) and [4\(f\)-2](#)).

Impacts to the property might be avoided if the US 67 interchange, which currently provides access to Grant and State Streets, is eliminated. Eliminating the US 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 existing I-74 near this location, the building may be impacted by construction of the mainline itself, due to the close proximity of the Iowana Milk Farms Company to existing I-74. Therefore, eliminating the interchange may not necessarily avoid the impact.

#### 4.4.8 McManus Park

In response to public concerns regarding how roadway closures under I-74 would affect accessibility in downtown Bettendorf, two local roadway underpass variations (Kimberly Road Connector underpass or Holmes Street/Mississippi Boulevard underpass) were developed and evaluated. Both underpass variations are compatible with either alignment alternative E or F and with the diamond type interchange at US 67. However, the Holmes Street/Mississippi Boulevard underpass could not be provided with the single loop type interchange at US 67. The Holmes Street/Mississippi Boulevard has the potential to impact McManus Park, while the Kimberly Road Underpass would avoid it. The underpass options are summarized below.

- **Kimberly Road Underpass.** The Kimberly Road Underpass variation would maintain the existing Kimberly Road Connector underpass at I-74 and eliminate vehicular access under I-74 at Holmes Street/Mississippi Boulevard. Access for bicyclists and pedestrians under I-74 could be provided in the vicinity of Holmes Street/Mississippi Boulevard to optimize accessibility between neighborhood areas east and west of I-74.
- **Holmes Street/Mississippi Boulevard Underpass.** The Holmes Street/Mississippi Boulevard Underpass variation eliminates the existing Kimberly Road Connector underpass at I-74, and instead provides an underpass at Holmes Street/Mississippi Boulevard. Holmes Street/Mississippi Boulevard would need to be reconstructed and lowered by as much as 6 ft between 13th Street and 14th Street to provide adequate vertical clearance under the proposed I-74 ramps at Grant Street. This would require a substantial amount of excavation, reconstruction of portions of the existing storm sewer system, and construction of retaining walls along the north and south sides of Holmes Street/Mississippi Boulevard. The proposed Holmes Street/Mississippi Boulevard underpass would require the acquisition of approximately 0.07 ac of additional right-of-way and temporary construction easements.

Traffic analyses reveal that the Kimberly Road underpass maintains a reasonable connection between neighborhoods east and west of I-74. However, it requires minor out-of-direction travel and would result in a nominal increase in traffic volumes along US 67. The Holmes Street/Mississippi Boulevard underpass would require more substantial reconstruction along the local roadway system when compared to the Kimberly Road underpass and would result in additional right-of-way impacts. However, the Holmes Street/Mississippi

Boulevard underpass provides a more direct connection between neighborhoods, resulting in less out-of-direction travel and less diversion of neighborhood traffic to US 67. For a depiction of these variations, see Pages 13-16 in [Appendix B of the DEIS](#) and Pages 7 and 8 in [Appendix 4\(f\)-2](#).

Impacts to McManus Park would be avoided if the Kimberly Road underpass variation were selected. The Kimberly Road underpass variation is being carried forward for further consideration.

## 4.5 Summary

Section 4(f) properties were identified early in the project development process. By identifying these properties early, avoidance of 4(f) properties was considered in the alternatives development process. Of the 20 4(f) properties within the I-74 corridor, twelve properties are avoided by the proposed alternatives. In addition to the proposed alternatives, which were developed to avoid as many impacts as possible while still meeting the purpose and need, the following alternatives were also considered for their potential to avoid 4(f) resources:

- No-Action,
- 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

Although these alternatives would potentially avoid impacts to 4(f) properties within the I-74 corridor, these alternatives were not carried forward for detailed evaluation due to their inability to meet the project purpose and need.

For each of the eight potentially impacted properties, a series of specific avoidance alternatives were then investigated. These alternatives are summarized in [Table 5, \*Summary of Avoidance Alternatives for Specific Properties\*](#).

Of the avoidance alternatives investigated for specific 4(f) properties, three were carried forward for further consideration. Those that were not carried forward were typically not able to meet the purpose and need or were not technically viable.

For the locations where impact was not avoidable, considerations for minimizing the impacts were developed. These measures to minimize harm are discussed in the following section.

