IOWA 92 FROM INTERSTATE 35 TO INDIANOLA IN WARREN COUNTY, IOWA STP-092-5(46)--2C-91

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 And WARREN COUNTY, IOWA

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

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For the Office of Location and Environment Iowa Department of Transportation

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For Warren County, Iowa

For the Iowa Division Administrator Federal Highway Administration

Date of Approval for Public Availability

The following persons may be contacted for additional information:

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PREFACE

This Environmental Assessment (EA) will proceed as a Streamlined EA. Section 1309 of the Transportation Equity Act of the 21st Century (TEA-21) mandated environmental streamlining in order to improve transportation project delivery without compromising environmental protection. A streamlining process was used to focus on issues that apply to the Iowa 92 project. This process allowed study and discussion of resources present in the study area, rather than expend effort on resources that were either not present or not impacted. Although not all resources are discussed in the EA, they were considered during the planning process and are documented in the Streamlined Resource Summary shown in Appendix A.

The following table shows the resources considered during the environmental review for this project. The first column with a check means the resource is in the project area. The second column with a check means the impact to the resource warrants more discussion in this document. Resources with a check in the first but not in the second column have been reviewed and are included in the Streamlined Resource Summary (Appendix A).

SOCIOECONOMIC				NATURAL ENVIRONMENT				
\times		Land Use	X	X	Wetlands			
		Community Cohesion	\times		Surface Waters			
\times	\times	Relocation Potential	\times		Water Quality			
\times		Churches and Schools			Wild and Scenic Rivers			
\times		Utilities	X		Flood Plain			
		Energy	\times		Wildlife and Habitat			
		Emergency Routes	\times	\boxtimes	Farmlands			
		Environmental Justice	\times	\boxtimes	Threatened and Endangered			
\times		Transportation	\times		Vegetation			
\times	\times	Right of Way			Ecosystem			
\times		Construction						
\times	\times	Pedestrian and Bicycle						
		CULTURAL			PHYSICAL			
\times	\times	Historical Sites or Districts	\times	\times	Noise			
\times	\times	Archaeological Sites			Air Quality			
		Recreational	\times		Temporary Impacts			
					Contamination			
			\times		Regulated Materials Sites			
					Visual			
	CONTROVERSY POTENTIAL							
	Section 4(f): A <i>de minimis</i> determination has been made at two historic farmstead districts (see page 8).							

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DESCRIPTION OF THE PROPOSED ACTION

The proposed project would consist of improvements to Iowa Highway 92 located in rural Warren County, Iowa. The proposed project would begin at Interstate 35 (I-35) and extend east for approximately 10 miles to the city of Indianola (Figure 1). The project corridor passes through land that is used primarily for agricultural purposes; however, rural residential homes are found throughout the length of the corridor.

The new roadway would consist of an improved 2-lane cross-section from I-35 to just west of County Road R63. The roadway would transition to a 4-lane with turn lanes cross-section near County Road R63 and continue into Indianola. The proposed project would provide for intersection improvements, such as the addition of turning lanes, and improve the safety of the roadway by reconstructing the roadway to current design standards which would include full-width shoulders, improved sight distance and reducing the number of access points.

PROJECT PURPOSE AND NEED

Background

The Iowa 92 corridor was first paved in the early 1930s using a 7-inch Portland Cement Concrete (PCC) roadway. Portions of the roadway were overlaid in the mid-1950s with a 3-inch Asphalt Cement Concrete (ACC), and another 3-inch ACC overlay project was completed in 1992.

The existing highway no longer meets current roadway design standards and has areas of limited passing and sight distance and high concentrations of access points. Due to the concerns for safety along the corridor and the desire to improve the transportation link to Interstate 35, a group of leaders from Indianola was formed in the 1990s to begin pursuing funding and approval for improving the Iowa 92 corridor.

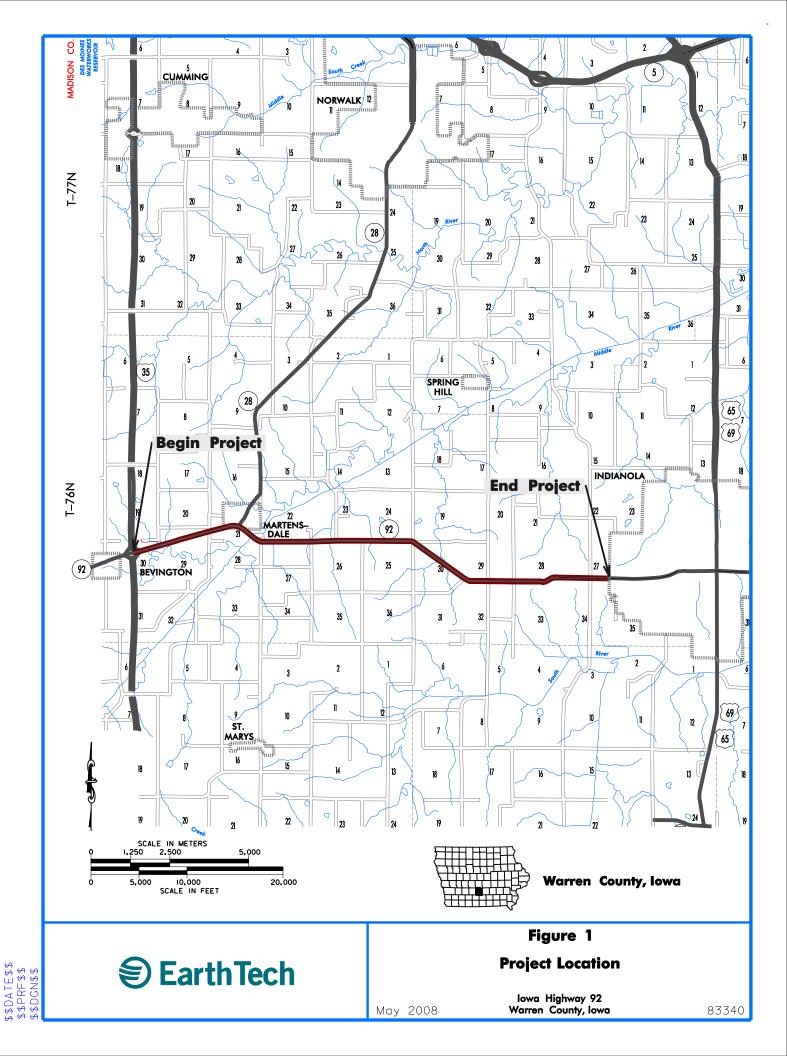
In September 2004, Warren County initiated a project to evaluate alternatives and to prepare a Streamlined Environmental Assessment for the Iowa 92 corridor from I-35 to Indianola. Since that time, three public information meetings have been held to discuss and present information relating to the project.

Purpose and Need

The purpose of the proposed project is to upgrade substandard pavement and roadway geometry on Iowa 92 between Interstate 35 and Indianola, Iowa, to provide a safer and more efficient roadway for the traveling public.

The purpose of the proposed project is supported by several needs described below:

• **High Crash and Injury Rates.** The overall crash rate from 2001 to 2004 in the project corridor between I-35 and Kenwood Boulevard in Indianola was 2.2 crashes per 100 million vehicle miles (MVM) compared to the statewide average of 2.05 crashes per 100 MVM. The crash rate at the Iowa 92 intersection with County Road R63 was 1.46 crashes per million entering vehicles (MEV) compared with the statewide average of 0.80 MEV. Twenty-nine (29) percent of crashes in the project corridor were rear-end type crashes.



• **Increasing Traffic Volumes and Decreasing Level of Service.** Traffic volumes on some segments of Iowa 92 are near or exceeding 5,000 vehicles per day (vpd) which is considered to be approaching maximum capacity for a 2-lane roadway with inadequate turn lanes, poor sight distance and unlimited access. As traffic volumes increase, congestion, traffic flow and risk for crashes increase and result in a lower level of service (LOS) for the roadway.

Currently, the level of service ranges from C to D. The lowest LOS is in the rolling terrain of Iowa 92. Future LOS, with improvements to Iowa 92, would range from B to C/D in areas of rolling terrain.

- **Substandard Geometrics.** Many locations on the Iowa 92 corridor have severe vertical and horizontal curves that do not meet current design standards. Substandard vertical curves create poor stopping sight distance, inadequate passing zones, and limited sight distance for access points and side road intersections. Horizontal curves along the corridor have radii less than the current minimum standard and are constructed with pavement superelevation which is inadequate. This can create unsafe driving conditions.
- Age and Condition of Pavement. With the exception of two overlay projects over the years, the roadway has not had a major reconstruction since it was first built in the early 1930s. Sufficiency ratings are one way to determine a roadway's need for upgrade and the ratings take into account, safety characteristics, structural adequacy and service level characteristics of a primary rural roadway. In 2001, sufficiency ratings for Iowa 92, from I-35 to Indianola, were in the poor range according to Iowa DOT's website (www.sysplan.dot.state.ia.us/sufficiency/index.htm). With this low rating, generally a roadway is considered to be in need of an upgrade.
- Access Management. The Iowa 92 corridor currently has uncontrolled access characterized by closely spaced driveway locations and inadequate sight distance.

Summary

The need for improving the Iowa 92 corridor is supported by several factors discussed above. The improved roadway would increase safety and improve efficiency for the traveling public.

If Iowa 92 were not reconstructed, the future traffic demand on portions of the project corridor would exceed the capacity of the roadway by 2012. Decreased traffic safety and delays could be expected, particularly from County Road R63 to Indianola (Y Street).

ALTERNATIVES

Three alternatives were examined in addition to the Preferred Alternative. A 4-lane divided rural roadway was considered for the entire corridor. Access would be limited to 1,000-foot spacing. This alternative was dropped from consideration because, although it met the purpose and need for the project, traffic does not warrant a 4-lane facility for the entire length. In addition, impacts with this alternative were higher than with any other alternative in terms of total ROW required, farmland acquired and houses displaced. A reconstructed 2-lane facility was considered for the Iowa 92 corridor. This alternative would correct the sight distance issues at intersections and other roadway geometrics. It would include turn lanes and more passing areas. This alternative was dropped from consideration because it did not adequately accommodate the traffic needs on the east end of the project corridor. A spot improvements

alternative was considered briefly which would reconstruct areas around intersections. This alternative did not meet the purpose and need for the project regarding future traffic volumes and age/condition of the pavement throughout the corridor and was dropped from further consideration.

