U.S. 30 MOUNT VERNON-LISBON BYPASS
FROM 1.2 MILES WEST OF MOUNT VERNON TO 2.0 MILES EAST
OF CEDAR/LINN COUNTY LINE
LINN AND CEDAR COUNTIES, IOWA
NHS-30-7(76)--19-57

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

The 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 requests to fund the preferred alternative.

Michael LaPietra
For the Iowa Division Administrator
Federal Highway Administration

James Rost
For the Office of Location and Environment
Iowa Department of Transportation

9/24/2012
Date of Approval for Public Availability

The following persons may be contacted for additional information:

Mr. Lubin Quinones, P.E.
Iowa Division Administrator
Federal Highway Administration
105 6th Street
Ames, Iowa 50010
Telephone: 515-233-7300

Mr. Jim Rost
Office of Location and Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010
Telephone: 515-239-1225

PREFACE

The Transportation Equity Act of the 21st 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.

Resources Considered

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

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1.0 Description of the Proposed Action

The Iowa Department of Transportation (Iowa DOT) and the Federal Highway Administration (FHWA) have re-initiated planning and preliminary design studies for proposed improvements to U.S. Highway 30 (U.S. 30), including a bypass of the communities of Mount Vernon and Lisbon, located in Linn and Cedar Counties, Iowa. The proposed improvements are consistent with the State of Iowa's initiative to widen U.S. 30 to four lanes across Iowa.

The proposed project would include approximately eight miles of a four-lane roadway with two proposed interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon, and would end approximately 2 miles east of the Linn/Cedar County line as shown in Figure 1.

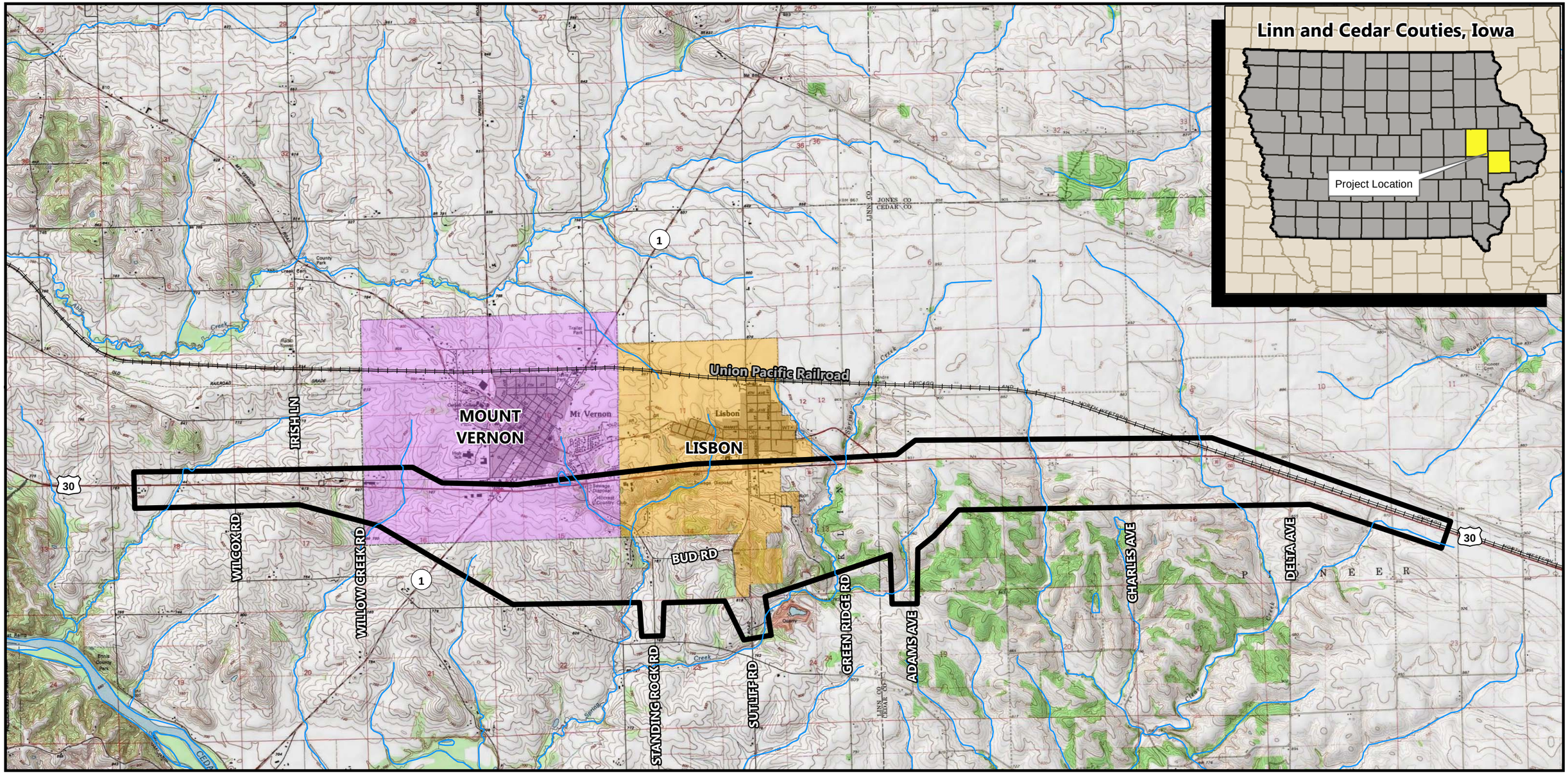
2.0 Project History

The relocation of U.S. 30 around Mount Vernon and Lisbon has been under consideration by the Iowa DOT since the early 1980s. During the initial review a location planning study was conducted and a concept alignment for a bypass was presented to the Iowa Transportation Commission. Subsequently, an Environmental Assessment (EA) was completed on March 7, 1988, and the Commission approved the bypass alignment on December 13, 1988. A Finding of No Significant Impact (FONSI) was signed on October 11, 1989. In accordance with the findings of the FONSI, location approval was obtained for the entire length of the U.S. 30 corridor, including the bypass portion. Construction of the bypass segment was deferred to an unspecified time.

As plans to advance the bypass construction were proceeding, there were some changes to the proposed concept that were not included in the projected actions described in the 1988 EA. Modifications to the alignment, additional interchanges/grade separations, and more restrictive access control issues developed after the 1989 FONSI was signed.

In March of 2000, the Iowa DOT and FHWA concluded that because of the required changes in alignment and design, and given the time that had elapsed since the 1989 FONSI was approved, the National Environmental Policy Act (NEPA) process should be re-initiated. The second EA was signed in July of 2001 but a FONSI was not completed. The project was not constructed due to other funding priorities.

In 2010 the Iowa DOT decided to complete the planning efforts so the project could be a candidate project eligible for the Iowa DOT Five Year Plan. The planning efforts include completion of the NEPA process and preliminary engineering.



Iowa Department of Transportation

Map Published: 8/9/2012

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Miles

- Railroads
- Rivers and Streams
- Mount Vernon City Limits
- Lisbon City Limits
- Study Area

Figure 1
Project Location
US 30 Mount Vernon / Lisbon Bypass

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3.0 Purpose and Need for Action

Purpose of Project:
The purpose of the proposed project is to provide a safe, free-flowing east-west route for the efficient transportation of people, goods, and services while maintaining access to the communities.

Need for Action:
The need for the proposed action includes:

- Improve capacity of U.S. 30
- Improve local access and safety
- Improve roadway conditions

3.1. Improve Capacity of U.S. 30

This section of U.S. 30 is considered a part of the State of Iowa's Commercial and Industrial Network (CIN) of highways. The CIN highways are intended to support the movement of people, goods and services to, from, and through the State of Iowa. The CIN comprises primary highways that connect the State's regional growth areas, carry a significant amount of the State's commercial traffic, and does not include the Interstate system.

The Iowa DOT Commission has set one of its priorities to complete the four-lane roadway between Ames and Clinton, Iowa. The Iowa DOT is in the process of increasing the capacity of U.S. 30 by expanding two lanes to four lanes. Table 1 describes the existing and forecasted traffic volumes for specific sections of U.S. 30 in the project study corridor. Figures 2A and 2B show the locations of these roadways in relationship to the project study area.

Table 1. U.S. 30 Traffic Volumes

Location	Length (miles)	Existing 2009 (ADT[1])	Forecasted 2035 (ADT[1])	Over Capacity 2035 (ADT[1])
From west of Mount Vernon City Limits to Junction of Iowa 1	1.07	11,300	19,200	4,300
From Iowa 1 to Junction of Country Club Drive & 1st Street	0.67	9,900	17,600	2,700
From Country Club Drive & 1st Street to West Limits of Lisbon	0.25	10,000	16,400	1,500
From West Limits of Lisbon to Washington Street	1.03	10,000	16,400	1,500
From Washington Street to East Limits of Lisbon	0.35	8,100	13,700	-1,200

[1] Average Daily Traffic (ADT) Volume
Source: Iowa DOT Traffic Volumes Technical Memorandum, June 8, 2010

In 2009 the average daily traffic for the study area ranged from approximately 8,100 to 11,300 vehicles per day (vpd). In general, the transportation industry estimates that a typical two lane, undivided roadway, with turn lanes, is at capacity when the volume reaches approximately 14,900 vpd. In 2035 the volume of traffic is expected to increase from 13,700 to 19,200 vpd. This would result in four of the five

locations on U.S. 30 being over capacity by approximately 1,500 to 4,300 vpd. The locations over capacity in 2035 include U.S. 30 from west of Mount Vernon city limits to Washington Street in Lisbon. The average existing percent of trucks on U.S. 30 within the project study corridor is 8 percent. In 2035 the volume of trucks is forecasted to increase to 10 percent.

3.2. Improve Local Access & Safety

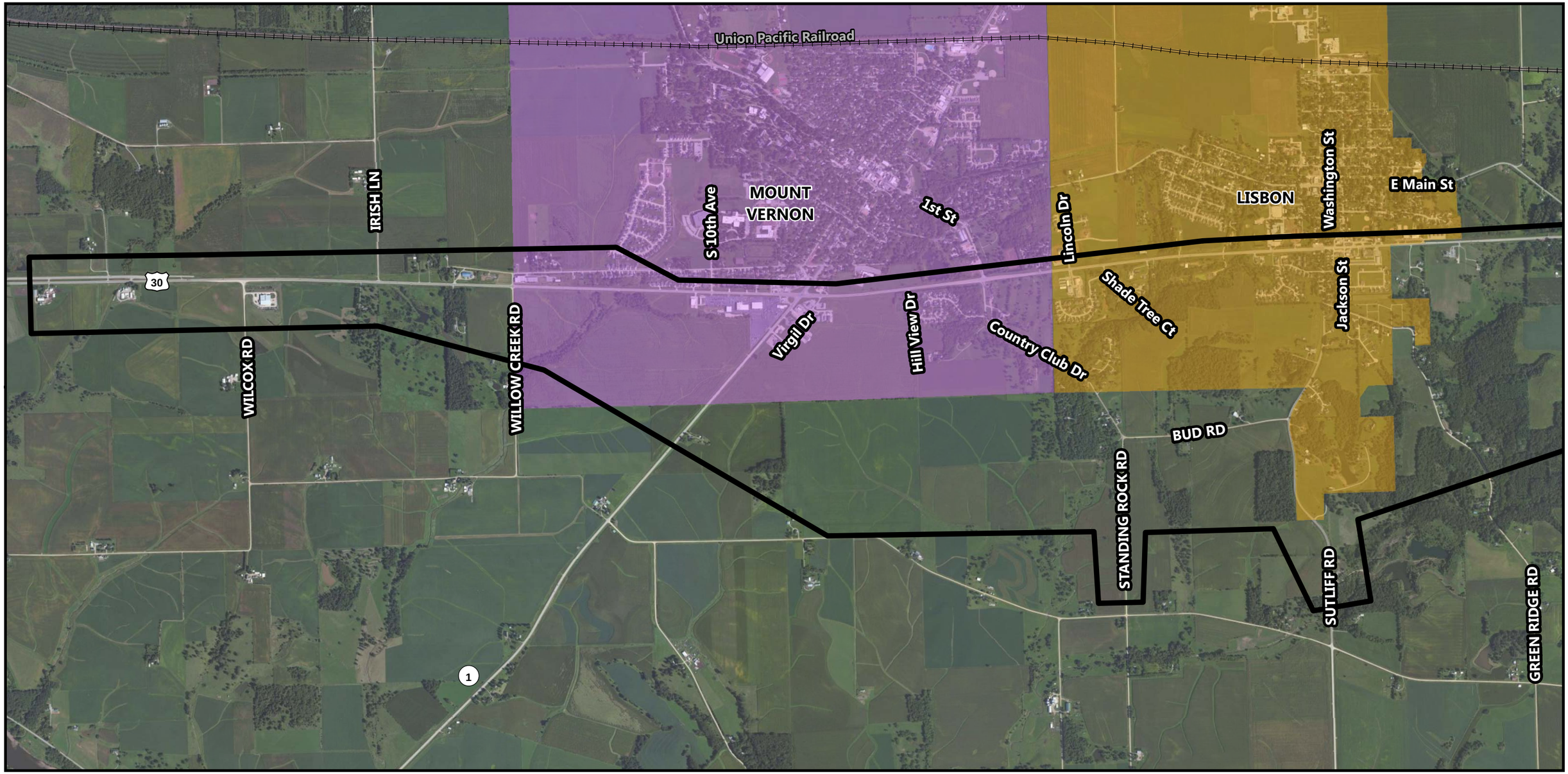
Local Access:
The more driveways or access points that are located along a corridor, the more potential there is for crashes to occur, especially as traffic volumes increase. There are numerous access points along the existing U.S. 30 corridor in both Mount Vernon and Lisbon. The majority of these accesses are from businesses and commercial properties located along existing U.S. 30. These access points, in addition to the intersections with local roads, create potential areas of conflict. Vehicles that are turning off of U.S. 30 to enter a property or to turn onto a local road can cause traffic on U.S. 30 to slow down or back up. Similarly, vehicles turning onto U.S. 30 from an access point must wait for a break in traffic to safely proceed. Some access locations are located too close to existing U.S. 30 intersections with local streets. Finding a break in the traffic in order to turn onto U.S. 30 from these locations can be difficult during high traffic conditions. As a result, some drivers proceed onto U.S. 30 under higher-than-normal risk conditions increasing the potential for accidents to occur.

Safety:
A crash history review was completed for the existing U.S. 30 corridor within in the study area. This included a review of 15 intersections of U.S. 30 from the Wilcox Road intersection to the Charles Avenue intersection. The crash analysis was completed using the Crash Mapping Analysis Tool (CMAT) software from the Iowa DOT. Crash rates were calculated based on the most recent five years of data available, 2005 to 2009. Table 2 describes the crash rates. See Figures 2A and 2B for locations of these intersections.

Table 2. 2005 to 2009 Intersection Crash Rates

Intersection with U.S. 30	Number of Crashes	Crash Rate (Crashes/MEV)	Statewide Average Crash Rate (Crashes/MEV)
Wilcox Road	4	0.21	0.8 [1]
Irish Lane	10	0.31	0.8 [1]
Willow Creek Road	5	0.10	0.8 [1]
10th Avenue South	24	0.60	0.9 [2]
IA 1	46	0.58	1.0 [3]
Virgil Drive	13	0.40	0.9 [2]
Hill View Drive	9	0.50	0.9 [2]
1st Street/Country Club Drive	9	0.33	0.9 [2]
Lincoln Drive	3	0.18	0.8 [1]
Shade Tree Court	3	0.17	0.8 [1]
Washington Street	8	0.33	0.9 [2]
Jackson Street	8	0.13	0.9 [2]
East Main Street	4	0.07	0.8 [1]
Adams Avenue	7	0.24	0.8 [1]
Charles Avenue	5	0.19	0.8 [1]
Total	158		

[1] Rural intersection, Primary with Secondary roadway.
[2] Urban intersection, Primary with City Street roadways.
[3] Urban intersection, Primary with Primary roadways.



Iowa Department of Transportation

Map Published: 9/18/2012

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Miles

- Railroads
- Mount Vernon City Limits
- Lisbon City Limits
- Study Area

Figure 2A
Project Study Area
US 30 Mount Vernon / Lisbon Bypass

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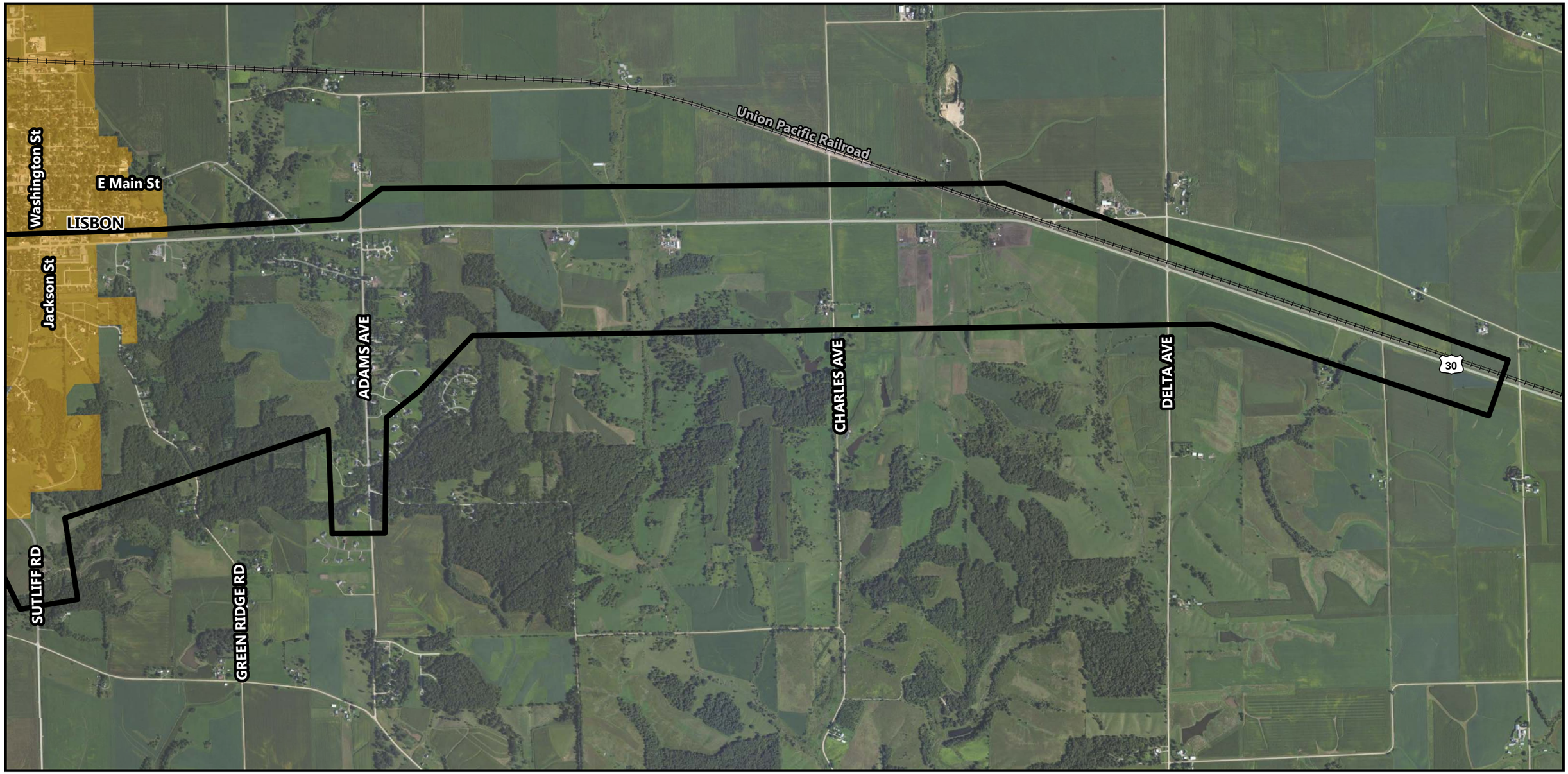

Iowa Department of Transportation

Map Published: 9/18/2012

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Miles

- Railroads
- Mount Vernon City Limits
- Lisbon City Limits
- Study Area

Figure 2B
Project Study Area
US 30 Mount Vernon / Lisbon Bypass

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There were a total of 158 reported crashes along U.S. 30 between 2005 and 2009. The intersection with the most crashes was U.S. 30 and Iowa Highway 1 (IA 1), with 46 reported crashes. The second intersection with the most crashes was U.S. 30 and 10th Avenue South with 24 reported crashes.

Crash rates are given as the number of crashes occurring at an intersection for every million entering vehicles (MEV). None of the intersections are currently above the statewide average crash rate. However, as the volume of traffic increases, crash rates are expected to increase. The forecasted traffic volumes in 2035 for U.S. 30 indicate that more traffic than the two lane roadway can carry. Therefore, the number of crashes experienced on U.S. 30 is expected to increase especially as the volume of traffic reaches and exceeds the capacity of the two lane roadway.

3.3. Improve Roadway Condition

The Iowa DOT uses sufficiency ratings to indicate the type of condition the highway is in. Sufficiency ratings are a numerical index of the characteristics of a section of roadway. The basic ratings are determined based on:

- Structural adequacy – The ability of the road to withstand traffic and climate.
- Safety – The ability of a road section to offer motorists a safe route.
- Service – The ability of the road to accommodate traffic volumes with minimal conflict.

To determine the sufficiency of the roadway based on the roadway classification, geometry, and amount of traffic it is expected to carry, the basic sufficiency ratings are adjusted. The adjustments include tolerability, volume-to-capacity ratio, and continuity.

A rating of 90-100 is considered "excellent", 80-89 is "good", 65-79 is "fair", 50-64 is "tolerable", and 0-49 is "poor". Table 3 describes the sufficiency rating for specific segments of U.S. 30. Figures 2A and 2B show the locations of these roadways.

Table 3. U.S. 30 Sufficiency Ratings

Location	Length (miles)	Basic Rating	Adjusted Rating		
			Tolerability	V/C Ratio	Continuity
From the End of the Four-Lane to West of Mount Vernon City Limits	1.28	49	39	30	23
From West of Mount Vernon City Limits to Junction of Iowa 1	1.07	60	46	36	29
From Junction of Iowa 1 to Junction of Country Club Drive and 1st Street	0.67	62	48	40	35
From Junction of Country Club Drive and 1st Street West City Limits of Lisbon / East City Limits of Mount Vernon	0.29	89	87	84	86
Source – Iowa DOT 2009 Primary Highway Sufficiency Ratings					

The basic sufficiency ratings for U.S. 30 in the project study corridor indicate the roadway ranges from "poor" to "good". The western section of U.S. 30, from the four-lane to west of Mount Vernon's city limits, received the lowest basic and adjusted sufficiency rating overall ranging from 23 to 39 in the "poor" category.

The two middle sections of U.S. 30, from west of Mount Vernon's city limits to the junction of IA 1 and from IA 1 to the junction of Country Club Drive and 1st Street, received similar basic sufficiency ratings

of 60 and 62, respectively, which is considered "tolerable". However, when the basic rating is adjusted both of the middle sections receive adjusted ratings ranging from 35 to 48 in the "poor" category.

The eastern section of U.S. 30, from Country Club Drive and 1st Street to west of Lisbon's city limits, received a basic sufficiency rating of 89 which is considered "good". The adjusted sufficiency ratings range from 84 to 87 also in the "good" category.

4.0 Alternatives

4.1. No Build Alternative

The No-Build Alternative would be the continuation of the highway system as it exists. It would not address the safety needs, increases in traffic volumes, or the outdated geometrics of the existing roadway within the project corridor. This alternative would not satisfy the project's purpose and need requirements. However, it is carried forward to serve as a baseline for comparison with the proposed Build Alternative.

4.2. Alternatives Considered but Dismissed

Through Town Alternative:

The Through Town Alternative would widen the existing two-lane facility to a four-lane facility providing two eastbound and two westbound travel lanes. This alternative would also provide left turn lanes or two-way left turn lanes at higher volume intersections. However, all traffic would still be subjected to the braking and stopping conditions experienced on the existing road because of the high number of access points along the alignment.

The Through Town Alternative would not create the free-flowing traffic conditions and would not solve the safety, overall capacity, and local access issues that the proposed project is intended to address. As a result, the Through Town Alternative does not meet the project purpose and need and was dismissed from further evaluation (Iowa Department of Transportation, 2011).

Northern Alternative:

The Northern Alternative would consist of a four-lane, divided roadway that would bypass Mount Vernon and Lisbon to the north of existing U.S. 30. The Northern Alternative was considered by the Iowa DOT in late 1999 and early 2000. Compared to southern alternatives the Northern Alternative would:

- Be approximately 2.7 miles longer because the majority of development in Mount Vernon and Lisbon is located north of existing U.S. 30.
- Include approximately 98 additional acres of farmland to be taken out of production.
- Include two crossing locations of the Union Pacific mainline railroad tracks.
- Appears to have more diagonal severances of farmland.
- Have odd angled intersections and overpasses/bridges with 13 local roads plus up to four additional bridges for stream crossings.
- Increase the cost due to the additional right of way and expenses of additional bridges.

- Include only one interchange, which would be located at IA 1 causing an increase in the out of distance travel for motorists and access issues for Lisbon residents.

Based on this comparison, the Iowa DOT dismissed the Northern Alternative from further evaluation in early 2000.

Alternatives C and D:

Alternatives C and D both would consist of a four-lane, divided, southern bypass of Mount Vernon and Lisbon. Each of these build alternatives includes two interchanges and multiple bridges or overpasses. On the west end, Alternatives C and D tie into existing U.S. 30 where the four lane roadway ends, approximately 1,500 feet west of Wilcox Road. On the east end, Alternatives C and D would tie into existing U.S. 30 approximately one mile east of Delta Avenue. Alternatives C and D are shown in Figures 3A and 3B. They have the same proposed alignment except for the area between Standing Rock Road and Adams Avenue.

Alternative C's alignment continues eastward after it crosses Standing Rock Road crossing Sutliff Road approximately 300 feet south of the existing "T" intersection of Bud and Sutliff Roads. Alternative D's alignment bends slightly to the north after it crosses Standing Rock Road crossing Sutliff road approximately 800 feet south of the existing "T" intersection of Bud and Sutliff Roads.

Alternative C's alignment bends slightly to the north after crossing Sutliff Road and crosses Green Ridge Road approximately 700 feet south of where Green Ridge Road begins heading southbound. Alternative D's alignment continues eastward further than Alternative C before bending to the north and crosses Green Ridge Road approximately 1,900 feet south of where Green Ridge Road turns southbound. As a result, Alternatives C and D have different shaped diamond style interchanges at Adams Avenue. Alternative C's relocated Adams Avenue interchange has shorter on and off ramps than Alternative D's relocated Adams Avenue interchange.

From existing Adams Avenue to Delta Avenue, Alternative C and D's alignments would relocate U.S. 30 to the south approximately 1,100 feet from existing U.S. 30. Alternatives C and D would tie into existing U.S. 30 approximately one mile east of Delta Avenue. Alternatives C and D differ from the other build alternatives because of this southern realignment of U.S. 30.

Compared to Alternatives A, B, E, and F (shown in Figures 3A and 3B), Alternatives C and D would:

- Increase the overall cost of the project by about 25-32 percent due to the additional 70 to 110 acres of right of way needed and additional length of roadway (approximately three miles).
- Have additional impacts on wildlife habitat, forested land, and wetlands because the majority of these resources are located south of U.S. 30 between Sutliff Road and Delta Avenue.
- Have more out of distance travel for the local population.
- Provide no substantial traffic operations or safety benefit beyond that of Alternatives A, B, E, and F.

Neither of these alternatives received public support at the July 13, 2010 public information meeting nor did they receive support from local and county elected officials. As a result, Alternatives C and D were dismissed from further evaluation (Iowa Department of Transportation, 2010).

Alternative A, B, and F:

Alternatives A, B, and F would consist of a new four-lane highway that would relocate U.S. 30 south around the communities of Mount Vernon and Lisbon. Alternatives A, B, and F are shown in Figures 3A and 3B. Each of these build alternatives includes two interchanges and multiple bridges or overpasses. On the west end, each alternative ties into existing U.S. 30 where the four lane roadway ends, approximately 1,500 feet west of Wilcox Road. From east of Wilcox Road to approximately one mile west of Charles Avenue, east of Lisbon, all three of these build alternatives would provide access to the new highway by interchange only. Access to Mount Vernon would be provided with a grade separated interchange located at existing IA 1. On the east end, each alternative ties into existing U.S. 30 at Charles Avenue. The differences between these three build alternatives are described below.

Alternative A would swing south of existing U.S. 30 approximately 510 feet south of existing Bud Road. Access to Lisbon would be provided with a grade separated interchange near Sutliff Road. Alternative A would relocate Sutliff Road as shown in Figure 3A.

Alternative B would have the same proposed alignment as Alternative A but the placement of the Lisbon interchange is different as shown in Figures 3A and 3B. Access to Lisbon would be provided by a grade separated interchange located between Green Ridge Road and existing Adams Avenue, east of Lisbon. Adams Avenue would be relocated to the west of its existing location. Alternative B would tie back into existing U.S. 30 at Charles Avenue.

Alternative F would have the same proposed alignment as Alternative A from Wilcox Road to the proposed IA 1 interchange as shown in Figures 3A and 3B. Alternative F would then swing further to the south of existing U.S. 30, approximately 1,410 feet south of existing Bud Road. Access to Lisbon would be provided by an interchange located at Sutliff Road. Sutliff Road would be relocated further to the west from its intersection with existing U.S. 30. Alternative F would tie back into existing U.S. 30 alignment at Charles Avenue.

Both Alternatives A and B would impact a former Lisbon landfill site located in the southeast quadrant of the Bud Road and Sutliff Road intersection. Analysis of the landfill indicates that approximately 55,000 cubic yards of material is buried in the landfill and it would cost approximately $4 million to excavate and dispose of the material. Both Alternatives A and B would impact a pond located east of the Lisbon landfill. Draining and excavating the pond would add cost to the project and potential issues with settlement of fill material.

The Iowa DOT determined that the more southern alignment of Alternatives E and F would impact fewer homes and would avoid impacts to the Lisbon landfill and the pond located east of the landfill. Alternative E is shown in Figure 3B with a more detailed view in Figure 4 and is described in Section 4.3. While Alternatives A and B meet the purpose and need for the project, they were dismissed from further evaluation because Alternatives E and F offer the same access, safety, and operation benefits as Alternatives A and B with fewer impacts to the natural and human environment.

Comparing Alternatives E and F, Alternative F would have access off of Sutliff Road that would impact the southwest corner of the pond located east of the Lisbon landfill. Options for constructing the access while maintaining the pond are available but would increase the cost of the project compared to Alternative E. The City of Lisbon notified the Iowa DOT of their support for an interchange at Adams Avenue instead of Sutliff Road. Therefore, in May 2012 Alternative F was dismissed from further consideration.

Alternative AA:

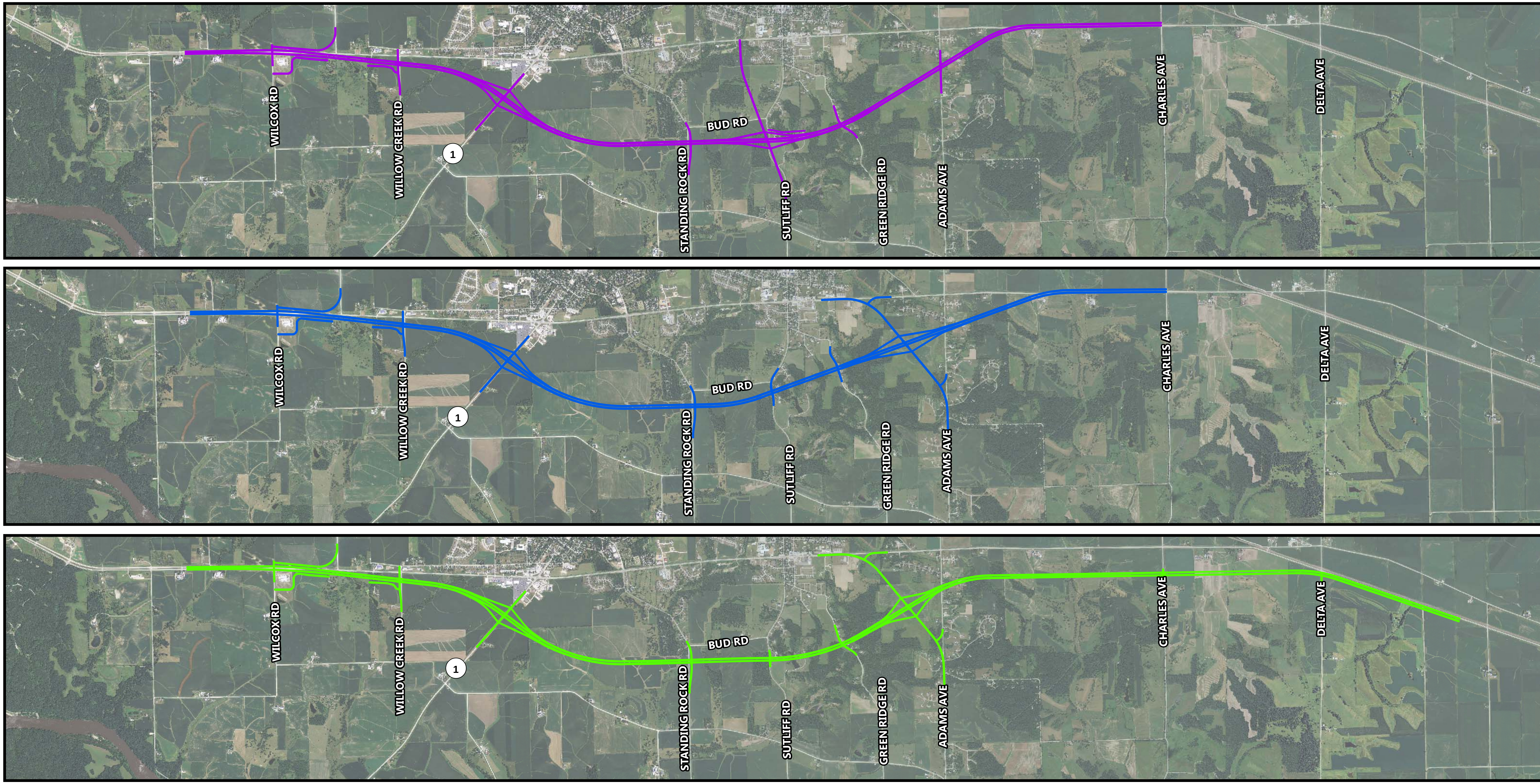
In May 2012 a hybrid alternative was developed called Alternative AA. Alternative AA included Alternative A's more northern alignment with Alternative E's location of the eastern interchange at Adams Avenue. Alternative AA would tie back into existing U.S. 30 at Charles Avenue. A comparison was done between Alternative AA and Alternative E. The difference between these two alternatives is a more northern alignment compared to a more southern alignment since both alternatives include the Adams Avenue interchange. The comparison revealed that the cost for the two alternatives would be similar but Alternative AA would impact approximately one more home than Alternative E and a pond located east of Sutliff Road that would not be impacted by Alternative E. Therefore, Alternative AA was dismissed from further consideration.