**TABLE 5**  
Summary of Avoidance Alternatives for Specific Properties

<b>Property</b>	<b>Avoidance Alternative(s)</b>	<b>Avoidance Alternative Carried Forward?</b>
Scottish Rite Cathedral	Do not provide access to I-74 at 19 <sup>th</sup> Street	No
	Shift mainline eastward or westward	No
C. I. Josephson House	Interchange variation M1 avoids the property with either alignment	<b>Yes</b>
Knights of Pythias Lodge Hall	Shift the mainline eastward or westward	No
Eagle Signal Building	Alignment F avoids the property	<b>Yes</b>
Davenport, Rock Island, and Northwestern Railroad Depot	Shift the mainline eastward or westward	No
Iowa-Illinois Memorial Bridge	Non-roadway improvement alternatives	No
McManus Park	The Kimberly Road underpass variation avoids the property	<b>Yes</b>
	Shift mainline eastward or westward	No
Iowana Milk Farms Company	Eliminate US 67 interchange	No
	Shift mainline eastward or westward	No

## SECTION 5

# Measures to Minimize Harm

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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](#).

## 5.1 Minimization Measures for Specific Properties

### 5.1.1 Scottish Rite Cathedral

Use of the southeast portion of the Scottish Rite Cathedral property would be required for the redesign of the southbound I-74 entrance ramp at 19<sup>th</sup> Street. Placement of fill material would be necessary to accomplish the elevation transition between 19<sup>th</sup> Street and elevated I-74, which consequently requires either a retaining wall or embankment slope. A retaining wall has been proposed 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 a 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.

### 5.1.2 Knights of Pythias Lodge Hall

The Knights of Pythias Lodge Hall is directly impacted by mainline I-74 improvements (both by the E Alignment Alternative which impacts the northwest corner of the property and by the F Alignment Alternative, which impacts the entire property). As discussed in the previous section of this 4(f) document, impacts resulting from mainline improvements are unavoidable at this location. The possibility of minimizing impacts with the E Alignment Alternative, which impacts the northwest corner of the property, 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 due to FHWA policy.

With the M1 interchange variation (split diamond type interchange), the options considered included changing the ramp divergence angle and alignment, thereby shifting the northbound entrance and southbound exit ramps east of the Knights of Pythias Lodge Hall. This would impact the Thomas/Lewis/Wilson House, a 4(f) resource, as well as adjacent commercial properties. Also, this option would introduce undesirable curvature to the improved I-74 ramps, causing potential safety issues. Therefore, this option is not being carried forward for further consideration because of its impacts and the fact that it does not meet purpose and need. See Page 1 of [Appendix 4\(f\)-3](#).



### 5.1.3 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 couldn't 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 4 in [Appendix 4\(f\)-3](#). While this minimization option would avoid physically impacting 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 direct impacts to the Eagle Signal Building, a 4(f) resource, as well as the Kone elevator factory. Thus this option was not recommended for further consideration.

### 5.1.4 Iowa-Illinois Memorial Bridge

Minimization alternatives were defined to be those that may require a physical alteration to the existing bridges or which may have an impact on the setting or aesthetic qualities of the existing bridges, but which do not require the demolition of the existing structures.

The following options were considered for their potential to minimize the impact to the existing NRHP – eligible structure:

#### **Re-Use Of The Existing Bridges For I-74 Traffic With Construction Of A New Structure Adjacent To The Existing Bridges**

This option would consist of converting the existing structures to carry I-74 traffic in one direction with the construction of a new structure to carry I-74 in the other direction. Due to 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 existing bridges. Therefore, the existing bridges would be used for southbound traffic and the new structure would be used for northbound traffic. Due to the separation between the existing structures, a collector-distributor system would be employed to provide access to downtown Bettendorf and Moline. The western-most structure would provide access to the interchanges in Bettendorf and Moline and the eastern-most structure would carry through traffic.

A review of trip patterns along I-74 revealed that this alternative would not address the capacity need for the project. Likewise the continued use of the narrow, two-lane bridges would not address the travel reliability need. 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 also retain the reverse curvature on the approaches and the four reverse curves on the Illinois approach. All of the 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 on this alternative can be found in [Section 2.2 in the DEIS](#).

