



Abbreviated EA

Interstate 57 and Interstate 74 Interchange, Champaign, Champaign County, Illinois

ENVIRONMENTAL ASSESSMENT

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

U. S. Department of Transportation
Federal Highway Administration

and

Illinois Department of Transportation

April 23, 2015
Date of Approval

[Signature]
For IDOT

April 23, 2015
Date of Approval

[Signature]
For FHWA

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ABSTRACT: This EA assesses the applicable issues and potential impact areas of the project that includes reconstructing the existing full conventional cloverleaf interchange and approaches at I-57 and I-74, northwest of Champaign, with improved interchange geometry and operations, enhanced safety conditions, and increased capacity for growing traffic volumes.

Construction of the proposed action would require approximately 46.7 acres of right-of-way from 15 parcels with 7 separate owners. One parcel would require removing approximately 0.66 acres of a parking/storage lot, but the acquisitions would not displace any residences or businesses. Five special waste sites are located in the acquisition area and may be affected. Based on the traffic noise analysis and noise abatement evaluation conducted, including the viewpoints of the benefited receptors, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The project also would require fill within the 100-year floodplain and reconstruction of approximately 1,500 feet of Copper Slough.

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SECTION I: INTRODUCTION & PURPOSE AND NEED

1. Introduction

The proposed project is located on the northwest side of the City of Champaign, Illinois. The approximate project limits are the Olympian Drive over I-57 diamond interchange to the north, North Prospect Avenue over I-74 diamond interchange to the east, the Norfolk Southern Railroad over I-57 to the south, and North Duncan Road over I-74 to the west. (Exhibit 1)

The existing facility was originally constructed in 1965 and is a full conventional cloverleaf interchange connecting I-57 and I-74. Each interstate consists of four lanes (two lanes in each direction) of concrete pavement with multiple overlays. Both I-57 and I-74 have open grass medians that are typically 64 feet and 40 feet in width, respectively. The adjacent section of I-74 to the east beginning between Mattis Avenue and Prospect Avenue consists of a 26 foot paved median with concrete barrier.

I-57 is a full access controlled north-south facility that serves local, regional, and interstate traffic. It originates in Southeastern Missouri and crosses numerous other interstates before terminating in Chicago in northern Illinois. I-57 serves as a vital link in the transportation network between northern and southern Illinois and is a Class I truck route carrying an average of 32,400 vehicles per day in 2013 with approximately 29 percent truck volume (9,450 trucks per day average) within the project limits.

I-74 is a full access controlled east-west facility that serves local, regional, and interstate traffic. It crosses numerous other north-south and east-west interstates as it passes through Iowa, Illinois, Indiana, and Ohio. I-74 serves as a vital link in the transportation network between the Quad Cities on the Iowa-Illinois border and Cincinnati, Ohio and is a Class I truck route carrying an average of 38,900 vehicles per day in 2013 with approximately 19 percent truck volume (7,350 trucks per day average) within the project limits.

2. Purpose and Need

The purpose of the proposed interchange reconstruction improvement is to provide safer and more efficient transportation at the I-57 and I-74 interchange by eliminating deficient geometric features and reducing points of access to reduce crash frequency and severity, improve travel efficiency and increase the traffic capacity of the roadways by implementing policy design speed and cross sectional elements on both the mainline interstates and ramps.

The need for the proposed improvement is to address operational, geometric, safety, and capacity deficiencies.

A. Operational and Geometric Deficiencies

The existing cloverleaf interchange, including the mainline interstates and all eight ramps connecting the interstates, contains several deficiencies. A deficiency is an element or characteristic of a roadway that does not meet current Federal Highway Administration (FHWA)

or Illinois Department of Transportation (IDOT) policies. The existing interchange deficiencies include the ramp design speeds, mainline weaving distances, mainline interstate shoulder widths, and I-74 median width. These deficiencies lead to poor operational and safety performance of the interchange and need to be improved.

Exhibit 2 and Table 1 below illustrate the ramp design speeds and policy speeds, which are both determined based on the radii of the ramp curves and the cross slope of the roadway. The ramp design speed is the speed that the ramp currently accommodates, and the ramp policy speed is the speed that the ramps should accommodate according to current FHWA and IDOT policies. These policies set minimum speeds based on the type of facility to provide adequate geometry for vehicles navigating the roadways. Interstates have high policy speeds to move large volumes of traffic efficiently. Therefore, ramps connecting the interstates also need to have high policy speeds to safely accommodate travel between the high speed interstates. When the ramp design speed is less than the policy speed, i.e., deficient, the ramp cannot safely accommodate vehicles travelling from one high speed facility to another.

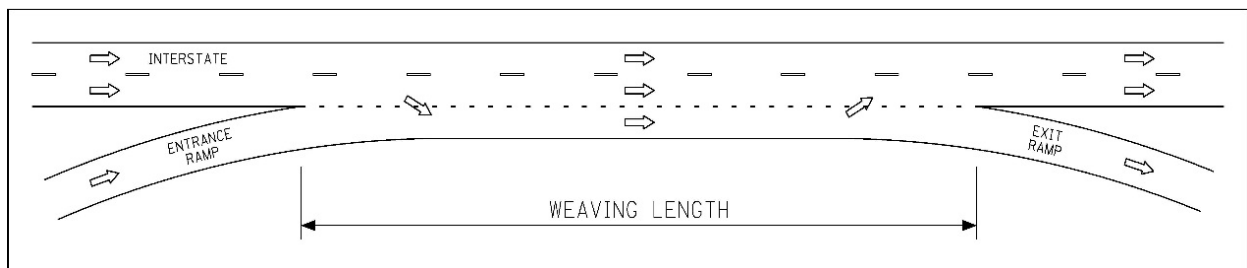
Table 1: Ramp Speed Deficiencies – mph (See Exhibit 2)

Ramp	A	B	C	D	E	F	G	H
Policy Speed:	45	45	40	40	40	40	45	45
Design Speed:	35	30	30	30	30	30	30	35
Deficient By:	10	15	10	10	10	10	15	10

All of the ramp speeds for the current cloverleaf interchange configuration are deficient. As shown in the table above, six of the eight ramps are deficient by 10 miles per hour (mph), and two of the eight ramps are deficient by 15 mph. These deficient ramp design speeds are contributing to the crashes (see Section 2.B.) along the ramps at the existing interchange and need to be improved.

The posted speeds for I-57 and I-74 through the interchange are 70 mph. A combination of different warning signs is used to alert motorists to reduce speed along the interchange ramps and approaches due to the deficiencies of each ramp. Signs include advisory exit and reduced ramp speeds, truck rollover warnings, chevrons, large arrows, flashing lights, and radar detected speed signs. Despite these countermeasures, crashes are still occurring due to deficiencies of the ramp geometry. Ramp improvements are needed to reduce the number of crashes occurring due to the deficient ramp geometry.

A weave in an interchange is the length of roadway where an additional lane is added to allow for vehicles to increase speed to enter and reduce speed to exit the mainline interstate lanes from adjoining ramps:



The existing cloverleaf interchange has four weave locations connecting the ramps between I-57 and I-74. The actual length provided for each weave at the existing interchange is less than the IDOT policy length (see Exhibit 2), so all four weave lengths are deficient:

Weave Location	I-57 NB	I-57 SB	I-74 EB	I-74 WB
Policy Length:	750 ft.	750 ft.	750 ft.	750 ft.
Actual Length:	646 ft.	619 ft.	646 ft.	655 ft.
Deficient By:	104 ft.	131 ft.	104 ft.	95ft.

These deficient weave lengths create high speed differentials between the mainline vehicles and vehicles trying to enter or exit the ramps. The speed differential and merging of vehicles onto the mainline without sufficient acceleration or deceleration length contribute to the concentrated crashes (see Section 2.B.) at the weave areas for the existing interchange and need to be improved or removed.

Access points along interstates are the locations where vehicles are allowed to enter and exit the freeway. The existing cloverleaf interchange configuration has a total of 16 access points, including four along each direction of travel (northbound, southbound, eastbound, and westbound). Each access point along an interstate introduces a conflict point, where drivers are forced to make decisions with vehicles entering and exiting the mainline. At the existing access points for this interchange, the deficient weave lengths and ramp curves that motorists use to access the interstate contribute to the crashes presented in Section 2.B. A reduction in the number of access points is needed to reduce the number of crashes at this interchange.

Paved shoulders along interstates can provide an area for vehicles that leave the mainline pavement to recover and return back to the mainline lanes of the roadway. The existing paved shoulders for I-57 are 10 feet on the right edge of travel (outside) and 4 feet on the left edge of travel (inside), and I-74 shoulders are 10 feet and 6 feet, respectively. The current policy is 12 foot right shoulders for I-57 and I-74, 6 foot left shoulders for I-57, and 12 foot left shoulders for I-74.

Location	I-57 Right	I-57 Left	I-74 Right	I-74 Left
Policy Width:	12 ft.	6 ft.	12 ft.	12 ft.
Actual Width:	10 ft.	4 ft.	10 ft.	6 ft.
Deficient By:	2 ft.	2 ft.	2 ft.	6 ft.

Since the existing shoulders are not as wide as the current policy, the shoulder widths are deficient. The deficient shoulder widths are a contributing factor to vehicles that strike fixed objects or overturn after running off of the pavement (see Section 2.B.) and need to be improved.

The current open grass median policy width for both interstates within the study limits is 60 feet. A 40 foot open grass median is provided for I-74 in the existing configuration; therefore it does not meet current policy and is deficient.

Location	I-57	I-74
Policy Width:	60 ft.	60 ft.
Actual Width:	64 ft.	40 ft.
Deficient By:	N/A	20 ft.

This deficiency is a contributing factor to the fatal crash on I-74 (see Section 2.B.), where a vehicle entered the median and was not able to recover prior to entering into oncoming traffic and collided head on with another vehicle.

B. Safety Deficiencies

The history of crash data and resulting injuries within the study limits were reviewed for the period between 2008 and 2012 for I-57, I-74, and the interchange ramps. Injury types are defined as follows: Type A-Injuries are incapacitating injuries that prevent a person from walking, driving, or normally continuing activities the person was capable of performing prior to the injury; Type B-Injuries are non-incapacitating injuries that were evident to observers at the scene of the crash; Type C-Injuries are any other injuries that are reported but not evident; Crashes that do not result in injury are Property Damage Only (PDO).

Between 2008 and 2012, 22 percent of the 325 total crashes within the study limits resulted in injury. Each crash is classified by the maximum injury sustained, and some crashes involve multiple injuries:

	Fatal	A-Injury	B-Injury	C-Injury	PDO	Total
Crash Type	1	21	37	12	254	325
Total Injuries	1	27	48	15	0	91

1. Interstate 57

A total of 85 crashes occurred between 2008 and 2012 along I-57 within the study limits. These crashes resulted in 14 injury crashes, including one Type A-Injury crash, 10 Type B-Injury crashes, and 3 Type C-Injury crashes; 71 crashes resulted in PDO. See Exhibits 3 and 4 for diagrams of the crashes along I-57 and Table 6 below for a summary of crashes along I-57:

Table 6: Interstate 57 Crashes (2008-2012)								
Crash Type	Total	Frequency	Total Injury Crashes	Injury Type				PDO
				Fatal	A-Injury	B-Injury	C-Injury	
Animal	9	11%						9
Fixed Object	21	25%	3			2	1	18
Other Non-Collision	1	1%						1
Other Object	2	2%						2
Overtuned	11	13%	5		1	4		6
Parked Motor Vehicle	1	1%						1
Rear End	12	14%	3			3		9
Sideswipe Same Direction	28	33%	3			1	2	25
Subtotal	85	100%	14	0	1	10	3	71

2. Interstate 74

A total of 168 crashes occurred between 2008 and 2012 along I-74 within the study limits. These crashes resulted in 45 injury crashes, including one fatality, 17 Type A-Injury crashes, 21 Type B-Injury crashes, and 6 Type C-Injury crashes; 123 crashes resulted in PDO. See Exhibits 5 and 6 for diagrams of the crashes along I-74 and Table 7 below for a summary of crashes along I-74:

Table 7: Interstate 74 Crashes (2008-2012)								
Crash Type	Total	Frequency	Total Injury Crashes	Injury Type				
				Fatal	A-Injury	B-Injury	C-Injury	PDO
Angle	4	2%	2		2			2
Animal	16	9%	2		1		1	14
Fixed Object	63	37%	15		7	8		48
Head On	1	1%	1	1				
Other Non-Collision	6	4%	1			1		5
Overtaken	6	4%	6		2	4		
Parked Motor Vehicle	3	2%	2		1	1		1
Rear End	26	15%	8		3	3	2	18
Sideswipe Same Direction	38	23%	6		1	2	3	32
Turning	5	3%	2			2		3
Subtotal	168	100%	45	1	17	21	6	123

3. I-57 and I-74 Summary

Fixed object and sideswipe same direction crashes account for 150 of the crashes, which is more than half (58% on I-57 and 61% on I-74) of the crashes on the interstates within the study limits. The deficient weaving lengths explained in Section 2.A are contributing to these types of crashes and need to be improved or removed. Review of the crash reports indicate that a contributing factor for these crashes is vehicles attempting to negotiate the weaving sections and ramp terminals for the deficient ramps entering and exiting I-57 and I-74. Fixed object crashes are occurring when vehicles either speed up too fast to enter the mainline, losing control and going off the roadway, or fail to slow down enough to stay on the pavement around the ramp curves, going off the roadway. Deficient shoulders along the interstates also contribute to fixed object crashes, since there is less recovery area for vehicles that begin to go off the roadway. Sideswipe crashes are occurring when vehicles are forced to enter the mainline lanes in a short distance and are unable to find an appropriate gap in traffic to pull out into the mainline lanes.

Five percent segments have been identified along I-74 within the study limits. Two segments have been identified in yearly reports by the IDOT Bureau of Safety Engineering and represent the top 5% of roadway segments within the State with the highest potential for safety improvements.

The 2011 5% Segment along I-74 begins west of I-57 and extends 2,000 feet to the east through the loop ramp weaving areas and I-57 outer ramp terminals (Exhibit 9). A total of 72 crashes occurred between 2008 and 2012 within this 5% Segment, resulting in 15 injury crashes, including one fatality, 4 Type-A crashes, 9 Type-B crashes, and one Type-C crash. Review of the crash reports indicate that the deficient ramp design speeds and deficient weave distances discussed in Section 2.A contribute to these crashes and improvement to these features is needed.

The 2012 5% Segment along I-74 begins 3,000 feet west of Prospect Avenue and continues east through the Prospect Avenue ramp terminals to the Prospect Avenue cross roadway structure (Exhibit 9). A total of 37 crashes occurred between 2008 and 2012 within this 5% Segment, resulting in 14 injury crashes, including 8 Type-A crashes, 5 Type-B crashes, and one Type-C crash. Reviews of the crash reports indicate that limited capacity of the interstate along this segment contributes to these crashes, so additional lanes are needed to provide additional capacity.

4. Interchange Ramps

A total of 72 crashes occurred between 2008 and 2012 along the interchange ramps within the study limits. These crashes resulted in 12 injury crashes, including 3 Type A-Injury crashes, 6 Type B-Injury crashes, and 3 Type C-Injury crashes; 60 crashes resulted in PDO. Exhibits 7 and 8 show diagrams of the crashes along the interchange ramps and illustrate the concentration of crashes along the deficient low speed ramp curves. See Table 8 below for a summary of crashes along the ramps:

Crash Type	Total	Frequency	Total Injury Crashes	Injury Type				
				Fatal	A-Injury	B-Injury	C-Injury	PDO
Angle	1	1%						1
Fixed Object	55	77%	6		1	3	2	49
Other Non-Collision	2	3%						2
Overtuned	11	15%	6		2	3	1	5
Parked Motor Vehicle	1	1%						1
Sideswipe Same Direction	2	3%						2
Subtotal	72	100%	12	0	3	6	3	60

5. Interchange Ramp Summary

The predominant crash types for the interchange ramps are fixed object (76%) and overturned (15%), which both occur when vehicles leave the ramp pavement. These crash types account for 66 of the 72 total crashes for the interchange ramps. Review of the crash reports for the interchange ramps indicates that the primary cause for these crashes is excessive speed for the ramp curves and configuration. Motorists are unable to slow their vehicles to negotiate the deficient ramp curves as explained in Section 2.A. The vehicles go off the pavement and either strike fixed objects or overturn. The interchange ramps need to be improved to reduce the number of crashes that are occurring due to the deficient ramp curves and design speeds. A high friction surface treatment was placed on the interchange ramps in 2014 in an attempt to reduce the crash frequency.