The Preferred Alternative combines the 4-lane with turn lanes and 2-lane options to best serve the needs of the corridor from a traffic standpoint, while also satisfying the purpose and need for the project by adequately providing for future traffic, correcting the existing geometrics and improving safety. The Preferred Alternative and No Action Alternative were evaluated as part of this Streamlined EA and are described below.

Preferred Alternative

The Preferred Alternative would be a combination of 2-lane and 4-lane roadway with turn lanes (Figure 2). Forecasted traffic volumes do not warrant a 4-lane roadway for the entire corridor; however, where traffic is predicted to be heaviest, a 4-lane facility with turn lanes is proposed.

Future traffic on the proposed Iowa 92 corridor was forecast for design year 2032. Based on this forecast, traffic volumes on Iowa 92 are expected to range from 6,900 to 12,900 vehicles per day during the design year. Historic traffic counts and traffic volume forecasts on Iowa 92 are shown in Table 1.

TABLE 1

	Interstate 35 to Iowa 28 to		County Road R45 to	County Road R57 to	County Road R63
	Iowa 28	County Road R45	County Road R57	County Road R63	to Y ST.
1984*	2,230	2,280	2,140	3,110	3,110
1988*	3,110	3,080	2,790	3,860	5,520
1992*	3,840	3,530	3,240	4,530	6,200
1996*	4,210	4,430	4,160	5,100	5,900
2000*	6,100	5,200	4,820	6,000	8,100
2004*	4,170	4,110	3,990	4,880	7,600
2012	5,700	5,300	5,100	6,100	9,400
2032	8,000	7,500	6,900	8,000	12,900

IOWA 92 TRAFFIC COUNTS AND FORECAST DATA FROM INTERSTATE 35 TO INDIANOLA

* Iowa DOT Counts

The 2-lane segment, from I-35 to County Road R63, would include a total reconstruction of the existing roadway. Improvements that would result from this reconstruction would include raising horizontal and vertical alignments to current design standards, reducing the number of no passing zones by improving sight distance or adding passing lanes, construction of full-width shoulders and improved clear zones, addition of turning lanes at major intersections, and a reduction in the number of access points along the roadway. Access to the road would be allowed at a minimum 600-foot spacing.

At County Road R63, the 2-lane segment would transition to a 4-lane urban roadway with a center turn lane. This 4-lane roadway with turn lanes would initially be constructed as a 3-lane cross-section, a 2-lane roadway with a continuous turn lane. It would be upgraded in the future as traffic volumes warrant. Access would be allowed at a minimum of 1,000-foot spacing. At the east end of the project corridor at



Potential Displacement

EarthTech

\$\$DATE\$\$ \$\$PRF\$\$ \$\$DCNGG

2000 SCALE IN FEET

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Preferred Alternative lowa 92

May 2008

lowa Highway 92 Warren County, Iowa

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Indianola, the roadway would be transitioned to meet the existing 3-lane segment on the west edge of town. The project would include reconstruction of all major intersections.

Accesses throughout the corridor would be consolidated to reduce the overall number. No property owners will lose access to their property. Construction of the Preferred Alternative would improve safety of the roadway and increase the volume of traffic that could be carried at a high level of service. The estimated cost of the Preferred Alternative is \$31.2 million based on 2008 construction estimates. This estimate does not include costs for right-of-way acquisition, design, survey, construction inspection or administration of the project.

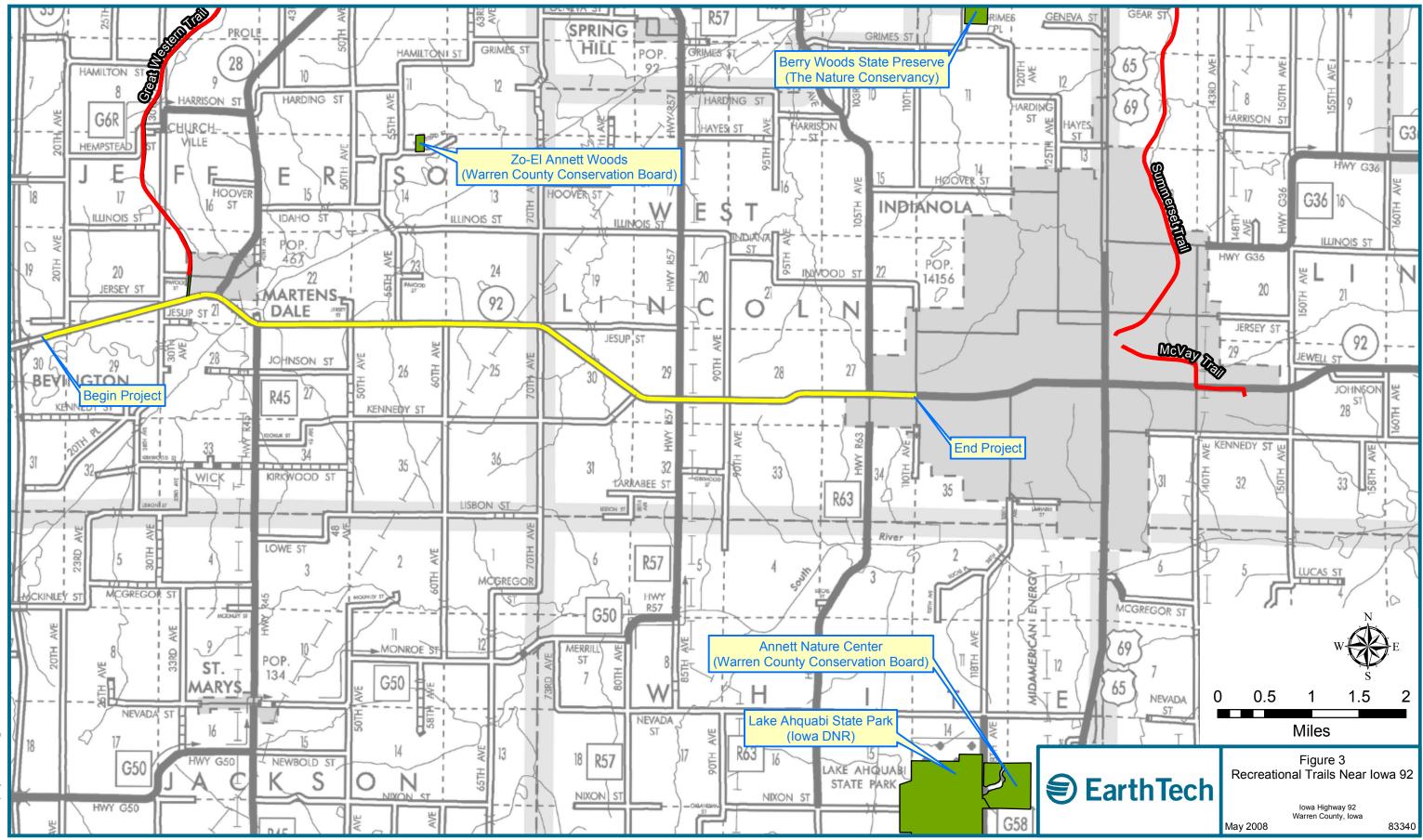
Although not part of the purpose and need for the project, a recreational trail was considered along the Iowa 92 corridor. Alternatives for connecting the Great Western Trail near Martensdale and the Summerset Trail which begins in Indianola were considered as part of the proposed alternatives (Figure 3). Alternatives considered include new off roadway alignments, existing county road alignments (using paved shoulders) and alignments along the Iowa 92 corridor. These potential trail segments would be coordinated with ongoing trail plans within Indianola and Warren County, including plans to connect to Lake Ahquabi State Park. Area evaluated for this EA is anticipated to cover the area needed for the proposed trail. No additional ROW is planned to be acquired for the trail beyond what is needed for the roadway.

No Action Alternative

The No Action Alternative would be the continuation of the highway system as it exists at the present time. No physical changes would be made in the pavement widths, lane configuration, intersection layouts or traffic patterns.

The No Action Alternative, while having fewer environmental impacts such as land acquisition and relocations, would not address the safety needs, substandard geometrics, increasing traffic volumes and the age/condition of the roadway within the project corridor. If no changes are made to the existing roadway, it is expected that traffic congestion and traffic-related crashes on Iowa 92 will continue to increase in proportion to future traffic volume increases.

Based on these factors, this alternative would not satisfy the Project Purpose and Need requirements. However, it is carried forward in this document to serve as a baseline for comparison with the Preferred Alternative. The initial cost for the No Action Alternative is unknown for the purpose of this study. It should be noted that maintenance costs, including potential resurfacing projects, spot repairs, culvert repair/replacement, etc., would be higher and would be needed sooner than the Preferred Alternative.



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PROJECT IMPACTS

Introduction

At the beginning of this document, a table listing resource areas was shown. Those resources with a check in the second column on the table are discussed in the following sections. Other resources with a check in the first column or no check on the table were also evaluated; however, they did not warrant discussion in the body of the EA. Information about these resources, the database used to evaluate them and when the evaluation was completed can be found in Appendix A.

A 400-foot wide corridor was used to evaluate impacts along the Iowa 92 corridor. For the archaeological survey areas at curves, such as near Martensdale, the corridor width extended 1,000 feet. The minimum additional width at a curve was 175 feet.

ROW Impacts and Potential Relocations

Preliminary ROW estimates show that approximately 129 acres of new ROW would be required to accommodate the Preferred Alternative. The proposed project would require the acquisition of land from 113 property owners for the Preferred Alternative and displace up to three residences. The displaced residences are shown on Figure 2.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, ensures uniform and equitable treatment of all persons displaced from their residences, businesses or farmsteads as a result of a federally funded project. This includes just compensation for such acquired properties (42 USC 4601 et seq., as amended, 1989).

In addition, it is FHWA's policy that persons displaced from their property receive uniform and equitable treatment and do not disproportionately bear the impacts of a project that is intended to provide benefits to a larger group of people (U.S. Department of Transportation - Federal Highway Administration and Iowa Department of Transportation, 1999). FHWA has programs and policies that enforce the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, such as an early acquisition program to assist individuals who meet certain hardship criteria and policies to ensure comparable (that is, equal or better) housing for residential relocations.

Individuals displaced from their residences, whether owners or tenants, are eligible for relocation assistance advisory services and moving payments. ROW would be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and follow FHWA's policy when working with displaced individuals. Relocation assistance agents would be used to explain all available options. Replacement housing payments and reimbursement for certain expenses incurred during the purchase of replacement housing are determined upon review of each relocation and the eligibility of the displaced individual. The goal is to find equal housing for all who are relocated.