4.3. Proposed Alternative

Alternative E:

The proposed alternative is Alternative E which is shown in Figure 4. Alternative E includes two interchanges and multiple bridges or overpasses. On the west end, Alternative E ties into existing U.S. 30 where the four lane roadway ends, approximately 1,500 feet west of Wilcox Road. Alternative E modifies Irish Lane's connection to existing U.S. 30 and includes access roads between Wilcox and Willow Creek Roads. Alternative E swings south of existing U.S. 30 approximately 1,410 feet south of existing Bud Road. Access to Mount Vernon would be provided by an interchange at IA 1. Access to Lisbon would be provided by a grade separated interchange located between Green Ridge Road and existing Adams Avenue, east of Lisbon. Adams Avenue would be relocated to the west of its existing location. Existing Adams Avenue would be closed where the bypass alignment crosses existing Adams Avenue. Alternative E would tie back into the existing U.S. 30 alignment at Charles Avenue.

Alternative E will be referred to as the Proposed Alternative through the remainder of this document.



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Map Published: 9/17/2012

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Miles

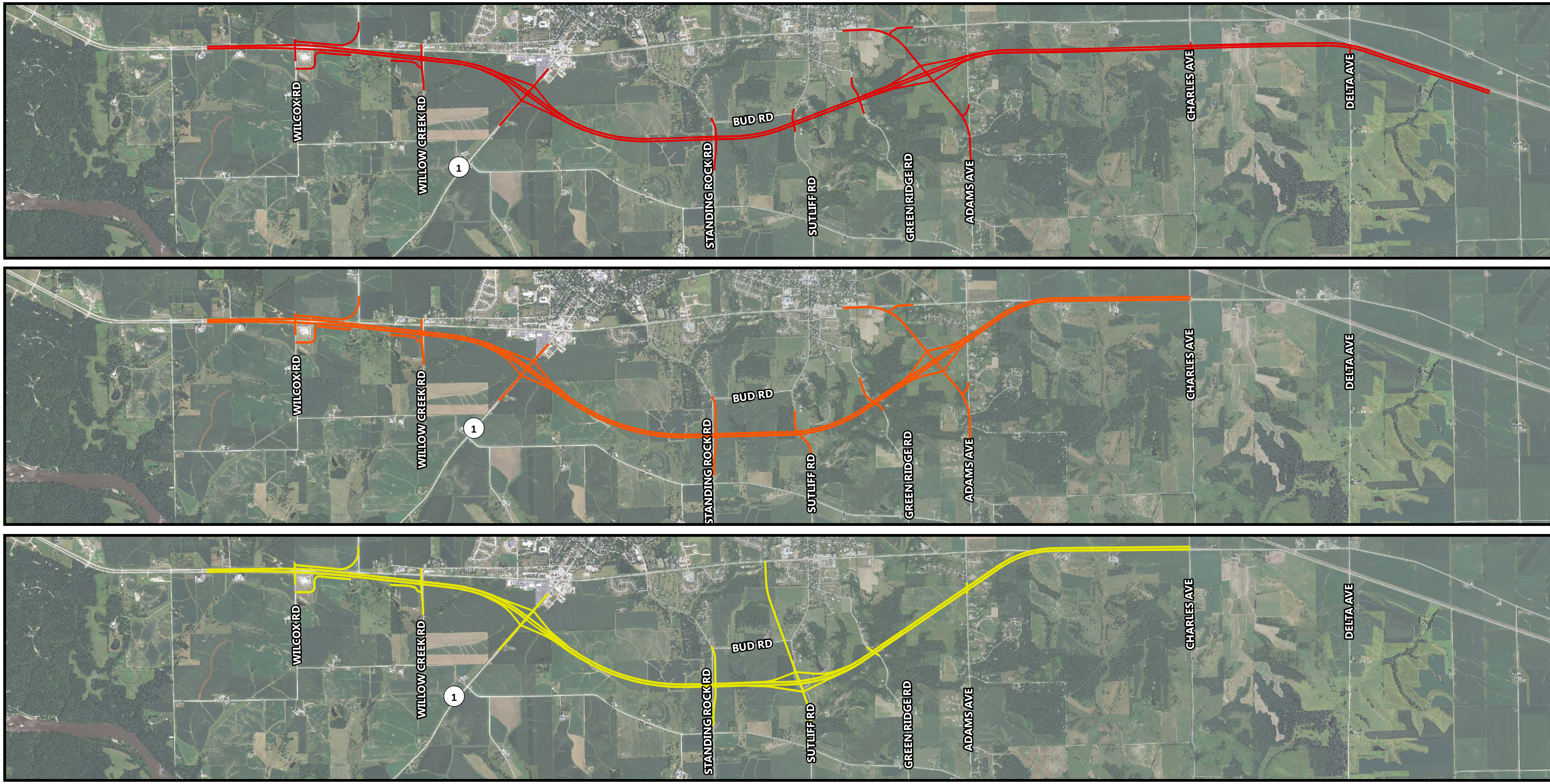
Alternative A

Alternative B

Alternative C

Figure 3A
Considered Alternatives
A, B, & C
US 30 Mount Vernon / Lisbon Bypass

HRGreen



Iowa Department of Transportation

Map Published: 9/17/2012

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Legend	
Red	Alternative D
Orange	Alternative E
Yellow	Alternative F

Figure 3B
Considered Alternatives
D, E, & F

US 30 Mount Vernon / Lisbon Bypass

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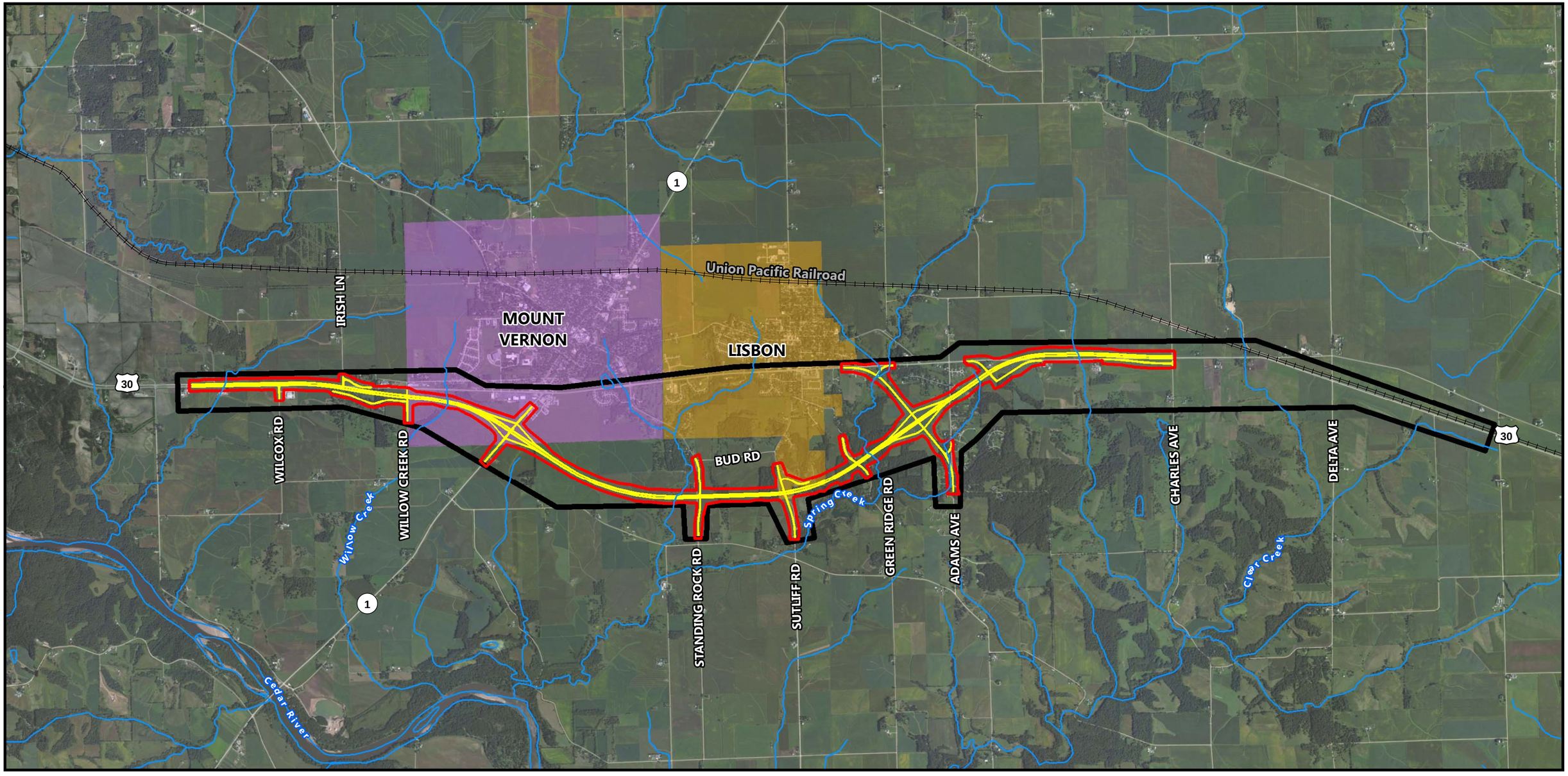

Iowa Department of Transportation

Map Published: 9/17/2012

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Miles

- Railroads
- Rivers and Streams
- Mount Vernon City Limits
- Lisbon City Limits
- Proposed Alternative
- Preliminary Alternative Impact Area
- Study Area

Figure 4
Proposed Alternative
Alternative E

US 30 Mount Vernon / Lisbon Bypass

HRGreen

5.0 Environmental Analysis

This section will describe the existing socioeconomic, cultural, natural and physical environments in the project corridor that will be affected by the Proposed Alternative. The resources with a check in the second column in the Resources Considered table (see Preface), located at the beginning of the document, are discussed below.

5.1. Socioeconomic Impacts

5.1.1. Land Use

The proposed project is a bypass of Mount Vernon and Lisbon and therefore most of the study area is located outside of incorporated Mount Vernon and Lisbon in unincorporated areas of Linn and Cedar Counties. The majority of land use in the project area is rural in character, although a strip of commercial, industrial, and residential land use is present along the existing U.S. 30 alignment.
Approximately two-thirds of the study area is agricultural land including 50 percent cropland followed by pasture and harvestable timber. Remaining land uses include residential, open land, right of way, commercial, civic, recreation, and industrial land uses. See Figure 5 for a map of current land uses within the study area.

While the majority of the project area is dominated by agricultural land uses, the overall matrix of land use is mixed. Low density residential areas are adjacent to cropland, woodland, and pasture areas in the areas immediately south of developed Mount Vernon and Lisbon. Commercial retail and office land uses are located next to high density residential and manufacturing land uses along the existing U.S. 30 corridor.

Mount Vernon, Lisbon, Linn County, and Cedar County provide land use control through their own zoning and subdivision regulations. These jurisdictions have comprehensive plans and other planning documents to address land use and the potential bypass in the study area. A summary of these plans are below:

- *Mount Vernon Community Visioning Final Report and Feasibility Study by Hall and Hall Engineers (2011).* The Mount Vernon plan identifies the corridor preservation zone[1] being considered for the U.S. 30 bypass. The corridor preservation zone allows Iowa DOT to review and comment on any changes to zoning, building permits, or subdivision requests that are made within the zone. The plan identifies the bypass as a barrier, especially for pedestrian connectivity to the south. It also anticipates that jurisdiction of existing U.S. 30 will be transferred to Mount Vernon and Lisbon when the bypass is complete.
- *The Lisbon Comprehensive Plan 2002-2022 by Lisbon Planning & Zoning Commission with the East Central Iowa Council of Governments (2002).* The Lisbon Comprehensive plan identifies the proposed future U.S. 30 bypass as a future arterial on the plan's future transportation plan. The plan recommends planning future street systems including the bypass and shows an interchange south of the intersection of Sutliff Road and Bud Road. The bypass is shown on the plan's future land use plan with commercial and residential areas near the interchange.

[1] The corridor preservation zone requires the cities of Mount Vernon and Lisbon and Linn and Cedar Counties to notify the Iowa DOT in writing of receipt of an application for a building permit for construction valued at $25,000 or more, of the submission of a subdivision plat, or of a proposed zoning change. The notification must take place no less than 30 days prior to the granting the proposed building permit, approving the subdivision plat, or changing the zoning.

- *Linn County Rural Land Use Plan (2000).* The Linn County Rural Land Use Plan does not mention the U.S. 30 bypass specifically, but includes guidelines and design standards for community gateways along high visibility corridors including U.S. 30. These include minimizing the negative visual impact of industrial and warehousing operations, commercial development, and public land uses by adoption of design and performance standards. Design standards address parking, access, orientation of buildings, lighting, signage, intensity, storage, display landscaping, and buffers.
- *The Cedar County, Iowa Land Use Plan 2006 by East Central Intergovernmental Association (2006).* The Cedar County plan has no specific mention of the U.S. 30 bypass or development near highways.

The Proposed Alternative would directly change land use throughout the study area from its current use to roadway right of way. Indirectly, areas adjacent to the roadway right of way have the potential to be developed. Land use planning, zoning, and permitting would need to reflect the new development opportunities provided by the bypass, especially near the proposed interchanges where commercial and higher density residential land use is more likely to occur. Additionally, lower traffic volumes along existing U.S. 30 after construction of the proposed bypass may allow for development of safer pedestrian and bicycle facilities within the communities of Mount Vernon and Lisbon.

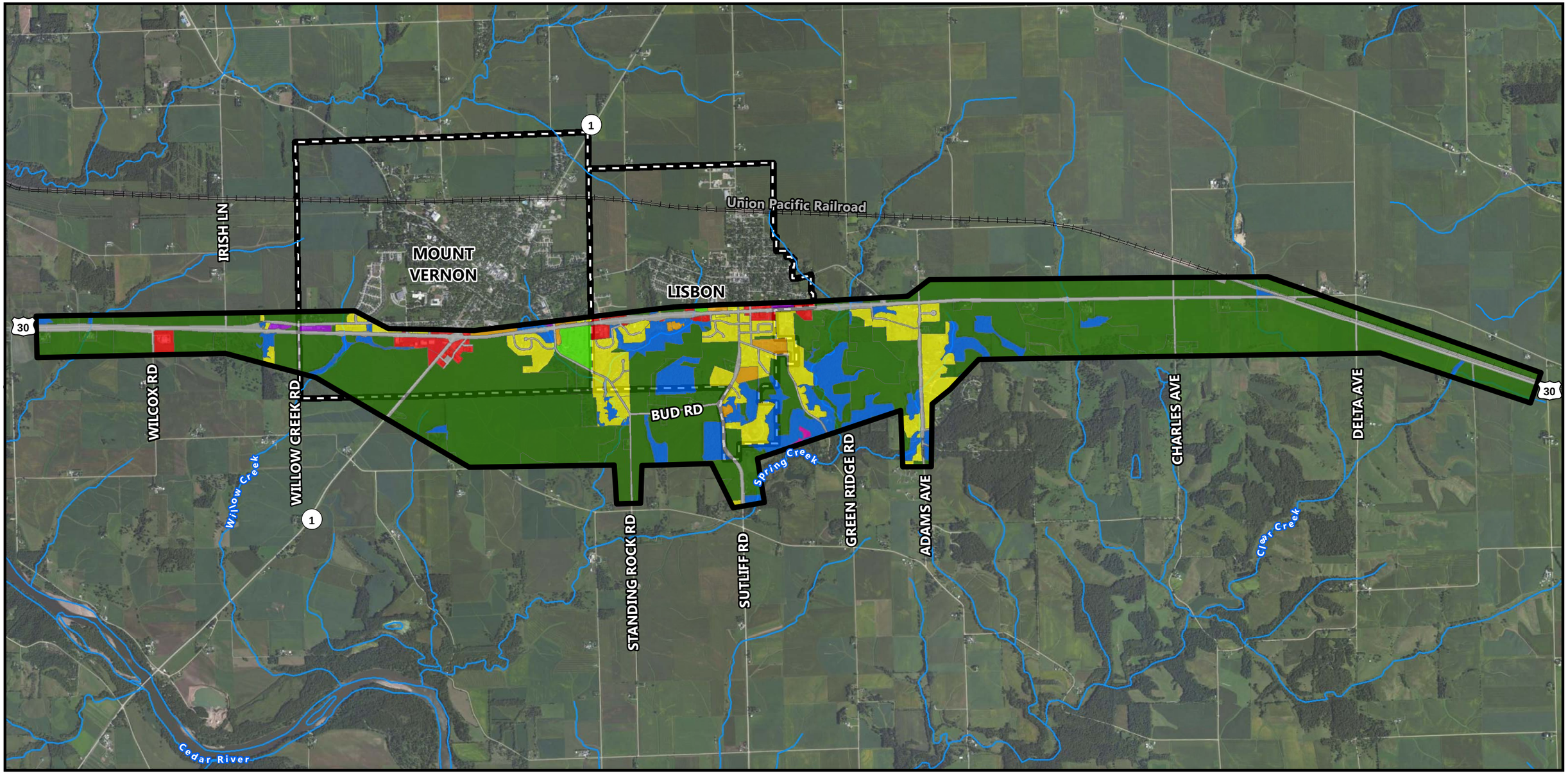
The No Build Alternative would not impact land use greatly and the current incremental land use changes in rural areas and along a busy U.S. 30 corridor through Mount Vernon and Lisbon would continue.

5.1.2. Churches and Schools

The Lisbon Community High School is located within the study area north of existing U.S. 30. The Seeds of Faith Lutheran Church is located within the study area on the south side of existing U.S. 30.

The Proposed Alternative would not impact the Lisbon Community High School and would impact the Seeds of Faith Lutheran Church property. The Proposed Alternative would have minor impacts to the church parking lot but no impacts to the structures of the property would occur.

The No Build Alternative would not impact churches or schools.



Iowa Department of Transportation

Map Published: 9/18/2012

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Miles

- Railroads
- Rivers and Streams
- City Limits
- Study Area
- Agricultural
- Civic
- Commercial
- Industrial
- Open Land / Forested
- Other
- Recreation
- Residential
- Right of Way

Figure 5

Existing Land Use

US 30 Mount Vernon / Lisbon Bypass

HRGreen

5.1.3. Economic

Overall, economic activity based on the average taxable retail sales per capita for the fiscal year 2011 (FY2011) in both Lisbon ($3,604) and Mount Vernon ($7,640) are much lower than the Iowa state average per capita ($10,757) according to the Iowa State University FY 2011 Retail Trade Analysis Report. Neither community is an economic center compared with the rest of Linn County or Iowa. The majority of residents in Mount Vernon and Lisbon commute to either Cedar Rapids or the Iowa City areas for work.

There are several highway-oriented businesses along U.S. 30 including three gas stations. Sinclair, Casey's, and BP are located at the intersection of U.S. 30 and IA 1 and there is a Casey's in Lisbon. Additionally, there are currently three fast food restaurants including Hardee's, Dairy Queen, and Subway at the southeast corner of the U.S. 30/IA 1 intersection. These types of businesses typically rely on drive-by traffic to attract customers.

Existing regional economic activity from freight transportation is currently slowed by the U.S. 30/IA 1 intersection and slower traffic speeds through Mount Vernon and Lisbon.

The Proposed Alternative may negatively affect highway-oriented businesses' economic activity because of reduced business from drive-by traffic along U.S.30. However, according to a summary of highway bypass studies (Economic Development Research Group, 2000) local trade businesses may see improved repeat businesses because of improved traffic flow patterns. Additional positive effects will be seen regionally from increased efficiency of freight traffic through the project area. No businesses would be displaced because of the Proposed Alternative and the project may create jobs in the area if new retail or industrial facilities are located near the bypass interchanges.

Linn and Cedar Counties would likely see reduced taxes on agricultural land because of the farmland which will be acquired for right of way for the Proposed Alternative. However, tax revenue from residential and commercial property would likely increase if commercial and residential development progresses as identified in local plans. The addition of two new interchanges is expected to support the planned development in the study area and could potentially accelerate it. Additionally, as development restrictions in the corridor preservation zone are removed residential subdivisions are more likely to be constructed in the study area.

Project costs are estimated to be $97,950,000.

The No Build Alternative will not affect economic the current economic activity.

5.1.4. Right of Way and Relocation Potential

The Proposed Alternative preliminary impact area is approximately 760 acres and includes property owned by the State, Linn and Cedar Counties and Cities of Mount Vernon and Lisbon that is used for roadway and right of way purposes such as existing roadways and bridges. The amount of property that the Proposed Alternative would acquire would be less than 760 acres. The amount of property needed will be determined as the design process continues.

The Proposed Alternative would impact several parcels of land. Some parcels would be impacted partially resulting in a partial acquisition while others would result in total acquisition. The Proposed Alternative would impact 10 residences and no businesses. Of the 10 residences that are impacted, 6 would be partial acquisitions and 4 would be total acquisitions resulting in relocation. The affected residences are shown in Figures 6A and 6B.

According to Iowa Code 306.9, the location of primary highways through cultivated land should be avoided to the maximum extent possible. Also, diagonal routes should be avoided if feasible and prudent. Existing right of way should be used to its full extent, but if additional right of way is needed, then it should be contiguous to the existing right of way. Because the proposed project is a bypass of existing U.S. 30 through Mount Vernon and Lisbon, it isn't feasible to use existing right of way or land adjacent to the existing right of way. Also, because the majority of the land needed for roadway right of way is currently farmland or used for other agricultural purposes, it's not feasible to avoid using farmland for right of way. The proposed project would result in approximately 10 diagonal severances of farm parcels and another 8 parcels that may be too small or inaccessible for farming. These parcels would be purchased as roadway right of way.

The Iowa DOT offers a relocation assistance program to property owners that are displaced by a state highway project. The Uniform Relocation Assistance and Real Property Acquisition Polices Act of 1970, as amended (Uniform Act) ensures uniform and equitable treatment of all persons displaced from their residences, businesses, or farmsteads as a result of a federally funded project. This includes just compensation for the acquired properties (42 USC 4601 et seq., as amended, 1989).

FHWA has programs and policies that enforce the Uniform Act. An example of this policy is the early acquisition program that assists individuals who meet certain hardship criteria and policies to ensure comparable (equal or better) housing for residential relocations.

Individuals displaced from their residences, whether owners or tenants, are eligible for relocation assistance advisory services and moving expenses. Right of way would be acquired in accordance with the Uniform Act and would follow FHWA's policy when working with displaced individuals. Relocation assistance agents would be available to explain all potential options. Replacement housing payments and reimbursement for certain expenses incurred during the purchase of replacement housing are determined upon review of each relocation and the eligibility of the displaced individual. The goal is to find equal housing for all who are relocated.

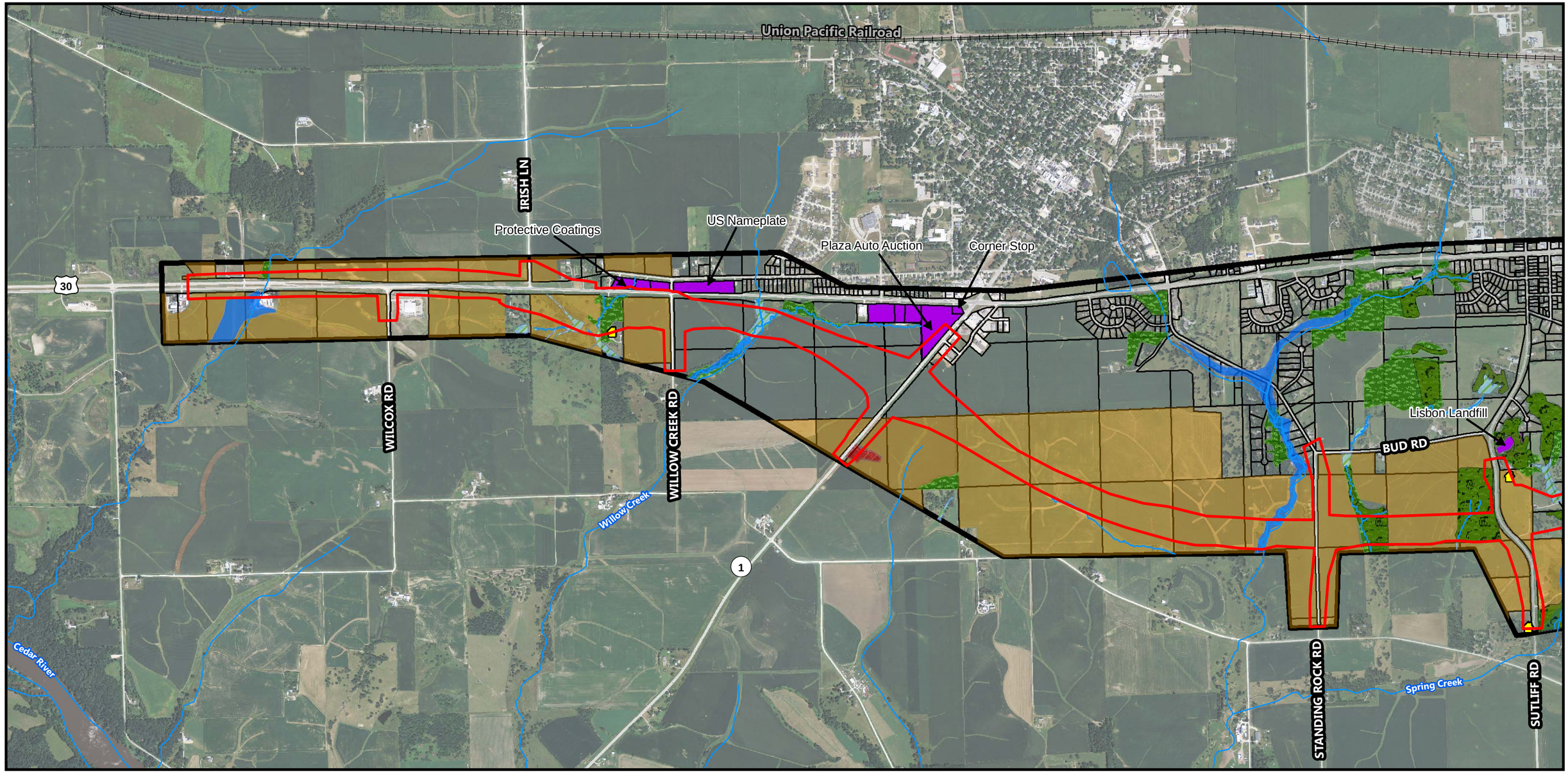
The No Build Alternative would not require acquisition of any property or the relocation of any residences or businesses.

5.1.5. Construction and Emergency Routes

The construction of the Proposed Alternative would be staged so traffic and access to property would be maintained. Detailed staging plans for the Proposed Alternative would be developed during final design. Temporary pavement might be used during construction to accommodate the staging of traffic and to maintain access to properties. The Proposed Alternative would be staged and constructed while traffic uses the existing roadway system as much as possible to reduce disruption to traffic and access. Therefore, the impacts of the Proposed Alternative to access would be minimal.

The Proposed Alternative would change emergency service routes to properties along and located off of existing Adams Avenue. Under the Proposed Alternative, Adams Avenue would be closed where the bypass alignment crosses existing Adams Avenue. This closure would change the routes used to access properties located along and off of Adams Avenue south of where the bypass crosses existing Adams Avenue. The out of distance travel is anticipated to be under a half mile for emergency service responders to access residents living on Adams Avenue near the road closure area. Impacts to emergency services are anticipated to be minimal and additional coordination with emergency service providers would occur as the design of the Proposed Alternative is advanced.

The No Build Alternative would not have impacts to construction and emergency routes.



Iowa Department of Transportation

Map Published: 9/17/2012

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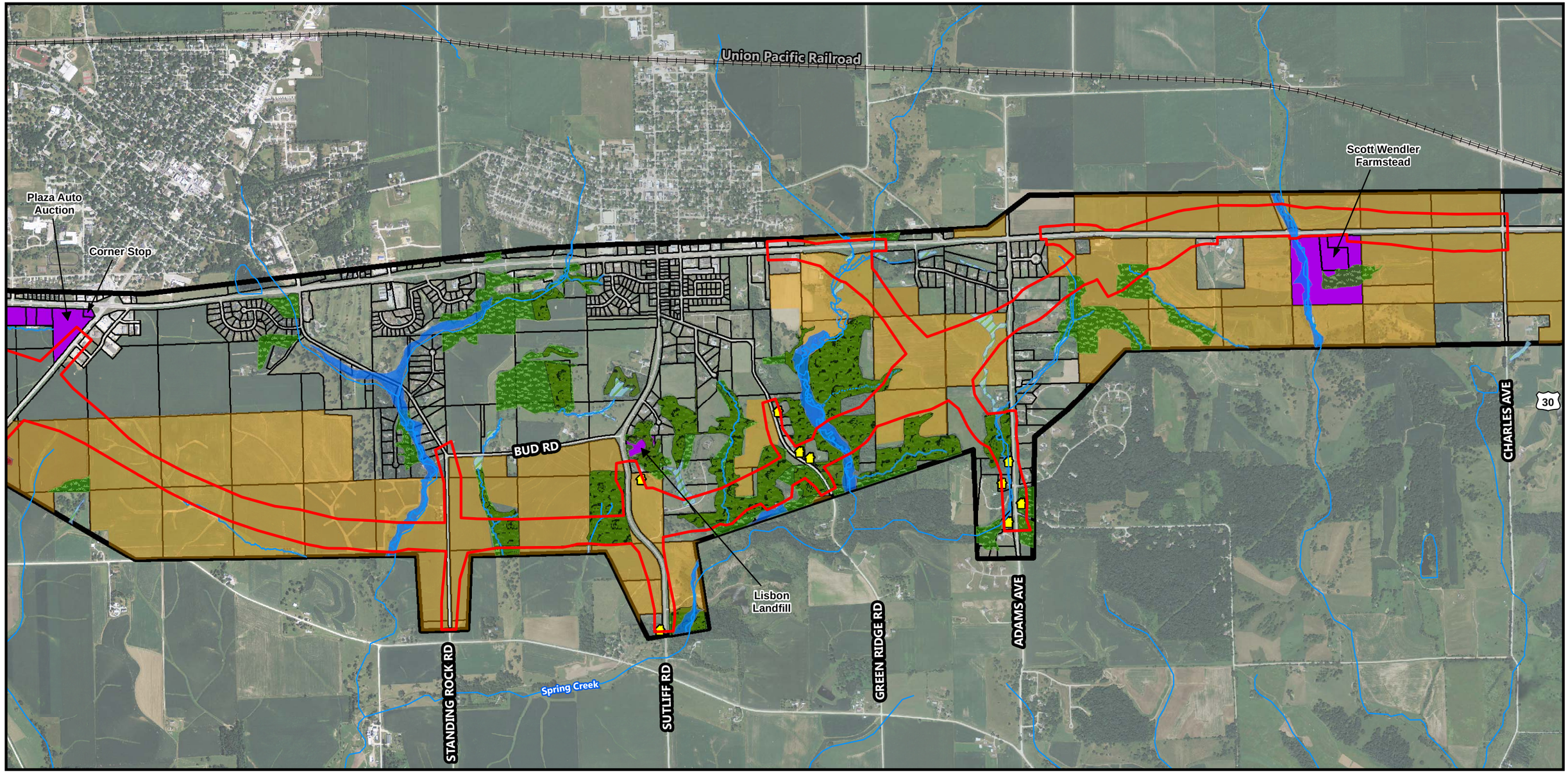
Miles

- Homes
- Railroads
- Rivers & Streams
- Historical Sites
- Farmland
- Woodlands
- Floodplains
- Wetlands
- Potential Indiana Bat Habitat
- Regulated Materials Sites
- Parcels
- Counties
- Proposed Alternative Impact Area
- Study Area

Figure 6A
Environmental Constraints & Impacts

US 30 Mount Vernon / Lisbon Bypass

HRGreen



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- Floodplains
- Wetlands
- Potential Indiana Bat Habitat
- Regulated Materials Sites
- Parcels
- Proposed Alternative Impact Area
- Study Area

Figure 6B
Environmental Constraints & Impacts

US 30 Mount Vernon / Lisbon Bypass

HRGreen

5.2. Cultural Impacts

5.2.1. Historical Sites or Districts

A Phase I architectural/historical intensive survey and evaluation of the study area was conducted in August 2010. Properties were evaluated to determine their eligibility for inclusion in the National Register of Historic Places (NRHP). As a part of this survey, three previously recorded properties were re-evaluated and their inventory forms updated due to changes since their first recordings. In addition, there are three newly recorded and evaluated properties that were found eligible for the NRHP as described in Table 4. The State Historic Preservation Office (SHPO) concurred with the findings of the historical and architectural sites study on September 21, 2010. This correspondence is included in Appendix B.

Table 4. NRHP Eligible and State Protected Properties

Identification Number	Property Name	Type of Property	NRHP Criterion Eligible Under
Previously Recorded Evaluated Properties			
57-05656	Mason House	Farmstead	A,C
16-00422	Thomas Andre Brick House	Brick House	A,C
16-00312	Thomas McKee Brick House	Brick House	A,C
Newly Recorded Evaluated Properties			
16-00587/00589	Kelsey/Andre/Carpenter Farmstead	Farmstead	A,C
16-00586	James D. and Susan Cameron House	Farmstead	A,C
16-00541	McAlister/Hudachek Farmstead	Farmstead	A,C

The Proposed Alternative would not impact the historic resources. The Iowa DOT made a "no historic properties affected" determination and asked the Iowa SHPO for their concurrence on August 7, 2012. This correspondence is included in Appendix B.

The Mason House property is located at 681 IA 1 SE. The Proposed Alternative would construct IA 1 pavement improvements adjacent to the Mason House property but no impacts to the Mason House property would occur.

No historic properties would be impacted as a result of the No Build Alternative.

5.2.2. Archaeological Sites

A Phase I archeological investigation was conducted for the study area in March 2011. The results of the survey included the recording of 79 previously unrecorded archaeological sites, and the expansion/re-evaluation of 10 previously recorded sites. Of the 89 sites identified 16 are considered eligible for listing on the NRHP. The SHPO concurred with the findings of the archeological study on October 14, 2010. This correspondence is included in Appendix B.

The Proposed Alternative would impact eight of the 16 identified archeological sites that are potentially eligible. The eight sites are listed in Table 5. A Phase II Archeological survey will be conducted to gather the information needed to determine whether the eight sites are eligible for listing on the NRHP. The results of the Phase II survey will be coordinated with the SHPO.

The No Build Alternative will not impact any identified archeological sites.

Table 5. Impacted Archeological Sites

Site ID Number	Site Name	Eligible for Listing on NRSP	Recommendation
13LN262	Late Prehistoric (Oneota)	potentially eligible	Avoidance; Phase II testing if cannot avoid
13LN799	Historic mill	potentially eligible	Avoidance; Phase II testing if cannot avoid
13LN991	Early Woodland extended occupation/ Historic scatter	potentially eligible	Avoidance; Phase II testing if cannot avoid
13LN1008/ 13CD119	Early Archaic & Late Prehistoric short term occupation/ Historic scatter	re-evaluation as potentially eligible	Avoidance; Phase II testing if cannot avoid
13LN998	Late Prehistoric limited activity	potentially eligible	Avoidance; Phase II testing if cannot avoid
13CD125	Possible early Prehistoric short term occupation	re-evaluated as potentially eligible	Avoidance; Phase II testing if cannot avoid
13CD126	Possible late Paleoindian/ Early Archaic short term occupation	re-evaluated as potentially eligible	Avoidance; Phase II testing if cannot avoid
13CD127	Possible Paleoindian/ Early Archaic limited activity	re-evaluated as potentially eligible	Avoidance; Phase II testing if cannot avoid

5.3. Natural Environment Impacts

5.3.1. Wetlands

In August and November, 2010, field reviews were conducted to delineate the wetlands located within the study area. National Wetland Inventory (NWI) data were collected prior to the site visits and confirmed or denied based on observed on-ground conditions. Waters of the U.S. (WOUS), 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, which requires a permit to authorize 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 to compensate for the impacts.