C. Capacity Deficiencies

The design year for this project is 2040. Traffic volumes on all roadways within the study limits are expected to increase over time. Table 9 illustrates the forecasted increase in traffic volumes (provided by IDOT) for the design year of 2040:

Table 9: Average Daily Traffic (ADT)			
	2013 ADT	2040 ADT	% Increase
Interstate 57			
South of I-74	32,400	49,900	54%
North of I-74	22,200	33,400	50%
Interstate 74			
West of I-57	32,900	41,800	27%
East of I-57	38,900	59,900	54%
Interchange ramps			
I-57 NB to I-74 EB	5,600	8,800	57%
I-74 EB to I-57 SB	2,800	4,550	62%
I-57 SB to I-74 EB	2,100	2,650	26%
I-74 EB to I-57 NB	500	1,000	100%
I-74 WB to I-57 SB	5,700	9,900	74%
I-57 NB to I-74 WB	3,300	4,950	50%
I-74 WB to I-57 NB	2,100	2,650	26%
I- 57 SB to I-74 WB	650	1,200	85%

The operation of the existing I-57 and I-74 interchange has been evaluated for the increased traffic in the 2040 future conditions and several other criteria including Level of Service, speed differential, and ramp capacity.

Level of Service is a measure of the quality of traffic flow for a specific section of roadway. Level of Service characterizes the operating conditions of a roadway, which include speed, travel time, and freedom to maneuver. Levels of Service values can range from LOS A, which is the least congested or free flow, to LOS F, which is the most congested or breakdown of flow. According

to The Bureau of Design and Environment Manual, Figure 44-5.A, acceptable Levels of Service for I-57 and I-74 are LOS C or better.

The Highway Capacity Manual (HCM) was used to determine the 2013 and 2040 Levels of Service for the existing I-57 and I-74 cloverleaf interchange (see Table 10). These Levels of Service represent the existing geometric characteristics or “no-build” scenario and do not account for adding lanes to the freeways or reconfiguring the interchange ramps. For the design year of 2040, I-74 will have a Levels of Service D eastbound on both sides of I-57 and westbound on the east side of I-57. These Levels of Service do not meet the minimum design criteria of LOS C, so they are deficient. Improvement is needed to provide additional capacity.

Table 10: Levels of Service - Existing Cloverleaf Interchange (HCM)				
	2013		2040	
	AM	PM	AM	PM
Northbound Interstate 57				
South of I-74	B	B	B	B
North of I-74	A	B	A	B
Southbound Interstate 57				
South of I-74	B	B	B	C
North of I-74	B	B	B	B
Eastbound Interstate 74				
West of I-57	C	B	D	B
East of I-57	C	B	D	C
Westbound Interstate 74				
West of I-57	B	B	B	C
East of I-57	B	C	C	D

The loop ramps for the existing cloverleaf interchange have limited traffic capacity of approximately 800 vehicles per hour due to the low design speed of the ramp curves. The 2040 projected traffic volume for Ramp E (westbound I-74 to southbound I-57) is 1025 vehicles per hour, exceeding this capacity value of 800 vehicles per hour by more than 25%. If the traffic demand for a ramp exceeds the capacity, traffic will back up onto the interstate. Improvements are needed to prevent traffic from backing up onto the interstate.

D. Summary

The need for the proposed interchange improvements include:

1. Increased ramp design speeds to reduce crashes
2. Elimination of the mainline weaves to reduce crashes
3. Reduced access points along the interstates to reduce the number of conflict points
4. Increased mainline shoulder widths to reduce the number of vehicles running off the pavement
5. Increased median width on I-74 to allow more recovery area for vehicles that runoff pavement before going into opposing lanes of traffic
6. Increased capacity on I-74 to improve travel efficiency

SECTION II: AFFECTED ENVIRONMENT TABLE

(See BDE Chapter 26)

Environmental Resources/Conditions	Resource/Condition Present?		
	Yes	No	Present But Not Affected
<u>I. Social/Economic</u>			
1. Community Cohesion			X
2. Environmental Justice and Title VI			X
3. Public Facilities and Services			X
4. Changes in Travel Patterns and Access		X	
5. Relocations (Business and Residential)		X	
6. Economic Impacts		X	
7. Land Use			X
8. Growth and Economic Development		X	
9. Pedestrian and Bicycle Facilities		X	
<u>II. Agricultural</u>			
1. Farms and Farmland Conversion	X		
2. Prime and Important Soils	X		
3. Severed/Landlocked Parcels		X	
4. Adverse Travel		X	
<u>III. Cultural Resources (Historic Properties)</u>			
1. Archeological Sites			X
2. Historic Bridges		X	
3. Historic Districts		X	
4. Historic Buildings		X	
<u>IV. Air Quality</u>			
1. Microscale Analysis			
a. Does project add through lanes or auxiliary turning lanes?	X		
b. Has COSIM 4.0 been used?		X	
2. Air Quality Conformity			
a. Is project in a non-attainment or maintenance area?		X	
3. Is project located in a PM 2.5 or PM 10 non-attainment or maintenance area		X	
4. Construction-Related Particulate Matter		X	
5. Mobile Source Air Toxics		X	

Environmental Resources/Conditions	Resource/Condition Present?		
	Yes	No	Present But Not Affected
V. <u>Noise</u>			
1. Is this a Type I project?	X		
a. Noise impacts	X		
b. Does abatement meet feasibility and reasonableness criteria?	X		
2. Is this a Type III project?		X	
VI. <u>Natural Resources</u>			
1. Upland Plant Communities			
a. Does the project impact wooded areas (Trees)?		X	
b. Does the project impact Prairie?		X	
c. Does the project occur within an Illinois Department of Agriculture quarantine area for an invasive species?	X		
2. Wildlife Resources			
a. Does the project area contain Wildlife Habitat?	X		
b. Does the project area contain breeding habitat for neotropical migrant species of birds?		X	
c. Does the project area contain nesting Bald Eagles?		X	
3. Threatened and Endangered Species			
a. Does habitat exist for Federally listed species in the project area?		X	
b. Did the EcoCAT response from IDNR indicate the presence of State-Listed Species in the project area?		X	

Environmental Resources/Conditions	Resource/Condition Present?		
	Yes	No	Present But Not Affected
VII. <u>Water Quality/Resources/Aquatic Habitats</u>			
1. Does the project involve a waterbody?	X		
2. Does the project affect the physical features of a stream?	X		
3. Does the project affect the fish and/or mussels within the stream?		X	
4. Does the project affect either the narrative or numeric water quality standards?		X	
5 Does the project occur within an area listed as a navigable stream, nationwide river inventory, ADID stream, or have a rating under the Biological Stream rating system?		X	
6. Is the stream listed by IEPA as impaired and is it subject to TMDLs?	X		
7. Do the project impacts require mitigation?		X	
VIII. <u>Groundwater Resources</u>			
1. Is groundwater the primary source of potable water in the area?	X		
2. Does the project occur within an area of karst topography?		X	
3. Does the project occur within a watershed that has been designated by the IEPA as vital for a particularly sensitive ecological system?		X	
4. Does the project impact a Wellhead Protection Area?	X		
5. Does the project occur within an area where potable water supply wells are present?	X		
6. Does the project contribute to degradation of the areas Groundwater Quality?		X	
7. Does the project occur within an area designated as a special resources groundwater?		X	

Environmental Resources/Conditions	Resource/Condition Present?		
	Yes	No	Present But Not Affected
IX. Floodplains			
1. Does the project occur within a 100-year floodplain?	X		
2. Does the project occur within the Regulated Floodway?		X	
3. Is a Floodplain Finding required?		X	
X. Wetlands			
1. Does the project impact Wetlands?	X		
2. Do the wetlands have an FQI of 20 or greater?		X	
3. Are the wetlands listed as an ADID Site?		X	
4. Attach the Wetland Impact Evaluation Form to the document	X		
5. Wetlands Finding		X	
XI. Special Waste			
1. Did project pass Level I screening?		X	
2. Did project pass Level II screening?		X	
3. Was a Preliminary Environmental Site Assessment (PESA) required?	X		
a. Is All Appropriate Inquiry (AAI) required?		X	
b. Were REC(s) identified in the PESA?	X		
4. Was a Preliminary Site Investigation (PSI) required?	X		
XII. Special Lands			
1. Section 4(f)			
a. DeMinimis, Programmatic, or Individual		X	
2. Section 6(f)		X	
3. Open Space Lands Acquisition and Development (OSLAD) Act Lands		X	
4. INAI Sites		X	
5. Nature Preserves		X	
6. Land & Water Reserves		X	
XIII. Indirect and Cumulative Impacts			
1. Indirect Impacts	X		
2. Cumulative Impacts	X		

Additional Information	Yes	No
XIV. <u>Environmental Commitments Permits/Certifications Required</u>		
1. Does the project require Section 404 Permit(s)?		X
a. Is an individual, nationwide, or regional permit anticipated?		X
2. Will an individual Water Quality Certification from IEPA be required?		X
3. Will a Coast Guard Bridge Permit be required?		X
XV. <u>Public Involvement</u>	X	
XVI. <u>Agency Coordination</u>	X	

SECTION III: ALTERNATIVES

[BDE Section 24-3.02(d)] *Identify preliminary alternatives, methods for screening and reasons for eliminating, alternatives to avoid certain resources, support preferred alternative selection)*

1. No Build/Do Nothing Concept

While the No-build (Do Nothing) Alternative would not require additional right-of-way (ROW) acquisition or relocations, no additional environmental impacts, and no additional cost, the project's purpose to provide safer and more efficient transportation would not be met. Also, the need for the proposed improvement to address the operational, geometric, safety, and capacity deficiencies of the existing interchange would not be met. All of these deficiencies could be mitigated by adding capacity and reconstructing the interchange to meet current design criteria. The No-build (Do Nothing) Alternative is not recommended as the Preferred Alternative because it does not correct any of these deficiencies and does not fulfill any of the needs of the project.

2. Mainline Improvements

The forecasted traffic demands for I-57 do not warrant three lanes in each direction for the design year (and well into the future 50+ years), so the proposed improvements only provide two lanes in each direction and shoulders to meet current policy. Since only two lanes will be provided in each direction, the proposed median for I-57 will match the existing, which consists of a 64' open grass median. Accommodations will be provided to allow for future widening (towards the inside) of I-57 to three lanes in each direction. The anticipated limits of improvements along I-57 for both alternatives are just south of the Norfolk Southern Railroad on the south end and Olympian Drive on the north end.

The proposed typical section for I-74 will consist of three lanes in each direction, a 60' open grass median, and shoulders to meet current policy. A concrete barrier wall is anticipated along portions of the inside shoulder to protect vehicles from the ramp flyover substructure units. A closed median with concrete barrier wall will be provided on the east end of I-74 between Mattis Avenue and Prospect Avenue. This closed median matches the median for existing I-74 through Champaign-Urbana. Anticipated limits of improvements along I-74 for both alternatives are Duncan Road on the west end of I-74 and Prospect Avenue on the east end of I-74.

3. Development of Proposed Interchange Type Concepts

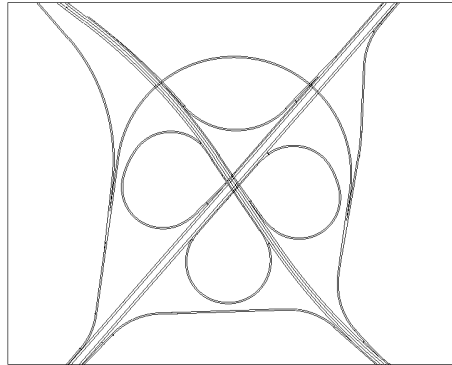
Initial coordination of the interchange type concepts included identifying the project needs and preferred components and characteristics of the proposed interchange. Items identified in the project need include increasing the ramp design speeds, eliminating the mainline weave, reducing the number of access points along the interstates, increasing the mainline shoulder widths, increasing the I-74 median width, and increasing the capacity on I-74. Selection variables also included reducing impacts to the surrounding land environmental features.

The proposed interchange type concepts include the use of flyover ramps, minor convergences, and minor divergences. The term flyover ramp is used for ramps that cross numerous roadways with long, continuous bridge structures that carry the ramp over the roadways underneath. Minor convergences are where two ramps converge to form a single ramp. Minor divergences are where a ramp splits into two separate ramps.

A meeting was conducted at the IDOT District 5 office in November 2012 to review the alternatives studied to date and identify which alternatives or their variations to consider for further studies. These initial interchange type alternatives included:

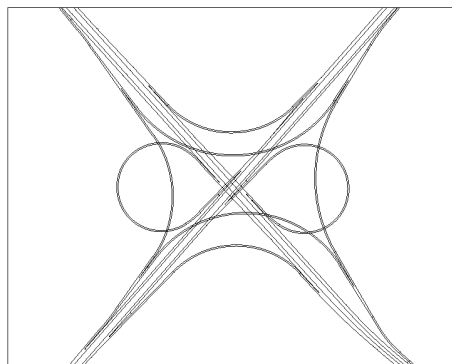
Alternative A: Semi-Directional Interchange Type with Three Loops

- Consists of four outer ramps, three loops, and one semi-directional flyover ramp.
- Four sub-alternatives were considered with loop ramp speeds varying from 30 to 45 mph.
- Includes two weaves, one along I-57 and one along I-74.
- These concepts were not selected for further studies because they did not eliminate the mainline weave and had more impacts on the adjacent properties and environmental features compared to other alternatives.



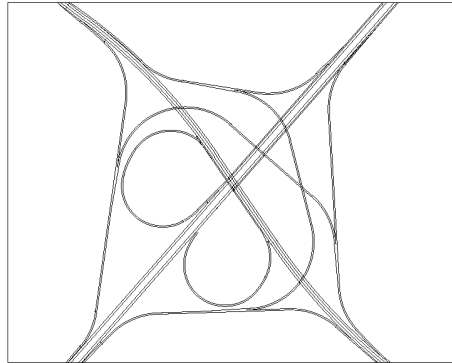
Alternative B: Semi-Directional Interchange Type with Two Diagonal Loops

- Consists of four outer ramps, two diagonal loops, and two flyover ramps (with use of both directional and semi-directional types).
- Six sub-alternatives were considered with loop ramp speeds varying from 35 to 40 mph, variable semi-directional ramp radii, use of transposed ramps, and flyover ramps crossing over loop ramps.
- Eliminates the mainline weave.
- Two of these concepts were identified to be studied further. These were selected because they eliminated the mainline weave and had less impact on the adjacent properties and environmental features compared to other alternatives.



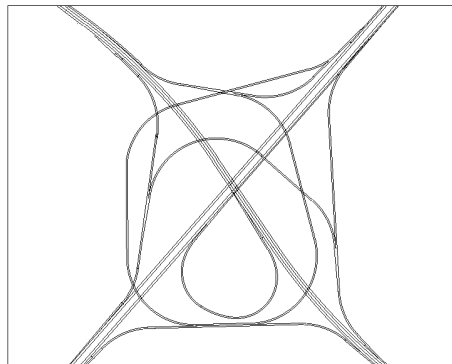
Alternative C: Semi-Directional Interchange Type with Two Adjacent Loops

- Consists of four outer ramps, two adjacent loops, and two semi-directional flyover ramps.
- Four sub-alternatives were considered with loop ramp speeds varying from 30 to 45 mph.
- Includes one weave along I-74.
- These concepts were not selected for further studies because they did not eliminate the mainline weave and had more impacts on the adjacent properties and environmental features compared to other alternatives.



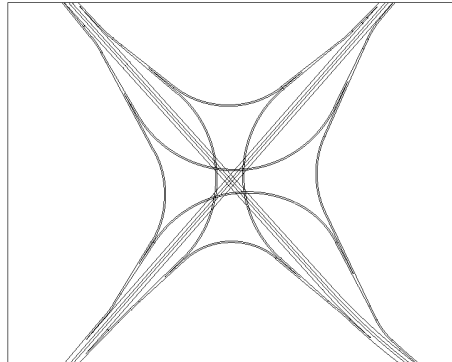
Alternative D: Semi-Directional Interchange Type with One Loop

- Consists of four outer ramps, one loop, and three semi-directional flyover ramps.
- Four sub-alternatives were considered with loop ramp speeds varying from 30 to 45 mph.
- Eliminates the mainline weave.
- These concepts were not selected for further studies because they had more impacts on the adjacent properties and environmental features compared to other alternatives.



