

U.S. 30
FROM I-35 INTERCHANGE TO JUST WEST OF 11th STREET IN NEVADA
STORY COUNTY, IOWA
NHSX-030-5(244)—3H-85

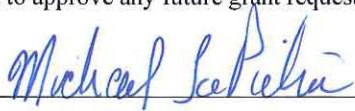
ENVIRONMENTAL ASSESSMENT

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

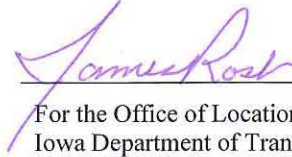
By The

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.



For the Iowa Division Administrator
Federal Highway Administration



For the Office of Location and Environment
Iowa Department of Transportation

7-30-15

Date of Approval for Public Availability

The following persons may be contacted for additional information:

Ms. Karen Bobo
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.

Table P-1 shows the resources considered during the environmental review for this project. The first column with a check means the resource is present in the project area. The second column with a check means the impact to the resource warrants more discussion in this document. The other listed resources have been reviewed and are included in the Streamlined Resource Summary.

Table P-1: Resources Considered

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

TABLE OF CONTENTS

1. DESCRIPTION OF THE PROPOSED ACTION.....	1-1
2. PROJECT HISTORY	2-1
3. PURPOSE AND NEED FOR ACTION.....	3-1
4. ALTERNATIVES	4-1
No Build Alternative.....	4-1
Alternatives Considered but Dismissed.....	4-1
Proposed Alternative.....	4-3
5. ENVIRONMENTAL ANALYSIS	5-1
5.1. SOCIOECONOMIC IMPACTS.....	5-1
Land Use.....	5-1
Churches and Schools	5-3
Economic.....	5-4
Right-of-Way.....	5-6
Relocation Potential	5-7
Construction and Emergency Routes	5-7
Transportation	5-8
5.2. CULTURAL IMPACTS	5-9
Historical Sites or Districts.....	5-10
Archaeological Sites.....	5-10
5.3. NATURAL ENVIRONMENT IMPACTS.....	5-11
Wetlands.....	5-11
Surface Waters and Water Quality	5-12
Floodplains	5-14
Threatened and Endangered Species.....	5-15
Woodlands.....	5-16
Farmlands	5-16
5.4. PHYSICAL IMPACTS.....	5-18
Noise.....	5-18
Air Quality.....	5-21
Contaminated and Regulated Materials Sites.....	5-21
Utilities	5-23

5.5. CUMULATIVE	5-24
5.6. STREAMLINED RESOURCE SUMMARY.....	5-26
6. DISPOSITION	6-1
7. COMMENTS AND COORDINATION	7-1
Agency and Tribal Coordination.....	7-1
NEPA/404 Merge Coordination.....	7-2
Public Involvement.....	7-3

LIST OF FIGURES

Study Area	Figure 1-1
Alternatives	Figure 4-1
Alternatives	Figure 4-2
Proposed Alternative.....	Figure 4-3
Proposed Alternative.....	Figure 4-4
Environmental Constraints.....	Figure 5-1
Proposed Acquisitions	Figure 5-2
Noise	Figure 5-3
Future Construction Projects.....	Figure 5-4

LIST OF TABLES

Crash Rates per Hundred Million Vehicle Miles, 2002-2009	Table 3-1
Major Causes of Corridor Accidents, 2002-2009	Table 3-2
Environmental Impacts of Alternatives	Table 4-1
Potentially Eligible Archaeological Sites in Study Area	Table 5-1
Potential Impacts to Wetlands	Table 5-2
Potential Impacts to Surface Waters	Table 5-3
Noise Receptors and Estimated Noise Levels	Table 5-4
REC's in Study Area.....	Table 5-5
Utilities	Table 5-6
Future Construction Actions Near the Study Area	Table 5-7
Potential Cumulative Impacts	Table 5-8
Summary of Impacts	Table 5-9

Agency CoordinationTable 7-1
Tribal Coordination.....Table 7-2

APPENDICES

A. Streamlined Resource Summary
B. Agency and Tribal Coordination
C. Farmland Protection Form

SECTION 1

DESCRIPTION OF PROPOSED ACTION

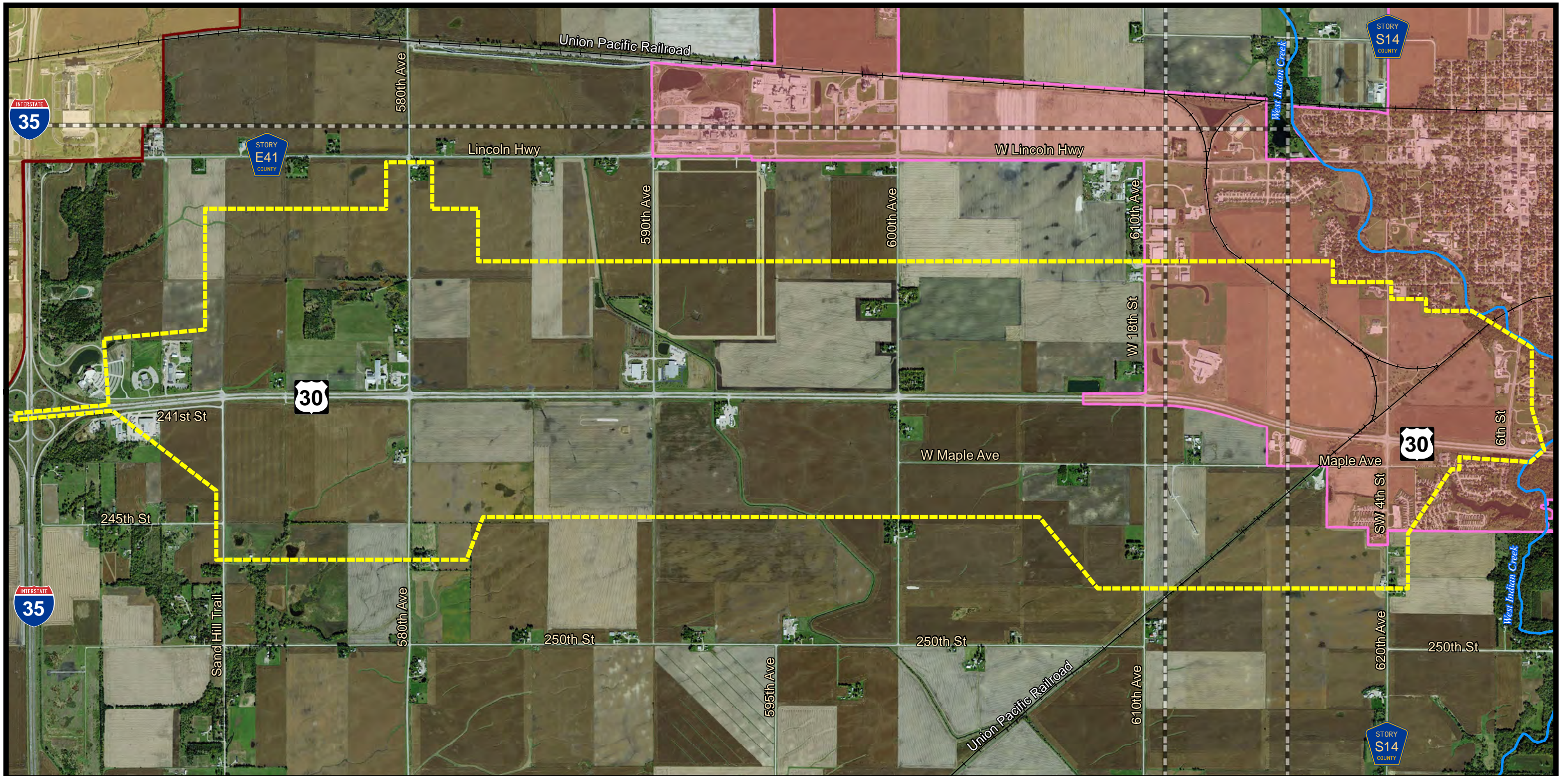
This Environmental Assessment (EA) has been prepared in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA). This EA informs the public and interested agencies of the proposed action and alternatives to the proposed action in order to gather feedback on the improvements under consideration.

Proposed Action

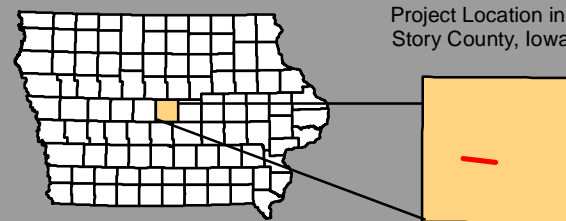
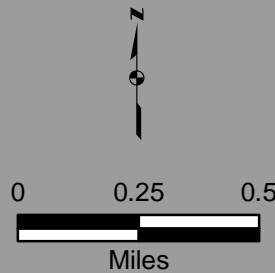
The Iowa Department of Transportation (Iowa DOT) and the Federal Highway Administration (FHWA) are evaluating potential alternatives to improve U.S. Highway 30 (U.S. 30) from the I-35 interchange near Ames east to 11th Street in Nevada, Story County, Iowa. Improvements will include interchanges at the west and east ends of the Study Area and the development of full access control along the corridor.

Study Area

The primary area of investigation for the Project is generally a 1-mile wide corridor along U.S. 30 beginning at the I-35 interchange and proceeds east approximately 6 miles to the U.S. 30 bridge over West Indian Creek in the city of Nevada. For the purposes of this discussion, this area will be referred to as the Study Area. The Study Area boundaries were established to allow the development of a wide range of alternatives that could address the purpose of and need for the project. The Study Area is larger than the area proposed for construction activities for the Project. However, some impacts may extend beyond the Study Area; where this occurs will be noted and addressed in the Environmental Analysis Section (Section 5). Figure 1-1 outlines the Study Area of the proposed action.



Created May 2015
2014 Aerial



- Project Study Area
- Pipelines
- ~ West Indian Creek
- City of Ames
- City of Nevada
- + + + Union Pacific Railroad

FIGURE 1-1
PROJECT STUDY AREA
NHSX-30-5(244)--3H-85
U.S. Highway 30 Improvements
Ames to Nevada
Story County, Iowa

SECTION 2

PROJECT HISTORY

U.S. 30 from just west of I-35 (Skunk River) in Ames east to Nevada was constructed in 1964 as a two-lane highway with the intent for future expansion to four-lane highway. In 1988, the Iowa DOT's Transportation Commission identified U.S. 30 as part of the State's Commercial Industrial Network (CIN). As part of the CIN¹, segments of U.S. 30 in Iowa have been developed as four-lane expressways or freeway facilities with posted speed limits of 65 mph in rural areas. In 1991, the segment of U.S. 30 from I-35 east to the beginning of the existing four-lane segment in Nevada was improved to a four-lane expressway with limited at-grade access.

U.S. 30 directly west of the Study Area, from old U.S. 30 west of Ames to the I-35/ U.S. 30 interchange, is a full access control freeway facility with access provided at grade separated interchanges. U.S. 30 between the I-35 interchange and the city of Nevada is a four-lane expressway with limited at grade access including at-grade intersections at Sand Hill Trail, 580th Avenue, 590th Avenue, 600th Avenue, 610th Avenue, S14, and 6th Street. East of the Study Area, the next direct access to U.S. 30 is at the 19th Street interchange in the city of Nevada.

The city of Nevada has made several Requests for Funding for safety improvements to the U.S. 30 Corridor in Nevada. The most recent request, in 2009, proposed an interchange between County Road S-14 (S14) and 6th Street to replace the at-grade intersections at 610th Avenue/W18th Street, S14, and 6th Street (Figure 1-1). The request also proposed improvements to the local highway network which included the removal of two at-grade rail crossings on County Road S14 just north of U.S. 30, the addition of one at-grade crossing on a new proposed local road, and one improved crossing on Maple Avenue south of U.S. 30. Nevada's Request for Funding identified high speeds along U.S. 30 and a high number of conflict points at the S14 intersection as a basis for the proposed safety improvements.

Both the 2000 and 2005 Ames Area MPO Long Range Transportation Plan included an interchange at 580th Avenue in the long-term (16-25 year) planning horizon.

Iowa DOT conducted a public information meeting (PIM) on March 7, 2013, prior to the initiation of the NEPA process. The meeting was held to inform the public about the proposed U.S. 30 project from the I-35 interchange in Ames to 11th Street in Nevada and to gather input and comments from the public.

¹ Iowa DOT defines the Commercial Industrial Network as a "designated road system of primary highways that connect the State's regional growth areas and carry a significant amount of the State's commercial traffic; the CIN does not include the interstate system.

SECTION 3 PURPOSE AND NEED FOR ACTION

This section describes the purpose of and need for the proposed action based on the transportation system problems that currently exist in the Study Area. This section details the substandard nature of the existing highway, and explains the importance of U.S. 30 as part of the Commercial Industrial Network (CIN).

Purpose of the Proposed Action

The purpose of the proposed action is to improve the level of safety and to improve traffic operations on U.S. 30 from the I-35 interchange near Ames to 11th Street in Nevada.

Need for the Proposed Action

The need for the proposed action is based on a combination of factors, as described below:

- Safety
- System Continuity
- Traffic Demand
- Roadway Deficiencies

Safety

Crash rates for this U.S. 30 corridor were evaluated for the eight-year period from 2002-2009. During this time period, 205 crashes were recorded with no fatalities, 5 major injuries, and 17 minor injuries.

Between 580th Avenue and 610th Avenue, crash rates were comparable to the statewide averages for rural Iowa highways. At the west end of the corridor, from the I-35 interchange to Sand Hill Trail, crash rates were approximately four times greater than the statewide average for rural highways.

The east end of the corridor, from 610th Avenue to 11th Street in Nevada, had crash rates approximately 2.5 times greater than the statewide average for rural highways. This section of the corridor is within the corporate limits of the city of Nevada and is categorized as an urban area. However, the existing access control, high speeds, and rural cross sections of the roadway make this section more comparable to a rural route

Table 3-1: Crash Rates per Hundred Million Vehicle Miles (HMVM), 2002-2009

Location	Number of Crashes	Crash Rate /HMVM	Number of Injury Crashes	Injury Crash Rate /HMVM
I-35 to just East of Sand Hill Trail	48	202	8	34
East of Sand Hill Trail to 580 th Ave.	24	69	6	17
East of 580 th Ave to just west of 610 th Ave.	42	38	10	9
<i>Statewide Rural Expressway Average</i>		49		14
610 th Ave to 6 th Street in Nevada	76	126	22	37
<i>Statewide Urban Expressway Average</i>		124		40

Source for Statewide Averages: “Crash Rates and Densities on Mainline, Divided Roads in Iowa, 2001-2009”, available at http://www.iowadot.gov/crashanalysis/pdfs/crash_rate-density_comparables_segments_2001-2009_20100706_dividedroadmainline.pdf.

Three locations have higher intersection crash rates than the rest of the corridor:

- Sand Hill Trail: 0.9 crashes per million entering vehicles (MEV)
- W. 4th Street: 1.2 crashes per MEV
- East 6th Street: 1.0 crashes per MEV

Although these stand out within the corridor, these rates are comparable to statewide averages for municipal intersections with these traffic volumes.

About 30% of crashes are animal related. The next most common cause, “following too close”, accounted for about 10% of crashes.

Table 3-2: Major Causes of Corridor Accidents, 2002-2009

Major Cause	Crashes	%
Animal	62	30.2%
Followed Too Close	20	9.8%
Driving Too Fast for Conditions	16	7.8%
FTYROW: From Stop Sign	15	7.3%
FTYROW: From Yield Sign	11	5.4%
Other/None Indicated	81	39.5%

System Continuity

U.S. 30 across Iowa is part of the Commercial Industrial Network (CIN), a designated road system of primary highways that connect the state’s regional growth areas and carry a significant amount of the state’s commercial traffic. The goal of the CIN is to “improve the flow of commerce; to make travel more convenient, safe, and efficient; and to better connect Iowa with regional, national, and international markets.”

U.S. 30 serves as a commuter route between Ames and Nevada, as indicated by an approximately 30 percent drop in traffic volumes on U.S. 30 at the 19th Street interchange located on the east side of Nevada. 2035 projections indicate 5459 vehicles per day enter or exit U.S. 30 to the west of this location.

The increasing traffic volumes, coupled with numerous at-grade intersections and other types of public and private access points has contributed to operational issues for the U.S. 30 corridor between I-35 and Nevada. With the current access control in place, U.S. 30 is congested and not operating at its maximum traffic carrying capacity.

Traffic Demand

Ames is a major city along U.S. 30 that has experienced growth in the recent past and is expected to continue to grow. Future traffic volumes and patterns are expected to increase as well. Traffic count in 2011 was 12,700 vehicles per day, with 7% truck. Projected traffic in 2015 is 13,700 vehicles per day, with 7% trucks. By 2035, traffic is projected to increase to 18,900 vehicles per day, with 9% trucks.

Nevada has begun development of 610th Avenue (also known as 18th Street/Airport Road) on the west side of the community. Nevada Industrial Park is located on 18th Street/610th Avenue and covers the entire one-mile distance between U.S. 30 and Lincoln Highway. This park is currently home to nine companies and the ISU Energy Research Center. Future expansion of industry and businesses in this park will generate increased demand for freight and large vehicle access to this roadway.

Development of bio-energy facilities (DuPont and Lincolnway Energy) has recently occurred on Lincoln Way between 590th Avenue and 600th Avenue. These facilities, along with the existing Key Cooperative grain elevator, are also expected to generate an increase in truck volumes between U.S. 30 and Lincoln Highway.

In the past twenty years, two large churches have been built just east of I-35 and north of U.S. 30. The favored route to these churches is U.S. 30 to Sand Hill Trail. The majority of the trips to these churches are on Sundays, although both host activities throughout the week as well. It is estimated the churches contribute 4546 vehicles to the Sunday traffic and 1130 vehicles to weekday traffic.

Ames has plans to expand their city limits and utilities across I-35 to the east. If this occurs, further development in this location will place increased traffic demands on 580th Avenue.

Roadway Deficiencies

At the west end of the Study Area, the Sand Hill Trail intersection is a quarter-mile from the ramp tapers for the U.S. 30/I-35 interchange. The close proximity of the intersection to the interchange causes some operational problems which will only worsen as traffic volumes increase.

The existing U.S. 30/S14 intersection at the east end of the Study Area has design deficiencies. The intersection is only 725 feet east of the U.S. 30 bridges over the Union Pacific Railroad. This railroad overpass does not meet the minimum vertical clearance of 23' 4" over the railroad tracks and does not have sufficient sight distance for the posted 55 mph speed limit. The U.S. 30

grade at this location does not have the desired vertical clearance and vertical curve sight distance.

The speed limit is currently reduced from 65 mph to 55 mph through this section due to traffic volumes, safety, sight distance, and the at-grade intersection locations.

SECTION 4 ALTERNATIVES

This section discusses the alternatives investigated to address the purpose of and need for the proposed action. A range of alternatives were developed and then a screening process was used for narrowing the range of alternatives. This section will discuss the No Build Alternative, the alternatives considered but dismissed, and the Proposed Alternative.

No Build Alternative

Under the No Build Alternative, neither the proposed improvements to U.S. 30 nor the new interchanges would be constructed. The road network would continue to be used in its existing configuration. The at-grade intersections at 580th Avenue, 610th Avenue, S14, and 6th Street would remain in place. This alternative would not improve safety at these intersections, would not provide system continuity for more efficient traffic flow, and would not meet future traffic demands. The road network would continue to operate with the current roadway deficiencies. Although it does not meet the purpose and need, the No-Build Alternative was carried forward for detailed study because it provides a baseline for comparing the potential impacts of other alternatives and consideration of a no action alternative as required by Council on Environmental Quality regulations for implementing NEPA (40 CFR 1500-1508).

Alternatives Considered but Dismissed

Two interchange alternatives were considered for development at the west end of the Study Area, West Alternative 1 and West Alternative 2. Two interchange alternatives were considered at the east end of the Study Area, East Alternative 3 and East Alternative 4. A third interchange alternative for a proposed diamond interchange at the west end of the Study Area was also considered. However, due to the excessive amount of right-of-way required for this alternative, it was dismissed early in the NEPA process and was not carried forward for development.

To improve traffic operations on U.S. 30, all four interchange alternatives propose the development of full access control along U.S. 30 from I-35 east to 19th Street in Nevada and existing at-grade intersections at Sand Hill Trail, 580th Avenue, 590th Avenue, 600th Avenue, S14 and 6th Street will be closed. All field and farm/residential entrances between I-35 and 610th Avenue will also be closed.

West Alternative 2 - 580th Avenue Interchange

Located at the west end of the Study Area (Figure 4-1), this alternative would relocate 580th Avenue slightly to the east. The interchange would be a three-quadrant interchange, with relocated 580th Avenue constructed over U.S. 30. The new relocated 580th Avenue over U.S. 30 would be connected to Sand Hill Trail with a frontage road on the south side of U.S. 30 and the existing access to U.S. 30 at Sand Hill Trail would be closed. On the north side of U.S. 30, a new access road would be constructed approximately 0.5 mile north of the interchange that extends west from 580th Avenue and then back south connecting to the existing frontage road that serves

the Iowa DOT maintenance facility and the two churches on the north side of U.S. 30. The existing U.S. 30 through lanes would be used as constructed.

West Alternative 2 was dismissed for several reasons. The proposed frontage and connector roads on both sides of U.S. 30 would be approximately 1 mile long. Consequently, this would incur higher construction cost due to the amount of additional ROW and new pavement that would be required for this construction. This alternative would also result in longer out-of-distance travel to reach destinations along U.S. 30 between I-35 and 580th Avenue. This alternative would have a large construction footprint that would lead to greater impacts to environmental resources, notably farmland, floodplains, and wetlands. This alternative was also dismissed due to the fact that the design for this interchange includes an entrance loop ramp in the northeast quadrant for westbound entrance to U.S. 30. Iowa DOT did not favor a loop ramp design as they have greater impacts on truck operations. Additionally, based on the comments received during a public information meeting held on March 7, 2013, the loop ramp was also not favored with many of the attendees citing the potential for driver confusion at the entrance to the loop ramp as a concern.