The wetland delineation identified 16 WOUS, including wetlands that are partially or wholly located within the project area. The total area of wetlands located within the study area is approximately 39 acres, as described in Table 6.

Table 6. Potential Impacts to Wetlands

Wetland Area	Wetland Type	Wetland Size in Study Area (acres)	Potential Wetland Impact (acres)
B	Palustrine Unconsolidated Bottom (PUB)	3.8	1.3
	Palustrine Emergent (EM)	0.8	0.2
	Palustrine Forested (PFO1)	0.2	0.1
	Palustrine Scrub-Shrub (PSS)	0.3	0.3
C	Palustrine Emergent Forested (PEM)	4.9	0.0
	Palustrine Forested (PFO1)	4.1	3.0
D	Palustrine Emergent (PEM)	0.5	0.0
E	Palustrine Emergent (PEM)	0.2	0.0
G	Palustrine Emergent (PEM)	1.7	0.0
H	Palustrine Forested (PFO1)	0.1	0.0
I	Palustrine Unconsolidated Bottom (PUB)	2.1	0.0
	Palustrine Emergent (PEM)	1.6	0.0
K	Palustrine Unconsolidated Bottom (PUB)	3.2	0.6
	Palustrine Emergent (PEM)	0.2	0.0
	Palustrine Forested (PFO1)	1.5	0.1
L	Palustrine Unconsolidated Bottom (PUB)	0.7	0.0
	Palustrine Emergent (PEM)	2.2	0.4
	Palustrine Scrub-Shrub (PSS)	0.4	0.0
M	Palustrine Emergent (PEM)	5.2	3.2
N	Palustrine Forested (PFO1)	2.8	0.0
O	Palustrine Emergent (PEM)	0.6	0.0
Q	Palustrine Emergent (PEM)	0.9	0.0
R	Palustrine Emergent (PEM)	0.2	0.0
S	Palustrine Emergent (PEM)	0.4	0.0
U	Palustrine Emergent (PEM)	0.1	0.0
	Palustrine Forested (PFO1)	0.5	0.5
	Total:	39.2	9.7

The Proposed Alternative would impact 6 of the 16 delineated wetland areas, totaling approximately 9.7 acres as shown in Figures 6A and 6B and described in Table 6. All proposed impacts would be to open water, emergent, forested, and scrub-shrub wetlands.

The Proposed Alternative was evaluated using the preliminary impact area with the understanding that adjustments can be made later in the design process to minimize wetland impacts. The current preliminary impact area includes a buffer for flexibility in completing the final design. Consequently, the area of wetlands impacted is expected to be less than described in Table 6. During final design, potential minimization of wetland impacts under the Proposed Alternative would be evaluated and the design would be altered to minimize wetland impacts where practical. The USACE Section 404 permit application would include the detailed final design as well as efforts to minimize impacts on wetlands and other WOUS. Where wetland impacts cannot be avoided, mitigation would occur at ratios determined by the USACE.

The No Build Alternative would not involve construction and therefore would not affect wetlands.

5.3.2. Surface Waters and Water Quality

In August and November, 2010, field reviews were conducted to validate the locations of streams and other WOUS in the study area. The field review indicated that approximately 55,809 linear feet of streams and tributaries known as Spring Creek, Willow Creek, Clear Creek and unnamed tributaries are within the study area.

The Proposed Alternative would impact approximately 12,160 linear feet of waterways as shown on Figures 6A and 6B. However, stream impacts are expected to decrease as the project proceeds through final design. The proposed stream impacts would be largely associated with impacts to wetlands, as the streams run through or near many of the wetlands described in Section 5.3.1. Given the extent of potential stream impacts, an individual Section 401 Water Quality Certification would be required. A State 401 Water Quality Certification is issued by the Iowa Department of Natural Resources (DNR) pursuant to Section 401 of the Clean Water Act. State Certification is required by the USACE before a Section 404 permit can be issued. Section 401 Certification represents the Iowa DNR's concurrence that the project certified is consistent with Iowa's water quality standards as set forth in Chapter 61, Iowa Administrative Code 567. In addition, the stream impacts from the final design would need to be authorized by the USACE Section 404 permit (see Section 5.3.1 Wetlands) and would require stream mitigation. Stream mitigation is usually performed at the impact locations rather than at an offsite location, however, it is determined on a case by case basis as part of the Section 404 permitting process.

The contractor would be required to implement Iowa DOT's Construction Manual to minimize temporary impacts on water quality during construction. The Iowa DNR administers the Federal National Pollutant Discharge Elimination System (NPDES) program and issues general permits for stormwater discharges from construction activities. The purpose of the program is to improve water quality by reducing or eliminating contaminants in stormwater. The NPDES program requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) for construction sites of more than one acre.

The specific sediment, erosion control, and spill prevention measures would be developed during the detailed design phase and would be included in the plans and specifications. The SWPPP would address requirements specified by Iowa DOT in its Construction Manual, which are often implemented to meet measures anticipated by Iowa DNR. Although it is not possible to speculate on specific details of the SWPPP at this stage in the design process, the SWPPP is likely to include installation of silt fences, buffer strips, or other features to be used in various combinations as well as the stipulation that drums of petroleum products be placed in secondary containment to prevent leakage onto ground surfaces. A standard construction best management practice (BMP) is re-vegetation and stabilization of roadside ditches to provide opportunities for the runoff from the impermeable area to infiltrate, to reduce the runoff velocities, and to minimize increases in sedimentation. Iowa DOT would require the contractor to comply with measures specified in the SWPPP.

The No Build Alternative would not involve construction and therefore would not affect surface waters or water quality.

5.3.3. Floodplains

Floodplains are defined as those flood prone areas that have been identified as part of the National Flood Insurance Program (NFIP) and are depicted on Federal Emergency Management Agency (FEMA) maps. FEMA has established the one percent annual chance (100-year) flood as the national standard for floodplain management purposes. The FEMA maps generally depict floodplains for watersheds with a tributary area of at least 1 square mile or 640 acres.

There are approximately 89.3 acres of floodplain identified within the study area, as shown on Figures 6A and 6B. The waterways within the project corridors that have floodplains are Spring Creek, an unnamed tributary to Spring Creek, and an unnamed tributary to Clear Creek. These floodplains are unstudied and do not have water surface elevations associated with them. Natural and beneficial values of floodplains in the study area, as defined by the Water Resources Council Floodplain guidelines include: water resource values (natural moderation of floods, water quality maintenance, and groundwater recharge), cultural resources (archeological and historical sites), agricultural, and forestry resources.

The Proposed Alternative would impact approximately 9.1 acres of floodplain. Prior to construction an Iowa DNR Floodplain Development Permit will be required during the final design phase to authorize impacts to the subject floodplains. A joint permit application to the Iowa DNR floodplain development program and the Iowa DNR sovereign lands program should be submitted to satisfy the Iowa DNR Floodplain Development Permit requirements.

The No Build Alternative would not involve construction and therefore would not affect any floodplains.

5.3.4. Wildlife and Habitat

Coordination with the U.S. Fish and Wildlife Service (USFWS) and the Iowa DNR began with early agency coordination in June 2010. Additional coordination with USFWS occurred in May 2011. Additional coordination with Iowa DNR occurred in March 2011. No unique natural communities were identified within the study area by USFWS and Iowa DNR. Much of the study area has been converted to agricultural or residential use.

Multiple biological resource reviews, woodland assessments, and fish and mussel surveys were conducted in the project study area between October 1999 and February 2011. These studies identified wetland and woodland habitat within the study area, but confirmed that unique natural communities are not present in the study area.

The No Build Alternative would not impact any wildlife and habitat.

5.3.5. Threatened and Endangered Species

Section 7 (c) of the Endangered Species Act of 1973, as amended, requires Federal agencies to consult with the Secretaries of the Interior and Commerce to ensure that actions are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of the critical habitat of such species." Consultations will be conducted with the USFWS regarding a determination of potential effects to listed species.

A review of the state and federal lists for listed species in Linn and Cedar Counties and a field review of the current project area were summarized in *Biological Resources Review for U.S. 30 Improvements and Relocation, Mount Vernon and Lisbon, Iowa,* HR Green, December 2010. The report documented no suitable habitat for state or federally listed species within the project study corridor. At this time neither Linn nor Cedar Counties were designated by the Iowa DNR or USFWS as summer range of the Indiana bat in Iowa. However abundant potential suitable habitat and potential roosting trees for the Indiana bat (*Myotis sodalis*) were documented in the project area.

At an Environmental Concurrence Point meeting on December 8, 2010 USFWS requested an Indiana bat habitat survey be conducted of the woodlands within the project area. *Indiana Bat Summer Habitat Survey, U.S. 30 Improvements and Relocation, Mount Vernon and Lisbon, Iowa,* HR Green, February

2011 documented 17 woodland areas and 1,139 potential roost trees meeting criteria for suitable Indiana bat habitat in the project area.

An analysis of the field data was calculated to determine potential impacts to woodland and suitable Indiana bat habitat within the remaining alternatives. To avoid potential impacts to Indiana bats the Iowa DOT proposed tree removal after September 15th and before April 15th and replacement of impacted woodland with new tree plantings or tree preservation areas with suitable tree species for Indiana bat summer habitat.

The Iowa DOT submitted a "may affect but not likely to adversely affect" determination to the Iowa DNR and the USFWS on April 4, 2011 requesting concurrence. On May 26, 2011 the USFWS updated the range of potential Indiana bat summer habitat in Iowa. Linn County and Cedar County north of Interstate 80 were added to the range. On June 6, 2011 the USFWS responded by letter that they do not concur with the may affect but not likely to adversely affect determination because winter cutting alone may not be sufficient to eliminate adverse effects. To evaluate whether take of the species and/or suitable habitat will occur by the proposed project the USFWS recommended a mist net survey to determine the presence or absence of Indiana bats in the project area.

A mist net survey of four locations within the project area captured 161 bats comprising six different species, none of which were Indiana bats (*Indiana Bat Mist Net Survey,* Stantec Consulting Services, Inc., July 2012). Consultation with the Iowa DNR and the USFWS is ongoing, and will be completed by the time a NEPA is completed.

The Proposed Alternative would potentially impact 61.6 acres of suitable Indiana bat habitat in the project area. To avoid potential impacts to the Indiana bat, per Iowa DOT Standard Note 232-9, all tree removal will occur after September 15th and before April 15th, and impacted woodland will be replaced with new tree plantings or tree preservation areas with suitable tree species for Indiana bat summer habitat.

The No Build Alternative would not impact any federally or state listed threatened or endangered species.

5.3.6. Woodlands

Woodlands are defined as areas consisting of 3 acres or greater of forested land having at least 200 trees (3-inch diameter at breast height or greater) per acre, or an area of 0.5 acre but less than 3 acres of at least 200 trees (3-inch diameter at breast height or greater) per acre that is connected to a larger tract of forested land or a total of more than 3 acres (not including treed fencerows and trees along property lines). Approximately 373.1 acres of woodlands are located within the study area. The majority of the woodlands are located east and west of Sutliff Road and Green Ridge Road, and are associated with the Broulik/Powell Woods, Frey Woods, and Wooded Valley as identified by the November 2000 Phase II Assessment of Woodlands in the Mount Vernon U.S. 30 Bypass Corridor in Linn and Cedar Counties, Iowa. The study concluded that high quality woodlands exist in the project area, especially the diverse mature forests observed in the Broulik/Powell Woods and Frey Woods.

The Proposed Alternative would impact approximately 82.6 acres of woodlands. Of the 82.6 acres of woodland impact, 10.2 acres of impact to the Broulik/Powell Woods and 9.3 acres of the Frey Woods would occur. Clearing of trees will be minimized. In accordance with Iowa Code 314.23, Environmental Protection, woodland removed would be replaced by plantings as close as possible to the initial site; or by acquisition of an equal amount of woodland in the general vicinity for public ownership and preservation; or by other mitigation deemed to be comparable to the woodland removed, including, but not limited to, the improvement, development, or preservation of woodland under public ownership.

The No Build Alternative would not impact any woodland.

5.3.7. Farmlands

The Farmland Protection Policy Act (FPPA) of 1981 (7 CFR 658) is intended to minimize the extent to which federal activities, such as highway projects, contribute to the unnecessary and irreversible conversion of agricultural land to nonagricultural uses.

The study area is approximately 75% agricultural land used for growing corn and soybeans, livestock pasture, farmsteads, and harvestable timber areas. There are approximately 1,837 acres of farmland in study area. The proposed project would convert approximately 426 acres of farmland to roadway right of way as describe in Table 7.

Table 7. Farmland Impacts

County	Farmland in Study Area (acres)	Potential Farmland Impact (acres)
Linn	991	292
Cedar	846	134
Total	1,837	426

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Farmland Conversion Impact Rating Form for Corridor Type Projects (NRCS-CPA-106) was completed for the study area to assess the effects of the conversion on farming and farm-related services in the area. This assessment considers the effects of the conversion of farmland as a result of a project on existing and future land use, the amount of existing farmable land in a county, the creation of economically non-farmable parcels, impacts on other on-farm investments, and effects on local farm services. Coordination with the NRCS is ongoing. The AD-1006 forms for Linn and Cedar Counties are included in Appendix C.

Some of the impacted farmland may be severed resulting in non-farmable land. The Proposed Alternative would be designed to minimize farm severance. In addition, changes in access to properties may occur as a result of the Proposed Alternative. Access to private property would be maintained from public roads.

The No Build Alternative would not require acquisition of property and therefore would not affect farmland.

5.4. Physical Impacts

5.4.1. Noise

A traffic noise study was completed for the proposed U.S. 30 improvements (HR Green, Inc., August 2012). The study was conducted in accordance with the 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.

As shown in Figures 7A and 7B, forty-one (41) unique common noise environments (CNE) were identified within approximately 750 feet of the Proposed Alternative in the project area. A CNE is a site that is considered representative of properties with similar characteristics in a given area. Many of the CNEs represent single rural residences. CNEs in residential subdivisions or commercial/industrial strip developments represent several residential units or parcels.

A CNE is considered to have a traffic noise impact if predicted or future noise levels approach or exceed the Noise Abatement Criteria (NAC) established in the FHWA regulations and Iowa DOT noise policy, or if there is a substantial increase in traffic noise.[2] For residential land uses, the NAC is 67 dB(A) and for commercial land use the NAC is 72 dB(A). Per Iowa DOT noise policy, noise impacted areas are identified using an absolute value of 66 dB(A) to represent approaching the NAC for residential areas and 71 dB(A) to represent approaching the NAC for commercial areas. An incremental change of 10 dB(A) or more from existing noise conditions is considered to represent a substantial noise increase.

Subjectively, noise levels that change by 10 dB(A) are perceived by the average human ear as either reduced by half or being twice as loud. Generally, 3 dB(A) is the minimum change in outdoor sound levels that can be perceived by a person with average hearing. An outdoor noise level approaching, meeting, or exceeding 67 dB(A) is considered to interfere with speech communication in residential areas.

Existing noise levels were monitored at five locations in the project area on September 13, 2010. The purpose of the noise monitoring was to determine the noise levels currently experienced at various locations throughout the corridor and to verify that the predicted noise results from the model are reasonable. The field monitored noise levels were within 3 dB(A) of the predicted noise levels and therefore the model is considered valid.

FHWA's Traffic Noise Model (TNM) Version 2.5 was used to predict the traffic noise levels for Existing, No Build, and Proposed Alternative conditions. The Existing Conditions was defined as the current roadway geometry and land use with 2009 traffic characteristics. The No Build Alternative used current roadway geometry and existing land use with forecasted (2036) traffic characteristics. The Proposed Alternative assumed the proposed roadway geometry and land use, and (2036) traffic characteristics.

Table 8 summarizes the predicted noise levels for the three conditions modeled. Predicted noise levels for the Existing Conditions range from 44 dB(A) to 70 dB(A). The No Build Alternative predicted noise levels range from 45 dB(A) to 72 dB(A), and the Proposed Alternative predicted noise levels range from 47 dB(A) to 71 dB(A).

Table 8. Noise Model Results

CNE	Land Use	Approaching NAC (db(A))	Sound Levels (dB(A))[1]				Impacts (yes/no)
			Existing Conditions (2010 traffic)[(2)]	No Build Alternative (2036 traffic)[(2)]	Proposed Alternative (2036 traffic)	Difference between Proposed & Existing	
1	**Residential**	**66**	**70**	**72**	**71**	**1**	**yes**
2	Residential	66	53	54	54	1	no
3	**Residential**	**66**	**70**	**72**	**69**	**-1**	**yes**
4	Commercial	71	59	60	60	1	no
5	Residential	66	54	55	56	2	no
6	Residential	66	63	64	57	-6	no
7	Residential	66	49	50	56	7	no
8	Residential	66	53	55	53	0	no
9	Commercial	71	68	70	63	-5	no
10	Residential	66	61	63	57	-4	no
11	**Residential**	66	**67**	**69**	61	-6	no

[2] Federal Highway Administration. Highway Traffic Noise: Analysis and Abatement Guidance (FHWA-HEP-10-025). December 2011.

CNE	Land Use	Approaching NAC (db(A))	Sound Levels (dB(A))[1]				Impacts (yes/no)
			Existing Conditions (2010 traffic)[(2)]	No Build Alternative (2036 traffic)[(2)]	Proposed Alternative (2036 traffic)	Difference between Proposed & Existing	
12	Commercial	71	58	59	54	-4	no
13	Commercial	71	65	67	63	-2	no
14	Commercial	71	58	60	63	5	no
15	Residential	66	56	58	60	4	no
16	**Residential[(2)]**	**66**	**48[(2)]**	**n/a**	**59**	**11**	**yes**
17	Residential[(2)]	66	48[(2)]	n/a	53	5	no
18	Residential[(2)]	66	48[(2)]	n/a	53	5	no
19	Residential[(2)]	66	48[(2)]	n/a	54	6	no
20	Residential	66	52	54	51	-1	no
21	Institutional	66	60	61	59	-1	no
22	Commercial	71	56	57	50	-6	no
23	Residential	66	62	63	55	-7	no
24	Residential	66	56	58	50	-6	no
25	Residential	66	53	54	58	5	no
26	Residential	66	50	51	49	-1	no
27	Residential	66	65	66	58	-7	no
28	Residential	66	46	48	47	1	no
29	Residential	66	48	49	50	2	no
30	Residential	66	52	53	53	1	no
31	Residential	66	49	51	50	1	no
32	Residential	66	51	52	49	-2	no
33	Residential	66	46	47	47	1	no
34	Residential	66	53	54	59	6	no
35	**Residential**	**66**	44	**45**	**57**	**13**	**yes**
36	Residential	66	56	57	64	8	no
37	Residential	66	50	51	58	8	no
38	Residential	66	58	60	53	-5	no
39	Residential	66	60	62	63	3	no
40	Residential	66	65	66	61	-4	no
41	Residential	66	63	65	63	0	No

[(1)] For CNEs with more than one unit, the unit closest to the noise source (roadway) was used to represent the most conservative noise levels.
[(2)] Due to the limitations of TNM, noise monitoring data (noise monitoring location 5) was used to represent the existing conditions for CNEs in the rural areas along the proposed alignment when existing noise is not predominately traffic noise.

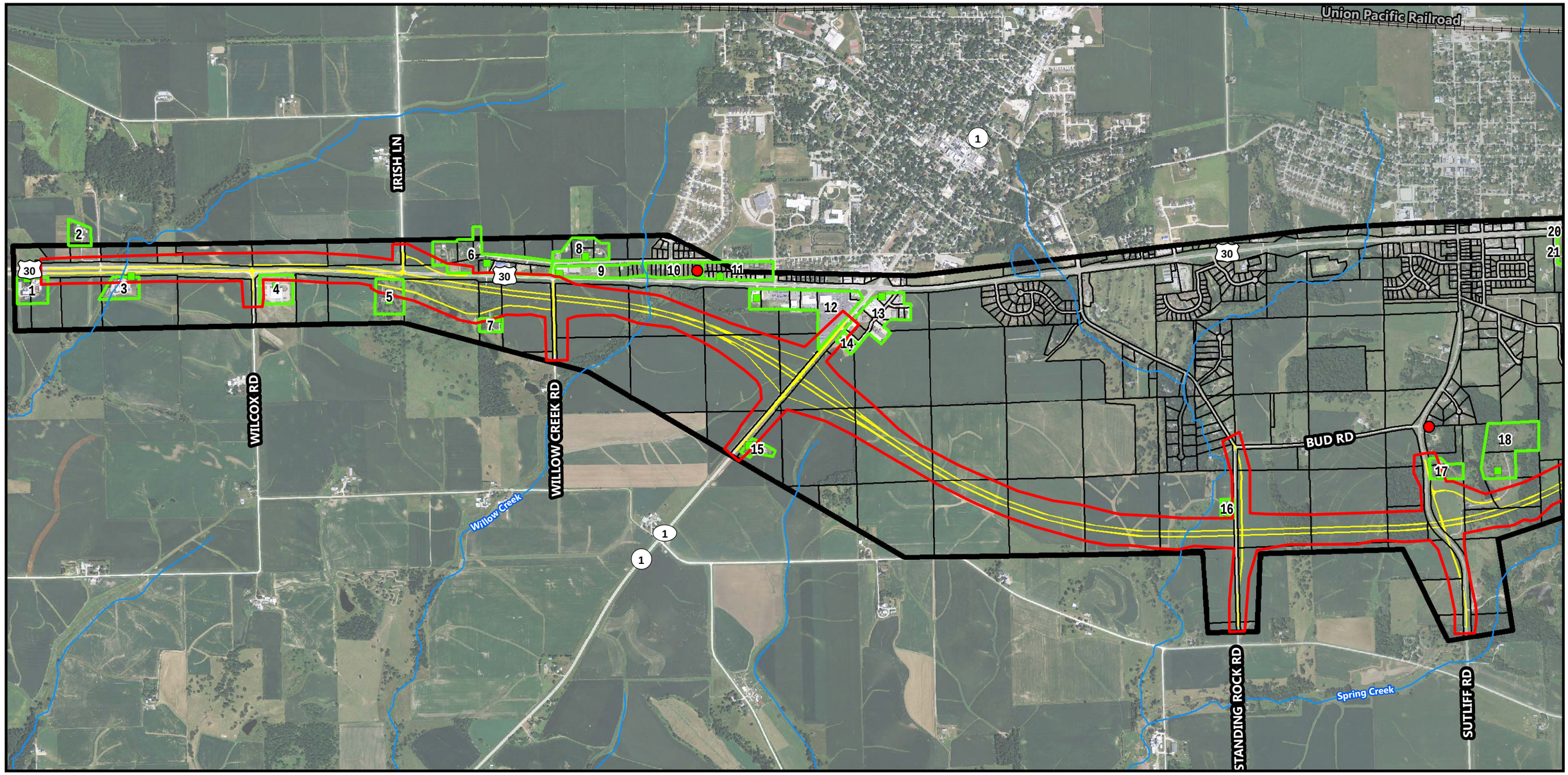
CNE 11 is a residential property with an NAC of 67 dB(A). Under the Existing Conditions, the model predicts noise levels at CNE 11 to be 67 dB(A). Under the No Build Alternative, the model predicts noise levels at CNE 11 to be 69 dB(A) due to an increase in predicted traffic. Under the Proposed Alternative, the model predicts the noise levels at CNE 11 to be 61 dB(A) because a portion of U.S. 30 traffic would shift away from this CNE. Therefore, CNE 11 would not be impacted by the Proposed Alternative.

Traffic noise impacts were identified at CNE 1, CNE 3, CNE 16, and CNE 35 for the Proposed Alternative. CNE 1 and 3 are impacted by traffic noise as the Proposed Alternative noise levels are predicted to exceed the FHWA NAC of 67 dB(A) for a residential area. CNE 15 and 35 are impacted by traffic noise as the predicted increase in traffic noise levels between the Existing and Proposed Alternative conditions exceeds the Iowa DOT policy value of 10 dB(A) for a substantial noise increase.

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. 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 dB(A) traffic noise reduction at an impacted receptor to be considered feasible. In addition, each of the following three factors 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 dB(A) for at least one benefitted receptor.
- Viewpoints of owners and residents considered benefited by 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.

Noise abatement analysis was conducted in August 2012 as part of the noise study. Construction of noise walls would not meet the noise reduction goal and would not satisfy the criteria mentioned above.



Iowa Department of Transportation

Map Published: 9/17/2012

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Miles

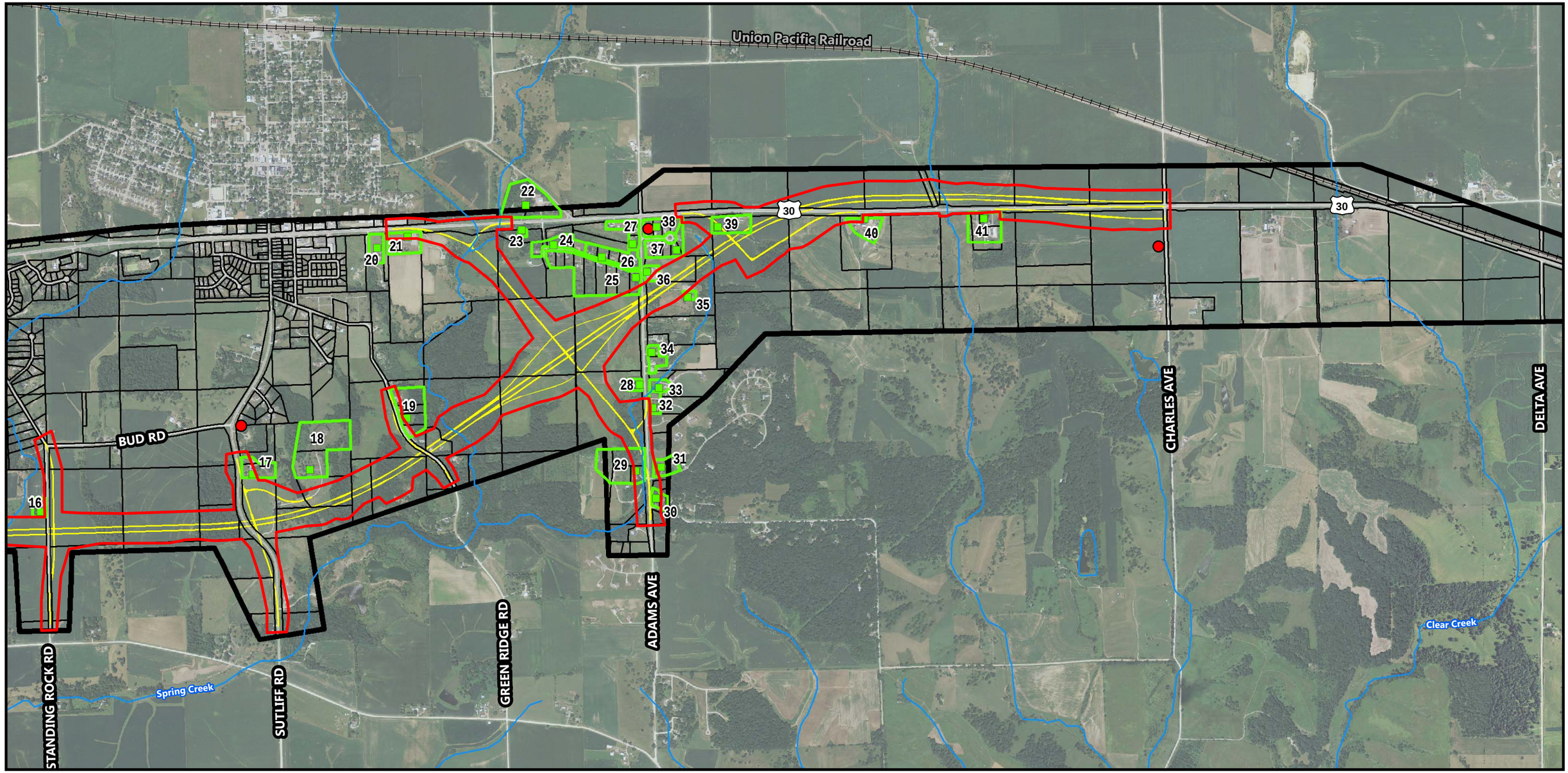
- Receptor Locations
- Noise Monitoring Locations
- Railroads
- Rivers and Streams
- Common Noise Environments
- Parcels
- Proposed Alternative
- Preliminary Alternative Impact Area
- Study Area

Figure 7A

Common Noise Environments

US 30 Mount Vernon / Lisbon Bypass

HRGreen



Iowa Department of Transportation

Map Published: 9/17/2012

N
W E
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Miles

- Receptor Locations
- Noise Monitoring Locations
- Railroads
- Rivers and Streams
- Common Noise Environments
- Parcels
- Proposed Alternative Impact Area
- Preliminary Alternative Impact Area
- Study Area

Figure 7B
Common Noise Environments
US 30 Mount Vernon / Lisbon Bypass

HRGreen

5.4.2. Contaminated and Regulated Materials Sites

The Iowa DOT conducted a review of the potential contaminated and regulated materials sites located within the study area in October 2010. There are 16 potentially contaminated and regulated sites located within the study area. Of the 16 sites, 6 are located within or immediately adjacent to the preliminary impact area. Many of these sites would be avoided by the Proposed Alternative but are included in this discussion because of their close proximity to the preliminary impact area. Table 9 describes the 6 sites and their locations are shown in Figures 6A and 6B.

Table 9. Regulated Materials Sites

Site Name	Address	Info
Protective Coatings	2400 Palisades Rd, Mount Vernon	RCRA CESQG (IAD022047369)
US Nameplate Co.	2100 Hwy 30 W, Mount Vernon	LUST (7LTJ52), RCRA LQG (IAD054758958), RCRA TSD (IAD054758958)
Corner Stop (Amoco Zipmart)	210 Hwy 30 W, Mount Vernon	LUST (7LTM77)
Plaza Auto Auction	320 Hwy 30 W, Mount Vernon	UST, RCRA CESQG (IAD022261127)
Lisbon Landfill	East of Bud Rd and Sutliff Rd., Lisbon	Landfill
Scott Wendler Farmstead	138-142 Hwy 30, Lisbon	Manure spill, manure surface lagoon
LUST – Leaking Underground Storage Tank, UST – Underground Storage Tank, RCRA –Resource Conservation and Recovery Act, LQG – Large Quaintly Generator, TSD – Treatment, Storage, Disposal, CESQG – Conditionally Exempt Small Quantity Generator		

Protective Coatings Inc. was used by Brayton Chemical Company, an agricultural chemical distributorship, from 1970 to 1987. Reports of the alleged burial of chemicals on the property led to an investigation by the Iowa DNR. Contaminated soil was removed from several locations. In 2005, the Iowa DNR agreed to termination of site monitoring activities and required closure of the monitoring wells. This site is located just north of the preliminary impact area and would be avoided by the Proposed Alternative.

US Nameplate Company has been the subject of U.S. Environmental Protection Agency (USEPA) / Iowa DNR investigations since 1977, due to the release of chromium plating and other hazardous wastes. Soil, groundwater, and surface water contamination has been reported. Monitoring wells are situated on both sides of existing U.S. 30 including two just outside current U.S. 30 right of way on the south side of the highway. Current site activities involve the on-going monitoring of the solvent contamination levels in groundwater and surface water. This site is located just north of the preliminary impact area and would be avoided by the Proposed Alternative.

The Corner Stop (Amoco ZipMart) is a high risk LUST site. This site is currently undergoing site monitoring and had a cleanup start date of October 13, 1995. There are currently three active 10,000 gallon underground storage tanks containing gasoline and diesel. Review of the June 2012 Site Monitoring Report (SMR) indicates that the groundwater contamination plume extends into the Proposed Alternative, and the soil contamination plume is limited to the site only. The SMR indicates the ground surface was at an approximate 829 foot elevation, and the groundwater was at an approximate 822 foot

elevation. Depending on the extent of construction activities, the Proposed Alternative may come in contact with contaminated groundwater.

Plaza Auto Auction had three underground storage tanks (USTs) that were removed in 1987 and 1990. In addition, this site is a RCRA CESQG site. The USTs do not have associated leaking underground storage tanks designations. The Proposed Alternative may impact the vehicle parking lot located along IA 1 South, depending on the U.S. 30 and IA 1 interchange design.

The Former City of Lisbon Landfill is no longer being used for municipal waste. The former city landfill operated for approximately 25 years closing in 1975. The landfill was open to the public through unrestricted access for the disposal of household trash, construction and demolition waste. Reportedly, a two foot clay cap was placed over the fill area at the time of closure. The City of Lisbon currently uses the site for the disposal of yard waste, concrete rubble, and asphalt millings. A study of the landfill was conducted in October 2010. The landfill was found to contain approximately 55,500 cubic yards of buried material. The relocation and reconstruction of Sutliff Road as part of the Proposed Alternative would be located immediately to the south of this landfill, but would not impact the landfill.

Scott Wendler Farmstead is the site of a hog confinement facility with a surface lagoon for the storage of hog manure. The owner has stated other hog wastes are incinerated, collected by a rendering service, or buried on the property. In October 1997, hog manure was released into a stream flowing southward from the property, resulting in a major cleanup effort and an estimated 28,000 fish killed. This site is located just south of the preliminary impact area and would be avoided by the Proposed Alternative.

The No Build Alternative would not impact regulated or contaminated sites.

5.4.3. Visual

The study area consists of a mix of landscapes including urban, suburban development, rural communities, and farmland. The existing U.S. 30 corridor is nearly completely developed within Mount Vernon and Lisbon with a mix of retail, office, light manufacturing, higher density residential areas, recreation fields, and overhead utilities. Outside of the city limits, the Proposed Alternative's corridor is a mix of cropland, pasture, woodland, low density single family homes in rural communities, and farmsteads with outbuildings. Terrain is generally rolling and a number of perennial creeks run generally north to south towards the Cedar River south of the project area.

Construction of the Proposed Alternative would change the visual nature of the existing rural and low-density residential landscape by adding a four-lane paved highway and two interchanges. The Proposed Alternative would be visible from the surrounding residences, and farmsteads.

The No Build Alternative would not impact the rural character of the study area and therefore would not affect visual resources.

5.4.4. Utilities

Several major utilities are located within the study area. The Magellan Iowa City to Dubuque 6-inch petroleum pipeline is located in the eastern project area running generally southwest to north east that crosses existing U.S. 30 approximately 350 feet east of the intersection of Charles Avenue and U.S. 30. Buckeye Petroleum has a 12-inch petroleum pipeline running southwest to northeast across the west half of the project area. The pipeline crosses existing U.S. 30 approximately 1,500 feet west of the intersection of Wilcox Road and U.S. 30.

ITC Holdings high voltage overhead transmission lines are present running north to south near the western edge of Mount Vernon to just south of the existing U.S. 30 alignment. The overhead lines then run east along existing U.S. 30 and crosses U.S. 30 the Mount Vernon/Lisbon border. The lines then run east along the north edge of U.S 30 through the project area.