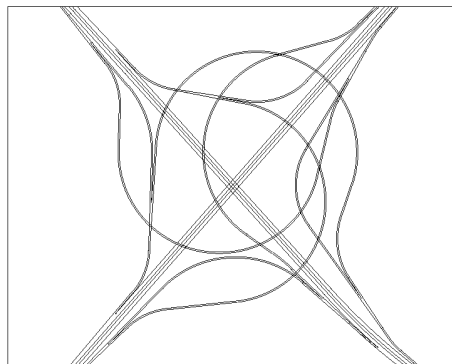
Alternative E: Full Directional Interchange Type

- Consists of four outer ramps and four directional flyover ramps.
- Three sub-alternatives were considered with varying flyover ramp geometry.
- Eliminates the mainline weave.
- Two of these concepts were identified to be studied further. These concepts were selected because they eliminated the mainline weave and all loop ramps and had less impact on the adjacent properties and environmental features compared to other alternatives.



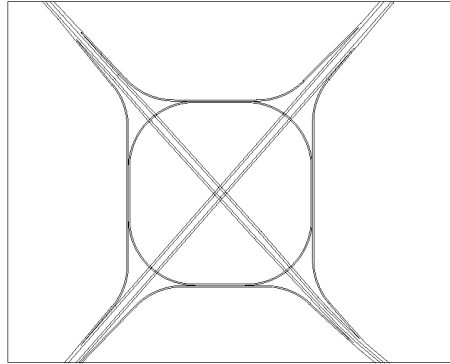
Alternative F: Semi-Directional Interchange Type with No Loops

- Consists of four outer ramps and four semi-directional flyover ramps.
- Two sub-alternatives were considered with varying flyover ramp geometry.
- Eliminates the mainline weave.
- One of these concepts was identified to be studied further. This concept was selected because it eliminated the mainline weave.



Alternative G: Circle Interchange

- Consists of an outer ring from which all ramp traffic merges and diverges to reach their desired direction of travel.
- Eliminates the mainline weave.
- This concept was not selected for further studies because of the curves and weaving movements on the ramps.



The addition of through lanes along the interstates for the existing cloverleaf interchange configuration was considered, but due to the numerous deficiencies of the interchange ramps detailed in this study, it was not further considered because it does not address the project Purpose and Need. A proposed full cloverleaf type interchange (either with collector-distributor roadways or expanded loop ramps and weaving sections) was also discussed as an alternative for the replacement of the existing full cloverleaf interchange. However, even with collector distributor roadways or the addition of a third lane along the interstate, this interchange type concept still has four weaves to navigate between interstates and was therefore not further considered as a desirable alternative. The expanded full cloverleaf also has substantially more environmental and right-of-way impacts than the other alternatives due to the large loop ramps to accommodate higher design speeds in each quadrant.

4. Interchange Type Alternatives Selected for Further Study

After review of the seven interchange type concepts described in the previous section, five interchange type alternatives were selected for further studies and investigation in the Interchange Type Study (available upon request). Each interchange type alternative meets or exceeds current design criteria and no deficiencies or design exceptions are anticipated.

Alternative 1: Full Directional

This full directional interchange type alternative does not include any inner loop ramps and eliminates the mainline weaving movements within the interchange. The proposed design consists of eight access points off of the interstates, which is half of the access points for the existing cloverleaf interchange. The use of minor convergences and divergences along the ramps reduces the number of entrance and exit terminals from four in each direction of travel to two. All ramps in the full directional interchange type alternative are designed for a 50 mph design speed. This alternative consists of compact ramp flyovers centered around the intersection of I-57 and I-74.

Alternative 2: Semi-Directional with Directional Flyovers and Two Loops

This interchange type alternative is a semi-directional interchange with directional flyovers and two loops. The loop ramps are placed in diagonal quadrants in order to eliminate any mainline weaving movements within the interchange. The proposed design consists of twelve access points off of the interstates, compared to sixteen for the existing cloverleaf interchange. The use of minor convergences and divergences in the northeast and southwest quadrants reduces the number of entrance and exit terminals from four in each direction for the existing cloverleaf to three for the proposed alternative. Loop ramps are designed for a 40 mph design speed, while all other ramps are designed for a 50 mph design speed.

Alternative 3: Semi-Directional with Semi-Directional Flyovers and Two Loops

The third interchange type alternative is a semi-directional interchange with semi-directional flyovers and two loops. Similar to Alternative 2, the loop ramps are placed in diagonal quadrants to eliminate any mainline weaving movements within the interchange. The proposed design consists of twelve access points off of the interstates, compared to sixteen for the existing cloverleaf interchange. The use of minor convergences and divergences in the northeast and southwest quadrants reduces the number of entrance and exit terminals from four in each direction for the existing cloverleaf to three for the proposed alternative. Loop ramps are designed for a 40 mph design speed, while all other ramps are designed for a 50 mph design speed.

Alternative 4: Semi-Directional with No Loops

Similar to Alternative 1, the proposed semi-directional interchange type alternative with no loops does not include any inner loop ramps and eliminates the mainline weaving movements within the interchange. The proposed design consists of eight access points off of the interstates, which is half of the access points for the existing cloverleaf interchange. The use of minor convergences and divergences along the ramps reduces the number of entrance and exit terminals from four in each direction of travel to two. All ramps in the semi-directional interchange type alternative are designed for a 50 mph design speed.

Alternative 5: Full Directional with Two Convex Ramps

The proposed full directional interchange type alternative does not include any inner loop ramps and eliminates the mainline weaving movements within the interchange. The proposed design consists of eight access points off of the interstates, which is half of the access points for the existing cloverleaf interchange. The use of minor convergences and divergences along the ramps reduces the number of entrance and exit terminals from four in each direction of travel to two. All ramps in the full directional interchange type alternative are designed for a 50 mph design speed. This alternative consists of ramp flyovers that cross over each other and are spread further out over the center of the I-57 and I-74 intersection than Alternative 1.

5. Evaluation of Interchange Type Alternatives

Evaluation of these five interchange type alternatives is based on the following primary objectives:

- Accommodation of future peak hour traffic volume
- Efficiency of the Interchange (Ramp Travel Times)
- Safety of vehicles entering and exiting the interstates
- Impacts to environmental resources
- Construction cost
- Design exceptions
- Public input

Based on the objectives above Alternatives 1 and 2 (see Exhibits 10 and 11) provide the best solution to achieve the project purpose and need while minimizing the environmental impacts.

6. Alternative 1 and 2 Evaluation

After the five interchange type alternatives were evaluated in the Interchange Type Study, IDOT BDE Procedure Memorandum 14-02 was issued (on February 21, 2014), which changed the mainline interstate design speed from 70 mph to 75 mph and ramp design speeds from 50 mph to 55 mph (with the exception of the loop ramps, which may remain at 40 mph). Alternatives 1 and 2 were revised and evaluated based on the primary objectives described in the previous section. A final comparison of the potential environmental impacts, ROW acquisition, and cost for Alternatives 1 and 2 is provided below to assist in determining the preferred concept:

Table 11: Alternative 1 and 2 Evaluation

	Feature	Alternative 1	Alternative 2
Potential Environmental Impacts	Wetlands # (acres)	6 (3.52)	6 (3.52)
	Detention Ponds # (acres)	1 (1.47)	1 (1.47)
	Streams – Copper Slough (ft)	2,520	1,500
	Floodplains	Yes	Yes
	T&E Species/Habitat/Natural Areas	None	None
	Special Waste Sites (RECs)	5	5
	Potential Archaeological Resources	1	0
	Impacts to Existing Developments	2	1
ROW	Estimated ROW Acquisition	63	46
Cost	Estimated Construction Cost	\$164,702,000	\$134,926,500

Both Alternatives 1 and 2 impact a temporary aggregate parking/storage site that has been constructed on the east side of the existing Midwest Underground Technology, Inc. (MUTI) building in the southwest quadrant of the interchange. Alternative 1 would impact a potential archaeological site and a portion of the office building parking lot in the southeast quadrant. Alternative 1 requires 17 more acres of ROW acquisition than Alternative 2 (63 vs. 46,

respectively) and the construction cost of Alternative 1 is estimated to be \$29,775,500 more than Alternative 2 (\$164,702,000 vs. \$134,926,500, respectively). Based on this comparison and evaluation of the objectives presented herein, Alternative 1 has been eliminated from further consideration.

7. Recommended Alternative

The recommended I-57 and I-74 interchange alternative is Alternative 2, the semi-directional interchange type with two directional ramps and two loops. As summarized in Table 11, Alternative 2 provides the least amount of potential environmental impacts, least amount of ROW acquisition, and least amount of cost to construct. Alternative 2 best satisfies the project purpose and need to address operational, geometric, safety, and capacity deficiencies while minimizing the impacts to environmental resources and surrounding land and providing a cost effective solution.

SECTION IV: IMPACTS, DOCUMENTATION AND MITIGATION

The project area was inventoried for environmental resources. The original Environmental Survey Request (ESR) Form for the project was submitted on September 18, 2012. The project limits were adjusted as the preliminary design progressed, resulting in subsequent ESR Addendums dated March 25, 2013 (Addendum A), December 19, 2013 (Addendum B) and August 8, 2014 (Addendum C). The results of the environmental surveys were reviewed and applicable agency reviews and signoffs are referenced in this Environmental Assessment.

The Preferred Alternative Exhibit (Exhibit 11) identifies all sensitive, natural, physical, and socio-economic resources, and special waste sites in the study area. Resources potentially impacted by the proposed action or that require discussion pursuant to applicable laws and regulations are addressed in this Section.

Part I. Socio-economic

1. Community Cohesion

Description

This project is located in the Hensley and Champaign City Townships in the central portion of Champaign County and in the northwest side of the City of Champaign. The nearest residential neighborhoods are located approximately one-third of a mile east of the interchange on the north and south sides of I-74.

Demographics:

Table 12 presents demographic characteristics for the City of Champaign, Champaign County, and the Project Study Area. For this analysis, the Project Study Area is largely based on a 500 foot buffer area from the limits of the proposed roadway improvements because this is the general boundary where noise levels may have an impact on adjacent noise sensitive land uses.

Using U.S. Census Bureau Data,¹ an analysis was conducted of the census blocks and census tracts that encompass noise sensitive land uses (e.g., residential areas, schools, parks, etc.) within the 500 foot buffer area. Population, race and ethnicity, age and housing occupancy information is available at the census block level (the smallest geographical area available in the census data). Income, poverty, and median housing values only are available at the census tract level using the American Community Survey 5-Year estimates; therefore this data represents a larger geographical area than the defined study area.

¹ U.S. Census, 2010 Decennial Census and U.S. Census, American Community Survey, 2008-2012 5-Year Period Estimate.

Table 12: Demographic Data						
Characteristic	General Project Area		City of Champaign		Champaign County	
	2010 Census		2010 Census		2010 Census	
	No.	%	No.	%	No.	%
Total Population	1,119	100	81,055	100	201,081	100
Race and Ethnicity						
White	533	47.6	54,918	67.8	147,600	73.4
Asian	59	5.3	8,566	10.6	17,969	8.9
Native Hawaiian and Other Pac. Islander	6	<0.1	58	<0.1	134	<0.1
Black or African American	365	32.6	12,680	15.6	21,946	12.4
American Indian/ Native Alaskan	1	<0.1	205	0.3	549	0.3
Bi-Racial	144	12.9	2,425	3.0	5,522	2.7
Hispanic Origin:						
Hispanic Origin (of any race)	247	22.1	5,111	6.3	10,607	5.3
Age:						
Median Age	33.5	NA	25.7	NA	28.9	NA
18 Years and Older	691	61.8	67,020	84.6	162,002	82.8
65 Years and Older	99	8.8	6,154	7.6	20,066	10.0
Income *(2008-2012 American Community Survey):						
Median Household Income	\$39,743	NA	\$41,403	NA	\$45,088	NA
Per Capita Income	\$18,736	NA	\$24,855	NA	\$25,455	NA
Persons Below Poverty Line	338	30.2	21,317	26.3	44,439	22.1
Housing Characteristics						
Occupied Housing Units:	432	100	32,207	100	80,665	100
Owner-Occupied	185	42.8	14,722	45.7	43,419	53.8
Renter-Occupied	247	57.2	17,241	54.3	37,246	46.2
Median House Values*	\$105,775	NA	\$151,300	NA	\$149,000	NA

Source: U.S. Census Bureau, 2010 Decennial Census and *2008-2012 American Community Survey,

No changes in land use and no displacements or changes in access to businesses and residences are anticipated as a result of the proposed project.

The project would not adversely impact community cohesion because it will not divide any communities or change access to the properties within the project limits. No existing bicycle or pedestrian facilities are provided within the project limits, including Mattis Avenue and U.S. 150 (Bloomington Road) over the interstates. The proposed reconstruction improvements for Mattis Avenue and U.S. 150 include sidewalks and on-street bicycle lanes.

There will be some temporary community inconvenience associated with the construction, such as the use of detours, temporary utility interruptions, construction noise, and fugitive dust from construction activities.

2. Title VI and Environmental Justice

Title VI

Groups of ethnic, religious, elderly or handicapped people **are** / **are not** present within the project area. No groups or individuals have been, or will be, excluded from participation in public involvement activities, denied the benefit of the project, or subjected to discrimination in any way on the basis of race, color, age, sex, national origin or religion.

Environmental Justice

Environmental Justice addresses environmental impacts that disproportionately affect low-income and minority populations, as defined in Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Additionally, Title VI of the Civil Rights Act of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination on the basis of race, age, color, national origin, sex, disability, or religion as part of any federally-funded program.

The project area was evaluated to determine if there is a potential for disproportionate and adverse impacts to low-income or minority populations. The 2010 Census indicates that residents of the project area are 47.6% white, 32.6% black, 5.3% Asian, 12.9% Bi-racial, and less than 0.1% are American Indian/Native Alaskan or Native Hawaiian/Other Pacific Islander. The 2010 Census indicates that approximately 22% of the population in the project area is Hispanic (of any race).

The median family income for the project area is \$39,743. Approximately 30% of the residents within the project area have an income below the poverty level, and approximately 26% of the residents in the city of Champaign have an income below the poverty level. Since the poverty level in the project area is less than 10% greater than the city's poverty level, it is not considered a low-income population of concern in the context of Environmental Justice. The Health and Human Services 2014 Poverty Guidelines for a family of four is \$23,850.

The demographic analysis within the project study area focused primarily on the single- and multi-family residential neighborhoods located on the north and south sides of I-74, east of the interchange. The remaining land uses in the project study area include commercial, industrial, institutional, parkland, agricultural, and a few scattered rural residential properties. Figure 1 depicts the percentage of the population, by Census tract, in the project area that was below the poverty level based on the 2010 U.S. Census data. Figure 2 depicts the percent minority population, by Census block group, based on the 2010 U.S. Census data.

While the project study area includes minority and low income populations, impacts on these environmental justice populations are not disproportionate. The proposed improvements in proximity of the residential neighborhoods include widening I-74 to three lanes in each direction within the existing ROW. There are noise impacts within these residential areas, but these impacts are not isolated to low income or minority populations. Measures to minimize the noise impacts will be incorporated into the proposed project, including potential construction of noise barrier walls. Further information regarding the detailed noise analysis conducted for this project is included in Part V. Noise.



Figure 1: Percent Below Poverty

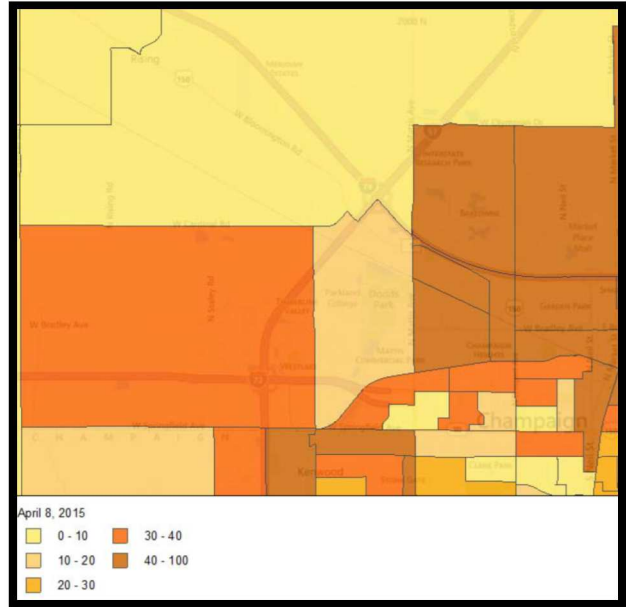


Figure 2: Percent Minority

Based on this demographic information and field observations of the project area, the project **will** / **will not** result in disproportionately adverse impacts to minority or low-income populations because (a) the project is a reconstruction of an existing transportation facility; (b) there are no residential or commercial displacements; (c) vehicular mobility and access will improve; (d) the project will generate temporary direct construction jobs; (e) there is no historical significance tied to the project area in regards to minorities; and (f) there are no anticipated impacts to visual resources.

