

U.S. 218  
FROM CEDAR RIVER TO THE IOWA 116 INTERCHANGE  
NEAR WAVERLY  
IN  
BREMER COUNTY, IOWA  
NHSX-218-8(124)--3H-09

## ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 USC 4332(2)(c)

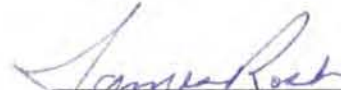
By The

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
and  
IOWA DEPARTMENT OF TRANSPORTATION  
OFFICE OF LOCATION AND ENVIRONMENT

These signatures are considered acceptance of the general project location and concepts described in the environmental document unless otherwise specified by the approving officials. However, such approval does not commit to approve any future grant request to fund the Preferred Alternative.



For the Iowa Division Administrator  
Federal Highway Administration



For the Office of Location & Environment  
Iowa Department of Transportation

March 11, 2015

Date of Approval for Public Availability

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**PREFACE**

The Transportation Equity Act of the 21<sup>st</sup> Century (TEA-21) (23 CFR) mandated environmental streamlining in order to improve transportation project delivery without compromising environmental protection. In accordance with TEA-21, the environmental review process for this project has been documented as a Streamlined Environmental Assessment (EA). This document addresses only those resources or features that apply to the project. This allowed study and discussion of resources present in the study area, rather than expend effort on resources that were either not present or not impacted. Although not all resources are discussed in the EA, they were considered during the planning process and are documented in the Streamlined Resource Summary, shown in Appendix A.

The following table shows the resources considered during the environmental review for this project. The first column with a check means the resource is present in the project area. The second column with a check means the impact to the resource warrants more discussion in this document. The other listed resources have been reviewed and are included in the Streamlined Resource Summary.

**TABLE P-1: Resources Considered**

| SOCIOECONOMIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | NATURAL ENVIRONMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Land Use<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Community Cohesion<br><input type="checkbox"/> <input type="checkbox"/> Churches and Schools<br><input type="checkbox"/> <input type="checkbox"/> Environmental Justice<br><input type="checkbox"/> <input type="checkbox"/> Economic<br><input type="checkbox"/> <input type="checkbox"/> Joint Development<br><input type="checkbox"/> <input type="checkbox"/> Parklands and Recreational Areas<br><input type="checkbox"/> <input checked="" type="checkbox"/> Bicycle and Pedestrian Facilities<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Right-of-Way<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Relocation Potential<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Construction and Emergency Routes<br><input checked="" type="checkbox"/> <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Wetlands<br><input checked="" type="checkbox"/> <input type="checkbox"/> Surface Waters and Water Quality<br><input type="checkbox"/> <input type="checkbox"/> Wild and Scenic Rivers<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Floodplains<br><input checked="" type="checkbox"/> <input type="checkbox"/> Wildlife and Habitat<br><input checked="" type="checkbox"/> <input type="checkbox"/> Threatened and Endangered Species<br><input checked="" type="checkbox"/> <input type="checkbox"/> Woodlands<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Farmlands |
| CULTURAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PHYSICAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Historical Sites or Districts<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Archaeological Sites<br><input type="checkbox"/> <input type="checkbox"/> Cemeteries                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Noise<br><input type="checkbox"/> <input type="checkbox"/> Air Quality<br><input checked="" type="checkbox"/> <input type="checkbox"/> Mobile Source Air Toxics (MSATs)<br><input type="checkbox"/> <input type="checkbox"/> Energy<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Contaminated and Regulated Materials Sites<br><input type="checkbox"/> <input type="checkbox"/> Visual<br><input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Utilities                                                                                                                         |
| <input type="checkbox"/> <b>CONTROVERSY POTENTIAL</b> Click here to enter text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <input type="checkbox"/> <b>Section 4(f):</b> Choose an item. Click here to enter text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## **1.0 DESCRIPTION OF THE PROPOSED ACTION**

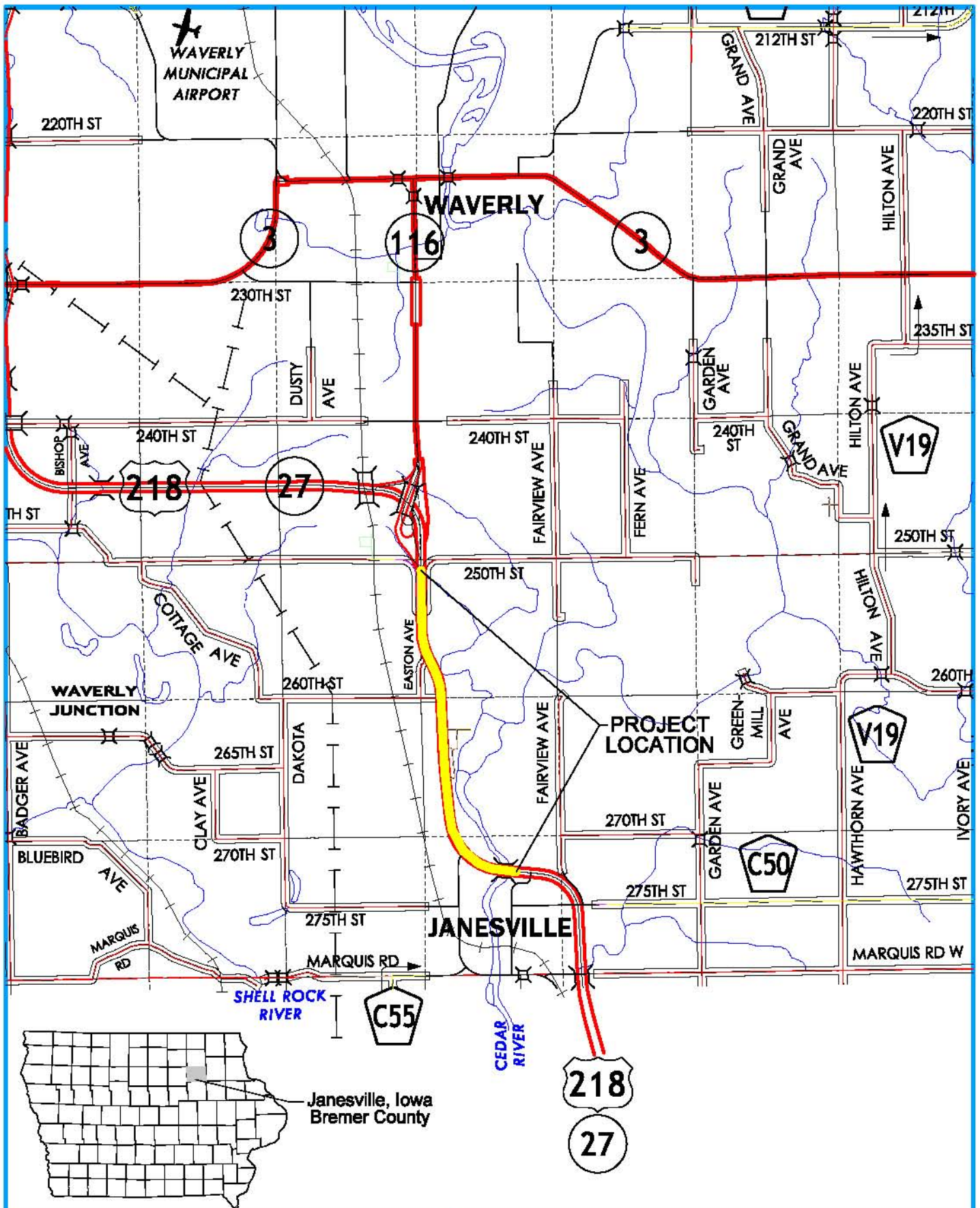
The proposed action consists of upgrading U.S. 218 from the Janesville Cedar River Bridge crossing north to the Iowa 116 interchange near Waverly in Bremer County, Iowa. It passes through a rural mix of land uses, including farmland, rural residential and a housing subdivision. The total length of the project is approximately 3 miles. Refer to the vicinity map on Figure 1.

The current roadway is a 4-lane, rural facility with a divided median with access allowed at 1,000-foot spacing. Currently, there are a total of 16 at-grade access points that allow direct access onto U.S. 218 in this portion of the roadway. These include farm field accesses, residential accesses and public roadways. Traffic volumes on U.S. 218 have increased significantly since it opened in the early 1990s. This increase in traffic, coupled with numerous at-grade intersections, has resulted in safety and traffic operation issues. Therefore, this project proposes to improve the roadway by reducing access to interchanges only.

## **2.0 PROJECT HISTORY**

U.S. 218 from County Road C57 to Waverly was opened as a 4-lane highway in 1993. In 1995, a segment from Cedar Falls north to County Road C57 was also completed. Priority III access control was applied to this new 4-lane facility which allows for at-grade access points at 1,000-foot spacing. Access control from County Road C57 north to Maple Street was Priority II, and north of Maple Street to the Iowa 116 interchange was Priority III. Traffic volumes increased at a greater rate than anticipated following the opening of this roadway. With this increase in traffic, safety and operational issues developed.

In 2005, Iowa DOT initiated a Corridor Study of U.S. 218 from Mount Vernon Road north to the Iowa 116 interchange near Waverly. The purpose of the study was to focus on safety improvements and traffic operations for the corridor. It was determined that adding interchanges at County Road C50 at Janesville and County Road C57, also known as Cedar Wapsi Road, would help improve safety and operations by limiting access. Several alternatives were considered for the remainder of U.S. 218 from the Cedar River north to Waverly. This document addresses these alternatives and the Preferred Alternative for this segment.



**Figure 1**  
**U.S. 218 Janesville to Waverly**  
**Location Map**  
 US 218, Bremer County, Iowa  
 Environmental Assessment

### **3.0 PURPOSE AND NEED FOR ACTION**

This section describes the purpose of and need for the proposed action based on the transportation system problems that currently exist in the Study Area. This section details the substandard nature of the existing highway, and explains the importance of the highway in Bremer County.

#### **3.1 Purpose**

The purpose of the proposed action is to improve the safety and operation of U.S. 218 between the Cedar River at Janesville and the Iowa 116 interchange at Waverly.

#### **3.2 Need**

The need for the proposed action is to:

- Improve Safety – The crash rate for this segment of highway is above the statewide average.
- Improve Traffic Operation – The current at-grade intersections are not sufficient to meet the anticipated traffic capacity.

##### **3.2.1 Improve Safety**

A crash analysis was performed for the study area along U.S. 218 in Black Hawk and Bremer Counties using the Iowa DOT software Safety Analysis, Visualization and Exploration Resource (SAVER). Between 2006 and 2010, a total of 127 crashes occurred, of which 19 resulted in injuries. Most of the remaining crashes were property damage only crashes. The total number of crashes resulted in a crash rate of 131.8 per 100 million vehicle miles traveled, which is higher than the statewide average of 93 for an expressway. The length of the study area is 3.3 miles.

The crashes are fairly evenly distributed along this portion of U.S. 218, which is not unexpected given the Priority III access control in this corridor. Priority III access control allows access spacing from 1,000 feet to ¼ mile; and in this corridor, there are nine at-grade access points. The access points include side roads, private driveways and farm field entrances.

##### **3.2.2 Improve Traffic Operation**

This 4-lane roadway opened to traffic in 1993. Traffic volumes have been steadily increasing since that time. Given the development in the area and the trend toward more commuter traffic between Waverly and Waterloo/Cedar Falls, traffic is projected to increase further. Table 3-1 below shows the historic and projected traffic volumes for U.S. 218 from the Cedar River north to the Iowa 116 interchange.

**TABLE 3-1**  
**HISTORIC AND PROJECTED TRAFFIC VOLUMES ON U.S. 218**

| Location                                   | Year   |        |        |        |        |        |
|--------------------------------------------|--------|--------|--------|--------|--------|--------|
|                                            | 1997   | 2001   | 2005   | 2013   | 2020   | 2040   |
| Maple Street at North Limits of Janesville | 12,300 | 15,500 | 16,700 | 20,400 | 21,500 | 31,500 |
| Iowa 116 Interchange                       | 13,300 | 15,600 | 17,000 | 20,400 | 23,700 | 34,660 |

*Note: Traffic volumes are Average Annual Daily Traffic (AADT)*

In addition to overall traffic increasing, the percentage of trucks has increased as well. In 1997, trucks were estimated to comprise 7% of the total volume; and by 2005, trucks had increased to 12%. By 2040, trucks are expected to be 14% of the total traffic volume on U.S. 218 in this segment.

The increasing volume of traffic, coupled with numerous at-grade intersections and other types of public and private access points, has contributed to operational issues for the U.S. 218 corridor north of the Cedar River. Currently, with Priority III access control in-place, U.S. 218 is congested and not operating at its maximum traffic carrying capacity.



## 4.0 ALTERNATIVES

This section discusses the alternatives considered to address the project's purpose and need for the proposed action. A range of alternatives was developed, including slight variations to the existing alignment of U.S. 218, and then a screening process was used to narrow the range of alternatives. The No Build Alternative, the alternatives considered but dismissed, and the Preferred Alternative are discussed below.

### 4.1 No Build Alternative

Under the No Build Alternative, no improvements would be made to the existing roadway. Only maintenance and repairs would be done. The roadway's geometric features and access control would remain the same. The No Build Alternative would not have any direct or indirect impacts to adjacent properties. No additional right-of-way would be acquired, and no modifications would be done to the roadway.

The No Build Alternative would not meet the purpose and need for the project. It would not improve the safety and operations of U.S. 218 between the Cedar River and Waverly. Although it does not meet the purpose and need, consideration of a No Build Alternative is required by Council on Environmental Quality regulations for implementing NEPA (40 CFR 1500-1508), and the No Build Alternative will be carried forward to provide a baseline for comparing the potential impacts of the Preferred Alternative.

### 4.2 Alternatives Considered but Dismissed

A total of eight build alternatives were developed for this project, seven of which were eventually dismissed from further review. These alternatives are described briefly below and are shown on Figures 2A and 2B.

Five build alternatives (Alternatives A-E) were developed to address the purpose and need of the project. Federal and State agencies reviewed these alternatives as part of the first NEPA/404 Concurrence Point (CP) process meeting (CP1 and CP2).<sup>1</sup> These five alternatives were also presented to the public for review and comment at a public information meeting held in November 2011. Based on comments from the public, an additional alternative was developed for consideration which included an interchange at 260<sup>th</sup> Street (Alternative F). Two additional interchange alternatives (Alternatives G and H) were developed and presented to the agencies at the second Concurrence Point meeting discussing alternatives to be carried forward (CP3). In August 2013, a public information meeting was held to present the interchange alternatives to the public for review and to provide comment.

Some of the key aspects of all of the alternatives were to maintain access to Waverly and connectivity for residents living along U.S. 218 between Janesville and Waverly.

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<sup>1</sup> More information of the NEPA/404 Concurrence Point process can be found in Section 7.0 - Comments and Coordination.