CIPCO high voltage overhead transmission lines are present running almost directly north to south between Mount Vernon and Lisbon. The overhead lines cross existing U.S. 30 along the east edge of Hillcrest Country Club between Country Club Avenue and Shade Tree Court.

The Proposed Alternative has the potential to impact the Magellan and Buckeye petroleum pipelines. The Iowa DOT District 6 Utility Coordinator would coordinate with Magellan and Buckeye to ensure the safety and function of the pipelines.

The No Build Alternative would have no effect on existing utilities.

5.5. Cumulative

Cumulative impacts are those that result from past, present, and reasonably foreseeable actions, combined with the potential impacts of the proposed improvements. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time. A cumulative impact assessment looks at the collective effects imposed by individual land use plans and projects in the same vicinity of the proposed project.

Past Actions

The relocation of U.S. 30 around Mount Vernon and Lisbon has been under consideration by the Iowa DOT since the early 1980s. An EA was completed on March 7, 1988, and the Commission approved the bypass alignment on December 13, 1988. A FONSI was signed on October 11, 1989 but plans changed resulting in another EA taking place in March 2000. The second EA was signed in July of 2001 but a FONSI was not completed. The project was not constructed due to other funding priorities.

The *Lisbon Comprehensive Plan, City of Lisbon, Iowa, 2002-2020* was approved by the City Council on July 22, 2002. The Plan includes the U.S. 30 bypass with an interchange located at Sutliff Road. In the Plan, the land use around the Lisbon interchange is shown as future commercial use. The Plan also shows Lisbon's future growth area which goes south of the proposed bypass and interchange. The Plan shows the majority of the land between existing U.S. 30 to south of the bypass is shown as future residential.

The Fiscal Impact of Residential Development in Mount Vernon was a study conducted for the Mount Vernon City Council in November 2006. This study describes how proposed development would impact the City of Mount Vernon. According to the study, most of the new residential construction that occurred between 1999 and 2006 occurred in subdivisions located on the fringes of Mount Vernon. This trend was expected to continue as there are many vacant lots in approved subdivisions.

Present Actions:

The City of Mount Vernon is proposing improvements at the existing U.S. 30 and IA 1 intersection. The proposed improvements include a multi-lane roundabout style intersection. Construction of this planned improvement is anticipated in 2013.

Future Actions:

The Iowa DOT Commission has set one of its priorities to complete the four-lane roadway between Ames and Clinton, Iowa. The Iowa DOT is in the process of increasing the capacity of U.S. 30 by expanding two lanes to four lanes. Portions of this initiative are in various stages of planning, design, and construction across Iowa as funding becomes available.

Proposed future commercial development is planned around the interchanges of the Proposed Alternative. According to the 1995 *Mount Vernon's Comprehensive Plan*, Mount Vernon plans to allow for future development in a way that allows the downtown area to remain economically viable. According to the 2002 *Lisbon Comprehensive Plan*, Lisbon plans to allow for future development in a way that maintains the small-town atmosphere and protects against sprawling development.

Cornell College, located in Mount Vernon, has a master plan that includes $34 million in renovations and construction over the next five to eight years. A new, $6 million, residence hall is planned to begin in the Fall of 2012. The expansion of student housing on campus, building renovations, and facility expansion enhance the college's appeal to potential students and faculty members from across the state and nation. As more population is attracted to the Mount Vernon community, traffic increases and expansion of municipal services is needed.

Summary of Cumulative Impacts:

The construction of the Proposed Alternative would be a beneficial impact for the movement of goods and services through the State of Iowa and would accomplish a piece of the Iowa DOT's U.S. 30 initiative. Some commercial development is planned around the area of the Preferred Alternative and this economic development would be considered a beneficial impact to this area of the state. Both Mount Vernon and Lisbon have comprehensive plans in place to allow for development in ways that are consistent with the goals of the communities.

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 10 summarizes the Proposed Alternative's impacts to resources discussed in the sections above.

Table 10. Summary of Impacts

Issue	No Build Alternative	Proposed Alternative
Property Acquisition (acres)	0	Less than 760
Displacements (number)	0	4
Historic Sites (number)	0	0
Archeological Sites	0	8
Wetland Impacts (acres)	0	9.7
Surface Water Impacts (Streams) (linear feet)	0	12,160
Floodplain Impacts (acres)	0	9.1
Indiana Bat Habitat (acres)	0	61.6
Woodland Impacts (acres)	0	86.2

Issue	No Build Alternative	Proposed Alternative
Farmland Impacts (acres)	0	426
Noise Impacts (number)	0	4
Contaminated Sites (number)	0	2

6.0 Disposition

This Streamlined 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.

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.

The following permits may be required for this 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)

The proposed project is included in the 2013-2017 Iowa Highway Program with $19 million for right of way acquisition occurring in 2014-2016, $30.05 million for grading occurring in 2017, and $1.15 million for wetland mitigation occurring in 2017.

7.0 Comments and Coordination

7.1. Agency and Tribal Coordination

Appropriate federal, state, regional, county, and local agencies were contacted by letter on June 1, 2010 as a part of the early agency coordination process. This process requested agency comments concerning the proposed project. Table 11 lists the agencies that were contacted and the response date, if applicable. Written responses to the early coordination requests are provided in Appendix B.

Table 11. Agency Coordination

Agency Type	Agency	Date of Response
Federal	Federal Emergency Management Agency	None
Federal	Federal Railroad Administration	None
Federal	Federal Transit Administration	None
Federal	National Park Service	None
Federal	National Resources Conservation Services	None
Federal	U.S. Army Corps of Engineers	6/29/10
Federal	U.S. Coast Guard	6/30/10
Federal	U.S. Department of Agriculture	None
Federal	U.S. Department of Housing and Urban Development	None
Federal	U.S. Department of Interior	6/8/10
Federal	U.S. Environmental Protection Agency	None
Federal	U.S. Fish and Wildlife Service	5/12/11, 6/6/11
State	Iowa Department of Agriculture and Land Stewardship	None
State	Iowa Department of Natural Resources	6/8/10, 6/16/10, 6/30/10, 3/25/11
State	Iowa Department of Natural Resources Field Offices #1 and # 6	None
State	State Historical Society of Iowa	6/10/10, 10/4/11, 10/14/10
State	Soil Conservation District	None
County	Cedar County Board of Supervisors	None
County	Cedar County Conservation Board	None
County	Cedar County Engineering & Secondary Road Department	None
County	Cedar County Environmental Health and Zoning	7/1/10
County	Linn County Board of Supervisors	None
County	Linn County Conservation Board	None
County	Linn County Engineering & Secondary Roads Department	None
County	Linn County Historic Preservation Commission	6/21/10
County	Linn County Planning & Development	6/15/10
County	Linn County Soil & Water Conservation District	None
Local	City of Lisbon	None
Local	City of Mount Vernon	None

The comments received from federal, state, county, and local agencies are summarized as follows:

- The USACE said that the proposed project does not involve Rock Island District administered land and no further coordination with the Rock Island Real Estate department was needed. The project may impact waters of the United States including wetlands and may require USACE authorization under Section 404 of the Clean Water Act. The responsible federal entity should coordinate with the State Historical Society of Iowa. The Rock Island Field Office of the USFWS should be contacted. The Iowa Emergency Management Division should be contacted to determine if the floodways would be impacted.
- The U.S. Coast Guard responded saying the subject property does not involve bridges over navigable waters of the United States and no further coordination was necessary.
- The Iowa DNR found no recreational properties that were funded by the federal Land and Water Conservation Fund (LWCF) in the project area.

- The U.S. Department of Interior wanted to make sure that early coordination information was sent to the USFWS, National Park Service, and U.S. Geological Survey.
- The Iowa DNR said there are no site-specific records of rare species or significant natural communities in the project area. Any project construction activity that disturbs more than one acre may require a storm water discharge permit from the Iowa DNR. Reasonable precautions should be taken to prevent the transport of visible emissions of fugitive dust into adjacent properties.
- The Iowa DNR stated that two contaminated sites were found in the study area. One is a RCRA site and the other site contains underground storage tanks.
- The Iowa DNR stated that the proposed project may affect but is not likely to adversely affect listed species.
- The State Historic Society of Iowa said that no cultural resource studies were completed for the project area and it is currently unknown if significant historic properties will be affected by the proposed project.
- The State Historic Society of Iowa concurred with the findings of the historic structures study and the archeology study.
- The Cedar County Environmental Health and Zoning Office questioned whether a house inventory needed to be completed for the proposed project. An email response was provided.
- The Linn County Historic Preservation Commission wanted to draw attention to cultural sites found during a 1994 study that are known sites and are potentially eligible for listing on the National Register of Historic Places.
- Linn County Planning & Development Office expressed concern that the bypass could trigger demand for development in areas not currently supported in the Rural Land Use Plan. The project corridor is located in an area designated as "Non Metro Urban Services Area" in the Linn County Rural Land Use Plan that is intended for future development. The project corridor borders the "Agricultural Area" that is not intended for non-farm development.

As part of the early coordination process, Iowa DOT also notified the Tribes of initiation of the proposed project and solicited their feedback. The Tribes contacted are listed in Table 12. The coordination information sent to the Tribes is included in Appendix B. No responses were received.

Table 12. Tribal Coordination and Responses

Tribe	Date of Coordination	Date of Response
Iowa Tribe of Kansas and Nebraska	6/1/10	None
Iowa Tribe of Oklahoma	6/1/10	None
Otoe-Missouria Tribe	6/1/10	None
Sac & Fox Nation of Mississippi in Iowa	6/1/10	None
Sac & Fox Nation of Oklahoma	6/1/10	None
Sac & Fox Nation of Missouri	6/1/10	None
Winnebago Tribe of Nebraska	6/1/10	None

7.2. NEPA / 404 Merge Coordination

FHWA and Iowa DOT coordinated with resource agencies using the Iowa DOT concurrence point process. The process incorporates planning, design, agency coordination, public involvement elements, and integrates compliance with NEPA and Section 404 of the Clean Water Act. The transportation agencies request agency concurrence regarding four points in the NEPA 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 Points 1 and 2 were conducted at the same time on December 8, 2010. Representatives from the USACE, USFWS, FHWA, Iowa DNR, and Iowa DOT attended the meeting. The purpose and need for the project and the alternatives being considered were discussed. Concurrence on Points 1 and 2 was received from the agencies during the meeting.

Concurrence Point 3 occurred on June 9, 2011. Representatives from the USACE, USFWS, USEPA, FHWA, Iowa DNR, Cedar County, City of Mount Vernon, City of Lisbon, and Iowa DOT attended the meeting. An overview of the project's purpose and need, alternatives being considered, and the March 10, 2011 public information meeting were given. A comparison of Alternatives A-F was presented and the alternatives being carried forward, Alternatives A, E, and F were discussed. Concurrence on Point 3 was received from the agencies during the meeting.

7.3. Public Involvement

Two public meetings have been held to date. The first public information meeting was held on July 13, 2010 in the Lisbon High School cafeteria located at 235 West School Street, Lisbon, Iowa. The purpose of the meeting was to discuss alternatives for the proposed project. The meeting was held from 4:30 to 6:30 PM and was attended by 163 people. In general, most that attended the meeting were in favor of the bypass alternative with differing views on the east interchange location. Comments received indicated that the public was concerned about the bypass connection with existing U.S. 30 and local access for properties along existing U.S. 30. The Iowa DOT summarized written comments received and prepared responses to comments in August 2010.

The second public meeting was held on March 10, 2011 in the Mount Vernon High School commons area located at 731 Palisades Road SW, Mount Vernon, Iowa. The purpose of the meeting was to discuss alternatives for the proposed project. The meeting was held from 4:30 to 6:30 PM and was attended by 76 people. Comments received indicated that the public were still concerned with how the bypass connected to existing U.S. 30, especially on the west end near Irish Lane. Farmers who farm both sides of existing U.S. 30 on the west end of the bypass were concerned with access to their property if the bypass were constructed. In general most that attended were concerned about safety and the amount of traffic on existing U.S. 30 and are in favor of the bypass. The Iowa DOT summarized written comments received and prepared responses to comments in April 2011.

8.0 References

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Iowa Department of Transportation , *Iowa DOT Policies and Procedures Manual, Highway Traffic Noise Analysis and Abatement*, July 29, 2011.

Iowa Department of Transportation, *U.S. 30 Bypass Environmental Assessment*, 2001.

Iowa Department of Transportation, *U.S. 30 Mt. Vernon / Lisbon Project Management Team Meeting Minutes*, July 7, 2011.

Iowa Department of Transportation, *U.S. 30 Mt. Vernon / Lisbon Project Management Team Meeting Minutes*, May 2, 2012.

Iowa Department of Transportation Office of System Planning, *Mount Vernon / Lisbon Proposed U.S. 30 Bypass Technical Memorandum,* Thursday, June 8, 2010.

Lisbon Planning & Zoning Commission, East Central Iowa Council of Governments, *The Lisbon Comprehensive Plan, City of Lisbon, Iowa 2002-2012*, July 22, 2002.

RDG Crose Gardner Shukert, *The Mount Vernon Plan, A Comprehensive Plan for Mount Vernon, Iowa*, September 1995.

Shive Hattery, *West Side Long Range Transportation Plan*, Final Report, March 30, 2007.

Site Monitoring Report, *Iowa Department of Natural Resources, Amoco Zipmart LUST 7LTM77*. May 2012.

Stantec Consulting Services, Inc., *Indiana Bat Mist Net Survey,* July 2012).

Tallgrass Historians L.C., *US Highway 30 Mt. Vernon/Lisbon Corridor Preservation Zone, Phase I Archeological Investigation, Linn/Cedar Counties, Iowa,* Volumes I-IV, March 2011.

Tallgrass Historians L.C., *US Highway 30 Mt. Vernon/Lisbon Corridor Preservation Zone, Architectural/Historical Intensive Survey, Linn/Cedar Counties, Iowa,* August 2010.

U.S. 30 Coalition of Iowa, www.fourlane30.com.

APPENDIX A

STREAMLINED RESOURCE SUMMARY

SOCIOECONOMIC IMPACTS SECTION:

Community Cohesion	
Evaluation:	No neighborhood communities will be impacted by Alternative E.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 7/20/12.
Environmental Justice	
Evaluation:	Resource is not in the study area.
Method of Evaluation:	Review of the current census information. http://epamap14.epa.gov/ejmap/ejmap.aspx?wherestr=Lisbon%2C%20IA
Completed by and Date:	Consultant, 5/16/12.
Joint Development	
Evaluation:	Joint development is not proposed as a part of this project.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 5/16/12
Parklands and Recreational Areas	
Evaluation:	There are no parklands or recreational areas located along the proposed bypass alignment. No impacts would occur to recreational facilities located on the north side of existing U.S. 30.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 5/16/12.
Bicycle and Pedestrian Facilities	
Evaluation:	There are no bicycle or pedestrian facilities located along the proposed bypass alignment. No impacts would occur to bicycle and pedestrian facilities located along existing U.S. 30.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 5/16/12.
Transportation	
Evaluation:	Alternative E does not impact other modes of transportation including air, rail, bike, or pedestrian. Alternative E would have a beneficial impact to the transportation of freight, goods, and services through the study area and across the region and nation.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 7/20/12.

CULTURAL IMPACTS SECTION:

Cemeteries	
Evaluation:	No impacts would occur to cemeteries.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 5/16/12.

PHYSICAL IMPACTS SECTION:

Air Quality	
Evaluation:	Resource in the area is in attainment and will not be impacted.
Method of Evaluation:	Review of study area.
Completed by and Date:	Consultant, 5/16/12.
MSATs	
Evaluation:	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. 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.
Method of Evaluation:	FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents
Completed by and Date:	February 3, 2006.
Energy	
Evaluation:	Resource is in the area but will not be impacted
Method of Evaluation:	Review of the study area
Completed by and Date:	Consultant, 5/16/12.

NATURAL ENVIRONMENT IMPACTS SECTION:

Wild and Scenic Rivers	
Evaluation:	Resource is not in the study area.
Method of Evaluation:	Review of http://www.rivers.gov/wildriverslist.html.
Completed by and Date:	Consultant, 5/16/12.

APPENDIX B

AGENCY AND TRIBAL COORDINATION

Cultural Resources Agency Correspondence

SEP 2 2 2010

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010-6993
515-239-1795
FAX 239-1726

September 21, 2010

Ref. No. NHS-030-7(76)--19-57
Linn / Cedar Counties
Primary Roads

Ralph Christian
Review and Compliance
Department of Cultural Affairs
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319-0290

R&C# 930857069

Dear Ralph:

RE: Architectural / Historical Intensive Survey and Evaluation
U.S. 30 Mt. Vernon / Lisbon Corridor Preservation Zone
Linn and Cedar Counties.

Enclosed for your review and comment is the Architectural / Historical Intensive Survey and Evaluation for the above mentioned federal fund project. This project proposes a series of road improvements along U.S. 30 in Linn and Cedar Counties.

The project corridor evaluated for this project is approximately 9.09 miles in length with variable widths (approximately 1.14 miles maximum width). A total area of 1,915 acres was investigated for this corridor.

The architectural / historic investigations were conducted using an extensive archival search, along with property site visits, photographic documentation and the completion of Iowa Site Inventory Forms.

A total of 146 modern properties were investigated during this survey, all of which did not meet the basic requirements for listing on the National Register of Historic Places. No further work is recommended for these.

This survey also examined 9 historic age and 3 near historic age or "mature" properties. In addition to these properties, this survey examined 5 properties previously recorded by past investigations. The site inventory forms for these properties were updated, due to changes to the properties since first recorded.

Of the newly recorded historic properties, three were found eligible for the National Register. These properties are listed as follows:

Property 16-00586- James D. and Susan Cameron House
Section 10, T82N-R4W, Cedar County, Iowa

Property 16-00587- Kelsey / Andre / Carpenter Farmstead
16-00589 Section 15, T82N-R4W, Cedar County, Iowa

Property 16-00541- McAlister / Hudacheck Farmstead
Section 9, T82N-R4W, Cedar County, Iowa

Of the previously evaluated properties, re-examined by this survey, three were determined to remain eligible for the National Register.

Property 57-05656- Mason House
Section 16, T82N-R5W

Property 16-00422 Thomas Andre Brick House
Section 17, T82N-R5W

Property 16-00312 Thomas McKee Brick House
Section 16, T82N-R4W

All of these eligible properties are recommended for avoidance or mitigation if impacted by this project.

At the present time, impacts to these properties, if any, have not been determined since the final design plans and project corridor are still being developed. Once avoidance or impacts are known, a separate finding of effect will sent to your office for your review.

If you concur with the findings of this survey, please sign the concurrence line below and return this letter. If you have any questions regarding this survey or this project, please do not hesitate to contact me.

Sincerely,

Matthew J.F. Donovan

Matthew J.F.Donovan
Office of Location & Environment
Matt.Donovan@dot.state.ia.us

MJFD
Enclosure
cc: Jim Schnoebelen- District 6 Engineer
Dee Ann Newell- NEPA / OLE
Leah Rogers- Principal Investigator / Tall Grass Historians

Concur:

SHPO Historian 10/4/10 Date

STATE HISTORICAL SOCIETY of IOWA

A Division of the Iowa Department of Cultural Affairs

October 14, 2010

In reply refer to:
R&C#: 930857069

Mr. Matthew J.F. Donovan
Office of Location and Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50319-0290

RE: NHS-30-7(76)--19-57 – US HIGHWAY 30 MT.VERNON/LISBON CORRIDOR PRESERVATION ZONE (CPZ): PHASE I ARCHAEOLOGICAL INVESTIGATION [TALLGRASS TH09-468-1, VOLS. I, II, AND III, RODGERS & NAGEL]

Dear Matt,

We have received your September 22, 2010 submittal regarding the above-referenced project. Thank you for providing the State Historic Preservation Office (SHPO) of Iowa with the opportunity to review this project. We make the following comments and recommendations based upon our review of this and previously submitted documentation and in accordance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. §§ 470 *et seq.*) and its implementing regulations 36 CFR Part 800 (revised, effective August 5, 2004).

The three volumes of this report document intensive archaeological survey of the Highway 30 Mt. Vernon/Lisbon Corridor Preservation Zone (CPZ). The project area surveyed for this investigation measures 1,802 acres which includes portions of both Cedar and Linn Counties. The study included background research, landowner interviews, soils assessment, pedestrian survey, as well as both judgmental and systematic sub-surface testing. This investigation builds on previous research completed for this undertaking. The report documents 79 newly recorded archaeological sites and provides additional information on 10 previously recorded sites. The table provided in the Management and Recommendations portion of the report documents twenty sites where additional testing, site avoidance, or Phase II evaluation for listing in the National Register of Historic Places has been recommended.

We agree with the consultant that additional testing at Sites 13CD203, 13CD204, 13CD209, and 13CD219 should be completed to fully evaluate their potential for National Register listing. We add that this same approach should be given to Site 13CD198, where more data is needed to clearly address the National Register eligibility of this site.

As documented in the report Sites 13CD124, 13CD125, 13CD126, and 13CD127 were originally evaluated as ineligible for listing in the National Register. These sites have since been re-evaluated in consideration of the new data collected from Sites 13CD201and 13CD232. We recommend that as this project moves forward these sites (13CD124, 13CD125, 13CD126, 13CD127, 13CD201, and 13CD232) continue to be held in group context unless new or additional data shows this possible connection to be unsubstantiated. The commonality of material type, as well as formal and informal tools collected across these uplands may provide new information about the Paleo-Indian Tradition in Iowa, even if the sites individually lack

integrity. We appreciate this consideration provided by your consultant; this is an excellent example of using new data and context to evaluate the research potential of a site, or in this case a group of sites.

Based on the results of this study we agree with your consultants' recommendations regarding the 69 sites determined to be not eligible for listing in the National Register. We also agree with the additional testing or avoidance of the twenty sites listed in the Management and Recommendations portion of the report. Once project plans are finalized and avoidance or construction impacts are known please submit a finding of effect to our office for review.

If design changes are made for this project which would involve undisturbed new rights-of-way or easements, please forward additional information to our office for further comment along with the Agency Official's determination of effect. If project activities uncover an item(s) that might be of archeological, historical or architectural interest, or if important new archeological, historical or architectural data should be encountered in the project Area of Potential Effects, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual that meets the Secretary of the Interior's Professional Qualification Standards (36 CFR 61).

We have made these comments and recommendations according to our responsibility defined by Federal law pertaining to the Section 106 process. Should you have any additional comments or questions, please contact me at brennan.dolan@iowa.gov or at 515.242.6157.

Sincerely,

Brennan J. Dolan, Archaeologist
Iowa State Historic Preservation Office

cc: Jim Schnoebelen, District Engineer, Iowa DOT
Dee Ann Newell, NEPA/OLE, Iowa DOT
Doug Jones, Archaeologist and Review and Compliance Program Manager, Iowa SHPO
Dan Higginbottom, Archaeologist, Iowa SHPO
June Stand, Review and Compliance Program Manager, Iowa SHPO
Leah Rodgers, Principle Investigator, Tallgrass Historians

Iowa Department of Transportation
800 Lincoln Way, Ames, Iowa 50010
515-239-1097
FAX 515-239-1726

August 7, 2012

Ref. NHS-30-7(76)- -19-57
Linn and Cedar Counties
Primary
R&C: 930857069

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

Dear Ralph:

RE: Finding of Effect / Architectural Properties:
U.S. Highway 30 Mt. Vernon/Lisbon Bypass, Linn and Cedar Counties, Iowa.
No Historic Properties Affected – Historic Architectural Properties

Enclosed for your review is the Determination of Effect for the above mentioned federal project, in regards to historic architectural structures.

In September of 2010, an architectural / historical intensive survey was forwarded to your review and concurrence regarding its findings. You concur with the findings of this report on October 4th, 2010. At that time, the preferred alternative had not been determined for this project and it was not known if any of the identified historic properties would be impacted by this project.

The 2010 intensive level architectural investigation recorded three historic properties that had not been previously identified. (Properties 16-00586, 16-00587 and 16-00541) All of these properties were found eligible for the National Register.

This survey also reexamined three properties that had been previously found eligible for the National Register. (Properties 57-05656, 16-00422, and 16-00312)

A review of the present alignment / alternative for this project, along with coordination with the project planning engineers, shows that none of the six properties found eligible for the National Register will be impacted by this project.

Based on this review, with the understanding that the six properties examined and determined eligible will not be impacted by the proposed project, the determination for this project, in regards to historic architecture is **No Historic Properties Affected**.

If you concur with this determination, please sign the concurrence line below and return this letter. If you have any questions regarding this project, or this determination, please feel free to contact me at 515-239-1097 or matthew.donovan@dot.iowa.gov.

Sincerely,

Matthew J.F. Donovan, RPA
Office of Location and Environment

MJFD:sm
cc: Janet Vine- NEPA / OLE
Jan Nash- Tallgrass Historians
Ken Yanna- Assistant Engineer / District 6

Concur _____ Date_____
SHPO Historian

Comments:

APPENDIX B

AGENCY AND TRIBAL COORDINATION

Listed Species Agency Correspondence

800 Lincoln Way, Ames, Iowa 50010 515-239-1510
FAX# 515-239-1726

April 4, 2011

Ref: Mount Vernon/Lisbon Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57
PIN: 95-57-030-050

Kelly Poole
Iowa Department of Natural Resources
Wallace State Office Building
502 East 9th
Des Moines, IA 50319-0034

Dear Ms. Poole:

The Iowa Department of Transportation (DOT) is proposing improvements to U.S. Highway 30 (U.S. 30), including a bypass of the communities of Mount Vernon and Lisbon, located in Linn and Cedar Counties, Iowa (Figure 1, enclosed).

The proposed project would include approximately eight miles of a four lane roadway with two interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon and would end approximately 2.0 miles east of the Cedar/Linn County line.

History of Biological Reviews

Several species studies were completed for the project study area in 1999 and 2000. The findings in these reports are relevant to the current project investigation area because much of the study areas overlap geographically.

An Overview of Biological Resources in the Mt. Vernon Highway 30 Bypass Corridor in Linn and Cedar Counties, Iowa completed by Jacobs and Associates in October 1999 documented that no protected species were observed and no suitable habitat for species known to have ranges approaching or within the project study area were observed.

Biological Resources in the Construction Zone of a Proposed Connector Road in Linn County, Iowa completed by Jacobs and Associates in November 2000 documented that the general nature of the corridor route as pasture or agricultural fields characterized by common plants.

Phase II Assessment of Woodlands in the Mt. Vernon Highway 30 Bypass Corridor in Linn and Cedar Counties, Iowa completed by Jacobs and Associates in November 2000 documented woodland character descriptions and comprehensive species lists from field identification studies conducted throughout the 2000 growing season. The study concluded that high quality woods exist in the project area; however, no protected species were identified during this study.

Fish and Mussel Surveys for the U.S. Hwy 30 Mount Vernon Bypass completed by Helms & Associates in October 2000 collected 11 species of fishes, all common to the area, from three streams. None are listed as threatened, endangered or species of concern on state or federal lists. No mussels were observed or collected.

Current Biological Reviews

After reviewing the state and federal lists for listed species in Linn and Cedar Counties Howard R. Green Company (HR Green) conducted field reviews of the current project area in August and November 2010. ***Biological Resources Review for US 30 Improvements and Relocation Mount Vernon and Lisbon, Iowa*** prepared in December 2010 and updated in February 2011 documented no suitable habitat for state or federally listed species within the project study corridor. HR Green determined that abundant potential summer habitat and potential roosting trees for the Indiana bat (*Myotis sodalis*) are present in the project area.

At an Environmental Concurrence Point meeting on December 8, 2010 Joe Slater of the U.S. Fish and Wildlife Service (USFWS) requested an Indiana bat habitat survey of the woodlands within the project study area.

HR Green conducted a desktop analysis and field reviews on January 6-7 and 25-26, 2011 to determine if suitable Indiana bat roost trees were present within the project area. Their report, ***Indiana Bat Summer Habitat Survey U.S. 30 Improvements and Relocation Mount Vernon and Lisbon, Iowa***, prepared in February of 2011 documented 17 forest cover areas meeting criteria for suitable Indiana bat habitat. Within the 17 forest cover areas 1,139 potential roosting trees were observed and documented (report enclosed).

Iowa DOT conducted an analysis of HR Green's data to calculate potential impacts to woodland and suitable Indiana bat roost trees within the project's four remaining alternatives: Alternative A, Alternative B, Alternative E and Alternative F (Table 1 and Figures 2-5, enclosed).

Avoidance and Mitigation

Neither Linn nor Cedar Counties are designated by the Iowa Department of Natural Resources (Iowa DNR) or USFWS as summer range of the Indiana bat in Iowa. In addition, there are no known occurrences of Indiana bat documented in Linn or Cedar Counties. There are also no hibernacula known in Linn or Cedar Counties. However 17 forest cover areas within the project area contain more than 15% forest cover, permanent water within a ½-mile radius and trees that meet criteria for Indiana bat summer habitat.

To avoid potential impacts to Indiana bats the following mitigation strategies are proposed:

1) Include Iowa DOT Standard Note 232-9 in project plans. Standard Note 232-9 requires tree removal after September 15th and before April 15th.
2) Replace impacted woodland with new tree plantings suitable for Indiana bat summer habitat or tree preservation areas with suitable tree species. In a meeting between Iowa DOT and FHWA on March 23, 2011 the FHWA concurred with replacing the impacted portions of the 17 forest cover areas with an equal amount of tree plantings to provide future habitat for potential use by Indiana bats should they become known in Linn or Cedar County.

Determination of Effect

Based on literature, data reviews and field studies for the project, Iowa DOT has determined, under the delegation authority provided by FHWA, that the proposed project is not likely to adversely affect federally or state-listed species or result in the destruction or adverse modification of federally designated critical habitat. *We request the Iowa DNR's review and response in regard to this project.* A Determination of effect form is enclosed.

The project is a federal-aid project. If you have questions or need additional information, please contact me at 515/239-1510 or Jill Rudloff at 515/239-1698.

Sincerely,

Scott C. Marler
Environmental Resources Manager
Office of Location and Environment

SCM:JR:sm
Enclosures

cc: Richard Nelson, USFWS (via separate letter sent 4-4-2011)
J. Rudloff, Location & Environment (file)

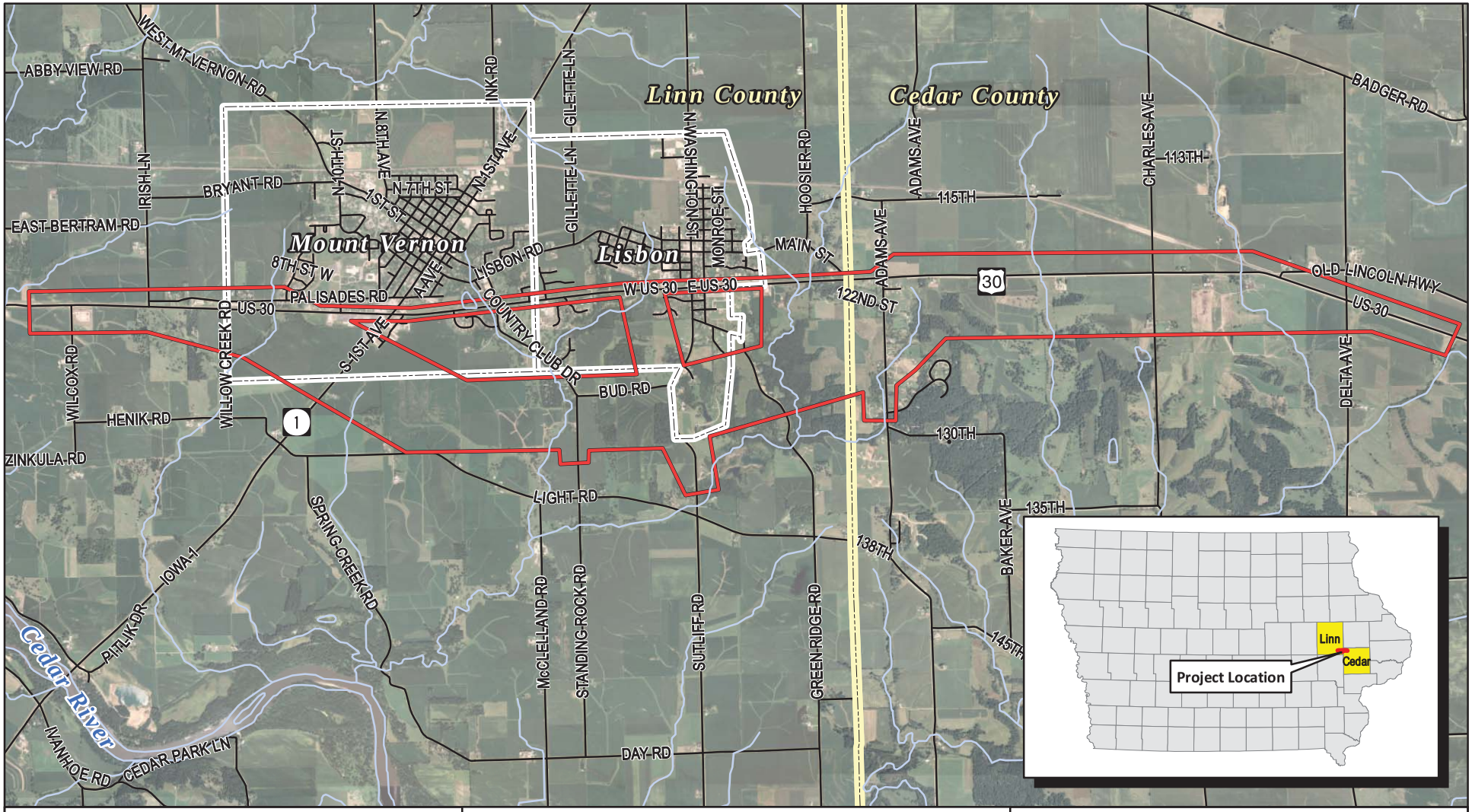


FIGURE 1
Project Location Map

US 30 Improvements and Relocation
Biological Resources Review

Linn & Cedar Counties, Iowa

Project Study Area

0 0.5 1 2
Miles

\\HRGSPNAS\Data\10100002.01\GIS\Figures\Species\Figure 1 - Project Area.mxd

Table 1. Analysis of Woodland & Suitable Indiana Bat Roost Trees in Remaining Alternatives

Alternative	Woodland Impacts (acres)	Potential Impacted Roost Trees
A	36.26	172
B	34.76	279
E	50.72	296
F	54.48	332

Determination of Effect for Threatened & Endangered Species

Project Name:		Highway No.:
Mount Vernon/Lisbon Bypass		Hwy 30
Project No.:		Station No.:
NHS-30-7(76)--19-57		
County:	Letting Date:	PLSS/UTM:
Linn and Cedar		

Project Description:

The proposed project would include approximately eight miles of a four lane roadway with two interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon and would end approximately 2.0 miles east of the Cedar/Linn County line.

Are there documented occurrences of T&E species within 1 mile of the project? ☒ Yes ☐ No

If yes, list species:

Eastern Prairie Fringed Orchid - Fed T, State E

Are there documented occurrences of T&E species within the limits of construction? ☐ Yes ☒ No

If yes, list species:

Is there likely to be habitat for T&E species within the project's limits of construction? ☒ Yes ☐ No

If yes, list species:

Indiana bat - Fed E, State E

Describe current geographic setting *(native habitats, adjacent land use, etc.)* and potential project impacts:

Much of the study area has been converted to agricultural or residential use but wetland features and mature woodlands are also present.