Pedestrian and Bicycle

The Iowa 92 project would have the opportunity to connect two important trail segments in central Iowa. The two trails are The Great Western Trail, which begins in Martensdale and ends in Des Moines, and the Summerset Trail, which begins in Indianola and ends in Carlisle. The city of Indianola is developing trail concepts within the city limits to connect the Summerset Trail to Iowa 92 on the west side of town. If a

trail connection is made, it would provide the southerly connection of the Des Moines Metro Area Trail Loop.

Any proposed alternative for this trail connection would be within existing ROW and acquired as part of the Iowa 92 roadway project. Therefore, no additional socio-economic or natural resource impacts are anticipated as a result of the trail.

The proposed trail would have many benefits. Some of these would include recreational opportunities for central Iowa residents, bicycle tourist opportunities, economic development and choices for a "greener" commute.

Farmland Impacts

The Farmland Protection Policy Act of 1981 (FPPA) has as its purpose "to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses, and to assure that Federal programs are compatible with . . . policies that protect farmland."

A Farmland Conversion Impact Rating Form, AD-1006, was completed and sent to the Natural Resources Conservation Service (NRCS) in Warren County to determine impacts to prime and unique farmland in the project corridor. A copy of this form is attached in Appendix B.

The Preferred Alternative is expected to impact approximately 83 acres of farmland, approximately 64 acres of which are considered prime farmland by the NRCS. The total points shown in form AD-1006 are 157. Since this is under 160, mitigation is not required, and no further action is warranted.

Erosion and sediment runoff during construction is a concern, particularly near the Middle River and areas of rolling terrain. An erosion control plan will be implemented to maintain water quality and minimize soil erosion.

Threatened and Endangered Wildlife

Coordination with the Iowa Department of Natural Resources (DNR) and the U.S. Fish and Wildlife Service (USFWS) was conducted in March 2004 (see letters in Appendix C). Both agencies listed several species with possible ranges within the project area.

The DNR has no records of federal or state threatened or endangered species in the project corridor. However, the Indiana bat (*Myotis sodalis;* federal and state endangered) may occur within the project area.

The USFWS listed several federal threatened and endangered plant and animal species with ranges within this region of Iowa. They are:

- Indiana Bat (*Myotis sodalis*) Endangered
- Bald Eagle (*Haliaeetus leucocephalus*) Threatened (Now no longer a federally listed species.)
- Prairie Bush Clover (*Lespedeza leptostachya*) Threatened
- Western Prairie Fringed Orchid (*Platanthera praeclara*) Threatened
- Mead's Milkweed (Asclepia meadii) Threatened

No potential habitat was found during a field review on June 14, 2005, for any of the listed plant species mentioned by USFWS. Impacts to potential Indiana bat habitat will be assessed during the design phase of the project. Results of that assessment will be summarized in a technical memorandum and distributed to regulatory agencies as necessary as part of Section 7 consultation.

Wetland Impacts

The project biologist evaluated the potential wetland impacts through inspection of USFWS National Wetlands Inventory (NWI) maps, the Warren County Soil Survey and a field review to confirm NWI mapping.

According to NWI maps, approximately 0.7 acre of wetland is found within the corridor for the Preferred Alternative. NWI maps were used to approximate wetland impacts within the project corridor and, based on a field review, are likely an overestimate of the wetland impacts. In addition, 0.07 acre of surface water is estimated to be impacted. This is a pond located within the corridor.

Wetland and surface water (pond) areas will be delineated to determine impacts during the design phase of the project. Jurisdictional wetlands found in the corridor will require a Section 404 permit if the impact is greater than 0.10 acre in total.

Cultural Resources

Archaeological Sites

A Phase I archaeological survey was completed in summer 2005. Twenty-one (21) previously unknown archaeological sites were found and two previously recorded sites located in the project corridor were reinvestigated. All of these sites were determined to be not eligible for the National Register of Historic Places (NRHP) and do not warrant any further investigation. A supplemental survey was conducted for the Sarchett Farms Historic District which is discussed below in more detail. No additional sites were found as a result of this 20-acre survey. The Iowa State Historic Preservation Office (SHPO) concurred with both reports (see Appendix C for copies of the letters dated 2/16/06 and 12/3/06).

Historic Sites

A Phase I historic architecture survey was completed in summer 2005. Of the 78 properties examined, 26 are considered historic (more than 50 years old), three of which meet one or more criteria for significance under the NRHP guidelines. Two individual properties make up the Sarchett Farms Historic District, a locally significant property that is eligible for the NRHP. The third significant property is the Pearson Historic Farmstead District, an individual property also eligible as a historic district on the National Register.

Because the original alternatives resulted in direct impacts ranging from right-of-way (ROW) acquisition to displacement of structures, avoidance alternatives were developed to avoid both of these historic districts. Both historic districts are discussed below.

The original alternative was to improve Iowa 92 on existing alignment. However, this would have displaced/required 0.5 acre of ROW from the Sarchett Farms Historic District. Therefore, to avoid impact to the district, a southern bypass of the historic district was presented to SHPO. The project was deemed

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to have No Adverse Effect on the district (see SHPO concurrence letter dated 12/13/06 in Appendix C). The Preferred Alternative will avoid impacts to the Sarchett Farms Historic District; however, the existing roadway will remain between the two properties that make up Sarchett Farms (Figure 4). Leaving the existing roadway in-place between the two properties will serve as access to them and is also considered a part of the historic district that needs to remain in order to retain the integrity of the district.

A supplemental survey of the Pearson Historic Farmstead District was conducted to better determine the extent of this district. It was determined to extend nearly 1.0 mile south of Iowa 92, making a southern bypass of this property not feasible. At the Pearson Historic Farmstead, an alternative that would completely miss this property without displacing three homes and a farmstead to the north was not possible. The Preferred Alternative will acquire a strip of ROW from the edge of the farmstead adjacent to Iowa 92 (Figure 5). This impact to the property would not affect the historic integrity of the historic district. SHPO concurred that this impact will result in No Adverse Effect to the proposed district. (See SHPO concurrence letter dated 2/26/07 in Appendix C.)

Coordination with the Federal Highway Administration (FHWA) was conducted to determine if the minimization alternative (Preferred Alternative) would require preparation of a Section 4(f) Statement under 49 USC 303. FHWA determined the impacts to the Pearson Historic Farmstead District were minor enough to be considered a *de minimis* impact. A public information meeting was held on June 12, 2007, to present the *de minimis* alternative at the Pearson Historic Farmstead District and the avoidance alternative at the Sarchett Farms Historic District to the public for their input and information. Comments received as a result of the meeting can be found in the Comments and Coordination Section. No further action regarding Section 4(f) is required.

Noise Impacts

This section presents a summary of the analysis of the potential noise impacts generated by the Preferred Alternative. A comparison of existing (2005) and future (design year 2032) noise levels is made.

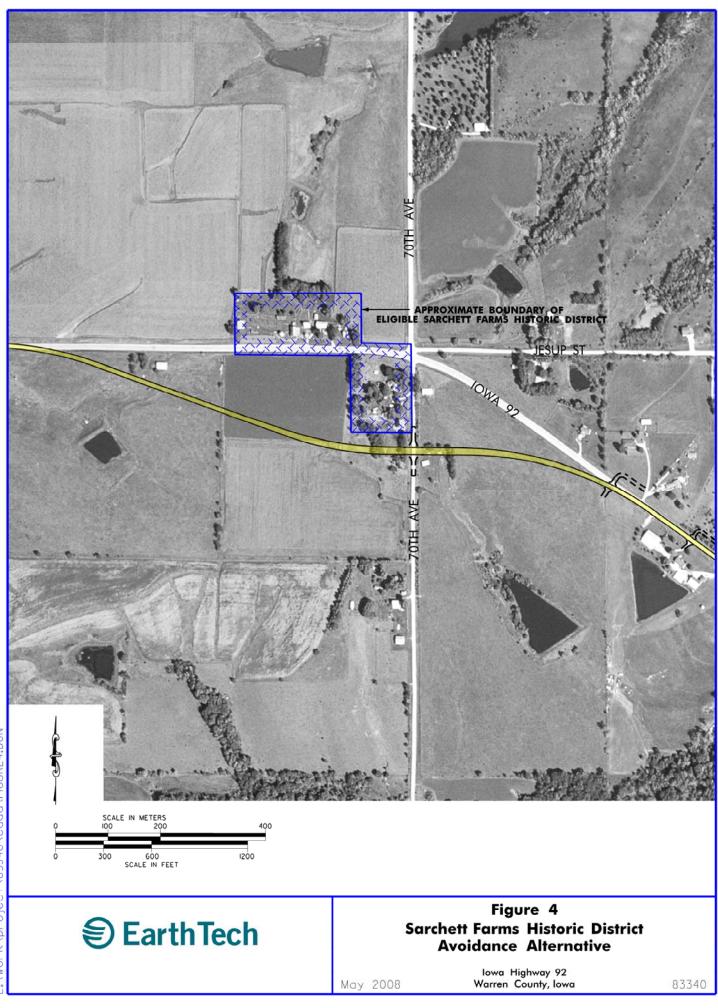
The project area is located adjacent to existing roads, and the existing noisescape is dominated by traffic noise. Traffic noise levels for the 135 receivers were predicted using existing (2005) and future (design year 2032) traffic volumes for the No Action and Build scenarios (Figures 6a and 6b). Comparison of the future noise levels with the existing levels and with the Noise Abatement Criteria (NAC) is assumed to indicate the degree of noise impacts to be experienced at the noise-sensitive sites.

The majority of the receivers represent single-family homes located adjacent to Iowa 92. The remaining receivers include several businesses and three churches.