3. Public Facilities and Services

Description

The following public facilities are located near the interchange and are identified on Exhibits 10 and 11: one elementary school, one high school, one college, one library, one fire station, one surgery center, four parks and four places of worship. Approximately 0.3 acres of open space would be acquired from the Kingdom Hall of Jehovah's Witnesses located in the southwest quadrant. All existing local roads will remain in the same location; therefore, no changes to community access to these facilities would be anticipated.

Exhibit 11 (Alternative 2) depicts the public facilities in the project area.

4. Changes in Travel Pattern and Access

Description

Construction would need to be completed while maintaining traffic at all times on I-57 and I-74. Use of temporary pavement will be minimized, although required for some temporary ramp connections and tie-ins. Short-term duration closures could be considered for completion of portions of ramp construction items in lieu of temporary pavement or detour routes.

The proposed project would not provide any new access or eliminate access to any areas. In addition, all existing roads will remain in the same location; therefore, no changes in travel patterns and access in the project area would be anticipated.

5. Relocations (Business and Residential)

Estimation and Description

No relocations are anticipated with the preferred alternative.

Construction of the preferred alternative will require approximately 46.7 acres of ROW from 15 parcels with 7 separate owners. The proposed ROW is needed for the construction of the new interchange ramps and is adjacent to the existing ROW. All property acquisition will be conducted under the provisions of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*,² as amended, and the *IDOT Land Acquisition Policies and Procedures Manual*.³

6. Economic Impacts

Description

The southeast quadrant is mostly agricultural land use with some office development. There is a two story office building located in the far northeast corner of the quadrant; however, there is no impact to this facility by the proposed project. The southwest quadrant also is primarily agricultural land use with some commercial and light industrial development. There is a church located in the southwest corner of the quadrant and two businesses located farther west along I-74. The preferred alternative would require acquisition of a portion of the storage lot for MUTI.

The areas north and south side of I-74 between Mattis Avenue and Prospect Avenue are developed with businesses. No economic impacts to these businesses, or other area businesses, are anticipated.

No businesses will be relocated. There will be no business or residential access changes as a result of the proposed project; however, as part of the approximately 46.7 acres of proposed ROW, approximately 0.66 acres of the MUTI storage lot would be acquired. MUTI has been informed of this project (see meeting notes in Section V) and is aware that a portion of the property and storage lot will be acquired. During development of the Interchange Design Study, the proposed six-lane expansion to I-74 was shifted north of the existing facility to reduce impacts and encroachment onto MUTI. During the stakeholder meeting with MUTI, their representatives indicated a preference for the alternative ultimately selected and IDOT land acquisition staff in attendance at the meeting explained the process for mitigation of potential impacts. Compensation or mitigation for the acquisition of the land and lot will be negotiated during ROW acquisition. All property acquisition will be conducted under the provisions of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*,² as amended, and the *IDOT Land Acquisition Policies and Procedures Manual*.³

A new and improved interchange is anticipated to have a positive impact on business in general, in terms of increased transportation efficiency. The proposed improvements will provide

² 91st Congress, S. 1, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, January 2, 1971.

³ IDOT - Bureau of Land Acquisition, Land Acquisition Policies and Procedures Manual, October 2013. <http://www.dot.il.gov/landacq/lamanual/land%20acquisition%20manual.pdf>

congestion relief and reduce travel times through the interchange. Improved travel efficiency may encourage new construction and redevelopment of land uses and buildings. In turn, this may attract new land uses, commercial developments and employment opportunities.

7. Land Use

Description

The northeast quadrant of the I-57 and I-74 interchange is primarily agricultural land use. Copper Slough passes through the center of the quadrant and there is a detention pond in the far southeast corner of the quadrant. The southeast quadrant is mostly agricultural land use with some office development. Clearlake Boulevard provides access to the quadrant from Bloomington Road. There is a two story office building located in the far northeast corner of the quadrant. The southwest quadrant also is primarily agricultural land use with some commercial and light industrial development. Midwest Court provides access to the quadrant from Bloomington Road. There also is a church located in the southwest corner of the quadrant and a detention pond between Midwest Court and the interchange ramp. The northwest quadrant is mainly agricultural land use with a roadway for future potential development. There is a detention pond carrying Copper Slough through the center of the quadrant and there is a multi-use path surrounding the detention pond.

The City of Champaign's Future Land Use Map indicates all four interchange quadrants have the potential for development as employment centers.

The preferred alternative would be consistent with local/regional land use plans. It is not anticipated that any appreciable land use changes in the project area would be experienced as the proposed project is primarily a replacement project.

8. Growth and Economic Development

Description

Three of the four interchange quadrants show potential for economic growth with existing developments. As depicted on the City of Champaign's Future Land Use Map, all four interchange quadrants have the potential for development as employment centers.

No specific growth is expected as a result of the proposed project, but the preferred alternative could enhance the area's economic stability by providing safer and more efficient transportation at the I-57 and I-74 interchange and increasing the traffic capacity of the roadways.

9. Pedestrian and Bicycle Facilities

- Project will cause disruption or permanent changes in pedestrian or bicycle access
- Project will not cause disruption or permanent changes in pedestrian or bicycle access

Description

No existing bicycle or pedestrian facilities are provided along the existing Mattis Avenue or U.S. 150 (Bloomington Road) corridors near the grade separations over the interstates. The proposed reconstruction improvements for the roadways and bridges at these locations will include sidewalks and on-street bicycle lanes.

There is an existing multi-use path surrounding the detention pond located in the northwest quadrant of the interchange; however, no impacts are anticipated to the path or the detention pond as no land acquisition is proposed in this area.

Part II. Agricultural

1. Farms and Farmland Conversion

Identify total amount of farmland

Approximately 46.7 acres of ROW are proposed for acquisition. Of the total acquisition, approximately 38.1 acres are currently farmed. Nearly all of the 38.1 acres are currently owned by a commercial development company, with the remaining land area platted as a corporate park center.

2. Prime and Important Soils

The project did not meet any of the six criteria, listed in the IDOT, Bureau of Design and Environment Manual for exemption from coordination with the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). Additionally, the project did not meet any of the three criteria, listed in the IDOT, Bureau of Design and Environment Manual for exemption from coordination with the Illinois Department of Agriculture (IDOA). Accordingly, the proposed project description and the Form AD-1006, which is the primary means of coordination with NRCS and IDOA, were submitted to the NRCS and IDOA for their review and comments.

The proposed project will result in the conversion of approximately 44.3 acres of Prime farmland soils to a non-agricultural use. As indicated on the completed Form AD-1006 (in Exhibit 16), the project received a total of 205 points. Sites or alternatives receiving total scores of 175 or fewer points require only minimal consideration for protection from conversion, and no additional sites/alternatives need be evaluated. Those alternatives receiving 176 to 225 points are in the moderate range for protection. In most cases, alternatives exceeding the 225 point level should be retained for agricultural use, and an alternative site should be utilized for the intended project.

IDOA stated that “[b]ecause the interchange improvements are adjacent to existing Interstate right-of-way and the agricultural impacts have been mitigated to the greatest extent possible, the IDOA has determined that the project complies with IDOT's Agricultural Land Preservation Policy and Illinois' Farmland Preservation Act.” A copy of the completed Form AD-1006 and IDOA November 10, 2014 signoff letter is available upon request.

According to IDOA's *Agricultural Areas Annual Report 2013* there are no protected agricultural lands in Champaign County.

Erodible soils are defined as soils with greater than 4 percent slope. They are very common in hilly areas and areas surrounding streams. Based on NRCS soil survey maps, erodible soils compose 0.1% of the soils in the existing and proposed highway Right-of-Way within the project limits. All erodible soils within the project corridor are classified Wyonet silt loam, 5 to 10 percent slopes, eroded. Refer to Exhibit 12 for the locations and limits of impacted farmlands and soil types

Erosion Control Blankets made of sod, straw mats, or synthetic materials will be placed over areas containing soils susceptible to erosion during construction as a temporary erosion control method.

Seeding will be completed in these areas after construction to promote vegetation growth to prevent future erosion.

A Stormwater Pollution Prevention Plan is required and will be developed during the Phase II design stage of the project.

3. Severed/Landlocked Parcels

Identify

The preferred alternative will not create any uneconomic remnants of farmland that are too small to be economically tilled, nor will it land lock or sever any existing crop fields.

4. Adverse Travel

Describe how project may impact farm equipment travel

As the proposed project mainly entails replacing the existing interchange with a new interchange in the same location, no change in farm equipment travel would occur.

Part III. Cultural Resources

No Historic Properties Affected - See letter from SHPO

Historic Properties Affected - See below

1. Archeological Properties

Project will not affect Archeological Properties

Project will affect Archeological Properties

Impacts

Preliminary project investigations conducted by Illinois State Archaeological Survey (ISAS) personnel identified an ancient American Indian archaeological habitation site as requiring test excavations to evaluate its National Register eligibility (IDOT Memo dated February 20, 2014); however, access to the site has been denied by the landowner. Therefore, test excavations by ISAS must be undertaken when IDOT has control of the site area that could be potentially impacted by the project. It is anticipated that the preferred Alternative 2 could avoid the archaeological site.

A Memorandum of Agreement (MOA) has been developed and ratified (IDOT Memo dated July 09, 2014) with the following stipulations (if the site would be impacted by the preferred alternative): (1) archaeological test excavations must be conducted before construction, and (2) if National Register eligible cultural resources are identified, data-recovery excavations (mitigation) must be completed prior to any construction activities in the vicinity of the site. If the resource is determined eligible for the NRHP, and adverse impacts by the project cannot be avoided, IDOT, in coordination with the SHPO, will ensure that data-recovery excavations (mitigation) are completed.

Mitigation

While it is anticipated that the archaeological site could be avoided, if it is determined during the design phase that the site cannot be avoided, the stipulations in the above referenced MOA will

be undertaken to mitigate any adverse effects. IDOT will ensure that data-recovery excavations are completed by the ISAS in accordance with the attached data-recovery plan (included in the MOA), which is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation, and the Advisory Council on Historic Preservation's Treatment of Archaeological Properties: A Handbook. IDOT will ensure that no construction activities will be undertaken in the vicinity of the site prior to the conclusion of data-recovery excavations.

2. Historic Bridges

Project will not affect a bridge listed in the Illinois Historic Bridge Survey

Project will affect a bridge listed in the Illinois Historic Bridge Survey

Documentation

According to IDOT's Historic Bridges of Illinois list (http://www.isas.illinois.edu/transportation_research/idot_historic_bridges/counties/champaign.html), accessed on October 29, 2014, no historic bridges are located in the proposed project area. As such, coordination for compliance with Section 106 on historic bridges is not required.

3. Historic District

Project will not affect a Historic District

Project will affect a Historic District

Impacts

According to the Illinois Historic Preservation Agency's Historic Architecture and Archaeological Geographic Information System (HAARGIS) (<http://gis.hpa.state.il.us/hargis/>), accessed on October 29, 2014, no historic districts are located in the proposed project area.

Proposed Mitigation

No mitigation required.

4. Historic Buildings

Project will not affect any Historic Buildings

Project will affect Historic Buildings

Impacts

According to the Illinois Historic Preservation Agency's Historic Architecture and Archaeological Geographic Information System (HAARGIS) (<http://gis.hpa.state.il.us/hargis/>), accessed on October 29, 2014, no historic buildings are located in the proposed project area. Additionally, IDOT determined that "No Historic Properties Affected" in a memo dated January 13, 2014.

Mitigation

No mitigation required.

Part IV. Air Quality

1. CO Microscale Analysis

Project Type:

- Project does not add Through Lanes or Auxillary Turning Lanes
- Project does not involve any sensitive receptors and is not suitable for using COSIM 4.0
- Project is subject to COSIM Pre-screen
- Project is subject COSIM screening analysis

NEPA compliance language

The proposed project has no “sensitive” receptors within 1,000 ft. of an intersection with added through lanes and it does not fit the assumptions for use of the COSIM model as the proposed project does not include changes to an intersection.

2. Air Quality Conformity

Project Type:

- Project is outside of Nonattainment or Maintenance Area
- Exempt Project in Nonattainment or Maintenance Area
- Project is within a portion of a Nonattainment or Maintenance Area where CMAP is the MPO
- Project is within a Nonattainment or Maintenance area served by an MPO other than CMAP
- Project is within a Nonattainment or Maintenance area not served by an MPO
- Regionally Significant Non-Federal project within a Nonattainment or Maintenance Area.

NEPA Compliance Language

No portion of the proposed project is within a designated nonattainment or maintenance area for any of the air pollutants for which the USEPA has established standards. Accordingly, a conformity determination under 40 CFR Part 93 (“Determining Conformity of Federal Actions to State or Federal Implementation Plans”) is not required.

3. PM2.5 and PM10 Nonattainment and Maintenance Areas

Project-Type

- Exempt Project
- Nonexempt project that is not an Air Quality Concern
- Nonexempt project that is an Air Quality Concern

NEPA Compliance Language/PM Analysis Summary

No portion of the proposed project is within a designated nonattainment or maintenance area for particulate matter for which the USEPA has established standards. Accordingly, a conformity determination under 40 CFR Part 93 (“Determining Conformity of Federal Actions to State or Federal Implementation Plans”) is not required.

4. Construction Related Particulate-Matter

Demolition and construction activities can result in short-term increases in fugitive dust and equipment-related particulate emissions in and around the project area. (Equipment-related particulate emissions can be minimized if the equipment is well maintained.) The potential air quality impacts will be short-term, occurring only while demolition and construction work is in progress and local conditions are appropriate.

The potential for fugitive dust emissions typically is associated with building demolition, ground clearing, site preparation, grading, stockpiling of materials, on-site movement of equipment, and transportation of materials. The potential is greatest during dry periods, periods of intense construction activity, and during high wind conditions.

IDOT’s Standard Specifications for Road and Bridge Construction include provisions on dust control. Under these provisions, dust and airborne dirt generated by construction activities will be controlled through dust control procedures or a specific dust control plan, when warranted. The contractor and the Department will meet to review the nature and extent of dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby publicly-traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any significant, short-term particulate matter air quality impacts.

5. Mobile Source Air Toxics (MSAT)

Project-Type

- Project is exempt
- Project has no meaningful potential MSAT effects
- Project has low meaning potential MSAT effects and is one of the following types below:
 - A minor widening project
 - A new interchange connecting an existing roadway with a new roadway
 - A new interchange connecting new roadways
 - Minor improvements or expansions to intermodal centers or other projects that affect truck traffic
- Project has high potential MSAT effects

NEPA Compliance Language

This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic (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 non-build alternative.

Moreover, USEPA regulations for vehicle engines and fuels will cause overall MSATs emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with USEPA'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 travels 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.

Part V. Noise

Type I Project

Type III Project

The proposed I-57 and I-74 interchange improvement project is classified as a Type I project, as it includes the addition of through traffic lanes and the relocation of interchange lanes or ramps. Therefore, a traffic noise analysis is required as part of this project. The purpose of the analysis is to evaluate potential noise impacts from the proposed roadway improvements and to consider abatement measures where impacts are identified. Following is a summary of the noise analysis. A copy of the complete Traffic Noise Analysis report is available upon request.

The FHWA regulations (23 CFR 772) establish Noise Abatement Criteria (NAC) activity categories based on land use to assess potential traffic noise impacts. The FHWA NAC and description of activity categories are shown in Table 13.

Table 13: FHWA Noise Abatement Criteria Hourly “A-Weighted” Sound Level – Decibels (dB(A))		
Activity Category	Noise Abatement Criteria dB(A)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B¹	67 (Exterior)	Residential.
C¹	67 (Exterior)	Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio stations, recording studios, schools, and television studios.
E¹	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D.
F	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	Undeveloped lands that are not permitted.

¹Includes undeveloped lands permitted for this activity category.
Source: FHWA, 23 CFR, Part 772

Highway Noise Policy

According to the Code of Federal Regulations (23 CFR 772), traffic noise impacts occur when predicted noise levels approach (defined in Illinois as within 1 dB(A) of), meet or exceed the FHWA Noise Abatement Criteria (NAC) or when predicted noise levels substantially exceed (defined in Illinois as greater than 14 dB(A)) existing noise levels. The NAC are noise impact thresholds that, if approached, met or exceeded, require the consideration of noise abatement.