East Alternative 4 - County Road S14/6th Street Interchange

Located at the east end of the Study Area (Figure 4-2), this alternative proposes a new interchange approximately 0.25 miles east of S14, connecting S14 to 6th Street in Nevada. The interchange would be a folded diamond interchange with a new diagonal roadway constructed over U.S. 30. The existing at-grade crossings at S14 and 6th Street with U.S. 30 would be closed. In addition to construction of the new interchange, the proposed design includes replacing the at-grade crossing at 610th Avenue with a new overpass bridge over U.S. 30. West Maple Avenue, located approximately 0.25 miles south of U.S. 30, would also be paved from 610th Avenue east approximately 1 mile to the new realigned S14. The existing U.S. 30 through lanes and the railroad overpass bridges over the UPRR will be reconstructed from about 0.8 miles west of S14 to about 0.5 miles east of County Road S-14.

The East Alternative 4 was dismissed because it would lead to greater out-of-distance travel to and from Nevada's growing industrial area and developing ethanol plant north of U.S. 30. Additionally, this alternative is located immediately adjacent to a residential area with bike and pedestrian traffic and would not provide adequate truck separation for this neighborhood. This alternative would also incur greater project costs as it would require the construction and maintenance of two additional bridge structures for an eastbound U.S. 30 exit ramp and westbound U.S. 30 entrance ramp over the UPRR.

All four interchange alternatives were shown to the public and to potentially interested resource agencies (Iowa Department of Natural Resources (IDNR), U.S. Fish and Wildlife Services (USFWS), U.S. Army Corps of Engineers (USACE), and the Environmental Protection Agency (EPA)).

Table 4-1 Environmental Impacts of Alternatives

Environmental Resources	No Build	West Alternative 1 575th Ave	West Alternative 2 580th Ave.	East Alternative 3 610th Ave.	East Alternative 4 S14/6th St.
Impact Area (acres)	0	227	240	258	215
Historic Properties	0	1	0	2	2
Floodplains (acres)	0	10	10	1	0
Regulated Materials (parcels)	0	4	2	2	2
Streams (feet)	0	190	0	146	146
T & E	0	0	0	0	0
Wetlands (acres)	0	0.7	9.0	0.8	0.7
Open Water (acres)	0	0	0	2.4	1
Woodlands (acres)	0	1	2	0	0
Businesses	0	3	3	5	6
Churches	0	0	0	1	1
Farmland (acres)	0	172.4	202	50.9	34
Homes	0	2	1	1	1
Schools	0	0	0	0	0
Utilities	0	0	0	1	1

Proposed Alternative

Iowa DOT has identified an West Alternative 1 as the Proposed Alternative at the west end of the Study Area and East Alternative 3 as the Proposed Alternative at the east end.

West Alternative 1 - 575th Avenue Interchange

Located at the west end of the Study Area (Figure 4-3), this alternative proposes a new local road, 575th Avenue, to be constructed between Sand Hill Trail and 580th Avenue. The interchange would be a diamond interchange with 575th Avenue over U.S. 30. The new overpass road at 575th Avenue would be connected to Sand Hill Trail and 580th Avenue with a new connector road (242nd Avenue) on the south side of U.S. 30. On the north side of U.S. 30, a new access road would also be constructed heading west from 575th Avenue connecting to an existing frontage road. From the point of the new access road, 575th Avenue will then continue north for approximately 0.4 miles and turn east connecting back to 580th Avenue. The existing U.S. 30 through lanes would be used as constructed while existing at-grade crossings at Sandhill Trail, 580th Avenue and 590th Avenue would be closed.

This alternative minimizes the out-of-distance travel for traffic to and from the two large churches, the Iowa DOT maintenance facility located along the north side of U.S. 30, and for the commercial business located along the south side. The location of the side road connection from 575th Avenue back to 580th Avenue on the north side of U.S. 30 also allowed for a reduction to the wetland and woodland impacts.

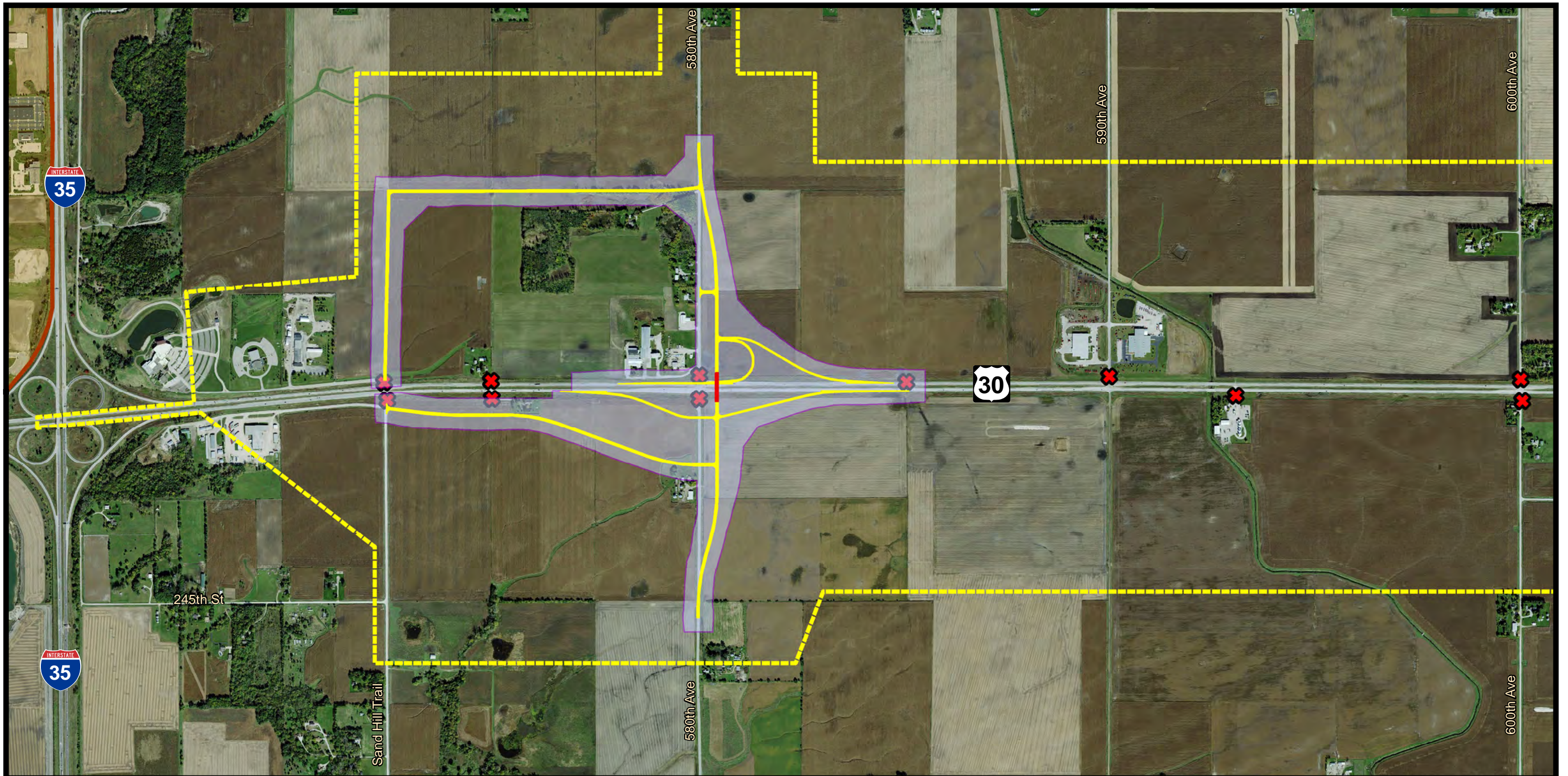
East Alternative 3 - 610th Avenue Interchange

Located at the east end of the Study Area (Figure 4-4), this alternative consists of a new diamond interchange at 610th Avenue, with 610th Avenue carried over U.S. 30. In addition to construction of the new interchange, the proposed design includes closing the existing at-grade crossings at

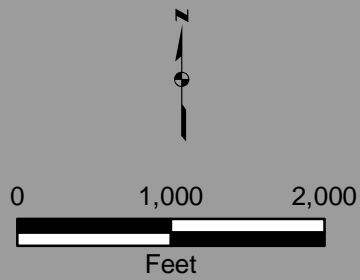
600th Avenue, S14 and 6th Street in Nevada. A new roadway would be constructed diagonally over U.S. 30 connecting S14 on the south side of U.S. 30 to 6th Street on the north side of U.S. 30 in Nevada. Direct access to the interchange will be provided by paving West Maple Avenue from 610th Avenue east approximately 1 mile to realigned S14. The existing U.S. 30 through lanes and the railroad overpass bridges over the UPRR will be used as constructed. During final design however, there may be a need to reconstruct the railroad overpass bridges and the U.S. 30 through lanes from about 0.8 miles west of S14 to about 0.5 miles east of S14.

After reviewing the reasonable alternatives under consideration, Iowa DOT has identified West Alternative 1 and East Alternative 3 as the Preferred Alternative along with the development of full access control from the I-35 interchange east to the 19th Street interchange in Nevada. All field and farm/residential entrances will also be closed between I-35 and 610th Avenue. In order to reduce impacts due to access restrictions, East Alternative 3 (610th Avenue interchange) will be constructed first, including the closure of the intersection of 600th Avenue and U.S. 30. All other side road and farm/residential access points will be kept open until after construction of West Alternative 1(575th Avenue interchange). This alternative is preferred because it meets the Project purpose and need while minimizing overall impacts.

Final selection of an alternative, including a construction scenario, will not occur until FHWA and Iowa DOT evaluate all comments received as a result of their review of this document and the public hearing on the U.S. 30 Improvement Study. Following public and agency review of this EA, FHWA and Iowa DOT will determine if an EIS is required. If one is not required, the selected alternative will be identified in the Finding of No Significant Impact (FONSI) document. If an EIS is required, then a preferred alternative would be selected through that process.

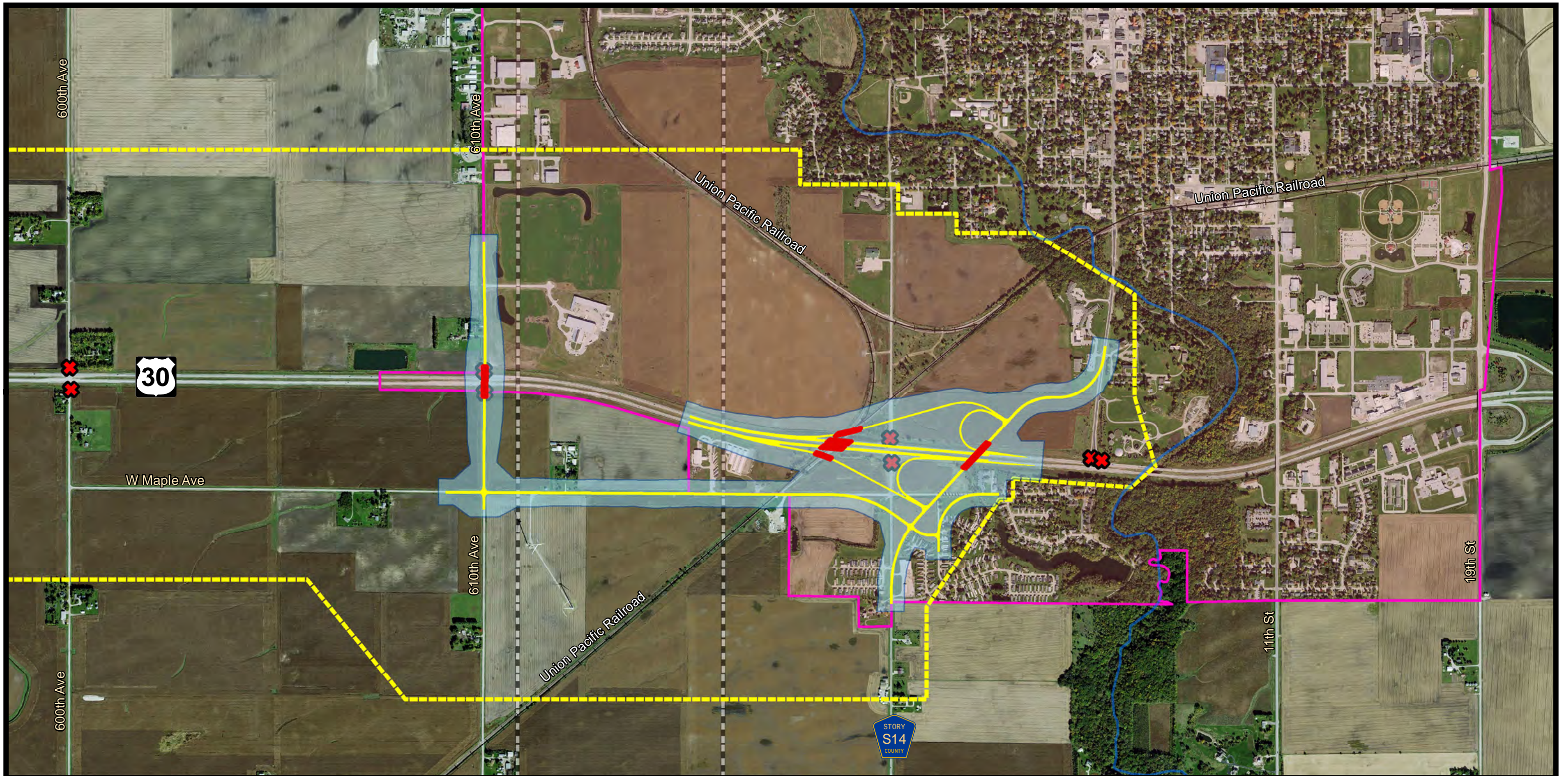


Created May 2015
2015 Aerial

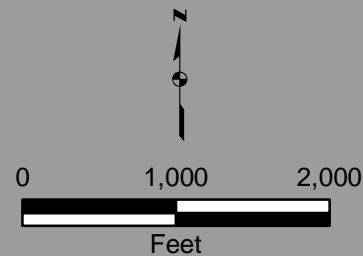


- Proposed Bridge
- Proposed Alignment
- Closures
- Impact Area
- Project Study Area
- City of Ames

FIGURE 4-1
WEST ALTERNATIVE 2
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Planning Study
 Ames to Nevada
 Story County, Iowa

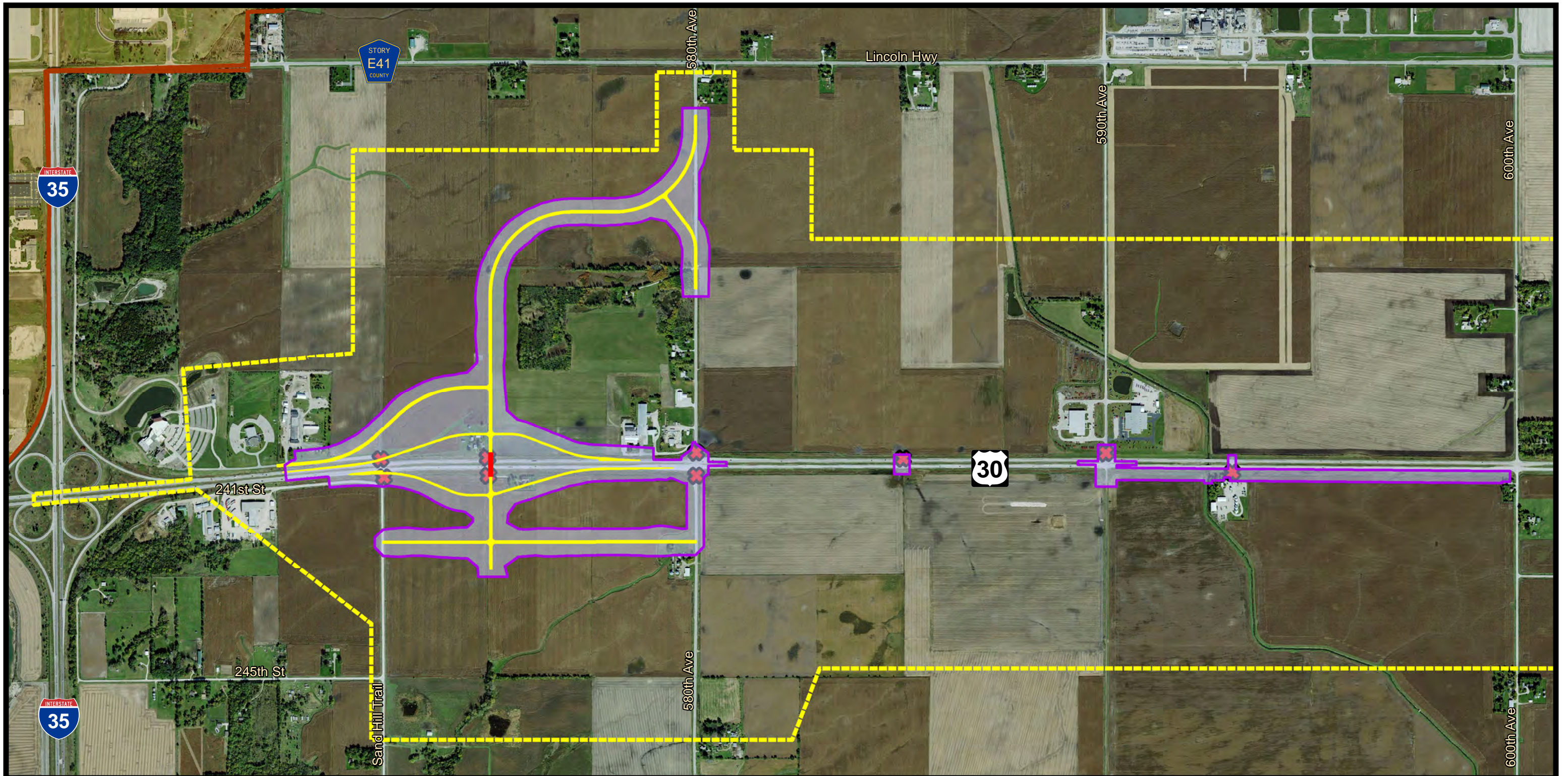


Created May 2015
2013 Aerial

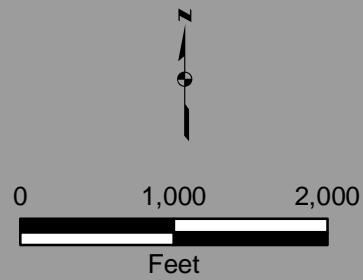


- Proposed Bridge
- Proposed Alignment
- X Closures
- Impact Area
- City of Nevada
- Pipelines
- Railroad
- IndianCreek

FIGURE 4-2
EAST ALTERNATIVE 4
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Planning Study
 Ames to Nevada
 Story County, Iowa

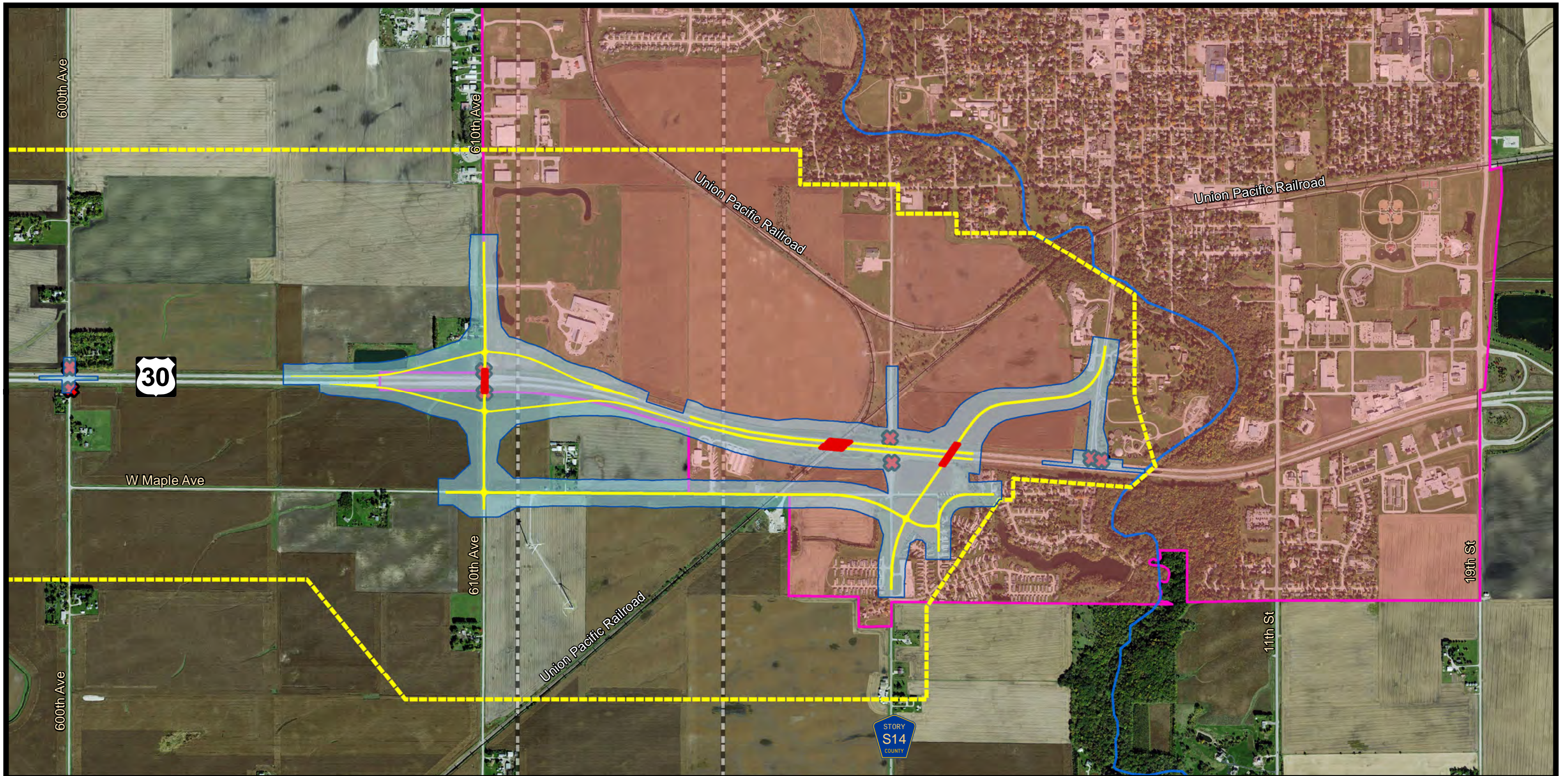


Created May 2015
2015 Aerial

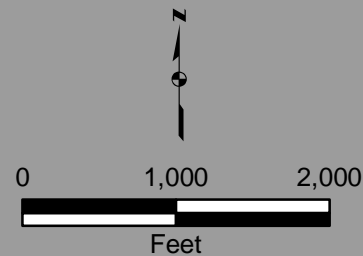


- Proposed Bridge
- Proposed Alignment
- Closures
- Impact Area
- Project Study Area
- City of Ames

FIGURE 4-3
WEST ALTERNATIVE 1
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Planning Study
 Ames to Nevada
 Story County, Iowa



Created May 2015
2013 Aerial



- Proposed Bridge
- Proposed Alignment
- Closures
- Impact Area
- City of Nevada
- Project Study Area
- Railroad
- Pipelines
- Indian Creek

FIGURE 4-4
EAST ALTERNATIVE 3
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Planning Study
 Ames to Nevada
 Story County, Iowa

SECTION 5

ENVIRONMENTAL ANALYSIS

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

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

5.1 Socioeconomic Impacts

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

Land Use

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

The project Study Area is situated in a mostly rural area of Story County bounded by I-35 on the west end and the U.S. 30 bridge over West Indian Creek in the city of Nevada on the east end. A majority of the land use is for agriculture with rural farmsteads and rural residences adjacent to U.S. 30. Small areas with commercial and light industrial use are also present. Commercial businesses exist on the north and south sides of U.S. 30 between I-35 and 580th Street at the west end of the Study Area. The east end of the Study Area extends into the City of Nevada where there is a mixture of residential, commercial, and industrial land use.