Will the project likely require borrow? ☒ Yes ☐ No

DETERMINATION OF EFFECT - ACTION

☐ No Effect ☐ No Effect *(by following recommendations)* ☐ Needs Further Study
☒ May Affect – Not Likely to Adversely Affect ☐ May Affect – Likely to Adversely Affect

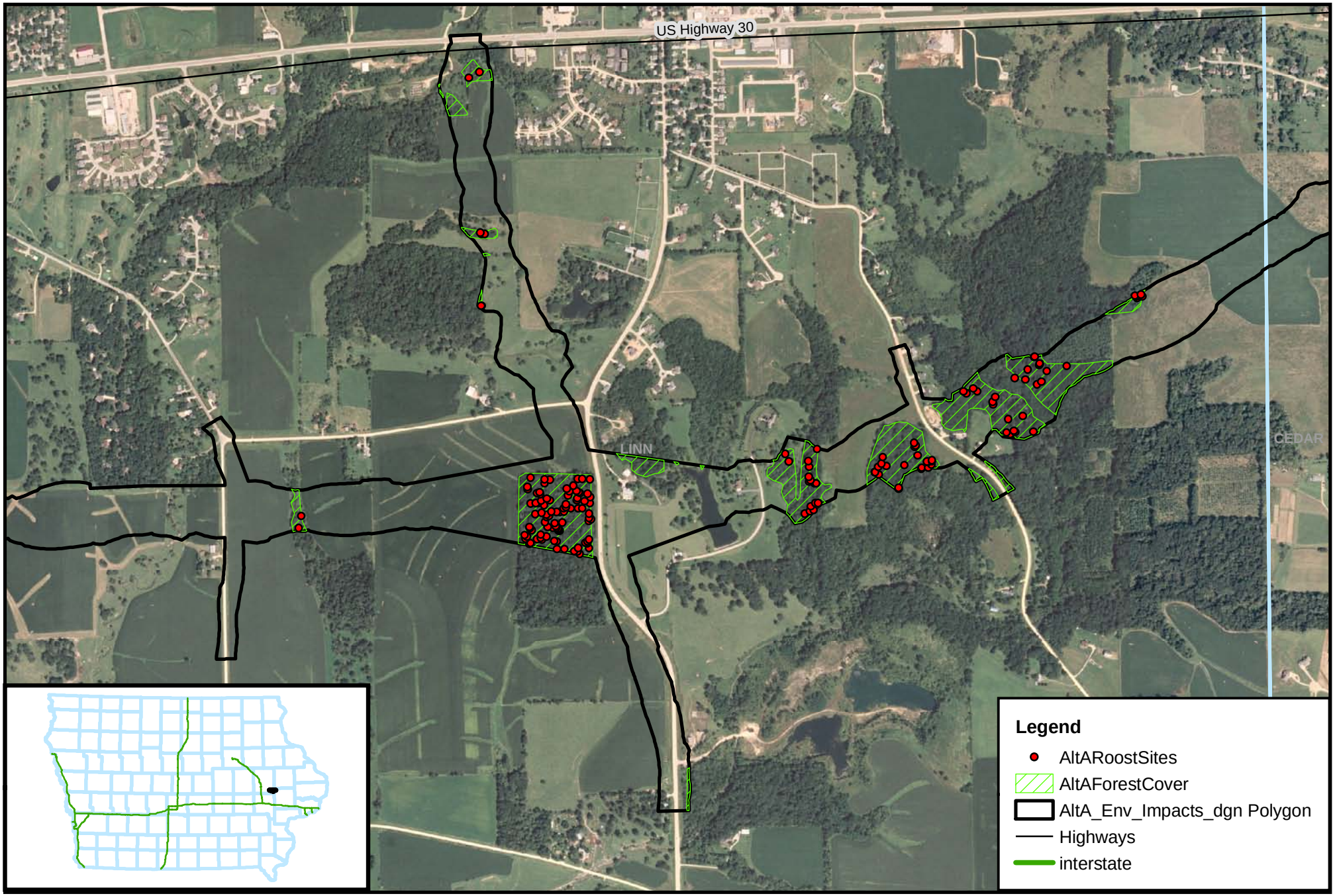
Further Study – *Consisting of the Following*	Iowa DOT Recommendations
	Iowa DOT Standard Note 232-9 will be included in project plans requiring tree removal after September 15th and before April 15th.Replace impacted woodland with suitable Indiana bat tree species to satisfy Iowa Code 314.23 and provide future habitat for potential use by Indiana bats in the project area.

References:

☒ Natural Areas Inventory ☒ T&E Species Range Maps ☒ Aerial Photos ☐ Soils of Concern Data
☒ Other: Biological Reviews

J. Rudloff — *Prepared By:*

3/25/2011 — *Date:*



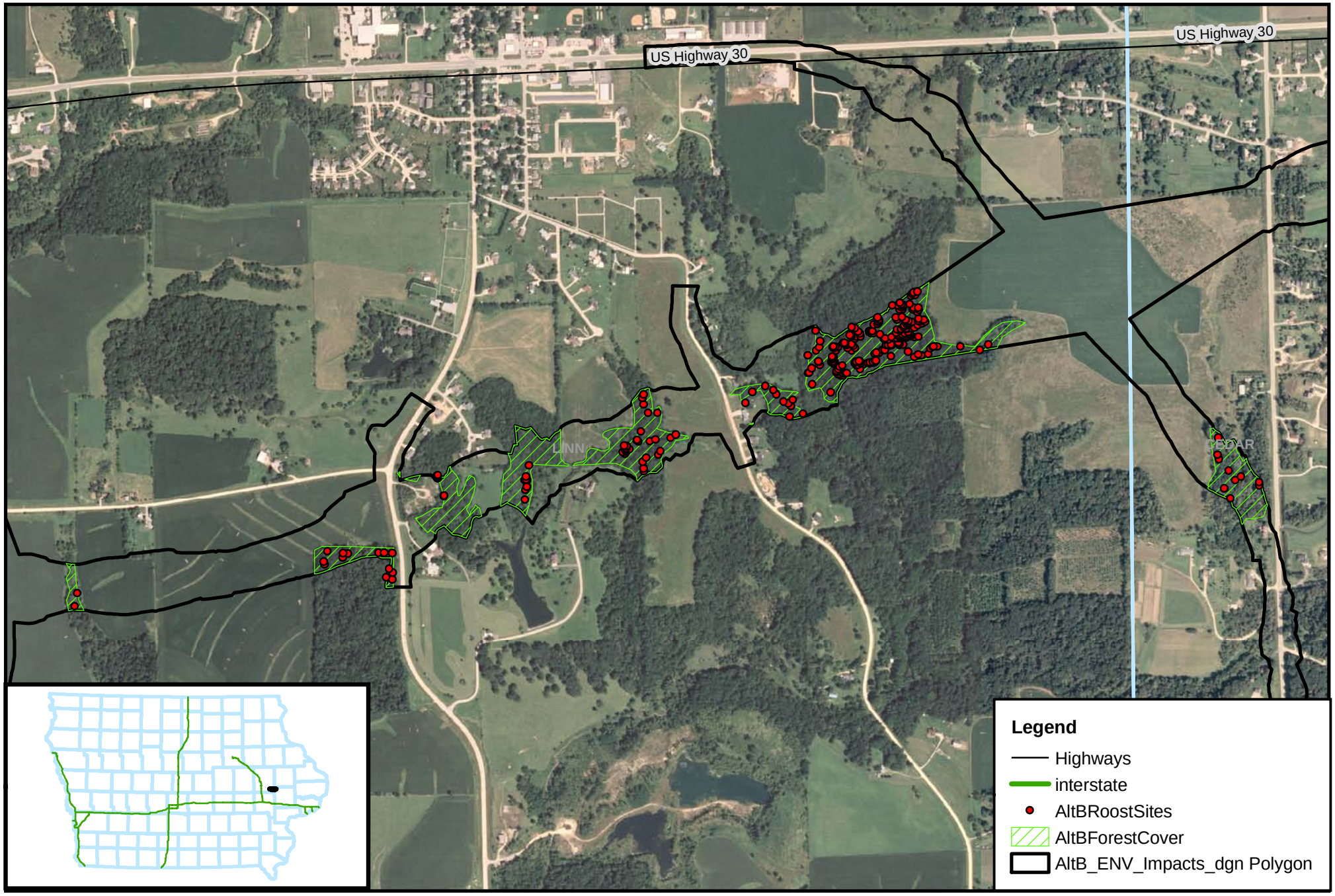
Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative A - 36.26 acres Woodland Impacts, 172 Potential Indiana Bat Roost Trees

0 0.125 0.25 0.5 Miles

N

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



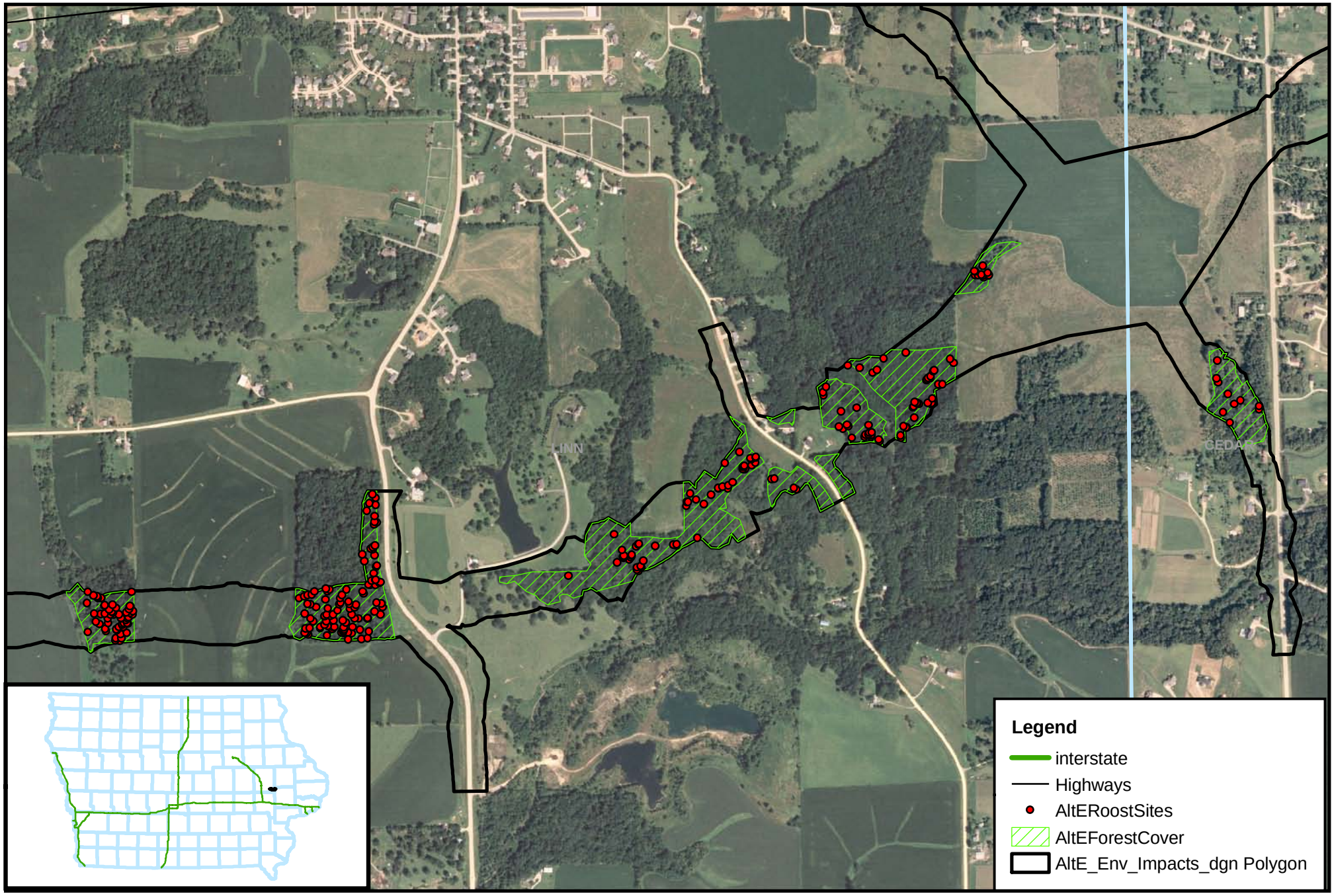
Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative B - 34.76 acres Woodland Impacts, 279 Potential Indiana Bat Roost Trees

0 0.1 0.2 0.4 Miles

N

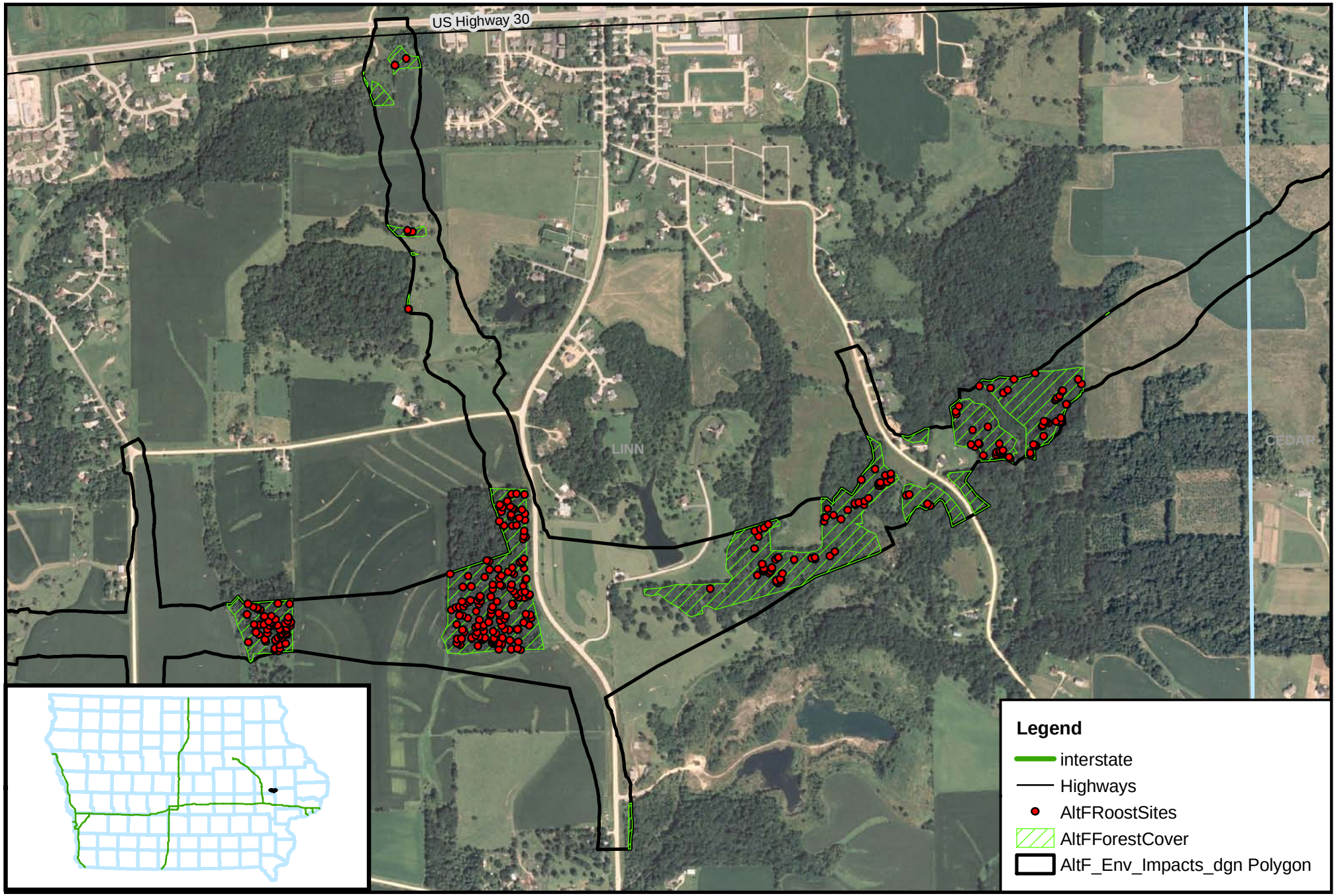
*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative E - 50.72 acres Woodland Impacts, 296 Potential Indiana Bat Roost Trees

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative F - 54.48 acres Woodland Impacts, 332 Potential Indiana Bat Roost Trees

0 0.1 0.2 0.4 Miles

N

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**

800 Lincoln Way, Ames, Iowa 50010 515-239-1510
FAX# 515-239-1726

April 4, 2011

Ref: Mount Vernon/Lisbon Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57
PIN: 95-57-030-050

Richard C. Nelson
U.S. Fish & Wildlife Service
Rock Island Field Office
1511 – 47th Avenue
Moline, IL 61265

Dear Mr. Nelson:

The Iowa Department of Transportation (DOT) is proposing improvements to U.S. Highway 30 (U.S. 30), including a bypass of the communities of Mount Vernon and Lisbon, located in Linn and Cedar Counties, Iowa (Figure 1, enclosed).

The proposed project would include approximately eight miles of a four lane roadway with two interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon and would end approximately 2.0 miles east of the Cedar/Linn County line.

History of Biological Reviews

Several species studies were completed for the project study area in 1999 and 2000. The findings in these reports are relevant to the current project investigation area because much of the study areas overlap geographically.

An Overview of Biological Resources in the Mt. Vernon Highway 30 Bypass Corridor in Linn and Cedar Counties, Iowa completed by Jacobs and Associates in October 1999 documented that no protected species were observed and no suitable habitat for species known to have ranges approaching or within the project study area were observed.

Biological Resources in the Construction Zone of a Proposed Connector Road in Linn County, Iowa completed by Jacobs and Associates in November 2000 documented that the general nature of the corridor route as pasture or agricultural fields characterized by common plants.

Phase II Assessment of Woodlands in the Mt. Vernon Highway 30 Bypass Corridor in Linn and Cedar Counties, Iowa completed by Jacobs and Associates in November 2000 documented woodland character descriptions and comprehensive species lists from field identification studies conducted throughout the 2000 growing season. The study concluded that high quality woods exist in the project area; however, no protected species were identified during this study.

Fish and Mussel Surveys for the U.S. Hwy 30 Mount Vernon Bypass completed by Helms & Associates in October 2000 collected 11 species of fishes, all common to the area, from three streams. None are listed as threatened, endangered or species of concern on state or federal lists. No mussels were observed or collected.

Current Biological Reviews

After reviewing the state and federal lists for listed species in Linn and Cedar Counties Howard R. Green Company (HR Green) conducted field reviews of the current project area in August and November 2010. ***Biological Resources Review for US 30 Improvements and Relocation Mount Vernon and Lisbon, Iowa*** prepared in December 2010 and updated in February 2011 documented no suitable habitat for state or federally listed species within the project study corridor. HR Green determined that abundant potential summer habitat and potential roosting trees for the Indiana bat (*Myotis sodalis*) are present in the project area.

At an Environmental Concurrence Point meeting on December 8, 2010 Joe Slater of the U.S. Fish and Wildlife Service (USFWS) requested an Indiana bat habitat survey of the woodlands within the project study area.

HR Green conducted a desktop analysis and field reviews on January 6-7 and 25-26, 2011 to determine if suitable Indiana bat roost trees were present within the project area. Their report, ***Indiana Bat Summer Habitat Survey U.S. 30 Improvements and Relocation Mount Vernon and Lisbon, Iowa***, prepared in February of 2011 documented 17 forest cover areas meeting criteria for suitable Indiana bat habitat. Within the 17 forest cover areas 1,139 potential roosting trees were observed and documented (report enclosed).

Iowa DOT conducted an analysis of HR Green's data to calculate potential impacts to woodland and suitable Indiana bat roost trees within the project's four remaining alternatives: Alternative A, Alternative B, Alternative E and Alternative F (Table 1 and Figures 2-5, enclosed).

Avoidance and Mitigation

Neither Linn nor Cedar Counties are designated by the Iowa Department of Natural Resources (Iowa DNR) or USFWS as summer range of the Indiana bat in Iowa. In addition, there are no known occurrences of Indiana bat documented in Linn or Cedar Counties. There are also no hibernacula known in Linn or Cedar Counties. However 17 forest cover areas within the project area contain more than 15% forest cover, permanent water within a ½-mile radius and trees that meet criteria for Indiana bat summer habitat.

To avoid potential impacts to Indiana bats the following mitigation strategies are proposed:

1) Include Iowa DOT Standard Note 232-9 in project plans. Standard Note 232-9 requires tree removal after September 15th and before April 15th.
2) Replace impacted woodland with new tree plantings suitable for Indiana bat summer habitat or tree preservation areas with suitable tree species. In a meeting between Iowa DOT and FHWA on March 23, 2011 the FHWA concurred with replacing the impacted portions of the 17 forest cover areas with an equal amount of tree plantings to provide future habitat for potential use by Indiana bats should they become known in Linn or Cedar County.

Determination of Effect

Based on literature, data reviews and field studies for the project, Iowa DOT has determined, under the delegation authority provided by FHWA, that the proposed project is not likely to adversely affect federally or state-listed species or result in the destruction or adverse modification of federally designated critical habitat. *We request that USFWS concur with this determination.* A Determination of effect form is enclosed.

The project is a federal-aid project. If you have questions or need additional information, please contact me at 515/239-1510 or Jill Rudloff at 515/239-1698.

Sincerely,

Scott C. Marler
Environmental Resources Manager
Office of Location and Environment

SCM:JR:sm
Enclosures

cc: Kelly Poole, DNR (via separate letter sent 4-4-2011)
J. Rudloff, Location & Environment (file)

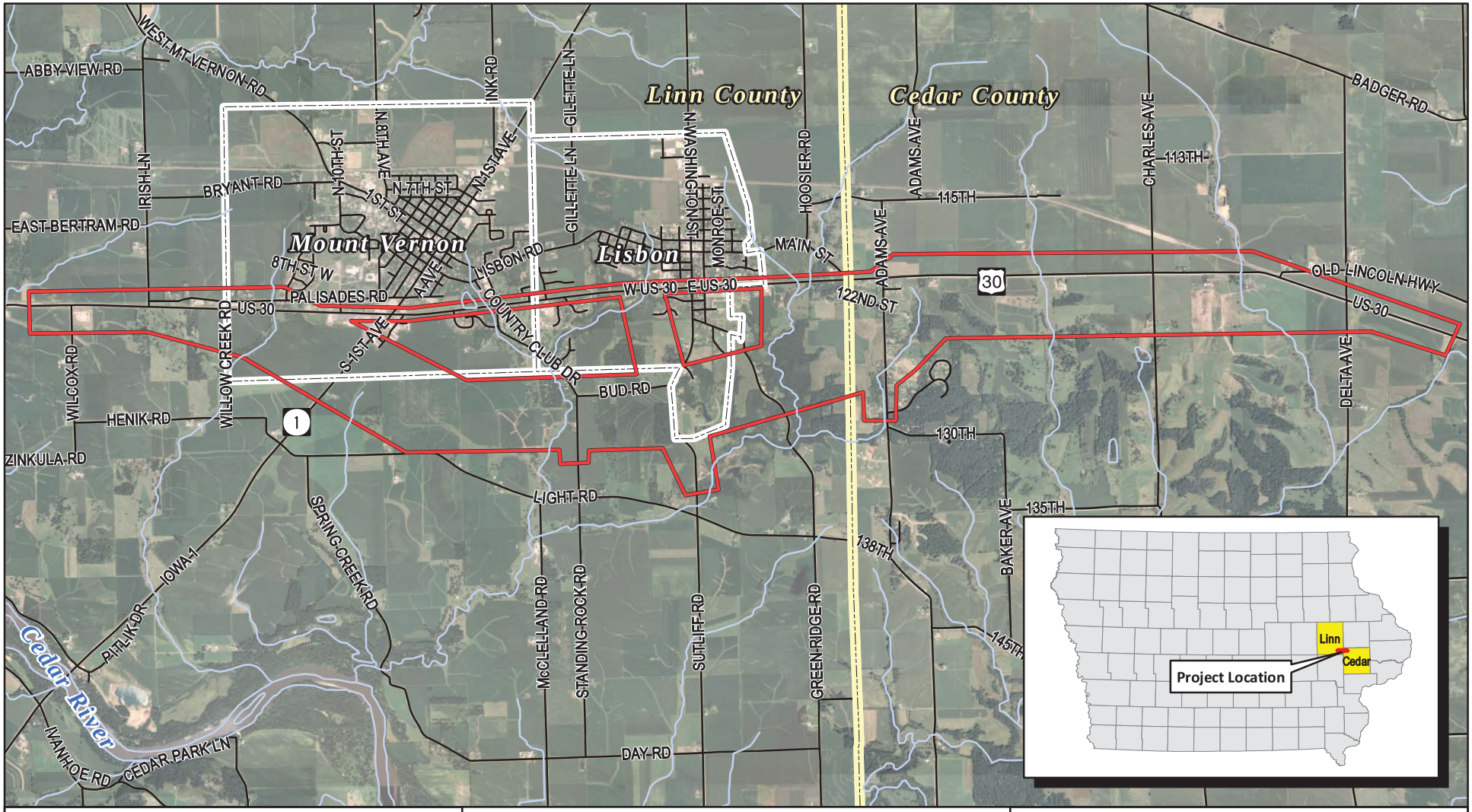


FIGURE 1
Project Location Map

US 30 Improvements and Relocation
Biological Resources Review

Linn & Cedar Counties, Iowa

Project Study Area

0 0.5 1 2
Miles

\\HRGSPNAS\Data\10100002.01\GIS\Figures\Species\Figure 1 - Project Area.mxd

Table 1. Analysis of Woodland & Suitable Indiana Bat Roost Trees in Remaining Alternatives

Alternative	Woodland Impacts (acres)	Potential Impacted Roost Trees
A	36.26	172
B	34.76	279
E	50.72	296
F	54.48	332

Determination of Effect for Threatened & Endangered Species

Project Name:		Highway No.:
Mount Vernon/Lisbon Bypass		Hwy 30
Project No.:		Station No.:
NHS-30-7(76)--19-57		
County:	Letting Date:	PLSS/UTM:
Linn and Cedar		

Project Description:

The proposed project would include approximately eight miles of a four lane roadway with two interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon and would end approximately 2.0 miles east of the Cedar/Linn County line.

Are there documented occurrences of T&E species within 1 mile of the project? ☒ Yes ☐ No

If yes, list species:

Eastern Prairie Fringed Orchid - Fed T, State E

Are there documented occurrences of T&E species within the limits of construction? ☐ Yes ☒ No

If yes, list species:

Is there likely to be habitat for T&E species within the project's limits of construction? ☒ Yes ☐ No

If yes, list species:

Indiana bat - Fed E, State E

Describe current geographic setting *(native habitats, adjacent land use, etc.)* and potential project impacts:

Much of the study area has been converted to agricultural or residential use but wetland features and mature woodlands are also present.

Will the project likely require borrow? ☒ Yes ☐ No

DETERMINATION OF EFFECT - ACTION

☐ No Effect ☐ No Effect *(by following recommendations)* ☐ Needs Further Study
☒ May Affect – Not Likely to Adversely Affect ☐ May Affect – Likely to Adversely Affect

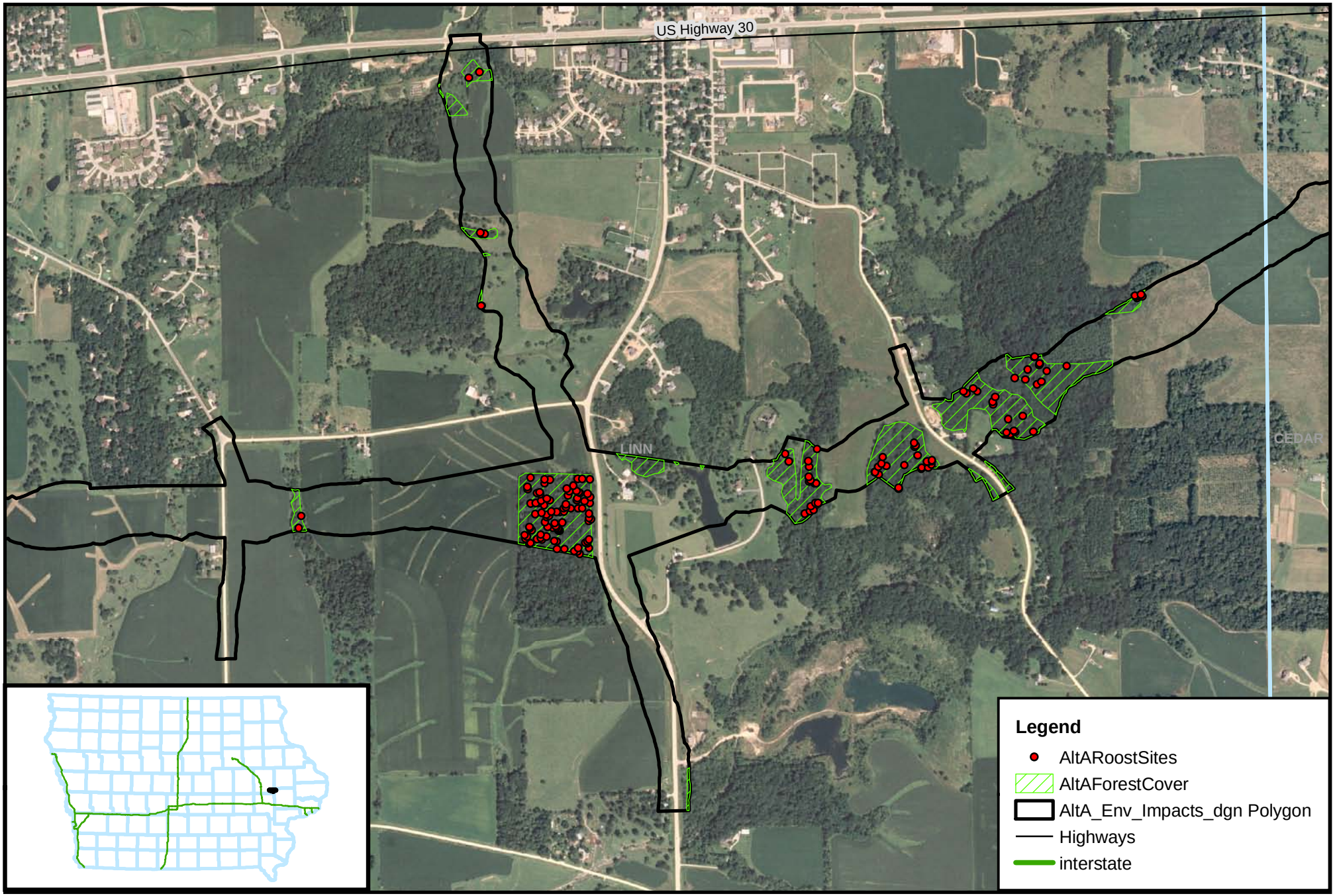
Further Study – *Consisting of the Following*	Iowa DOT Recommendations
	Iowa DOT Standard Note 232-9 will be included in project plans requiring tree removal after September 15th and before April 15th.Replace impacted woodland with suitable Indiana bat tree species to satisfy Iowa Code 314.23 and provide future habitat for potential use by Indiana bats in the project area.