Description of Noise Receptors

IDOT defines a receptor as a discrete or representative location of a common noise environment (CNE) for any of the activities listed in Table 13. Primary consideration should be given to exterior areas where frequent human use occurs for activity categories A, B, C, and E. Consideration should be given to activity category D land uses only if no exterior uses are identified.

Sensitive noise receptors with similar characteristics such as land use, topography, and roadway geometrics can be grouped into CNEs. One receptor within the CNE can be considered representative of the area as a whole. Typical CNE groupings include residential subdivisions, commercial areas, recreational lands, churches, and schools. Land uses within 500 feet of the edges of the project area were reviewed. A total of 14 CNEs (labeled 1 through 14 in Table 14), and 14 receptors, were chosen to represent the study area.

Table 14: Noise Receptor Descriptions				
CNE ID	Representative Receptor Description	Activity Category	IDOT Approach Criterion dB(A)	No. of Receptors in CNE
1	SFR – Backyard	B	66	3
2	SFR – Backyard	B	66	12
3	SFR – Backyard	B	66	16
4	MFR ¹ – Balcony	B	66	14
5	Church – Outside gathering area in front of church	B	66	1
6	MFR ² – Balcony	B	66	48
7	MFR ³ – Common green space	B	66	82
8	SFR – Backyard	B	66	9
9	Park – Playground, picnic area, baseball field, and soccer field	C	66	4
10	Church – Playground on east side of building	C	66	1
11	SFR – Backyard	B	66	10
12	SFR – Backyard	B	66	64
13	SFR – Backyard	B	66	19
14	Church – Patio in back of building	B	66	1

SFR=Single Family Residence; MFR= Multi-Family Residence

¹ Two 4-unit apartments and one 6-unit apartment.

² Six 8-unit apartments.

³ Two 8-unit apartments, four 16-unit apartments, and two common areas.

Impacts

Table 15 summarizes the modeled noise levels for the Existing, No-Build, and Build scenarios. Existing scenario traffic noise levels range from 59 dB(A) at CNE 14 to 75 dB(A) at CNEs 10 and 12. No-Build scenario traffic noise levels range from 61 dB(A) at CNE 14 to 76 dB(A) at CNEs 4, 5, 6, 7, 10, and 12.

The Build scenario traffic noise levels range from 59 dB(A) at CNE 14 to 77 dB(A) at CNE 12. CNEs 1 through 13 (representing 133 single family residential receptors, 144 multi-family residential receptors, a park with 4 receptors, and two churches) approach or exceed the NAC, and are therefore considered impacted under this scenario. None of the receptors will experience a substantial increase of 14 dB(A) or greater.

CNE ID	Description of Receptor	IDOT Approach Criterion dB(A)	No. of Receptors Represented	Existing		No-Build Alternative	Build Alternative			Impact (Yes/No) ²
				Dist. To I-74 Nearest Edge of Pavement (ft)	Noise Level dB(A)	Noise Level dB(A)	Dist. To I-74 Nearest Edge of Pavement (ft)	Noise Level dB(A)	Increase Over Existing dB(A) ¹	
1	SFR	66	3	260	67	69	236	73	6	Yes
2	SFR	66	12	247	71	72	233	73	3	Yes
3	SFR	66	16	365	68	69	365	70	2	Yes
4	MFR	66	14	178	74	76	170	76	2	Yes
5	Church	66	1	185	74	76	185	76	2	Yes
6	MFR	66	48	181	74	76	181	76	2	Yes
7	MFR	66	82	185	74	76	178	76	2	Yes
8	SFR	66	9	206	73	75	199	76	2	Yes
9	Park	66	4	509	64	66	501	66	2	Yes
10	Church	66	1	168	75	76	160	77	2	Yes
11	SFR	66	10	403	67	69	395	70	3	Yes
12	SFR	66	64	168	75	76	160	77	2	Yes
13	SFR	66	19	430	69	71	419	71	2	Yes
14	Church	66	1	733	59	61	314 ³	59	0	No

¹ Calculated noise levels have been rounded to the nearest whole numbers. The values in the "Increase Over Existing dB(A)" column were computed based on the calculated raw noise levels and then rounded to the nearest whole number. Therefore, some values in this column may not appear add correctly.

² Noise Level under Build Alternative meets or exceeds approach criterion of 66 dB(A).

³ Distance to I-57 SB/I-74 EB interchange ramp nearest edge of pavement.

SFR=Single Family Residential, MFR=Multi-Family Residential

Abatement Evaluation for Feasibility and Reasonableness

Feasibility

Feasibility generally addresses the engineering aspects of implementing a noise barrier such as consideration for safety, drainage, and utilities. If these factors cannot be accommodated in providing the minimum noise reduction, noise abatement will be deemed not feasible. In order to be considered acoustically feasible, a noise abatement measure also must achieve the traffic noise reduction feasibility criterion of at least 5 dB(A) for at least one impacted receptor.

Reasonableness

The following three reasonableness evaluation criteria must be met in order for noise abatement to be considered reasonable:

- 1) Noise Reduction Design Goal – Noise abatement measures must achieve at least an 8 dB(A) traffic noise reduction for at least one benefited receptor. In order to be considered benefited, a receptor must have a noise reduction of at least 5 dB(A). Both impacted and non-impacted receptors can be considered benefited.
- 2) Economic Reasonability – The overall cost of the noise barrier must not exceed the allowable cost per benefited receptor comparison. The base value for the allowable noise abatement cost is \$24,000 per benefitted receptor.

Other reasonableness factors may be considered to potentially adjust the allowable noise abatement base value cost of \$24,000 per benefited receptor (Table 16). These factors include:

- The absolute noise level of the benefited receptors in the design year build scenario before noise abatement,
- The incremental increase in noise level between the existing noise level at the benefited receptor and the predicted build noise level before noise abatement, and
- The date of development compared to the construction date of the highway.

Consideration of the three reasonableness adjustment factors result in a potential maximum allowable noise abatement cost of \$26,000 per benefited receptor. This determination is based upon an adjustment factor of \$2,000 added to the base value cost per benefited receptor because some of the receptor locations have predicted noise levels between 75 and 79 dB(A) before noise abatement. If the estimated build cost of noise abatement per benefited receptor is less than the adjusted allowable noise abatement cost per benefited receptor, then the noise abatement measure achieves the cost-effective reasonableness criterion.

Table 16: Factors for Adjusting the Allowable Noise Abatement Cost per Benefited Receptor Base Value of \$24,000	
Absolute Noise Level Consideration	
Predicted Build Noise Level Before Noise Abatement	Dollars Added to Base Value Cost per Benefited Receptor
Less than 70 dB(A)	\$0
70 to 74 dB(A)	\$1,000
75 to 79 dB(A)	\$2,000
80 dB(A) or greater	\$4,000
Increase in Noise Level Consideration	
Incremental Increase in Noise Level Between the Existing Noise Level and the Predicted Build Noise Level Before Noise Abatement	Dollars Added to Base Value Cost per Benefited Receptor
Less than 5 dB(A)	\$0
5 to 9 dB(A)	\$1,000
10 to 14 dB(A)	\$2,000
15 dB(A) or greater	\$4,000
New Alignment / Construction Date Consideration	
Project is on New Alignment OR the Receptor Existed Prior to the Original Construction of the Highway	Dollars Added to Base Value Cost per Benefited Receptor
No for both	\$0
Yes for either	\$5,000

- 3) Viewpoints of Benefited Receptors – Viewpoints of benefited receptors must be considered for noise abatement measures that are determined to be feasible and achieve the first two reasonableness factors. For noise abatement to be considered reasonable, more than 50 percent of the responses (weighted totals) must be in favor of the noise abatement measure. A response from first row benefited receptors (receptors sharing a property line with the highway right-of-way) will be counted and weighted as two responses. Benefited receptors not in the first row will count as one response. In the case of rental properties, the tenant shall always count as one response and the owner shall always count as one response per benefited unit.

Based on the IDOT Noise Policy, the goal is to obtain responses from at least one-third (33%) of the benefited receptors for each noise abatement measure. (i.e., for each noise barrier being considered). If responses from one-third of the benefited receptors are not received after the first attempt, a second attempt shall be made. If after the second attempt there are still less than one-third of the responses received, the tally can be conducted based on the responses received.

Barrier Assessments

TNM 2.5 was used to perform the noise wall feasibility and reasonability analysis for impacted locations along the project corridor. The feasibility and reasonableness of potential noise walls were evaluated using the base cost effectiveness value of \$26,000 per benefited receptor and a unit noise wall construction cost of \$25 per square foot. Additionally, impacted and non-impacted

receptors with a reduction of at least 5 dB(A) were considered benefited receptors and were counted when evaluating cost per benefited receptor. The results of the three barrier assessments are summarized in Tables 17 and 18.

Noise Wall ID	CNE	Description of Receptors	Benefited Receptors (Reduced by at Least 5 dB(A))	Total Receptors
1	1	SFR	0	3
2	2	SFR	9	12
	3	SFR	15	16
	4	MFR	10	14
	5	Church	1	1
	6	MFR	48	48
3	7	MFR	28	82
	8	SFR	9	9
	9	Park	3	4
	10	Church	1	1
	11	SFR	10	10
	12	SFR	64	64
	13	SFR	7	19

Note: Wall 1 is not feasible because there are no impacted receptors that are reduced by at least 5 dB(A).

Noise Wall ID	CNE	Wall Height (ft)	Wall Length (ft)	Noise Reduction L_{eq} (dB(A))	Cost ¹	Benefited Receptors	Cost per Benefited Receptor	Adjusted Allowable Cost per Benefited Receptor	Likely to Implement (Yes/No) ²
2	CNEs 2, 3, 4, 5, and 6	10	124	5 – 9	\$781,000	83	\$9,410	\$26,000	Yes
		12	2,500						
3	CNEs 7, 8, 9, 10, 11, 12 and 13	12	4,634	5 – 8	\$1,390,100	122	\$11,394	\$26,000	Yes

¹ Noise wall cost based on \$25 per square foot construction cost.

Noise walls 2 and 3 met the feasibility evaluation and achieved the first two reasonableness factors. Therefore, the last factor that was considered for reasonableness included soliciting the viewpoints of the benefited receptors for the potential abatement measures. Because the first survey of benefited receptors resulted in less than 33% of responses received, a second survey request was sent to the benefited receptors via certified mail. Table 19 presents the results of the viewpoints of benefited receptors for each noise wall evaluated. Based on the survey results, 83.6% are in favor of the north wall and 76.7% are in favor of the south wall.

Noise Wall ID	Total Surveys Sent to Benefited Receptors ¹	Number of Responses Received from Both Surveys	% Responses Received	Responses in Favor of Noise Wall ²	Responses Not in Favor of Noise Wall ²	% in Favor of Noise Wall
2 (North Wall)	97	44	45.4%	61	12	83.6%
3 (South Wall)	290	77	26.6%	66	20	76.7%

¹ Surveys were sent to the property owners and tenants; therefore, the number of surveys do not equal the total number of benefited receptor properties.

Likelihood Statement

Based on the traffic noise analysis and noise abatement evaluation conducted, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The noise barriers determined to meet the feasible and reasonable criteria are identified in Table 18. If it subsequently develops during final design that constraints not foreseen in the preliminary design occur, or public input substantially changes reasonableness, the abatement measure may need to be modified or removed from the project plans. A final decision on the installation of abatement measure(s) will be made upon completion of project's final design and the public involvement process.

Coordination with Local Government Officials

FHWA and IDOT policies require that noise levels under future build conditions be predicted on undeveloped properties that have not received a building permit by the date of NEPA document approval, so that local communities can protect future land development from becoming incompatible with highway traffic noise levels. There are no active building permits within the study corridor. However, undeveloped land in the study corridor is zoned for future commercial land uses. Noise contours were developed for undeveloped lands along the project corridor. A map depicting the noise contours will be provided to the appropriate planning/zoning official for their use.

Construction Noise

Trucks and machinery used for construction produce noise that may affect some land uses and activities during the construction period. Residents along the alignment will, at some time, experience perceptible construction noise from the project. To minimize or eliminate the effect of construction noise on these receptors, mitigation measures have been incorporated into the IDOT Standard Specifications for Road and Bridge Construction as Article 107.35.

Part VI. Natural Resources

1. Upland Plant Communities

Impacts

According to the Wetland Delineation Report, dated June 2013, the common upland plants found in the area, in addition to grasses, are alfalfa, wheat, common dandelion, thistle, Canada goldenrod, common ragweed, tall fescue, clover, fleabane, English plantain and Queen Anne's lace.

Table 20 depicts the typical ground cover in the proposed ROW area.

Type	Acres
Cropland	38.1
Grass	3.8
Water	2.6
Trees	1.8
Paved	0.4

The total area of tree removal could be minimized during detailed design.

Proposed Mitigation

The proposed project consists of an interchange reconfiguration, and portions of adjacent existing farmland will be acquired and converted to grass roadway embankments, ditches, and infield areas. Therefore, there will be an increase in vegetative ground cover within the ROW and no mitigation would be necessary. Any removal of trees would follow the IDOT – Bureau of Design and Environment's (BDE) Preservation and Replacement of Trees policy.⁴

2. Wildlife Resources

Impacts

The area of the project located north and south of I-74 and west of I-57 is more rural than urban in nature; the part of the project located east of I-57 is more urban in nature. The proposed project area, including existing and future ROW, primarily consists of cropland and grassland. It is likely that the proposed project area supports wildlife species adapted to urban and rural environments, such as; coyote, fox, rodents, skunk, opossum, raccoon, and various raptor and song birds.

Proposed Mitigation

The proposed project primarily consists of an interchange reconfiguration with an increase in vegetative ground cover within the ROW. No mitigation would be necessary.

⁴ IDOT - Bureau of Design and Environment, Preservation and Replacement of Trees policy, September 6, 2002. <http://www.dot.il.gov/desenv/depolicy.pdf>

3. Threatened and Endangered Species

A. Federally-listed Species/Habitat

According to the Wetland Delineation Report, dated June 2013, no species listed as threatened or endangered federally or in Illinois were found during the wetland survey within the project corridor. Also, no natural communities of special interest were noted.

The U.S. Fish and Wildlife Service (USFWS), Region 3 list of threatened or endangered species in Illinois lists the Indiana bat, Eastern prairie fringed orchid and Prairie bush clover as occurring Champaign County, Illinois. The USFWS published a notice in the *Federal Register* on April 2, 2015, that the Northern Long-Eared Bat will be listed as threatened effective May 4, 2015.

As stated in IDOT memos dated June 27, 2013, January 7, 2014 and November 13, 2014, the Bureau of Design and Environment determined that there would be no effect to any of these species. These memos documented compliance with Section 7 of the Endangered Species Act.

Impacts

- No Effect
- May Effect
 - Informal Consultation
 - Formal Consultation

B. State-Listed Species

According to the Wetland Delineation Report, dated June 2013, no species listed as threatened or endangered federally or in Illinois were found during our wetland survey within the project corridor. Also, no natural communities of special interest were noted.

As stated in IDOT memos, dated June 27, 2013, January 7, 2014 and November 13, 2014, the Bureau of Design and Environment stated that the Illinois Department of Natural Resources (IDNR) had no records of listed species, natural areas or nature preserves within the project corridor. In accordance with the 2013 Memorandum of Understanding by and between IDNR and IDOT,⁵ consultation is terminated.

IDNR Consultation results

- Closed
 - Date (11-13-14)

- Open

Incidental Take Authorization

- Yes
 - Species – [list here]
- No

⁵ Illinois Department Of Natural Resources and Illinois Department Of Transportation, Memorandum Of Understanding By And Between The Illinois Department Of Natural Resources And The Illinois Department Of Transportation, January 10, 2013.

Part VII. Water Quality/Resources/Aquatic Habitats

Impacts

Copper Slough flows south through the proposed project site, crossing under I-57, through the northeast quadrant crossing under I-74, then turns and flows southwest towards West Bloomington Road. The Wetland Delineation Report indicated that the stream is not a permanent body of water and that the watershed area is 1.12 square miles. The stream is described as excavated and converted into ponds north of I-57 and is essentially a grassed waterway with no discernible bed or bank south of I-57. Based on the roadway geometry in the approved Interchange Design Study, approximately 1,020 lineal feet of the existing Copper Slough between I-57 and I-74 can remain undisturbed. An estimated 1,500 lineal feet of the slough will be reconstructed with a configuration to provide a flow path of approximately the same distance as the existing alignment. Reconstruction of the slough will be limited to locations where the proposed roadway embankment and grading limits prohibit the existing alignment to remain in place. Efforts to minimize impacts to Copper Slough will be taken into consideration during the design phase of the project, including measures as outlined in the Proposed Mitigation section below.