ALTERNATIVE A

ALTERNATIVE B

ALTERNATIVE C

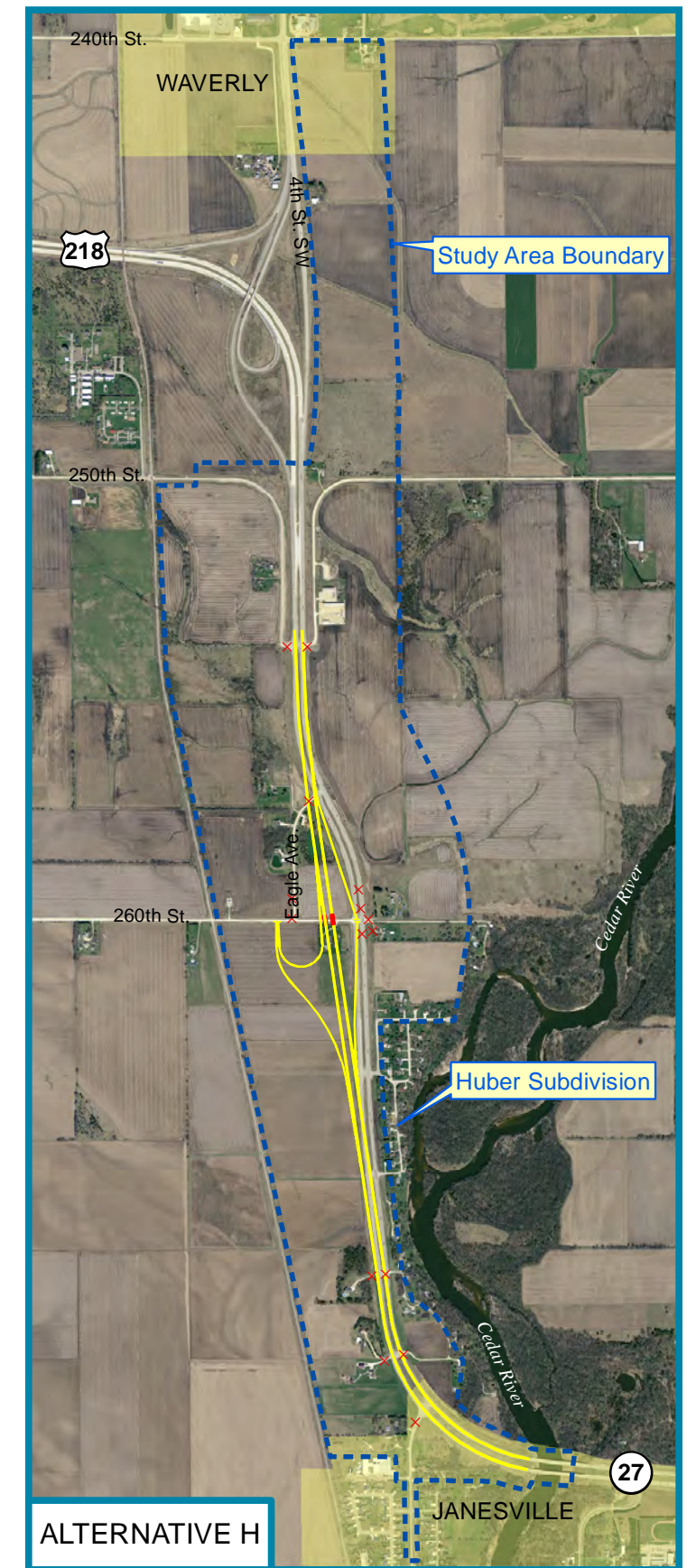
ALTERNATIVE D

- × Proposed Closures
- Proposed New Bridge
- Proposed Pavement
- - - Proposed Access Road

0 0.25 0.5 0.75 1 Miles



Figure 2A  
 Alternatives Considered and Dismissed  
 US 218, Bremer County, Iowa  
 Environmental Assessment  
 Feb. 2015 60190935



- × Proposed Closures
- Proposed New Bridge
- Proposed Pavement
- Proposed Access Road
- Proposed Granular

0 0.25 0.5 0.75 1 Miles

**IOWA DOT**  
**AECOM**

Figure 2B  
Alternatives Considered and Dismissed  
US 218, Bremer County, Iowa  
Environmental Assessment  
Feb. 2015 60190935

Janesville residents also need access to Waverly and to U.S. 218. Therefore, the alternatives would include parallel frontage roads to assist in local access.

#### **4.2.1 Alternative A**

Alternative A would add two lanes on the west side of the existing highway. Traffic on U.S. 218 would be shifted onto the west set of four lanes. The existing (easternmost) northbound lanes would be converted into a frontage road system that could be used by the Huber Addition and Anderson Subdivision, housing developments east of U.S. 218, to have access to Waverly to the north. It would eliminate all at-grade intersections. This frontage road would also connect from 260<sup>th</sup> Street south to North Maple Street at Janesville. An access road would be provided between 260<sup>th</sup> and 250<sup>th</sup> Streets on the west side of U.S. 218. This alternative would require two fly-over bridges which are expensive to construct and maintain. This alternative would increase the out-of-distance travel to Waverly or into Janesville to access U.S. 218 and would have high impacts due to frontage roads.

#### **4.2.2 Alternative B**

Alternative B would relocate the roadway to the west which would eliminate two curves just north of 260<sup>th</sup> Street. A portion of the existing highway would serve as a frontage road system in order to remove all at-grade intersections. The frontage road would connect to Maple Street in Janesville. An access road would be provided between 260<sup>th</sup> and 250<sup>th</sup> Streets on the west side of U.S. 218 to provide access to Waverly on the north. This alternative would require two fly-over bridges which are expensive to construct and maintain. This alternative would increase the out-of-distance travel to Waverly or into Janesville to access U.S. 218 and would have high impacts due to frontage roads.

#### **4.2.3 Alternative C**

Alternative C would relocate a portion of U.S. 218 to the west. The existing highway would be converted into a frontage road system as a way to remove all at-grade intersections and direct accesses to U.S. 218. The frontage road would connect to Maple Street at Janesville. An access road would be provided between 260<sup>th</sup> and 250<sup>th</sup> Streets on the west side of U.S. 218 to provide access to Waverly on the north. This alternative would increase the out-of-distance travel to Waverly or into Janesville to access U.S. 218 and would have high impacts due to frontage roads. This alternative would require two fly-over bridges which are expensive to construct and maintain. This alternative would result in undesirable geometry due to the curvature of the alignment.

#### **4.2.4 Alternative D**

Alternative D would relocate the 4-lane highway to the west slightly, which would eliminate one curve and flatten another curve. A portion of the existing highway would

be re-used as a frontage roadway system so that all the at-grade intersections would be closed. The frontage road system would connect to Maple Street in Janesville. Access roads on the back side of properties (also referred to as backage roads) would be provided on the west side of U.S. 218 from Maple Street to 250<sup>th</sup> Street to provide a route to Waverly on the north. This alternative would require two fly-over bridges which are expensive to construct and maintain. This alternative would increase the out-of-distance travel to Waverly or into Janesville to access U.S. 218 and would have high impacts due to frontage roads.

#### **4.2.5 Alternative E**

Alternative E would relocate the highway west to be adjacent to and parallel with the railroad until 260<sup>th</sup> Street where it would begin to curve back to the existing roadway. This alignment would flatten two curves, and the existing highway would be re-used as a frontage road system. This frontage road system would allow the elimination of all at-grade intersections and would connect residents to Maple Street in Janesville as well as to Waverly to the north. This alternative would require two fly-over bridges which are expensive to construct and maintain. This alternative would increase the out-of-distance travel to Waverly or into Janesville to access U.S. 218 and would have high impacts due to frontage roads.

#### **4.2.6 Alternative F**

Alternative F differs from all the previous alternatives in that it includes an interchange at 260<sup>th</sup> Street. The proposed interchange would be a skewed 2-quadrant folded diamond interchange, with loop ramp exits. The interchange was at a skew to avoid a nearby residence and minimize other impacts. An access road would also be constructed from 260<sup>th</sup> Street south to Maple Street in Janesville. On the west side of U.S. 218, 250<sup>th</sup> Street/Eagle Avenue would be extended south to connect with the 260<sup>th</sup> Street interchange. This alternative would require one bridge instead of two, as in the previous alternatives. This frontage road would also be extended south to the Huber/Anderson Housing Additions on the east side of the highway so they would have connectivity to Waverly on the north as well as Janesville.

The 2-quadrant interchange configuration was shown at a public involvement meeting and was considered too complicated by members of the public, and there was a concern about out-of-distance travel. From an engineering perspective, drivers expect high-speed exits from the mainline. The northbound exit loop at 260<sup>th</sup> Street will require a reduced speed which would go against driver expectancy. The same exit goes beyond the bridge and reduces sight distance to the exit gore and the loop; this is known to cause an increase in crashes and has moderate safety impacts. The ramp/loop combination at the at-grade terminal increases the potential for wrong-way movements onto the freeway. Alternative F also impacts two National Register of Historic Places (NRHP) properties, requiring avoidance alternatives in accordance with 23 CFR 774. For these reasons, Alternative F was not developed further.

Sub-alternatives to Alternative F (Alternatives G and H) were developed. These new interchange alternatives would avoid the NRHP properties and include design refinements that would cause the impacts shown in Table 4-1 to not be comparable to the impacts in Table 4-2.

#### **4.2.7 Alternative H**

As mentioned above, Alternative H (and G) was developed due to some of the impacts and concerns related to Alternative F. Alternatives H and G were both developed to a greater level of detail from an engineering perspective than any of the previous alternatives (A-F). Therefore, data presented for Alternatives A-F in Table 4-1 is not comparable to the impacts in Table 4-2 for Alternatives G and H. For this reason, a separate table is used for G, H and the No Build Alternatives.

Alternative H uses the same alignment as Alternative D, which moves the mainline slightly to the west and thereby would minimize impacts to the NRHP-eligible historic barn mentioned above. However, Alternative H includes an interchange at 260<sup>th</sup> Street, as did Alternative F. The interchange would be a 3-quadrant configuration, with the loop-ramp being located in the southwest quadrant of the intersection. This alternative would involve extending frontage and backage roads from 260<sup>th</sup> Street south to connect with Maple Street in Janesville. Also, 250<sup>th</sup> Street would be extended south to connect to 260<sup>th</sup> Street on the east side of U.S. 218. A portion of the existing northbound lanes of U.S. 218 would be used as frontage road for the Huber/Anderson Housing Additions so they could have connectivity to Waverly and Janesville. This interchange configuration was not as desirable as the diamond interchange configuration.

#### **4.2.8 Summary of Alternatives Dismissed**

Alternatives A through F and H were dismissed for numerous reasons related to right-of-way impacts and engineering deficiencies. Compared to the alternative being carried forward, Alternative G, each of the dismissed alternatives have more impacts to one or more of the following: farmland, total right-of-way, wetlands, floodplains and historic sites. Table 4-1 summarizes and compares impacts of the dismissed alternatives.

**TABLE 4-1  
SUMMARY OF IMPACTS FOR ALTERNATIVES CONSIDERED BUT DISMISSED**

|                             | Alt. A* | Alt. B* | Alt. C* | Alt. D* | Alt. E* | Alt. F* |
|-----------------------------|---------|---------|---------|---------|---------|---------|
| Total ROW (Acres)           | 406     | 398     | 354     | 406     | 438     | 170     |
| Farmland (Acres)            | 210     | 184     | 158     | 210     | 232     | 109     |
| Floodplains (Acres)         | 15      | 15      | 16      | 15      | 13      | 13      |
| Regulated Materials (Acres) | 5       | 5       | 5       | 5       | 5       | 4       |
| Historic Sites Impacted     | Yes     | Yes     | Yes     | Yes     | Yes     | Yes     |
| Open Water (Acres)          | 1.2     | 1.5     | 1.3     | 1.2     | 1.6     | 0       |
| Wetlands (Acres)            | 1.6     | 1.3     | 1.3     | 1.6     | 1.5     | 0.5     |
| Businesses Acquired         | 0       | 0       | 1       | 0       | 0       | 1       |
| Homes Displaced             | 15      | 15      | 15      | 15      | 18      | 3       |

\*Alternatives A-E were dismissed from further consideration once interchange alternatives were developed. Alternatives A-F, were not developed to the same level of engineering detail as Alternatives G and H

### 4.3 Preferred Alternative

Alternative G is being carried forward as the proposed build alternative for the U.S. 218 project (Figure 3). This alternative uses the Alternative D alignment and includes an interchange at 260<sup>th</sup> Street. As with Alternative D, this alternative would relocate the 4-lane highway to the west slightly. This would eliminate one curve and flatten another curve. The 260<sup>th</sup> Street interchange is a standard diamond interchange configuration and it avoids the NRHP-eligible barn. All direct access to U.S. 218 would be eliminated; therefore, frontage and backage roads would be necessary.

Alternative G includes an access road from 260<sup>th</sup> Street south to Maple Street in Janesville to allow residents on the west side a way to travel to Janesville from the north. On the east and west sides of U.S. 218, 250<sup>th</sup> Street would be extended south to 260<sup>th</sup> Street to allow access to local properties and the interchange at 260<sup>th</sup> Street. The Huber/Anderson Housing Additions (rural subdivisions) located on the east side of U.S. 218 currently has direct access to the highway. This alternative would convert the current northbound lanes of U.S. 218 to a frontage road and connect with 260<sup>th</sup> Street and the proposed interchange. This would help maintain connectivity to Waverly, as well as Janesville, for these residents.

There are properties on the west side of U.S. 218 just north of Janesville that would need access from the back of their residences as a result of the project. An access (backage) road is proposed that will connect Maple Street in Janesville to 260<sup>th</sup> Street, as shown on Figure 3. This backage road is currently proposed to be parallel to the existing railroad to minimize impacts to farmland and farm operations. It is proposed to

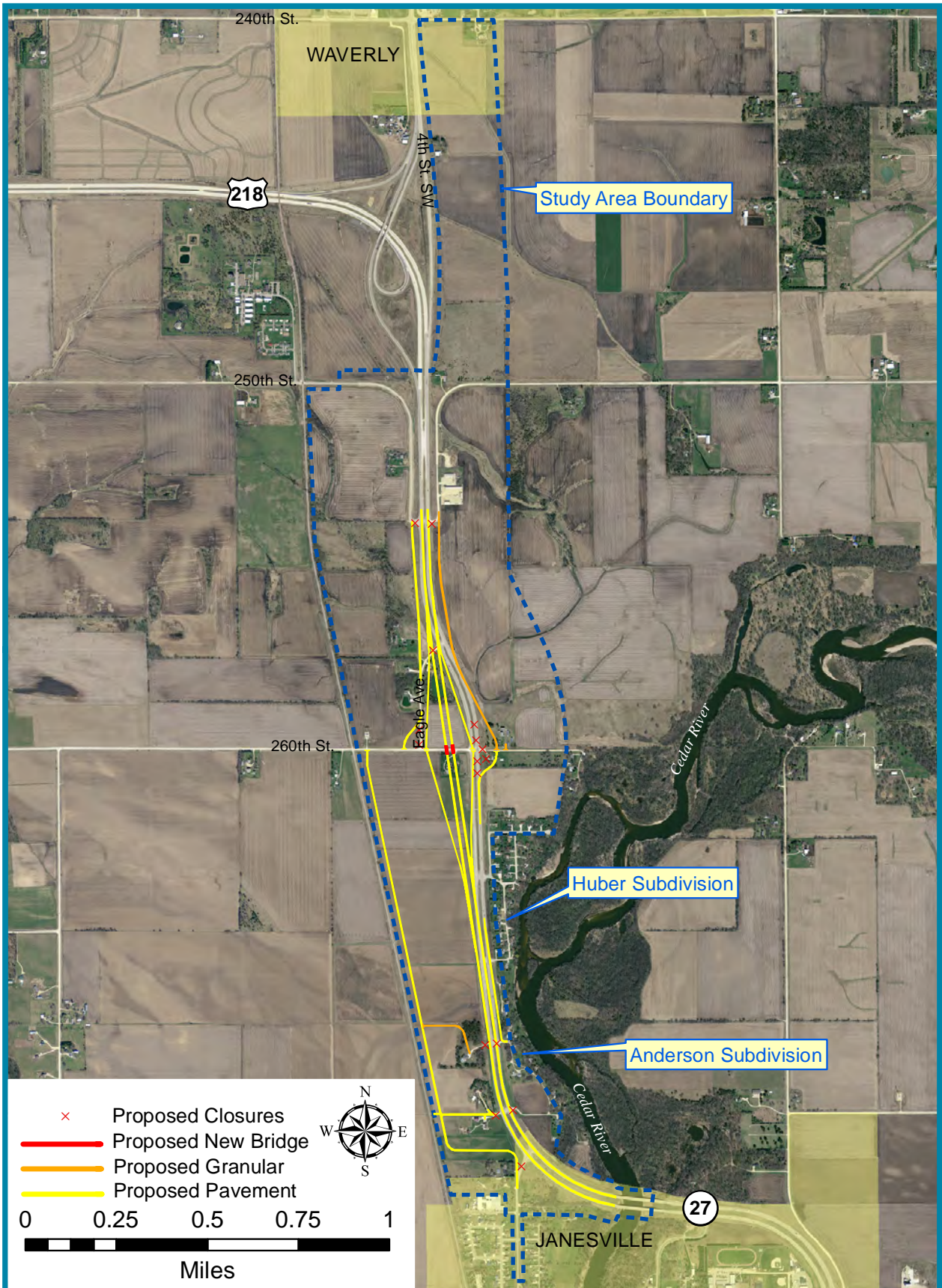


Figure 3  
 Preferred Alternative (Alternative G)  
 US 218, Bremer County, Iowa  
 Environmental Assessment



be a 2-lane paved facility. Three residential properties and a farm entrance will need direct access to this backage road. The actual location of the backage road and these driveways will be determined during final design and through coordination with land owners.

After reviewing the reasonable alternatives under consideration, Iowa DOT has identified Alternative G as the Preferred Alternative. This alternative is preferred because it meets the project purpose and need, while minimizing overall impacts. Table 4-2 below summarizes and compares impacts of the Preferred Alternative and the No Action Alternative.

**TABLE 4-2  
SUMMARY OF IMPACTS FOR PREFERRED AND NO ACTION ALTERNATIVES**

|                             | Preferred Alternative<br>(Alternative G) | Alternative H | No Action Alternative |
|-----------------------------|------------------------------------------|---------------|-----------------------|
| Total ROW (Acres)           | 224                                      | 236           | 0                     |
| Farmland (Acres)            | 94                                       | 105           | 0                     |
| Floodplains (Acres)         | 14                                       | 15            | 0                     |
| Regulated Materials (Acres) | 1                                        | 1             | 0                     |
| Historic Sites Impacted     | No                                       | No            | No                    |
| Open Water (Acres)          | 1.2                                      | 1.2           | 0                     |
| Wetlands (Acres)            | 0.67                                     | 0.67          | 0                     |
| Businesses Acquired         | 0                                        | 0             | 0                     |
| Homes Displaced             | 7                                        | 12            | 0                     |

Final selection of an alternative will not occur until FHWA and Iowa DOT evaluate all comments received as a result of their review of this document and the public hearing. Following public and agency review of this Environmental Assessment (EA), FHWA and Iowa DOT will determine if an Environmental Impact Statement (EIS) is required. If one is not required, the selected alternative will be identified in the Finding of No Significant Impact (FONSI) document. If an EIS is required, then a Preferred Alternative would be selected through that process.