The city of Ames has developed the Ames Urban Fringe Development Plan (2006) to classify future land uses within two miles of the city and has been adopted by Story County. The area west of 580th Avenue and north of U.S. 30 falls within two miles of the city of Ames and has been classified as an urban/rural transition area due to the proximity to Ames city limits. This

area has been identified in the Land Use Framework Map as Agricultural/Long-term Industrial Service. The city of Nevada has identified the area north of U.S. 30 along 610th Avenue as Limited Industrial and Commercial/limited Commercial land use; the area south of U.S. 30 as General Industrial and some Mobile Home Residential land use along S14. Recent development in the Study Area includes the relocation of several agricultural businesses (Van Wall Equipment, Vetter Equipment, and Ag Information Center) to the U.S. 30 corridor. Future development is expected along the U.S. 30 corridor.

Direct effects on existing land use would occur through the acquisition of new Right-of-Way (ROW) for roadway purposes. A specific discussion on ROW and acquisition impacts is provided in a later section titled Right-of-Way. The affected area within the Study Area was determined by identifying land uses through GIS applications and windshield surveys and comparing results to local land use plans. Indirect effects were evaluated by studying access restrictions and their impact in causing out-of-distance travel. Changes in land use as a result of future development were considered, and the alternatives were also reviewed for consistency with city and county land use plans.

No Build Alternative

The No Build Alternative would result in the continued use of U.S. 30 and would not affect the overall land use. The land use, characterized as predominantly agriculture with scattered agricultural businesses, light industrial and rural residences, would remain essentially unchanged.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

This proposed interchange alternative at 575th Avenue would be constructed in an area that is predominately agricultural. Construction of this alternative would result in the direct conversion of approximately 172.4 acres of agricultural land, including farmsteads with residences. The Proposed Alternative is consistent with existing land use plans of the city of Ames and Story County. This alternative is also consistent with the city of Ames future land use plans in the northeast corner of the I-35/U.S. 30 interchange which calls for Agricultural and Long-term Industrial Service as identified in the Land Use Framework Map and Ames Urban Fringe Plan.

East Alternative 3-610th Avenue Interchange

This proposed interchange alternative at 610th Avenue would be constructed in an area that is predominantly agricultural with small areas of residential and mobile home/multifamily residential, commercial and industrial use. As discussed in detail in the Section 4, this alternative would also require the realignment of County Road S-14 and 6th Street, with an overpass bridge over U.S. 30, paving Maple Avenue to provide access to the interchange at 610th Avenue, and closure of several at-grade intersections at 600th Avenue, County Road S14 and 6th Street. Construction of this alternative would result in the direct conversion of approximately 50.9 acres of agricultural land, including farmsteads with residences. This alternative is consistent with the existing land use plans of the city of Nevada and Story County. This alternative is also consistent with the city of Nevada's proposed future land use plans along U.S. 30 and 610th Street which call for additional general industrial and commercial growth in this area.

Churches and Schools

Churches and schools can contribute to a community's sense of identity. Therefore, the impacts of the Project on churches and schools in the Study Area relate in part to community cohesion. Churches and schools were identified through database searches and reconnaissance of the Study Area. There are five churches identified in the Study Area: Cornerstone Church, Campus Baptist Church, Nevada Baptist Church, First Christian Church, and Nevada Seventh Day Adventist Church and Elementary School (grades K-9). Access to The Cornerstone Church and the Campus Baptist Church is provided by a frontage road along the north side of U.S. 30 at the intersection with Sand Hill Trail. A left turn lane currently exists for U.S. 30 EB traffic turning onto the frontage road at Sand Hill Trail that is approximately 1700 feet long. During peak travel times, traffic can be backed up to a mile long, at times stopping traffic on the U.S. 30 through lanes. Additionally, the Ames Iowa Congregation of Jehovah's Witness is also located just outside the north boundary of the Study Area on County Road E41/Lincoln Highway.

No Build Alternative

The No-Build Alternative would not result in any impacts on area churches or schools and would not affect community cohesion for the reason described above. Traffic operations in the vicinity of The Cornerstone Church and Campus Baptist Church would not be improved and safety concerns at the Sand Hill Trail intersection would not be addressed.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

The Campus Baptist Church and The Cornerstone Church are located at the west end of the Study Area in the northwest quadrant of the I-35/U.S. 30 interchange. Construction of an interchange at 575th Avenue would not have an impact to these properties. However, construction of this alternative includes extending the existing frontage road on the north side of U.S. 30 to connect to the new access road at 575th Avenue to provide direct access to the churches. The out of distance travel for traffic to and from Campus Baptist Church and the Cornerstone Church will be slightly longer than currently exist. The new interchange would be located approximately 0.25 miles west of the present at-grade frontage road intersection and will provide traffic separation from the mainline travel to ease congestion during peak travel times. Church traffic will be routed through the new interchange and then proceed north for a short distance to reach the new access road at 239th Street and then back track approximately 0.5 miles west to Campus Baptist Church and Cornerstone Church. With this alternative, direct access to the two churches will also be provided from the north where 575th Avenue connects back to 580th Avenue.

East Alternative 3-610th Avenue Interchange

The Nevada Baptist Church, First Christian Church, and the Seventh-day Adventists Church and Elementary School are all located at the east end of Study Area in the city of Nevada. The proposed interchange at 610th Avenue would not impact the First Christian Church. Access to the Nevada Baptist Church from U.S. 30 would be rerouted to either 610th Street or 19th Street in Nevada due to the closure of the at-grade intersection of County Road S14/SW 4th Street and U.S. 30. Access to the Seventh Day Adventists Church and Elementary School from U.S. 30 will be rerouted via the new proposed overpass side road that will connect County Road S14

south of U.S. 30 to East 6th Street on the north side of U.S. 30. The proposed alternative will also have minor impacts to the Seventh Day Adventists Church and Elementary School parking lot, but no impacts to the structure on the property.

Economic

This section addresses the economic character of the Study Area. The sources for information are a site visit and the Story County assessor's database. Approximately 24 businesses operate within the Study Area that include farm implement dealerships, sport/athletic training facilities, farm/agricultural services/feed store, transportation services, light industrial, veterinary services, a modular and manufactured home seller, and storage rental facilities. Recent development includes the relocation of two large farm implement dealerships from within the city of Nevada to the U.S. 30 Corridor. Van Wall Equipment, a John Deere dealership, is now located on the northeast quadrant of the U.S. 30 and 610th Street. Vetter Equipment, a Case I.H. dealership, and Ag Information Center, an agricultural research and training facility, are also located at 590th Street. In addition, a 50 million gallon dry mill ethanol plant (Lincolnway Energy, LLC) is located just outside the north boundary of the Study Area on County Road E41/Lincoln Highway, which runs parallel to U.S. 30 one mile to the north. Adjacent to that facility is a 30 million gallon cellulosic ethanol plant, which is slated to begin production by mid-2015. Both of these facilities are dependent on access to U.S. 30.

Taxable valuations for fiscal years 2013 and 2014 in Story County are approximately \$1.39 billion and \$1.46 billion respectively (Story County Assessor's Office). Other tax levying entities in the Study Area include Grant Township, Nevada Township, Ames School District, and Nevada School District.

No Build Alternative

The No Build Alternative would result in continued use of U.S. 30. New development is not expected to be induced by continued use of the existing highway.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

The existing businesses located in the northwest corner of the intersection of 580th Avenue and U.S. 30, as well as business located in the northeast and southeast corners of the I-35/U.S. 30 interchange, would be affected by restrictions in access and route modifications due to construction. Access to all business will be maintained during construction and there would be no displaced businesses due to construction for this alternative.

After construction, businesses along U.S. 30 between I-35 and 580th Avenue would be affected as out-of-distance travel will increase slightly to reach those destinations. However, overall access would be improved by addressing the safety concerns for U.S. 30 crossings at Sand Hill Trail and 580th Avenue. Businesses along the north side of U.S. 30 would have access from the new frontage road off of the new 575th overpass road. In addition to access from the new interchange location, businesses on the north side of the U.S. 30 will gain safer access from County Road E41/Lincoln Highway to the north by using realigned 580th Avenue. Businesses on

the south side of U.S. 30 will continue to have access off of U.S. 30 with a new access road from 575th Avenue to Sand Hill Trail.

Because this alternative also proposes to close access points to U.S. 30 at 580th Avenue and 590th Avenue, two existing businesses located along U.S. 30 will be affected. Customers of Vetter Implement, located in the northwest corner of U.S. 30 and 590th Avenue, and Ag Information, located in the northeast corner of U.S. 30 and 590th Avenue, will have greater out-of-distance travel and will have to reroute by going north on 575th Avenue from U.S. 30 to Story County Road E41 (Lincoln Highway), east to 590th Avenue, and then back south 590th Avenue to reach those destinations. Because these businesses serve destination customers rather than impulse customers, adverse effects to business income are not expected to occur. The Iowa DOT intends to minimize impacts by constructing the interchange at 610th Avenue first and maintaining access at 580th Avenue and 590th Avenue until after the completion of the interchange at 575th Avenue.

Right-of-way for this alternative would need to be acquired from agricultural, commercial, and residential landowners. Construction of the proposed interchange at 575th Avenue would require approximately 179 acres of additional ROW that would be removed from the Story County tax base. This amount is approximately 0.05 percent of the total land in Story County. Consequently, the decrease in the amount to tax revenue from the affected property owners would be very small. There would be no displaced businesses due to construction for this alternative.

East Alternative 3-610th Avenue Interchange

The existing businesses at the east end of the Study Area along U.S. 30, 610th Avenue, S14, and 6th Street in Nevada will be affected by restrictions in access due to road closures and detours during construction. During interchange construction, traffic that would normally take 610th Avenue will be detoured west 1 mile to 600th Avenue or to the east 2.5 miles to 19th Street and through the city of Nevada. Likewise, traffic that would normally take S14 or 6th Street to downtown Nevada will also be detoured either to the 600th Avenue to the west or to 19th Street to the east. There are two businesses that have entrances along West Maple Avenue and access to those businesses will be also be maintained during construction. Access to all business will be maintained during construction and there would be no displaced businesses due to construction for this alternative.

After construction, overall access will be improved by addressing safety concerns of U.S. 30 crossings at 610th Avenue, S14, and 6th Street in Nevada. The proposed interchange at 610th Avenue will provide direct access to Nevada's expanding business and industrial development located along 610th Avenue/W. 18th Street approximately 1 mile north of U.S. 30. The proposed interchange will also provide a direct access from U.S. 30 to County Road E41/Lincoln Highway, the main east-west thoroughfare into Nevada. It will also provide access for truck traffic to the ethanol plant and grain elevator located west of Nevada along E41/Lincoln Highway.

Construction of this alternative also includes paving West Maple Avenue from 610th Avenue to S14. The proposed interchange will provide direct access to West Maple Avenue that will improve accessibility to businesses along this road. It will also provide direct access to the realigned S14 and 6th Street that will serve as a connection to downtown Nevada.

Right-of-way for this alternative would need to be acquired from agricultural, commercial, and residential landowners. Construction of the proposed interchange at 610th Street, paving of West Maple Avenue and new overpass bridge at S14/6thStreet over U.S. 30 would require approximately 191 acres of additional ROW that would be removed from the Story County and city of Nevada tax base. This amount is approximately 0.06 percent of the total land in Story County. Consequently, the decrease in the amount to tax revenue from the affected property owners would be very small.

Right-of-Way

To assess the potential impacts associated with the alternatives, ROW acquisition and property relocations were evaluated based on existing ROW, private and public property boundaries, and future ROW needs.

Construction of the proposed project will require the acquisition of additional ROW. The Study Area is approximately 4,190 acres in size and includes approximately 289 parcels of agricultural, commercial, industrial, and residential land. Approximately 24 business and 28 homes are included in the Study Area.

No Build Alternatives

The No Build Alternative would not require acquisition of any ROW along the highway.

Proposed Alternative

West Alternative 1 -575th Avenue Interchange

The Proposed Alternative at 575th Avenue would have an impact area with approximately 38 parcels and would potentially require the acquisition of approximately 179 acres of additional ROW from private property owners. ROW acquisitions would include the potential total acquisition of two rural properties. Three businesses are located within the impact area for this alternative; however, there would be no anticipated business displacements. Potential frontage impacts are also expected with this alternative. During final design, an effort would be made to minimize ROW acquisition and relocations to the extent practicable. ROW acquisition and relocations would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S. Code (USC) 4601 et seq.).

East Alternative 3-610th Avenue Interchange

The Proposed Alternative at 610th Avenue would have an impact area with approximately 65 parcels and would require the potential acquisition of approximately 191 acres of additional ROW from private property owners. ROW acquisitions would include the potential total acquisition of one rural residential property. There would be no anticipated business displacements. ROW impacts would be minimized at the U.S. 30 and S14 intersection by the fact that there are currently 65 acres of existing ROW previously purchased during construction of the 4 lane section of U.S. 30 from Nevada to Colo in 1994 and 1995. During final design, an effort would be made to minimize ROW acquisition and relocations to the extent practicable. ROW acquisition and relocations would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S. Code (USC) 4601 et seq.).

Relocation Potential

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

No Build Alternative

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

Proposed Alternative

West Alternative 1-575th Avenue Interchange

The proposed alternative would potentially require the total acquisition of two rural owner-occupied properties located in the northeast and northwest quadrant of 575th Avenue and U.S. 30 (figure 5-2). Both properties are one story houses but do not appear to be farmsteads. One of the properties also includes outbuildings which will require a personal property move. Rural acreages are in extremely limited supply in the vicinity of the Study Area. It is unlikely that there would be an ample market to absorb the needs of the displaced property owners who may search for a replacement rural property. There are building contractors in the area however, again limited, and nearly non-existent rural properties which to build on. Displaced rural residents could potentially be relocated within Ames or Nevada or other nearby towns.

East Alternative 3-610th Avenue Interchange

The proposed alternative would potentially require the total acquisition of one rural owner-occupied property located in the northwest corner of 610th Avenue and U.S. 30 that does not appear to a farmstead (Figure 5-2). Rural acreages are in extremely limited supply in the vicinity of the Study Area. It is unlikely that there would be an ample market to absorb the needs of the displaced property owners who may search for a replacement rural property. There are building contractors in the area however, again limited, and nearly non-existent rural properties which to build on. ROW acquisitions could also potentially affect several owner-occupied mobile homes on rented lots in a suburban mobile home park. The affected mobile homes would be relocated to other lots within the same mobile home park to the extent possible. Displaced rural residents could potentially be relocated within Ames or Nevada or other nearby towns. There would be no business relocations involved with this alternative.

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

Construction and Emergency Routes

This section addresses potential impacts from construction routes and impacts on emergency routes. Emergency vehicles (ambulances, fire trucks, and police cruisers) respond to events using

routes that are designated to reduce response times and account for access limitations. Any construction delays should be coordinated to minimize access limitations, when possible, during construction.

U.S. 30 is a vital emergency corridor serving Ames, Nevada, and other smaller neighboring communities. Story County Medical Center has two locations in Nevada, with the main campus located just off of U.S. 30 on the east side of the city of Nevada. Direct access to U.S. 30 is provided by the interchange at 19th Street in Nevada. The Nevada Fire Department is also located near the Study Area approximately 1.5 miles north of U.S. 30. Ambulance service in the Study Area is provided by the Nevada Fire Department and Story County Medical Center. Additionally, Mary Greeley Medical Center is located in Ames approximately 5 miles from the Study Area and provides emergency services in the Study Area. Police service in the Study Area is provided by the Story County Sheriff's Office in Nevada and the Nevada Police Department. The Ames Police Department and Ames Fire Department are also in close proximity to the Study Area.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area. There would be continued use of the existing side road connections that experiences frequent crashes and do not meet the anticipated future traffic demands. The increased risk of crashes could require occasional detours off the highway during emergency situations. Access to and from emergency service providers would continue along the same routes as currently used.

Proposed Alternative

Construction of both West Alternative 1 and East Alternative 3 would not require a detour route for emergency vehicles traveling along U.S. 30. Direct access would be maintained to all properties along U.S. 30 and Maple Avenue during construction.

As a result of the proposed alternative, several emergency routes will have slightly longer out-of-distance travel. Alternative routes may be needed to reach locations north and south of U.S. 30 in the vicinity of Sand Hill Trail, 580th Avenue, 590th Avenue, and 600th Avenue as access to these roads from U.S. 30 will be closed. Emergency vehicles may use Lincoln Highway or Maple Avenue, located 1 mile to the north and 0.5 miles south of U.S. 30 respectively, as alternative routes. Construction of East Alternative 3 will provide a more direct and safer route to the residential area in the southeast corner of U.S. 30 and S14 in Nevada. In the long term, access for emergency vehicles would improve because U.S. 30 would have sufficient capacity for anticipated traffic volumes and safety would be improved, particularly in the locations of the two new interchanges.

Transportation

Transportation resources in the Study Area include the highway and the surrounding network of roadways, railroads, airports, and waterways as well as the equipment used (such as public transit buses) for the movement of people and materials. Transportation resources in the Study Area include U.S. 30, County Roads R70 and S14, and the surrounding local road network. Additionally, the Study Area is bounded on the west end by I-35.

Other transportation resources include rail transportation approximately 1.5 miles north of the Study Area and the Ames Municipal Airport located approximately 3 miles west of the Study Area. Public bus service is also available in and near the Study Area through the Heart of Iowa Regional Transit Agency (HIRTA), a public transit system serving the counties of Boone, Dallas, Jasper, Madison, Marion, Story and Warren in central Iowa.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area, and the highway would remain a four-lane highway with at-grade intersections. Traffic operating conditions would not improve as the traffic demand along U.S. 30 continues to grow. Accidents would continue to occur at a rate above the statewide average for rural highways. No other reasonably foreseeable projects planned in the Study Area would address these issues. Airport operations would be unaffected.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

Construction of the proposed interchange at 575th Avenue would result in the closing of the Sand Hill Trail, 580th Avenue, and 590th Avenue intersections with U.S. 30. Access to frontage roads on both the north and south side of U.S. 30 would also be altered. The Campus Baptist Church and the Cornerstone Church, churches with large congregations, have access along the north frontage road between I-35 and 580th Avenue. Traffic congestion due to church traffic is expected to be reduced as a result of this proposed alternative. Ultimately, construction of the interchange would create a safer crossing of U.S. 30 while at the same time improve the flow of through traffic on U.S. 30.

Construction of the interchange could potentially result in an obstruction of airspace during bridge construction through the use of a crane. As design advances, construction of the proposed interchange would be further evaluated for the potential to avoid or minimize any airspace obstruction at the Ames Municipal Airport. Further coordination with FAA would occur if needed.

East Alternative 3-610th Avenue Interchange

Construction of the proposed interchange at 610th Avenue would result in the closing of the 600th Avenue, County Road S14 and 6th Street intersections with U.S. 30. A new cellulosic ethanol plant being constructed adjacent to the existing ethanol plant located north and west of the project site along County Road E41/Lincoln Highway is expected to increase traffic movements along 610th Avenue. Construction of the interchange would create a safe and direct route to these sites and to the city of Nevada. Although several routes will have longer out of distance travel as a result of the proposed action, construction of the interchange would create safer crossings of U.S. 30 while at the same time improving the flow of through traffic on U.S. 30.

5.2 Cultural Impacts

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

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

Historical Sites or Districts

An Intensive Historic Architecture Evaluation was completed to investigate potential impacts to historic structures in the Study Area. A total of 147 properties and structures were examined during the survey, of which only two were determined to be eligible for the National Register of Historic Places. The Ross/Barger Barn was determined eligible under Criteria C, while the Bechtel/Church Double Crib Barn was determined eligible under Criteria A and C.

No Build Alternative

The No Build Alternative would not result in any expansion of the U.S. 30 in the Study Area. No construction activities would occur, and no new ROW would be needed. Therefore, the No Build Alternative would have no effect on historic structures or districts.

Proposed Alternative

The Ross/Barger Barn is located southwest of Nevada and is adjacent to the impact area for East Alternative 3 and the Bechtel/Church Barn is located south of the present U.S. 30 alignment. Both locations have been noted in the corridor development and steps will be taken to avoid impacting these structures. A final determination from SHPO would be made prior to the FONSI, if a FONSI is determined to be the applicable decision document.