According to the Illinois Environmental Protection Agency's (IEPA) 2014 303(d) List,⁶ Copper Slough is impaired by Endrin. Endrin is an insecticide that was used mainly on field crops such as cotton, maize, sugarcane, rice, cereals, ornamentals, and other crops. Once widely used in the U.S., most uses were cancelled in 1980. Total Maximum Daily Loads (TMDL) have not yet been developed for this stream. According to the IEPA's 2014 stream assessment, Copper Slough is not supporting of aquatic life caused by alteration in stream-side or littoral vegetative covers, Endrin, and other flow regime alterations. The sources of these impairments are channelization and contaminated sediments. The contaminated sediments are not types of impairment that are historically attributed to roadways. Cooper Slough is rated D for Diversity under the Biological Stream C. <http://www.dnr.illinois.gov/conservation/BiologicalStreamratings/Pages/default.aspx>

The Wetland Delineation Report indicated that no Mussel shell material was observed during the site visit. Additionally, no federal or state species listed as threatened or endangered were found during the wetland survey within the project corridor. Also, no natural communities of special interest were noted.

There are no other specially designated streams in the project area including: navigable waters, nationwide rivers inventory, Illinois natural areas, Advanced Identification of Water Resources (ADID) and Biologically Significant Streams.

Proposed Mitigation

Best Management Practices (BMPs) will reduce or eliminate temporary impacts to water quality during construction. The selected construction site BMPs would be consistent with practices to comply with requirements of the State of Illinois National Pollutant Discharge Elimination System (NPDES) permit.

⁶ Illinois Environmental Protection Agency, Illinois Integrated Water Quality Report And Section 303(D) List, Volume I: Surface Water, Appendix A-2, March 24, 2014.

To minimize surface water impacts, appropriate erosion and sediment control practices will be implemented in accordance with local, state, and federal regulations. These specifications also prohibit contractors from discharging any contaminant that may affect water quality. In the event of accidental spills, the contractor is required to immediately notify all appropriate local, state, and federal agencies and to take immediate action to contain and remove the contaminant.

With proper implementation of BMP measures and compliance with the NPDES construction permit, short-term construction-related water quality impacts will be avoided or minimized.

Part VIII. Groundwater Resources

Impacts

The proposed project lies on the edge of the Upper Kaskaskia Watershed and the edge of the Mahomet Aquifer. The Mahomet Aquifer, a sand and gravel aquifer, is the public water supply for Champaign and is a designated Sole Source Aquifer. A public water supply well is located north of West Bloomington Road, between I-57 and Clearlake Boulevard. As such, this project crosses a wellhead protection recharge area for one public well for the community of Champaign. The wellhead protection area is crossed by I-57 approximately from 500 to 2,200 feet south of I-74. According to the Illinois Integrated Water Quality Report and Section 303(d) List – 2012, Volume II: Groundwater,⁷ the quality of the public water supply well is categorized as good/full support.

According to the Illinois Pollution Control Board there are no Class III Special Resource Groundwater areas in Champaign County.

This project will not create any new potential “routes” for groundwater pollution or any new potential “sources” of groundwater pollution as defined in the Illinois Environmental Protection Act (415 ILCS 5/3, et seq.).⁸ Accordingly, the project is not subject to compliance with the minimum setback requirements for community water supply wells or other potable water supply wells as set forth in 415 ILCS 5/14, et seq.

Proposed Mitigation

BMPs will reduce or eliminate temporary impacts to groundwater quality during construction. The selected construction site BMPs would be consistent with practices to comply with requirements of the State of Illinois NPDES permit.

To minimize groundwater impacts, appropriate erosion and sediment control practices would be implemented in accordance with local, state, and federal regulations. These specifications also prohibit contractors from discharging any contaminant that may affect water quality. In the event of accidental spills, the contractor is required to immediately notify all appropriate local, state, and federal agencies and to take immediate action to contain and remove the contaminant.

With proper implementation of BMP measures and compliance with the NPDES construction permit, short-term construction-related water quality impacts would be avoided or minimized.

⁷ Illinois Environmental Protection Agency, Illinois Integrated Water Quality Report And Section 303(D) List – 2012, Volume II: Groundwater, December 20, 2012

⁸ Illinois Environmental Protection Agency, Illinois Environmental Protection Act (415 ILCS 5/3, et seq.), January 1, 2014.

On March 11, 2015 the U.S. Environmental Protection Agency (USEPA) designated a portion of the Mahomet Aquifer system as a sole source aquifer (SSA) under Section 1424(e) of the Safe Drinking Water Act, as shown in the attached map. The Safe Drinking Water Act gives USEPA authority to designate all or part of an aquifer as a "sole source" if contamination of the aquifer would create a significant hazard to public health and there are no physically available or economically feasible alternative sources of drinking water to serve the population that relies on the aquifer. The designation authorizes EPA review of projects that receive Federal financial assistance to assess potential for contamination of the aquifer system that would create a significant hazard to public health.

This project is within the review area of the Mahomet SSA. Once FHWA Region 5 and U.S. EPA Region 5 update their memorandum of understanding, the agencies will follow the agreed upon review procedures to ensure compliance with the requirements of Section 1424(e) of the Safe Drinking Water Act.

Part IX. Floodplains

Identify

As delineated on the Federal Emergency Management Agency floodplain maps from 2013⁹ (see Exhibits 13 & 14), there is a 100-year floodplain, with no base flood elevations determined, in the proposed project area. The floodplain is associated with the Copper Slough, which runs through the northwest, northeast, and southeast quadrants of the interchange (see Exhibits 10 & 11). Currently, the slough is meandering in nature and passes through culverts under I-57 and I-74. The crossing of the 100-year floodplain is both transverse and longitudinal, due to the geometry of the slough, the interstates, and the interchange ramps. As previously noted, an estimated 1,500 lineal feet of Copper Slough will be reconstructed with the proposed improvements, and the proposed slough configuration will provide a flow path of approximately the same distance as the existing. The proposed improvements will include accommodations for the slough; proposed pavements will be designed above the 100-year floodplain, and policy freeboard will be provided.

Floodplain Finding if significant encroachment

No

Yes

Required Statement (See Chapter 26 Section 7.05(d))

There will be no significant encroachment within the floodplain or regulatory floodway. The roadway does not have significant potential for interruption of emergency vehicles, providing a sole route of emergency evacuation, increasing the risk of flooding or having significant risk or significant adverse impact on natural or beneficial floodplain values.

Compensatory flood storage volume would be provided to compensate for any floodplain storage losses resulting from the project. Additionally, a floodplain development permit would likely be required from the IDNR Office of Water Resources.

⁹ Federal Emergency Management Agency, Flood Insurance Rate Maps – Map Numbers 17019C0293D and 17019C0294D, October 2, 2013.

Part X. Wetlands

Identify

A wetland survey was conducted by the Wetland Science Program of the Illinois Natural History Survey (INHS) on June 13-14, 2013 (available upon request). All potential wetlands within the specified project area were examined. INHS determined that 16 sites met the three criteria of a wetland established in the Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0).

Table 21 provides a summary of the potential wetland impacts for the preferred alternative. The estimated impact areas were calculated based on the proposed ROW limits. The wetland areas are shown in proximity to the preferred alternative on Exhibit 11.

Table 21: Wetland Impacts							
Wetland Site Number	NWI Code	Community Type	Approximate Area Within Project Corridor (acres)	Anticipated Impact Area (acres)	Dominant Plant Species	Soil Type	FQI*
1	U	Marsh	0.27	0.00	squirrel-tail grass soft-stem bulrush narrow-leaved cattail	Drummer silty clay loam	7.9 poor
2	U	Marsh	0.38	0.005	red-rooted spike rush rice cut grass common reed narrow-leaved cattail broad-leaved cattail	Drummer silty clay loam	9.5 poor
3	U	Wet shrubland	0.83	0.00	bristly cattail sedge common reed sandbar willow	Drummer silty clay loam	8.5 poor
4	U	Wetland pond	4.29	0.19	tall waterhemp reed canary grass American pondweed sandbar willow	NRCS mapped as Drummer SICL; revised to Aquent	11.7 moderate
5	U	Wet shrubland	0.42	0.00	sandbar willow narrow-leaved cattail	NRCS mapped as Drummer SICL; revised to Aquent	10.0 moderate
6	U	Marsh	0.24	0.00	late boneset narrow-leaved cattail	NRCS mapped as Drummer SICL; revised to Aquent	7.3 poor
7	U	Marsh	0.15	0.00	narrow-leaved cattail	NRCS mapped as Dana SIL; revised to Aquent	7.2 poor
9	PEMAx	Wet meadow	2.36	2.36	fat-hen saltbush late boneset squirrel-tail grass sharp-fruited rush prairie switch grass rough dropseed	NRCS mapped as Orthents, loamy, undulating; revised to Aquent	9.0 poor

Table 21: Wetland Impacts							
Wetland Site Number	NWI Code	Community Type	Approximate Area Within Project Corridor (acres)	Anticipated Impact Area (acres)	Dominant Plant Species	Soil Type	FQI*
10	U	Marsh	0.36	0.36	fat-hen saltbush squirrel-tail grass sharp-fruited rush prairie switch grass rough dropseed narrow-leaved cattail	NRCS mapped as Orthents, loamy, undulating; revised to Aquent	8.3 poor
11	U	Wetland pond	0.40	0.40	rice cut grass comb pondweed	Drummer silty clay loam	9.9 poor
12	PEMAx	Marsh	0.04	0.04	tall waterhemp common ragweed	NRCS mapped as Orthents, loamy, undulating; revised to Aquent	5.3 poor
13	U	Marsh	0.24	0.09	rice cut grass curly dock narrow-leaved cattail	Drummer silty clay loam	10.4 moderate
14	PSS1Cx	Marsh	0.17	0.17	sharp-fruited reed canary grass narrow-leaved cattail	NRCS mapped as Orthents, loamy, undulating; revised to Aquent	6.7 poor
15	U	Marsh	0.24	0.08	narrow-leaved cattail	Drummer silty clay loam	10.3 moderate
17	U	Marsh	0.02	0.00	rice cut grass narrow-leaved cattail	NRCS mapped as Flanagan SIL; revised to Aquent	8.6 poor
18	U	Marsh	0.16	0.00	red-rooted spike rush	NRCS mapped as Flanagan SIL; revised to Aquent	4.5 poor
Total Acreages			10.57	3.695			

Source: Wetland Delineation Report, I-74/I-57 (FAI 74/57), Champaign County, Illinois, June 2013.

* FQI is a measure of the wetland's natural quality. 0-9.9 are considered to be poor quality, 10-19.9 are considered to be moderate quality, and 20+ are considered to be high quality.

A copy of the INHS wetland survey was submitted to IDNR and the U.S. Army Corps of Engineers (ACOE) for review to determine if these areas would be considered jurisdictional wetlands, thus requiring review in accordance with the Interagency Wetland Policy Act and the Clean Water Act. Coordination with IDNR on November 5, 2014, IDNR stated “the wetland areas described within the interchange area and maintained ROW are not considered State jurisdictional wetlands and are not subject to review under IPWA.” In a letter received from the ACOE, dated December 4, 2014, they also determined that the project would not impact jurisdictional waters of the U.S. or wetlands; therefore, a Department of the Army (Section 404) permit is not required for the proposed work. Copies of the INHS wetland survey and agency coordination letters, including the Wetland Impact Evaluation Form, are available upon request.

Proposed Mitigation

- On-site
- Off-site
- Wetland Bank

Description

Based on correspondence from IDNR and the ACOE, no mitigation for the above-referenced wetland impacts would be required for this project because the delineated areas were determined to be non-jurisdictional.

Part XI. Special Waste

The Level I screening determined that special waste investigations were necessary due to the proposed project meeting the following two criteria (#1 and #3) of the three criteria listed in BDE Manual Section 27-3.02(a) Level I Screening:

- Criteria #1-involving acquisition of additional right-of-way or easements (temporary or permanent);
- Criteria #3-involving excavation (see definition of excavation) or subsurface utility relocation.

Projects that don't pass Level I screening due to situations #1 and #3 above should be further screened to determine if a Preliminary Environmental Site Assessment (PESA) will be necessary. A Level II screening was accomplished and identified that further assessment of the project for special wastes or other regulated substance contamination was required. As such, a PESA was accomplished for the proposed project and is available upon request.

An initial PESA was completed on March 13, 2013 for the proposed project area. The report indicated five recognized environmental conditions (RECs) on properties that would be proposed for acquisition or construction with the preferred alternative. RECs are conditions that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the site.

The RECs include:

- IDOT ROW – evidence of chemical use, impacted soil, and spills
- Copper Slough – non-attainment of water quality
- Rockwell Automation – above-ground storage tank (AST), evidence of chemical use
- MUTI – ASTs

- Mixed-use Building – AST, evidence of chemical use; former underground storage tank (UST), and presence of leaking underground storage tank (LUST) and Illinois Emergency Management Agency (IEMA) lists

The buildings on these properties would be avoided, but vacant land and a portion of an existing parking/storage site at MUTI would be acquired for proposed ROW.

A PESA Addendum A was completed on September 5, 2013 for an expanded proposed project area not previously assessed. The addendum did not reveal any additional RECs in the preferred alternative's area. A second PESA Addendum B was completed on May 20, 2014 for additional expansion of the proposed project area not previously assessed. The addendum did not reveal any additional RECs in the preferred alternative's area. The Special Waste Assessment Screen/Survey Request Forms and the survey reports are available upon request.

A Preliminary Site Investigation (PSI) will likely be necessary to determine the nature and extent of contamination within existing/proposed ROW. It would be determined during the Phase II design if any of the sites or ROW will be impacted with the proposed work. Groundwater, soil and sediment test results would be compared to the clean-up objectives within Illinois' Tiered Approach to Correction Action Objectives (TACO).

Part XII. Special Lands

1. Section 4(f)

- DeMinimis
- Programmatic
- Individual

Description

Highway development projects can create adverse impacts on Section 4(f) lands through: acquisition of all or a portion of Section 4(f) land; temporary use for project construction-related activities; or constructive use such as increased noise impacts or increased surface traffic impacts that are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.

The preferred alternative would not require permanent acquisition or temporary construction easements from any Section 4(f) lands. However, there is one park located within the limits of the noise impact area as determined through the detailed noise analysis conducted for the proposed project. Garden Hills Park, owned and operated by the Champaign Park District, is a five acre park located in the City of Champaign, southeast of the I-57 and I-74 Interchange and south of I-74 and Bloomington Road.

Garden Hills Park has a picnic area, a playground, an unlighted baseball field and a soccer field. There would be no direct impacts to these facilities as a result of the proposed project. In addition, the projected noise level increase attributable to the project would be minimal (approximately 2

dB(A))¹⁰ and would not substantially interfere with the use and enjoyment of the park. There are no noise-sensitive facilities located within the park limits such as: an outdoor amphitheater; sleeping area of a campground; historic site where a quiet setting is a generally recognized feature or attribute of the site's significance; or area of the park where serenity and quiet are significant attributes; or wildlife and waterfowl refuge intended for wildlife viewing.¹¹

As noted in Section V. Noise, based on the traffic noise analysis and noise abatement evaluation conducted, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The noise abatement measures could include a potential noise wall between the park and the eastbound lanes of I-74, which would provide some reduction to noise levels within Garden Hills Park.

2. Section 6(f)

Description

According to the U.S. Department of the Interior - National Park Service, no Land and Water Conservation Funded (LAWCON/Section 6(f)) lands are present in the proposed project area.

3. Open Space Lands Acquisition and Development (OSLAD) Act Lands

Description

According to IDNR, Division of Grant Administration, no OSLAD lands are present in the proposed project area.

4. Illinois Natural Area (INAI) Sites

Description

There are no records of listed species, natural areas or nature preserves within the project corridor. In accordance with the 2013 Memorandum of Understanding by and between IDNR and IDOT, consultation is terminated.

5. Nature preserves

Description

There are no records of listed species, natural areas or nature preserves within the project corridor. In accordance with the 2013 Memorandum of Understanding by and between IDNR and IDOT, consultation is terminated.

6. Land & Water Reserves

Description

According to the Illinois Nature Preserves Commission, no land and water reserves are located in the project area.

¹⁰ The minimum change in the sound level of individual events that an average human ear can detect is about 3 dB.