## **5.0 ENVIRONMENTAL ANALYSIS**

This section describes the existing socioeconomic, natural and physical environments in the project corridor that will be directly or indirectly impacted by the Preferred Alternative (Figure 4). The resources with a check in the second column in Table P-1, located at the beginning of this document, are discussed below.

Each resource section includes an analysis of the impacts of the No Build Alternative and the Preferred Alternative. Because it is early in the design process, a preliminary NEPA impact area was used for estimating direct and indirect impacts on the evaluated environmental resources. The preliminary NEPA impact area includes roadway right-of-way needs and the area where construction could occur. The area actually impacted by the project will likely be less than what is portrayed within the preliminary NEPA impact area, and some impacts to resources are expected to be minimized or avoided as the project design is refined. Consequently, the potential impacts discussed in this section of the EA are conservative, as efforts to minimize direct and indirect impacts will be made during final design.

### **5.1 Socioeconomic Impacts**

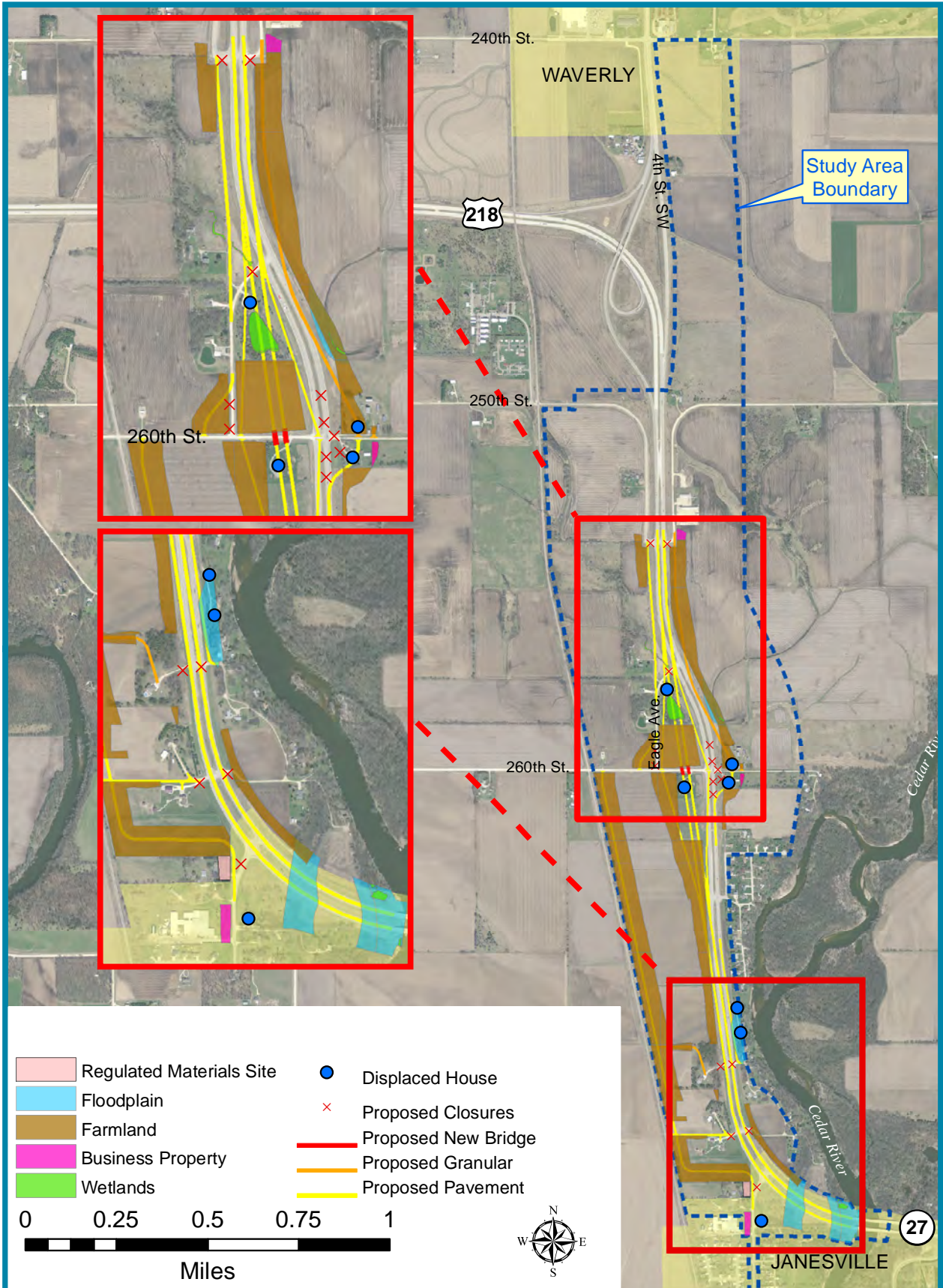
Evaluating the direct and indirect impacts that a transportation project has on socioeconomic resources requires consideration of impacts on land use as well as the project's consistency with development and planning by a city or other public entity.

#### **5.1.1 Land Use**

Evaluation of land use as it relates to transportation projects refers to the determination of direct and indirect effects on existing land uses, such as agricultural, residential and commercial/industrial, as well as consistency with regional development and land-use planning. Direct effects on existing and future land uses were determined by comparing the preliminary impact area to the existing land uses. Indirect effects were determined by evaluating potential access restrictions, out-of-distance travel and induced development.

Land use in the project area is made up primarily of rural homes and farmland. Rowcrops are the main agricultural land use in the area. The Cedar River is parallel to U.S. 218 at the south end and is a predominant feature of the area, adding to the rolling terrain. Riparian vegetation is present in association with the river.

In 2003, the Bremer County Planning and Zoning Commission adopted the Comprehensive Land Use Plan Update. The Comprehensive Plan does not specifically address U.S. 218 improvements but lists 10 goals and objectives under Implementation of the Plan. Goals 1 and 2 include transportation as a key component.



Goal 3 relates to potential new development. The County will require that necessary services shall be provided concurrent with development. This shall include, in part: access to a transportation network through highways, roads, streets and driveways.

Goal 4 relates to maintaining and improving, when possible, the quality of life for residents of Bremer County. Transportation is included under the quality of life goal, among other factors. The Comprehensive Plan states that Bremer County will maintain and continue to develop a multi-modal transportation network that includes access to highways, roads, air service, transit service and trail infrastructure.

The Future Land Use Plan map does not show significant changes over the existing land use, except in the area of the Huber Addition. On the north edge of the Huber Addition, future additional residential land use is shown.

### ***No Build Alternative***

The No Build Alternative would result in continued use of the highway. This continued use would not affect the overall land use. The No Build Alternative would not require acquisition of any right-of-way along U.S. 218.

### ***Preferred Alternative***

The Bremer County Comprehensive Land Use Plan does not specifically address the improvements to U.S. 218. However, nothing appears within the plan that conflicts with the proposed plans to improve U.S. 218. The goals stated within the Comprehensive Plan are compatible with plans proposed for the improvement of the roadway.

## **5.1.2 Community Cohesion**

Prior to 1993, U.S. 218 between Janesville and Waverly was a 2-lane highway. In 1993, the new 4-lane U.S. 218 was opened to traffic. Since that time, traffic volumes have increased and many of these vehicles travel at 65 mph or higher. Although there have been houses along U.S. 218 for decades, a number of houses were built within the Huber Subdivision as the highway opened. Many of the houses have construction dates in the early 1990s, which corresponds to the time when the subdivision was growing. Although this subdivision grew as the highway came into being, the increasing traffic volumes have created more of a barrier to community cohesion as the years have passed. U.S. 218 is a major north-south route from the Waterloo/Cedar Falls metro area to Waverly and, as such, serves as a busy commuter corridor between the cities.

### ***No Build Alternative***

Under the No Build Alternative, there would be no change to issues which inhibit community cohesion. Issues related to community cohesion (such as from a 4-lane

roadway which generates traffic congestion especially at peak times, real or perceived safety concerns, and high-speed traffic) would not change.

### ***Preferred Alternative***

Community cohesion will not be improved by the changes to the U.S. 218 corridor. Although safety will be improved through limiting of accesses, the highway itself will still be a barrier. Residents living in the Huber Subdivision will have out-of-distance travel whenever traveling south. In order to get to the city of Janesville (or another point south), they will travel north on a frontage road to the interchange at 260<sup>th</sup> Street then enter southbound U.S. 218 or cross the interchange to the backage road to travel south into Janesville via Maple Street.

### **5.1.3 Bicycle and Pedestrian Facilities**

Currently, there are no bicycle facilities along U.S. 218 within the Study Area. Local advocates have wanted a trail connecting Waverly from the south to Janesville and the Waterloo/Cedar Falls Metro area.

### ***No Build Alternative***

The No Build Alternative would not impact any bicycle and pedestrian facilities in the Study Area.

### ***Preferred Alternative***

The city of Waverly is working to develop a park, soccer fields and bicycle trails in the south part of their city. Advocates desire that the proposed access road, from 260<sup>th</sup> Street south to Maple Street, include a paved shoulder or a pavement wide enough to accommodate bicyclists. The preferred alternative's access road from Maple Street to 260<sup>th</sup> Street will not preclude local public agencies from developing bicycle accommodations at some point in the future.

### **5.1.4 Right-of-Way**

To determine the potential impacts associated with the Preferred Alternative, right-of-way acres were measured. This acreage is that which is not existing right-of-way but is currently in private ownership.

Total land within the Study Area is 774 acres. This includes the existing highway, farmland and all other land shown within the blue dashed line indicated on Figures 3 and 4. The existing right-of-way varies in width from 300 to 450 feet due to the topography of the area. Likewise, the width of new right-of-way needed to construct the roadway beyond the existing right-of-way line varies. The additional right-of-way needed ranges from approximately 380 to 1,500 feet.

The project area is in a rural area that has a somewhat hilly terrain influenced by the Cedar River. The land in the Study Area is in private ownership, with a total of 76 being individual landowners of 114 parcels.

### **No Build Alternative**

The No Build Alternative would not require acquisition of any right-of-way along U.S. 218 within the Study Area.

### **Preferred Alternative**

The Preferred Alternative would require approximately 224 acres of new right-of-way in order to construct the 3.3-mile segment of U.S. 218. Of this acreage, approximately 94 acres is from farmland, while the remainder is from rural residential land. There are 46 landowners within the impact area of the Preferred Alternative, three of which are in commercial ownership. A total of seven (7) residential homes would be displaced (see Section 5.1.4, Relocation Potential, for more information). There are three businesses in close proximity to the project but, through the design process, each will be avoided. Residents living in the Huber/Anderson Additions will have out-of-distance travel whenever traveling south on U.S. 218.

### **5.1.5 Relocation Potential**

To assess the potential impacts associated with the Preferred Alternative, right-of-way acquisition and property relocations were evaluated based on the conceptual design for the proposed expansion of the highway. The affected area for this analysis is the preliminary impact area.

Existing properties along the U.S. 218 corridor are agricultural, commercial, residential and government owned. Agricultural land includes houses, barns and other outbuildings.

All properties to be acquired would fall under the State of Iowa's Acquisition and Relocation Program. This program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), as amended, by the Surface Transportation and Uniform Relocation Assistance Act of 1987. The program provides relocation resources to all residential and business relocatees without discrimination. This includes just compensation for such acquired properties (42 USC 4601 et seq., as amended, 1989).

In addition, it is FHWA's policy that persons displaced from their property receive uniform and equitable treatment and do not disproportionately bear the impacts of a project that is intended to provide benefits to a larger group of people (U.S. Department of Transportation – Federal Highway Administration and Iowa Department of

Transportation, 1999). FHWA has programs and policies that enforce the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, such as an early acquisition program to assist individuals who meet certain hardship criteria and policies to ensure comparable (that is, equal or better) property for business relocations.

It is the policy of the state of Iowa that displaced individuals and businesses receive fair and equitable treatment and do not suffer disproportionately from highway projects planned for the public as a whole. Persons required to relocate their businesses and residences as a result of this or any highway project are eligible for relocation assistance and may be eligible for moving assistance and expenses incurred in searching for a replacement location. A relocation assistance agent would work with each relocatee to smooth the transition.

### ***No Build Alternative***

The No Build Alternative would not require relocation or acquisition of any property.

### ***Preferred Alternative***

Under the Preferred Alternative, seven (7) residential properties would be subject to relocation. Of these, all are owner occupied. There does not appear to be any specific minority or ethnic group adversely impacted by the project. The project does not appear to isolate or unusually disrupt the economy of the neighborhood. Comparable housing is in adequate supply to purchase, and the market should be able to absorb the needs of the relocatees who may search for replacement property. There are also an adequate number of rental properties currently on the market and a sufficient number of building contractors in the area.

Relocations would be conducted in conformance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended by the Surface Transportation Assistance Act of 1987 and 49 Code of Federal Regulations, Part 24, effective April 1989. Relocation assistance would be made available to all affected persons without discrimination.

## **5.1.6 Construction and Emergency Routes**

This section addresses potential impacts from construction routes and impacts on emergency routes. Emergency vehicles (ambulances, fire trucks and police cruisers) respond to events using routes that are designated to reduce response times and account for access limitations. Any construction delays should be coordinated to minimize access limitations, when possible, during construction. The U.S. 218 corridor is a vital emergency corridor into and out of Janesville, Iowa. There are EMTs and a police force who reside in Janesville. The fire rescue department is located in the City Hall at 227 Main Street in Janesville. The U.S. 218 corridor connects Janesville to the

various medical centers and emergency services located to the north in Waverly, Iowa, or to the south in Cedar Falls, Iowa. The Bremer County Sheriff's Department also serves the area and utilizes this highway corridor.

### ***No Build Alternative***

The No Build Alternative would not result in any improvements to U.S. 218 in the Study Area. There would be continued use of the 4-lane highway that experiences frequent crashes and does not meet the anticipated future traffic demands. The increased risk of crashes could require occasional detours off the highway during emergency situations. Access to and from emergency service providers would continue along the same routes as currently used.

### ***Preferred Alternative***

The U.S. 218 corridor would remain open during construction, though temporary lane closures would likely be implemented at certain stages of construction. During periods of temporary lane closures, temporary, minor delays to traffic operations would be anticipated due to reduced roadway capacity, particularly during high traffic periods. These delays and lane closures could result in temporary delays for emergency services. The duration of lane closures and the associated delays would be minimized to the extent possible by scheduling such construction activities during low traffic periods, such as evenings or weekday non-peak periods.

Much of the construction would occur in the new right-of-way to the west of the existing corridor and would therefore not significantly impact routes used by emergency service providers. The introduction of construction equipment would add slightly to the level of traffic within the Study Area. Movement of the equipment would occur throughout the period of construction but is not anticipated to adversely affect traffic operations or emergency service access.

Local access along U.S. 218 would be closed at multiple locations along the 3.3-mile project area. Closure of these access points would be scheduled to occur once alternative access routes, including the new frontage and backage routes, were completed to ensure continued access to local residents and businesses. The location of the backage road and modifications to driveways along that road would be determined during the final design process and through coordination with landowners. Some of these landowners will experience out-of-distance travel compared to what they have currently. It is anticipated that emergency response times will be negatively affected with the construction of this road.

Emergency responders, local residents and businesses, and the traveling public would be notified in advance of all temporary detours, closures and traffic control changes in the U.S. 218 corridor throughout the construction period. Local emergency responders will be consulted and coordinated with to ensure that response times remain



acceptable. Adjacent property owners will also be consulted prior to construction to convey expectations and durations of road closures, detours and permanent modifications.

In December 2014, Iowa DOT staff met with Janesville city officials to discuss emergency response in relation to the closure of Maple Street. This closure, along with access control for the rest of the project, is deemed necessary based on increasing traffic volumes, operational concerns, driver expectancy, and consideration of other investments made in the U.S. 218 Corridor that are complete or underway (C50 Interchange and C57 interchange). The goal of these projects is to provide a safe facility for the traveling public. This change in access creates concerns for emergency responders. Therefore, Iowa DOT has offered a professional facilitator to work toward solutions with emergency responder departments in the Janesville, Denver, Waverly and Cedar Falls areas. (See letter in Appendix B from Iowa DOT dated December 10, 2014.)

## **5.2 Cultural Resources**

According to Title 36 CFR, Part 800.8, federal agencies are encouraged to coordinate compliance of Section 106 and any steps taken to meet the requirements of NEPA. Coordination of both reviews should occur early in the process to fulfill the respective requirements.