Archaeological Sites

A Phase I Archaeological Survey was completed to investigate the potential impacts to archaeological resources for the Study Area. The archaeological survey was conducted using an extensive archival search, along with historic research of the Study Area. A pedestrian survey was conducted of areas not previously surveyed. Subsurface testing was conducted using auger and shovel testing. The investigation identified 44 archaeological sites, of which three have both historic and prehistoric components. Of the sites identified, twenty-four represent historic farmsteads.

As a result of the Phase I Archaeological Survey, five archaeological sites were recommended for avoidance or Phase II investigations. The sites are as follows:

Table 5.1: Potentially Eligible Archaeological Sites in Study Area

Site ID Number	Description	Recommendations
13SR249	Middle Archaic Period - Open habitation site	Avoidance or Phase II
13SR299	Early Archaic Period - Open habitation site	Avoidance or Phase II
13SR306	Late Paleo Indian Period-Single artifact find	Avoidance or Phase II
13SR315	Early Archaic Period - Single artifact find	Avoidance or Phase II
13SR319	Early Archaic Period - Low density prehistoric habitation	Avoidance or Phase II

No Build Alternative

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

Proposed Alternative

Sites 13SR249, 13SR299, and 13SR306 would potentially be impacted by construction of the Proposed Alternative. Phase II investigations will be conducted for those sites, if any, that could be potentially impacted by the project’s constructions plans. A final determination from SHPO would be made prior to the FONSI, if a FONSI is determined to be the applicable decision document.

5.3 Natural Environment Impacts

This section characterizes the natural resources in the Study Area and addresses potential impacts of the No Build Alternative and the Proposed Alternative. The resources discussed are wetlands, surface waters and water quality, floodplains, woodlands, and farmlands.

Wetlands

Waters of the United States (WUS), including wetlands, streams, rivers and other drainages, lakes, natural ponds, and impoundments, are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), which requires a permit to authorize the discharge of dredged or fill material into WUS (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 for unavoidable impacts.

Iowa DOT conducted a preliminary desktop review to identify WUS and other environmental habitats present in the Study Area. The desktop review included a review of National Wetland Inventory (NWI) maps, soil maps, LIDAR, USGS Quad-maps and the best available aerial images. During October 2013, Iowa DOT staff conducted wetland delineations in non-cropped areas to identify WUS using methods outlined in the *1987 Corps of Engineers Manual for*

Wetland Delineation and its Midwest Regional Supplement. Since much of the Study Area's land use is actively being farmed, the methodology of Subtitle C of the Food Security Act for agricultural wetland determinations (FSA methodology) was used to delineate wetlands on agricultural lands. Hydric soil determinations were made in agricultural areas of the landscape that displayed enough signatures for field investigation.

Based on the results of the delineations, approximately 61.5 acres of wetlands were identified within the Study Area (Figure 5-1) and categorized into four different types: Farmed Wetlands (FW), Palustrine Emergent Wetlands (PEM), Palustrine Forested Wetlands (PFO) and Palustrine Sapling-Shrub Wetlands (PSS). The PEM, PFO and PSS wetlands are mainly in non-cropped low lying areas and adjacent to streams.

No Build Alternative

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

Proposed Alternative

Due to the nature and size of the proposed project, unavoidable wetland impacts are expected. The proposed 575th Avenue interchange alternative could potentially impact approximately 0.7 acres of wetland; the proposed 610th Avenue interchange alternative would potentially impact approximately 0.8 acres of wetlands. As design advances, efforts will be made to further reduce the impact on wetlands. Impacts as a result of the project are expected to require a Section 404 permit from USACE. In a letter dated August 12, 2013 to Iowa DOT in response to early coordination efforts on the Project, USACE indicated that "minimization of impacts should consist of a list of appropriate and practicable steps to minimize unavoidable adverse impacts. Compensatory mitigation must include plans to restore or create wetlands to mitigate unavoidable project wetland impacts." It is the intent of the Iowa DOT to mitigate impacts at a serviceable wetland mitigation bank. If one is not available, Iowa DOT will provide appropriate compensatory mitigation.

For the 575th Avenue interchange alternative, the alignment for 575th Avenue was extended further north from its original design before turning east to connect with 580th Avenue to avoid wetland areas. The shift in the alignment was a result of comments received during the Iowa DOT's consultation with the resource agencies (EPA, Iowa DNR, USFWS, and USACE) that resulted in a reduction in wetland impacts.

Table 5.2: Potential Impacts to Wetlands

Wetland Type	West Alternative 1 (acres)	East Alternative 3 (acres)	Total Preferred Alternative (acres)
Farmed Wetland (FW)	0.4	0	0.4
Palustrine Emergent (PEM)	0.2	0.7	0.9
Palustrine Forested (PFO)	0.1	0.1	0.2
Palustrine Sapling-Shrub (PSS)	0	0	0
Total:	0.7	0.8	1.5

Surface Waters and Water Quality

Water resources include rivers, lakes, ponds, and other surface water bodies. For the purpose of this analysis, the topic of water quality is also assumed to apply to groundwater. Important criteria in evaluating surface water and groundwater are adequate quantity and quality of these waters. Surface water features in the Study Area were determined through the use of aerial photography and topographic mapping.

On-site WUS determinations were also performed in October, 2013 in accordance with guidance received from the USACE for all significant drainages within the project limits. The WUS determinations indicated approximately 10,317 feet of streams and approximately 7.9 acres of open water (surface water) in the Study Area (Figure 5-1). The largest stream resource is a highly modified, straightened channel near the center of the Study Area. There are no streams listed as an Outstanding Iowa Water (OIW) or other protected streams identified by IA DNR. Other sources of surface water include small agricultural drainages, roadway drainage ditches, and ponds.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area. The No Build Alternative would have no impact on the quality of surface water or groundwater in the Study Area.

Proposed Alternative

The proposed 575th Avenue interchange alternative would potentially impact approximately 190 feet of streams with no impacts to open water; the proposed 610th Avenue interchange alternative would potentially impact approximately 146 feet of streams and 2.4 acres of open water. As previously mentioned above, the largest stream resource is a straightened channel near the center of the Study Area. Based on results of the delineation report, neither the 575th Avenue interchange nor the 610th Avenue interchange alternatives will impact this stream, therefore stream impacts are expected to be very minimal. For any potentially unavoidable stream impacts greater than 1 acre, a Section 401 Water Quality Certification would be required. A State 401 Water Quality Certification is issued by the Iowa 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, unavoidable stream impacts as a result of this project would need to be authorized by the USACE Section 404 permit. It is anticipated that no stream mitigation will be required for either the 575th Avenue interchange or 610th Avenue project areas.

Table 5.3: Potential Impacts to Surface Waters

Surface Water Type	West Alternative 1	East Alternative 3	Preferred Alternative Total
Streams (feet)	190 ft.	146 ft.	336 ft.
Open Water (acres)	0 ac.	2.4 ac.	2.4 ac.

For both the 575th Avenue and 610th Avenue interchange alternatives, surface water runoff would increase after construction is completed because the new pavement surface area from the proposed interchanges would be larger than that of the existing at-grade intersections. Pollutants from street runoff (oil, grease, salt, metals) would be dispersed differently as a result of the new paved interchange configurations. The increase in traffic volumes resulting from the improvements would be negligible and thus the increase in pollutants also would be negligible and would not adversely impact water quality.

The contractor would be required to implement Iowa DOT’s Construction Manual to minimize temporary impacts on water quality during construction. 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 1 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.

Floodplains

Floodplains present in the Study Area were identified by reviewing Federal Emergency Management Agency (FEMA) Flood Insurance Maps and United States Geological Survey (USGS) 7.5-minute quadrangle maps. The Study Area crosses 3 areas of FEMA mapped 100-year floodplains with a total area of 316 acres (Figure 5-1). The 100-year (base) flood is identified as the flood having a one percent probability of being equaled or exceeded in any given year. The regulatory “floodway” is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a predetermined volume.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new ROW would be needed. The No Build Alternative would have no impact on the floodplains in the Study Area.

Proposed Alternative

Of the 316 acres of FEMA-mapped floodplains in the Study Area, approximately 11 acres could be potentially impacted from three floodplain areas that are within the preliminary impact area for the Proposed Alternative. This includes the closure of 580th Avenue and 590th Avenue associated with construction of West Alternative 1 and the closure of 600th Avenue associated with construction of East Alternative 3. One of the floodplain areas crosses 580th Avenue just south of U.S.30 and would potentially be impacted by construction of the south frontage road for connecting 580th Avenue to 575th Avenue and Sand Hill Trail. Another floodplain located between 590th Avenue and 600th Avenue crosses U.S. 30 twice and would potentially be impacted by work being done to close the at-grade intersection of 600th Avenue and for construction of the proposed entrance to a rural residence.

Coordination with Iowa DNR and FEMA occurred as part of the early consultation process. Comments received from the DNR in a letter dated July 29, 2013 indicated that any construction within the 100-year floodplain will require a DNR floodplain development permit. As design advances, efforts will be made to reduce any potential impacts on floodplains. An Iowa DNR Flood Plain Development Permit and Section 404 Permit will be applied for during final design if required. Figure 5-1 shows the location of floodplains relative to the preliminary impact areas.

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.

Coordination with USFWS and Iowa DNR occurred as part of the early consultation process. Comments received from the USFWS in an email dated July 2, 2013 recommended as a first step to review the species listed on the USFWS website to determine if any suitable habitat was present in Study Area. It was further recommended to use the habitat information and the

website's Section 7 step-by-step instructions to further assess what impacts the proposed project may have on listed species. Iowa DNR also searched for records of rare species and significant natural communities in the Study Area. In a letter dated August 13, 2013 Iowa DNR indicated they found no site specific records that would be impacted by this project.

Iowa DOT Staff conducted preliminary reviews of the USFWS list of federally-listed species as well as the Iowa DNR's Natural Areas Inventory (NAI) to determine the likelihood of impacts to threatened and/or endangered species in the Study Area. The 2011 Iowa DNR NAI database shows no occurrences of threatened or endangered species within a mile radius of the project. On June 21, 2013, Iowa DOT staff performed a field review of the Study Area for potentially suitable habitat for threatened and endangered species known to occur in Story County. No suitable habitats for listed species were observed.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new ROW would be needed. The No Build Alternative would have no impact to threatened and endangered species in the Study Area.

Proposed Alternative

The proposed project falls within a county designated by the Iowa DNR and the USFWS as summer range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) in Iowa. However, suitable habitat for the Indiana bat and the northern long-eared bat is not present and no special clearing restrictions apply.

Iowa DOT has determined, under the delegated authority provided by the Federal Highway Administration, that there will be No Effect on federally or state listed species and the project will not result in the destruction or adverse modification of federally designated critical habitat.

Woodlands

The Iowa DOT considers woodland impacts to occur if the area to be impacted consists of 2 acres or greater of forested land having at least 200 trees (3-inch diameter at breast height or greater) per acre. Woodland impacts are not considered to occur if the area impacted is less than 2 acres.

Approximately 38 acres of woodlands were identified in the Study Area through preliminary desk top reviews and verified by field surveys. Woodlands are located near the I-35/U.S. 30 interchange, north of the U.S. 30 and west of 580th Avenue and east of Story County Road S14.

No Build Alternative

The No Build Alternative would not result in any expansion of the highway in the Study Area. No construction activities would occur, and no new ROW would be needed. The No Build Alternative would have no impact on the woodlands in the Study Area.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

The proposed 575th Avenue interchange alternative would potentially impact approximately 1.0 acres of woodland. As previously stated in the Wetlands Section, the alignment for 575th Avenue was extended further north from its original design before turning east to connect with 580th Avenue. The shift in the alignment was a result of comments received as a result of consultation with the resource agencies (EPA, Iowa DNR, USFWS, and USACE) that also resulted in a reduction in woodland impacts.

East Alternative 3-610th Avenue Interchange

The proposed 610th Avenue interchange alternative would not impact any woodland acres.

The total number of potential woodland acres impacted for the 575th Avenue interchange is 1 acre. There are no woodland impacts expected for the 610th Avenue interchange alternative. Combined, this is less than 2 acres and does not meet the Iowa DOT criteria for woodlands impacts. Mitigation is not required for this project.

Farmlands

A Federal project, program, or other activity that requires acquisition of ROW must comply with the provisions of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA Section 5 is to “minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, local government, and private programs and policies to protect farmland” (7 USC 4201(b)).

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

No Build Alternative

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

Proposed Alternative

Early in the engineering design process, the USDA NRCS Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106) form was completed for the generalized corridor of each of the preferred alternatives to assess the effects of this conversion on farming and farm-related services. The assessments considers the effects that the conversion of farmland as a result of a project would have on existing and future land use, the amount of existing farmable land in the county, the creation of economically non-farmable parcels, impacts on other on-farm investments, and effects on local farm services. Sites receiving a score of less than 160 points need not be given further consideration for protection.

West Alternative 1-575th Avenue Interchange

The potential total amount of farmland (outside of the existing ROW) converted to transportation use by this alternative is approximately 172.4 acres. This alternative received a score of 172 out of the possible 260 points on the NRCS-CPA-106 form (Appendix C). Because the score was more than 160 points, this alternative warrants an in-depth site review for concerns in conjunction with the FPPA. Based on this score, potential means to reduce the impact on farmland for revision of the NRCS-CPA-106 form were evaluated. The proposed alternative would not create any non-farmable land and all of the farmable land in the Study Area would still be accessible from existing roads. As design advances, further efforts to reduce the number of farmland impacts will be made.

East Alternative 3-610th Avenue Interchange

The potential total amount of farmland (outside of the existing ROW) converted to transportation use by this alternative is approximately 50.9 acres. This alternative received a score of 152 out of the possible 260 points on the NRCS-CPA-106 form (Appendix C). Because the score was less than 160 points, this alternative does not warrant an in-depth site review and is cleared from significant concerns in conjunction with the FPPA. The proposed alternative would not create any non-farmable land and all of the farmable land in the Study Area would still be accessible from existing roads.

5.4 Physical Impacts

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

Noise

This project is considered a Type I highway project for noise impacts because of the proposed interchanges. Per Iowa DOT policy, noise analyses are conducted for all Type I Highway projects. As such, a traffic noise analysis was completed in March 2015 to evaluate noise impacts in the Study Area. The analysis was conducted in accordance with the Iowa DOT's traffic noise policy for the purpose of meeting the requirements set forth in the FHWA "Procedures for Abatement of Highway Traffic Noise and Construction Noise" in 23 CFR 772 and all applicable state laws. The Study Area is predominantly a rural area with scattered farm residences adjacent to U.S. 30 with one high density residential area identified. The high density residential area is located in the southeast corner of U.S. 30 and S14 at the east end of the Study Area within the corporate limits of the city of Nevada.

The FHWA has developed Noise Abatement Criteria (NAC) and procedures to be used in the planning and design of highways. For residential areas and cemeteries (as well as other designated sensitive land uses), the NAC is 67 dBA; for businesses, it is 72 dBA. The Iowa DOT noise policy defines a noise impact as occurring when levels approach or exceed the NAC or when predicted future noise levels are 10 dBA or more above existing levels. Iowa DOT defines "approach" as coming within 1 dBA of the NAC, which are 66 dBA for residential areas and 71 dBA for businesses.

Per Iowa DOT noise policy, a receptor is defined as a location of a noise sensitive area, primarily a residential exterior that is frequently used by people. The traffic noise analysis indicated a total of twenty-two noise receptors that were identified to represent noise sensitive land uses in the Study Area. Noise levels were estimated for each of the identified noise receptors using the FHWA's Traffic Noise Model (TNM) for both the existing (2011) and preferred alternative (design year 2035) as shown in Table 5-4 below. The predicted noise levels were also compared to the NAC to determine noise impacts. The comparison indicated two noise receptors could potentially be impacted. The estimated existing noise levels were validated by field measurements conducted in May 2014.

Table 5.4 Noise Receptors and Estimated Noise Levels

Receptor Address	Land Use Type	Existing (2011) Noise Level, Leq(h) (dB(A))	Build Condition Design Year (2035) Noise Level, Leq(h) (dB(A))	Difference Between Existing and Build Condition Noise Levels, dB(A)	Leq(h) Noise Abatement Criteria, Leq(h) (dB(A)) Minus 1 dB(A)
135 Maple Ave. - Unit #1, Eight Apts.	Residential	62.8	63.4	0.6	66
135 Maple Ave. - Unit #2, Eight Apts.	Residential	59.5	60.2	0.7	66
217 Maple Ave.	Residential	58.4	59.2	0.8	66
227 Maple Ave.	Residential	58.3	59.3	1	66
239 Maple Ave.	Residential	58.3	59.3	1	66
301 Maple Ave.	Residential	58.2	59.3	1.1	66
311 Maple Ave.	Residential	58.7	59.8	1.1	66
321 Maple Ave.	Residential	58.7	60.1	1.4	66
331 Maple Ave.	Residential	58.7	60.1	1.4	66
341 Maple Ave.	Residential	59	60.5	1.5	66
403 Maple Ave.	Residential	59.2	60.7	1.5	66
Southwoods Dr. - Condominium #1	Residential	60.5	62.1	1.6	66
Southwoods Dr. - Condominium #2	Residential	59.3	60.8	1.5	66
Southwoods Dr. - Condominium #3	Residential	58.1	59.7	1.6	66
837 W. Maple Ave.	Commercial	59.5	63.3	3.8	71
57011 U.S. HWY 30	Worship	54.5	57.9	3.4	66
57006 241st St.	Industrial	58.8	62.3	3.5	-
57507 U.S. HWY 30*	Residential	60.7	64.1	3.4	66
57606 U.S. HWY 30*	Residential	62.6	66.4	3.8	66
59296 U.S. HWY 30	Residential	61.9	65.6	3.7	66
24039 600th Ave.	Residential	58.4	62.3	3.9	66
23912 600th Ave.	Residential	57.6	61	3.4	66

Bold numbering indicates a noise level approaching or exceeding the noise abatement criteria (NAC).

* Indicates potential total acquisition.

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 benefitted 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.

No Build Alternative

Under the No Build Alternative, noise levels in 2035 are estimated to be in the same range as the preferred alternative due to the fact that the existing U.S. 30 lanes will remain in place. The No Build traffic levels would be similar to the preferred alternative traffic levels; therefore, noise impacts would also be similar.

Proposed Alternative

West Alternative 1-575th Avenue Interchange

Of the twenty-two receptors identified, two (2) noise receptors were considered impacted. One of the impacted receptors, besides being isolated, is considered a potential total acquisition because it is within the construction footprint of the proposed 575th interchange configuration (Figure 5-3). The second receptor is an isolated farm residence just south of U.S. 30 between 590th Ave. and 600th Ave. Isolated residences do not meet the Iowa DOT's noise abatement criteria for cost vs. benefit. Because the impacted noise receptors do not appear to meet noise abatement feasibility and reasonableness criteria at this time, noise abatement is considered unlikely for this proposed alternative.

East Alternative 3-610th Avenue Interchange

As previously stated, one high density residential area was identified in the Study Area. This residential area is located in the southeast corner of U.S. 30 and S14 at the east end of the Study Area and within the corporate limits of Nevada (Figure 5-3). However, none of the receptors in this area had a predicted noise level that would be considered approaching the NAC. Therefore, noise impacts are not expected for this proposed alternative.

Generalized noise contours were developed for the study corridor based on TNM run results. Predicted noise levels are based on estimated traffic levels for 2035. The 66 dB(A) contour is predicted to be approximately 140 feet and the 71 dB(A) contour is predicted to be approximately 70 feet from mainline U.S. 30. It is recommended that future noise sensitive land uses adjacent to U.S. 30 be located beyond these distances.

In addition to the traffic noise level, construction noise must also be identified and a level of effort must be made to minimize its effects. Noise from on-site construction equipment and

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

- Design Considerations: Plans includes measures and specifications to minimize or eliminate adverse noise impacts.
- Community Awareness: Local residents should be made aware of the possible inconvenience and to know its approximate duration so that they can plan their activities accordingly. It is Iowa DOT policy that information concerning the upcoming project construction be submitted to all local news media.
- Source Control: This involves reducing noise impacts from construction by controlling the noise emissions at their source. Install and maintain effective mufflers on equipment.
- Site Control: This involves limiting unnecessary idling of equipment, use of temporary noise barriers in front of equipment and operating stationary equipment as far away from sensitive areas as possible.
- Time and Activity Restraints: Whenever possible, limiting work hours on a construction site can be very beneficial during the hours of sleep or on Sundays and holidays.

Contaminated and Regulated Materials Sites

Properties in the Study Area where hazardous materials have been stored may present a future risk if spills or leaks have occurred. Contaminated or potentially contaminated properties are of concern for transportation projects because of the associated liability of acquiring the property through ROW purchase, the potential cleanup costs, and safety concerns related to exposure to contaminated soil, surface water, or groundwater.

Iowa DOT staff conducted a preliminary review for the potential or known presence of regulated materials in the Study Area. The review was intended to identify those properties with potential or known Recognized Environmental Conditions (REC's) and was based on a review of DNR and EPA on-line databases, historic aerial photos and a Google Earth search. The results of the preliminary review identified seven properties as having potential REC's and 1 property identified as having a known REC. These sites were then assessed for their potential risk using criteria published in Iowa DOT's Office of Location and Environment Manual (Iowa DOT 2009) and classified as high, low, or minimal risk sites. Sites classified as minimal risk do not warrant further investigation.

Table 5.5 REC's in Study Area

Site	Address	REC	Risk
Iowa DOT Maintenance Garage	57073 U.S. 30, Ames	Known	Low
Technical Services Inc.	57006 241 st Street, Ames	Potential	Low
Caremoli/Garst-AgriPro	23959 580 th Avenue, Ames	Potential	Moderate
Jay Armstrong	23937 580 th Avenue, Ames	Potential	Moderate
CNH America (Ag Information Center)	23942 590 th Avenue, Ames	Potential	Low
Ivan Jensen	59296 U.S. 30, Nevada	Potential	Moderate
New Century FS/Central Iowa FS/Heartland Coop	732 Maple Avenue, Nevada	Potential	Low
Marshall County Rural Electric Coop	SW 4 th Street, Nevada	Potential	Moderate

No Build Alternative

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

Proposed Alternative

575th Avenue Interchange

Three potential REC's were identified in the impact area for the 575th Avenue Interchange alternative.