### **Construction Of A New Bridge On New Alignment For I-74 Traffic With Re-Use 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 that 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 Re-Use Of The Existing Bridges For Bus Or Rail Transit**

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

- There is not an existing rail infrastructure in the area of the existing bridges capable of using the existing bridges for a crossing;
- There is an existing rail corridor downriver in the Quad Cities with a crossing of the Mississippi River;
- There is not currently any other rail transit in the Quad Cities; therefore, none of the other needed infrastructure are 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. Additionally, at a meeting held with MetroLINK, that agency communicated it was unwilling to adopt jurisdiction over the existing bridge. See [Section 5 of the DEIS](#) for more information about this meeting.

### **Construction Of A New Bridge On New Alignment With Re-Use Of One Of The Existing Bridges For Pedestrian / Bicycle Traffic**

This option is one of three possibilities for accommodating bicycle/pedestrian traffic in the corridor (See [Section 2 of the DEIS](#) for more information). This option would convert the Iowa-bound (historic) bridge to a bicycle / pedestrian path and place all I-74 traffic on a new structure. The Iowa DOT has estimated that a path in this location would meet the 25 trips-per-day criteria in Iowa Trails 2000. Both states have trail systems generally following along the river through the Quad Cities and would be accessible 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 can only be implemented if there exists 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 utilized for a transportation use. Project staff have contacted involved local agencies (Cities of Bettendorf and Moline, Scott County, and Rock Island County), and each of these agencies have indicated that they do not have interest in assuming jurisdiction over the bridge and the responsibilities it entails. See [Appendix 4\(f\)-5, Correspondence](#).

Additionally, there is 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 determines 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.

This option remains under consideration.

### **Widening The Existing Structures To Accommodate Additional Lanes**

The design of the existing structures does not allow for them to be widened. Were any such attempt made, it would require the dismantling of the existing structures and their complete reconstruction. 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**

As 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 will 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.

### **5.1.5 Iowana Milk Farms Company**

The proposed improvements to the northbound exit ramp at US 67 (Grant Street) would result in direct impacts to this property. Several minimization options were considered at this location. One option involves increasing the ramp divergence angle and shifting the ramp to east of the Iowana property to an intersection with Grant Street near 15<sup>th</sup> Street. See Page 4 in [Appendix 4\(f\)-3](#). This would also require shifting the proposed northbound entrance ramp to the east to ensure smooth traffic flow through the interchange area. While this option may avoid direct impacts to the property, access to the property would be prohibited because it is within the area between the mainline and entrance ramp. FHWA prohibits access to the infield area of interchanges. Without access, there would still be a permanent transportation use of the property. Further, this option would result in impacts to the local roadway system, including possible roadway closures and / or relocations in addition to property and neighborhood impacts. For these reasons, it is not being carried forward for further consideration.

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 via a loop ramp. In addition to the concerns noted with the prior option, this would result in undesirable ramp curvature and steep grades, as well as inadequate storage and taper rates. Therefore, this option would not meet the purpose and need of improving travel dependability and road geometry. Additionally, 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, due to the close proximity of the improved mainline I-74 roadway to the Iowana property, these concepts would not minimize impacts to the property. These options were not carried forward for further consideration.

### 5.1.6 McManus Park

If the Holmes Street underpass is selected, a retaining wall is being proposed along the McManus Park property line to avoid a permanent acquisition from the park. However, a temporary construction easement may still be required. If required, appropriate correspondence will be undertaken with the City of Bettendorf in accordance with the FHWA Section 4(f) Policy Paper. (See [Table 4, Potential Impacts to 4\(f\) Properties in Bettendorf](#), and [Appendix 4\(f\)-2, Properties Potentially Impacted](#)). The retaining wall would be placed behind the sidewalk, which would be reconstructed to allow continued access to the park by pedestrians.

The grade separation caused by the retaining wall between the park and the sidewalk, while not requiring acquisition from the park, still constitutes a use because it not only reduces the pedestrian access but creates potential safety concerns due to the grade separation. This use can be minimized if the proposed structure depth could be reduced. Work is continuing to determine if the structural depth can be reduced based on further study of drainage and subsurface issues such as utilities and underlying bedrock.