Title 36 CFR 800.8 also details the general principles of coordinating NEPA and Section 106, relevant NEPA actions, and the use of the NEPA process for satisfying portions of the Section 106 requirements, including standards for developing NEPA environmental documents for Section 106 purposes.

This section addresses potential direct and indirect impacts on both historic and archaeological resources located within the Study Area.

A Phase I Cultural Resources Inventory was completed in 2007 for U.S. 218 which included the Study Area. The survey included 2,197.5 acres along the 7.8 miles of U.S. 218 encompassed by the Study Area. The cultural resources inventory was completed by a pedestrian survey, augmented by shovel and auger tests and hand soil cores.

Prior to initiation of the cultural resources survey, desktop research identified the recorded existence of three historic archaeological sites within the Study Area. Two of those sites were destroyed at some point after they were originally recorded. The 2007 survey identified four potentially significant archaeological sites and three structures considered to be National Register-eligible.

### **5.2.1 Historical Sites or Districts**

Two farmsteads identified during the cultural resources survey are recommended as potentially eligible for nomination to the National Register of Historic Places (NRHP). These potentially NRHP-eligible sites include the Fox (formerly Miller) farmstead (09-00546) and the two barns at the Kellum farmstead (09-00555 and 09-00556).

#### ***No Build Alternative***

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new right-of-way would be needed. Therefore, the No Build Alternative would have no effect on historic structures or districts.

#### ***Preferred Alternative***

The two barns on the Kellum farmstead are located on the northeast quadrant of U.S. 218 and 260<sup>th</sup> Street. One was constructed in 1899 and the other in 1939. Both are considered eligible for the National Register. At this time, these barns will be avoided by construction of the interchange at this location.

The Fox (formerly Miller) farmstead dates back to 1875 and consists of a house, barn and three out buildings. It is located on Eagle Avenue west of U.S. 218. It is considered eligible for the National Register and will be avoided by the project construction activities.

Although these structures will be avoided, their close proximity to construction activities makes them potentially subject to vibration impacts. Therefore, Iowa DOT will require vibration monitoring throughout construction. SHPO concurred with a finding of No Adverse Effect since the buildings are avoided, but with the provision that they be monitored for vibration (see letter dated October 22, 2014, in Appendix B).

### **5.2.2 Archaeological Sites**

Five prehistoric archaeological sites (12BM131 and 13BM138-13BM141) identified during the 2007 cultural resources inventory were recommended as potentially eligible for nomination to the NRHP. Two additional Phase I Archaeological Surveys were conducted for the Study Area in 2008 and 2012. The 2008 survey identified two archaeological sites within the Study Area. After consultation with the SHPO, neither site was evaluated as eligible for the NRHP. The 2012 survey conducted further evaluations of two previously identified archaeological sites and identified a new site. The survey and subsequent consultation confirmed that Sites 13BM138 and 13BM139 were still recommended as eligible for the NRHP. The SHPO recommended the new site (13BM157) also be considered as eligible. Appendix B includes the SHPO consultation regarding the archaeological sites.

### **No Build Alternative**

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new right-of-way would be needed. Therefore, the No Build Alternative would have no effect on archeological sites.

### **Preferred Alternative**

As described above, over 2,000 acres of land were surveyed for potential archaeological sites. As a result, several previously unrecorded sites were discovered. However, all significant archaeological sites will be avoided by the proposed improvement for U.S. 218.

SHPO concurred with a finding of No Adverse Effect for archaeological properties (see letter dated October 22, 2014, in Appendix B).

## **5.3 Natural Environment Impacts**

This section characterizes the natural resources in the Study Area and addresses potential impacts of the No Build Alternative and the Preferred Alternative. The resources discussed are wetlands, floodplains and farmlands.

### **5.3.1 Wetlands**

Waters of the U.S., including wetlands, waterways, lakes, natural ponds and impoundments, are regulated by the U.S. Army Corps of Engineers (USACE). Under Section 404 of the Clean Water Act (CWA), a permit is issued by the USACE which authorizes the discharge of dredged or fill material into waters of the U.S. (33 USC 1251 et seq.). Executive Order 11990, Protection of Wetlands, requires Federal agencies (including FHWA) to implement “no net loss” measures for wetlands (42 Federal Register (FR) 26951). These no net loss measures include a phased approach to wetland impact avoidance, then minimization of impacts if wetlands cannot be avoided, and finally mitigation.

Field reviews were conducted using methods outlined in the *1987 Corps of Engineers Manual for Wetland Delineations and its Regional Midwest Supplement* to delineate the wetlands located within the study area. National Wetland Inventory (NWI) data were reviewed prior to the site visits and confirmed or denied based on observed on-ground conditions. The wetland delineation identified approximately 4.0 acres of wetlands within the Study Area. There are approximately 2.0 acres of open water, including three ponds within the Study Area. The wetlands present in the Study Area include palustrine emergent, palustrine forested, palustrine scrub-shrub, and farmed wetlands. Approximately 2,900 linear feet of perennial and intermittent streams were identified within the Study Area.

### **No Build Alternative**

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new right-of-way would be needed. Therefore, the No Build Alternative would not impact any wetlands.

### **Preferred Alternative**

The width of the potential impact area varies by location to account for shifts in alignment (to avoid and minimize impacts) and variations in elevation. Based on wetland delineation boundaries and the potential impact area, the Build Alternative is projected to impact 1.2 acres of open water and approximately 0.67 acre of wetland (see Table 5-1). Given the extent of potential wetland impacts, a USACE Section 404 Clean Water Act Permit (Section 404 Permit) will be required.

**TABLE 5-1  
WETLAND IMPACTS OF THE  
PREFERRED ALTERNATIVE (ALT. G)  
U.S. 218**

| Wetland Type* | Number of Wetlands | Acres Impacted |
|---------------|--------------------|----------------|
| FW            | 1                  | 0.08           |
| PEM           | 5                  | 0.44           |
| PFO           | 3                  | 0.11           |
| PSS           | 2                  | 0.04           |

\*FW = Farmed Wetland  
PEM = Palustrine Emergent  
PFO = Palustrine Forested  
PSS = Palustrine Scrub-Shrub

Should it be determined during the final design process that wetland impacts cannot be avoided, mitigation would occur at ratios determined by USACE. Iowa DOT would select a location for mitigation, subject to USACE approval. An analysis of suitable sites for mitigation would be performed and described in the mitigation concept within the Section 404 Permit application. The permitting process would occur after completion of the NEPA process.

### **5.3.2 Floodplains**

FEMA Flood Insurance Rate Maps (FIRM), showing the 100-year floodplain and the regulatory floodway (Revised: February 16, 2007), and the USGS 7.5-minute quadrangle maps were reviewed for the Study Area, and coordination with the Iowa DNR has taken place (see letter dated April 28, 2011, in Appendix B). As displayed on Exhibit 5-11, the FIRM Map indicates that the Cedar River 100-year floodplain and a designated regulatory floodway are located in the project area. Title 23 CFR 650 identifies the 100-year (base) flood as the flood having a 1% probability of being

equaled or exceeded in any given year. The regulatory “floodway” is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a predetermined volume.

At the southernmost extent of the Study Area, U.S. 218 crosses the Cedar River at an elevation of approximately 870 feet above mean sea level. The Cedar River parallels the southeastern side of U.S. 218 from the southernmost portion of the Study Area to approximately 260<sup>th</sup> Street. The Cedar River stream-gage located at Janesville recorded two flood events between 1960 and 2012. These events occurred in 1999 and 2008, with elevations of 17.15 feet and 19.45 feet, respectively (NWS, 2014). Portions of U.S. 218 are immediately adjacent to the Cedar River’s 100-year floodplain. The majority of U.S. 218 is located approximately 20 feet above the elevation of the river within the Study Area. The river crossing is the lowest portion of the highway at approximately 880 feet above mean sea level, approximately 10 feet above the elevation of the river. Flooding of the Cedar River has impacted U.S. 218, resulting in road closures and some flooding on multiple occasions (FEMA, 2008a, b, c; USGS 2013, 2014).

### ***No Build Alternative***

The No Build Alternative would not result in any modifications of U.S. 218 in the Study Area. No construction activities would occur, and no new right-of-way would be needed. The No Build Alternative would have no impact on the floodplains in the Study Area. Local and regional hazard mitigation plans would continue to be utilized to close the roadway and divert traffic, as needed, during flood events. Traffic disruptions associated with flooding do not occur on a regular basis and are typically short-term and minor.

### ***Preferred Alternative***

Of the FEMA-mapped floodplain in the Study Area, approximately 14.3 discontinuous floodplain acres are within the preliminary impact area, as well as 3.2 acres of floodway. Figure 4 shows the location of floodplains relative to the preliminary impact area. Floodplain impacts are minor as the roadway improvements would be completed farther from the Cedar River. Coordination with Iowa DNR and the USACE occurred as part of the early coordination process. No comments were received from either agency regarding floodplains. As design advances, efforts will be made to reduce the impacts on floodplains. In addition, an Iowa DNR Flood Plain Development Permit and Section 404 Permit would be required and applied for during final design.

### **5.3.3 Farmlands**

A Federal project, program or other activity that requires acquisition of right-of-way must comply with the provisions of the Farmland Protection Policy Act (FPPA). The purpose

of the FPPA Section 5 is to “minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland” (7 USC 4201(b)).

The FPPA governs impacts on farmland only. The FPPA defines farmland as prime farmland, unique farmland, or farmland that is of state or local importance. Land that is already in or committed to urban development or water storage does not qualify as farmland and is therefore not subject to the FPPA.

The Study Area, with the exception of the U.S. 218 corridor, is primarily agricultural land (mainly cropland with corn and soybeans) and hay/pastureland (NLCD, 2011). There are approximately 515 acres of farmland (including prime farmland and farmland of statewide importance) within the Study Area.

### ***No Build Alternative***

Under the No Build Alternative, no impacts on farmland or farm facilities would occur.

### ***Preferred Alternative***

The USDA NRCS Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106) form was completed for the generalized corridor to assess the effects of this conversion on farming and farm-related services in the area. This assessment considers the effects that the conversion of farmland as a result of a project would have on existing and future land use, the amount of existing farmable land in the county, the creation of economically non-farmable parcels, impacts on other on-farm investments, and effects on local farm services. Sites receiving a score of less than 160 points need not be given further consideration for protection. The NRCS determined that there were approximately 78.3 acres of prime farmland and 14.6 acres of farmland of statewide importance within the 94 acres in the Preferred Alternative. The project received a score of 147 out of the possible 260 points (Appendix C). Based on this score, the project does not warrant an in-depth site review and is cleared from significant concerns in conjunction with the Farmland Protection Policy Act.

The Preferred Alternative would not create any areas of non-farmable land. Changes in access to property would occur, but access to all of the parcels would be maintained from public roads.

## 5.4 Physical Impacts

This section characterizes physical resources in the Study Area and addresses potential impacts of the No Build Alternative and the Preferred Alternative. The resources discussed are noise, contaminated and regulated materials sites, and utilities.

### 5.4.1 Noise

The proposed alignment evaluated in the noise study includes a diamond interchange at 260<sup>th</sup> Street. Due to the proposed interchange and the horizontal alignment shift, the proposed planning improvement is considered a Type I highway project and requires a noise analysis. Type I projects also require consideration of noise abatement measures when a determination of noise impact has been made.

Noise-sensitive areas in the project corridor include scattered rural residences and a rural subdivision (the Huber Subdivision) located on the east side of U.S. 218 between Janesville and 260<sup>th</sup> Street (Figure 5).

#### **Noise Abatement Criteria**

The FHWA has developed Noise Abatement Criteria (NAC) and procedures to be used in the planning and design of highways. These criteria and procedures are set forth in 23 CFR 772. A traffic noise study was completed for the proposed improvements in November 2013. The study was conducted in accordance with Iowa DOT's traffic noise policy and the requirements set forth in the FHWA Noise Standard at 23 Code of Federal Regulations (CFR) Part 772. A complete copy of the noise study report is available through Iowa DOT.

In analyzing traffic noise levels, emphasis was given to the two main noise criteria for a traffic noise impact as set forth in 23 CFR 772. A comparison will be made between the predicted traffic noise levels and the noise abatement criteria (NAC) to determine if a traffic noise impact exists due to the noise levels approaching or exceeding the criteria. Also, a comparison will be made between existing noise levels and future predicted traffic noise levels to determine if a noise impact occurs due to a substantial increase in noise. The Iowa DOT generally considers that an impact occurs and abatement measures will be considered for the impacts if:

- 1) The predicted design year noise levels approach or exceed the noise abatement criteria (NAC). Iowa DOT has established that a noise level of 1 decibel less than the NAC in the FHWA Noise Standards constitutes "approaching" the NAC; e.g., 66 dBA for residences.
- 2) Predicted future noise levels are 10 dBA or more above existing levels. This 10 dBA predicted increase would be considered a "substantial increase" in the predicted noise level.

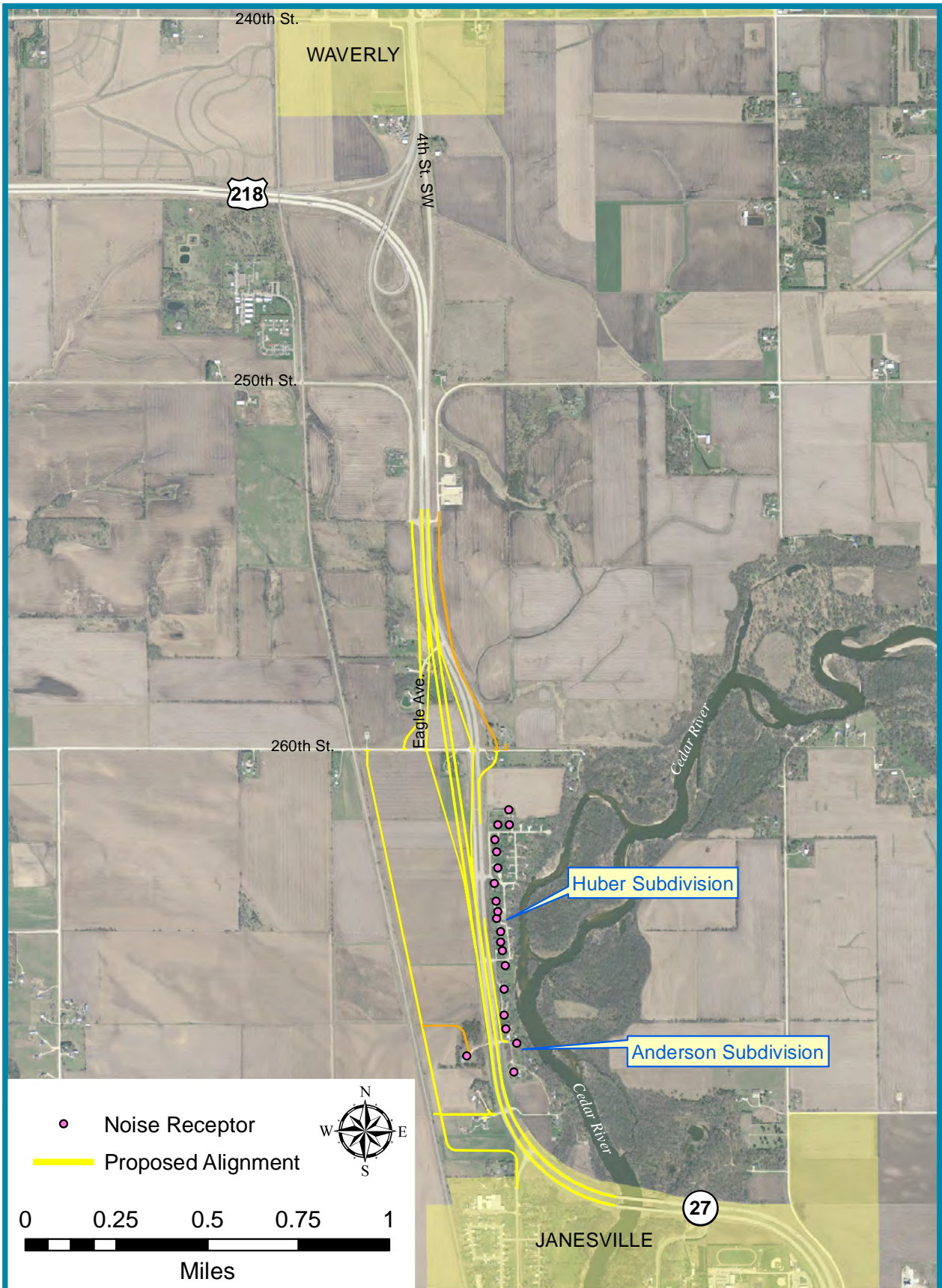


Figure 5  
 Noise Receptor Locations  
 US 218, Bremer County, Iowa  
 Environmental Assessment



Applicable noise abatement criteria are presented in Table 5-2.