- Caremoli/Garst-AgriPro, 23959 580th Ave, Ames, Has two registered underground storage tanks (DNR UST #198600745) reportedly removed in 1990. Additionally, this facility has a US EPA hazardous waste generator ID number (IAP000001349 – inactive).
- CNH America, 23942 590th Ave, Ames, is registered as a Tier 2 Chemical Storage facility.
- Ivan Jensen, 59296 U.S. Hwy 30, Nevada, has one registered underground storage tank (DNR UST #198912329) reportedly removed in 1989

Additionally, one known REC was identified for this alternative:

- Iowa DOT, 57073 U.S. Hwy 30, Ames, is an identified leaking underground storage tank site (DNR LUST #7LTJ90) with six registered underground tanks (DNR UST #198609357) reportedly removed in 1988 and 1994. This site received a No Further Action designation from DNR in January 2000. Additionally, this facility has a US EPA hazardous waste generator ID number (IAD981116502 - SQG).

610th Avenue Interchange

Two potential REC's were identified in the impact area for the 610th Avenue Interchange alternative:

- New Century FS/Central Iowa FS/Heartland Coop, 732 Maple Ave, Nevada, is registered as a Tier 2 Chemical Storage facility.
- Marshall County Rural Electric Coop, SW 4th St, Nevada, has two registered underground storage tanks (DNR UST 198604768) reportedly removed in 1988 and 1990

There are no known REC's in the impact area for the 610th Avenue interchange.

Impacts to these properties will be determined as the project is developed and appropriate acquisition recommendations will be made (i.e. permanent easement versus fee title). When possible, any identified highly contaminated areas will be avoided. Should any contaminated material be encountered during construction, it will be handled in accordance with state and federal regulations.

Utilities

The potential for the Project to affect utilities in the Study Area was considered by identifying utility locations and orientation in relation to the project area. Potential effects were evaluated with respect to major utilities crossed by or located within the ROW for the Proposed Alternative.

Table 5.6: Utilities

Utility Name	Utility Type	575 th Ave	610 th Ave
Alliant Energy	Electricity, Gas	X	X
AT&T	Telecommunications	X	
City of Ames	Electric, Water, Sewer	X	
Central Iowa Water Association	Water, Wastewater	X	X
Colo Telephone Company	Telecommunications	X	X
Windstream Communication	Telecommunications	X	X
Iowa Hospital Association	Communications (fiber)	X	X
Iowa State University	Communications (fiber)		X
Kock Crude P/L	Petroleum Pipeline		X
MCI	Telecommunications		X
Consumers Energy	Electricity	X	X
City of Nevada	Water, Sewer	X	X
Precision Underground Utility	Telecommunications, Gas, Electric, Water, Sewer	X	X
Qwest Communications	Telecommunications		X
Sprint Nextel	Telecommunications		X
Mediacom	Telecommunications	X	X
CenturyLink	Telecommunications	X	X
Iowa Department of Transportation	Communication (fiber)	X	X
Level 3 Communications	Telecommunication		X
Magellan Midstream Partners	Petroleum Pipeline		X

No Build Alternative

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

Proposed Alternative

Construction of the East Alternative 3 would require some frontage acquisition of ROW from the Consumers Energy facility on S14 south of U.S. 30. Construction of this alternative could also potentially affect two petroleum pipelines (Magellan Midstream and Kock Crude) and fiber optics lines that are located along the east side of 610th Avenue. As detailed design plans are developed for the Proposed Alternative, construction activities would be coordinated with all public utilities to avoid potential conflicts and to minimize planned interruptions of service. When service interruptions are unavoidable, an effort would be made to limit their duration.

5.5 Cumulative

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

Past Actions:

Transportation Improvements

The existing U.S. 30 four-lane highway was constructed in the mid 1960’s. U.S. 30 between I-35 and Nevada was improved from 2 lanes to 4 lanes in 1992 and from Nevada to Colo in 1998. Other improvements included the construction of grade separated interchanges at Dayton Road and South Dakota Avenue, both located within the city of Ames. Additionally, U.S. 30 was repaved from 0.9 miles east of I-35 to 610th Avenue in Nevada in 2013.

In 2012, Story County constructed \$200,000 in roadway improvements along 590th Avenue. These improvements serve traffic from U.S. 30 northbound to the existing Lincolnway Energy and DuPont sites, in addition to Vetter Equipment and Ag Information Center. Additionally, 600th Avenue has been added to the Farm-to-Market system for traffic related to the existing use of the Lincolnway Energy.

Industrial/Commercial Development

There is some commercial/light industrial land use in the southeast quadrant of the I-35/U.S. 30 interchange. In 2012, Vetter Equipment relocated their farm implement dealership to the northwest corner of the U.S. 30 and 590th Avenue intersection; and in late 2014, Van Wall

Equipment, another large farm implement dealership, moved to the northeast corner of the U.S. 30 and 610th Avenue intersection. Ag Information Center, an agricultural research and training facility, is also operating at the northeast corner of the U.S. 30 and 590th intersection. In 2006, The Lincoln Way Energy Ethanol Plant began operation just outside the Study Area on Lincoln Highway approximately 1 mile north of U.S. 30. These businesses all rely on access from U.S. 30.

Churches

The Cornerstone Church and the Crossroads Baptist church are located in the northeast quadrant of the I-35/U.S. 30 interchange. These churches also rely on access from U.S. 30.

Present Actions:

Industrial Development

The DuPont Cellulosic Bio-refinery is a 30 million gallon cellulosic ethanol plant that is currently under construction. The site is located just outside the north boundary of the Study Area on County Road E41/Lincoln Highway, which runs parallel to U.S. 30 one mile to the north, and is slated to begin production by mid-2015. The facility will be dependent on access to U.S. 30.

Future Actions:

Transportation Improvements

Iowa DOT is currently proposing improvements to the I-35 interchange at U.S. 30 to improve interchange capacity and safety improvements. Other transportation improvement projects that are proposed to take place near the Study Area are listed in the table below.

Table 5.7 Future Construction Actions Near the Study Area

Project Name	Project Type
I-35/U.S. 30 Interchange in Ames.	Interchange
U.S. 30 over West Branch Indian Creek 0.7 miles east of County Road S-14.	Bridge deck overlay.
U.S. 30 over U.S. 69 (Duff Avenue)	Bridge deck replacement
I-35 over Skunk River just south of the City of Ames.	Bridge replacements. In addition, approximately 2.4 miles of I-35 will be reconstructed
Co. Rd E(57) over I-35, 2 miles south of U.S. 30	Bridge replacement

Summary of Cumulative Impacts:

The analysis of cumulative impacts focuses on the key resources potentially affected by the Proposed Alternative and other reasonably foreseeable actions in the vicinity of the Study Area (Figure 5-4). Specifically, the analysis focuses on wetlands, floodplains and surface waters, farmland, relocation potential, transportation, construction and emergency routes.

Table 5.8 Potential Cumulative Impacts

Key Resource Affected	Direct and Indirect Effects	Potential Cumulative Impacts
Wetlands	1.5 total acres of wetlands converted to roadway use.	Potential loss of habitat and loss of water quality. Impacts minimized to the extent practicable through mitigation and using best management practices.
Floodplains/Surface waters/Water Quality	Construction of bridge or culvert at one stream crossing. Approximately 11 acres impacted from three floodplain areas.	Increased sedimentation and pollutant loading; altered hydrology; potential impact to designated water uses; increase in storm water runoff. Impacts minimized to the extent practicable through by using best management practices.
Farmland/ROW	Potential net loss of approximately 223 acres of farmland and acquisition of additional ROW.	Other reasonably foreseeable projects may result in net loss of available farm land. ROW acquired will be minimized to extent possible as design advances.
Relocation Potential	Potential total acquisition of 3 residential properties that would require relocation assistance and several owner occupied mobile homes on rented lots.	Loss of personal property. Potential relocations of displaced properties owners are expected to be relocated within the same county.
Transportation, construction and emergency routes	Longer out of distance travel to reach certain destinations along U.S. 30.	Creation of alternate routes to reach destinations. Safer crossings of U.S. 30 along Study Area and improved traffic flow.

The overall cumulative impacts of the U.S. 30 Improvement project are not considered to be collectively significant.

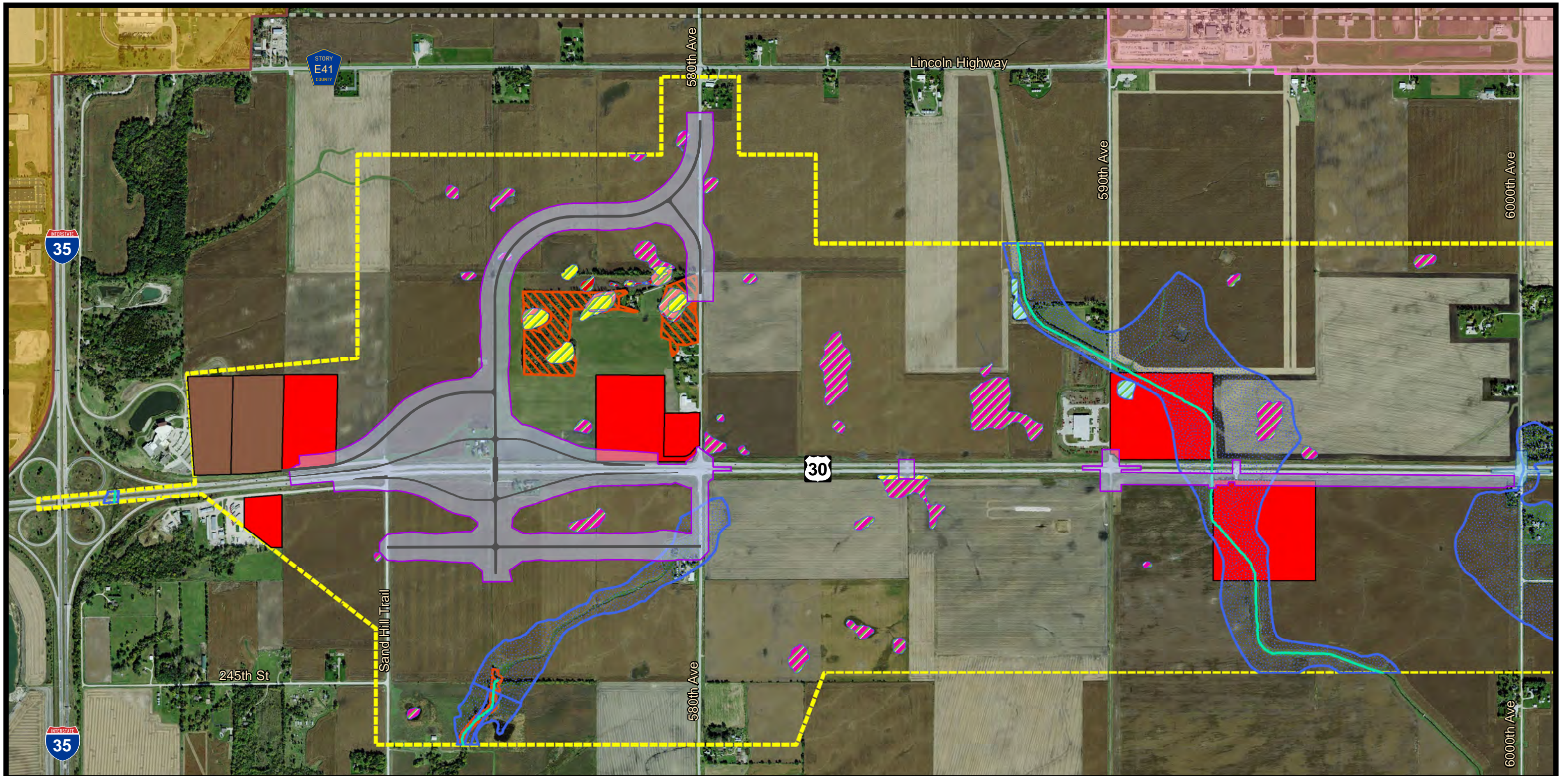
5.6 Streamlined Resource Summary

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 X summarizes the Proposed Alternative’s impacts to resources discussed in the sections above.

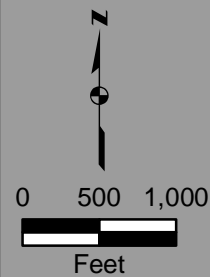
Table 5.9: Summary of Impacts

Resource	No Build Alternative	Proposed Alternative
Land Use	No change in existing land use	Conversion of potentially 223.3 acre of agricultural land to transportation use.
Churches and Schools	No impacts on churches and schools	Access restrictions to two churches at west end of Study Area, minor ROW acquisitions from one church at east end of Study Area.
Economic	None	Loss of tax revenue due to acquisition of ROW. Increase travel distance for businesses and their customers for delivery of goods and services.
Right-of-Way	None	Potential acquisition of approximately 244 acres of additional ROW from property owners.
Relocation Potential	None	3 total acquisitions of owner occupied rural homes and relocation of several owner occupied mobile homes on rented lots. No business relocations
Construction and Emergency Routes	No construction impacts or change in emergency routes	Increased travel distance and rerouting for emergency routes. Long term improved access along U.S. 30.
Transportation	No changes	Increased safety at improved traffic movements along U.S. 30.
Historical Sites or Districts	No Site or districts impacted	2 historic sites avoided.
Archaeological Sites	None	3 sites potentially impacted; Avoidance or Phase II required.
Wetland Impacts	No impact	1.5 acres converted to roadway use.
Surface Water Impacts (Streams and Open Water)	None	2.4 acres converted to transportation use

Resource	No Build Alternative	Proposed Alternative
Floodplains	None	Approximately 11 acres converted to transportation use.
Woodland Impacts	None	1 acre converted to transportation use. Does not meet DOT criteria for woodland impact-no mitigation required.
Farmland Impacts	None	223.3 acres of farmland converted to transportation use.
Noise Impacts (Number of Receptors)	2 residential receptors impacted.	2 residential receptors impacted. Noise abatement not required.
Contaminated and Regulated Material Sites Recognized Environmental Conditions (REC's)	None	5 Potential REC's impacted: 3 moderate risk and 2 low risk. 1 Known REC impacted-low risk.
Utilities	None	Frontage ROW acquisition from Consumers Energy. When service interruptions are unavoidable, an effort would be made to limit their duration.

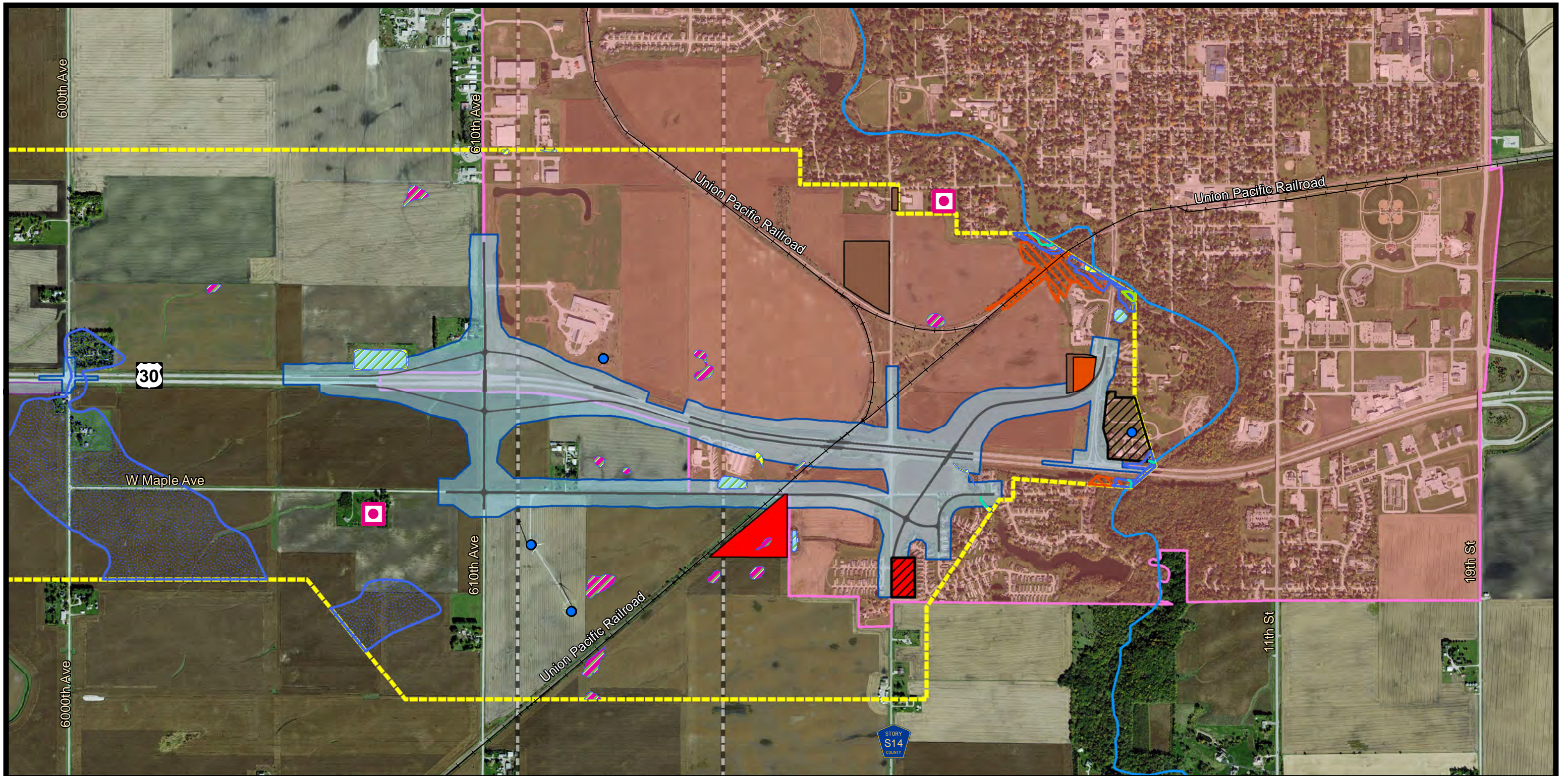


Created May 2015
2013 Aerial

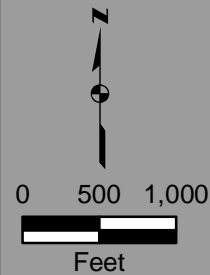


- | | | | | |
|---------------------|-----------|--------------|--------------------|-------------------|
| Floodplains | Churches | Open Water | Project Study Area | West Indian Creek |
| Woodlands | Schools | FW Wetlands | Alt 1 Impact Area | Pipelines |
| Regulated Materials | Utilities | PEM Wetlands | Alt 3 Impact Area | |
| Recreation Area | Windmills | PFO Wetlands | City of Ames | |
| Historic Structures | Streams | PSS Wetlands | City of Nevada | |

FIGURE 5-1
ENVIRONMENTAL CONSTRAINTS
 PAGE 1 OF 2
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Improvements
 Ames to Nevada
 Story County, Iowa

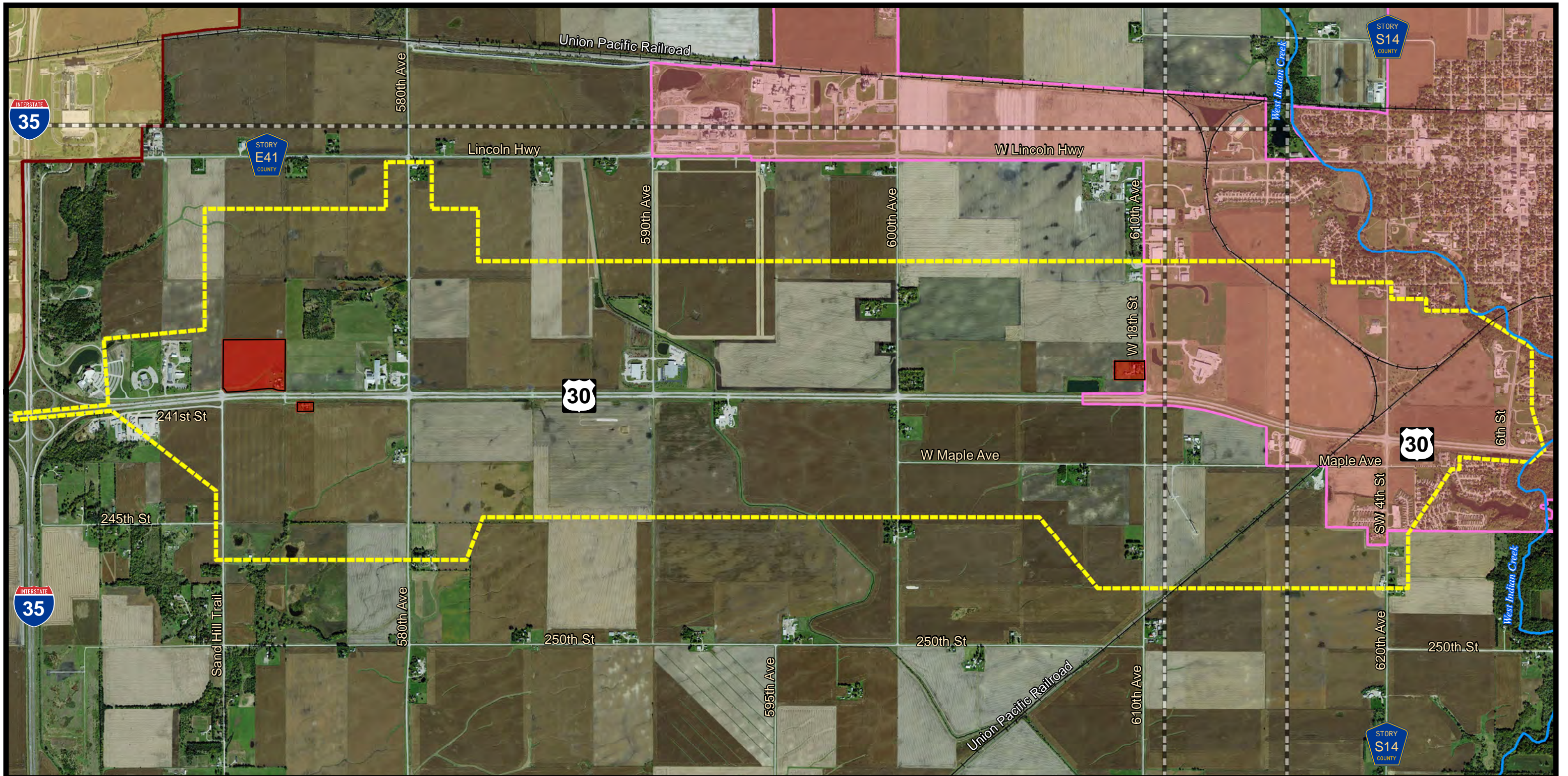


Created May 2015
2013 Aerial

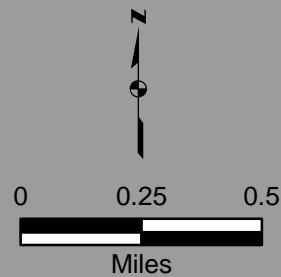


- | | | | | |
|---------------------|-----------|--------------|--------------------|-------------------|
| Floodplains | Churches | Open Water | Project Study Area | West Indian Creek |
| Woodlands | Schools | FW Wetlands | Alt 1 Impact Area | Pipelines |
| Regulated Materials | Utilities | PEM Wetlands | Alt 3 Impact Area | |
| Recreation Area | Windmills | PFO Wetlands | City of Ames | |
| Historic Structures | Streams | PSS Wetlands | City of Nevada | |