References:

☒ Natural Areas Inventory ☒ T&E Species Range Maps ☒ Aerial Photos ☐ Soils of Concern Data
☒ Other: Biological Reviews

J. Rudloff — *Prepared By:*

3/25/2011 — *Date:*



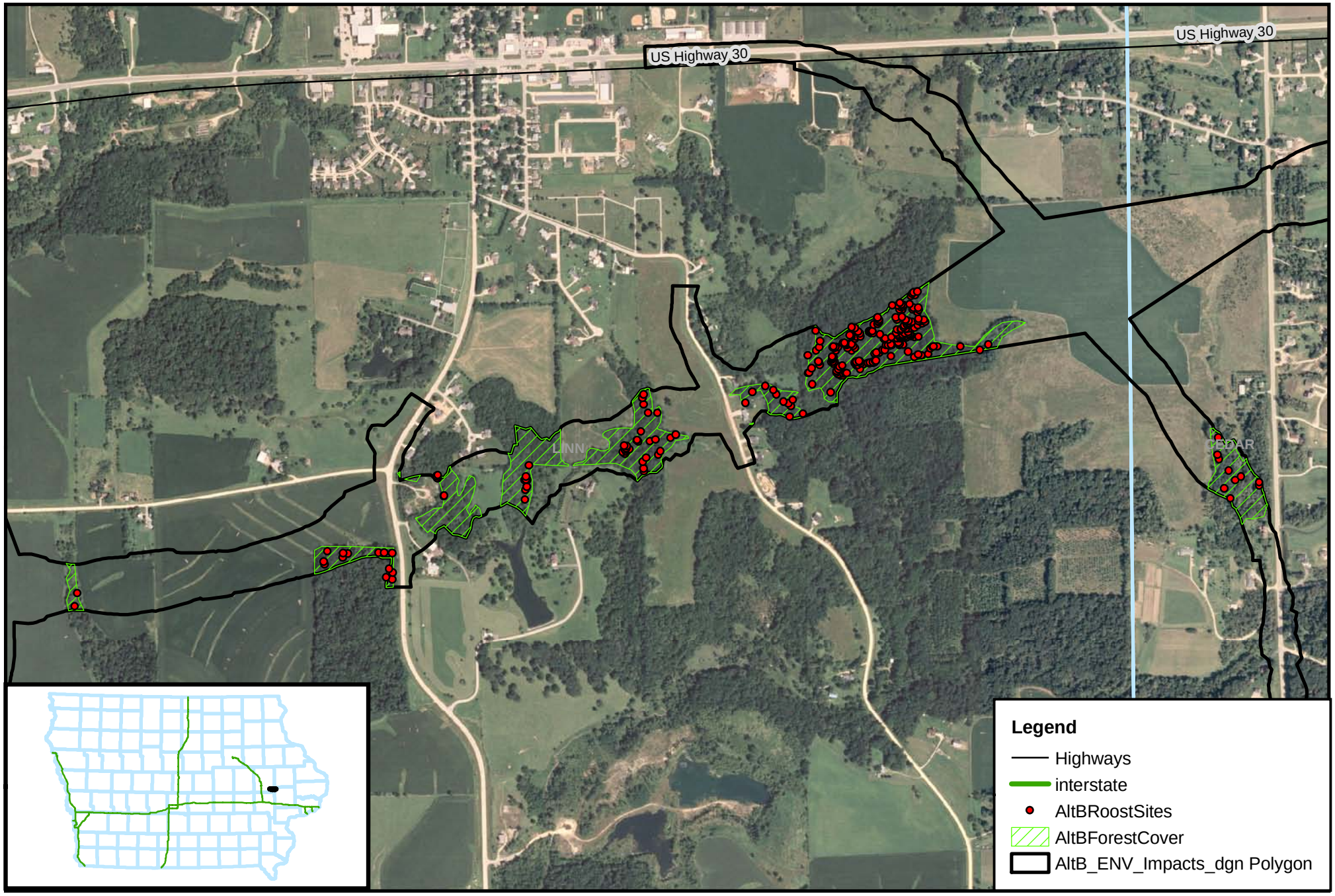
Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative A - 36.26 acres Woodland Impacts, 172 Potential Indiana Bat Roost Trees

0 0.125 0.25 0.5 Miles

N

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



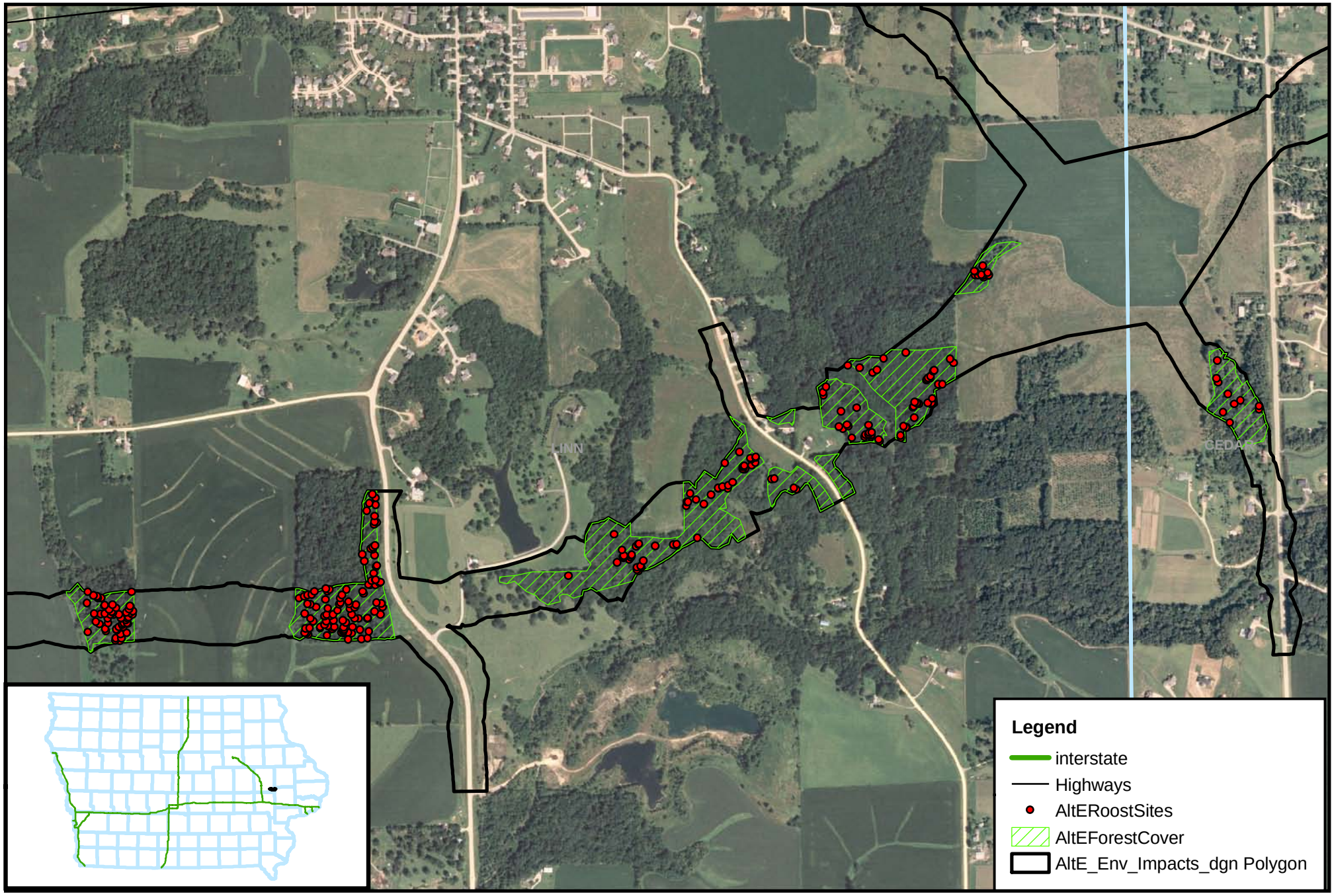
Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative B - 34.76 acres Woodland Impacts, 279 Potential Indiana Bat Roost Trees

0 0.1 0.2 0.4 Miles

N

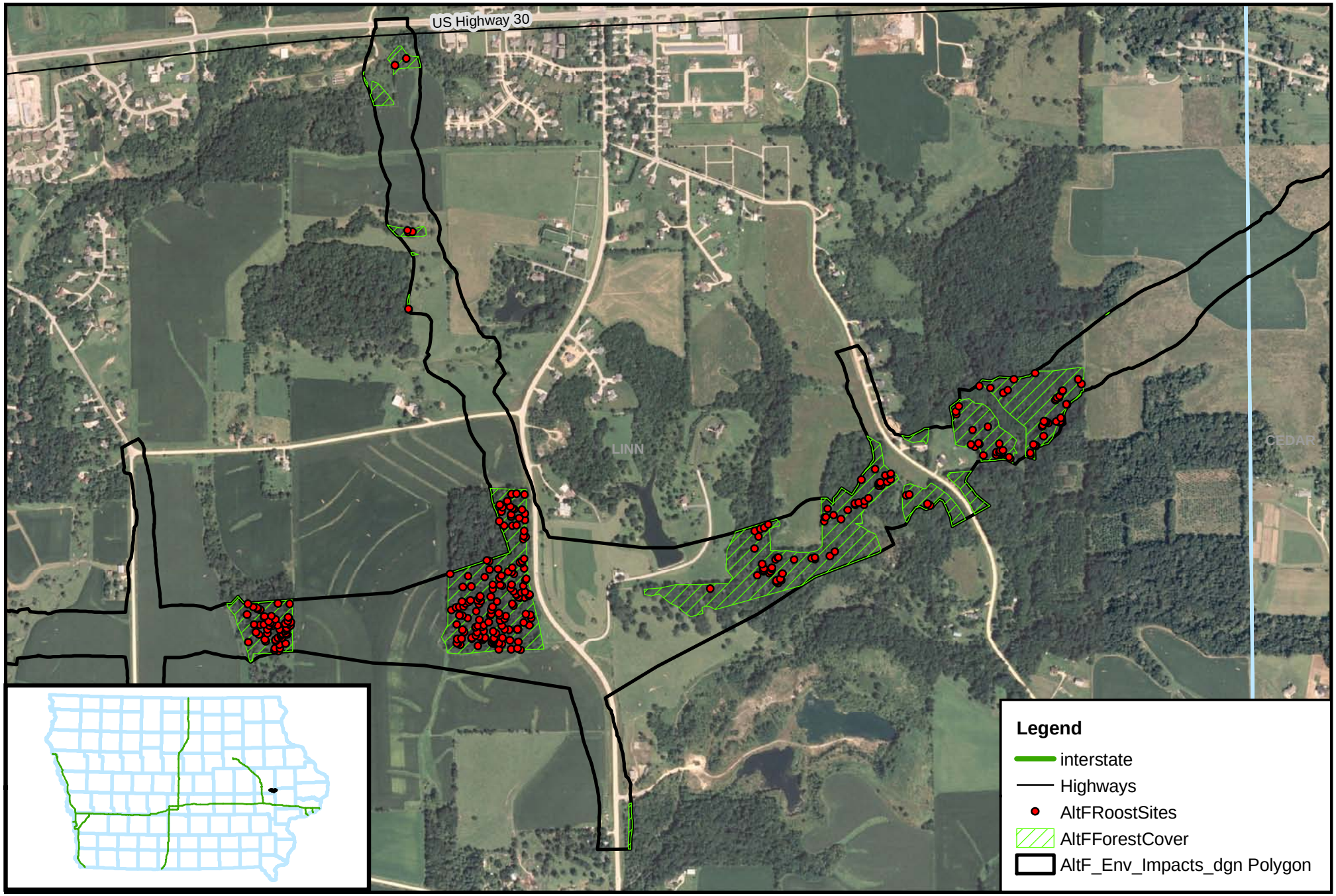
*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative E - 50.72 acres Woodland Impacts, 296 Potential Indiana Bat Roost Trees

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**



Iowa Department of Transportation

Mount Vernon/Lisbon Highway 30 Bypass
Linn and Cedar Counties
NHS-30-7(76)--19-57, PIN: 95-57-030-050
Alternative F - 54.48 acres Woodland Impacts, 332 Potential Indiana Bat Roost Trees

0 0.1 0.2 0.4 Miles

N

*** Map zoomed into areas of Forest Cover meeting Indiana bat criteria**

Rudloff, Jill [DOT]

From: Joseph_Slater@fws.gov
Sent: Thursday, May 12, 2011 8:44 AM
To: Rudloff, Jill [DOT]
Subject: US 30 Mt Vernon Bypass study

After much discussion internally, we have come to the conclusion that the Service cannot Concur with the May Affect-Not likely to Adversely Affect determination with regards to the Indiana bat species on the above project.
Recent survey data has discovered the species north of the I-80 corridor and with the suitability of the habitat located in the bypass project area, presence of the species must be assumed. We would recommend a mist net survey as part of the planning process studies to determine if maternity colonies are present in the summer months. Simply using the no-cut window will not result in a not likely to adversely affect outcome if the species is in fact in the area during the summer months. Once presence or absence can be verified we can proceed with the concurrence process and discuss mitigation measures further. We can discuss this in further detail but I wanted to let you know the direction we are headed with the new data on Indiana bats that is being collected. Thanks for your patience in this regard.

Joe

Joe Slater
USFWS
1511 47th Avenue
Moline, IL 61265
(309) 757-5800 ext.208

" The only progress that counts is that
on the actual landscape of the back forty"
Aldo Leopold

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office
1511 47th Avenue
Moline, Illinois 61265
Phone: (309) 757-5800 Fax: (309) 757-5807

IN REPLY REFER TO:
FWS/RIFO

June 6, 2011

Mr. James P. Rost, Director
ATTN: Mr. Scott Marler
Office of Location and Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Dear Mr. Marler:

The Iowa Department of Transportation (IDOT) is proposing improvements to U.S. Highway 30 (U.S. 30) which includes a bypass of the communities of Mount Vernon and Lisbon, located in Cedar and Linn Counties, Iowa. The Service offers the following comments with reference to the federally listed Indiana bat as it relates to the proposed construction of that project.

By letter dated April 4, 2011, IDOT requested concurrence with its determination that the project "may affect-but is not likely to adversely affect" federally endangered Indiana bats as a result of construction of the Mount Vernon/Lisbon bypass which impacts suitable habitat for the Indiana bat. The basis for your determination involved the avoidance and mitigation measures of winter clearing and forest replanting respectively. We **do not concur** with your determination because winter cutting alone may not be sufficient to eliminate adverse effects. The dates between September 15 and April 15 refer to a period when Indiana bats are not likely to be present (non-maternity periods) and thus clearing during this period avoids direct take. However, indirect take in the form of harm or harassment may result from stress related to loss of their communal maternity habitat and energy expended in efforts to find new suitable habitats.

Indiana bats are philopatric to their summer areas and are sensitive—particularly pregnant females—to changes in their thermal environment. Reproductive females are obligate colonial roosters. In the spring females are stressed from 6 to 7 months of hibernation, pregnancy, and potentially long migrations. If they return to their traditional summer roosting area and it is no longer habitable, they are faced with finding suitable habitat They need primary and alternative roosting trees with specific thermal properties that are within commuting distance of a good prey base. In addition to the difficulties associated with replacing their roosting and foraging habitat, they need to find their colony mates as well. All this on top of stress from over-wintering can cause reduced somatic condition, aborted pregnancy, or death. Thus, in considering whether

cutting trees in the winter will have an adverse effect, we need to complete an analysis that assesses how much of their traditional summer habitat will be destroyed, how likely is it that they will find unoccupied habitat to compensate for this loss, and the likely costs of needing to find a new home during a physiologically stressed time of the year.

Thus, to evaluate whether take of the species and/or suitable habitat will occur by the proposed project, we recommend mist net surveys to determine whether Indiana bats are present. We would be pleased to assist in the design of the surveys.

This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended.

If you have any questions regarding our comments, please contact Joe Slater of my staff at (309) 757-5800, extension 208.

Sincerely,

for Richard C. Nelson
Field Supervisor

CC: FHWA (LaPietra)

S:\Office Users\Joe\iadotMtVernon.doc

U.S. Department of Transportation
Federal Highway Administration

Iowa Division

105 Sixth Street
Ames, Iowa 50010
(515) 233-7300
(515) 233-7499
www.fhwa.dot.gov/iadiv

August 4, 2011

In Reply Refer To:
HAD-IA

Mr. Richard C. Nelson, Field Supervisor
United States Fish and Wildlife Service
Rock Island Field Office
1511 47th Avenue
Moline, Illinois 61265

Dear Mr. Nelson,

Thank you for your recent comments to the Iowa Department of Transportation (Iowa DOT) regarding the federally-listed Indiana bat as it relates to the proposed construction of a US 30 bypass of Mount Vernon and Lisbon, Iowa.

As you are aware, the Federal Highway Administration (FHWA) has the responsibility under the Endangered Species Act of 1973 (ESA) to make determinations of effect on federally-threatened or endangered species and to consult with the United States Fish and Wildlife Service (the Service) as required. In August of 1986, the FHWA delegated informal consultation to all state DOT's in accordance with 50 CFR 402.08.

By letter dated June 6, 2011, the Service did not concur with the Iowa DOT's determination that the project "may affect but is not likely to adversely affect" the federally-listed Indiana bat because winter tree cutting alone may not be sufficient to eliminate adverse effects. In addition, the Service indicated an analysis and assessment of potentially suitable summer habitat would need to be completed. The Service recommended mist net surveys to determine whether Indiana bats are present and offered to assist with survey design.

The FHWA's review of this project revealed the following information:

- There will be no direct take of Indiana bats because potentially suitable summer habitat will be cleared during the winter when bats are not present.
- There are no known hibernacula within the vicinity of the project.
- To our knowledge, there are no known records of Indiana bats in Linn County. We are aware the Service recently updated their website to include Linn County within the range of Indiana bats. We would be interested in learning more about the data and information that led to this recent change.
- Indiana bats were recently recorded north of Interstate 80 in Poweshiek and Guthrie Counties, neither of which are in close proximity or as far north in latitude as the project area .

- The Iowa DOT is aware of recent acoustic surveys by private groups in Tama County which revealed minimal amounts of *Myotis* activity.
- The Iowa DOT has already conducted field surveys and concluded potentially suitable summer habitat for Indiana bats is present. Of the three alternatives under consideration, the largest amount of potentially suitable summer habitat that would be impacted is approximately 54 acres. However, the Iowa GAP data showed 1,911 acres of potentially suitable habitat within 1 mile of the project area. Therefore, without regard for species presence or absence, the quality and quantity of habitat available should not be diminished on a scale that would cause harm to the species.
- Review of land use plans for this portion of Linn County designates the proposed project area as Non-Metro Urban Service Areas.
- In addition to winter tree cutting, the Iowa DOT, in consultation with FHWA, has already proposed preservation of woodlands as well as tree plantings to mitigate potential effects to Indiana bats. The FHWA intends to take these steps whether Indiana bats are present or not, to best ensure survival of the species should they be discovered in Linn County in the future.

Although the FHWA is not required to conduct new scientific investigations under the ESA, the FHWA and state DOT's have conducted many scientific investigations in the past and will continue to do so in the future. In this case and in light of the facts listed above, mist net surveys to determine present/absence do not appear warranted by the FHWA because the Iowa DOT has, on its own, conservatively approached the project as if there were known presence. If you have any additional information specific to Indiana bats and the project vicinity, please forward this information to our office at your earliest convenience for further consideration.

Sincerely,

Mike LaPietra
Environmental Program Manager

cc:
Jim Rost, Iowa DOT

APPENDIX B

AGENCY AND TRIBAL COORDINATION

Early Agency Coordination

Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

RECEIVED
JUN 14 2010
OFFICE OF LOCATION & ENVIRONMENT

June 8, 2010

Janet Vine
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: U.S. 30 Mount Vernon and Lisbon ByPass – Environmental Assessment
NHS-30-7(76)—19-57
Early Coordination Letter

Dear Ms. Vine,

Thank you for the early coordination letter on the environmental assessment for the Highway 30 bypass around Mount Vernon and Lisbon, Iowa.

After review of the Federal Land and Water Conservation Fund (LWCF) recreational projects for both the Linn and Cedar County's, and the two city's, I have found no projects that would be affected within the study corridor.

Therefore, it appears that the U.S. Highway 30 realignment corridor area through Mount Vernon and Lisbon, and the counties of Linn and Cedar, has no effect on the LWCF program.

If you have any questions, please do not hesitate to contact me at 515-281-3013, or by email at kathleen.moench@dnr.iowa.gov.

Sincerely,

Kathleen Moench

Kathleen Moench
LWCF Federal Aid Coordinator

Vine, Janet [DOT]

From: Vine, Janet [DOT]
Sent: Wednesday, June 09, 2010 8:35 AM
To: 'Stewart, Robert'
Subject: RE: Early Coordination - US 30 Mt Vernon/Lisbon
Attachments: 100601 EC Packet.pdf

The letter and supporting information were sent to both NPS and USFWS, but not to USGS. I've attached a copy of the information for you to forward to USGS. If you need anything else, let me know.

Janet M. Vine
NEPA Section
515.239.1467

From: Stewart, Robert [mailto:Robert_F_Stewart@ios.doi.gov]
Sent: Tuesday, June 08, 2010 9:30 AM
To: janet.vine@dot.ia.gov
Subject: Early Coordination - US 30 Mt Vernon/Lisbon

Did you also send the letter to the U.S. Fish and Wildlife Service, National Park Service, and U.S. Geological Survey?

If not, could you send me an electronic version of the Project Location Map so I can do so?

Thanks.

Robert F. Stewart
Regional Environmental Officer
Office of Environmental Policy and Compliance
U.S. Department of the Interior
P.O. Box 25007 (D-108)
Denver, CO 80225-0007
Voice: (303) 445-2500
Fax: (303) 445-6320
Cell: (303) 478-3373
Email: robert_f_stewart@ios.doi.gov

STATE HISTORICAL SOCIETY of IOWA

A Division of the Iowa Department of Cultural Affairs

June 10, 2010

In reply refer to:
R&C#: 930857069

Janet m. Vine, NEPA Document Manager
Office of Location and Environment
Planning & Research Division
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: FHWA – LINN COUNTY – NHS-30-7(76)—19-57 – PROPOSED US HWY 30 MOUNT VERNON/LISBON BYPASS – ENVIRONMENTAL ASSESSMENT PREPARATION (EA) FOR PROJECT

Dear Ms. Vine,

Thank you for notifying our office about the above referenced proposed project. We understand that this project will be a federal undertaking for the Federal Highway Administration (FHWA) and will need to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800 (revised, effective August 5, 2004) and with the National Environmental Policy Act (NEPA).

It is our understanding that additional cultural resource studies have not yet been completed for this undertaking and it is currently unknown whether any significant historic properties will be affected by the proposed undertaking. Per our programmatic agreement, our office understands that the appropriate cultural resources investigations will be implemented and conducted to determine whether any historic properties will be affected by the proposed undertaking. If during your scoping process, a cultural resource issue is identified, our agency can provide further technical assistance to your agency.

Our office will be a consulting party to the responsible federal agency and your agency acting on behalf of FHWA in accordance with our Programmatic Agreement as part of the Section 106 consultation process. We request that all correspondence related to this undertaking for Section 106 consultation be provided to our office through the Office of Location and Environment at the Iowa Department of Transportation in accordance with our Programmatic Agreement.

We look forward to consulting with your office and the Federal Highway Administration on the Area of Potential Effect for this proposed project and whether this project will affect any significant historic properties under 36 CFR Part 800.4. We will need the following types of information for our review:

- The Area of Potential Effect (APE) for this project needs to be adequately defined (36 CFR Part 800.16 (d)).
- Information on what types of cultural resources are or may be located in the APE (36 CFR Part 800.4).

- The significance of the historic properties in the APE in consideration of the National Register of Historic Places Criteria.
- A determination from the responsible federal agency of the undertaking's effects on historical properties within the APE (36 CFR Part 800.5).

Also, the responsible federal agency will need to identify and contact all potential consulting parties that may have an interest in historic properties within the project APE (36 CFR 36 Part 800.2 (c)).

Please reference the Review and Compliance Number provided above in all future submitted correspondence to our office for this project. We look forward to further consulting with your agency and the Federal Highway Administration on this project. Should you have any questions please contact me at the number below.

Sincerely,

Douglas W. Jones

Douglas W. Jones, Archaeologist and Review and Compliance Program Manager
State Historic Preservation Office
State Historical Society of Iowa
(515) 281-4358

cc: Mike La Pietra, FHWA
Randall Faber, OLE, IDOT, Ames
Ralph Christian, Historian, State Historical Society of Iowa
Stacy Woodson, Howard R. Green Company

Planning & Development
Linn County, Iowa
www.linncounty.org/planning

Administrative Office Building
930 First Street Southwest
Cedar Rapids, Iowa 52404-2161

June 15, 2010

Janet Vine
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Re: US 30 Mt. Vernon/Lisbon Bypass – Environmental Assessment NHS-30-7(76) – 19-57

Ms. Vine:

The Linn County Planning & Development Department has briefly examined the proposed US 30 Mt. Vernon/Lisbon Bypass corridor and makes the following comments:

Future Land Use Planning
The corridor is located in an area designated as "Non-Metro Urban Service Area" (NMUSA) on the Linn County Rural Land Use Plan (RLUP). This area is generally intended for future development conforming to urban standards for density and provision of services. Therefore, the county anticipates future development within the NMUSA areas. However, I would also note that the corridor borders the "Agricultural Area" (AA) as designated on the RLUP. Agricultural Areas are not intended for non-farm development and the construction of the bypass may trigger demand for development not currently anticipated or supported in the AA area. The future land use map for the corridor area is shown on Exhibit 1.

Flood Hazard Areas
Linn County participates in the National Flood Insurance Program (NFIP), and construction of the bypass likely will impact designated flood hazard areas. Flood Plain Development Permits must be obtained before any development can occur within designated flood hazard areas, shown on Exhibit 2.

Wetlands
Construction of the bypass may impact identified wetlands, and appropriate mitigation measures and permits may be required. Designated wetlands are shown on Exhibit 3.

Historic and Archaeological Resources
Information from the State Historic Preservation Office indicates that historic and/or archaeological resources may be present within the corridor. Such data is only provided at the section scale; therefore the precise location and nature of these resources are unknown at this time. The Public Land Survey Sections which may contain historic and archaeological resources are shown on Exhibit 4.

Thank you for the opportunity to comment. If you have any questions regarding this, you may contact me by phone at 319-892-5130 or by email at les.beck@linncounty.org.

Regards,

Les Beck, Director

Digitally signed by Les Beck, Director
DN: cn=Les Beck, Director, email=les.beck@linncounty.org, o=Linn County, IA, ou=Department of Planning & Development, c=US
Date: 2010.06.21 18:07:11 -05'00'

Les Beck, Director

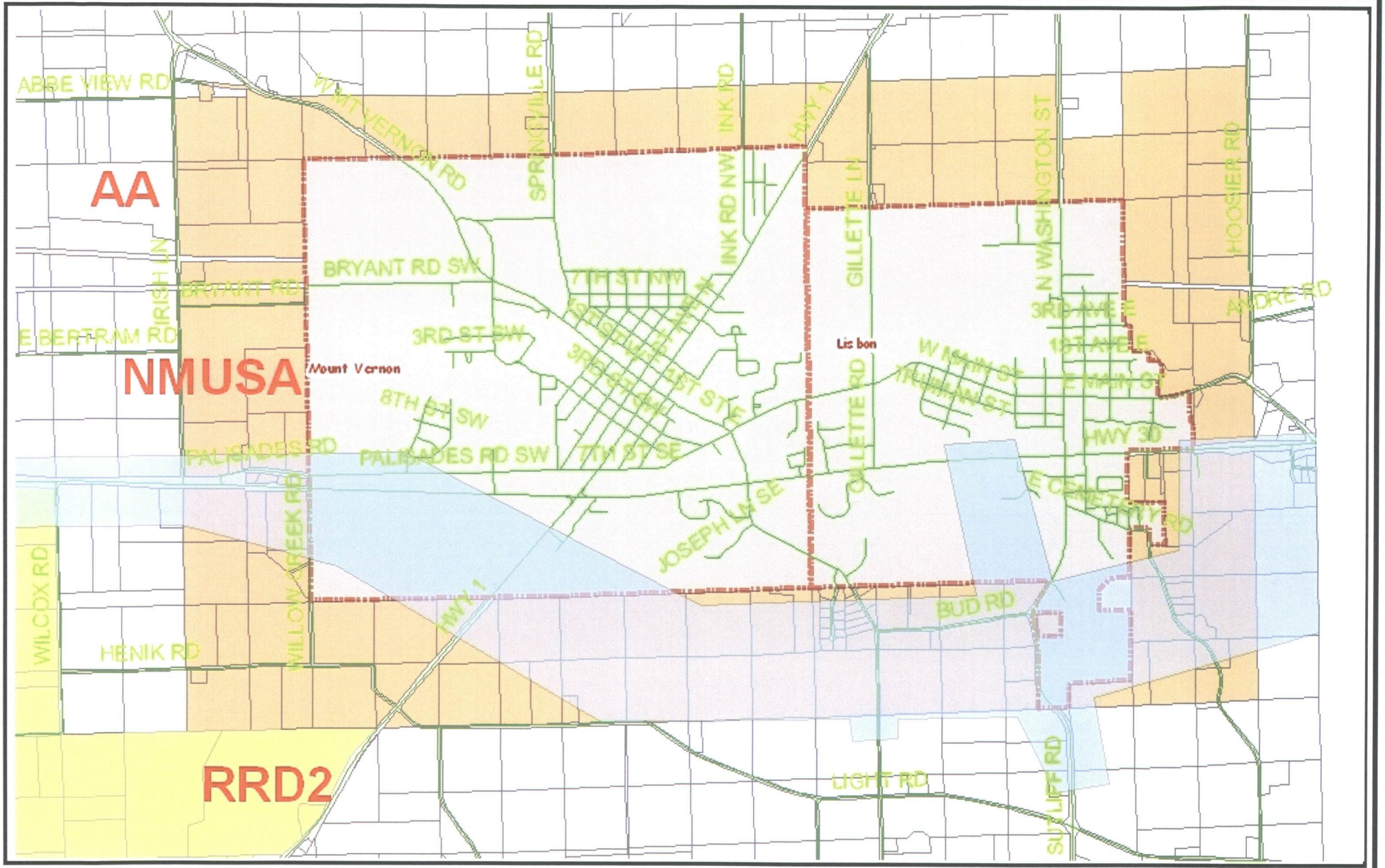


Exhibit 1
Linn County Rural Land Use Plan Map Designations
IDOT HWY 30 Corridor Preservation Zone

Legend
- Hwy 30 Cor Pres Zone
- Corporate Limits

RLUP Area
- AA
- NMUSA
- RRD2

Department of Planning and Development
930 First Street SW
Cedar Rapids, IA 52404
www.linncounty.org/planning

Data Source: Linn County Digital Flood Insurance Rate Map

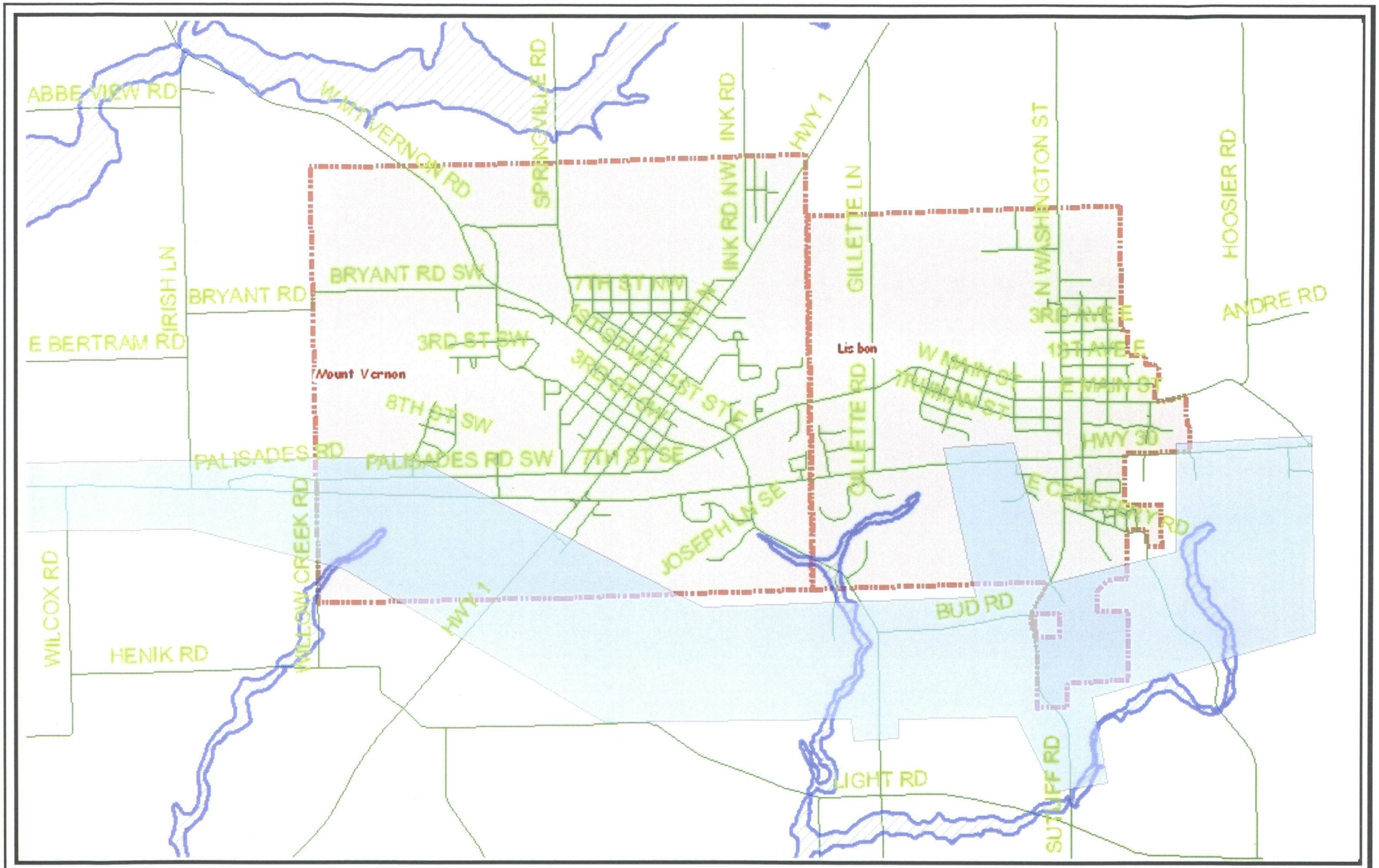


Exhibit 2
Designated Flood Hazard Area within the IDOT HWY 30 Corridor Preservation Zone

Legend

Hwy 30 Cor Pres Zone

Flood Zone

100 year (not studied)

Secondary Roads

Corporate Limits

Department of Planning and Development
930 First Street SW
Cedar Rapids, IA 52404
www.linncounty.org/planning

Data Source: Linn County Digital Flood Insurance Rate Map

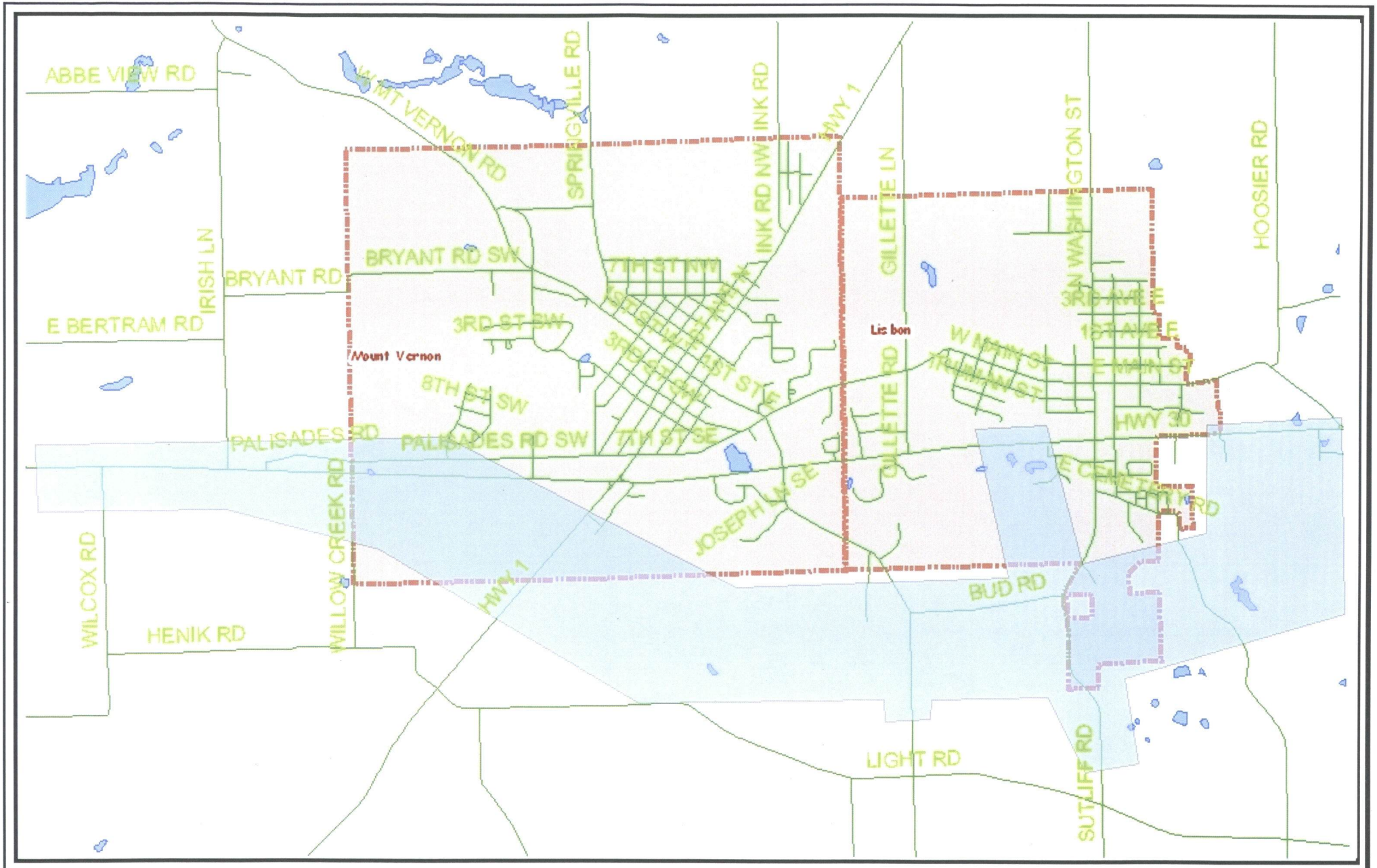


Exhibit 3
Identified Wetlands
IDOT HWY 30 Corridor Preservation Zone

Legend

- Hwy 30 Cor Pres Zone
- Identified Wetlands
- Corporate Limits

Department of Planning and Development
930 First Street SW
Cedar Rapids, IA 52404
www.linncounty.org/planning

Data Source: Linn County GIS/Natural Resource Conservation Service

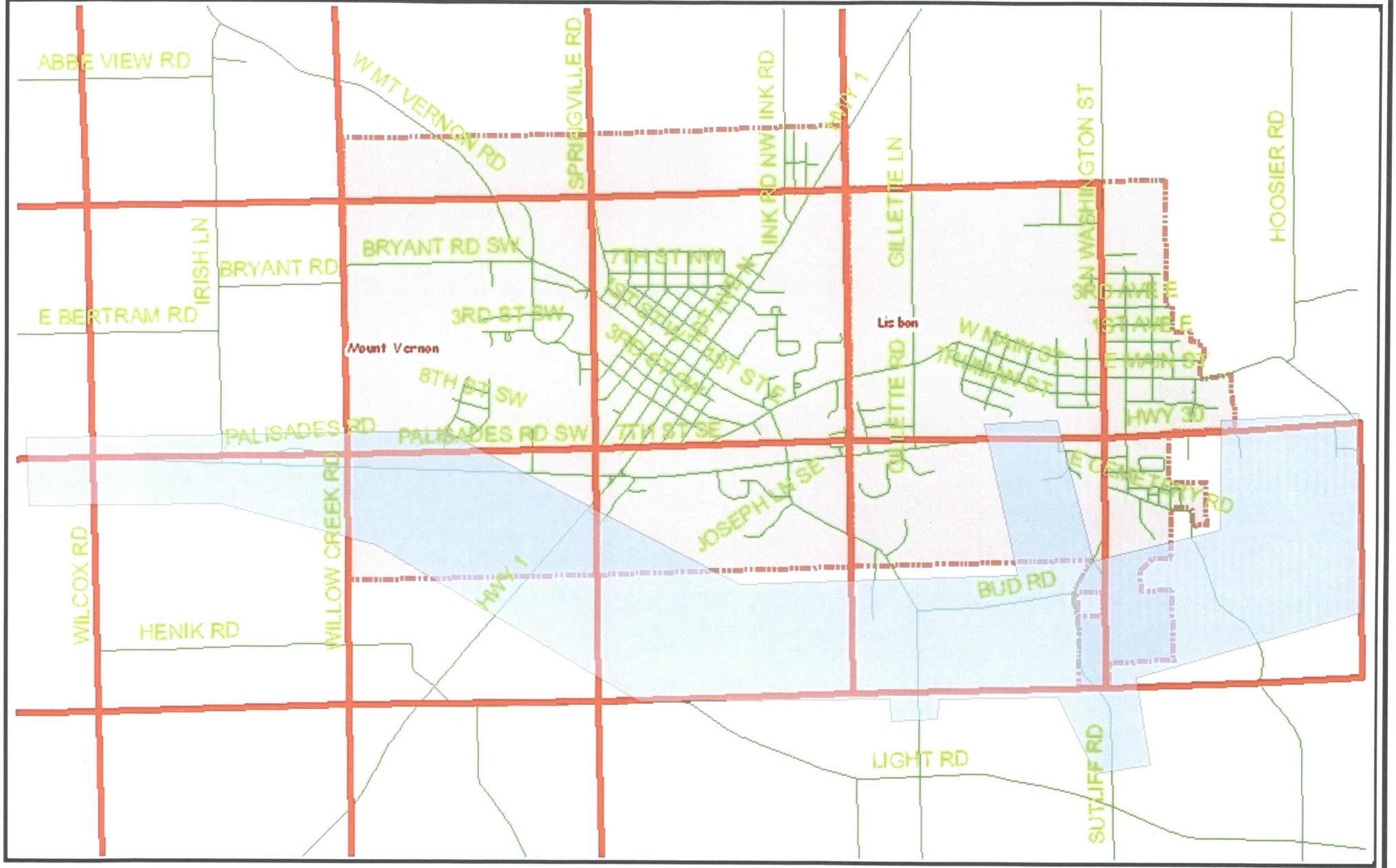


Exhibit 4
Sections Potentially Containing Historic & Archaeological Resources
IDOT HWY 30 Corridor Preservation Zone

Data Source: Iowa Office of the State of Archaeologist

Legend

- Hwy 30 Cor Pres Zone
- Potential Historic Sites
- Corporate Limits

Department of Planning and Development
930 First Street SW
Cedar Rapids, IA 52404
www.linncounty.org/planning

RECEIVED

JUN 18 2010

OFFICE OF LOCATION & ENVIRONMENT

Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

June 16, 2010

Ms. Janet Vine
NEPA Project Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

RE: U.S. 30 Mount Vernon and Lisbon Bypass – Environmental Assessment

Dear Ms. Vine:

Thank you for inviting Department comment on the impact of this project. The Department has searched for records of rare species and significant natural communities in the project area and found no site-specific records that would be impacted by this project. However, these 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 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) 281-8524.