**TABLE 5-2  
NOISE ABATEMENT CRITERIA**

| Hourly A-Weighted Sound Level – Decibels (dBA) |                           |          |                     |                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------|---------------------------|----------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Activity Category                              | Noise Abatement Criterion |          | Evaluation Location | Description of Activity Category                                                                                                                                                                                                                                                                                                                                                                   |
|                                                | FHWA                      | Iowa DOT |                     |                                                                                                                                                                                                                                                                                                                                                                                                    |
| A                                              | 57                        | 56       | Exterior            | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.                                                                                                                                                                        |
| B                                              | 67                        | 66       | Exterior            | Residential                                                                                                                                                                                                                                                                                                                                                                                        |
| C                                              | 67                        | 66       | Exterior            | Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. |
| D                                              | 52                        | 51       | Interior            | Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.                                                                                                                                                                 |
| E                                              | 72                        | 71       | Exterior            | Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.                                                                                                                                                                                                                                                                           |
| F                                              | --                        | --       | --                  | Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.                                                                                                                                                      |
| G                                              | --                        | --       | --                  | Undeveloped lands that are not permitted.                                                                                                                                                                                                                                                                                                                                                          |

### **Noise Prediction Method**

Traffic noise levels associated with two different scenarios were predicted for this noise study for the alternative under detailed study:

- The Existing Condition Scenario assumed current (2010) traffic volumes, vehicle mix (broken down by autos, heavy trucks and motorcycles) and roadway characteristics.
- The 2038 Build Condition Scenario assumed 2038 design year traffic volumes with the project constructed as per the alternative under detailed study illustrated in this report.

Traffic noise levels discussed in this document represent “peak hour” noise levels and were predicted in Leq(h) (hourly Leq) dBA.

The FHWA Highway Traffic Noise Prediction Model (FHWA Model) was the method used in this report to predict Leq dBA noise levels. The procedures included in the FHWA Model permit an analysis of variations in traffic noise in terms of traffic parameters, roadway and receptor characteristics. These parameters are then identified for a particular traffic situation and transformed into noise level estimates through the use of this prediction method. Noise level predictions were computed using the FHWA Traffic Noise Model (TNM), Version 2.5.

### **Noise Impact Analysis**

Noise levels were predicted using TNM for 2010 existing conditions and 2038 no-build and build conditions for 20 representative receptors. Table 5-3 lists the predicted noise levels obtained from the analysis. Two additional residential properties impacted by the project are total displacements, 1406 - 260<sup>th</sup> Street and 2589 Eagle Avenue. Noise levels were not estimated for these sites.

**TABLE 5-3  
PREDICTED NOISE LEVELS**

| Receptor Address      | Existing (2010) Noise Level | Predicted No-Build (2038) Noise Level | Difference Between Existing and No-Build | Build Condition Design Year (2038) Noise Level | Difference Between Existing and Build Condition Noise Levels |
|-----------------------|-----------------------------|---------------------------------------|------------------------------------------|------------------------------------------------|--------------------------------------------------------------|
| 2692 Easton Avenue    | 58.9                        | 60.8                                  | 1.9                                      | 61.0                                           | 2.1                                                          |
| 2683 Edgebrook Drive  | 65.5                        | 67.6                                  | 2.1                                      | 68.7                                           | 3.2                                                          |
| 2673 Edgebrook Drive  | 61.7                        | 63.8                                  | 2.1                                      | 62.9                                           | 1.2                                                          |
| 2671 Edgebrook Drive  | 64.6                        | 66.8                                  | 2.2                                      | 65.3                                           | 0.7                                                          |
| 2669 Easton Avenue    | 65.3                        | 67.5                                  | 2.2                                      | 65.4                                           | 0.1                                                          |
| 2667 Easton Avenue    | 65.5                        | 67.7                                  | 2.2                                      | 65.1                                           | -0.4                                                         |
| 100 Cedar Drive       | 63.7                        | 65.8                                  | 2.1                                      | 64.3                                           | 0.6                                                          |
| 101 Cedar Drive       | 65.2                        | 67.3                                  | 2.1                                      | 65.5                                           | 0.3                                                          |
| 103 Cedar Drive       | 66.0                        | 68.1                                  | 2.1                                      | 66.6                                           | 0.6                                                          |
| 105 Cedar Drive       | 65.8                        | 67.9                                  | 2.1                                      | 66.8                                           | 1.0                                                          |
| 107 Cedar Drive       | 66.6                        | 68.7                                  | 2.1                                      | 67.5                                           | 0.9                                                          |
| 109 Cedar Drive       | 66.2                        | 68.3                                  | 2.1                                      | 67.4                                           | 1.2                                                          |
| 111 Cedar Drive       | 67.9                        | 70.1                                  | 2.2                                      | 68.1                                           | 0.2                                                          |
| 113 Island View Drive | 66.6                        | 68.7                                  | 2.1                                      | 64.9                                           | -1.7                                                         |
| 206 Huber Road        | 64.3                        | 66.4                                  | 2.1                                      | 62.8                                           | -1.5                                                         |
| 210 Huber Road        | 65.5                        | 67.6                                  | 2.1                                      | 62.6                                           | -2.9                                                         |
| 200 Sunrise Terrace   | 65.6                        | 67.7                                  | 2.1                                      | 62.3                                           | -3.3                                                         |
| 300 Huber Road        | 63.1                        | 65.2                                  | 2.1                                      | 59.7                                           | -3.4                                                         |
| 203 Sunrise Terrace   | 58.8                        | 60.8                                  | 2.0                                      | 57.2                                           | -1.6                                                         |
| 302 Huber Road        | 59.3                        | 61.3                                  | 2.0                                      | 58.1                                           | -1.2                                                         |

- Notes:
1. All Noise Levels Given in  $Leq(h)$  (dBA).
  2. Activity Category is B With a Noise Abatement Criterion Minus 1 of 66  $Leq(h)$  (dBA) for All Receptors
  3. Impacted Receptors Shown on Dark Background

The noise level results for the 20 noise receptors are summarized below.

### **Existing Conditions**

Five existing condition receptors approach the NAC.

### **No Build Alternative**

Under the No Build Alternative, noise levels in 2038 are predicted to be approximately 2 dBA higher than the existing noise levels. Of the 20 sensitive receivers in the Study Area, 14 residential properties and no businesses would approach or exceed the NAC

under the No Build Alternative. No receptors would experience a substantial increase in highway traffic noise under this alternative.

### ***Preferred Alternative***

Under the Preferred Alternative, noise levels in 2038 are predicted to be between -3.4 dBA lower and 3.2 dBA higher than the existing noise levels. Of the 20 sensitive receivers in the Study Area, six residential properties and no businesses would approach or exceed the NAC under the Preferred Alternative. No receptors would experience a substantial increase in highway traffic noise under this alternative. A decrease in the number of predicted noise impacts was observed when comparing build vs. “no-build.” The decrease in noise impacts can be attributed to a horizontal alignment shift away from noise-sensitive areas.

According to the Iowa DOT Traffic Noise Policy, noise abatement must be considered and evaluated for feasibility and reasonableness if traffic noise impacts are identified. Although the Preferred Alternative does not cause noise impacts (i.e., more impacts were predicted for the no-build scenario), noise barriers were evaluated for the build scenario to determine if noise levels for Huber Subdivision residents could be “feasible” and “reasonably” reduced.

Feasibility refers to the ability to provide abatement in a given location considering the acoustic and engineering limitations of the site. A noise abatement option must achieve a 5 dBA traffic noise reduction at an impacted receptor to be considered feasible. In addition, each of the following three conditions must be met in order for noise abatement to be considered reasonable:

- Noise abatement measures shall not exceed a cost of \$40,000 per benefitted receptor.
- Noise abatement measures must provide a benefit of a minimum of 10 dBA for at least one benefitted receptor.
- Viewpoints of owners and residents considered to benefit from a noise abatement option that meets the above criteria must be obtained. For noise abatement to be considered reasonable, a majority of responses must be in favor.

Two independent noise barriers were modeled in TNM attempting to reduce noise levels at impacted receptors: an east wall scenario which would follow the higher natural berm adjacent to the Huber Subdivision residents, approximately ¼ mile long; and a west wall scenario which would be located approximately 25 feet from the proposed edge of pavement, approximately 1 mile long. The noise barrier analysis presented in Table 5-4 shows that each of the proposed barriers was somewhat effective in providing significant noise reduction; i.e., +5 dBA reduction for first row receptors, but second row receptors were not benefitted by either of the proposed barriers.

Iowa DOT's noise reduction design goal of 10 dBA for at least one receptor was not met for either barrier scenario. Moreover, the cost of the walls per benefitted receptor exceeded Iowa DOT's cost criteria of \$40,000 per benefitted receptor. As shown in Table 5-4 and based on the noise analysis performed to date, there appear to be no feasible or reasonable solutions available to mitigate the noise impacts at the locations identified. Therefore, noise barriers are not recommended for any of the receivers.

**TABLE 5-4  
SUMMARY OF NOISE BARRIER ANALYSIS**

| Barrier Wall Modeled | Noise Reduction dBA | Barrier Length (ft) | Barrier Height (ft) | Total Cost  | Number of Impacted Receptors | Number of Benefitted Receptors | Cost of Abatement per Benefitted Receptor | Feasible/ Reasonable? |
|----------------------|---------------------|---------------------|---------------------|-------------|------------------------------|--------------------------------|-------------------------------------------|-----------------------|
| East Wall            | 0.3-7.3             | 1148                | 14/12/10            | \$354,551   | 7                            | 5                              | \$70,910                                  | No                    |
| West Wall            | 1.0-7.6             | 4976                | 14                  | \$1,741,501 | 7                            | 6                              | \$290,250                                 | No                    |

### ***Construction Noise and Vibration***

During the construction phase of the Project, noise from on-site construction equipment and construction activities would add to the noise environment in the immediate Study Area. The driving and operation of construction equipment would also generate ground vibrations. The vibrations are not projected to be of a sufficient magnitude to affect normal activities of occupants in the Study Area. Increased truck traffic on area roadways would also generate noise associated with the transport of heavy materials and equipment. The noise increase and vibrations from construction activities would be temporary in nature and are expected to occur during normal daytime working hours. Equipment operating at the project site would conform to contractual specifications requiring the contractor to comply with all local noise control rules, regulations and ordinances. Although construction noise impacts would be temporary, the following Best Management Practices would be implemented to minimize such impacts:

- Whenever possible, limit operation of heavy equipment and other noisy procedures to non-sleeping hours.
- Install and maintain effective mufflers on equipment.
- Limit unnecessary idling of equipment.

### **5.4.2 Contaminated and Regulated Materials Sites**

Properties in the Study Area where hazardous materials have been stored may present a future risk if spills or leaks have occurred. Contaminated or potentially contaminated

properties are of concern for transportation projects because of the associated liability of acquiring the property through right-of-way purchase, the potential cleanup costs, and safety concerns related to exposure to contaminated soil, surface water or groundwater.

Sites that may have regulated materials within the area of potential impact were identified through U.S. Environmental Protection Agency (EPA) and Iowa Department of Natural Resources database searches. These sites were then assessed for their potential risk using criteria published in Iowa DOT's Office of Location and Environment Manual (Iowa DOT 2009). Iowa DOT classified sites as high, moderate, low or minimal risk. Sites characterized as minimal risk do not warrant further evaluation or notation.

### ***No Build Alternative***

The No Build Alternative would not involve construction of the project, and regulated materials sites would not be affected. Any contamination at the sites has the potential to migrate. Petroleum contamination could possibly degrade naturally over time.

### ***Preferred Alternative***

The database search identified one site with known or potential recognized environmental conditions within the Study Area. One non-regulated farm/residential 300-gallon gas UST is located at 2716 Easton Avenue, in the southern portion of the Study Area approximately 0.10 mile from U.S. 218. There are no recorded incidents of leaks or other issues associated with this UST (EPA, 2011; Iowa DNR and Public Safety State Fire Marshal Office, 2011). The risk level associated with this UST is minimal.

The property on which the UST is located would not be anticipated to be impacted by the proposed action, although approximately 0.5 acre of the property would be acquired as part of the project. Encountering contamination from this site within the scheduled construction area is also not anticipated. If any contamination above regulatory limits is encountered during construction, work would be stopped and Iowa DOT would be notified. Proper handling and disposal of any contaminated soil (including decontamination of equipment) would be warranted.

### **5.4.3 Utilities**

The potential for the project to affect utilities in the Study Area was considered by identifying utility locations and orientation in relation to the highway. Potential effects were evaluated with respect to major utilities crossed by or located within the right-of-way for the Preferred Alternative.

### ***No Build Alternative***

Under the No Build Alternative, the highway would not be expanded and utility line relocation would not affect utility service.

### **Preferred Alternative**

As detailed design plans are developed for the Preferred Alternative, construction activities would be coordinated with public utilities to avoid potential conflicts and to minimize planned interruptions of service. Utilities identified within the corridor include: CenturyLink, Central Iowa Water, Mediacom, Waverly Light and Power, MidAmerican, and Windstream. When service interruptions are unavoidable, an effort would be made to limit their duration.

## **5.5 CUMULATIVE IMPACTS**

A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7). Cumulative impacts include the direct and indirect impacts of a project, together with impacts from reasonably foreseeable future actions of others. For a project to be reasonably foreseeable, it must have advanced far enough in the planning process that its implementation is likely. The impacts of reasonably foreseeable future actions not associated with a new interchange include the impacts of other Federal, state and private actions. Reasonably foreseeable actions are not speculative, are likely to occur based on reliable sources, and are typically characterized in planning documents.

### **5.5.1 Past Actions**

In 1993, U.S. 218 opened as a 4-lane divided roadway from Cedar Falls in Black Hawk County north to Waverly in Bremer County and beyond. Since its opening, traffic has increased between Cedar Falls and Waverly, a distance of approximately 16 miles. In the intervening years, Waverly has seen some growth. Combined housing starts for 2003 and 2004 were 180, with 2004 setting a record in this area. In 2006, Wal-Mart upgraded their business to a Superstore; and in 2007, Hy-Vee completed a major expansion of their grocery store.

In order to help improve safety, an interchange was added with County Road C50 at Janesville in 2012. This had previously been an at-grade intersection with U.S. 218 and the site of many crashes.

### **5.5.2 Present Actions**

Some commercial and residential developments are happening in Janesville. Currently under construction is a new bank near the U.S. 218/C50 interchange. Additional housing has developed as well in Sands 1<sup>st</sup> and 2<sup>nd</sup> Additions. A total of 35 houses

have been constructed in Sands 1<sup>st</sup> Addition between 2008 and 2014. In Sands 2<sup>nd</sup> Addition, 2 to 3 houses will be complete in 2014, out of a total of 10 available lots.

### **5.5.3 Future Actions**

The Iowa DOT has designed an interchange at U.S. 218/Black Hawk County Road C57 (Cedar-Wapsi Road) for construction in FY 2016. This intersection is located approximately 2.5 miles south of Janesville. As part of the improvement, the Mount Vernon Road, Bennington Road and Gresham Road intersections would be permanently closed at U.S. 218.

As part of this project, Maple Street would be closed which is an important access to Janesville. This change in access creates concerns for emergency responders. Therefore, Iowa DOT has offered the services of a professional facilitator to work towards solutions with emergency responder departments in Janesville, Denver, Waverly, and Cedar Falls areas.

Housing growth in both Waverly and Janesville would be expected to continue. In Janesville, the remainder of Sands 2<sup>nd</sup> Addition will be developed; while in Waverly, there are currently at least 15 vacant residential lots in two different subdivisions that will also be developed in years to come.

### **5.5.4 Summary of Cumulative Impacts**

Cumulative impacts to resources in the project study area may result from residential, and roadway development, as well as conversion of agricultural land to transportation uses. However, it is uncertain how much actual future development would be indirectly attributed to construction of the Preferred Alternative. Based on the Eleven Steps in Cumulative Analysis (CEQ, Considering Cumulative Effects Under the National Environmental Policy Act, January 1997), it was determined that cumulative impacts associated with the present and future actions and the Preferred Alternative would be minor.

Resource areas potentially experiencing cumulative impacts include Land Use, Community Cohesion, Right-of-Way, Construction and Emergency Use, and Farmlands. Land Use, Right-of-Way and Farmlands would be affected by the conversion of agricultural lands to roads, housing and some commercial purposes. These impacts would be minor and associated with the loss of farmlands or personal property.

The Proposed Action could result in minor impacts to Community Cohesion and Construction and Emergency Use resources associated with continued traffic impediments along this section of U.S. 218 associated with construction-related lane closures from two back-to-back projects. These impacts would be temporary. Most likely there would be a period of time between the projects where no construction



impediments are in-place, allowing traffic to flow freely. This would reduce any potential cumulative impacts associated with these two projects.