FIGURE 5-1
ENVIRONMENTAL CONSTRAINTS
 PAGE 2 OF 2
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Improvements
 Ames to Nevada
 Story County, Iowa

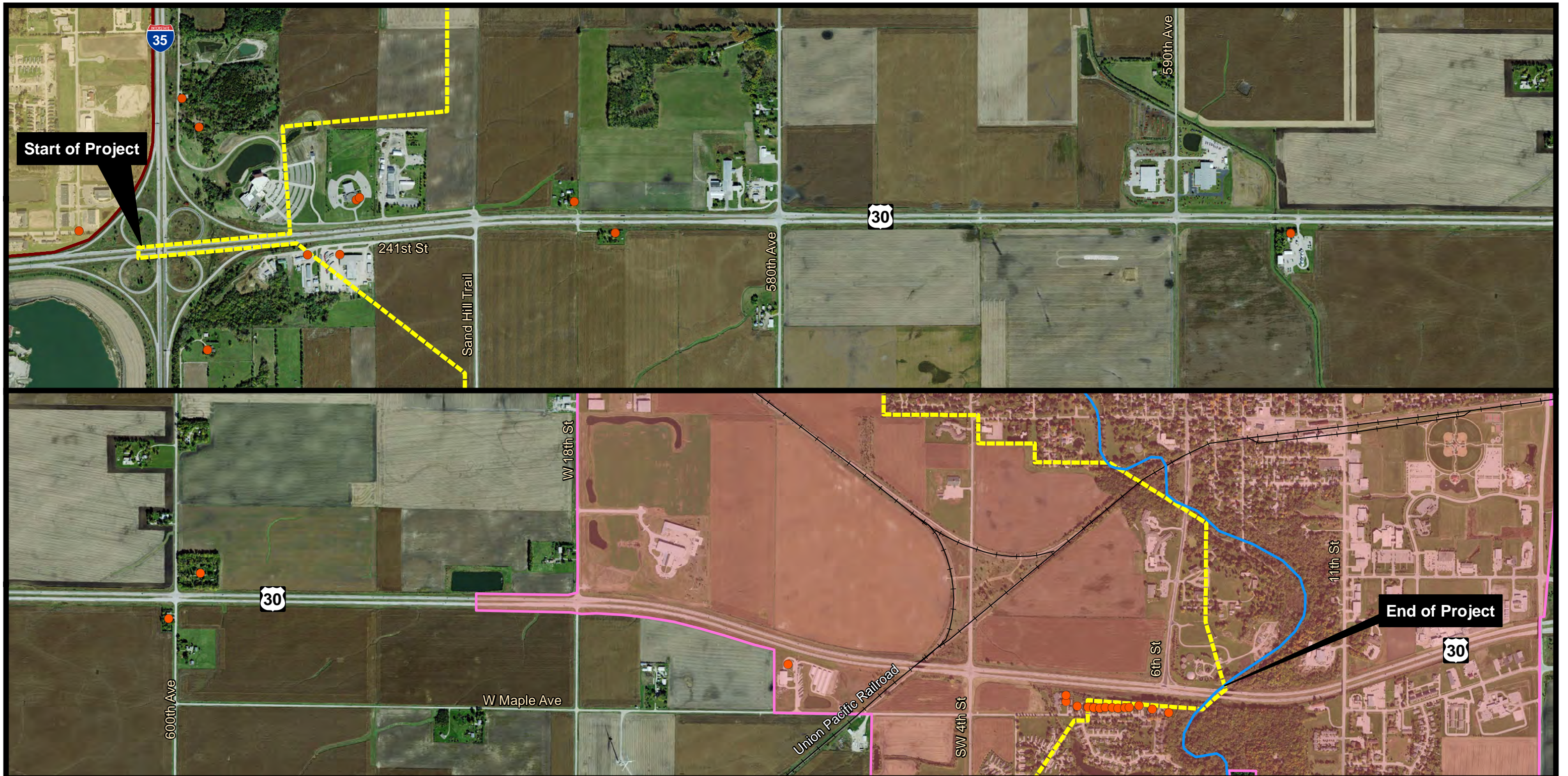


Created May 2015
2014 Aerial

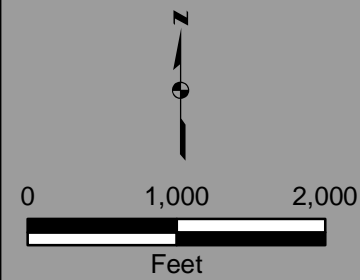


- Potential Acquisitions
- Pipelines
- City of Ames
- Project Study Area
- Union Pacific Railroad
- City of Nevada
- West Indian Creek

FIGURE 5-2
POTENTIAL TOTAL PROPERTY ACQUISITIONS
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Improvements
 Ames to Nevada
 Story County, Iowa



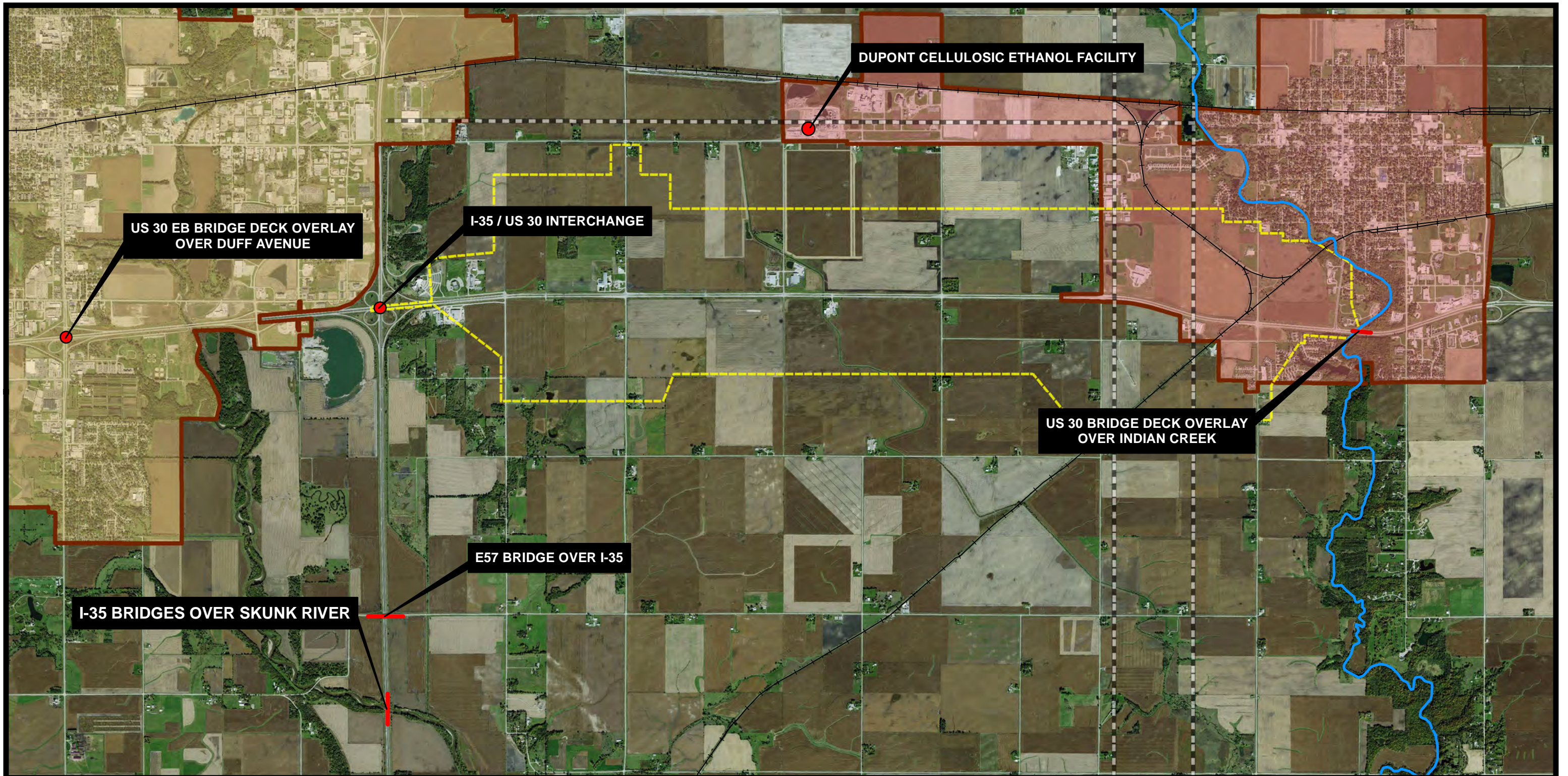
Created May 2015
2014 Aerial



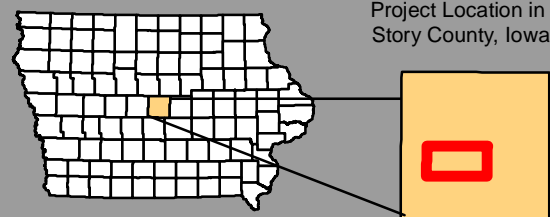
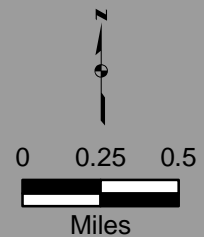
- Noise Receptors
- ▭ City of Ames
- ▭ City of Nevada
- ▭ Project Study Area
- ~ West Indian Creek
- +—+— Union Pacific Railroad

FIGURE 5-3 NOISE RECEPTORS

NHSX-30-5(244)--3H-85
U.S. Highway 30 Improvements
Ames to Nevada
Story County, Iowa



Created May 2015
2014 Aerial



- Project Study Area
- Pipelines
- Union Pacific Railroad
- West Indian Creek
- City of Ames
- City of Nevada

Figure 5-4
Future Construction Projects
 NHSX-30-5(244)--3H-85
 U.S. Highway 30 Improvements
 Ames to Nevada
 Story County, Iowa

SECTION 6 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.

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

Federal Agencies

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

State Agencies

Iowa Department of Natural Resources – State Office and Field Office #5 (Windsor Heights)
Iowa Soil and Water Conservation-Story County Office (Nevada)
State Historical Society of Iowa

Local/Regional Units of Government

Story County Board of Supervisors
Story County Conservation Board
Story County Engineer
Story County Planning and Development
Ames Historical Society
Nevada Community Historical Society
Ames Area MPO
City of Ames – Planning and Housing Director
City of Ames – City Manager
City of Nevada – City Administrator
Prairie Rivers Resource Conservation & Development
Ames Chamber and Economic Development Commission
Nevada Chamber of Commerce
Nevada Economic Development Council
Meskwaki Tribe – Director of Natural Resources

Locations Where this Document Is Available for Public Review:

Ames Public Library
515 Douglas Avenue
Ames, IA 50010

Nevada Public Library
631 K Avenue
Nevada, IA 50201

Federal Highway Administration
105 6th Street
Ames, IA 50010

Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Iowa Department of Transportation
1020 S. Fourth St.
Ames, IA 50010

Potential Permits Required for the Project:

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

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

The U.S. 30 interchange at S14 in Nevada is included in the 2015-2018 State Transportation Improvement Program (STIP) with \$1.5 million for right of way acquisition occurring in 2018.

SECTION 7 COMMENTS AND COORDINATION

Agency and Tribal Coordination

This section includes a summary of agency coordination, public involvement, and tribal coordination that has occurred during the development of this EA. Future public involvement efforts that are planned for the Project are also discussed. Appendix B contains agency and tribal comment letters received in response to Iowa DOT's coordination request letters to initiate the NEPA process for the Project.

Early agency coordination began on June 27, 2013, with letters sent to the Federal, state, and local government agencies listed below. The letters announced the initiation of the NEPA process for the highway project, solicited feedback as it relates to the agencies' relevant areas of expertise, and solicited tribal interest in the Project. Table 7-1 lists the agencies that were contacted through early coordination and the response date, if applicable. Written responses to the early coordination requests are provided in Appendix B.

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 7-2. The coordination information sent to the Tribes is included in Appendix B.

Table 7-1: Agency Coordination

Agency Type	Agency	Response Date
Federal	Federal Emergency Management Agency	NA
Federal	Federal Aviation Administration	July 11, 2013
Federal	Federal Railroad Administration	July 29, 2013
Federal	U.S. Department of Agriculture-NRCS	July 11, 2013
Federal	U.S. Army Corps of Engineers	Aug. 12, 2013
Federal	U.S. Fish and Wildlife Service (USFWS)	July 2, 2013
Federal	U.S. Department of Housing and Urban Development	NA
Federal	U.S. Department of the Interior	NA
Federal	U.S. Environmental Protection Agency	July 15, 2013
State	State Historical Society of Iowa	July 19, 2013
State	Iowa Department of Natural Resources (DNR)	Aug. 13, 2013
State	Iowa Department of Agriculture and Land Stewardship	July 30, 2013
State	Iowa Emergency Management Division	July 11, 2013
State	NRCS-Soil and Water Conservation District (Story County)	NA
Regional	Ames Area MPO	NA
County	Story County-Board of Supervisors	July 17, 2013
County	Story County Conservation Board	NA
County	Story County Planning and Development	NA
Local	City of Nevada- City Administrator, Mayor, Street Department, Public Safety Director	July 23, 2013
Local	Nevada Chamber of Commerce	NA
Local	Nevada Economic Development Council	July 23, 2013
Local	Nevada Community Historical Society	NA

Table 7-1: Agency Coordination Continued

Agency Type	Agency	Response Date
Local	City of Ames-Mayor, City Manager, Public Works Director, Police Chief, Fire Chief	July 29, 2013
Local	City of Ames Planning and Housing	July 29, 2013
Local	Ames Economic Development Commission	NA
Local	Ames Historical Society	NA

Table 7-2: Tribal Coordination

Tribe	Date of Coordination	Response Date
Sac & Fox of Oklahoma	June 27, 2013	NA
Sac & Fox of Missouri	June 27, 2013	NA
Sac & Fox Nation of Mississippi in Iowa	June 27, 2013	NA
Otoe-Missouria Tribe	June 27, 2013	NA
Iowa Tribe of Oklahoma	June 27, 2013	NA
Iowa Tribe of Kansas and Nebraska	June 27, 2013	NA

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 was conducted using the “Streamlined Concurrence Process”. Concurrence Point Packets for Concurrence Points 1 and 2 were emailed to representatives from the USACE, USFWS, FHWA, Iowa DNR, and other Iowa DOT staff. The Project Packets included a signature sheets for the agencies to provide their concurrence and provide any comments by email. Concurrence on Points 1 and 2 was concluded on December 19, 2013 when the agencies concurred by email correspondence.

Concurrence Point 3 occurred on April 9, 2014 via phone/webinar. Representatives from the USACE, USEPA, Iowa DNR, and Iowa DOT attended the webinar. A project overview was given including the project’s location, description, purpose, need, and the alternatives presented by the streamlined Concurrence Points 1 and 2 packets. There were 5 alternatives considered at Concurrence Point 2 (no-build and 4 build alternatives: 2 at east end and 2 at west end). The

Iowa DOT did NOT drop any alternatives and all 5 alternatives were carried forward through Concurrence Point 3.

During Concurrence Point 3, EPA asked if side road connections for the west end alternatives could be moved further north to avoid anticipated wetland impacts. Based on the comments received from the agencies during Concurrence Point 3, further design occurred to the preferred alternative at the west end. As a result, 575th Avenue was extended further north before turning east and connecting back to 580th Avenue to further reduce potential wetland impacts.

Public Involvement

One public meeting has been held to date. On March 7, 2013, a public information meeting was held at the Crossroads Baptist Church, located at 57011 U.S. 30, Ames. The purpose of the meeting was to present potential improvement alternatives for the proposed project. The meeting was held from 5:00 to 6:30 PM and was attended by 108 people. In general, most that attended the meeting were in favor of the alternatives with differing views on the locations of the proposed interchanges. A majority of the comments received seemed to favor the 575th Avenue interchange (Alternative 1) at the west end. For the east end, a few residents did favor the S14/6th Street interchange (Alternative 4), however, most in attendance were in favor of an interchange at the 610th Avenue (Alternative 3), citing safety as a major concern. Representatives from two businesses along U.S. 30 and several residents did express concern about the closing of 590th and 600th Avenue. There were also several comments expressing concerns that the intersection of Airport Road and Lincolnway is undersized for large farm vehicles. Access location and spacing was also a common topic. Many questioned the timing and cost for the project. The Iowa DOT summarized written comments received and prepared responses to comments on April 10, 2013.

APPENDIX A

STREAMLINED RESOURCE SUMMARY

SOCIOECONOMIC IMPACTS SECTION:

Land Use	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Community Cohesion	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Churches and Schools	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Environmental Justice	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Report
Completed by and Date:	OLE NEPA Manager, 12/2/2014
Economic	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Other
Completed by and Date:	OLE NEPA Manager, 2/27/2015
Joint Development	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Other
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Parklands and Recreational Areas	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Bicycle and Pedestrian Facilities	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Right-of-Way	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Database
Completed by and Date:	OLE Staff, 2/3/2015
Relocation Potential	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	OLE Staff, 4/24/2014

SOCIOECONOMIC IMPACTS SECTION Continued:

Construction and Emergency Routes	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Transportation	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014

CULTURAL IMPACTS SECTION:

Historic Sites or Districts	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	Consultant, 4/2/2014
Archaeological Sites	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	Consultant, 4/2/2014
Cemeteries	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014

NATURAL ENVIRONMENT IMPACTS SECTION:

Wetlands	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 12/18/2013
Surface Waters and Water Quality	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 12/18/2013
Wild and Scenic Rivers	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
Floodplains	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Database
Completed by and Date:	OLE Staff, 2/25/2015
Wildlife and Habitat	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 11/12/2014
Threatened and Endangered Species	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 7/9/2013
Woodlands	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 3/24/2015
Farmlands	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	Resource Agency, 3/16/2015

PHYSICAL IMPACTS SECTION:

Noise	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	OLE Staff, 3/13/2015
Air Quality	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE NEPA Manager, 11/12/2014
MSATs	
Evaluation:	<p>This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.</p> <p>Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOBILE6.2 model forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSAT from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.</p>
Method of Evaluation:	FHWA Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents, September 30, 2009
Completed by and Date:	OLE NEPA Manager, 6/19/2015
Energy	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 11/12/2014
Contaminated and Regulated Materials Sites	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	OLE Staff, 3/30/2015
Visual	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	OLE Staff, 11/12/2014
Utilities	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	OLE NEPA Manager, 7/9/2013

APPENDIX B

AGENCY AND TRIBAL COORDINATION

Zamora, Jorge [DOT]

From: McPeek, Kraig <kraig_mcpeek@fws.gov>
Sent: Tuesday, July 02, 2013 3:23 PM
To: Zamora, Jorge [DOT]
Subject: U.S. Highway 30 - Planning Study

Dear Mr. Zamora,

Thank you for your letter of June 27th, 2013 regarding the early coordination of the U.S. Highway 30 Planning Study in Story County, Iowa.

In order to determine whether your project will affect listed species, you will first need to determine whether listed species or their habitat is located within your action area. We recommend as a first step of this assessment that you download a list of species which are listed for the associated counties. You can find this list on the U.S. Fish and Wildlife Service's Region 3 website <http://www.fws.gov/midwest/endangered/section7/sppranges/index.html>. Descriptions of the habitat requirements are also included on this website. You may use these descriptions to help you determine if there is suitable habitat within your project area. In some instances surveys may be recommended to help make this determination. If suitable habitat is found in the area of your project, the appropriate determination is that the project "may affect" listed species. We recommend that you use the habitat information and the website's Section 7 step-by-step instructions to further assess what impacts your proposed project may have on listed species.

If no suitable habitat exists within your project area, you may determine the project will have "no effect" on listed species. You may then request a review of your determination from our office by submitting a determination letter. Please be sure to provide the supporting information that led you to determine that no suitable habitat exists on site. There is an example of a no effect determination on our website at <http://www.fws.gov/midwest/endangered/section7/s7process/letters.html>.

The website also contains a template and an example "not likely to adversely affect" determination letter that are used for requesting concurrence from the Service.

If you have any questions regarding these comments, please contact me at this email address or the number below. We look forward to working with the Iowa DOT on this and other projects across the state of Iowa. Thank you

Kraig McPeek
Assistant Field Supervisor

US Fish and Wildlife Service
Rock Island Ecological Service Field Office
1511 47th Avenue
Moline, IL 61265
309-757-5800 x202
309-429-0362 (cell)
309-757-5807 (fax)

<°,}}}}}}}}=<{

<°,}}}}}}}}=<{

<°,}}}}}}}}=<{

United States Department of Agriculture



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

July 11, 2013

Mr. Jorge Zamora
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

SUBJECT: Request for Comments Regarding Environmental Impact, U.S. Highway 30
Planning Study, Story County, Iowa

Dear Mr. Zamora:

In response to your inquiry dated June 27, 2013, the following resources of concern to the Iowa Natural Resources Conservation Service (NRCS) include:

- Existing NRCS Conservation Easements
Please refer to <http://gdwweb1.ftw.nrcs.usda.gov/> to see if your undertaking will affect an NRCS easement. Should an easement be affected, you may contact Sindra Jensen (515) 323-2480, at the Iowa NRCS State Office for further information.
- Prime Farmland
Should this undertaking involve Prime Farmland or Farmland of State Wide Importance, you will need to have a Form AD-1006 completed. Please fill out your portion of the form and send that along with maps showing the legal location(s) to the appropriate Area Resource Soil Scientist. See attached map for which Area Resource Soil Scientist needs to receive the form.