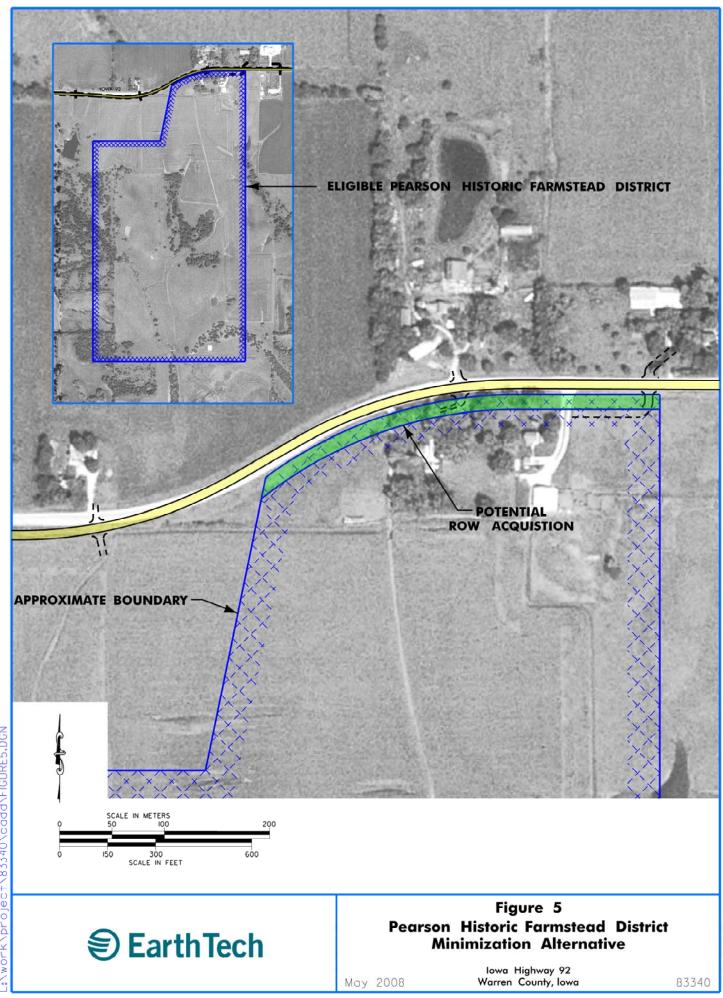
Existing noise levels along Iowa 92 range from 45 to 67 dBA. Three residences adjacent to the corridor are currently impacted by traffic noise. Of the 135 locations modeled using FHWA Transportation Noise Model 2.5 (TNM), only 2 percent currently experience traffic noise impacts.

In the design year under the No Action Alternative, noise levels are expected to increase by 1 to 3 decibels, to a range of from 47 to 69 dBA. One church and five residences are expected to be impacted by traffic noise under the No Action Alternative by 2032. Of the 135 locations modeled using TNM, 4 percent would experience traffic noise impacts under the No Action Alternative by 2032.

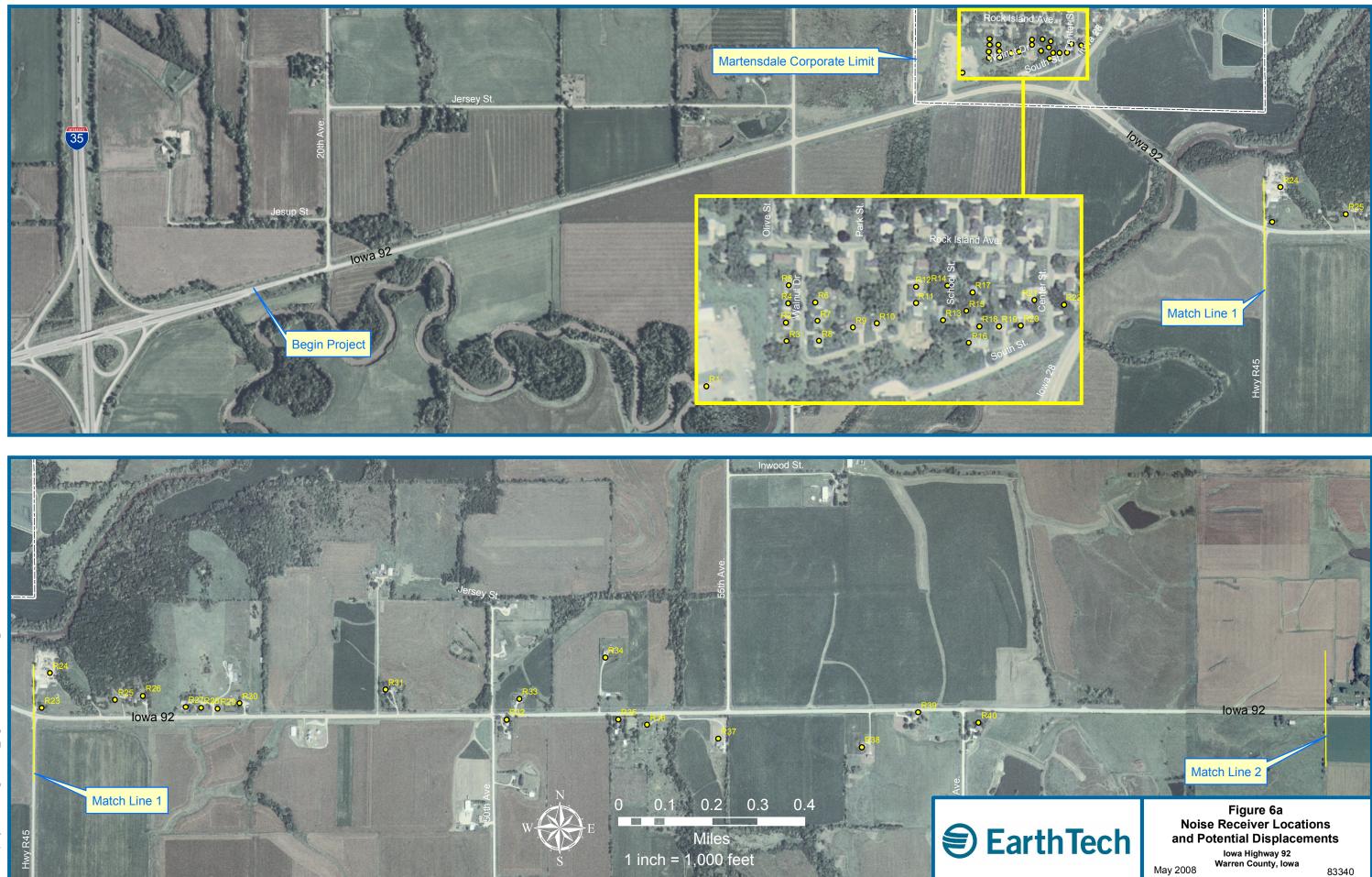
In the design year (2032) under the Preferred Alternative, noise levels are expected to range from 45 to 67 dBA. Of the 135 locations modeled, three would be displaced by the Preferred Alternative. Noise levels

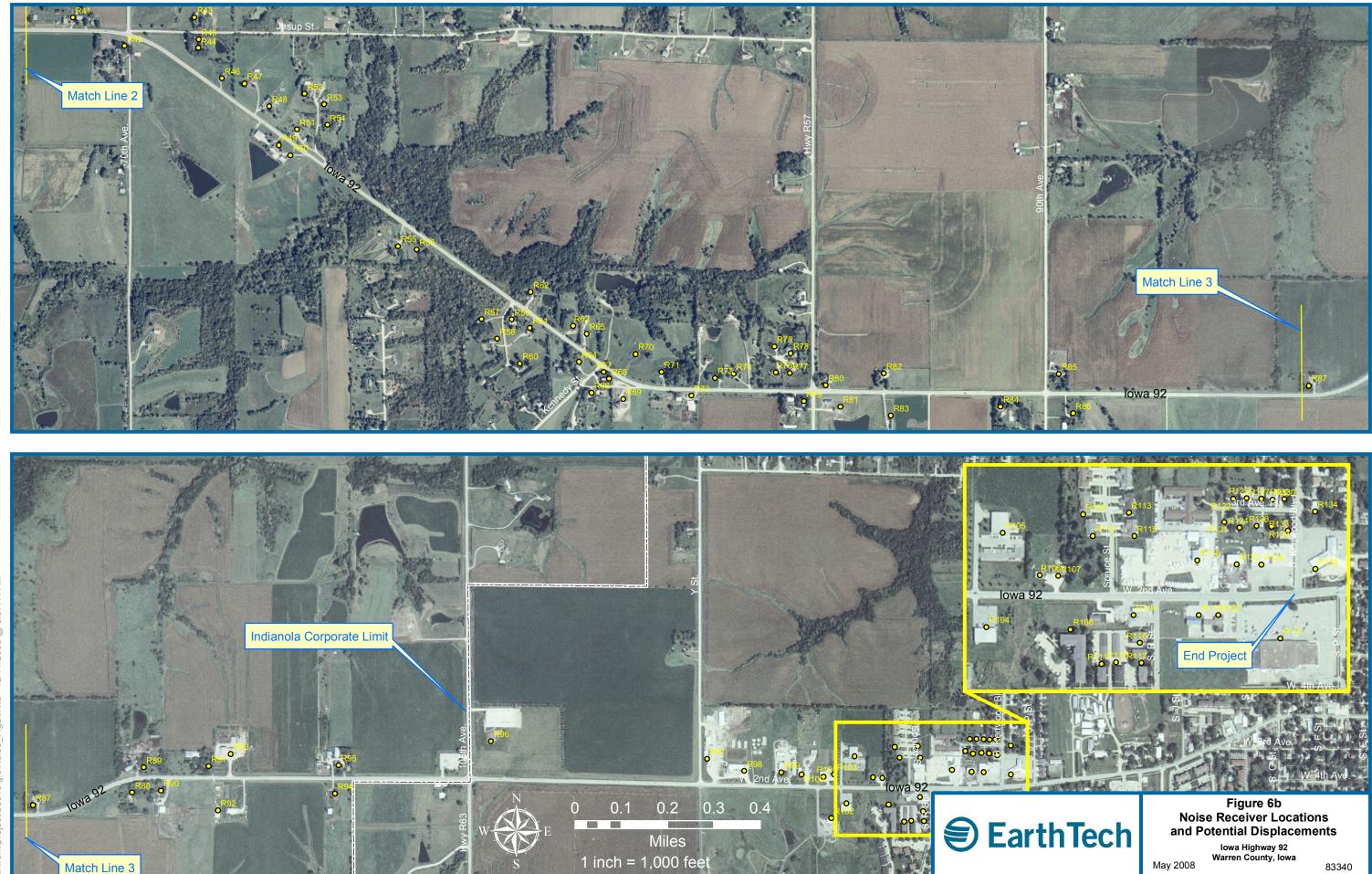


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either would be reduced by as much as 11 dBA or would remain unchanged at 21 locations. At the 111 remaining locations, traffic noise would be expected to increase by as much as 5 dBA. The increase would be 3 dBA or less at 102 of the locations, which would be barely noticeable. One church and one residence are expected to be impacted by traffic noise under this alternative. Of these two locations, one is currently impacted. Of the 135 locations, 2 percent would experience traffic noise impacts under the Preferred Alternative by 2032.