The proposed interchange at U.S. 218/Black Hawk County Road C57, in addition to the road closures and new interchange associated with the Proposed Action described in this EA, will fill in a gap between two full access-controlled sections of U.S. 218: between Waterloo/Cedar Falls and Janesville on the south, and the Waverly bypass on the north. These combined projects, therefore, change the nature of the road and the community and emergency access to this section of the highway. Such impacts to Community Cohesion and Construction and Emergency Use resources are minor and are designed to improve safety and traffic flow. Therefore, these impacts would ultimately be beneficial.

After completion of the present actions, proposed action and future actions, Community Cohesion and Construction and Emergency Use resources would experience beneficial cumulative impacts associated with safer roadways and potential reduced travel times once construction of the proposed action is complete.

The overall cumulative impacts of the U.S. 218 modifications are not considered to be collectively significant. No projects would impede the ability of traffic and emergency services to utilize the U.S. 218 corridor to travel between Waterloo/Cedar Falls and Waverly, Iowa.

## **5.6 Streamlined Resource Summary**

Resources not discussed in the body of the EA are located in the Streamlined Resource Summary, Appendix A. The summary includes information about the resources, the method used to evaluate them, and when the evaluation was completed. Table 5-5 summarizes the Preferred Alternative's impacts to resources discussed in the sections above.

**TABLE 5-5  
SUMMARY OF IMPACTS**

| Resource                                     | No Build Alternative | Preferred Alternative                  |
|----------------------------------------------|----------------------|----------------------------------------|
| Land Use                                     | No Impact            | Compatible with Existing Plans         |
| Right-of-Way (Acres)                         | 0                    | 224                                    |
| Relocation Potential                         | 0                    | 7                                      |
| - Homes                                      | 0                    | 0                                      |
| - Businesses                                 |                      |                                        |
| Construction and Emergency Routes            | No Impact            | Coordination Required to ensure access |
| Historical Sites or Districts                | 0                    | 0                                      |
| Archaeological Sites                         | 0                    | 0                                      |
| Open Water (Acres)                           | 0                    | 1.2 <sup>1</sup>                       |
| Wetland Impacts (Acres)                      | 0                    | 0.67                                   |
| Floodplains (Acres)                          | 0                    | 14                                     |
| Farmland Impacts (Acres)                     | 0                    | 94                                     |
| Noise Impacts (Number of Receptors Impacted) | 0                    | 6                                      |
| Contaminated and Regulated Materials Sites   | 0                    | 1 (0.5 Acre)                           |
| Utilities                                    | No Impact            | Coordination Required <sup>2</sup>     |

<sup>1</sup> Not a jurisdictional wetland under Section 404 of the Clean Water Act.

<sup>2</sup> Utilities Included: CenturyLink, Central Iowa Water, Mediacom, Waverly Light and Power, MidAmerican, and Windstream.

## **6.0 DISPOSITION**

This environmental assessment (EA) concludes that the proposed project is necessary for safe and efficient travel within the project corridor and that the proposed project meets the purpose and need. The project would have no significant adverse social, economic or environmental impacts of a level that would warrant an environmental impact statement. Alternative selection will occur following completion of the public review period and public hearing.

This EA is being distributed to the agencies and organizations listed. Individuals receiving this EA are not listed for privacy reasons.

### **Federal Agencies**

Federal Railroad Administration  
Federal Emergency Management Agency  
U.S. Army Corps of Engineers – Rock Island District (Regulatory)  
U.S. Department of Agriculture – Natural Resources Conservation Service  
U.S. Department of the Interior – Office of Environmental Policy and Compliance  
U.S. Environmental Protection Agency – Region 7, National Environmental Policy Act Team  
U.S. Fish & Wildlife Service – Rock Island Field Office

### **State Agencies**

Iowa Department of Agriculture and Land Stewardship  
Iowa Department of Natural Resources – State Office and Field Office #1 in Manchester  
Iowa Soil and Water Conservation  
State Historical Society of Iowa

### **Local/Regional Units of Government**

Iowa Northland Regional Council of Governments (INRCOG)  
Bremer County Board of Supervisors  
Bremer County Conservation Board  
Bremer County Engineer  
Bremer County Historical Society  
City of Janesville – Mayor, City Council  
City of Janesville – City Clerk  
City of Waverly - Mayor, City Council  
City of Waverly - City Clerk  
Waverly City Engineer

**Locations Where This Document Is Available for Public Review:**

Janesville Public Library  
227 Main Street  
Janesville, Iowa 50647

Waverly Public Library  
1500 West Bremer Avenue  
Waverly, Iowa 50677

Federal Highway Administration  
105 - 6<sup>th</sup> Street  
Ames, Iowa 50010

Iowa Department of Transportation  
800 Lincoln Way  
Ames, Iowa 50010

Iowa Department of Transportation – District 2  
1420 Fourth Street SE  
Mason City, Iowa 50401

Online at Iowa DOT: <http://www.iowadot.gov/ole/OLESite/nepadocuments.aspx>

**Potential Permits Required for the Project:**

- Department of Army Permit From U.S. Army Corps of Engineers, Rock Island District (Section 404 Wetland Permit)
- Water Quality Certification From Iowa DNR (Section 401 Water Quality Certification)
- Iowa DNR National Pollutant Discharge Elimination System General Permit No. 2 for Storm Water Discharge Associated with Construction Activities (NPDES Storm Water Permit)

Unless significant impacts are identified as a result of the public review or at the public hearing, a Finding of No Significant Impact (FONSI) will be prepared for the proposed action as a basis for federal-aid corridor location approval.

## 7.0 COMMENTS AND COORDINATION

### 7.1 Agency and Tribal Coordination

Appropriate federal, state and local agencies were contacted on May 28, 2009, as part of early coordination for their comments regarding the project. Comment letters received are shown in Appendix B. The agencies contacted are listed below.

U.S. Environmental Protection Agency – NEPA Team  
U.S. Department of Interior – Office of Environmental Policy & Compliance  
**U.S. Army Corps of Engineers – Rock Island District**  
U.S. Fish and Wildlife Service  
**U.S. Department of Agriculture – Natural Resource Conservation Service**  
Federal Emergency Management Agency  
Federal Railroad Administration  
**Iowa Department of Natural Resources – Environmental Services Division**  
**Iowa Department of Natural Resources – Conservation and Recreation Division**  
Iowa Department of Cultural Affairs – State Historical Society of Iowa  
Iowa Northland Regional Council of Governments (INRCOG)  
Black Hawk County Board of Supervisors  
**Black Hawk County Conservation Board**  
Black Hawk County Engineer  
Bremer County Board of Supervisors  
Bremer County Conservation Board  
Bremer County Engineer  
Cedar Falls City Engineer  
Janesville Mayor  
Janesville City Council  
Waverly City Engineer

*NOTE: Agencies which appear in **bold** provided a response.*

Comments received from agencies include:

**U.S. Army Corps of Engineers** commented that if the project involves filling of wetlands and/or streams, a wetland delineation and Section 404/401 joint application will be required.

**Natural Resources Conservation Service** noted that a Farmland Form AD-1006 should be completed for loss of farmland, if applicable.

**Iowa Department of Natural Resources Conservation and Recreation Division** requested a survey for Blandings Turtle (*Emydoidea blandingii*), a state-threatened species.

**Iowa Department of Natural Resources Environmental Services Division** commented that Waters of the U.S. should not be disturbed. A map showing leaking underground storage tanks was included as well.

**Black Hawk County Conservation** commented on a remnant prairie; however, this is located on another portion of U.S. 218 near County Road C57 and, therefore, not impacted by the current project.

Tribal notification was initiated in July 2006. Response was received from two tribes with interest in this portion of Iowa.

- Otoe-Missouria Tribe of Oklahoma, July 27, 2006
- Sac & Fox Tribe of the Mississippi in Iowa, October 23, 2007

## **7.2 NEPA/404 Merge Coordination**

FHWA and Iowa DOT coordinated with resource agencies using Iowa DOT's concurrence point process. This process incorporates planning, design, agency coordination and public involvement. The purpose of the process is to streamline project decision-making on federal-aid highway projects that may require a Section 404 permit for impacts to wetlands. There are five concurrence points in this process:

- Concurrence Point 1 – Purpose and Need
- Concurrence Point 2 – Alternatives to be Considered
- Concurrence Point 3 – Alternatives to be Carried Forward
- Concurrence Point 4 – Preferred Alternative
- Concurrence Point 5 - Mitigation

Concurrence Points 1 and 2 (CP1 and CP2) were conducted at the same time on December 7, 2011, by webinar/teleconference. Representatives from U.S. EPA, USACOE, USFWS, Iowa DNR, FHWA and Iowa DOT attended the meeting. The purpose and need for the project (CP1) and the alternatives to be analyzed (CP2) were presented. Concurrence on CP1 and CP2 was received from each agency on January 9, 2012.

Concurrence Point 3 (CP3) was held on November 13, 2013, by webinar/teleconference, with Iowa DNR, USACE, U.S. EPA and Iowa DOT in attendance. No representative from USFWS was able to attend this meeting. At the meeting, Alternatives G and H were presented as the alternatives to be carried forward. The agencies were asked if they were agreeable to moving forward to permitting without holding a webinar for CP4. U.S. EPA and USACE were agreeable; Iowa DNR was open to either moving forward or holding a webinar for CP4. It was decided that this project will forego CP4 (Preferred Alternative), and the next time the agencies would

see the project would be at permitting. Concurrence on CP3 was received on December 17, 2013.

## **7.3 Public Involvement**

### **7.3.1 First Public Information Meeting**

A public information meeting was held on November 1, 2011, in Janesville at the Riviera Roose Community Center. The purpose of the meeting was to show members of the public Alternatives A, B, C, D and E, receive comments, and answer questions related to the project. Approximately 192 people attended the open house style meeting. The main comments and concerns that were raised at the meeting included:

- Loss of direct access to U.S. 218 by residences, businesses and agricultural land;
- Frontage roads would create out-of-distance travel;
- Accessibility of emergency services;
- Connectivity of the local road system in relation to the embargoed bridge in Janesville; and
- There were suggestions of adding an interchange at Maple Street, 260<sup>th</sup> Street or 250<sup>th</sup> Street.

### **7.3.2 Second Public Information Meeting**

A second public information meeting was held on August 14, 2013, in Janesville at the Riviera Roose Community Center. This meeting was held to update the public on the project, present newly developed alternatives (Alternative F, a 3-quadrant interchange, and a diamond interchange), and answer questions about the project. Approximately 139 people were in attendance. The main comments received at the meeting included:

- Concerns about Maple Street not having direct access to U.S. 218;
- A few attendees from the Huber Addition felt the roadway creates a lot of noise and would like to see U.S. 218 moved west;
- Several were in favor of an interchange at 260<sup>th</sup> Street;

- There was a lot of concern regarding out-of-distance travel for emergency vehicles, especially if anything ever happens to the single Cedar River Bridge in Janesville; and
- Several commented they would be in favor of an interchange at Maple Street.

## 8.0 REFERENCES

- 1) Environmental Protection Agency (EPA). Facility Registry System (FRS) Facility Detail Report, Robert C. Mowery. Accessed online on July 18, 2011, at:  
  
[http://iaspub.epa.gov/enviro/fii\\_query\\_detail.disp\\_program\\_facility?p\\_registry\\_id=110036191279](http://iaspub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110036191279)
- 2) FEMA. Flood Insurance Rate Map (FIRM) Bremer County, Iowa, and Incorporated Areas, Panel 288 of 375. Map Number 19017C0288D. 2008a.
- 3) FEMA. Flood Insurance Rate Map (FIRM) Bremer County, Iowa, and Incorporated Areas, Panel 289 of 375. Map Number 19017C0289D. 2008b.
- 4) FEMA. Flood Insurance Rate Map (FIRM) Bremer County, Iowa, and Incorporated Areas, Panel 290 of 375. Map Number 19017C0290D. 2008c.
- 5) Iowa Department of Natural Resources (DNR) and Public Safety State Fire Marshal Office. 2011. Storage Tanks. Registration #198916612, Address 2716 Easton Avenue. Accessed online at:  
  
<https://programs.iowadnr.gov/tanks/pages/siteDetail.aspx?siteid=43B+zKAhJv0=> on October 31, 2011.
- 6) Iowa Department of Transportation (DOT). Office of Location and Environment Manual. 2009.
- 7) Iowa DOT. W0 Preliminary Wetlands Review Memorandum (510, Bremer County, NHSX-218-8(124)--3H-09, P0012005). November 3, 2011.
- 8) Iowa DOT. W0 Preliminary Wetlands Review – Field Review Results Memorandum (Bremer County, NHSX-218-8(124)--3H-09, PIN: 06-07-218-010-02, Proj. Dir. No. P0012005). October 11, 2012.
- 9) Iowa DOT. Noise Analysis Summary for the U.S. 218 Corridor Improvements Near Janesville, Iowa. Bremer County, Project No. NHSX-218-8(124)--3H-09. November 2013.



- 10) National Land Cover Database (NLCD). U.S. 218 Land Cover. Accessed online at:  
  
<http://nepassisttool.epa.gov/NEPAssist/entry.aspx> on July 14, 2014.
- 11) National Oceanic and Atmospheric Administration (NOAA). National Weather Service Advanced Hydrologic Prediction Service. Cedar River at Janesville. Accessed online at:  
  
<http://water.weather.gov/ahps2/hydrograph.php?wfo=dmx&gage=JANI4>. Last Updated June, 25, 2014.
- 12) United States Geological Survey (USGS). Waverly Quadrangle, Iowa, 7.5 Minute Series. 2013.
- 13) USGS. The National Map Viewer Spot Elevation Tool. Accessed online at:  
  
<http://viewer.nationalmap.gov/viewer/> on July 14, 2014.

APPENDIX A  
STREAMLINED RESOURCE SUMMARY

**SOCIOECONOMIC IMPACTS SECTION:**

|                                          |                                                             |
|------------------------------------------|-------------------------------------------------------------|
| <b>Land Use</b>                          |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Report                                                      |
| Completed by and Date:                   | Consultant, 6/7/2011                                        |
| <b>Community Cohesion</b>                |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Churches and Schools</b>              |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 2/28/2014                                       |
| <b>Environmental Justice</b>             |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Report                                                      |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Economic</b>                          |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Report                                                      |
| Completed by and Date:                   | Consultant, 5/27/2011                                       |
| <b>Joint Development</b>                 |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Other                                                       |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Parklands and Recreational Areas</b>  |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Bicycle and Pedestrian Facilities</b> |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Right-of-Way</b>                      |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Other                                                       |
| Completed by and Date:                   | Consultant, 2/28/2014                                       |
| <b>Relocation Potential</b>              |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | IA DOT NEPA Manager, 5/26/2011                              |

**SOCIOECONOMIC IMPACTS SECTION Continued:**

| <b>Construction and Emergency Routes</b> |                                                             |
|------------------------------------------|-------------------------------------------------------------|
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Other                                                       |
| Completed by and Date:                   | Consultant, 2/13/2014                                       |
| <b>Transportation</b>                    |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Other                                                       |
| Completed by and Date:                   | Consultant, 2/28/2014                                       |

**CULTURAL IMPACTS SECTION:**

| <b>Historic Sites or Districts</b> |                                                             |
|------------------------------------|-------------------------------------------------------------|
| Evaluation:                        | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:              | Report                                                      |
| Completed by and Date:             | Subconsultant, 3/27/2012                                    |
| <b>Archaeological Sites</b>        |                                                             |
| Evaluation:                        | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:              | Report                                                      |
| Completed by and Date:             | Subconsultant, 3/27/2012                                    |
| <b>Cemeteries</b>                  |                                                             |
| Evaluation:                        | Resource is not in the study area                           |
| Method of Evaluation:              | Field Review/Field Study                                    |
| Completed by and Date:             | Consultant, 6/7/2011                                        |

**NATURAL ENVIRONMENT IMPACTS SECTION:**

|                                          |                                                             |
|------------------------------------------|-------------------------------------------------------------|
| <b>Wetlands</b>                          |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 6/1/2011                                        |
| <b>Surface Waters and Water Quality</b>  |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Other                                                       |
| Completed by and Date:                   | Consultant, 3/27/2012                                       |
| <b>Wild and Scenic Rivers</b>            |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Database                                                    |
| Completed by and Date:                   | Resource Agency, 5/26/2011                                  |
| <b>Floodplains</b>                       |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Report                                                      |
| Completed by and Date:                   | Consultant, 3/27/2012                                       |
| <b>Wildlife and Habitat</b>              |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 3/27/2012                                       |
| <b>Threatened and Endangered Species</b> |                                                             |
| Evaluation:                              | Resource is not in the study area                           |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 6/29/2011                                       |
| <b>Woodlands</b>                         |                                                             |
| Evaluation:                              | Resource is in the study area but will not be impacted      |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 5/11/2011                                       |
| <b>Farmlands</b>                         |                                                             |
| Evaluation:                              | Resource is discussed in Section 5 of the Resource Analysis |
| Method of Evaluation:                    | Field Review/Field Study                                    |
| Completed by and Date:                   | Consultant, 5/26/2011                                       |

**PHYSICAL IMPACTS SECTION:**

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Noise</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is discussed in Section 5 of the Resource Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Method of Evaluation:                             | Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Completed by and Date:                            | IA DOT NEPA Manager, 11/15/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Air Quality</b>                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is in the study area but will not be impacted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Method of Evaluation:                             | Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Completed by and Date:                            | Consultant, 2/27/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>MSATs</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | <p>This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs.</p> <p>Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 percent to 87 percent, from 2000 to 2020, based on regulations now in effect. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.</p> |
| Method of Evaluation:                             | FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents, February 3, 2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Completed by and Date:                            | Consultant, 2/27/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Energy</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is in the study area but will not be impacted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Method of Evaluation:                             | Other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Completed by and Date:                            | Consultant, 3/27/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Contaminated and Regulated Materials Sites</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is discussed in Section 5 of the Resource Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Method of Evaluation:                             | Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Completed by and Date:                            | Consultant, 11/30/2010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Visual</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is discussed in Section 5 of the Resource Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Method of Evaluation:                             | Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Completed by and Date:                            | Consultant, 3/1/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Utilities</b>                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Evaluation:                                       | Resource is discussed in Section 5 of the Resource Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Method of Evaluation:                             | Field Review/Field Study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Completed by and Date:                            | Consultant, 6/16/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## APPENDIX B

### AGENCY COORDINATION LETTERS

- Rock Island Corps of Engineers - 7/1/2009
- Iowa Department of Natural Resources - 6/16/2009
- Iowa Department of Natural Resources - 8/31/2009
- Natural Resources Conservation Service - 6/5/2009
- Black Hawk County Conservation Board - 6/22/2009
- SHPO Concurrence Letter - 10/22/2014
- Iowa Department of Transportation, District Engineer - 12/10/2014



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CLOCK TOWER BUILDING - P.O. BOX 2004  
ROCK ISLAND, ILLINOIS 61204-2004

<http://www.mvr.usace.army.mil>

July 1, 2009

RECEIVED  
JUL 06 2009  
OFFICE OF EDUCATION & EMPLOYMENT

Operations Division

SUBJECT: U.S. 218 EA and CX Black Hawk and Bremer Counties

Ms. DeeAnn Newell  
NEPA Document Manager  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, Iowa 50010

Dear Ms Newell:

Our office received a request for comment on the proposed preparation of a Categorical Exclusion on U.S. 218 from Lone Tree Road to West Marquis Road in Black Hawk County, Iowa.