## 5.2 Mitigation

Potential mitigation for unavoidable impacts will be developed and included with the Final 4(f) Statement, based on comments received during the circulation of this 4(f) document and coordination with the property owners and the appropriate state SHPO for each property. It is likely that these measures will include relocation of the Iowa-Illinois Memorial Bridge Monument to Leach Park. For impacted historic buildings, the proposed mitigation will potentially involve documenting and photographing the structures for historic archives.

## 5.3 Summary

Of the eight 4(f) properties (including the bridge) potentially affected by the proposed improvement, two properties were shown to be avoidable (the C. I. Josephson House and the Eagle Signal Building). Minimization measures were developed for the remaining properties. The measures to minimize impacts are summarized in [Table 6, Summary of Minimization Measures for Specific Properties](#).

**TABLE 6**  
Summary of Minimization Measures for Specific Properties

<b>Property</b>	<b>Minimization Measure(s)</b>	<b>Carried Forward?</b>
Scottish Rite Cathedral	Construct a retaining wall to avoid permanent use of Scottish Rite Cathedral property	<b>Yes</b>
Knights of Pythias Lodge Hall	All alternatives would impact the building directly Minimization of impact to the building was not possible	Not applicable
Davenport, Rock Island, and Northwestern Railroad Depot	Increase or decrease the ramp divergence angle	No
Iowa-Illinois Memorial Bridge and Monument	Re-use 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
	Construction of a new bridge on new alignment for I-74 traffic with re-use of the existing bridges for transit	No
	Construction of a new bridge on new alignment with re-use of one of the existing bridges for pedestrian / bicycle traffic	<b>Yes</b>
	Widen the existing bridges to accommodate additional lanes	No
	Relocate the monument to another position near the bridge	<b>Yes</b>
McManus Park	Construct a retaining wall to avoid the acquisition of a permanent easement (for Holmes Street underpass option)	<b>Yes</b>
	Reduce the structure depth of the underpass	<b>Yes</b>
Iowana Milk Farms Company	Increase or decrease the ramp divergence angle	No
	Adjust the ramp configuration	No

As can be seen from [Table 6, \*Summary of Minimization Measures for Specific Properties\*](#), potential impacts to three 4(f) resources can be minimized. Impacts to the Scottish Rite Cathedral and McManus Park can be minimized through the use of retaining walls in addition to reducing the underpass structure depth. Bridge impacts can be minimized by choosing to preserve the historic structure for pedestrian and bicycle accommodations. These minimization efforts would work with each of the proposed build alternatives E or F.

## SECTION 6

# Coordination

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As emphasized throughout this 4(f) 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 impact the least number of 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 DEIS](#) for further information regarding the discussions held at Interagency and Public Coordination meetings.)

## 6.1 Coordination with the SHPO and Agencies With Jurisdiction

Coordination with the State Historic Preservation Officer (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 gain concurrence for the properties under their jurisdiction. These concurrence findings reported on the types and locations of NRHP eligible properties. Effect determinations will be sought during the next phase of project study but prior to the final 4(f) statement.

The Illinois SHPO was forwarded 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 report and the historic reports were sent to the Iowa SHPO on August 26, 2002 and September 9, 2002. 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.

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 primarily accomplished through the I-74 Project Advisory Committee process. Summaries of these discussions are found in [Section 6.2](#) of this 4(f) document.

Review of the Draft Environmental Impact Statement and Draft Section 4(f) Statement will continue formal coordination with the public officials having jurisdiction over these Section 4(f) properties and that coordination will be documented in the Final 4(f) Statement. Coordination will continue to include the following items:

- Discussion of significance and primary use of the 4(f) property,
- Impacts to the property,
- Avoidance alternatives, and
- Measures to minimize harm.

## 6.2 I-74 Project Advisory Committee Meetings

An Advisory Committee is 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 is also represented by an ex-officio member. Nine I-74 Project Advisory Committee Meetings took place between January 2001 and October 2003. At six of these meetings, the Section 4(f) properties in the project corridor were discussed.