Noise Abatement Analysis

In keeping with the Iowa DOT policy, a traffic noise abatement analysis was performed for the locations that would experience traffic noise impacts under the Preferred Alternative.

Noise walls placed adjacent to the roadway would attenuate traffic-related noise and are the most practical and commonly used measure. When proven effective and feasible, such barriers may be used for noise abatement. An effective barrier must break the line of sight and typically extends parallel to the roadway alignment for a length of four times the perpendicular distance to the last protected receptor. A substantial noise reduction is the goal when implementing a noise barrier. Iowa DOT considers at least a 5 dBA noise reduction as substantial, and this is the minimum goal for this project.

Noise barriers must also meet criteria for reasonableness, including cost effectiveness. Iowa DOT considers a maximum cost of \$35,000 per benefited receptor (based on 2007 costs) to be reasonable from the standpoint of cost effectiveness. In addition, reasonable barriers must generally protect at least two residences (i.e., barriers will not be built to protect individual residences).

Noise barriers were considered for the two impacted locations. At all potential noise wall locations considered, noise walls were found to be not effective or not feasible from an engineering standpoint. The effectiveness of noise walls is substantially compromised when access openings for driveways and cross streets need to be provided. In the Iowa 92 corridor, noise walls would need to have gaps to allow access at each impacted location, which would reduce the effectiveness of a noise wall. In addition, both of the impacted locations represent isolated structures.

Because none of the noise wall locations considered were reasonable, feasible or effective, the construction of noise walls to provide noise abatement at the impacted locations will not be included as part of this project.

Cumulative Impacts Analysis

This section addresses other projects outside the Iowa 92 corridor but with potential to have an impact on the corridor either now or in the future. Within the last 10 years, two roadways in Warren County have been upgraded. Iowa 5, an east-west roadway located 10 miles north of Iowa 92, was upgraded to a 4-lane from I-35 east. US 65, a north-south 4-lane roadway, was also upgraded to an improved 4-lane facility. The completion of these two projects may have contributed to the decline in traffic on Iowa 92 between 2000 and 2004 (Table 1). In addition, Iowa DOT is initiating a project to widen Interstate 35 from 2 miles south of the Iowa 92 interchange to 0.25 mile north of the Warren/Polk County line, for a distance of approximately 12.5 miles. This project is not expected to have a bearing on Iowa 92.

Future development along Iowa 92 could be reasonably expected, especially between County Road R63 and Indianola. Commercial development is occurring along Iowa 92 west of Indianola. With the addition of a 4-lane facility with turn lanes and city services, such as water, sewer and electric, out to County

Road R63 already available, this trend would likely continue. The land from 110th Avenue (Y Street) to County Road R63 is currently zoned agriculture. However, future land-use plans for this area is a commercial corridor. It is anticipated that future access requests will be controlled with designated spacing to minimize conflicts on Iowa 92 while also still allowing for economic development. However, no corridor preservation of the project is planned at this time.

Other development along the corridor, including additional housing areas and/or commercial areas, may also be expected. The Preferred Alternative would have adequate capacity to accommodate such unknown development activities. The overall cumulative impact of Iowa 92 and the consequences of subsequent related actions to resources examined in this EA have been evaluated and are not considered to be collectively significant.

COMPARISON OF ALTERNATIVES

This section summarizes the final comparison of the impacts between the No Action and the Preferred Alternatives. The impacts and general features of each alternative are summarized in the table below.

TABLE 2

SUMMARY OF IMPACTS IOWA 92 CORRIDOR

Issue	No Action Alternative	Preferred Alternative		
Approximate Length (mi)	10	10		
Level of Service	C - Level Terrain D - Rolling Terrain	B - Level Terrain C/D - Rolling Terrain		
Average Daily Traffic (Design Year 2032)	6,900-12,900	6,900-12,900		
ROW Acquisition (ac)	0	129		
Farmland Impacts (ac)	0	83		
Wetland Impacts (ac)	0	0.7		
Surface Water Impacts (Ponds) (ac)	0	0.07		
Displacements	0	3		
Noise Impacts (Number of Receptors)	6	2		
	No Change to Current Trail	Proposed Connection Between the Great		
Bike/Recreational Trail	No Change to Current Trail System	Western Trail and Summerset Trail		
Archaeological Sites	0	0		
Historic Properties Impacted	0	3 ¹		

NA = Not Applicable

Two potential historic districts that encompass three farmsteads are in the corridor. All will be avoided or minimally impacted.

DISPOSITION

This Streamlined Environmental Assessment concludes that the proposed project is necessary for safe and efficient travel within the project corridor. The project will have no significant social, economic or environmental impacts of a level that would warrant an environmental impact statement. Final alternative selection will occur following completion of a public review period and Location Public Hearing.

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

COMMENTS AND COORDINATION

Agency Coordination

Appropriate federal, state and local agencies were contacted on March 9, 2005, as part of early coordination for their comments concerning the project. Comment letters received are in Appendix C. Those agencies contacted are listed below:

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service
Federal Emergency Management
U.S. Department of the Interior - Office of Environmental Policy and Compliance
U.S. Environmental Protection Agency
U.S. Department of Agriculture – Natural Resources Conservation Service
Iowa Department of Natural Resources

Parks, Recreation and Preserves Division
Land Quality and Waste Management Assistance Program

State Historical Society of Iowa
Warren County Conservation Board
Warren County Zoning Department
City of Indianola
Martensdale City Hall
Indianola Municipal Utilities

Those agencies that responded to early coordination are shown in **bold**.

Comments received include:

- U.S. Army Corps of Engineers, Rock Island District, commented on the need to coordinate with U.S. Fish and Wildlife Service and the Iowa SHPO; commented that the Corps should be contacted to make a final determination on wetland impacts. (Noted)
- The U.S. Fish and Wildlife Service indicated several federal threatened and endangered plant and animal species have ranges within the project corridor. (No habitat for the plant species was found. Habitat for the Indiana bat will be assessed during final design.)
- Natural Resources Conservation Service commented regarding the need to minimize impacts to the environment as a result of road construction/reconstruction activities. (Noted)
- Iowa Department of Natural Resources indicated no site-specific records of rare species or natural communities exist within the corridor; however, the state- and federally-endangered Indiana Bat (*Myotis sodalis*) could potentially occur. (Potential impacts to Indiana bat habitat will be assessed during final design.)
- State Historic Preservation Office indicated that the project would need to comply with Section 106 of the National Historic Preservation Act. (Section 106 compliance will be adhered to throughout the Iowa 92 project.)

March 2008

- Warren County Conservation Board indicated that soil erosion during construction should be minimized, and native roadside vegetation should be used wherever appropriate. (An erosion control plan will be followed during construction. Native plantings will be used to the extent possible following construction.)
- Indianola Municipal Utilities commented that they own several facilities within the project limits, including water mains, electrical and transmission lines, fiber optic lines and an electrical substation.

Public Coordination

Public Information Meetings

A public information meeting was held on April 19, 2005, to receive comments and suggestions from the public and to answer any questions related to the project. The main comments and concerns received include:

- Several comments received pertained to concerns related to acquisition of ROW and the potential impacts to landowners in the corridor. Concerns about farmland and individual homes were most common.
- Several comments were received voicing concern over the length of the comment period. A response letter was sent out indicating that comments were welcome throughout the length of the project.
- Concerns about safety on the existing roadway were stated several times during the meeting.
- Several comments were received in favor of some type of improvement to the project corridor. Several comments were made specifically against a new 4-lane facility. Some were in favor of turning lanes at busy intersections. A few people suggested other improvement alternatives.
- St. Thomas Aquinas Church sent a copy of a site Master Plan for future development of their sanctuary/church.

A second public information meeting was held February 21, 2006. The purpose of this meeting was to present the proposed alternatives to the public and provide them an opportunity to comment and ask questions about the project. The main comments and concerns expressed at this meeting include:

- Several comments were received in favor of either the 2-lane or 4-lane alternatives, the majority of which cited safety as their main concern.
- Several comments were made specifically against one or both of the Build Alternatives. Several comments were again received suggesting other alternatives, including various intersection improvements and removal of sharp curves. Comments were received in favor of the No Action Alternative.

- Several comments were received in support of a bike trail within the project corridor. One comment was received against the bike trail.
- Comments were received regarding specific property impacts, including ROW acquisition, access and impacts to residences and farmland. One comment was received inquiring about the possibility of moving a residence to the back of the property to avoid being displaced by the road.

A third public information meeting was held on June 12, 2007. The purpose of this meeting was 1) to present the avoidance alternatives at the two historic farmsteads (Sarchett Farms Historic District and Pearson Historic Farmstead District) so that the public would have a chance to comment on the de minimis Section 4(f); and 2) to show the public the Preferred Alternative for the Iowa 92 corridor.

- Several comments were received listing safety as a concern. They gave examples of accidents that have occurred in the corridor.
- Comments were made regarding the Sarchett Farms Historic District. The owner and another commenter felt that the avoidance alternative would split the farm buildings from the rest of the land which would be detrimental to the farming operation.
- The owner of Sarchett Farms Historic District wrote a comment letter following the meeting that listed several of his concerns regarding the proposed avoidance alternative he had previously been in favor of. He is concerned that this alternative separates his building site from his fields, and many of his comments directly relate to this. Among his concerns are access to his field/pasture, livestock shelter since his livestock would not be able to cross Iowa 92 to get to the building site, farm safety due to crossing Iowa 92 several times a day, and future marketability of his farm. Another issue he raised is that the well he uses as the source of water for his livestock would be separated from the livestock. He is also concerned that his young horses would be stressed by the new roadway so near to them. He inquired if there would be a possibility of a livestock tunnel to connect his farm buildings with the fields.
- Concerns were raised regarding the roadway getting closer to the houses on the Pearson Historic Farmstead District. Safety of small children who live in one of the residences was an issue.
- Comments were received regarding specific property impacts such as ROW acquisition, access and impacts to residences and farmland. Some attendees pointed out the locations of new buildings and recently planted trees within the corridor.

This document will be made available to all appropriate federal, state and local agencies for review and comment. The responses from reviewing agencies will be considered during further development of the project. Notification of the time and place of the public hearing for this project will be announced at the time the Streamlined Environmental Assessment is made available for public review.