Sincerely,

Daryl Howell
Environmental Specialist
Conservation and Recreation Division

FILE COPY: Daryl Howell
Tracking Number: 4903

502 EAST 9th STREET / DES MOINES, IOWA 50319-0034
PHONE 515-281-5918 FAX 515-281-6794 www.iowadnr.gov

Linn County Historic Preservation Commission

930 First Street SW ▪ Cedar Rapids, Iowa 52404 ▪ 319-892-5118

June 21, 2010

Ms. Janet M. Vine
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: US 30 Mt. Vernon – Lisbon Bypass: Environmental Assessment
NHS-30-7(76)—19-57

Dear Ms. Vine:

The Linn County Historic Preservation Commission (HPC) met on June 16 and reviewed IDOT's letter requesting comment on the above mentioned project. The HPC would like to draw attention to the enclosed material that identifies architectural properties and archaeological sites in the review area that were identified during a 1994 survey by Tallgrass Historians on behalf of the Linn County HPC.

As you'll note from the enclosed material, some of these sites are listed on or are potentially eligible for the National Register of Historic Places. The HPC wanted to make the IDOT aware of the historical significance of these properties and sites.

Please note the 1994 survey includes the review area west of Highway 1. Linn County has not yet surveyed the review area east of Highway 1.

If you have questions, please feel free to contact me at joi.bergman@linncounty.org or (319) 892-5118.

Sincerely,

Joi Bergman

Joi Bergman
Communications Director and
Staff Liaison to the Linn County Historic Preservation Commission

Encl.

Information compiled from the Linn County Comprehensive Planning Project Phase Three: Archaeological, Historical and Architectural Survey of Subsections C & Q

April 29, 1994

Rural Architectural Properties in Review Area

Architectural Site #	Description	Era	National Register
48	Primary Building	1859-1913	Ineligible
49	Not Identified	Post 1913	Ineligible
50	Smith/West Farm	1859-1913	Potentially Eligible / Individual Farmstead Unit
	House on Smith/West Farm	1859-1913	Potentially Eligible / Multiple Property Listing
73	House and Smokestack on Wesley West Farm	1859-1913	Listed on the National Register
74	Stewart House	1837-1859	Ineligible

Rural Archaeological Sites in Review Area

Archaeological Site #	Description	Era	National Register
13LN261	School Site	Not Identified	Ineligible
13LN262	Habitation Site	Not Identified	Ineligible
13LN264	Habitation Site	Not Identified	Ineligible
13LN265	Habitation Site	Not Identified	Ineligible
13LN431	Habitation Site	1858-1869	Potentially Eligible
13LN432	Farmstead Site	1859-1960	Potentially Eligible
13LN433	Habitation Site	1859-1895	Potentially Eligible

Quote from Page 5-6:

At present, none of these sites are threatened with destruction, although most will continue to be degraded by cultivation. It is not recommended that any be listed in the NRHP at the present time, unless property owners request this listing or unless sites become threatened by natural processes or man-made activities, such as a housing development construction.

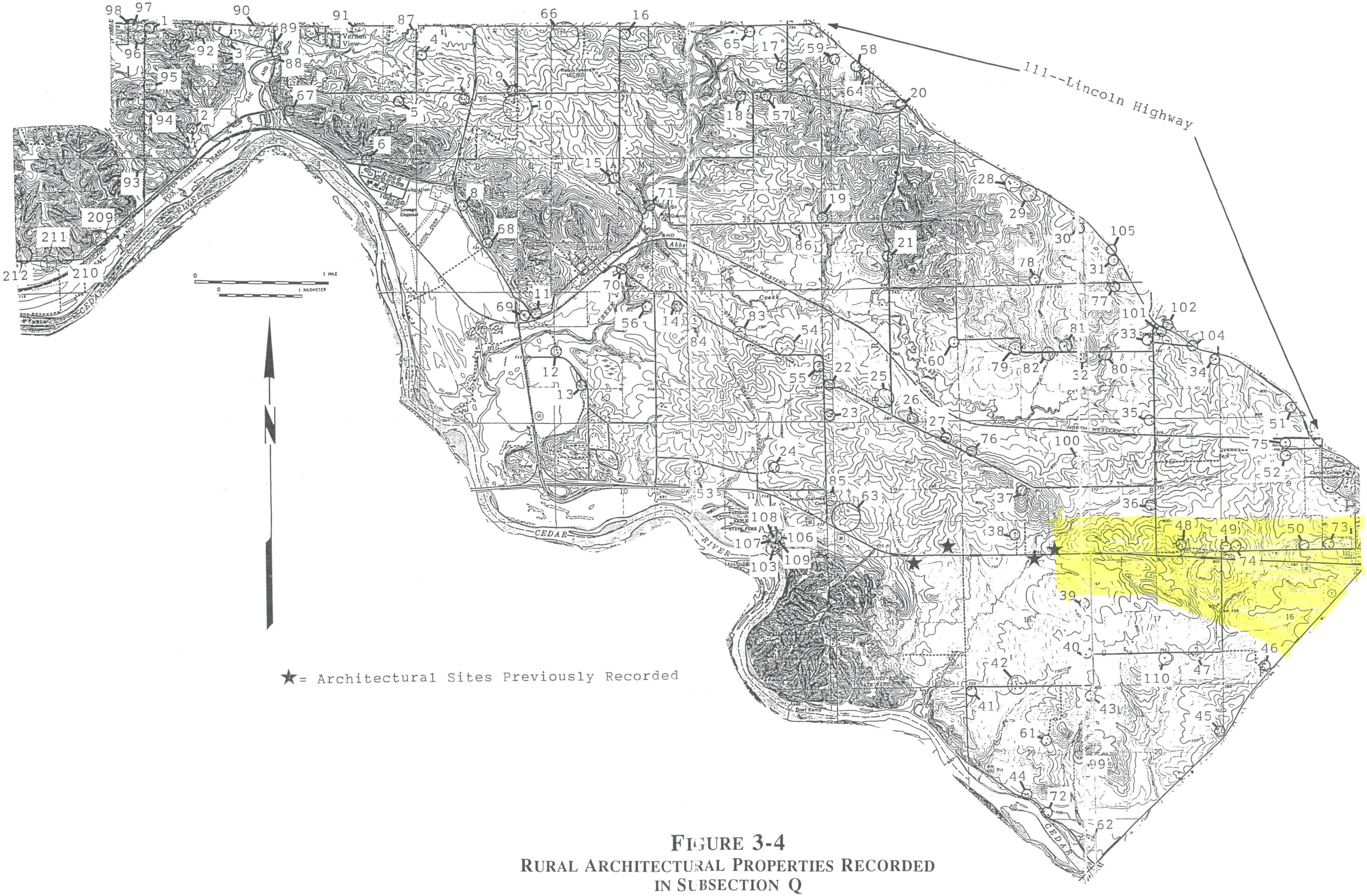


FIGURE 3-4
RURAL ARCHITECTURAL PROPERTIES RECORDED IN SUBSECTION Q

Rural agricultural resources for the Early Settlement Era are somewhat scarce on the present landscape, although not as rare as in the phase two study area of Fayette Township. In Subsections C and Q, the rural resources of this era include several cemeteries, one school, and individual houses and barns on otherwise late-Nineteenth to Twentieth Century farmsteads. The recorded properties associated with this era include: Rural Architectural Sites #25 (John Smyth I-house and banked barn); #53 (Berry Farm Pennsylvania banked barn); #56 (old house and basement barn on Lynch/Zobac Farm); #68 (old house and summer kitchen on Pitlik/Russell Farm); and #74 (Stewart house) in Subsection Q (see Figure 3-4). In Subsection C, the Early Settlement Era properties include: #135 (Logan house) and #138 (Sutton Springs Farm banked barn) (see Figure 3-5). Many of these early properties have integrity problems, although the rarity of some of these resource types, such as the Georgian/Greek Revival I-house on the John Smyth Farm places more significance on their survival rather than their comparative integrity.

Rural agricultural resources for the Expansion Era comprise the majority of architectural properties in both Subsections C and Q. Most of the farms still include either a house or barn or both dating from this era. The following Rural Architectural Sites contain primary buildings dating from the Expansion Era in Subsection Q: rural sites #1-4, 7, 8, 10-12, 14-18, 21, 24, 26, 27, 29-37, 39, 41-45, 47, 48, 50, 53, 54, 57, 58, 63, 64, 69, 72, 73, 77, 86, 92, 99, 110, and 209 (see Figure 3-4).

Rural agricultural resources for the Expansion Era include the following architectural sites in Subsection C: rural sites #112-125, 127-130, 132-134, 136, 138-141, 143-147, 150-153, 155-158, 162-165, 167-176, 179, 182, 183, 185, 187-189, 192-194, 197, 201, 203, 205, and 207 (see Figure 3-5).

The rural agricultural resources for the Consolidation Era comprise either whole farms, which may have been settled earlier but have only Twentieth Century buildings extant; a house or barn built during this era on an otherwise Expansion Era farmstead; or the farm and buildings both originated during the Consolidation Era. Suburban acreages and subdivision developments in the rural areas comprise the latter. The following sites are predominated by Consolidation Era resources: Rural Sites #5-7, 9, 13, 16, 19, 23-25, 28, 34, 37-43, 45, 46, 49, 52, 55, 56, 59-65, 72, 75, 77, 78, 79, 81, 83, 84, 86, 87, 90, 91, 93-98, 100, 106, 204, 208, 210, and 211 (see Figures 3-4 and 3-5).

2. Significance: The significance of the agricultural development of the study area derives from the associations and representations of an individual property, multiple properties, or districts with important historical developments in rural settlement patterns and farmstead evolution. Of particular note in the study area, is the early pattern of family-oriented settlement, often in identifiable neighborhoods. In Subsection Q, family clusters include those of the Robert Berry, P.D. Harman, and Robert Smyth families, while in Subsection C, the most significant family settlement is that associated with the William Henderson family.

3. Registration Requirements:

Criterion A. Resources must have a demonstrative association with significant rural settlement patterns or events.

contributions to successful stockraising and agricultural development in the township (Chapman Brothers 1887:193). This potential district would be eligible under Criteria C, A, and D. There are some problems with this potential district, including the fact that one potentially contributing farm has been separated from the neighborhood cluster by the construction of Highway 13 and the fact that one of the property owners (Site #10) is presently not receptive to the historic survey. Therefore, a final determination of eligibility for this district is deferred for the present until such time that more intensive research can be conducted or until the property owners desire further survey. The following are the properties potentially within the district boundaries (see Figure 3-4 for locations).

BERRY FAMILY RURAL DISTRICT

Rural Site #	Site Name	# of Contributing Resources	# of Noncontributing Resources
#7	Charles Berry Farm	2	1
#9	Berry Tenant's Cottage	1	0
#10	Robert Berry Farm	3	?*
13LN464	Robert Berry House Site	1	0
13LN463	J. Berry House Site	1	0
#15	W.J. Berry Farm	3	0

* = Property could not be fully surveyed because of owner refusal.

Brick Buildings of Bertram/Franklin Township Multiple Property Document Form

There appears to be some potential for a Multiple Property Document Form and associated nominations based on the extant brick farm houses and associated brick outbuildings and other buildings in the Bertram and Franklin township area. These properties include Italianate and Queen Anne style houses manufactured of locally produced brick, with a few contemporaneous brick outbuildings also extant. One brick school, the Abbe Creek School, is also among these resources. One such property, the Wesley West House and smokehouse (#73), is already listed in the National Register. This property was built by Mount Vernon builder/contractor, Marsden Keyes, and it is possible that he was responsible for others in the rural vicinity of Mount Vernon. It is also known that Peter Dix Harman, an early settler of the Bertram vicinity, was a brick mason and brickmaker. At present, only his own house (non-extant, archaeological site 13LN455) has been attributed to his brickmaking and construction skills; however, it is likely that he was responsible for others in the Bertram area, perhaps some of the Berry family houses.

Nominations under such a document would be potentially eligible under Criterion C, although a Phase II-level investigation is required to fully evaluate the historical and architectural significance of these individual properties. Of particular importance to a Multiple Property study would be the identification of the builders of these brick houses. The period of significance would be from the 1850s-1890s. Based on the results of the present survey, the following architectural resources (see Figure 3-4) have been identified as potentially eligible for nomination under this multiple property cover document.

BRICK BUILDINGS OF BERTRAM/FRANKLIN TOWNSHIP MPDF

Rural Site #	Site Name	Brick Resources
#10	Robert Berry Farm	House & Outbuildings
#15	H.J. Berry Farm	House
#36	Robert Smyth Farm	House
#50	Smith/West Farm	House
#53	A.J. & A.A. Berry Farm	House
#73	Wesley West Farm*	House & Smokehouse
#102	Abbe Creek School	School

* = Already Listed in the NRHP

Individuals

In addition to the above potentially eligible nominations under the proposed districts and Multiple Property Document Form are the following individual properties that are potentially eligible as individual farmstead units or districts based on Criterion C as they reflect important trends in the rural architectural landscape and agricultural development of the townships. Some of the properties are also eligible under other Criteria as noted under each description. These properties will require a Phase 2-level investigation before a final determination of eligibility can be made.

INDIVIDUAL PROPERTIES POTENTIALLY NRHP ELIGIBLE IN SUBSECTION C

Rural Site #	Site Name	Eligible Property Type
#118	Carson/Peyton Farm	farmstead
#122	Coquillette Farm	farmstead
#129	A.W. Dix Farm	barn
#132	Castle Farm	farmstead
#133	Fay/Boone Farm	barn
#136	Christ Nietert Farm	farmstead
#138	Sutton Springs Farm	farmstead
#140	Nietert Farm	barn
#145	Ware Farm	farmstead
#152	Mahlon Mills Farm	barns
#157	Linwood Farm	barn
#169	Unidentified Farm	farmstead
#170	Wm. Woods Farm	house
#171	Hannah Henderson Farm	farmstead
#172	Cummings/Vinton Farm	barn
#173	Castle/Burt Farm	barn
#175	Thomas Main Farm	barn
#185	Willis Farm	barn
#188	W.H. Weeks Farm	barn
#194	Lenox Farm	barn
#197	Pugh/Patton Farm	barn
#199	Carson/Turner Farm	farmstead
#203	Ramsey/Walton Farm	farmstead

INDIVIDUAL PROPERTIES POTENTIALLY NRHP ELIGIBLE IN SUBSECTION Q

Rural Site #	Site Name	Eligible Property Type
#2	Wolf/Christie Farm	farmstead
#10	Robert Berry Farm	farmstead
#15	W.J. Berry Farm	farmstead
#17	Reuben Thompson Farm	farmstead
#24	Martin Vislisel Farm	farmstead
#25	John Smyth Farm	farmstead
#27	Odell Farm	barn
#28	Stoneking Farm	farmstead*
#30	J. Cory Farm	barn
#32	Clark Farm	barn
#33	Williams/Travis Farm	barn
#36	Robert Smyth Farm	farmstead**
#37	Craig/White Farm	house
#38	Tunis Farm	farmstead
#40	Milholin Farm	farmstead
#42	Pierce/Zinkula Farm	farmstead
#46	Wayside Farm	farmstead*
#47	Carson/Serovy Farm	barns
#50	Smith/West Farm	farmstead
#53	A.J. and A.A. Berry Farm	farmstead
#54	Cornish/Michalek Farm	farmstead
#56	Lynch/Zobac Farm	farmstead
#57	Elrod Farm	barn
#58	Needles Farm	farmstead
#59	Messner/Petrock Farm	farmstead
#63	Hruloy/Biderman Farm	farmstead
#64	T.C. Stoneking Farm	farmstead
#83	J. Michaleck Farm	farmstead
#94	McGowen Farm	farmstead
#95	Wilder Farm	farmstead
#210	Horaby/Darr Farm	farmstead

* = Also eligible under Criterion D
** = Also eligible under Criterion D and B

The remaining rural agricultural resources were determined to be ineligible for nomination to the National Register based on the lack of sufficient integrity and/or significance. These properties require no further evaluation, while the above-noted potentially eligible properties will require Phase II-level investigation before a final determination of eligibility can be made and National Register nominations completed.

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Opportunities for historic preservation in Bertram are limited. Most of the public and semi-public buildings in the community have been lost and the few remaining ones present integrity concerns. The possibilities for a residential historic district are low. Given these factors, this report can make no recommendations for preservation planning on a community-wide basis in Bertram.

This report does recommend the following specific National Register registration activities:

> INDIVIDUAL PROPERTIES. Significant locally under several criteria, these properties are individually identified on pages 3-27 and 3-28 in Chapter 3 of this report.

The registration of individually eligible properties in Bertram should be pursued on a case-by-case basis. These nominations should be the responsibility of private individual property owners. The individual nomination of publicly owned property might be included in community-based planning. This report did not list individual properties in terms of priority for nomination.

5. Rural Architectural Resources of Subsection C and Q

The districts and MPDFs identified by the rural architectural survey could be nominated to the National Register, if the owners request and pursue such nominations. However, as noted above in the archaeological recommendations section, the rural district nominations may be better served under a county-wide MPDF based on family-oriented settlement patterns, while the other proposed districts and MPDFs should be completed based on local preservation needs and plans and property owner requests. For example, the proposed districts associated with the Lincoln Highway and Seedling Mile tie into contexts and resources already identified in the city of Mount Vernon. The Mount Vernon Historic Preservation Commission should give some consideration to the nomination of these proposed districts as they relate to the Lincoln Highway route through Mount Vernon.

Individually eligible rural properties should be nominated by the property owners as they desire, although future surveys in the county may result in the compilation of a MPDF which includes some or all of these individual resources. At present, the nominations of these properties should be deferred to the property owners.

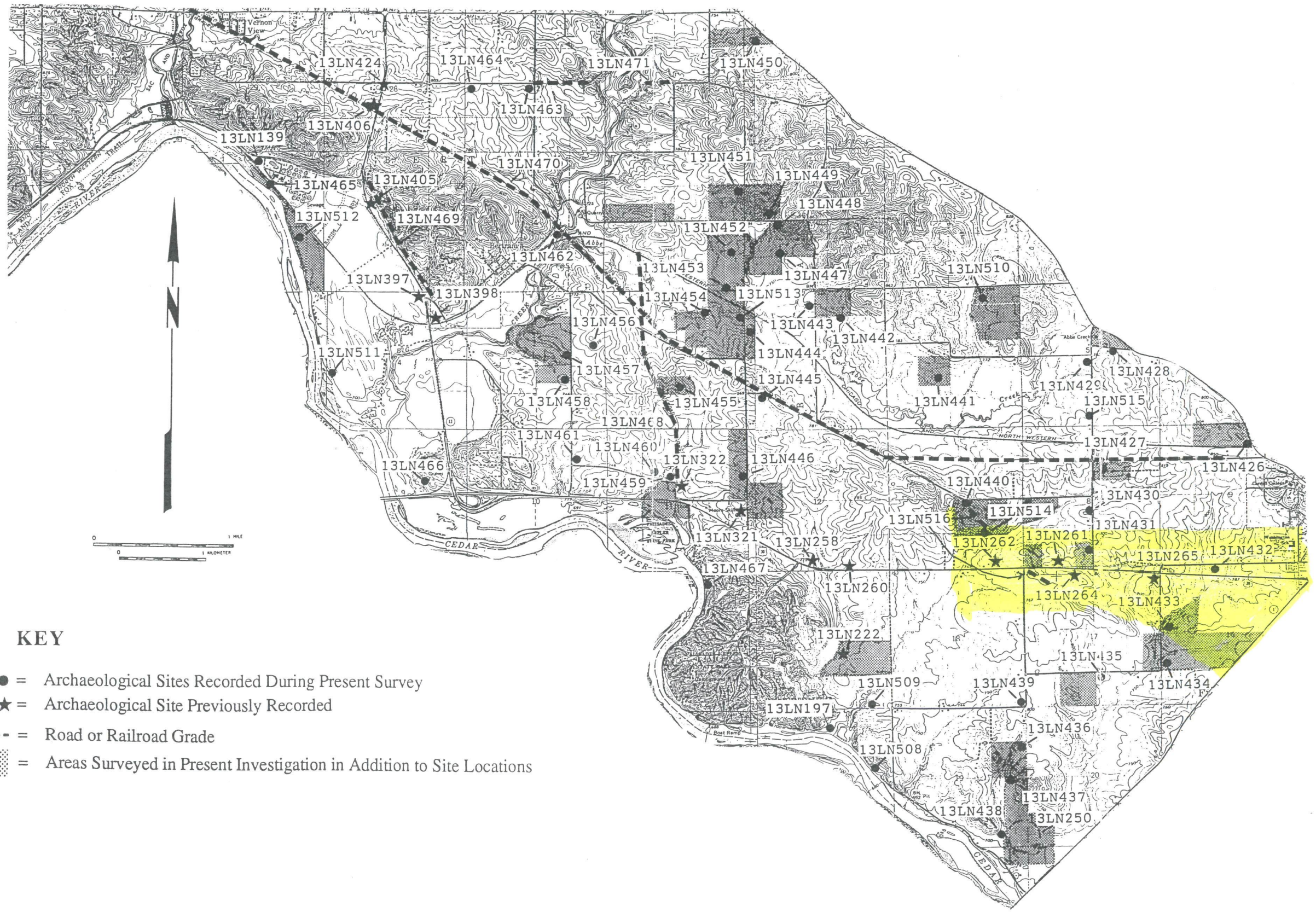
The following are the districts and MPDFs recommended in Subsections C and Q based on the survey results:

Valley Farm Road Rural District
Subsection C
Nine farmstead properties, five archaeological sites, and one modern intrusive property.

Berry Family Rural District
Four farmstead properties and two archaeological sites

Brick Buildings of Bertram/Franklin Townships Multiple Property Documentation Form
Seven eligible architectural properties

Lincoln Highway/Seedling Mile Historic District
Ten potential architectural properties, with additional survey of the north side of the corridor required before a final determination of resources and boundaries can be made.



KEY

● = Archaeological Sites Recorded During Present Survey

★ = Archaeological Site Previously Recorded

------ = Road or Railroad Grade

▒ = Areas Surveyed in Present Investigation in Addition to Site Locations

FIGURE 3-1
RESULTS OF THE ARCHAEOLOGICAL INVESTIGATION OF SUBSECTION Q

3

ASSOCIATED PROPERTY TYPES

I. SUMMARY OF SURVEY RESULTS

The property type descriptions presented in this chapter are based on the results of the present archaeological and architectural survey of Subsections C and Q and the previous survey of Subsection E in Linn County (Rogers and Page 1993). This study was also grounded in the phase one comprehensive planning project which identified four general eras of historic development and subcontexts related to that development (Rogers 1992). The present survey examined approximately 1702 ac (681 ha) and resulted in the recording of 91 archaeological and 480 architectural properties (Figures 3-1 and 3-2). Of the archaeological sites, 70 represent farmstead or habitation sites, 8 are industrial sites, 6 represent transportation-related properties, 4 represent churches and schools, 1 is an agricultural-related site, and 2 are prehistoric sites (one of which has an historic component). Nine of the historic archaeology sites also have prehistoric components. Of the architectural properties, 185 are located in the town of Coggon, 62 in Troy Mills, and 21 in the community of Bertram, while 212 are rural properties. Of the 212 rural properties, 115 are located in Subsection Q and 97 are in Subsection C. Time did not permit the examination of any alternate subsections.

A total of 243 volunteers from around Linn County, including 194 4th and 5th graders from Johnson Elementary in Cedar Rapids, participated in field survey, research, and labwork and have donated over 600 hours towards the completion of this project. The Johnson Elementary School classes participated in a lab session on January 24-25, 1994. These students helped in the washing and sorting of artifacts and learned about the archaeology and history of the Linn County area. Two workshops were held at the outset of the project as part of the annual Linn County Historic Preservation Conference in June 1993, with a follow-up workshop in July 1993. Both workshops were used to present the results of the previous phase-two survey and to further volunteer recruitment and participation. The results of the present survey will be presented at the August 1994 Linn County Historic Preservation Conference.

While several cultural resources investigations have been previously conducted in the Subsection Q area, relatively little survey has been conducted in the Subsection C project area of Spring Grove and Jackson townships. As a result, no previously recorded historic sites are located in Subsection C, while a number have been recorded in Subsection Q. The major studies previously conducted in the Bertram/Franklin township area have consisted primarily of Section 106 compliance cultural resource investigations associated with the Highway 30 relocation and widening project around Lisbon and Mount Vernon (Hirst 1988, 1992; Ingalls 1989); the recent replacement of the Ivanhoe Bridge along Highway 1 across the Cedar River (Bakken 1986); road improvements and widening along Highway 13 from its junction with Highway 30 north to Highway 151 (Forman 1993); and the construction of the Cedar Rapids sewage treatment plant west of Bertram along the Cedar River (Stevens 1976; Stevens and Nansel 1976). These studies recorded a total of 34 archaeological sites within the boundary of Subsection Q. Of these 34 sites, 13 were historic or had historic components on otherwise prehistoric sites. These 13 sites included: two school sites (13LN322 and 13LN261), three prehistoric/historic habitation sites

3-1

(13LN262, 13LN264, and 13LN265), one historic habitation site (13LN260), and one farmstead (13LN258) along Highway 13; one historic Native American village site (13LN250) near the Ivanhoe Bridge; two historic refuse scatters (13LN397 and 13LN398), one historic road remnant (13LN424), and one historic barn site (13LN405) along Highway 13; and one prehistoric site with a historic artifact scatter (13LN139) at the Cedar Rapids sewage treatment plant.

Other studies in the area have included two prehistoric sites documented and excavated by Lois Grissel in 1944-45 for her Master's Thesis in history which she completed in 1946 at the University of Iowa (Stevens 1976:4); and a number of sites recorded by Charles R.

would still have to be able to yield significant data concerning the contact period occupation in order to be considered National Register eligible. The less impacted the site deposit, the higher the degree of integrity and the greater the eligibility potential for inclusion in the National Register.

B. Sites Associated with Early Settlement of Bertram/Franklin and Spring Grove/ Jackson Townships

The property types associated with the early settlement of Subsections C and Q include both archaeological and architectural properties. This section will deal with the archaeological remains, which include the following potential site types: habitation sites, farmstead sites, early industrial and institutional sites, and transportation-related sites. The industrial, institutional, and transportation sites will be discussed below under those separate sections, with the following discussion focusing on the habitation and farmstead sites representing the early settlement period. Such sites are expected to occur over virtually the entire project area but particularly in those areas that were at or near the forest-prairie margins during the early settlement period. In addition, the former large groves of the major tributary valleys of these areas, such as Sugar Grove in the Big Creek/Abbe Creek valleys of Subsection Q and Spring Grove in the Walton Creek area of Subsection C, are known to have been the locus for early settlement during this era. The period of significance for Subsection Q is between 1837-1859 as defined by the arrival of the first permanent Euro-American settler and the extension of the railroad into this area. In Subsection C, the period of significance for the Early Settlement Era dates from 1841, when the first permanent Euro-American settlement was made, into the 1860s-70s when this area was largely settled and towns were being established. Formally, if the advent of the railroad into an area is to be used as the demarcation between the Early Settlement and Expansion eras, then the year 1886 would be used as an end-date for the earlier era because it was in that year that the railroad extended through Central City and Coggon. However, by that late date, the Subsection C area had long been settled, the towns of Troy Mills and nearby Paris and Central City had been established; and the agricultural development had progressed into a market-oriented economy. Therefore, this area had already advanced into an "Expansion Era" stage of development in many ways prior to the advent of the railroad into this specific area.

Early settlement period archaeological sites are primarily eligible under Criterion D, although there will be some sites that will achieve significance under Criteria A, B, or even C if they have substantial structural remains of importance. The significance of early settlement period sites lies in their importance to the establishment and early growth of the township and county and in their ability to provide a clearer picture of frontier life and material culture than can be provided by historical accounts and legal records.

A total of 44 early settlement period archaeological sites was recorded by the present investigation, with 31 found in Subsection Q and 13 in Subsection C. The sites in Subsection C include: 13LN474-476, 13LN480, 13LN484, 13LN493, 13LN497, 13LN498, 13LN501-504, and 13LN507 (Figure 3-1; Table 3-1). Those in Subsection Q include: 13LN427, 13LN428, 13LN430, 13LN431, 13LN433, 13LN434, 13LN439-442, 13LN444, 13LN446-448, 13LN451-456, 13LN458, 13LN461-464, 13LN469, 13LN471, 13LN510, 13LN512, 13LN514, and 13LN516 (Figure 3-2; Table 3-2). These are primarily historic habitation/farmstead sites, with one site (13LN462) representing the remains of the White/ Daniels gristmill in Bertram, another representing a house site, which has a possible association with an early sawmill (13LN497), three representing the remains of abandoned early roadways (13LN469, 13LN471, and 13LN516), which were established during the Early Settlement Era. One site (13LN504) represents an early house site that also served as the Spring Grove post office in Subsection C. Most of these sites

family-oriented settlement pattern resulting in family neighborhoods where farmsteads were clustered. All of these family settlements are represented in the archaeological record and include the following associations: Smyth family (sites 13LN430 and 13LN431); Harman family (13LN459, 13LN454, and 13LN455); Berry family (13LN463 and 13LN464); and Henderson family (13LN498). Where archaeological integrity is sufficient, these sites are potentially significant under Criterion A for their representation of the family settlement pattern, with some such as the Robert Smyth sites also potentially eligible under Criterion B for their association with a significant person. In the case of the Smyth sites, however, the extant 1866 brick house (Rural Architectural Site 52) associated with Robert Smyth is likely the best representation of his significance under Criterion B.

Registration requirements for early settlement period sites should be based on archaeological integrity, with the more significant and eligible sites being those that have discrete, less impacted deposits dating from the early settlement period. Of the 44 sites recorded in Subsections C and Q, 6 in Subsection C and 18 in Subsection Q initially meet this requirement. These sites will require extended Phase I and potentially Phase II level subsurface testing to determine if they have substantial sub-plow zone deposits and features before a final determination of eligibility can be made. Such testing should not be considered a high priority unless the sites are threatened by construction projects or other destructive activities, or if the property owners desire that the sites be nominated to the National Register.