¹¹ CFR Sec. 771.135 (p)(4)(i)

XIII. Indirect and Cumulative Impacts

Indirect Impacts

According to 40 CFR 1508.8, Indirect Impacts are defined as “caused by an action and are later in time or further removed in distance but still reasonably foreseeable.”

An improved I-57 and I-74 Interchange is anticipated to have a positive impact on local and regional economics and businesses in general, in terms of increased transportation safety and efficiency. The proposed improvements will improve interchange geometry and operations, enhance safety conditions, and increase capacity for growing traffic volumes. The proposed project could have an indirect effect on land use in the area with the generation of new development that would complement the current and proposed development in the area, and may accelerate the rate in which development would occur. However, this effect corresponds with the City of Champaign’s land use plan; therefore, no mitigation would be considered.

Cumulative Impacts

The Council on Environmental Quality (CEQ 1997) defines a cumulative impact 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” (40 CFR 1508.7). CEQ further defines cumulative effects as “caused by an action and are later in time or further removed in distance but still reasonably foreseeable” (40 CFR 1508.8). The cumulative impact analysis evaluates the effects of past, present, and future actions and recognizes while many actions may have individually small impacts, the accumulated effect of these actions needs to be assessed.

Based on the local, state, and federal regulations in place for protection of resources, there could be minimal cumulative impacts to water quality, streams, floodplains, land use, cultural resources, and potentially hazardous material sites.

A Watershed Master Plan¹² was prepared for the Copper Slough watershed, which is the largest urbanized watershed in the City of Champaign. This watershed area encompasses the I-57 and I-74 project study area. While most of the recommended projects in the Copper Slough Watershed Master Plan are located south of the I-57 and I-74 Interchange, outside of the project limits, some of the projects and recommendations could have a positive cumulative effect of reducing flooding and improving water quality in the project area. Further, the projects included in the Watershed Master Plan would not be impacted by the proposed I-57 and I-74 Interchange improvements. Therefore, the proposed I-57 and I-74 improvements would be compatible with the basic assumptions and objectives of the Copper Slough Watershed Plan.

There also could be a cumulative impact to agricultural land in the area due to the conversion of undeveloped lands to light industrial and office uses. Over time, agricultural land has been reduced in this area, and this trend will continue due to the expected future development, as most of the open space in the interchange area is owned by land developers. Coordination with IDOT District 5 and the City of Champaign indicated there are no active building permits within the study corridor. However, undeveloped land in the study corridor is zoned for future commercial land uses.

¹² Copper Slough Watershed Master Plan – Final Report, Prepared for the City of Champaign, Clark Deitz, Inc., March 2007.

The proposed project would not have any significant impacts to environmental resources to cumulatively add or assess in comparison to the past, the present, or the reasonably foreseeable future.

XIV. Environmental Commitments

- Compensatory flood storage volume will be provided to compensate for any floodplain storage losses resulting from the project. The volumes required will be computed during the final design phase.
- During the final design phase of the project, attempts will be made to avoid and minimize impacts to wooded areas and individual trees. The impacted trees will be replaced in accordance with IDOT policy “D&E-18 Preservation and Replacement of Trees.”
- A Preliminary Site Investigation (PSI), if required, will be performed for the affected REC sites during the final design phase. The PESA will be re-validated before conducting the PSI. The PSI would determine the type and extent of any contamination that may be encountered during construction. Any special waste encountered during construction will be disposed of following the IDOT’s specifications and IEPA guidelines.
- A Stormwater Pollution Prevention Plan will be developed during the final design stage of the project.
- Dust and airborne dirt generated by construction activities will be controlled through dust control procedures outlined in IDOT’s Standard Specifications for Road and Bridge Construction.
- Based on the traffic noise analysis and noise abatement evaluation conducted, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The noise barriers determined to meet the feasible and reasonable criteria are along the north and south side of I-74 between Mattis Avenue and Prospect Avenue. If it subsequently develops during final design that constraints not foreseen in the preliminary design occur, or public input substantially changes reasonableness, the abatement measure may need to be modified or removed from the project plans. A final decision on the installation of abatement measure(s) will be made upon completion of project’s final design and the public involvement process.
- A Section 106 Memorandum of Agreement (MOA) was executed in 2014 between FHWA, IDOT, and the Illinois SHPO. FHWA and IDOT shall ensure that the stipulations of the MOA are implemented if an archaeological site near the project area cannot be avoided.

XV. Permits/Certifications Required

- A Floodplain Development Permit would likely be required from the IDNR Office of Water Resources prior to the construction letting of the project.
- A Clean Water Act Section 402 NPDES Construction Permit will be obtained from the IEPA prior to the construction letting of the project.

All applicable permits will be obtained during the final design.

SECTION V. COORDINATION AND COMMENTS

1. Public Involvement

Various stakeholder coordination meetings have taken place and are summarized below:

08/20/2013: Illinois State Senator Chapin Rose Presentation

A local stakeholder coordination meeting was held to discuss the proposed interchange type alternatives currently being considered. Future development adjacent to the interchange was discussed and any site plans being considered were requested for consideration during development of the proposed interchange types. The City of Champaign's Future Land Use Map indicates all four interchange quadrants have the potential for development as employment centers.

01/21/2014: Elected Public Officials Presentation

A meeting was conducted with Champaign city officials to review the current proposed project improvements and interchange reconstruction alternatives. Items discussed included: minimizing the impacts to adjacent properties to allow for future development around the interchange; project funding and construction timing.

01/29/2014: City of Champaign Presentation

A meeting was conducted with Champaign city officials to review the current proposed project improvements and interchange reconstruction alternatives. Items discussed included: coordinating with the city for the proposed typical sections for Mattis Avenue and Bloomington Road; minimizing the impacts to adjacent properties to allow for future development around the interchange; and drainage impacts and embankment sources for the potential future construction of the interchange.

02/19/2014: Champaign Urbana Urbanized Area Transportation Study (CUUATS) Presentation

The proposed project improvements and interchange type alternatives were presented to the local planning organization. As the project is not currently funded for design or construction, funding options are being investigated. CUUATS and the individual entities represented were encouraged to formally submit a letter to IDOT with their preference on the interchange type alternative for consideration in selection of an alternative.

02/19/2014: Public Information Meeting #1

An open house format Public Information Meeting was held at Champaign County Highway Department, Champaign, IL, with exhibit boards set up throughout the meeting room and handouts available for participants. Public input was encouraged and comment forms were available for all attendees. The general consensus of the attendees at the meeting was that this interchange reconstruction project is necessary.

Public Comments

Several attendees, including members of the public, County Board and local developers, expressed that Alternatives 1 and 2 were their preferred concepts. Additional discussions indicated that Alternative 1 was preferred by the local agencies, because it does not have any proposed loop ramps; and that Alternative 2 was preferred by local landowners and developers, because it had the least amount of additional ROW acquisition and disturbance to developable land.

A total of 24 comment forms/letters were received, all with the exception of one are in favor of the proposed interchange reconstruction project. One of the comment forms suggested that Alternative 1 is their preferred concept, while ten preferred Alternative 2.

04/07/2014: Midwest Underground Technology, Inc. (MUTI)

MUTI are property owners in the southwest quadrant of the interchange. The purpose of the meeting was to review the current proposed project improvements and interchange reconstruction alternatives. MUTI explained ongoing and future plans to expand, including additional buildings to the east and west and additional parking/storage to the east. A temporary aggregate parking/storage site has been constructed on the east side of the existing building since the latest field surveys and aerial photography images have been collected. This site is anticipated to be impacted by Alternatives 1 and 2 (see Exhibits 10 and 11) and has been included as a potential social resource impact in the Evaluation Matrix (Section III.2.B.). Site plans have been developed and were made available to IDOT for consideration during development of the interchange design studies.

Various newspaper articles have been published regarding the interchange and are summarized below:

01/22/2014: The News-Gazette

The article discussed the proposed project and the time and expense involved for the new interchange. Additionally, the article listed the information for the public meeting ultimately held on February 19, 2014.

02/01/2014: The News-Gazette

The article reported a fatal accident on the I-74 westbound ramp to I-57 northbound.

02/03/2014: The News-Gazette

The article discussed the proposed project and the reasons why a new interchange is needed.

2. Agency Coordination

Ongoing agency coordination is summarized below:

06/27/2013: Illinois Department of Transportation Memorandum

This biological resources review for the original and first addendum (A) determined that there will be no effect to any listed threatened and endangered species and concludes consultation with the IDNR and USFWS. The memo further states that the IDNR Natural Heritage Database has no records of listed species, natural areas or nature preserves within the project corridor and that consultation is terminated with IDNR. Additionally, the memo discusses the wetlands surveyed as a part of the INHS wetland delineation report.

01/07/2014: Illinois Department of Transportation Memorandum

This natural resources review for the second addendum (B) area determined that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the project location and therefore; consultation is terminated. The memo further terminates wetland review. Additionally, IDOT determined that listed endangered, threatened, proposed and candidate species and critical habitat are not present in the area.

01/13/2014: Illinois Department of Transportation Memorandum

The memo transmits the No Historic Properties Affected – cultural resources clearance for the environmental survey area B.

02/20/2014: Illinois Department of Transportation Memorandum

The memo discusses the proposed projects potential to cause an Adverse Effect to an ancient American Indian archaeological habitation site. Additionally, this memo includes the concurrence, from the Illinois State Historic Preservation Officer (SHPO), with IDOT's determination of a "Preliminary Adverse Effect".

02/27/2014: NEPA-404 Merger Meeting

The interchange reconstruction project was presented at this meeting to review the project purpose and need, the current alternatives being studied, the environmental impacts, and the project complexity and suitability for the merger process. It was determined by the agencies represented that this project is not complex enough to go through the merger process and the individual agencies that have jurisdiction over the resources impacted will be coordinated with during the planning process.

Agencies in attendance:

- Federal Highway Administration (FHWA)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (USEPA)
- U.S. Fish and Wildlife Service (USFWS)
- Illinois Department of Transportation (IDOT)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Department of Agriculture (IDOA)
- Illinois Department of Natural Resources (IDNR)
- Illinois Historic Preservation Agency (IHPA)

07/09/2014: Illinois Department of Transportation Memorandum

The memo transmits the ratified MOA to the local IDOT district office.

07/31/2014: Federal Highway Administration

The letter submits the MOA to the Advisory Council On Historic Preservation ACHP.

08/19/2014: Advisory Council On Historic Preservation (ACHP)

The letter from ACHP acknowledged receipt of the MOA, which completes the requirements of Section 106 of the National Historic Preservation Act.

10/21/2014: NRCS

The AD-1006 with associated attachments was submitted to the NRCS for their coordination and completion.

10/30/2014: IDOA

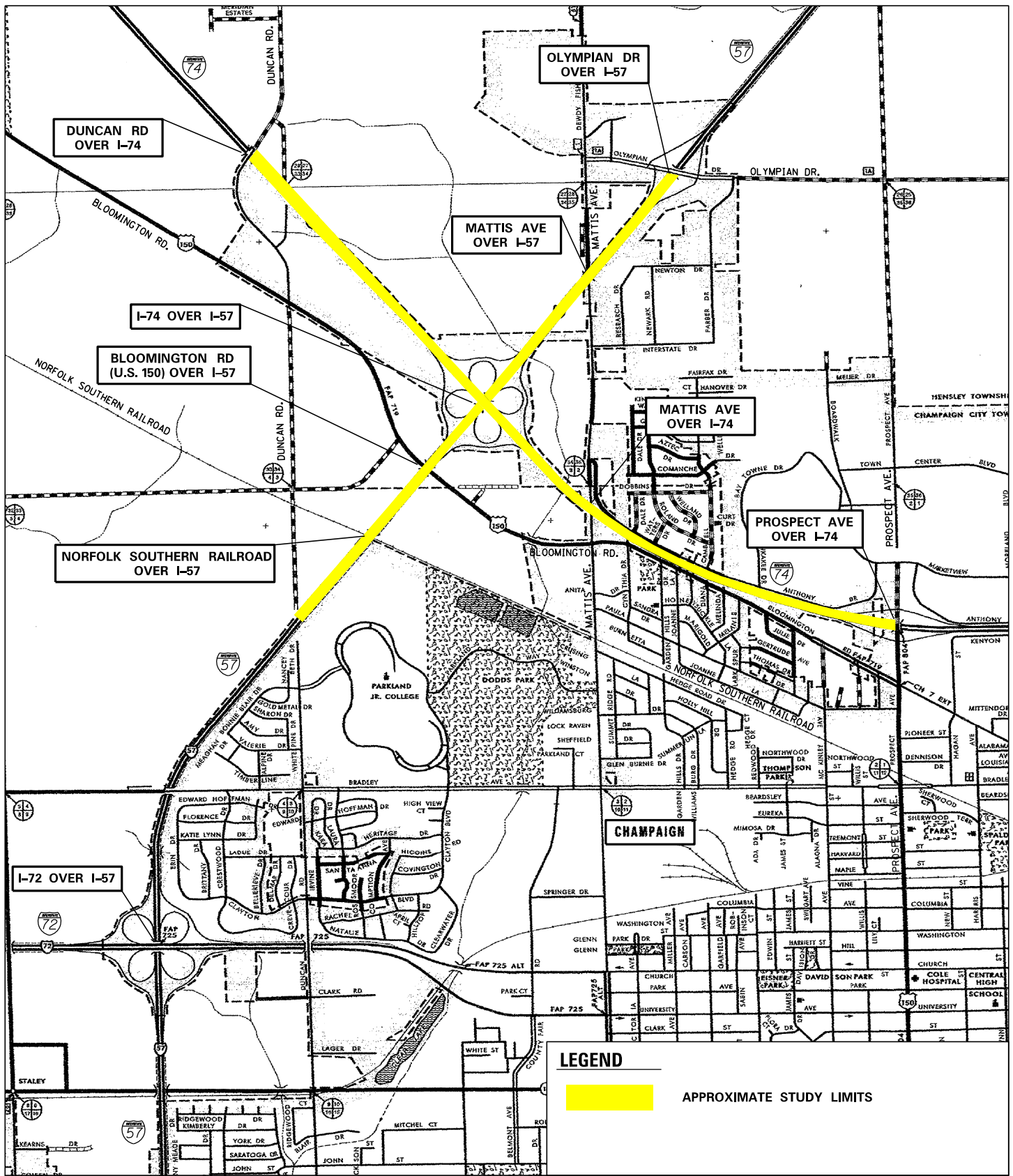
At the request of IDOA, project information was submitted to the IDOA office for their project review.

11/10/2014: IDOA

The letter from IDOA indicates that the project complies with IDOT's Agricultural Land Preservation Policy and Illinois' Farmland Preservation Act.

11/13/2014: Illinois Department of Transportation Memorandum

This natural resources review for the third addendum (C) area determined that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the project location and therefore; consultation is terminated. The National Wetlands Inventory shows wetlands in the vicinity of the project location. All potential sites were examined and 10 were determined to be wetlands. The project sponsor will consider location and design alternatives to avoid and minimize adverse wetland impacts to the extent practical. Additionally, IDOT determined that listed endangered, threatened, proposed and candidate species and critical habitat are not present in the area.