APPENDIX A

STREAMLINED RESOURCE SUMMARY

SOCIOECONOMIC Resource Summary Section:

Land Use					
Evaluation and Date:	Field work was conducted on June 14, 2005, to identify constraints within the project corridor. Land use within the corridor is primarily rural residential and farmland. No				
	significant impacts to land use are anticipated as part of this project.				
Database Used:	Warren County Master Plan; Aerial Photography				
Completed By:	T. VanDeWalle/S. Carlson - Earth Tech				
Community Cohesion					
Evaluation and Date:	No impacts to community cohesion are anticipated as part of the proposed project. 6/14/05				
Database Used:	Warren County Master Plan; Aerial Photography				
Completed By:	T. VanDeWalle/S. Carlson - Earth Tech				
Churches and Schools					
Evaluation and Date:	No churches will be displaced by the project. No schools are located in the corridor.				
Database Used:	Windshield survey.				
Completed By:	B. Durbahn - Earth Tech - 1/4/08				
Utilities					
Evaluation and Date:	Sanitary sewer and water mains are found within the corridor. No major relocations are anticipated. 5/8/07				
Database Used:					
Completed By:	L. Wiele - Earth Tech				
Energy					
Evaluation and Date:	Electric utility poles will need to be relocated as part of the project. 12/7/06				
Database Used:	Personal communication with project engineer.				
Completed By:	S. Carlson - Earth Tech				
Emergency Routes					
Evaluation and Date:	Iowa 92 would remain open during construction of the proposed project. No impacts to emergency routes are anticipated as part of the proposed project. 12/7/06				
Database Used:	N/A				
Completed By:	S. Carlson - Earth Tech				
Environmental Justice					
Evaluation and Date:	Data obtained from the U.S. Census Bureau indicate the proposed project would not adversely impact low-income or minority populations. 12/7/06				
Database Used:	U.S. Census Bureau - <u>www.census2000.gov</u>				
Completed By:	S. Carlson - Earth Tech				
	5. Calisoli - Earui Tech				
Transportation Evaluation and Date:					
	The project would result in no significant impact to the existing transportation routes.				
Database Used:	Personal communication with Iowa DOT and Warren County.				
Completed By:	L. Wiele - Earth Tech				
Construction					
Evaluation and Date:	Standard specifications will be used. No constructability issues are anticipated. 12/7/06				
Database Used:	N/A				
Completed By:	L. Wiele - Earth Tech				

NATURAL ENVIRONMENT Resource Summary Section

Surface Waters	
Evaluation and Date:	The Middle River crosses IA 92 east of I-35. The existing bridge will not be reconstructed, and no new bridge will be added. No significant impacts to the Middle River are anticipated. Approximately 0.07 acre of surface water (pond) is estimated to be impacted. Efforts to avoid this pond will be made during design. No other streams or
	lakes occur in the project corridor.
Database Used:	Aerial photography and GIS database.
Completed By:	B. Durbahn - Earth Tech - 1/4/08

NATURAL ENVIRONMENT Resource Summary Section (Continued):

Water Quality					
Evaluation and Date:	No significant water quality impacts are anticipated. Erosion control methods will be				
Evaluation and Date.	employed during construction to minimize impacts.				
Database Used:					
Completed By:	B. Durbahn - Earth Tech - 1/4/08				
Wild and Scenic Rivers					
Evaluation and Date:	No wild or scenic rivers are present within the project corridor. 12/7/06				
Database Used:	National Park Service - <u>www.nps.gov/rivers</u>				
Completed By:	S. Carlson - Earth Tech				
Flood Plain					
Evaluation and Date:	No bridge will be constructed at the Middle River. The existing bridge will be used;				
Evaluation and Date.	therefore, no flood plain impacts are anticipated.				
Database Used:					
Completed By:	B. Durbahn - Earth Tech - 1/4/08				
Wildlife and Habitat					
Evaluation and Date:	The USFWS and the Iowa DNR have no records of any unique or significant resources				
	occurring in the project area (see letters in Appendix C). A field review by the project				
	biologist did not locate any significant natural communities within the corridor. 6/14/05				
Database Used:	Coordination letters from agencies; field review.				
Completed By:	T. VanDeWalle/S. Carlson - Earth Tech				
Vegetation					
	No unique or protected ecosystems occur within the project corridor. Approximately 10				
Evaluation and Date:	acres of woodland will be impacted by the project. Roadsides will be replanted with Iowa				
	DOT native seed mix or better to promote native vegetation in the project corridor.				
Database Used:	Confirmed via field work conducted by project biologist on 6/14/05.				
Completed By:	T. VanDeWalle/S. Carlson - Earth Tech				
Ecosystem					
Evaluation and Date:	No unique or protected ecosystems occur within the project corridor.				
Database Used:	Comment letter received from the Iowa DNR.				
Completed By:	S. Carlson - Earth Tech				

CULTURAL Resource Summary Section

Recreational	
Evaluation and Date:	No parks or recreational areas will be impacted by the project.
Database Used:	Windshield survey; aerial photography.
Completed By:	B. Durbahn - Earth Tech - 1/4/08

Air Quality	
Evaluation and Date:	Air quality impacts are expected to be minor and include temporary air quality impacts during construction. The project is in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, Conformity Procedures of 23 CFR 770 do not apply to this project. 12/7/06
Database Used:	
Completed By:	S. Carlson - Earth Tech
Temporary Impacts	
Evaluation and Date:	Temporary impacts are expected to be minor and would occur as part of construction activities. 12/7/06
Database Used:	N/A
Completed By:	S. Carlson - Earth Tech

PHYSICAL Resource Summary Section (Continued):

Contamination	
Evaluation and Date:	Evidence of contamination was not observed during a windshield survey of the project corridor. Two potential sites occur in the project corridor: a gas station in Indianola and the Iowa DOT Garage east of I-35. Neither will be impacted by the project.
Database Used:	Windshield survey.
Completed By:	B. Durbahn - Earth Tech - 1/4/08
Regulated Materials Site	
Evaluation and Date:	No regulated materials sites will be impacted by the project.
Database Used:	GIS database search; windshield survey.
Completed By:	B. Durbahn - Earth Tech - 1/4/08
Visual	
Evaluation and Date:	No significant visual impacts are anticipated as part of the proposed project because the project consists of improving an existing roadway. 12/7/06
Database Used:	Windshield survey.
Completed By:	S. Carlson - Earth Tech

83340/Adm/EA - TEX.doc

APPENDIX B

FARMLAND CONVERSION IMPACT RATING FORM

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)				Date Of Land Evaluation Request					
Name Of Project				Federal Agency Involved					
lowa 92 Improvements				Federal Highway Administration					
Proposed Land Use Highway				County And State Warren County, Iowa					
PART II (To be completed by SCS)			Date Request Received By SCS						
Does the site contain prime, unique, statew			′es	No	Acr	es Irrigated	Average Far		
If no, the FPPA does not apply - do not con			X	⊠ □ 0 227					
Major Crop(s)	Farmable Land In Govt.			Amount Of Farmland As Defined In					
Com	Acres: 284,178					40%			
Name Of Land Evaluation System Used	Name Of Local Site Ass NA	essment Syste	em		Dat		ition Returned	By SCS	
CSR - Corn Suitability Rating						2/17/06 Alternative S	Site Rating	· · · ·	
PART III (To be completed by Federal Agenc	y)			Site A ¹		Site B ²	Site C	Site D	
A. Total Acres To Be Converted Directly				60		150	0110 0	Cito D	
B. Total Acres To Be Converted Indirectly	,			20		35			
C. Total Acres In Site				80		145			
PART IV (To be completed by SCS) Land E	valuation Information								
A. Total Acres Prime and Unique Farmlar				62.4		111.7			
B. Total Acres Statewide And Local Impor				15.9		30.5			
C. Percentage Of Farmland In County Or		Converted		0.00043 0.00077		0.00077			
D. Percentage Of Farmland In Govt. Jurisdiction				38%		38%			
PART V (To be completed by SCS) Land Ev									
Relative Value Of Farmland To Be C		100 Points)		74		74			
PART VI (To be completed by Federal Agenc		Maximum							
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))									
1. Area In Nonurban Use		15		14		14			
2. Perimeter In Nonurban Use		10	9			9			
3. Percent Of Site Being Farmed		20	20			20			
4. Protection Provided By State And Land	Government	20	0			0			
5. Distance From Urban Builtup Area		0	0			0		-	
6. Distance To Urban Support Services		0		0		0			
7. Size Of Present Farm Unit Compared	Fo Average	10		10		10			
8. Creation Of Nonfarmable Farmland		25		25		25			
9. Availability Of Farm Support Services		5		5		5			
10. On Farm Investments	10	20		0		0			
11. Effects Of Conversion On Farm Support Services2512. Compatibility With Existing Agricultural Use10				0		0			
12. Compatibility With Existing Agricultural Use				0		0			
TOTAL SITE ASSESSMENT POINTS	160		83		83		-		
PART VII (To be completed by Federal Agend									
Relative Value Of Farmland (From Part V)	100		74						
Total Site Assessment (From Part VI above	160		~~						
site assessment)			_	83		14			
TOTAL POINTS (Total of above 2 lines)				157					
Site Selected: Date Of Selection				Wa	as A I	Local Site Ass Yes 🗀	essment Usec No		

Reason For Selection:

APPENDIX C

AGENCY LETTERS

APPENDIX C

LISTING OF AGENCY LETTERS RECEIVED

Department of the Army, Rock Island District United States Department of the Interior, Fish and Wildlife Service United States Department of Agriculture, Natural Resources Conservation Service Iowa Department of Natural Resources State Historical Society of Iowa Warren County Conservation Board (e-mail) Indianola Municipal Utilities - Electric and Water Iowa Department of Transportation (4 Letters Dated 02/16/06, 10/10/06, 12/13/06, 02/26/07)



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

April 1, 2005

Planning, Programs, and Project Management Division

Mr. Terry VanDeWalle EarthTec 501 Sycamore Street Suite 222 Waterloo, Iowa 50703

Dear Mr. VanDeWalle:

I received your letter dated March 9, 2005, concerning environmental studies for Iowa Highway 92 work. Rock Island District staff reviewed the information you provided and have the following comments:

a. Your proposal does not involve Rock Island District Corps of Engineers (Corps) administered land; therefore, no further Rock Island District Corps real estate coordination is necessary.

b. Any proposed placement of fill or dredged material into waters of the United States (including wetlands) requires Department of the Army (DA) authorization. We require additional details of your project before we can make a final determination. When detailed plans are available, please complete and submit the enclosed application packet to the Rock Island District for processing.

c. The Responsible Federal Agency should coordinate with Ms. Maria Pandullo, Iowa Historic Preservation Agency, ATTN: Review and Compliance Program, State Historical Society of Iowa, Capitol Complex, 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 Field Office address is: 4469 - 48th Avenue Court, Rock Island, Illinois 61201. Mr. Rick Nelson is the Field Supervisor. You can reach him by calling 309/793-5800.

e. The Iowa Emergency Management Division should be contacted to determine if the proposed project may impact areas designated as floodway. Mr. Dennis Harper is the Iowa State Hazard Mitigation Team Leader. His address is: Hoover State Office Bldg., Level A, Des Moines, Iowa 50319. You can reach him by calling 515/281-3231.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Dr. Sandra Brewer of our Economic and Environmental Analysis Branch, telephone 309/794-5171.