One Early Settlement Era site that appears to have been destroyed by modern construction, is the remains of the early town of Westport just west of Bertram. The location from historical accounts places it in Section 32 of Bertram Township along the east bank of the Cedar River below the mouth of Indian Creek. This is the present location of the Cedar Rapids sewage treatment plant. The 1976 archaeological investigation of this location just prior to the plant construction did not locate any evidence of Westport, although one of the prehistoric sites did have a historic component (site 13LN139). That investigation concluded that the historic material was related to the old Doty homestead, which is near this site but over 500 ft distant from site 13LN139 (Stevens 1976; Stevens and Nansel 1976). The homestead location is an extant farmstead, although few historic buildings remain (Rural Architectural Site 10). One shortcoming of the 1976 investigation, is that the historic research was extremely limited and did not uncover the fact that Westport was located at this spot. As a result, the historic potential of the terrace was not given much consideration and subtle archaeological deposits may have gone unnoticed. This is not the fault of the investigators; rather, it reflects the level of archaeological investigation at that time when historic sites were not considered of much significance. It may also be that the Westport site was largely destroyed when the railroad was built along the terrace escarpment parallel to the river. The present investigation did conduct a reconnaissance of the eroded escarpment and river banks west of the sewage treatment plant (see Figure 3-2). This survey located a previously unrecorded prehistoric site (site 13LN465) but no historic material related to the Westport settlement. As a result, it is concluded that this early site has been destroyed.

C. Sites Associated with the Agricultural Development of Bertram/Franklin and Spring Grove/Jackson Townships

The property types associated with the agricultural development of Subsections C and Q include sites also associated with the early settlement period since the majority of those sites functioned as farmsteads. The agricultural development is represented by both archaeological and architectural properties; however, this section will deal only with the archaeological remains, which include the following potential site types: farmsteads, isolated agricultural buildings, and commercial and industrial properties associated with

agriculture such as gristmills and creameries. It is expected that the majority of rural historic sites encountered in Subsections C and Q and Linn County as a whole will be agricultural in nature and association. The period of significance for this context is from 1837-1943+ in Bertram/Franklin townships and 1841-1943+ in the Spring Grove/Jackson township area.

Sites associated with this context could be significant under Criteria A, B, C, or D, although the majority of the archaeological sites would be eligible under Criterion D. The significance of these sites would be in their ability to yield important data concerning the evolution of agriculture in the township and county and the nature of the settlement patterns, farmstead layouts, and material culture associated with this evolution. Sites would not have to be representative of the whole spectrum of change in order to be considered significant. Registration requirements should be based on the integrity of the archaeological deposits, with the more significant sites having discrete, less impacted deposits or features associated with one or more stages of agricultural development. A site that was occupied over the full period of significance but which has archaeological deposits that were adversely impacted by the more recent occupations will have less research potential and therefore less significance than a site that has intact earlier features as well as later features. At present, of the sites recorded in association with this context during the present investigation potentially meet these requirements and would require extended Phase I or Phase II testing if the sites were threatened by construction projects, or the property owners request that they be nominated (Table 3-1 and 3-2).

Of the 91 recorded sites, 70 rural are habitation or farmstead sites and 2 are gristmill sites that will be discussed in Section D. The 70 rural habitation or farmstead sites include the following: 13LN426, 13LN427, 13LN428, 13LN429, 13LN430, 13LN431, 13LN432, 13LN433, 13LN434, 13LN435, 13LN436, 13LN437, 13LN438, 13LN439, 13LN440, 13LN441, 13LN442, 13LN443, 13LN444, 13LN446, 13LN447, 13LN448, 13LN449, 13LN450, 13LN451, 13LN452, 13LN453, 13LN454, 13LN455, 13LN456, 13LN458, 13LN459, 13LN460, 13LN461, 13LN463, 13LN464, 13LN500, 13LN501, 13LN502, 13LN503, 13LN504, 13LN506, and 13LN507 in Subsection Q and 13LN473, 13LN474, 13LN475, 13LN476, 13LN478, 13LN479, 13LN480, 13LN482, 13LN484, 13LN485, 13LN486, 13LN487, 13LN489, 13LN492, 13LN493, 13LN494, 13LN495, 13LN496, 13LN497, 13LN498, 13LN509, 13LN510, 13LN511, 13LN512, 13LN513, 13LN514, and 13LN515 in Subsection C (see Figures 3-1 and 3-2). Of the occupation ranges identifiable in association with these farmstead sites, 40 sites were occupied from the Early Settlement Era into the Expansion Era, with three of these occupied on into the Consolidation Era; two were occupied during the Expansion Era; 13 were occupied from the Expansion Era into the Consolidation Era, while one was occupied only during the Consolidation Era.

A total of 15 sites had intact foundation remains of brick, limestone, fieldstone, and concrete construction, although limestone was the most common foundation type present (Table 3-1). Sites 13LN487, 13LN494, 13LN495, and 13LN506 in Subsection C and 13LN435, 13LN437, and 13LN459 in Subsection Q have extant historic buildings in association (see Figures 3-1 and 3-2).

All of the extant farmsteads which contain pre-1943 buildings were recorded during the architectural survey (see Section III of this chapter). Of the archaeological sites, at least 43 represent farmsteads that were generally abandoned prior to the Consolidation Era of the Twentieth Century due to the changing road system and/or to farm consolidation.

Five additional farmstead/habitation sites were recorded along Highway 30 in Subsection Q by previous investigations (Hirst 1988). These includes sites 13LN258, 13LN260,

13LN262, 13LN264, and 13LN265. At least one of these sites (13LN260) had a temporal range extending into the Early Settlement Era, while the remainder were primarily Expansion to Consolidation era farmsteads and/or rural habitations. All were determined to be ineligible for the National Register.

In addition to the farmstead archaeological sites, there are two archaeological mill sites that were recorded during the course of this project, one in each subsection. These include sites 13LN462, which is the remains of the White/Daniels gristmill in Bertram, and site 13LN472, which is the impacted remains of the Hoosier Mills in Troy Mills. The Hoosier Mill site consists of a partial limestone foundation on the bank of the Wapsipinicon River that has been completely covered over by rock rip-rap and is inaccessible to archaeological investigation. It was recorded to insure that it be considered if future bridge construction at this location will impact the site. The remains of the White/Daniels gristmill at Bertram consist of the bulldozed remnants of a limestone foundation and one of the grinding stones. The original channel of Big Creek is evident as an abandoned meander scar near the site location. Both mill sites are considered ineligible for the National Register because of their extremely impacted nature, although the exact condition of the Hoosier Mills site cannot presently be addressed. It is currently assumed to be highly impacted and ineligible but should be re-evaluated if it is ever uncovered and found to have substantial intact archaeological deposits.

The archaeological remains of the Valley Farm Creamery is likely extant within the boundaries of habitation site 13LN495, the P.G. Henderson house site. This location affords little surface visibility at present and will require shovel testing. As it is partially located within what is presently the house yard surrounding the extant farm house (Rural Architectural Site 153), it was not further investigated as part of the present project.

The location of the Deep Spring Creamery was examined during the present project and found to consist of a scatter of historic artifacts in a cultivated field with a covered and buried well feature. This site is designated as 13LN505. Because of the lack of foundation remains, the sparse artifacts found in association, and the fact that the well was likely open when it was covered and buried, the site is considered to have a low potential significance and is ineligible for the NRHP.

D. Sites Associated with Industrial Development of Bertram/Franklin and Spring Grove/Jackson Townships

The property types associated with the industrial development of Subsections C and Q are represented by both archaeological and architectural properties, with the archaeological sites discussed in this section. Potential site types include: mill sites and associated features such as dams and mill ponds and races; limestone quarries and kilns; brickyards; and concrete block manufactories. The period of significance for this context is from 1837-1943+ in Subsection Q and 1841-1943+ in Subsection C, with some properties also associated with other contexts such as early settlement and agricultural development. Sites associated with the industrial context could be significant under Criteria A, B, C, or D. Industrial sites would be significant for the information they can provide concerning the development and growth of the townships and county, the nature of these industries through time, and for their associations with persons significant in the industrial development of towns and rural communities. Registration requirements should be based on archaeological integrity, with the more significant sites being those that represent industries that were integral to the growth of a community or rural area and have archaeological and/or structural remains that are well preserved and represent the time period when that industry was important. Comparisons with other sites of this type should also be used to determine relative degrees of integrity and significance. Only one of the

TABLE 3-2. ARCHAEOLOGICAL SITE SUMMARY FOR SUBSECTION Q

Site No.	Location Sect-T-R	Landform Position	Site Type	Temporal Range*	Subsurface Feat Pot.	Extant Bldgs/ Foundations	Plowed	Artifact Density	Surface Vis.	Shovel Tested	Site Area**	NRHP Potential
13LN426	9-82-5	Summit	H hab	19th c. c.1859-c.1895	Low	No	Yes /Bulldozed	Sparse	Poor	Not	10,000	No
13LN427	8-82-5	Slope	H hab	mid 19th-20th c.1859-c.1921	Medium	No	Yes	Mod. /Dens	Fair	No	15,000	Yes
13LN428	5-82-5	Shoulder slope	H hab	mid 19th-20th c.1859-c.1921+	Medium	No	Yes	Sparse /Mod.	Poor	No	10,000	Yes
13LN429	5-82-5	Slope	H farm	late 19th-20th c.1859-c.1895	Low	No	Yes	Mod.	Poor	No	40,000	No
13LN430	8-82-5	Summit	H hab	mid 19th c. c.1859-1866	High	Yes/LS found. Extant house	No	Mod.	Poor	Yes Test Unit	2,500	Yes
13LN431	8-82-5	Shoulder slope	H hab	mid-19th c. c.1859-c.1869	Medium	No	Yes	Sparse /Mod.	Poor	Yes	15,625	Yes
13LN432	16-82-5	Slope	H farm	late 19th-20th c.1859-1960s+	High	Yes/LS founds. Concrete foundations	No	Mod.	Poor	Yes	10,000	Yes
13LN433	16-82-5	Sideslope	H hab	mid-19th c. c.1859-c.1895	Medium	No	Yes	Mod.	Poor /Fair	No	15,625	Yes
13LN434	16-82-5	Sideslope	H hab	mid-late 19th c.1859-c.1869	High	Yes/buried LS foundation	Yes	Sparse	Good	Yes	15,000	Yes
13LN435	17-82-5	Sideslope	H farm	late 19th-20th c.1869-1930+	High	Yes/Barn extant LS foundation	Yes (partial)	Mod.	Poor	Yes	22,500	Yes
13LN436	19-82-5	Sideslope	H hab	mid-late 19th c.1869	Medium	No	Yes	Mod.	Poor	Yes	10,000	Yes
13LN437	19-82-5	Footslope	H farm	no artifacts c.1869-c.1907	High	Yes/Barn & shed extant	No	Sparse	Poor	No	40,000	No
13LN438	19-82-5	Footslope	H hab	late 19th c. c.1869-c.1881	Low	No	Yes	Sparse	Fair	Yes	15,000	No
13LN439	18-82-5	Summit	H hab	mid-late 19th c.1881-c.1921+	Medium	No	Yes	Mod.	Poor	No	10,000	Yes
13LN440	7-82-5	Summit	H hab	mid-19th c. c.1859+	Low	No	Yes /eroded	Sparse	Fair	No	15,000	No
13LN441	6-82-5	Terrace/ fan	H hab	mid-late 19th c.1859-c.1869	Medium	No	Yes	Mod.	Poor	No	22,500	Yes
13LN442	1-82-6	Terrace	P/H hab	mid-late 19th c.1869	Medium	No	Yes	Mod.	Good	No	15,625	Yes
13LN443	1-82-6	Terrace	H farm	late 19th-20th c.1881-1921+	Low	No	Yes	Mod.	Poor	No	22,500	Yes

P), the Commission and other planners and preservation professionals will be provided with the necessary tools with which to evaluate the majority of potential property types in the county and to begin the process of compiling a county registry and completing NRHP nominations based on recommendations to date. The reasons for the selection of Subsections I and P are that these areas were the locus for early settlement and have a long history of development and more importantly because they have the potential to contain significant religious and ethnic-related properties associated with the Quaker congregations and Bohemian immigrants of Linn County. Strong ethnic settlements have been lacking in the previous survey areas, and it is imperative to have a comparative data base that includes a strong ethnic component in order to identify settlement patterns and properties in other areas of the county that have not been surveyed as yet.

One reason for setting a limit, for the present, on the number of additional subsections to be surveyed is the dwindling grant support at the state level. At this point, the surveys conducted to date have provided a strong base from which virtually any resource in the county could potentially be evaluated for NRHP eligibility. As noted above, the only data lacking are properties related to the religious and ethnic settlement contexts that were important to the historical settlement of Linn County. Once Subsections B, P, and I have been surveyed, then recommendations concerning the next priorities in the comprehensive preservation plan will be made.

Specific recommendations concerning the cultural resources identified and evaluated by the present investigation are as follows:

include year of report

A. Archaeological Resources

Tables 3-1 and 3-2 list the archaeological sites recorded in Subsections C and Q that were concluded to have some potential eligibility for nomination to the NRHP. At present, none of these sites are threatened with destruction, although most will continue to be degraded by cultivation. It is not recommended that any be listed in the NRHP at the present time, unless property owners request this listing or unless sites become threatened by natural processes or man-made activities, such as a housing development construction. There is a good potential for district nominations, MPDFs, and associated individual nominations based on the archaeological resources associated with the Early Settlement, Agricultural Development, and Transportation historic contexts as well as the architectural and archaeological resources associated with the potential Valley Farm Road Rural District and the Berry Family Rural District. It appears that there may a high potential for a county-wide MPDF based on the early family-oriented settlement pattern discerned to date in Subsections E, C, and Q. As a result, the two above-noted rural districts and the previously identified Lewis Bottoms Rural Neighborhood resources may be best understood and nominated within the context of a county-wide Rural Neighborhood cover document. Further action is deferred until the results have been obtained from the recommended surveys of Subsections B, I, and P.

The potential eligibility of the districts and individual properties should be considered by future investigators, particularly if these properties are threatened by construction projects. By identifying and evaluating these sites in the phase two and three surveys, future investigators have been provided with a framework and a set of criteria by which they can better evaluate historic resources that will be found in unsurveyed areas.

The results of the archaeological survey should be made available to the widest possible professional audience in order to assure that future investigations in this area take the results into consideration and to promote further research into material culture and settlement studies of the region. The curation of the project artifact collections and survey

U.S. Department of Homeland Security
United States Coast Guard

Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: dwb
Phone: (314)269-2378
Fax: (314)269-2737

16591.1/US 30 Bypass
June 24, 2010

Ms. Janet Vine
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Subj: US 30 BYPASS PROJECT, LINN AND CEDAR COUNTIES

Dear Ms. Vine:

Please refer to your correspondence of June 1, 2010 regarding the subject project. We have determined that pursuant to the Coast Guard Authorization Act of 1982, the subject project does not involve bridges over navigable waters of the United States. Therefore, a Coast Guard bridge permit is not required for this project.

We appreciate the opportunity to comment on the project.

Sincerely,

ERIC A. WASHBURN
Bridge Administrator
By direction of the District Commander

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT CORPS OF ENGINEERS
CLOCK TOWER BUILDING
PO BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

June 29, 2010

REPLY TO
ATTENTION OF

Planning, Programs, and
Project Management Division

Ms. Janet M. Vine
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Dear Ms. Vine:

I received your letter dated June 1, 2010, concerning the US 30 Bypass at Mount Vernon and Lisbon, Iowa (NHS-30-7(76)--19-57). Rock Island District Corps of Engineers staff reviewed the information you provided and have the following comments:

1. Your proposal does not involve Rock Island District administered land; therefore, no further Rock Island District real estate coordination is necessary.

2. Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. Based on the information you provided, a Section 404 permit may be required for this project. A completed application packet should be submitted to the Rock Island District for processing as soon as possible. The application should include final plans, wetland delineations, details of proposed impacts to wetlands and other waters of the United States, a statement explaining how impacts associated with the proposed activity are to be avoided, a description of planned components that are intended to minimize impacts to wetlands and streams, and a complete wetland/stream mitigation plan. The requirements for a complete mitigation plan are described in the Federal Register (Volume 73, No. 70) dated April 10, 2008, under "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule".

3. The Responsible Federal Agency should coordinate with Ms. June Strand, Iowa Historic Preservation Agency, ATTN: Review and Compliance Program, State Historical Society of Iowa, 600 East Locust, State Historic Building, Des Moines, Iowa 50319 to determine impacts to historic properties.

4. The Rock Island Field Office of the U.S. Fish and Wildlife Service should be contacted to determine if any federally-listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Rock Island (County) Field Office address is: 1511 - 47th

Avenue, Moline, Illinois 61265. Mr. Rick Nelson is the Field Supervisor. You can reach him by calling 309/757-5800.

5. The Iowa Emergency Management Division should be contacted to determine if the proposed project may impact areas designated as floodway. Mr. John Wagman is the Iowa State Hazard Mitigation Team Leader. His address is: 7105 NW 70th Avenue, Camp Dodge-Building. W4, Johnston, Iowa 50131. You can reach him by calling 515/725-3231.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Mr. Randy Kraciun of our Environmental and Economics Branch, telephone 309/794-5174.

You may find additional information about the Corps' Rock Island District on our website at **http://www.mvr.usace.army.mil** . To find out about other Districts within the Corps, you may visit: **http://www.usace.army.mil/about/Pages/Locations.aspx**.

Sincerely,

Kenneth A. Barr
Chief, Environmental and
Economics Branch

Iowa
Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

June 30, 2010

RECEIVED
JUL 06 2010
OFFICE OF LOCATION & ENVIRONMENT

Janet M. Vine
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear Ms. Vine:

This letter is in response to the June 1st request concerning the US 30 Mount Vernon Bypass 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.

We would ask that Best Management Practices be used to control erosion and protect water quality at and near the project. We appreciate all your efforts to avoid and minimize impacts to wetlands (especially fens) and waters of the U.S. Mitigation for unavoidable stream and wetland impacts will be required.

Mitigation for wetland and stream impacts will be required.

Contaminated Sites

After reviewing the records for the Contaminated Sites Section, two contaminated sites were found in the project area. Brayton Chemical is a closed agricultural chemical site located at 2400 W. Palisades Road. US Name Plate is an active site being handle by the RCRA division of the EPA. Please contact EPA for additional information regarding the US Name Plate site and contact Hylton Jackson at (515) 242-5084 for additional information about the Brayton Chemical site.

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,

Christine Spackman
Business Assistance Coordinator

502 EAST 9th STREET / DES MOINES, IOWA 50319-0034
PHONE 515-281-5918 FAX 515-281-6794 www.iowadnr.gov

Underground Storage Tank Sites
Mount Vernon and Lisbon Bypass

N

0 0.5 1 2
Miles

Vine, Janet [DOT]

From: Vine, Janet [DOT]
Sent: Thursday, July 01, 2010 10:28 AM
To: 'Phil LaRue'
Cc: Hofer, Brad [DOT]; Cutler, Catherine [DOT]
Subject: RE: Env Assessment NHS-30-7(76)--19-57

Hello Phil,

A general overview of any information or concerns that you think we should consider in developing the project is completely appropriate. If you have any other questions or need additional information, feel free to call me. Thanks,

Janet

Janet M. Vine
Iowa Department of Transportation
Office of Location and Environment
NEPA Section
Phone: 515.239.1467
Fax: 515.239.1726
janet.vine@dot.iowa.gov

From: Phil LaRue [mailto:plarue@cedarcounty.org]
Sent: Thursday, July 01, 2010 8:18 AM
To: Vine, Janet [DOT]
Subject: Env Assessment NHS-30-7(76)--19-57

Good morning Janet,

I am writing you regarding your request for information from my department for the proposed Hwy 30 bypass project east of Lisbon, IA in Cedar County.

Specifically, I am requesting input from you on the format you would like this information in, its depth, scope and so forth within the project area. There is a considerable number of residential homes in this area so I am hoping you're not wanting a house by house inventory, just a general overview.
Please let me know at your earliest convenience so I can finish this requested report. My cell number is: 563-886-4506.

Sincerely, Phil...
C.C. Zoning Admin.

APPENDIX B

AGENCY AND TRIBAL COORDINATION

Tribal Coordination

Iowa Department of Transportation
800 Lincoln Way, Ames, IA 50010
515-239-1097
FAX: 515-239-1726

June 1, 2010

Ref. No: NHS-030-7(76)--19-57
Cedar/ Linn
Primary

Mr. John Blackhawk
Winnebago Tribe of Nebraska
Box 687
Winnebago, NE 68071

RE: US 30 Mount Vernon and Lisbon Bypass - Envronmental Assessment

Dear Mr. Blackhawk:

The Iowa Department of Transportation, in coordination with the Federal Highway Administration (FHWA), is proposing to to re-initiate the study of a potential US 30 bypass of the communities of Mount Vernon and Lisbon in Linn and Cedar Counties, Iowa and to prepare an Environmental Assessment (EA) to document the study.

As part of the early coordination effort, we request that you contact us if you have any concerns that the project could impact sites of religious or cultural importance to your tribe. We will provide any additional project information that may be of interest to you as it becomes available, including the results of archaeological surveys that will be made of any undisturbed right-of-way needed for the project.

Enclosed with the map is a postage-paid notification form that you may use, if you wish, to return comments about the project. Please feel free to call me at (515) 239-1097. If you wish to contact a representative of the U.S. government, call Mr. Michael LaPietra, Federal Highway Administration, Iowa Division, at (515) 233-7302.

If you have any questions, please feel free to contact me.

Sincerely,

Matthew J.F. Donovan

Matthew J.F. Donovan
Office of Location and Environment
Matt.Donovan@dot.iowa.gov

cc: Mike LaPietra, FHWA

US 30 MOUNT VERNON & LISBON BYPASS
ENVIRONMENTAL ASSESSMENT
NHS-30-7(76)--19-57

PROJECT DESCRIPTION

Iowa Department of Transportation (Iowa DOT) has re-initiated planning and preliminary design studies for the proposed US 30 bypass of the communities of Mount Vernon and Lisbon, located in Linn and Cedar Counties, Iowa. The proposed improvements are consistent with the State of Iowa's initiative to widen US 30 to four-lanes across Iowa.

Two previous Environmental Assessments (EA) have been prepared for this proposed project. The first EA was signed in March of 1988 and a Finding of No Significant Impact (FONSI) was signed in December of 1988. The second EA was signed in July of 2001 and a FONSI was not completed. The project was not constructed due to other funding priorities.

The proposed project would include approximately eight miles of a four lane roadway with two proposed interchanges. The proposed project begins where the existing four-lane roadway transitions into a two-lane roadway, approximately 1.2 miles west of Mount Vernon, Iowa. The proposed project would end approximately 2.0 miles east of the Cedar/Linn County line. A project map is attached.

This project is being developed for federal funding participation. The Iowa DOT and the Federal Highway Administration have determined that this project requires preparation of an Environmental Assessment (EA). An EA is a National Environmental Policy Act (NEPA) document that is required in the preliminary stages of the planning process. The EA is a written record of the analysis of potential impacts to the environment resulting from the proposed project and is prepared for projects for which the potential for significant impacts is unclear. Impacts to both the natural and human environment are evaluated.

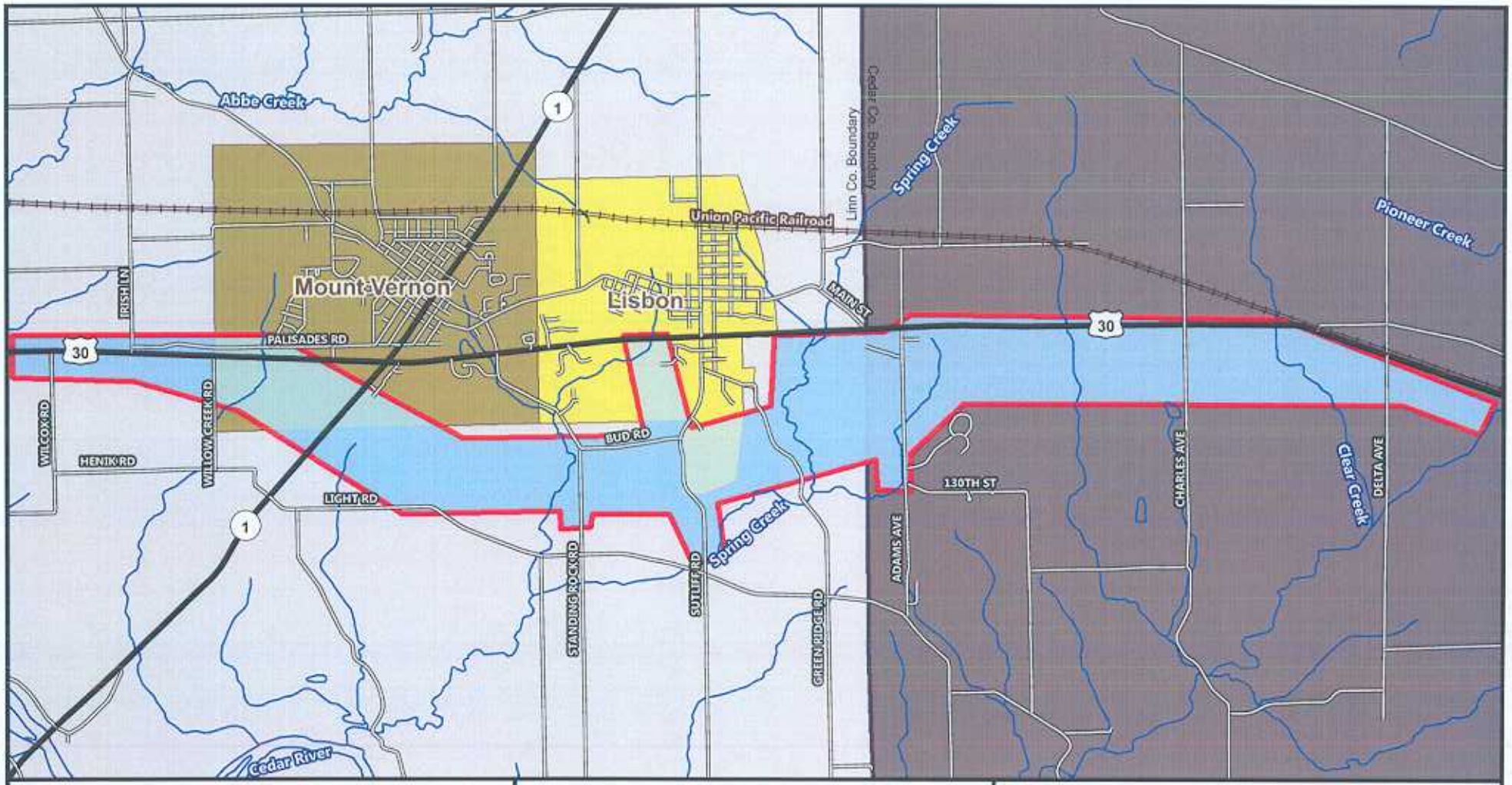
ANTICIPATED IMPACTS

A wide spectrum of resources will be evaluated including cultural resources, farmland, land use, floodplains, impacts to homes and businesses, socioeconomic resources, noise and air quality. Impacts may vary depending on the elements of the final design.

As part of the proposed project, existing right-of-way will be used whenever practical, although additional right-of-way would be required to accommodate the proposed bypass. Precise right-of-way impacts, as well as potential impacts to noise levels, air quality, cultural resources, natural resources, parks or recreation facilities, and the natural environment will be determined as planning and design activities continue.

DEVELOPMENT PROCEDURES

Current regulations governing development of federally funded highway improvements require early coordination with units of government who may have interests in the project or its potential impacts. This is intended to provide early notification of the proposed project and to solicit comments regarding the potential impacts of such an action. Several federal, state and local agencies will also be contacted directly to request their early input as part of the project impact identification process.



PROJECT LOCATION MAP

US 30
Mount Vernon / Lisbon
Bypass

Iowa Department of Transportation
TRIBAL NOTIFICATION

Form 536002
08-05

Date **June 1, 2010** IA DOT contact Randy Faber

IADOT project # NHS-030-7(76)--19-57 Phone # IA DOT - 515-239-1215 FHWA - 515-233-7300

Location Cedar/ Linn E-mail Randall.Faber@dot.iowa.gov

Description US 30 Mount Vernon and Lisbon Bypass - Envronmental Assessment

Type of Project *(see map)*

- VERY SMALL - Disturb less than 12-inch depth (*plow zone*)
- SMALL - Grading on existing road, shouldering, ditching, etc.
- SMALL - Bridge or culvert replacement
- LARGE - Improve existing road from 2 lanes to 4 lanes
- LARGE - New alignment
- OTHER

Type of Coordination/Consultation Points

- 1 - Early project notification (*project map and description*)
- 2 - Notification of survey findings (*Phase I*)
- 2a - Notification of site evaluation (*Phase II*)
- 3 - Consultation regarding site treatment
- 4 - Data Recovery Report
- 5 - Other

Type of Findings

- No American Indian site found --Section 106 Consultation Process ends*
- American Indian sites found but not eligible for National Register listing -- Section 106 Consultation Process ends*
- Avoided American Indian sites eligible for National Register listing *(see map and list of sites)* --Section 106 Consultation Process may or may not end
- Potentially significant American Indian sites found *(see map and list of sites)*
- American Indian sites eligible for National Register listing cannot be avoided (*see map*)
- Burial site found

* *In the event of a late discovery, consultation will be reopened*

_____ # of non-significant prehistoric sites
_____ # of potentially significant prehistoric sites
_____ # of National Register-eligible prehistoric sites

Affected National Register Properties

- Investigating avoidance or minimizing harm options
- Avoided
- Protected
- Data Recovery/MOA

Please Respond

Who should we contact for site/project-related discussions?

Name _____ Street Address _____ City, Zip Code _____

Phone _____ E-mail _____

Do you know of any sensitive areas within or near the project the FHWA/DOT should avoid (*please describe*)?

_____

- ☐ Thank you for the information; however, we do not need to consult on this particular project.
- ☐ We do not have a comment at this time, but request continued notification on this project.
- ☐ Please send a copy of the archaeology report.
- ☐ Thank you for the information. We are satisfied with the planned site treatment.
- ☐ We have concerns and wish to consult.
- ☐ We wish to participate in the Memorandum of Agreement for this project.

Comments _____

Name _____ Tribal name _____ Date _____

(Comments continued on back)

Additional Comments _____

Fold first

(TAPE–Do NOT Staple.)

(TAPE–Do NOT Staple.)

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 651 AMES, IA

POSTAGE WILL BE PAID BY ADDRESSEE

OFFICE OF LOCATION AND ENVIRONMENT
CULTURAL RESOURCES SECTION
IOWA DEPARTMENT OF TRANSPORTATION
800 LINCOLN WAY
AMES IA 50010-9902

Fold last

Mike LaPietra
FHWA, Iowa Division
105 6th St
Ames, Iowa 50010

Tribal Chairperson
Iowa Tribe of Kansas and Nebraska
3345 Thrasher Rd. #B
White Cloud, KS 66097-4028

Tribal Chairperson
Iowa Tribe of Oklahoma
R1, Box 721
Perkins, OK 74059

Ms. Barbara Childs-Walton
NAGRPA
Otoe-Missouria Tribe
RR 1, Box 61
Red Rock, OK 74651

Mr. Jonathan Buffalo
THP Coordinator
Sac & Fox Nation of Mississippi in Iowa
349 Meskwaki Road
Tama, IA 52339-9629

Ms. Sandra Massey
NAGPRA
Sac & Fox of Oklahoma
Route 2 - Box 246
Stroud, OK 74079

Ms. Deanne Bahr
NAGPRA
Sac & Fox Nation of Missouri
305 N. Main St.
Reserve, KS 66434-9723

Mr. John Blackhawk
Tribal Chairperson
Winnebago Tribe of Nebraska
Box 687
Winnebago, NE 68071

Mr. John Shalton
Otoe-Missouria Tribe
RR 1, Box 61
Red Rock, OK 74651

Cultural Preservation Office
Iowa Tribe of Oklahoma
RR1; Box 721
Perkins, OK 74059

APPENDIX C

FARMLAND PROTECTION FORMS

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request: 8/7/12	4. Sheet 1 of 1
1. Name of Project: **U.S. 30 Mount Vernon Lisbon Bypass**	5. Federal Agency Involved: **Federal Highway Administration**	
2. Type of Project: **New 4-lane bypass with 2 interchanges**	6. County and State: **Linn County, Iowa**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS: 8/7/12	2. Person Completing Form: Robert Vobora
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated: 0 / Average Farm Size: 298
5. Major Crop(s): Corn - Soybeans	6. Farmable Land in Government Jurisdiction — Acres: 399,988 % 87.4	7. Amount of Farmland As Defined in FPPA — Acres: 399,988 % 87.4
8. Name Of Land Evaluation System Used: Linn County, Iowa	9. Name of Local Site Assessment System: None	10. Date Land Evaluation Returned by NRCS: 9/21/12

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment ____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	292			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	699			
C. Total Acres In Corridor	991			
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	487.9			
B. Total Acres Statewide And Local Important Farmland	484.7			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	.001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	52.5			
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)*	72			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15	11			
2. Perimeter in Nonurban Use	10	8			
3. Percent Of Corridor Being Farmed	20	20			
4. Protection Provided By State And Local Government	20	20			
5. Size of Present Farm Unit Compared To Average	10	10			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availablility Of Farm Support Services	5	5			
8. On-Farm Investments	20	0			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	8			
TOTAL CORRIDOR ASSESSMENT POINTS	160	82	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	72	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	82	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	154	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
Alternative E	292	7/9/12	YES ☐ NO ☑

5. Reason For Selection:

Alternative E best meets the project purpose and need while minimizing impacts to agricultural land.

Signature of Person Completing this Part: | DATE

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

Clear Form

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

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **8/7/12**	4. Sheet 1 of **1**
1. Name of Project **U.S. 30 Mount Vernon Lisbon Bypass**	5. Federal Agency Involved **Federal Highway Administration**	
2. Type of Project **New 4-lane roadway with 2 interchanges**	6. County and State **Cedar County, Iowa**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **8/7/12**	2. Person Completing Form **Julie McMichael**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated **0** / Average Farm Size **357**
5. Major Crop(s) **Corn**	6. Farmable Land in Government Jurisdiction Acres: **342,180** % **92**	7. Amount of Farmland As Defined in FPPA Acres: **342,180** % **92**
8. Name Of Land Evaluation System Used **Cedar County, Iowa**	9. Name of Local Site Assessment System **None**	10. Date Land Evaluation Returned by NRCS **8/14/12**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment ____ Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	**134**			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	**0**			
C. Total Acres In Corridor	**846**			
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**93.0**			
B. Total Acres Statewide And Local Important Farmland	**39.7**			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	**0.03**			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	**51**			
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)*	84			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15	**15**			
2. Perimeter in Nonurban Use	10	**10**			
3. Percent Of Corridor Being Farmed	20	**20**			
4. Protection Provided By State And Local Government	20	**20**			
5. Size of Present Farm Unit Compared To Average	10	**0**			
6. Creation Of Nonfarmable Farmland	25	**0**			
7. Availablility Of Farm Support Services	5	**5**			
8. On-Farm Investments	20	**0**			
9. Effects Of Conversion On Farm Support Services	25	**0**			
10. Compatibility With Existing Agricultural Use	10	**8**			
TOTAL CORRIDOR ASSESSMENT POINTS	160	**78**	**0**	**0**	**0**
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	**84**	**0**	**0**	**0**
Total Corridor Assessment (From Part VI above or a local site assessment)	160	**78**	**0**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)*	260	**162**	**0**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
Alternative E	**134**	**7/9/12**	YES ☐ NO ☑

5. Reason For Selection:

Alternative E best meets the project purpose and need while minimizing impacts to agricultural land.

Signature of Person Completing this Part: | DATE

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

Clear Form

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?
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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

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