Should your project involve the filling of wetlands and/or streams, the Iowa DOT will need submit a Joint Application and a wetland delineation for our review. If impacts will be greater than 1/10<sup>th</sup> of an acre, wetland mitigation will be required. In addition to wetland mitigation, we will require stream mitigation for any streams and or creeks that will be impacted.

Should you have any questions, please contact Mr. Albert Frohlich in our Regulatory Branch by letter or telephone at 309/794-5859.

Sincerely,

Donna M. Jones, P.E.  
Chief, Enforcement Section  
Regulatory Branch





# STATE OF IOWA

CHESTER J. CULVER, GOVERNOR  
PATTY JUDGE, LT. GOVERNOR

RECEIVED DEPARTMENT OF NATURAL RESOURCES  
RICHARD A. LEOPOLD, DIRECTOR

JUN 17 2009

OFFICE OF LOCATION & ENVIRONMENT

June 16, 2009

DeeAnn Newell  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, IA 50010

Dear Ms. Newell:

This letter is in response to the May 28th letter concerning the U.S. 218, Black Hawk and Bremer counties, project. After a cursory review by our program staff, we have the following comments. You are welcome to visit our offices and conduct a more thorough review of our records.

### Water Quality

Waters of the United States (includes wetlands) should not be disturbed if a less environmentally damaging alternative exists. Unavoidable adverse impacts should be minimized to the extent practicable. Any remaining adverse impacts should be compensated for through restoration, enhancement, creation and/or preservation activities. We would ask that Best Management Practices be used to control erosion and protect water quality near the project.

### Contaminated Sites

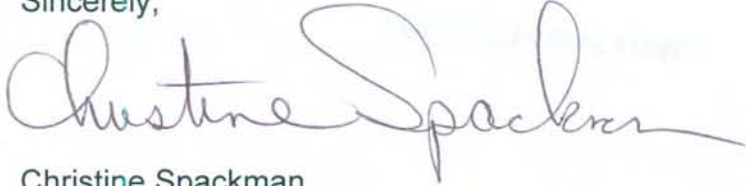
After reviewing the records for the Contaminated Sites Section, there appear to be no contaminated sites located in the project area. Please note that the above comments are based on the information available in the Contaminated Sites database and may not be applicable to other sections/units of the Department. Furthermore, all contaminated sites might not be accounted for through the sections' database or the Departments' records; therefore, the lack of contaminated sites in our records does not necessarily mean that none exist at or near the project area.

### Underground Storage Tanks

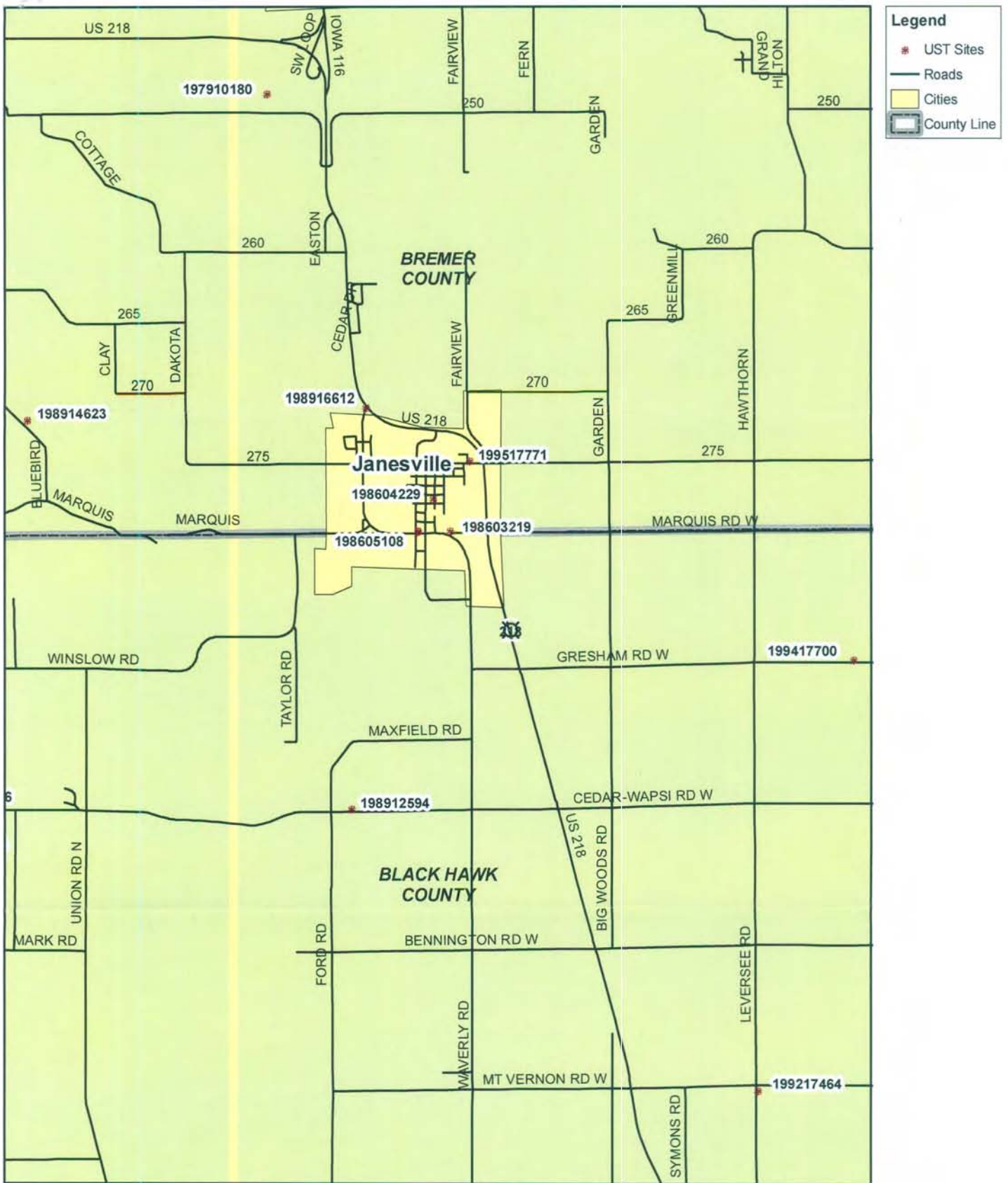
The registered underground storage tank/leaking underground storage tank projects in the vicinity of this project are identified on the attached map.

It is our policy that companies and their consultants conduct their own review for these sites. If you need advice for locating relevant information, please call me at (515)281-7276.

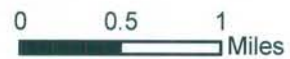
Sincerely,

A handwritten signature in cursive script that reads "Christine Spackman". The signature is written in dark ink and is positioned above the typed name.

Christine Spackman  
Business Assistance Coordinator



Underground Storage Tank Sites  
 Black Hawk and Bremer Counties U.S. 218 Project





# STATE OF IOWA

CHESTER J. CULVER, GOVERNOR  
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
RICHARD A. LEOPOLD, DIRECTOR

August 31, 2009

DeeAnn Newell  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, IA 50010

RECEIVED  
SEP 03 2009  
OFFICE OF LOCATION & ENVIRONMENT

RE: Environmental Review for Natural Resources  
U.S. 218 – Environmental Assessment and Categorical Exclusion  
Bremer County  
Section 14, 15, 22, 23, 26, 35, 36, Township 91N, Range 14W  
Section 1, 12, 13, 24, Township 90N, Range 14W  
Section 19, 30, Township 90N, Range 13W

Dear Ms. Newell:

Thank you for inviting Department comment on the impact of this project. The Department has record of the state-threatened Blanding's Turtle (*Emydoidea blandingii*) from Section 30, Township 90N, Range 13W. If wetland areas in the vicinity of this area will be disturbed, the areas must be surveyed for Blanding's Turtles in advance of construction.

There are also numerous state-listed plant species from the railroad right of way to the west of the proposed project area. Construction should avoid this right of way. Department records and data are not the result of thorough field surveys. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This letter is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, fisheries and wildlife but does not include any comment from the Environmental Services Division of this Department. This letter does not constitute a permit. Other permits may be required from the Department or other state or federal agencies before work begins on this project.

Any construction activity that bares the soil of an area greater than or equal to one acre including clearing, grading or excavation may require a storm water discharge permit from the Department. Construction activities may include the temporary or permanent storage of dredge material. For more information regarding this matter, please contact Ruth Rosdail at (515) 281-6782.

The Department administers regulations that pertain to fugitive dust IAW Iowa Administrative Code 567-23.3(2)"c." All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of property during construction, alteration, repairing or demolishing of buildings, bridges or other vertical structures or haul roads. All questions regarding fugitive dust regulations should be directed to Jim McGraw at (515) 242-5167.

If you have questions about this letter or require further information, please contact me at (515) 281-8967.

Sincerely,

A handwritten signature in cursive script, appearing to read "Inga Foster".

Inga Foster  
Environmental Specialist  
Conservation and Recreation Division

FILE COPY: Inga Foster

Tracking Number: 3608

CC: Chris Schwake, Iowa DNR  
Christine Spackman, Iowa DNR



Natural Resources Conservation Service  
210 Walnut Street, Room 693  
Des Moines, IA 50309-2180

RECEIVED  
JUN 7 10 2009  
OFFICE OF LOCATION & ENVIRONMENT

June 5, 2009

Ms. DeeAnn L. Newell  
NEPA Document Manager  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, IA 50010

Dear Ms. Newell:

Thank you for the opportunity to comment on the U.S. 218 Environmental Assessment and Categorical Exclusion in Black Hawk and Bremer Counties, Iowa. The Natural Resources Conservation Service has no concerns or comments at this time. If applicable, please take into account the loss of prime farmland associated with this undertaking. See enclosed Form AD-1066, "Farmland Conversion Impact Rating".

If we can be of any further assistance, feel free to contact me at 515-323-2223, or by email at [john.myers@ia.usda.gov](mailto:john.myers@ia.usda.gov).

Sincerely,

A handwritten signature in cursive script that reads "John Myers".

John Myers  
State Resource Conservationist

Enclosure

cc: Shaffer Ridgeway, District Conservationist, NRCS, Waterloo, IA

U.S. Department of Agriculture

## FARMLAND CONVERSION IMPACT RATING

|                                                   |                                 |
|---------------------------------------------------|---------------------------------|
| <b>PART I (To be completed by Federal Agency)</b> | Date Of Land Evaluation Request |
| Name Of Project                                   | Federal Agency Involved         |
| Proposed Land Use                                 | County And State                |

|                                                                                                                                                                          |                                                 |                                                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------|
| <b>PART II (To be completed by NRCS)</b>                                                                                                                                 |                                                 | Date Request Received By NRCS                     |                             |
| Does the site contain prime, unique, statewide or local important farmland?<br><i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i> |                                                 | Yes <input type="checkbox"/>                      | No <input type="checkbox"/> |
| Acres Irrigated                                                                                                                                                          | Average Farm Size                               |                                                   |                             |
| Major Crop(s)                                                                                                                                                            | Farmable Land In Govt. Jurisdiction<br>Acres: % | Amount Of Farmland As Defined in FPPA<br>Acres: % |                             |
| Name Of Land Evaluation System Used                                                                                                                                      | Name Of Local Site Assessment System            | Date Land Evaluation Returned By NRCS             |                             |

| <b>PART III (To be completed by Federal Agency)</b> | Alternative Site Rating |        |        |        |
|-----------------------------------------------------|-------------------------|--------|--------|--------|
|                                                     | Site A                  | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly             |                         |        |        |        |
| B. Total Acres To Be Converted Indirectly           |                         |        |        |        |
| C. Total Acres In Site                              | 0.0                     | 0.0    | 0.0    | 0.0    |

|                                                                                    |  |  |  |  |
|------------------------------------------------------------------------------------|--|--|--|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |  |  |  |  |
| A. Total Acres Prime And Unique Farmland                                           |  |  |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |  |  |  |  |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted            |  |  |  |  |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value |  |  |  |  |

|                                                                                                                                            |   |   |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| <b>PART V (To be completed by NRCS) Land Evaluation Criterion</b><br>Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) | 0 | 0 | 0 | 0 |
|--------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|

| <b>PART VI (To be completed by Federal Agency)</b><br>Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b)) | Maximum Points |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------|----------------|---|---|---|---|
| 1. Area In Nonurban Use                                                                                                         |                |   |   |   |   |
| 2. Perimeter In Nonurban Use                                                                                                    |                |   |   |   |   |
| 3. Percent Of Site Being Farmed                                                                                                 |                |   |   |   |   |
| 4. Protection Provided By State And Local Government                                                                            |                |   |   |   |   |
| 5. Distance From Urban Builtup Area                                                                                             |                |   |   |   |   |
| 6. Distance To Urban Support Services                                                                                           |                |   |   |   |   |
| 7. Size Of Present Farm Unit Compared To Average                                                                                |                |   |   |   |   |
| 8. Creation Of Nonfarmable Farmland                                                                                             |                |   |   |   |   |
| 9. Availability Of Farm Support Services                                                                                        |                |   |   |   |   |
| 10. On-Farm Investments                                                                                                         |                |   |   |   |   |
| 11. Effects Of Conversion On Farm Support Services                                                                              |                |   |   |   |   |
| 12. Compatibility With Existing Agricultural Use                                                                                |                |   |   |   |   |
| <b>TOTAL SITE ASSESSMENT POINTS</b>                                                                                             | 160            | 0 | 0 | 0 | 0 |

|                                                                       |     |   |   |   |   |
|-----------------------------------------------------------------------|-----|---|---|---|---|
| <b>PART VII (To be completed by Federal Agency)</b>                   |     |   |   |   |   |
| Relative Value Of Farmland (From Part V)                              | 100 | 0 | 0 | 0 | 0 |
| Total Site Assessment (From Part VI above or a local site assessment) | 160 | 0 | 0 | 0 | 0 |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                          | 260 | 0 | 0 | 0 | 0 |

|                       |                   |                                                                                               |
|-----------------------|-------------------|-----------------------------------------------------------------------------------------------|
| Site Selected:        | Date Of Selection | Was A Local Site Assessment Used?<br>Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Reason For Selection: |                   |                                                                                               |

# BLACK HAWK COUNTY CONSERVATION BOARD

657 Reserve Drive

Cedar Falls, Iowa 50613

319-433-7275

[www.blackhawkcountyparks.com](http://www.blackhawkcountyparks.com)

RECEIVED  
JUN 23 2009  
OFFICE OF LOCATION & ENVIRONMENT

June 22, 2009

DeeAnn Newell  
NEPA Document Manager  
Iowa Department of Transportation  
800 Lincoln Way  
Ames, Iowa 50010

Dear Ms. Newell,

This letter is in response to your request of May 28, 2008 for comments in regards to the potential impacts of modifying the intersection of West Cedar Wapsi Road (C57) and U.S. 218 in Black Hawk County to improve safety in the 218 corridor.