You may find additional information about the Corps' Rock Island District on our web site at http://www.mvr.usace.army.mil. To find out about other Districts within the Corps, you may visit the web site http://www.usace.army.mil/divdistmap.html.

Sincerely,

John P. Can (for)

Kenneth A. Barr Chief, Economic and Environmental Analysis Branch

Enclosure



IN REPLY REFER TO: FWS/RIFO

United States Department of the Interior

FISH AND WILDLIFE SERVICE Rock Island Field Office 4469 48th Avenue Court Rock Island, Illinois 61201 Phone: (309) 793-5800 Fax: (309) 793-5804



April 7, 2005

Mr. Terry J. VanDeWalle Earth Tech 501 Sycamore Street Suite 222 Waterloo, Iowa 50703

Dear Mr. VanDeWalle:

This is in response to your letter of March 9, 2004, regarding the proposed Highway 92 project in Warren County, Iowa.

With respect to any federally threatened or endangered species, listed or proposed to be listed, which may be present in the area of a proposed action, we are furnishing you the following list.

Classification	Common Name (Scientific Name)	<u>Habitat</u>
Endangered	Indiana bat (Myotis sodalis)	Caves, mines; small stream corridors with well developed riparian woods; upland and bottomland forests
Threatened	Bald eagle (Haliaeetus leucocephalus)	Breeding
Threatened	Prairie bush clover (Lespedeza leptostachya)	Dry to mesic prairies
Threatened	Western prairie fringed orchid (<i>Platanthera praeclara</i>)	Wet grassland habitats

Threatened

Wet to mesic	grassland
habitats	

The endangered **Indiana bat** (*Myotis sodalis*) is considered to potentially occur in Iowa in all counties south of Interstate 80 including Warren County, based on its historical habitat distribution. Indiana bats are considered to potentially occur in any area with forested habitat.

Mead's Milkweed (Asclepias meadii)

Indiana bats migrate seasonally between winter hibernacula and summer roosting habitats. Winter hibernacula include caves and abandoned mines. Females form nursery colonies under the loose bark of trees (dead or alive) and/or cavities, where each female gives birth to a single young in June or early July. A single colony may utilize a number of roost trees during the summer, typically a primary roost tree and several alternates. The species or size of tree does not appear to influence whether Indiana bats utilize a tree for roosting provided the appropriate bark structure is present.

During the summer, the Indiana bat frequents the corridors of small streams with riparian woods as well as mature upland forests. It forages for insects along stream corridors, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, over farm ponds, and in pastures.

Suitable summer habitat in Iowa is considered to have the following characteristics within a ¹/₂ mile radius of a project site:

- 1) forest cover of 15% or greater;
- 2) permanent water;
- 3) one or more of the following tree species: shagbark and shellbark hickory that may be dead or alive, and dead bitternut hickory, American elm, slippery elm, eastern cottonwood, silver maple, white oak, red oak, post oak, and shingle oak with slabs or plates of loose bark;
- 4) potential roost trees with 10% or more peeling or loose bark

If the project site contains **any habitat that fits the above description**, it may be necessary to conduct a survey to determine whether the bat is present. In addition, a search for this species should be made prior to any cave-impacting activities. If habitat is present or Indiana bats are known to be present, they must not be harmed, harassed, or disturbed when present, and this field office should be contacted for further assistance.

The threatened **bald eagle** (*Haliaeetus leucocephalus*) is considered to potentially occur statewide in Iowa based on historical records and habitat distribution, including Warren County. During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species.

The eagle may not be harassed, harmed, or disturbed when present nor may nest trees be cleared.

The threatened **prairie bush clover** (*Lespedeza leptostachya*) is listed as occurring in Warren County. It occupies dry to mesic prairies with gravelly soil. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage, or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The western prairie fringed orchid (*Platanthera praeclara*) is listed as threatened and considered to potentially occur statewide in Iowa based on historical records and habitat distribution, including Warren County. It occupies wet to mesic grassland habitats. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever wet prairie remnants are encountered.

The **Mead's milkweed** (*Asclepias meadii*) is listed as threatened in Warren County, Iowa where it occupies remnant prairies. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

These comments provide technical assistance only and do not constitute a report of the Secretary of the Interior on a project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act, do not fulfill the requirements under Section 7 of the Endangered Species Act, nor do they represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement.

If you have any questions regarding our comments, please contact Kristen Lundh of my staff at (309) 793-5800 ext. 215.

Sincerely Richard C. Nelson

Field Supervisor

S:\Office Users\Kristen\Technical Assistance\Section 7 \2005\Iowa\Warren Earth Tech 3-25-05



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

March 17, 2005

RE: Iowa Highway 92 Environmental Assessment Warren County, Iowa Earth Tech Project No. 83340

Mr. Terry VanDeWalle Earth Tech 501 Sycamore Street Suite 222 Waterloo, IA 50703

Dear Mr. VanDeWalle:

I am responding to your request for comments regarding the referenced Warren County, Iowa, project. The impact on the environment of road construction/reconstruction activity must be minimized. Control of soil moving from the construction site, via water or air transport, should be minimized, hopefully described in further design documents.

Please contact Ray Morrell, NRCS District Conservationist at 909 East 2nd Avenue, Suite B, Indianola, Iowa 50125 or 515/961-5264.

Sincerely,

Richard Van Klaveren State Conservationist

cc: Jeff Zimprich, ASTC-FO, NRCS, Atlantic, IA Ray Morrell, DC, NRCS, Leon, IA



THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES JEFFREY R. VONK, DIRECTOR

March 25, 2005

Mr. Terry J. Van De Walle Earth Tech 501 Sycamore Street, Suite 222 Waterloo, IA 50703

RE: Iowa Highway 92 project from Indianola to I-35, Earth Tech Project No. 83340

Dear Mr. Van De Walle:

Thank you for inviting our comments on the impact of the above referenced project. We have searched our records of the project area and found no site-specific records of rare species or significant natural communities. However, the Indiana bat (*Myotis sodalis*, state and federal endangered) may occur in the area of this project. The enclosed guidelines provide information about summer habitat requirements and survey methods for the Indiana bat. If it appears that you will disturb potential Indiana bat summer habitat, we suggest that you contact the U.S. Fish and Wildlife Service Rock Island Field Office at (309) 793-5800. If other listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

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

Effective March 10, 2003, any construction activity that bares the soil of an area greater than or equal to 1 acre including clearing, grading or excavation may require a storm water discharge permit from the Department. Construction activities may include the temporary or permanent storage of dredge material. For more information regarding this matter, please contact Ruth Rosdail at 515/281-6782.

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

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

Sincerely, nueno TA.

KEITH L. DOHRMANN, ENVIRONMENTAL SPECIALIST POLICY AND COORDINATION SECTION CONSERVATION AND RECREATION DIVISION

Attachment: Indiana Bat Guidelines (addressee only)

FILE COPY: Keith L. Dohrmann

05-3572L.doc

WALLACE STATE OFFICE BUILDING / 502 EAST 9th STREET / DES MOINES, IOWA 50319 515-281-5918 TDD 515-242-5967 FAX 515-281-6794 www.iowadnr.com



March 17, 2005

RICAL IETY*of*

> In reply refer to: R&C#: 050391079

ł . .

Terry J. VanDeWalle Earth Tech P.O. Box 1497 Waterloo, Iowa 50704-1497

RE: FHWA – WARREN COUNTY – STP-092-5(46)—2C-91 – IOWA HIGHWAY 92 -ENVIRONMENTAL ASSESSMENT – EARTH TECH PROJECT #83340 – PROPOSED IMPROVEMENTS TO HIGHWAY 92 BETWEEN INTERSTATE 35 AND THE CITY OF INDIANOLA

Dear Mr. VanDeWalle,

Thank you for notifying our office about the above referenced proposed project. We understand that this project will be a federal undertaking and will need to comply with Section 106 of the National Historic Preservation Act. We look forward to consulting with you, the Iowa Department of Transportation, and the Federal Highway Administration on the Area of Potential Effect for this proposed project and whether this project will affect any significant historic properties under 36 CFR Part 800.4. We will need the following types of information for our review:

- The Area of Potential Effect (APE) for this project needs to be adequately defined (36 CFR Part 800.16 (d)).
- Information on what types of cultural resources are or may be located in the APE (36 CFR Part 800.4).
- The significance of the historic properties in the APE in consideration of the National Register of Historic Places Criteria.
- A determination from the responsible federal agency of the undertaking's effects on historical properties within the APE (36 CFR Part 800.5).

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 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 you, the Iowa Department of Transportation, 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 State Historic Preservation Office State Historical Society of Iowa (515) 281-4358

cc: Mike LaPietra, FHWA Judy McDonald, OLE, IDOT, Ames Kris Reisenberg, OLE, IDOT, Ames ĺ

VanDeWalle, Terry

From:	Jim Priebe [jimpriebe@mindspring.com]
Sent:	Tuesday, March 22, 2005 2:03 PM
То:	terry.vandewalle@earthtech.com
Subject:	Response to environmental assessment information request

Terry,

Thank you for your request of the WCCB's assessment of the Highway 92 study corridor (Earth Tech Project No. 83340).

While there are areas of quality wildlife habitat in the region, I believe most concerns can be handled by minimizing soil erosion during construction of any new highway segments. I would also encourage the use of native vegetation in the right-of-way wherever it is appropriate.

Please feel free to contact me if there is anything my agency or I can do to assist you.