During these meetings, much of the time was spent on the historic bridge discussion. In order for the historic bridge to remain in place, two conditions must be met. First, the bridge must have a transportation use. Through the development process, it was determined that bicycle accommodations were the only possible transportation use. Second, the bridge must be owned and maintained by a public agency. Illinois DOT and Iowa DOT would require a transfer of jurisdiction of the historic bridge; therefore, per Coast Guard, a local municipality or county must take ownership of the bridge. Coordination relating to the jurisdiction of the bridge can be found in [Appendix 4\(f\)-5, Correspondence](#).

### 6.2.1 April 2001

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

### 6.2.2 June 2001

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

### 6.2.3 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 regards to the potential impact of the alternatives on the historic properties.

### 6.2.4 June 2002 / November 2002

These meetings continued discussions on use options for the I-74 bridge, including funding options for maintenance of the bridge for bicycle / pedestrian accommodations. Following these 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. The results of this correspondence can be found in [Appendix 4\(f\)-5](#).



## 6.3 Other Coordination Activities

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

### 6.3.1 Agency Input

In June 2001, A Concurrence Point (NEPA/404 Merge) Meeting was held. The purpose of this meeting was to review the concurrence point process and determine lead agencies. A subsequent meeting was held in December 2001 to discuss the study alternatives and describe the associated impacts to the resource agencies in attendance (see [Section 5 of the DEIS](#)). Generally, the resource agencies were in agreement with the project purpose and need as well as the impacts associated with the alternatives. They did not provide comments that indicate impact of a particular 4(f) resource under their jurisdiction.

### 6.3.2 Public Input

Using a multitude of communication tools, the public had numerous avenues to become involved. Through approximately 25 meetings – including interested groups, two major public meetings, numerous advisory committee and resource agency meetings, newsletters, web site, and media – the people in the Quad Cities had opportunities to learn about the project as well as provide input into the study process. Through this outreach program, the study team gained a thorough understanding of the transportation issues facing the Quad Cities' residents.

Many of the comments received during the Draft EIS study emphasized a frustration with growing congestion and safety concerns along the I-74 corridor – reflecting the need for major improvements. This 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 DEIS \(Section 5\)](#), the following meeting summaries document the input received regarding the 4(f) properties, in particular the bridge.

### 6.3.3 Public Information Meeting #1 (July 2001) & #2 (July 2002)

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

At the second public meeting, comments continued to be solicited on use options for the existing Mississippi River bridge(s). Concern regarding the plans for existing and future Mississippi River crossings was again expressed at this public information meeting. It was explained that jurisdiction over the existing bridge(s) for non-transportation use continues

to be sought. Support for bike/pedestrian accommodations was again represented in citizen comments.

As a result, the bicycle / pedestrian accommodations remain under consideration in the designs of proposed build alternatives. [Sections 4 and 5 of this 4\(f\) statement](#) include a discussion on what alternatives are reasonable depending on the communities' interest in adopting jurisdiction over the eligible bridge.

### **6.3.4 Small Group Meetings with Save the Memorial Bridge Committee (January & April 2002)**

At the January meeting, the Save the Memorial Bridge Committee emphasized concern over the prospects of retaining the existing bridges. As such, the Committee emphasized the need for a local entity to take jurisdiction over the bridge. The Committee also suggested a re-use option (re-using existing bridges for one direction of I-74 traffic) for the existing bridges. This option was subsequently considered. In the subsequent April meeting, the Committee expressed concern that local municipalities were not seriously considering adopting jurisdiction of the bridge. Coordination with the local communities has been ongoing and utilization of the existing bridges is still under consideration (See [Appendix 4\(f\) – 5](#) for more information about the local communities willingness to accept jurisdiction of the bridge.

### **6.3.5 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 as well as provide input on goals and concerns regarding the existing and proposed bridges.

## **6.4 Continued Coordination**

This Draft 4(f) Statement will be made available to the public and resource/regulatory agencies as part of the Draft Environmental Impact Statement public availability process, and copies will be made available to local units of government for review and comment. A Public Hearing will also be held to discuss the proposed action with interested parties. Responses relative to Section 4(f) from reviewing agencies, local governments and interested parties will be included in the Final Section 4(f) Statement prepared for this project. Comment letters and correspondence received specific to the 4(f) from the agency coordination process are included in [Appendix 4\(f\)-5](#). Overall project correspondence letters can be found in the [DEIS Appendix C](#).