First, the Black Hawk County Conservation Board manages a 12.71 acre triangle shaped wedge of land located in the southeast corner of this intersection, parcel # 9014-13-201-003. This area was dug out to create a lake/wetland complex. The upland and slopes were planted with a prairie. The lake/wetland has never functioned as either a lake or a wetland. The lake/wetland was dug with a uniform bottom. When the ground water comes up the bottom floods and turns the area into a lake. However, when the ground water level drops, the lake dries out and leaves "dead-zone". Thus, this area has had minimum long term value as wildlife habitat.

The Black Hawk County Conservation Board would be willing to work with the DOT and Black Hawk County Engineer to create a wetland complex within a new design. Hopefully, this design would create a series of wetlands with uneven bottoms surrounded by prairie. The BHCCB would be managed this complex as wildlife refuge with no hunting. The upland areas would be planted to prairie and managed for upland wildlife. This management could include harvesting the grass for prairie hay or biofuel.

Second, the 218 corridor is paralleled by a railroad right-of-way on the west side. On June 6, 2009 I walked about a 200 yards to the north on the ROW from C-57. Within this short walk I discovered the following prairie species: spiderwort, porcupine grass and prairie larkspur. I have included photographs of these plants.



These plants indicate to me that this ROW is harboring remnants of a dry prairie complex. If the final design of the 218/C-57 interchange, calls for relocating the railroad ROW, I would recommend that the DOT consider preserving critical segments of prairie habitat within the ROW. This preservation could be accomplished by first doing a botanical survey to identify prairie habitat. The top six inches of these segments could be physically dug up and moved to a protected area. A possible location could be the Turkey Ridge Wildlife Area, a county park within ten miles of the 218/C57 intersection.

In regards to the proposed design for the 218/Marquis Road interchange at Janesville, I would add the same comments about the railroad right-of-way. This ROW could also contain prairie remnants that should be considered before the construction phase of the project. I would also encourage signage that would direct people to the boat ramp on Barrick Road in Janesville. This boat ramp provides access to the Cedar River.

I look forward to working with the Iowa DOT and the Black Hawk County Engineer to preserve the existing biodiversity in this corridor and create wildlife habitat in the final design.

Yours truly,

A handwritten signature in blue ink, appearing to read "Vern Fish".

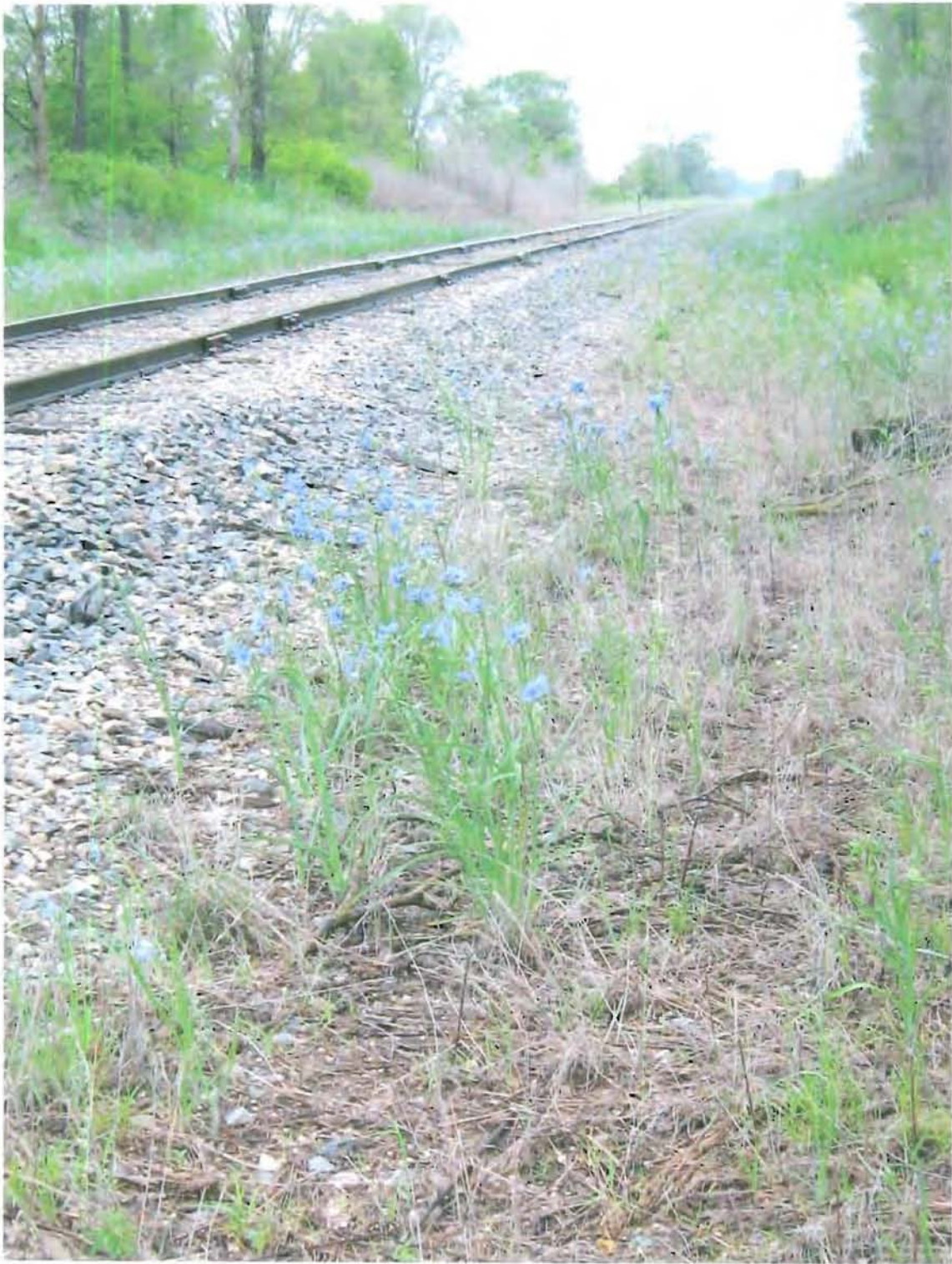
Vern Fish  
Executive Director  
Black Hawk County Conservation Board



Prairie Larkspur Clump



Prairie Larkspur & Spiderwort



Spiderwort Clumps



Porcupine Grass

Office of Location and Environment  
800 Lincoln Way | Ames, Iowa 50010  
Phone: 515.239.1795 | Email: [brennan.dolan@dot.iowa.gov](mailto:brennan.dolan@dot.iowa.gov)

October 22, 2014

Ref. NHSX-218-8(124)--3H-09  
NHSN-218-8(106)--2R-09  
NHSN-218-7(188)--2R-07  
Primary System  
Bremer County  
R&C: 850700076

Mr. Ralph Christian  
Mr. Doug Jones  
State Historic Preservation Office  
600 East Locust  
Des Moines, Iowa 50319

RE: Reconstruction of U.S. 218 from Janesville to Waverly; T91N-R14W Section 35; T91N-R14W Section 22; **No Adverse Effect** with conditions

Dear Ralph and Doug:

Enclosed for your review and comment is information about the preferred alternative recently selected for the above referenced project just north of Janesville in southern Bremer County. You last reviewed information for this project on 08/15/2012 when we sent in an additional archaeological study (Bond and Stanley 2012; BCA 1875) to your office. Since that time this project has progressed through the NEPA process. The Iowa DOT is seeking to control access in this area as traffic volumes have increased significantly and the number of fatalities along this stretch of U.S. 218 is unacceptable.

The location section engineering staff have done a tremendous job with avoidance of historic properties for this project. As you may recall our initial review of cultural resources along this corridor identified a number standing structures and archaeological sites that were recommended for avoidance. The enclosed maps show the preferred alignment and locations of potentially eligible historic structures. The real tight spot in terms of cultural resources is around the intersection of U.S. 218 and 260<sup>th</sup> Street. To the east is the Kellum farmstead, both barns on this property were identified as potentially eligible (09-00555 and 09-00556), to the west is the Fox-Miller farmstead, and both the house (09-00547) and the barn (09-00548) were identified as potentially eligible. Further, Site 13BM158 has also been recorded as a rumored burial within the Fox-Miller farmstead. As you can see on the enclosed maps all of these properties are avoided by the current undertaking.

Due to the proximity of construction activities near these locations the Iowa DOT will require a Special Provision for Vibration Monitoring within the project contract. The following steps will be detailed within the Special Provision to avoid any adverse effects to these nearby properties:

- A preconstruction survey of these structures [09-00547, 09-00548, 09-00555 and 09-00556] will be completed that will document their present condition. The preconstruction survey will also establish a peak particle velocity (PPV) threshold for vibration.
- Sensors (crack and/or seismic) will be installed and tested daily. If 80 percent of the PPV threshold is reached sensors will alert the contractor and in turn the construction engineer.
- If the PPV is reached, a meeting with the contractor and the construction engineer will identify alternative demolition/construction methods and/or equipment to be used to minimize project vibration.
- A post construction survey will be performed.

Also, we anticipate consultation with the Bremer County Historical Society and the Iowa Barn Foundation for this project. Per 36CFR800.3(f) we are requesting your input regarding other potential consulting parties.

With the selection of this alignment, no archaeological sites previously determined potentially eligible will be impacted, therefore, save for 13BM158, no further information about archaeological properties is provided herein.

With the above noted conditions in place we request your concurrence with our determination of **No Adverse Effect**. Also, it is FHWA's intent to make a *de minimis* impact determination based on your (SHPO's) written concurrence in the Section 106 determination of **No Adverse Effect**. As with any Iowa Department of Transportation project, should any new important archaeological, historical, or architectural materials be encountered during construction, project activities shall cease and the Office of Location and Environment shall be contacted immediately. If you have any questions, please feel free to contact me at 515-239-1795 or brennan.dolan@dot.iowa.gov.

Sincerely,

Brennan J. Dolan  
Office of Location and Environment

BJD:sm

Enclosures

cc: Jon Ranney – District 2 Engineer  
Dave Little – Assistant District 2 Engineer  
Krista Rostad – District 3 Planner  
Charles Bernhard – Vibration Engineer  
DeeAnn Newell – NEPA Section Leader

Concur:   
SHPO Historian

Date: Oct 30, 2014

Comments:

Concur:   
SHPO Archaeologist

Date: 11/10/2014

Comments:

**District 2 Office**

1420 4<sup>th</sup> St SE / Mason City, IA 50401

Phone: 641-423-7584 / 800-477-4368

Fax: 641-423-0246

December 10, 2014

The Honorable Sandi Carroll  
Mayor of Janesville  
P.O. Box 146  
Janesville, Iowa 50647-0146

Mayor Carroll,

Thank you and others for meeting with the Iowa Department of Transportation (IDOT) to discuss the US 218 corridor study.

This letter is to update you on the status of the study. The US 218 corridor study started in 2004 with the concept of the corridor being a freeway, in other words, access controlled through interchanges only. The corridor now includes the C50 interchange and will include the C57 interchange, which will begin construction next spring. The north segment concept includes an interchange at 260th and frontage roads for residential and business traffic. This concept was developed to address public input received at public meetings. IDOT has not yet scheduled another public meeting, but plans to in early 2015. Please recall, this project is not currently funded.

The Iowa Department of Transportation (IDOT) has evaluated issues discussed on 9/30/14 and also issues discussed with Director Trombino on 9/18/14. The IDOT recognizes concerns voiced about closing North Maple Street. However, IDOT will be recommending that all side roads and accesses be closed when the project from the Cedar River bridges north to the IA 116 interchange is constructed. This recommendation is based on increasing traffic volumes, operational concerns, driver expectancy, and consideration of other investments made in the US 218 corridor that are complete or underway. These investments will result in this segment of US 218 being an access-controlled corridor from Cedar Falls to Waverly. Our goal with these projects is to provide a safe transportation facility for the traveling public.

To possibly address emergency responder concerns, please recall the facilitation process IDOT has offered for emergency responders in the Janesville, Denver, Waverly, and Cedar Falls areas. IDOT has a facilitator available to begin discussions. We hope this process will work favorably for these emergency services.

The city's 7th Street bridge was also an issue. IDOT understands its age and condition, and the impacts it has on the local street network and traffic operations. IDOT intends to contribute funding to the bridge replacement project when it occurs and will be willing to entertain discussions with the city on what level of contribution would be possible.

Again, thank you for all of the open discussions you and others have had with the IDOT.

Sincerely,



E. Jon Ranney, P.E/ P.L.S.  
District Engineer



APPENDIX C  
FARMLAND CONVERSION IMPACT RATING FORM

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

|                                                   |                                    |                     |
|---------------------------------------------------|------------------------------------|---------------------|
| <b>PART I (To be completed by Federal Agency)</b> | 3. Date of Land Evaluation Request | 4. Sheet 1 of _____ |
|---------------------------------------------------|------------------------------------|---------------------|

|                    |                            |
|--------------------|----------------------------|
| 1. Name of Project | 5. Federal Agency Involved |
|--------------------|----------------------------|

|                    |                     |
|--------------------|---------------------|
| 2. Type of Project | 6. County and State |
|--------------------|---------------------|

|                                          |                                  |                           |
|------------------------------------------|----------------------------------|---------------------------|
| <b>PART II (To be completed by NRCS)</b> | 1. Date Request Received by NRCS | 2. Person Completing Form |
|------------------------------------------|----------------------------------|---------------------------|

|                                                                                                                                                                                                                                 |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/> | 4. Acres Irrigated   Average Farm Size |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|

|                  |                                                               |                                                            |
|------------------|---------------------------------------------------------------|------------------------------------------------------------|
| 5. Major Crop(s) | 6. Farmable Land in Government Jurisdiction<br>Acres: _____ % | 7. Amount of Farmland As Defined in FPPA<br>Acres: _____ % |
|------------------|---------------------------------------------------------------|------------------------------------------------------------|

|                                        |                                         |                                           |
|----------------------------------------|-----------------------------------------|-------------------------------------------|
| 8. Name Of Land Evaluation System Used | 9. Name of Local Site Assessment System | 10. Date Land Evaluation Returned by NRCS |
|----------------------------------------|-----------------------------------------|-------------------------------------------|

|                                                     |                                         |  |  |  |
|-----------------------------------------------------|-----------------------------------------|--|--|--|
| <b>PART III (To be completed by Federal Agency)</b> | <b>Alternative Corridor For Segment</b> |  |  |  |
|-----------------------------------------------------|-----------------------------------------|--|--|--|

|                                                                   | Corridor A | Corridor B | Corridor C | Corridor D |
|-------------------------------------------------------------------|------------|------------|------------|------------|
| A. Total Acres To Be Converted Directly                           |            |            |            |            |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |            |            |            |            |
| C. Total Acres In Corridor                                        |            |            |            |            |

|                                                                      |  |
|----------------------------------------------------------------------|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b> |  |
|----------------------------------------------------------------------|--|

|                                                                                    |  |  |  |  |
|------------------------------------------------------------------------------------|--|--|--|--|
| A. Total Acres Prime And Unique Farmland                                           |  |  |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |  |  |  |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            |  |  |  |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value |  |  |  |  |

|                                                                                                                                                                |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b> |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | Maximum Points |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|--|--|--|
| 1. Area in Nonurban Use                                                                                                          | 15             |  |  |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10             |  |  |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20             |  |  |  |
| 4. Protection Provided By State And Local Government                                                                             | 20             |  |  |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10             |  |  |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25             |  |  |  |
| 7. Availability Of Farm Support Services                                                                                         | 5              |  |  |  |
| 8. On-Farm Investments                                                                                                           | 20             |  |  |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25             |  |  |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10             |  |  |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>     |  |  |  |

|                                                     |  |
|-----------------------------------------------------|--|
| <b>PART VII (To be completed by Federal Agency)</b> |  |
|-----------------------------------------------------|--|

|                                                                           |            |  |  |  |
|---------------------------------------------------------------------------|------------|--|--|--|
| Relative Value Of Farmland (From Part V)                                  | 100        |  |  |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        |  |  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> |  |  |  |

|                       |                                                         |                       |                                                                                                      |
|-----------------------|---------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected: | 2. Total Acres of Farmlands to be Converted by Project: | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br><br>YES <input type="checkbox"/> NO <input type="checkbox"/> |
|-----------------------|---------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------|

|                          |
|--------------------------|
| 5. Reason For Selection: |
|--------------------------|

|                                           |      |
|-------------------------------------------|------|
| Signature of Person Completing this Part: | DATE |
|-------------------------------------------|------|

**NOTE: Complete a form for each segment with more than one Alternate Corridor**

## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)

As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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