**Please be advised, the Iowa NRCS discourages actions that would cause a reduction in stream length or adversely affect wetlands.*

Please note that federally-protected species, state-protected species, historic properties and/or waters of the United States may be affected by this proposed project. These are important resources of concern and this office strongly advises you to consult with the following offices for more information:

Federally - Protected Species

US Fish and Wildlife Service
Rock Island Illinois Field Office
1511 47th Avenue,
Moline, Illinois 61265
Phone: (309) 757-5800
Fax: (309) 757-5807

Helping People Help the Land

An Equal Opportunity Provider and Employer

State - Protected Species

Iowa Department of Natural Resources
Environmental Review for Natural Resources
Conservation and Recreation Division
502 East 9th Street
Des Moines, Iowa 50319-0034
Phone: (515) 281-8967

Cultural Resources and Historic Properties

State Historical Society of Iowa
State Historic Preservation Office
600 East Locust Street
Des Moines, Iowa 50319-0290
Phone: (515) 281-8743

Waters of the United States

U.S. Army Corps of Engineers
Regulatory Branch
Clock Tower Building
Post Office Box 2004
Rock Island, Illinois 61204-2004
Phone: (309) 794-5057

Thank you for your inquiry with the Iowa NRCS regarding your project proposal. It is our sincere expectation that the information provided is helpful to you. Should you require any further assistance please contact James Cronin, State Biologist, at (515) 323-2221.

Sincerely,

Jay T. Mar
State Conservationist

Attachments

Zamora, Jorge [DOT]

From: scott.tener@faa.gov
Sent: Thursday, July 11, 2013 3:24 PM
To: Zamora, Jorge [DOT]
Subject: U.S. Highway 30 Planning Study - Environmental Assessment NHSX-30-5(244)--3H-85, Story County, Iowa

Dear Mr. Zamora:

We have received your letter dated June 27, 2013. We generally do not provide comments from an environmental perspective.

Airspace Considerations

The project may require formal notice and review for airspace review under Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace. To determine if you need to file with FAA, go to <http://oeaaa.faa.gov> and click on the "Notice Criteria Tool" found at the left-hand side of the page.

Multiple locations will need to be checked because of the length of the route. You should check portions of the route within 5 miles of a public-use or military airport. Airport locations can be found using the "Circle Search for Airports" tab on the left side of the previously mentioned webpage.

If after using the tool you determine that filing with FAA is required, I recommend a 120-day notification to accommodate the review process and issue our determination letter. Proposals may be filed at <http://oeaaa.faa.gov>.

More information on this process may be found at: <http://www.faa.gov/airports/central/engineering/part77/>

Please let me know if you have any questions,

Scott Tener, P.E.
Iowa Airport Planning Engineer

FAA Central Region Airports Division
901 Locust St., Room 364
Kansas City, Missouri 64106-2325
T 816.329.2639 | F 816.329.2611
<http://www.faa.gov/airports/central/>

NOTE: This letter was e-mailed to jorge.zamora@dot.iowa.gov, No hard copy will follow.



STATE OF IOWA

TERRY E. BRANSTAD
GOVERNOR

KIM REYNOLDS
LT. GOVERNOR

IOWA HOMELAND SECURITY AND
EMERGENCY MANAGEMENT DEPARTMENT
MARK J. SCHOUTEN, HOMELAND SECURITY ADVISOR
AND EMERGENCY MANAGEMENT DIRECTOR

Jorge Zamora
NEPA Document Manager

In response to the Iowa Department of Transportation request for comments dated June 27, 2013, Iowa Homeland Security and Emergency Management Department has identified structures that have been acquired through a federally funded program. On record there are thirty-three properties in the city of Ames and twelve properties in the city of Nevada that were acquired using federal funds.

As required by 44 CFR 80.19

- (a) *Open space requirements.* "The property shall be dedicated and maintained in perpetuity as open space for the conservation of natural floodplain functions."
 - (1) *These uses may include:* "Parks for outdoor recreational activities; wetlands management; nature reserves, cultivation; grazing; camping (except where adequate warning time is not available to allow evacuation); unimproved, unpaved parking lots; buffer zones; and other uses FEMA determines compatible with this part."
 - (i) *Allowable uses generally do not included:* "Walled buildings levees, dikes, or floodwalls, paved roads, highways, bridges, cemeteries, landfills, storage of any hazard or toxic materials, above or below ground pumping and switching stations, above or below ground storage tanks, paved parking, off-site fill or other uses that obstruct the natural and beneficial functions of the floodplain."

Identified below are properties by previous address and location that were acquired and demolished by federal funds and currently maintained as open space in perpetuity.

If there are any further questions feel free to contact me at 515-725-9369 or dan.schmitz@iowa.gov.

City of Ames

Address	Latitude	Longitude
229 S RIVERSIDE DR	42.021062000	-93.629251000
231 S RIVERSIDE DR	42.012042000	-93.629251000
234 S RIVERSIDE DR	42.021200200	-93.629149000
303 S RIVERSIDE DR	42.020221000	-93.629251000
307 S RIVERSIDE DR	42.020172000	-93.629251000
308 S RIVERSIDE DR	42.020148000	-93.629149000
309 S RUSSELL AVE	42.020162000	-93.627963000
311 S RIVERSIDE DR	42.020124000	-93.529251000
312 S RUSSELL AVE	42.020106000	-93.627865000
316 S RUSSELL AVE	42.020062000	-93.627869000
317 S RUSSELL AVE	42.020073000	-93.627970000
319 S RIVERSIDE DR	42.020027000	-93.629251000
320 S RUSSELL AVE	42.020017000	-93.627872000
321 S HAZEL AVE	42.020023000	-93.626451000
325 S RIVERSIDE DR	42.019954000	-93.629251000
327 S HAZEL AVE	42.019956000	-93.626451000
327 S RUSSELL AVE	42.019962000	-93.627979000
328 S RIVERSIDE DR	42.019905000	-93.629149000
330 S RIVERSIDE	42.019881000	-93.629149000
331 S RIVERSIDE	43.019881000	-93.629251000
332 S RIVERSIDE DR	42.019856000	-93.629149000
306 S RIVERSIDE DR	42.020172000	-93.629149000
315 S RIVERSIDE DR	42.020075000	-93.629251000
330 S HAZEL	42.019882000	-93.626414000
445 S MAPLE AVE	42.018621000	-93.624767000
511 S MAPLE AVE	42.017981000	-93.624788000
10 OAK HILL HEIGHTS	42.031500000	-93.611400000
1803 16 TH	42.010931000	-93.633049000
521 ARRASMITH TRAIL	42.070837000	-93.621429000
5339 ARRASMITH TRAIL	42.077617000	-93.610814000
5352 O'NEIL DRIVE	42.071937000	-93.619357000
541 ARRASMITH TRAIL	42.070837000	-93.620428000
57566 280TH STREET	41.950263000	-93.549511000

City of Nevada

Address	Latitude	Longitude
107 W MEADOWLANE	42.016937000	-93.460837000
111 MEADOWLANE	42.016544000	-93.458189000
125 E AVE	42.015569000	-93.458175000
131 E AVE	42.015569000	-93.457987000
136 MEADOWLANE	42.016343000	-93.458540000
224 G AVE	42.017568000	-93.456763000
39 W MEADOWLANE	42.016937000	-93.460299000
49 W MEADOWLANE	42.016937000	-93.460599000
520 2ND ST	41.888631000	-93.397791000
529 2ND ST	41.888769000	-93.397697000
59 WEST MEADOWLANE	42.016937000	-93.460640000
633 3RD ST	42.167769000	-93.388574000

Zamora, Jorge [DOT]

From: Summerlin, Joe <summerlin.joe@epa.gov>
Sent: Monday, July 15, 2013 11:27 AM
To: Zamora, Jorge [DOT]
Subject: U.S. Hwy 30 Planning Study, Story County, Ames to Nevada EA

Dear Mr. Zamora:

We received your request for comment solicitation for the U.S. Hwy 30 Planning Study, Story County, Ames to Nevada EA. Recently, NEPAassist was made available to the public at <http://www.epa.gov/compliance/nepa/nepassist-mapping.html>. We have begun suggesting to local governments and contractors that they visit the NEPAassist site and determine themselves whether any of the tools or layers might be of use to them.

We appreciate your efforts to be inclusive and comprehensive in the review of potential environmental impacts associated with your project or action. In order to conserve our own resources, we prioritize the scoping and review of those major environmental assessments and all environmental impact statements required by NEPA and NEPA-implementing regulations. We do attempt to assist the public and local governments with information regarding other actions to the degree our resources allow.

Construction activities may have the potential to impact the proximate air quality for the short term duration of said activities. EPA has the following recommendations regarding the construction period of the project:

- Use ultra low sulfur fuel (< 15 ppm) in all diesel engines
- Use add-on controls such as catalysts and particulate traps where suitable
- Minimize engine idling (e.g., 5-10 minutes/hour)
- Use equipment that runs on clean, alternative fuels as much as possible
- Use updated construction equipment that was either manufactured after 1996 or retrofit to meet the 1996 emissions standards
- Prohibit engine tampering and require continuing adherence to manufacturers' recommendations
- Maintain engines in top running condition tuned to manufacturers' specifications
- Phase project construction to minimize exposed surface areas
- Reduce speeds to 10 and 15 mpg in construction zones
- Conduct unannounced site inspections to ensure compliance
- Locate haul truck routes and staging areas away from sensitive population centers

Regarding stormwater runoff during construction, the IDNR requires construction activity that disturbs one or more acres to be covered by a storm water permit before any soil is disturbed at the site. The permit coverage must be continued until all building is completed and the ground is completely stabilized with a permanent, perennial, vegetative cover. EPA recommends contacting IDNR to determine the best method of compliance with local and state ordinances and standards.

In the event that there are jurisdictional Waters and/or Wetlands of the United States impacted by any proposed future action, we recommend that any mitigation should occur in the same HUC 8 or smaller watershed as the location of the project impacts. We advise avoiding and minimizing impacts to wetlands and streams as much as possible before moving towards determining the amount of compensatory mitigation that is required. We urge you to contact the appropriate authorities at the US Army Corp of Engineers to determine whether a CWA Section 404 permit may be required for such action.

If changes occur in the project purpose, need, alternatives, or impacts between now and the time of issuance on Public Notice by the Corps of Engineers, EPA's 404 program reserves the ability to comment further on this

project. Information may be generated through the 404 public interest review process that was not documented during the EIS process and should be considered in the final decision. This could include changes in regulation or processes, advances in the knowledge of the resources to be impacted, discovery of additional populations of threatened or endangered species, new best management practices, and/or improvement in stream or wetland restoration science.

I am also including a link to an article with ideas for road or sidewalk improvements you may want to use in the future for inner city projects. <http://www.archdaily.com/359756/chicago-first-u-s-city-to-line-streets-with-smog-eating-cement/>

In addition, our Regional Office has moved to 11201 Renner Blvd., Lenexa, Kansas, 66219. We would appreciate it if you would ensure that your organizational records and data bases reflect this change of address.

Thank you,

Joe Summerlin
EPA Region 7
NEPA Team



Board of Supervisors
Administration Building
900 6th Street, Nevada, Iowa 50201

Rick Sanders, Chair
Paul Toot, Vice Chair
Wayne Clinton

Ph. 515-382-7200 Fax 515-382-7206
www.storycounty.com

RECEIVED

JUL 22 2013

Office of Location & Environment

July 17, 2013

Mr. Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

RE: US Highway 30 Planning Study, Story County, Ames to Nevada
Environmental Assessment
NHSX-30-5(244)—3H-85

Dear Mr. Zamora:

This letter is in response to your letter dated June 27, 2013, regarding the above-referenced study and details the comments and concerns identified by Story County regarding potential environmental as well as socioeconomic impacts. We appreciate the opportunity to provide feedback at this early stage. As the planning goes forth, Story County may highlight additional comments and concerns.

Those concerns identified at this time include:

- Through a review of the study area, County staff has not found Threatened or Endangered species, per our knowledge, but IDOT must confirm through State review.
- The corridor abuts, but does not include, a remnant prairie on the northwest corner.
- Much of the area is typical prairie/marsh topography. Numerous wet areas are present. Undoubtedly, there is extensive drainage tile which aids crop production.
- Approximately 600 acres of the study area are designated by FEMA as floodplain on the Federal Insurance Rate Map (adopted in 2008). The majority of the mapped floodplain is in non-detailed study areas and base flood elevations have not been established.
- According to the Story County Development Plan, Land Use Framework Map, there are varied future land use designations within the bounds of the study area, including Cooperative Planning Areas Tier One, Two, and Three as well as Natural Resource Areas. Within the two mile boundary of the City of Ames, the Ames Urban Fringe Plan details future land uses and this Plan has been adopted by Story County. A copy of both the County Development Plan and the Ames Urban Fringe Plan can be viewed online at www.storycountyiowa.gov.



Story County Board of Supervisors
Ph. 515-382-7300 Fax: 515-382-7349

- 600th Avenue north of US Highway 30 has been added to the Farm-to-Market system and experiences farm-to-market traffic related to the existing use at Lincolnway Energy and will have additional traffic from the DuPont site currently under construction.
- In 2012, along with the construction of the Vetter Equipment site, Story County constructed \$200,000 in roadway improvements along 590th Avenue. These improvements serve traffic from US Highway 30 northbound to the existing Lincolnway Energy and DuPont sites, in addition to Vetter Equipment (valued at \$4,405,600) and Flexi-Coil (\$2,455,900).
- Full access control within this corridor will have an overall impact on transportation for the farming community. As the table below demonstrates, the majority of land uses in the corridor (located in unincorporated Story County) are agricultural in nature, primarily used for commodities. Additional properties are used as a residential dwelling associated with agricultural uses. In addition to these types of land uses, two businesses in the past 10 years have substantially improved their sites creating businesses with valuations at nearly \$6.9 million. Both these sites have the primary entrance points from 590th as it intersects with US Highway 30.

Type of Land Use (Assessment Classification)	Number of Parcels	Number of Acres	Total Property Valuations (Buildings and Land)
Agriculture	97	3,259.9	\$7,370,700
Agriculture and Dwelling	8	242.7	\$1,572,300
Commercial	17	218	\$8,541,000
Industrial	2	31.3	\$2,099,300
Residential	13	81.9	\$2,865,100

If you have any questions regarding these comments or require additional information, please feel free to contact me, and I will direct your inquiry to the County staff person best suited to respond.

Best regards,

Rick Sanders, Chair
Story County Board of Supervisors

RS:lh

cc: Joe Jurasic, FHWA, 105 6th Street, Ames, Iowa 50010

CULTURAL AFFAIRS

MARY COWNIE, DIRECTOR
CHRIS KRAMER, DEPUTY DIRECTOR

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

July 19, 2013

**In reply refer to:
R&C#: 130785001**



SARABETH ANDERSON
ADMINISTRATOR



SUSAN KLOEWER
MUSEUM DIRECTOR



MATTHEW HARRIS
ADMINISTRATOR

Jorge Zamora, NEPA Document Manager
Office of Location and Environment
Planning & Research Division
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: FHWA – STORY COUNTY – NHSX-30-5(244)—3H-85 – US HWY 30 FROM
I 35 TO 11TH STREET IN NEVADA IMPROVEMENT PROJECT – NOTICE OF
INITIATING ENVIRONMENTAL STUDIES FOR PROJECT

Dear Mr. Zamora,

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 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).

STATE HISTORICAL BUILDING
600 EAST LOCUST
DES MOINES, IOWA 50319

T. (515) 281-5111
F. (515) 242-6498

WWW.CULTURALAFFAIRS.ORG

- 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, Archaeologist and Review and Compliance Program Manager
And Interim Deputy State Historic Preservation Officer
State Historic Preservation Office
State Historical Society of Iowa
(515) 281-4358

cc: Mike La Pietra, FHWA
Matthew J. F. Donovan, OLE, IDOT, Ames
Ralph Christian, Historian, State Historical Society of Iowa

1209 6th Street
P.O. Box 530
Nevada, IA 50201-0530



Phone: (515) 382-5466
Fax: (515) 382-5469
cityhall@midiowa.net

July 23, 2013

Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RECEIVED

JUL 24 2013

Office of Location & Environment

Dear Mr. Zamora:

The City of Nevada is proposing safety improvements by removing three at-grade highway/rail crossings with one interchange on Airport Road (West 18th Street) in Nevada.

The City of Nevada is very pleased that the IDOT is preparing an environmental assessment for US Highway 30 between Ames and Nevada. The Nevada Economic Development Council, City of Nevada, Story County, Union Pacific Railroad and Iowa Department of Transportation (IDOT) have made transportation along this corridor a priority concern.

In 1994-1995, the IDOT purchases 65 acres of right-of-way during construction of the 4-lane section between Nevada and Colo. In 2005, the IDOT lowered the speed limit and added flashing warning lights in recognition of the safety concern. The independent work of the IDOT in preparing this environmental assessment is just one more step toward construction of an interchange.

We believe this interchange will reduce the number of crashes due to failure to yield. It will provide a safer entrance and exit for our residents and truck traffic due to our two bio refineries located on Lincoln Highway to the north and those serving our West Industrial Park, which is currently expanding. Plus, the improvements could potentially attract additional industrial businesses to locate in the West Industrial Park and attract commercial and retail businesses to locate along Highway 30 between 6th Street and West 18th Street in Nevada.

The interchange improvements would enhance public safety, quality of life and will also be a useful selling point in our efforts to attract businesses to Nevada and the immediate surrounding area for many years to come.

Attached are Comments on the Proposed US30 Interchange Concepts from former Council Member Walt McDonald and the 2013 Request for Funding Brochure.

Sincerely,



Andrew Kelly, Mayor
515-382-5466
Enc (s)

COMMENTS ON PROPOSED U.S. 30 INTERCHANGE CONCEPTS

General Comments

Some of these thoughts go beyond the concept stage and would be considerations in the final design. Since I have been away from direct involvement in city matters for several years some comments may relate to issues that have been addressed in the interim.

1. On the Maple Street highway-rail crossing there are 11 trains per day with a typical speed range of 30 to 50 mph.
2. The Union Pacific Railroad has taken the position any new rail sidings near Nevada will only be allowed on the Spine Line south of Maple Street. That could result in future blockage of Maple Street during switching operations.
3. The present RR crossing angle on Maple Street creates a vision problem particularly for westbound truck and some large equipment operators. In addition, the short distance to the present bridge berm on U.S. 30 limits sight distance to the north for all westbound traffic. The roadway needs to be realigned to cross at as close to 90 degrees as possible.
4. The Maple Street highway-rail crossing presently lies within a Quiet Zone that conforms to federal standards with no Supplemental Safety Measures required beyond Constant Warning Time circuitry along with gates and lights in place. Increased highway traffic with either design will warrant installation of Supplemental Safety Measures (non-mountable medians) and widening the crossing surface to accommodate farm equipment and other wide loads.
5. Both concepts show S-14 as being closed near the north ROW line of U.S. 30 with no alternative connection. (An anticipated point of concern to many citizens.)
6. There are two landowners served by the two entrances located between the present two S-14 highway-rail crossings north of U.S. 30. Land locked agricultural land to the west is served by a private rail crossing from the railroad ROW. The farmland east of S-14 both north and south of the track has the same owner and there are private crossings on both legs of the wye track used by that farming operation.
7. One consideration with the closure of the present 6th Street entrance at U.S. 30 is the City maintaining adequate land for potential future needs at the Nevada Waste Water Treatment Plant.
8. Since it will take a significant amount of fill to construct either concept in the area between present S-14 and present 6th Street, is that dirt going to come from within that area and if so, what type of future land use will the remaining land configuration accommodate?
9. In the past there has been discussion of a concept to bridge over the UPRR east of present S-14 where the railroad is in cut with closure of the two present crossings on S-14. Further, the City Comprehensive Plan proposes a connector from the Indian Ridge Subdivision on Lincoln Way to present S-14 near the First Baptist Church. This bridge-over concept would be an extension of that roadway to a relocated 6th Street. If that concept was developed, S-14 might also need a cul-de-sac north of the tracks.
10. One of the changed conditions since the original 1988 interchange concept is the S-14 traffic movements generated by the paving of S-14 south of Iowa 210 (into Polk County) and used by many motorists to and from destinations in the Altoona, Ankeny and Des Moines areas.
11. Potential pedestrian and bicycle traffic generated by the residential developments south of U.S. 30 needs to be considered and addressed in the planning process.
12. Either proposed design would accommodate traffic movements to and from S-14 and the residential developments south of U.S. 30 and the Central Business District. The concerns I most often hear expressed by these residents relate to convenient access to U. S. 30.
13. With respect to Nevada Fire, First Responder and Police services it appears either concept provides accessibility. School bus operations might need some adjustment but would not appear to be a problem. With the Story County Medical Center location on the 19th Street interchange

and no thru streets south of and parallel to U.S. 30, ambulance service would be impacted by either concept.

Iowa DOT Layout 4 – Interchange at 610th Ave/Airport Road

1. The industrial uses on Airport Road and along Lincoln Way are heavy truck traffic generators. Truck operators using U.S. 30 and the limited number of trucks coming north on S-14 to those facilities should favor this direct access concept. With the heavy truck movements and the U.S. 30 curved alignment where eastbound ramp movements merge, there needs to be a parallel lane for some distance to reduce the bind spot until trucks get parallel with mainline traffic.
2. With no direct connection to the Central Business District, some type of business route designation and signing on Airport Road, 19th Street and Lincoln Way would probably be in demand.
3. This concept would provide more direct Story County Medical Center emergency service access for incidents at facilities and for residents on Airport Road and West Lincoln Way than the S-14 interchange concept.