SECTION 7

# Summary and Disposition of the Draft Section 4(f) Statement

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## 7.1 Summary

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

These improvements are being carried out in cooperation with both FHWA and the Iowa and Illinois Departments of Transportation. Further, the proposed action is consistent with local and regional transportation planning goals, including the Long Range Transportation Plan and the Quad Cities Mississippi River Crossing Major Investment Study (December 1998) conducted by the Iowa Department of Transportation and the Illinois Department of Transportation. The outcome of this study was a recommendation for a three-prong strategy to improve Mississippi River crossings in the Quad Cities, including improving the I-74 Mississippi River Bridge and associated corridor.

This 4(f) document establishes applicability of 49 U.S.C. 303, commonly referred to as Section 4(f) to certain resources within the corridor under study. These properties can be found in [Table 7, 4\(f\) Properties Potentially Impacted](#).

TABLE 7  
4(f) Properties Potentially Impacted

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

Additionally, this 4(f) document provides a record of coordination efforts with officials having jurisdiction over the resources cited above, discusses alternative locations that avoid the use of the protected resources, and identifies measures that will minimize/mitigate harm to these resources.

The purpose and need for the proposed action has been expressed in terms of an action that will improve capacity, travel reliability, and safety within the existing 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. By identifying these properties early, avoidance of 4(f) properties was considered in the alternatives 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, 12 were avoided through alternative development. 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. However, these alternatives were determined to not meet the project purpose and need, and were not carried forward for detailed evaluation.

For each of the eight potentially impacted properties, a series of specific avoidance alternatives was investigated ([Table 5, Summary of Avoidance Alternatives for Specific Properties](#)). Of the avoidance alternatives investigated for the eight specific 4(f) properties, three alternatives were carried forward for further consideration and are summarized as follows:

- C.I. Josephson House – the interchange variation M1 avoids the property with either alignment E or F
- Eagle Signal Building – Alignment F avoids the property
- McManus Park – the Kimberly Road Underpass variation avoids the property

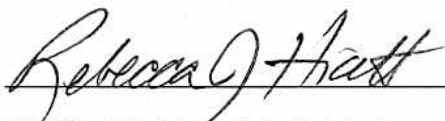
Those alternatives that were not carried forward were typically not able to meet the purpose and need or were not technically viable. For the five remaining 4(f) properties that could not be avoided, suggested minimization measures have been carried forward for further consideration ([Table 6, Summary of Minimization Measures for Specific Properties](#)). These measures are summarized as follows:

- Scottish Rite Cathedral – Construct a retaining wall to avoid permanent use of the Cathedral property.
- Iowa-Illinois Memorial Bridge and Monument – Construct a new bridge on new alignment within the corridor with re-use of one of the existing bridges for pedestrian/bicycle traffic and relocate the monument to another position near the bridge.
- McManus Park – (1) Construct a retaining wall to avoid the acquisition of a permanent easement (for Holmes Street Underpass variation) and (2) reduce the structure depth of the underpass.

The above minimization efforts could be used with either of the proposed alternatives E or F. All of the other minimization efforts that were not carried forward were either not able to meet the purpose and need or were not technically viable for construction (Table 6, *Summary of Minimization Measures for Specific Properties*).

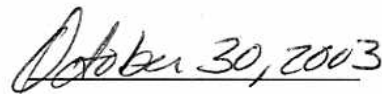
## 7.2 Disposition

Based on the discussion above, and considering the support regarding planned improvements either from public, resource/regulatory agencies or agencies with jurisdiction over the protected resources cited, it is the intent of the FHWA and Iowa and Illinois Departments of Transportation to proceed with the project development within the existing I-74 corridor. A public hearing will be held to discuss this proposed action with the public, and copies of the Draft Environmental Impact Statement / Draft Section 4(f) Statement will be made available to the public and resource/regulatory agencies for review and comment. A 45-day review and comment period will be provided for the public and resource agencies review. Following the review period, it is anticipated that a Final Section 4(f) Statement will be prepared and circulated with the Final EIS for this project. Comments received on the draft documents and during the public availability period will be presented in the final documents.



For the Division Administrator

Federal Highway Administration



Date