Jim Priebe

Visit the Warren County Conservation Board at http://www.warrenccb.org



111 South Buxton, P.O. Box 356 Indianola, Iowa 50125

> Electric 515-961-9444 FAX 515-961-9439 Water 515-961-9446 FAX 515-961-5523

Mark Ramthun, General Manager

March 25, 2005

Terry VanDeWalle Earth Tech 501 Sycamore Street, Suite 222 Waterloo, IA 50703

Dear Mr. VanDeWalle:

I am in receipt of your letter dated March 9, 2005, which outlines a series of environmental studies (Earth Tech Project No. 83340) that will be conducted in conjunction with the IDOT Iowa Highway 92 project. I understand the scope of your project includes the corridor along Highway 92 from Indianola west to Interstate 35.

Indianola Municipal Utilities (IMU) is a municipally owned and operated utility that owns facilities within the project scope. Specifically, IMU owns:

- A 12" water main installed in 2003 that runs parallel along Highway 92 on the north side from county highway R63 east to "Y" St. within an IMU private easement then into Indianola
- An electric 69-13kV substation located at the NW corner of the intersection of Highway 92 and county highway R63 on IMU property (work to be completed by September, 2005)
- Three planned underground electric 13.2kV, 3-phase feeder lines that run parallel along Highway 92 on the north and south sides from county highway R63 east to "Y" St. within the IDOT right-of-way then into Indianola (work to be completed by September, 2005)
- A planned fiber optic conduit line that runs parallel along Highway 92 on the north side from county highway R63 east to "Y" St. within the IDOT right-of-way then into Indianola (work to be completed by September, 2005)
- An electric 69kV transmission line built in 1991 that runs parallel along Highway 92 varying on both the north and south sides from county highway R63 west to Interstate 35 within the IDOT right-of-way and also within IMU private easements
- The 12" water main, the electric 69kV transmission line and the 13.2kV feeder lines cross Highway 92 at the intersection of county highway R63

If you need any additional information regarding these IMU facilities, please let me know.

Sincerely,

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Mark Ramthun General Manager

lowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010 515-239-1035 Fax # 515-239-1726 February 16, 2006 Ref. # STP-092-5(46)--2C-91 Warren County Primary Doug Jones **Review & Compliance** Community Program Bureau R&C# 050391079 State Historical Society of Iowa 600 East Locust St.

Dear Doug:

Des Moines, IA 50319

RE: Iowa 92 Study / I-35 to Indianola; Sections 26-30, 32-35; T76N-R24W & Sections 20-30; T76N-R25W

Enclosed for your review and comment is the Phase I investigation for the above-mentioned federally funded project. The proposed project will involve upgrading Iowa 92 from Interstate 35 to Indianola to address an increase in traffic volumes, the existence of some substandard design elements within the corridor, and local and county interest for an improved roadway. The alternatives being considered include spot improvements to the existing highway; an improved two-lane highway; or a four-lane expressway.

The project corridor was considered to encompass an area 53,660 ft. long by 400 ft. wide along the length of the corridor, with the width considered to extend 200 ft. on either side of the existing highway centerline. In four areas of the corridor, additional survey area was added to the width to allow for potential alignment alternatives at existing curve locations.

A total of 590 acres were surveyed for this investigation, along with 474 subsurface tests. Twenty-one previously unrecorded sites (13WA190-210) were found within the project corridor's APE along with two previously recorded sites (13WA83 and 13WA84). Sites 13WA83 and 13WA84 had been previously determined to be incligible for the National Register of Historic Places and warranted no further investigation. Of the 21 newly recorded sites, the majority represented historic habitation and/or farmstead sites, with three sites representing historic railroad remnants, two representing historic artifact scatters, two representing agricultural outbuilding sites, and one representing a historic road remnant. No prehistoric sites were encountered within the APE of the current project area. All of the 21 newly recorded historic sites were concluded to be ineligible for the National Register for lack of sufficient. integrity and/or significance. No further investigation appears warranted on any of the 21 sites.

Should the project APE be modified outside of the current survey's scope, further archaeological work will be warranted. In that event, we would forward new information to you with a determination of effect. Based on the results of the attached archaeological review, we have determined that **No Historic Properties will be affected**. Sign the concurrence line below, attach comments, and return this letter. If you have any questions, please contact me.

Sincerely,

David m. Stember

David M. Stember Office of Location & Environment david.stember@dot.iowa.gov



DMS Enclosure cc:

Larry Jackson, District 5 Engineer Kris Riesenberg, Office of Location & Environment--NEPA Leah D. Rogers, Tallgrass Historians

Concur: SHPO

2006 Date

lowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010		515 -2 39-1035
	Fax #	515-239-1726
October 10, 2006	Ref. #	STP-092-5(46)2C-91 Warren County Primary
Ralph Christian		
Review & Compliance		
Community Program Bureau	R&C#	050391079
State Historical Society of Iowa		
600 East Locust St.		

Dear Ralph:

Des Moines, IA 50319

RE: Iowa 92 Study / I-35 to Indianola; Sections 26-30, 32-35; T76N-R24W & Sections 20-30; T76N-R25W; PROPOSED ALTERNATIVES

Enclosed for your review and comment is the Phase I investigation for the above-mentioned federally funded project. The proposed project will involve upgrading Iowa 92 from Interstate 35 to Indianola to address an increase in traffic volumes, the existence of some substandard design elements within the corridor, and local and county interest for an improved roadway. The alternatives being considered include spot improvements to the existing highway; an improved two-lane highway; or a four-lane expressway.

The project corridor was considered to encompass an area 53,660 ft. long by 400 ft. wide along the length of the corridor, with the width considered to extend 200 ft. on either side of the existing highway centerline. In four areas of the corridor, additional survey area was added to the width to allow for potential alignment alternatives at existing curve locations.

Two options were being considered for the Pearson Historic Farmstead District. Option 1 would place the new alignment south of the highway and existing farm buildings. It was determined that option would impact the district, which includes farmland south of Highway 92. Option 2 would place the new alignment slightly further north of the existing highway centerline, completely avoiding the district. It was decided upon to use option 2 for the Pearson Historic Farmstead District.

One option was considered for the Sarchett Farms Historic District. It proposes to move the new alignment south of the farmhouse and accompanying buildings. The portion of highway 92 that currently goes north of the property will become a local access road with intersection. The Sarchett Farms Historic District will not be impacted by this option.

Should the project APE be modified outside of the current survey's scope, further work will be warranted. In that event, we would forward new information to you with a determination of effect. Based on the results of the attached archaeological review, we have determined there will be No Adverse Effect on the two historic districts. Please sign the concurrence line below, attach comments, and return this letter. If you have any questions, please contact me.

Sincerely,

David m. Stemper

David M. Stember Office of Location & Environment david.stember@dot.iowa.gov

DMS Enclosure cc: Larry Jackson, District 5 Engineer Kris Riesenberg, Office of Location & Environment--NEPA

Concur: / 16 1 4 SHPO

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Date

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Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

December 13, 2006

515-239-1035 Fax # 515-239-1726

Ref. # STP-092-5(46)--2C-91 Warren County Primary

Doug Jones Review & Compliance Community Program Bureau State Historical Society of Iowa 600 East Locust St. Des Moines, IA 50319

R&C# 050391079

Dear Ralph:

RE: Iowa 92 Study / I-35 to Indianola; Realignment at Sarchett Farms

The proposed project will involve upgrading Iowa 92 from Interstate 35 to Indianola. The Sarchett Farms were determined to be historically significant. In an effort to minimize and avoid harm, the engineers are looking at realigning the roadway south of the farmstead through previously cultivated fields.

The archaeological survey for the proposed realignment encompassed an additional 20 acres. The investigation included background research, pedestrian investigation and 39 subsurface tests. No additional sits were located.

Based on the supplemental investigation report, the south project alignment will have **No Adverse Effect** on the Sarchett Farmstead. If you are in agreement, please sign the concurrence line below, attach comments, and return this letter. If you have any questions, please contact me.

Sincerely,

Judy McDonald Office of Location & Environment Judy.mcdonald@dot.iowa.gov

JM Enclosure cc: Larry Jackson, District 5 Engineer Kris Riesenberg, Office of Location & Environment--NEPA

Concur: 19as W. Jones SHPO

Date



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FEB 2 7 2007

Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

February 26, 2007

515-239-1097 515-239-1726 FAX

Ref. No STP-092-5(46)- -2C-91 Warren Primary

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

05 03 9/ 07 R&C# -05391079

Dear Ralph:

RE: Supplemental Intensive Level Historical / Architectural Survey *The Pearson Farmstead Historic District (91-01022)* Iowa 92 from Interstate 35 to the City of Indianola, Warren County, Iowa Section 28, T76N-R24W

Enclosed for your review and comment is the Supplement Report on the Pearson Farmstead Historic District, Warren County, Iowa. This farmstead and surrounding area were initially surveyed and evaluated in 2006 as part of a road improvement proposed for a section of Iowa 92 between Interstate 35 and the City of Indianola, in Warren County, Iowa.

As stated in the October 10, 2006 concurrence letter to your office, two options were being considered for avoiding impacts to the Pearson Farmstead Historic District (91-01022). The first option would place the new alignment of the highway south of the existing farm buildings. The second option would place the new alignment slightly further north of the existing highway centerline, which would completely avoid the district.

This supplemental investigation reexamined the Pearson Farmstead Historic District to establish the extent of the historic district's southern boundaries. This supplemental survey determined that the historic district could be extended at least to the cattle feeder barn south of the farmstead.

Based on the information provided from this supplemental investigation, the proposed Option 1, the moving of the highway south of the historic building, would have an adverse impact on the historic district.

In addition to looking into the extent of the historic district and its southern boundaries, the present investigation examined the impact to the Pearson Farmstead by impacting the very northwest corner of the district, which would include the north end of the land of the tenant house. This investigation determined that the lost of this northwest corner would not impact the historic integrity of the historic district.

Based on the findings of this supplement investigation, the use of Option 1, the southern realignment of Iowa 92, would have an *adverse impact* to the Pearson Farmstead Historic District. In addition to this finding regarding the southern boundaries of Pearson Farmstead Historic District, the present investigation determined that northwest corner of the historic district could be impacted by the proposed Iowa 92 project and would result to a **No Adverse Effect** to the historic district.

If you concur with the findings and determinations of this supplement investigation, please sign the concurrence line below. If you have any questions or concerns regarding this project or this investigation, please feel to contact me.

Sincerely,

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Matthew J.F. Donovan Office of Location and Environment <u>Matt.Donovan@dot.iowa.gov</u>

MJFD Enclosure

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cc: Dee Ann Newell- Location and Environment / NEPA Jane Nash- Principal Investigator / Tallgrass Historians Concur: SHPO Historian Comments