Iowa DOT Layout 5 – Interchange Between S-14 and E 6th Street

1. This layout favors the non-truck traffic and addresses the direct access to U.S. 30 from residents south of the highway.
2. The downhill exit ramp for eastbound U.S. 30 traffic facing into the residential area may raise future engine brake prohibition issues.
3. Assume most eastbound U.S. 30 truck traffic bound for Lincoln Way locations would exit at the next interchange west of Airport Road. Those bound for Airport Road locations would probably use this interchange.
4. Assume many westbound U.S. 30 truck movements bound for Lincoln Way destinations (and the return trip) would use the 19th Street Interchange to stay away from the loops, the stop conditions, the sight distance issues and the train delays that may not be evident until the truck is at the point of no return on Maple Street. Depending upon visibility of train movements from the 6th Street exit loop, truck traffic may divert through the Central Business District if the operator senses a potential Maple Street crossing blockage in time to turn north instead of south.
5. This concept would provide more direct Story County Medical Center emergency service access for incidents and residents south of U.S. 30 than the Airport Road concept.

Prepared By:
Walt McDonald
637 14th Street Place
Nevada, IA 50201-2403
515-382-6320
March 5, 2013



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

July 23, 2013

RECEIVED

JUL 25 2013

MR JORGE ZAMORA
IOWA DEPARTMENT OF TRANSPORTATION
800 LINCOLN WAY
AMES IA 50010

Office of Location & Environment

RE: U.S. Highway 30 Planning Study (Environmental Assessment)
Project No. NHSX-30-5(244)—3H-85
Ames to Nevada, Story County

Dear Mr. Zamora:

This letter is in response to the June 27, 2013 letter concerning the proposed U.S. Highway 30 Planning Study. Thank you for inviting our comments on the impact of the above referenced project.

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

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization. When detailed plans are available, please complete and submit the joint application form to the Rock Island District Corps of Engineers (1 copy) and Iowa Department of Natural Resources (2 copies) for processing. The application form may be obtained at:

<http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WetlandsPermitting.aspx> .

An electronic copy of the application form and instructions may also be obtained on the Corps' website: <http://www.mvr.usace.army.mil/Missions/Regulatory.aspx> .

If you have any questions, please call me at (515)281-6615.

Sincerely,

A handwritten signature in blue ink that reads "Christine M. Schwake".

Christine Schwake
Environmental Specialist



Best regards,



Jorge Zamora
NEPA Document Manager
IDOT
800 Lincoln Way
Ames, IA 50010

RECEIVED

July 23, 2013

JUL 24 2013

Office of Location & Environment

Dear Jorge:

I have received a number of comments from NEDC Board of Directors regarding the IDOT preparation of an environmental assessment for the US Highway 30. We are very pleased that the plan includes an interchange on Airport Road which will serve our West Industrial Park. This interchange will provide a much safer entrance and exit for our bio refineries located on Lincoln Highway to the north.

As we continue to recruit bio companies, the increasing truck traffic coming from the Lincolnway industrial corridor one mile to the north of US 30, continues to be a safety concern. Two additional interchanges would afford much safer truck traffic control. In time, I would estimate that the Ames/Nevada Lincolnway Corridor will, in years to come, be almost totally industrialized.

Additionally, we understand that all at-grade crossings between Interstate 35 and 11th St in Nevada would be closed. This will obviously be of great consequence to a number of our farm residents during the planting and harvesting season. It would seem that 580th would be the most logical intersection for the western most interchange. 580th is hard surfaced between Hwy 30 and Lincolnway and would provide safe entrance and exit for truck traffic coming from Lincoln Highway. Sand Hill Trail dead ends to the north of Hwy 30. It serves primarily the churches that have services on a limited amount of days and hours.

Our downtown Nevada businesses are concerned regarding the closure of 6th St @ Hwy 30 to North bound traffic. We would ask that you review that particular intersection, within the Nevada city limits, to allow for traffic both coming and going from 6th St onto Hwy 30.

Thank you for your consideration of our perspective.

Best regards,

LaVon Schiltz, Exec Director
Nevada Economic Development Council
516 K Ave.
Nevada, IA 50201
515-382-1430
lschiltz@iowatelecom.net

Nevada, Iowa..... "Where Renewable Energy is Happening"



July 29, 2013

Iowa Department of Transportation

Attn: Jorge Zamora, NEPA Document Manager

800 Lincoln Way

Ames, IA 50010

RE: U.S. Highway 30 Planning Study, Story County, Ames to Nevada
Environmental Assessment
NHSX-30-5(244)—3H-85

Dear Mr. Zamora,

Thank you for the opportunity to provide comments as the IDOT initiates the environmental assessment of the U.S. Highway 30 Planning Study in Story County. The following comments are a supplement to the comments sent under separate cover by Eric Cowles of the Public Works Department on July 29, 2013.

The City would like to make the following comments.

- The City of Ames Urban Fringe Plan envisions primarily industrial development for the eastern urban fringe along the U.S. Highway 30 corridor. The U.S. Highway 30 corridor is identified as Agriculture/Long Term Industrial Reserve (ALTIR) on the Ames Urban Fringe Plan Future Land Use Framework Map. This designation extends from the Ames corporate limits eastward to one-quarter mile east of 580th Avenue. Agriculture/Long Term Industrial Reserve has the following stated Goals and Policies within the Urban Fringe Plan:

The Agriculture/Long Term Industrial Reserve designation supports the long term planning objective of accommodating future demand for industrial growth as described in the Industrial Study of July 2002 by the City of Ames. Although the need for this land use at these location [sic] may arise only after the planning horizon of this Plan, preventing uses incompatible with large industrial facilities and maintaining agricultural use will help secure the availability of suitable land for future industrial uses.

ALTIR Policy 1: Agricultural uses are compatible with this designation. Industrial development is not anticipated during the life of the plan unless significant development of Planned Industrial areas has already occurred, or unless it can be demonstrated that significant public benefit would be gained from such development.

ALTIR Policy 2: Prior to consideration of any request for rezoning or industrial subdivision development approval, require an amendment to the Ames Urban Fringe Land Use Framework Map re-designating the area proposed for development from Agriculture/Long Term Industrial Reserve to Planned Industrial.

ALTIR Policy 3: When development is proposed, require the urban level design requirements and service standards as required in areas designated Planned Industrial.

- The Ames City Council, recognizing the need to develop an area lying east of Ames for industrial purposes, is also currently seeking an amendment to the Ames Urban Fringe Plan to allow for the annexation and development of land extended out to 590th Avenue. This will likely be accomplished in several phases as utilities are extended and as dictated by development needs. To that end, City of Ames staff and Story County staff are preparing possible amendments to the Ames Urban Fringe Plan to extend the Planned Industrial and ALTIR area designations.
- The City of Ames has extended subdivision jurisdiction to all areas within two miles of the corporate city limits as allowed by Code of Iowa Chapter 354.9(1). The Ames Urban Fringe Joint and Cooperative Agreement (Pursuant to Code of Iowa, Chapter 28E) affirms that subdivision jurisdiction is shared between the City of Ames and Story County for the ALTIR. As allowed by Code of Iowa Chapter 354.9(2), the standards of the City of Ames are applied.
- Unless and until annexation occurs, the City of Ames's tools for development control are subdivision jurisdiction and the Ames Urban Fringe Plan. Although the City's zoning jurisdiction does not extend outside the corporate limits, the Ames Urban Fringe Plan binds Story County to approving only changes to zoning designations that are consistent with the Ames Urban Fringe Plan.
- The City of Ames supports the improved access management and safety along the US Highway 30 corridor insofar as they do not preclude the annexation and development of the ALTIR for industrial purposes.

The City of Ames thanks you for the opportunity to provide these comments. Please provide us with further information as it becomes available. The planning documents noted above are available upon request. The City desires to be a partner with the IDOT as this planning study progresses.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kelly Diekmann". The signature is fluid and cursive, with a large initial "K".

Kelly Diekmann

Planning and Housing Director

cc: John Joiner, P.E., Public Works Director

Eric Cowles, P.E., Civil Engineer II



July 29, 2013

Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Re: U.S. Highway 30 Planning Study, Story County, Ames to Nevada
Environmental Assessment
NHSX-30-5(244)- -3H-85

Dear Mr. Zamora,

First off, thank you for opportunity to provide comment to you regarding the above project. Your letter to John Joiner was forwarded to me to provide you a response.

In an effort to cover as many departments within the City, I was able to reach out to the other departments that may be affected. The department and related comments are below.

City of Ames Electric:

The City electrically serves the lights that illuminate the I-35/Hwy 30 cloverleaf, as well as a 161 kV transmission line currently under construction that crosses US Highway 30 between the IDOT maintenance facility and Cornerstone Church. The only area of concern would be the impacts the IDOT project will have on the lighting and the transmission pole. There are no current future plans to modify the existing facilities.

City of Ames Water Pollution and Control:

The Water Pollution and Control Department has no immediate impact to the area. However, there is a possibility that a sanitary sewer trunk line will need to be installed running north/south to the existing treatment plant south of the Skunk River, east of I-35. To date, the exact need, sizing and location of a main crossing US Highway 30 is to be determined. This information will become more defined as the future expansion of the City of Ames boundaries as a part of the East Industrial expansion is finalized. This area is north of the project along the Lincoln Highway (Old US 30) between Ames and Nevada.

Public Works:

No impacts related to the project

Ames Area Metropolitan Planning Organization:

No impact related to the project.

If you have any questions, please contact me at ecowles@city.ames.ia.us or at 515-239-5277.

Respectfully,

A handwritten signature in blue ink, appearing to read "Eric Cowles".

Eric Cowles, P.E.
Civil Engineer II

Cc: Kelly Diekmann, Director, COA Planning and Housing



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

July 29, 2013

JORGE ZAMORA
IOWA DOT
800 LINCOLN WAY
AMES IOWA 50010

Dear Jorge,

This letter is in response to the June 27, 2013 letter requesting comments and materials related to proposed project U.S. Highway 30 Planning Study, Story County, Ames to Nevada NHSX-90-5(244)—3H-85. 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.

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

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization. When detailed plans are available, please complete and submit the joint application form to the Rock Island District Corps of Engineers (1 copy) and Iowa Department of Natural Resources (2 copies) for processing. The application form may be obtained at <http://www.iowadnr.gov/InsideDNR/RegulatoryLand/FloodPlainManagement/FloodPlainDevPermits.aspx>.

An electronic copy of the application form and instructions may also be obtained on the Corps' website: <http://www.mvr.usace.army.mil>. Then click on "Need a Permit?" on the right side of the screen.

You are encouraged to conduct your construction activities during a period of low flow. You are required to seed all disturbed areas with native grasses and to implement appropriate erosion control measures to insure that sediments are not introduced into waters of the United States during construction of this project. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, should be limited to that which is absolutely necessary for construction of the project.

Any construction within the 100-year floodplain will require a DNR floodplain development permit.

No contaminated sites were found in the projected areas in the cursory review. Please note that the above comments are based on the information available in the Contaminated Sites database and may not be applicable to other sections/units of the Department. Furthermore, all contaminated sites might not be accounted for through the sections' database or the Departments' records; therefore, number of contaminated sites in our records does not necessarily mean that none exist at or near the project area.

One leaking underground storage tanks site (LUST# 7LTJ90) was reported within 1000' of the proposed construction projects. The site received a No Further Action letter in 2000 through Tier 1 Assessment (i.e. no active cleanup or monitoring was required). One active underground storage tank site was reported within 1000' of the proposed construction project registered as the City of Nevada #198710716. There are also two inactive underground storage tank sites (but not LUST).

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) 313-8909.

Sincerely,

Jerah Sheets
Executive Office

Zamora, Jorge [DOT]

From: eric.vanbuskirk@dot.gov
Sent: Monday, July 29, 2013 11:19 AM
To: Zamora, Jorge [DOT]
Subject: U.S. Highway 30 Planning Study in Story County, IA from Ames to Nevada. Questionnaire answers 1-8

Jorge,

Per our conversation today, 7/29/13, confirming you have received the information request from the UP concerning the HWY 30 project in Story County. If you require further assistance, please let me know.

Eric Van Buskirk
FRA, Region 6
Track Specialist
(O) (641) 753-2507
eric.vanbuskirk@dot.gov



July 30, 2013

RECEIVED

AUG 5 2013

Office of Location & Environment

Mr. Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

**RE: U.S Highway 30 Planning Study, Story County, Ames to Nevada
Environmental Assessment
NHSX-30-5(244)-3H-85**

Dear Mr. Zamora:

The Iowa Department of Agriculture and Land Stewardship - Division of Soil Conservation (IDALS – DSC) appreciates the opportunity to provide input regarding the highway expansion project along U.S. Highway 30 (Story County) and respectively submits the following item for comment below.

IDALS-DSC greatest concern is controlling soil erosion. Erosion often occurs at significant levels when large unvegetative areas are exposed and unprotected during construction activities. Any soil erosion that does occur during construction shall be promptly mitigated with procedures outlined in the written erosion control plan to address this concern.

If you have any questions, we ask that you contact the Story County Soil and Water Conservation District office located in Nevada:

Dana Holland, District Conservationist, USDA Service Center
Natural Resources Conservation Service
510 11th Street S.
Nevada IA 50201
(515) 382-2217

All personnel in the Soil and Water District office are well informed and stand ready to assist and advise you with problems that can arise from an undertaking of the size and scope that you have outlined in your report.

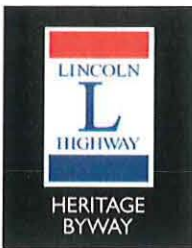
Thank you for the opportunity to provide this information.

Sincerely,

A handwritten signature in black ink, appearing to read "James Gillespie".

James Gillespie, Director
IDALS/Division of Soil Conservation

cc: Story SWCD
Dana Holland, District Conservationist, USDA Service Center



Lincoln Highway Heritage Byway

Managed by Prairie Rivers of Iowa
2402 South Duff Avenue
Ames, IA 50010
(515) 232-0048

www.prrcd.org/lincolnhighway



RECEIVED

AUG 5 2013

August 2, 2013

Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Office of Location & Environment

Dear Mr. Zamora:

Thank you for your letter requesting the input of Prairie Rivers of Iowa, the byway management organization for the Lincoln Highway Heritage Byway, on the U.S. Highway 30 Planning study in Story County, Iowa (NHSX-30-5(244)--3H-85).

Prairie Rivers of Iowa is a 501(c)(3) nonprofit organization with a mission to promote community-based stewardship that will improve the quality of life of our citizens, preserve the ecological integrity of the land, and meet the economic aspirations of landowners and communities. We work with the Iowa Department of Transportation to manage the Lincoln Highway Heritage Byway, Iowa's portion of the first coast-to-coast improved highway in the United States, the Lincoln Highway.

After reviewing the Highway 30 Project Description and Map of Project Limits, we do not believe that this project significantly affects the historical or cultural qualities of the Lincoln Highway. While portions of the Lincoln Highway Heritage Byway follow along current U.S. Highway 30 in Iowa, no portions of the Byway or any historical alignments of the Lincoln Highway run along the current Highway 30 route between Ames and Nevada.

As an organization committed to the responsible stewardship of Iowa's natural resources, we do urge you to consider the impact this project will have on the plant and animal life, natural resources, farmland, homes, and businesses that are within the project boundaries, and to minimize any negative effects of the project. As you mentioned in the project description, staying within the existing right-of-way whenever possible would be preferable in terms of impact.

Thank you for the opportunity to share our input on this project, and please feel free to contact us if you would like any additional information about the Lincoln Highway Heritage Byway or more details on our comments above.

Sincerely,

A handwritten signature in blue ink that reads 'John Mazzello'.

John Mazzello
Byway Coordinator



REPLY TO
ATTENTION OF

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

RECEIVED

AUG 14 2013

Office of Location & Environment

August 12, 2013

Regional Planning and
Environmental Division North

Mr. Jorge Zamora
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Dear Sir:

I received your letter dated June 27, 2013, requesting comments regarding the initiation of an Environmental Assessment for U.S. Highway 30 Planning Study in Story County, Iowa. Rock Island District Corps of Engineers staff reviewed the information you provided and have the following comments:

- a. Your proposal does not involve Rock Island District administered land; therefore, no further Rock Island District real estate coordination is necessary.
- b. 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. It appears that a Section 404 permit may be required for this project. When detailed information is available, please complete and submit an application packet to the Rock Island District for processing. The application should include determinations of wetlands and other waters of the United States, size estimations of impacts to those areas, and wetland types and relative functions. Permanent impacts greater than 1/10th of an acre will require compensatory wetland mitigation.

Prior to completing the permit review process and in compliance with the Clean Water Act Section 404(b)(1) guidelines, we may also require sequential mitigation involving an alternatives analysis, minimization of impacts, and compensatory mitigation for any unavoidable impacts. Alternatives analyses must demonstrate how you will avoid impacts by selecting the least environmentally damaging practicable alternative based on wetland sizes, locations, types, and relative functions. Minimization of impacts should consist of a list of appropriate and practicable steps to minimize unavoidable adverse impacts. Compensatory mitigation must include plans to restore or create wetlands to mitigate unavoidable project wetland impacts. If you have any questions regarding permitting requirements under Section 404 of the Clean Water Act, please contact Mr. Albert Frohlich of our Regulatory Branch. You may reach Mr. Frohlich by writing to our address above, ATTN: Regulatory Branch (Albert Frohlich), or by telephoning 309/794-5859.

c. 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.

d. 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.

e. 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 Ave., Camp Dodge-Bldg. 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 Ms. Wendy Frohlich of our Environmental Compliance Branch, telephone 309/794-5573.

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/Locations.aspx>.

Sincerely,



Kenneth A. Barr
Chief, Environmental Planning
Branch, (RPEDN)



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

August 13, 2013

IOWA DOT
Attn: JORGE ZAMORA
800 LINCOLN WAY
AMES IA 50010

RECEIVED

AUG 15 2013

Office of Location & Environment

RE: Environmental Review for Natural Resources
US Hwy 30 Planning Study
Ames to Nevada
Story County
Section , Township N, Range W
Project: NHSX-30-5-(244)-3H-85

Dear Mr. Zamora,

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.

Please reference the following IDNR Environmental Review/Sovereign Land Program tracking number assigned to this project in all future correspondence related to this project: 9022.

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

Sincerely,

Kelly Poole
Environmental Specialist
Conservation and Recreation Division

FILE COPY: Kelly Poole
Tracking Number: 9022

cmz

APPENDIX C

FARMLAND PROTECTION FORM

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

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request 3/2/15	4. Sheet 1 of 1
---------------------------------------------------	-----------------------------------------------------	------------------------

1. Name of Project US 30 From Ames to Nevada	5. Federal Agency Involved FHWA
-----------------------------------------------------	----------------------------------------

2. Type of Project Highway Improvement/575th St. Interchange	6. County and State Story County, Iowa
---------------------------------------------------------------------	-----------------------------------------------

PART II (To be completed by NRCS)	1. Date Request Received by NRCS 3/2/15	2. Person Completing Form Patrick Chase
------------------------------------------	---------------------------------------------------	---------------------------------------------------

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 <input checked="" type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated Average Farm Size 0 330
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------

5. Major Crop(s) Corn	6. Farmable Land in Government Jurisdiction Acres: 347,882 % 95	7. Amount of Farmland As Defined in FPPA Acres: 278,350 % 76
---------------------------------	----------------------------------------------------------------------------------	-------------------------------------------------------------------------------

8. Name Of Land Evaluation System Used Story County, IA	9. Name of Local Site Assessment System None - FPPA	10. Date Land Evaluation Returned by NRCS 3/16/15
-------------------------------------------------------------------	---------------------------------------------------------------	-------------------------------------------------------------

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	172.4			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0			
C. Total Acres In Corridor	229			

PART IV (To be completed by NRCS) Land Evaluation Information	
A. Total Acres Prime And Unique Farmland	165.7
B. Total Acres Statewide And Local Important Farmland	2.2
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	68.8

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)	86.0
----------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

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	1			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	15			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	86	0	0	0

PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	86	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	86	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	172	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? YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---------------------------------------------------------	-----------------------	------------------------------------------------------------------------------------------------------

5. Reason For Selection:

Signature of Person Completing this Part: **Jorge Zamora** DATE **3/23/15**

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request 1/27/15	4. Sheet 1 of <u>1</u>
---------------------------------------------------	------------------------------------------------------	------------------------

1. Name of Project US 30 From Ames to Nevada	5. Federal Agency Involved FHWA
-----------------------------------------------------	----------------------------------------

2. Type of Project Highway Improvement/610th Ave. Interchange	6. County and State Story County, Iowa
----------------------------------------------------------------------	-----------------------------------------------

PART II (To be completed by NRCS)	1. Date Request Received by NRCS 3/2/15	2. Person Completing Form Patrick Chase
------------------------------------------	---------------------------------------------------	---------------------------------------------------

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 <input checked="" type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated Average Farm Size 0 330
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------

5. Major Crop(s) Corn	6. Farmable Land in Government Jurisdiction Acres: 347,882 % 95	7. Amount of Farmland As Defined in FPPA Acres: 278,350 % 76
---------------------------------	----------------------------------------------------------------------------------	-------------------------------------------------------------------------------

8. Name Of Land Evaluation System Used Story County, IA	9. Name of Local Site Assessment System None - FPPA	10. Date Land Evaluation Returned by NRCS 3/16/15
-------------------------------------------------------------------	---------------------------------------------------------------	-------------------------------------------------------------

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	50.9			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0			
C. Total Acres In Corridor	255			

PART IV (To be completed by NRCS) Land Evaluation Information	
A. Total Acres Prime And Unique Farmland	48.5
B. Total Acres Statewide And Local Important Farmland	0.4
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	74.6

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)	83.0
----------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

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	8			
2. Perimeter in Nonurban Use	10	1			
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. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	15			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	69	0	0	0

PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	83	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	69	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	152	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? YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---------------------------------------------------------	-----------------------	------------------------------------------------------------------------------------------------------

5. Reason For Selection:

Signature of Person Completing this Part: Jorge Zamora	DATE 3/23/15
------------------------------------------------------------------	------------------------

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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