DUNCAN RD
OVER I-74

OLYMPIAN DR
OVER I-57

I-74 OVER I-57

BLOOMINGTON RD
(U.S. 150) OVER I-57

MATTIS AVE
OVER I-57

MATTIS AVE
OVER I-74

NORFOLK SOUTHERN RAILROAD
OVER I-57

PROSPECT AVE
OVER I-74

I-72 OVER I-57

CHAMPAIGN

LEGEND

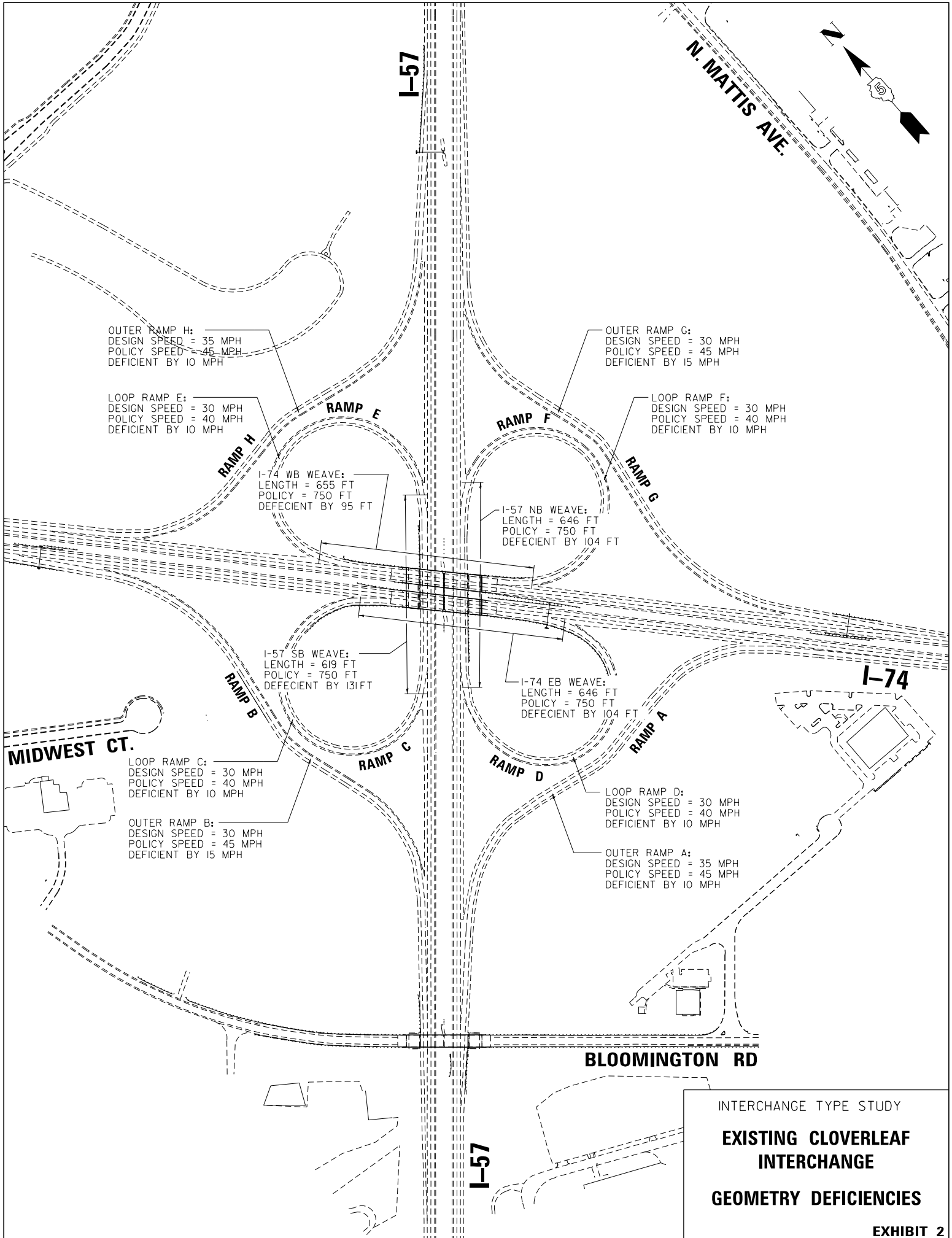
APPROXIMATE STUDY LIMITS



SCALE: 1" = 2,400'

SITE MAP

I-57 & I-74 INTERCHANGE
IDOT - DISTRICT 5
CHAMPAIGN COUNTY
CHAMPAIGN, IL



OUTER RAMP H:
 DESIGN SPEED = 35 MPH
 POLICY SPEED = 45 MPH
 DEFICIENT BY 10 MPH

LOOP RAMP E:
 DESIGN SPEED = 30 MPH
 POLICY SPEED = 40 MPH
 DEFICIENT BY 10 MPH

I-74 WB WEAVE:
 LENGTH = 655 FT
 POLICY = 750 FT
 DEFICIENT BY 95 FT

I-57 NB WEAVE:
 LENGTH = 646 FT
 POLICY = 750 FT
 DEFICIENT BY 104 FT

I-57 SB WEAVE:
 LENGTH = 619 FT
 POLICY = 750 FT
 DEFICIENT BY 131 FT

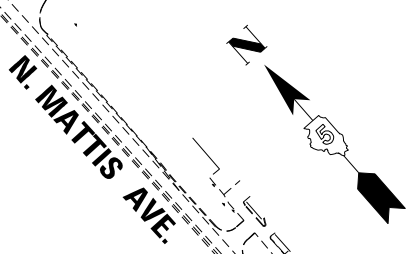
I-74 EB WEAVE:
 LENGTH = 646 FT
 POLICY = 750 FT
 DEFICIENT BY 104 FT

LOOP RAMP C:
 DESIGN SPEED = 30 MPH
 POLICY SPEED = 40 MPH
 DEFICIENT BY 10 MPH

OUTER RAMP B:
 DESIGN SPEED = 30 MPH
 POLICY SPEED = 45 MPH
 DEFICIENT BY 15 MPH

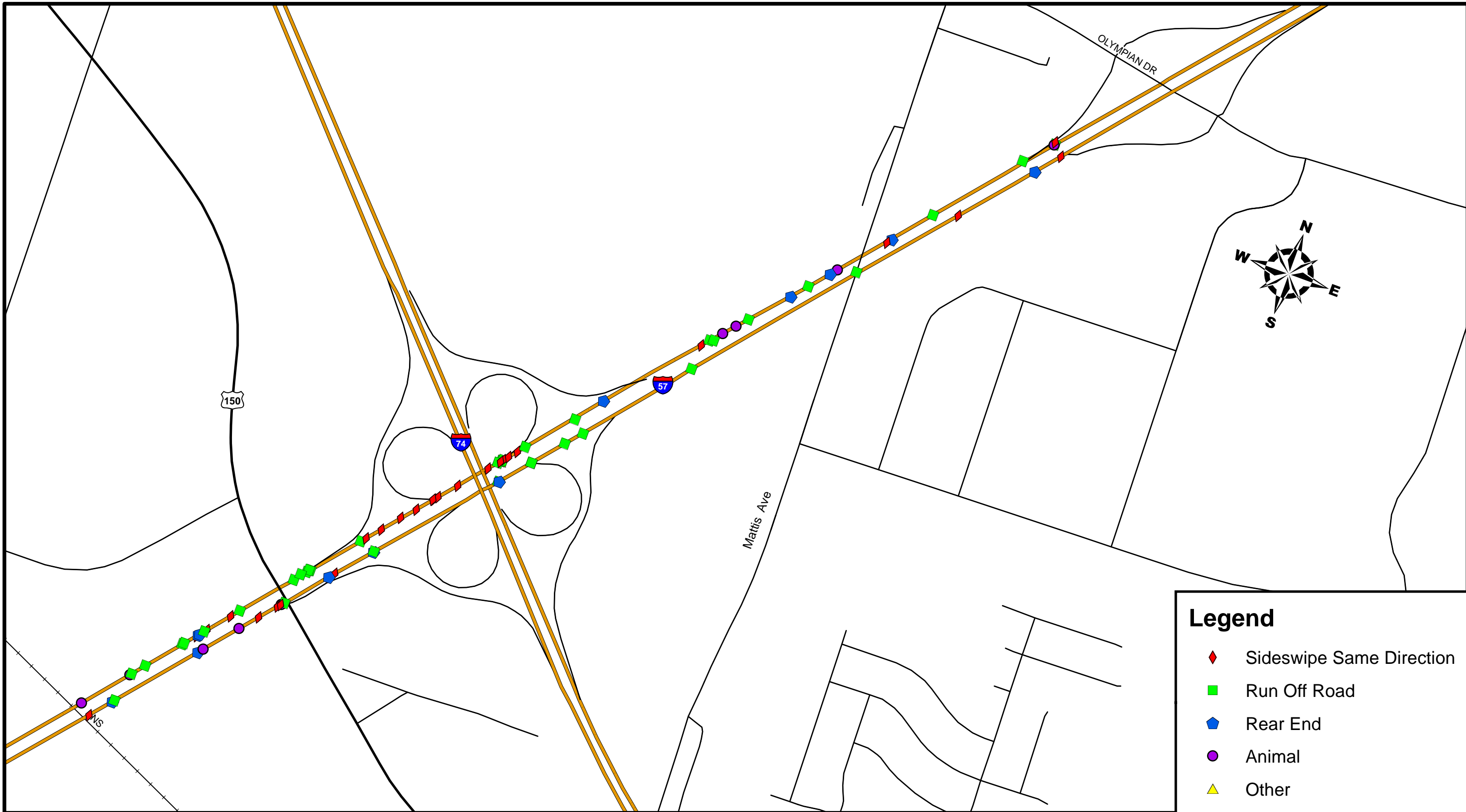
LOOP RAMP D:
 DESIGN SPEED = 30 MPH
 POLICY SPEED = 40 MPH
 DEFICIENT BY 10 MPH

OUTER RAMP A:
 DESIGN SPEED = 35 MPH
 POLICY SPEED = 45 MPH
 DEFICIENT BY 10 MPH



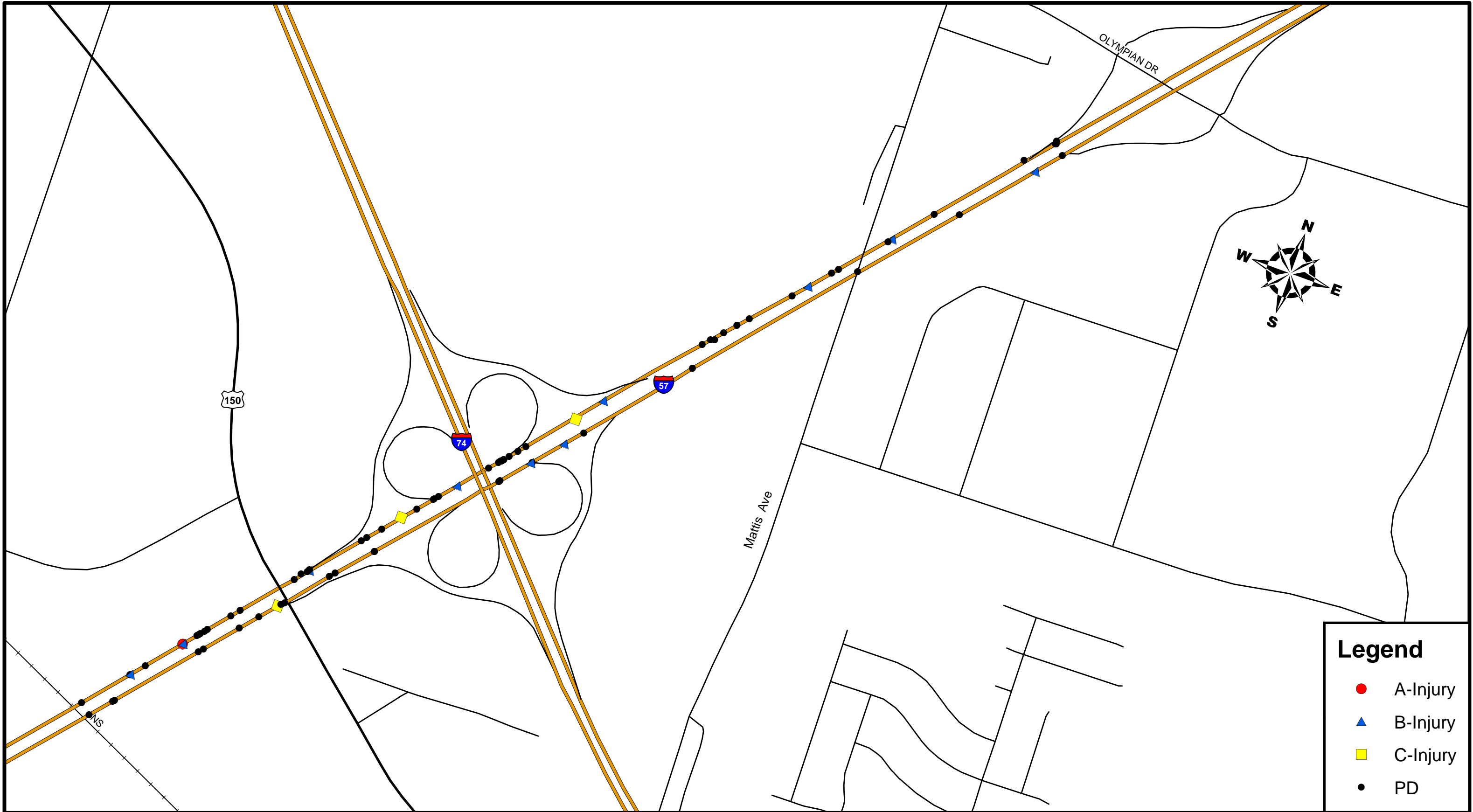
INTERCHANGE TYPE STUDY
EXISTING CLOVERLEAF INTERCHANGE
GEOMETRY DEFICIENCIES

Interchange Reconstruction Project I-57 Crashes from 2008 to 2012

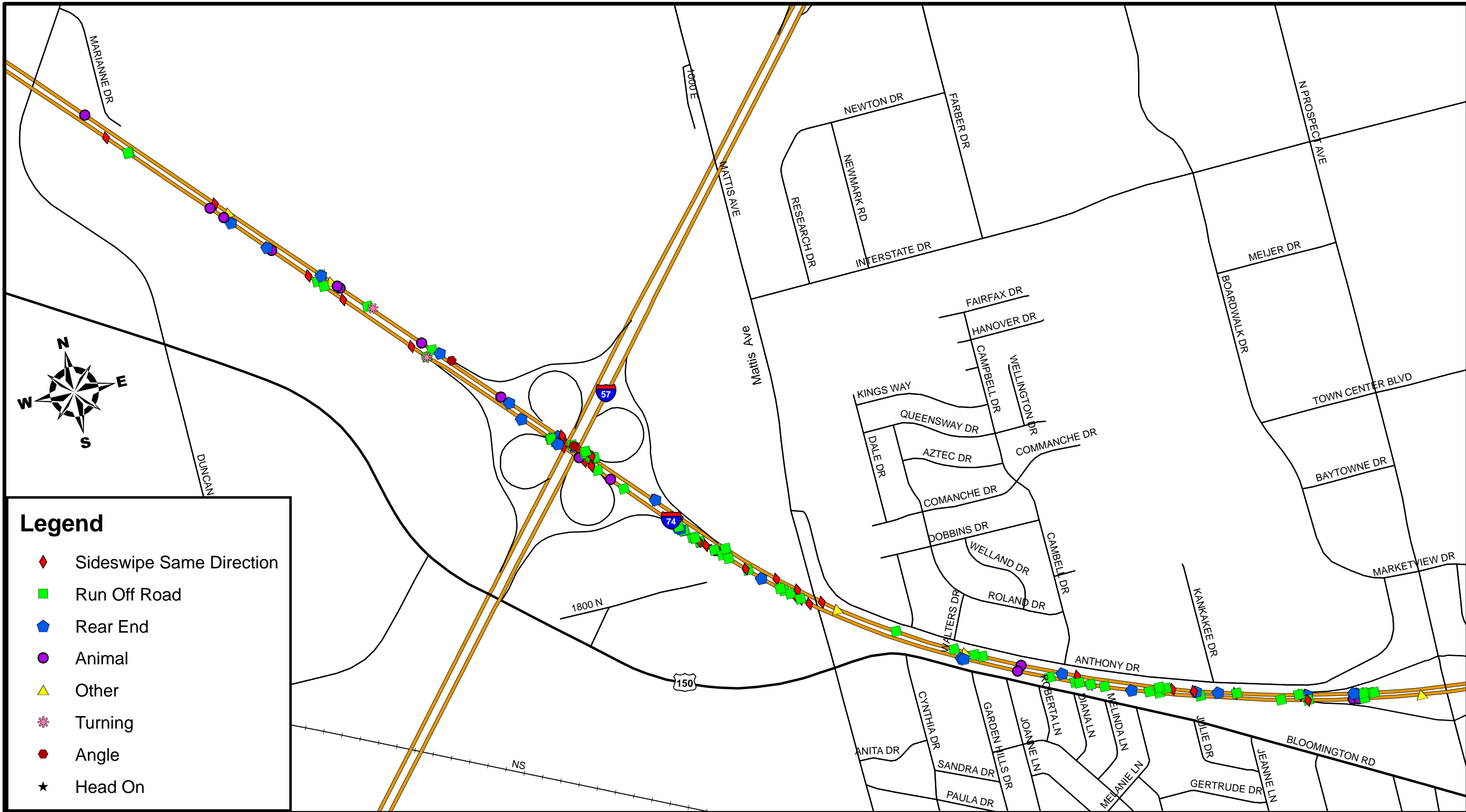


Note: Run Off Road crashes include fixed object, other object, overturned, and parked motor vehicle crashes

Interchange Reconstruction Project I-57 Crashes from 2008 to 2012

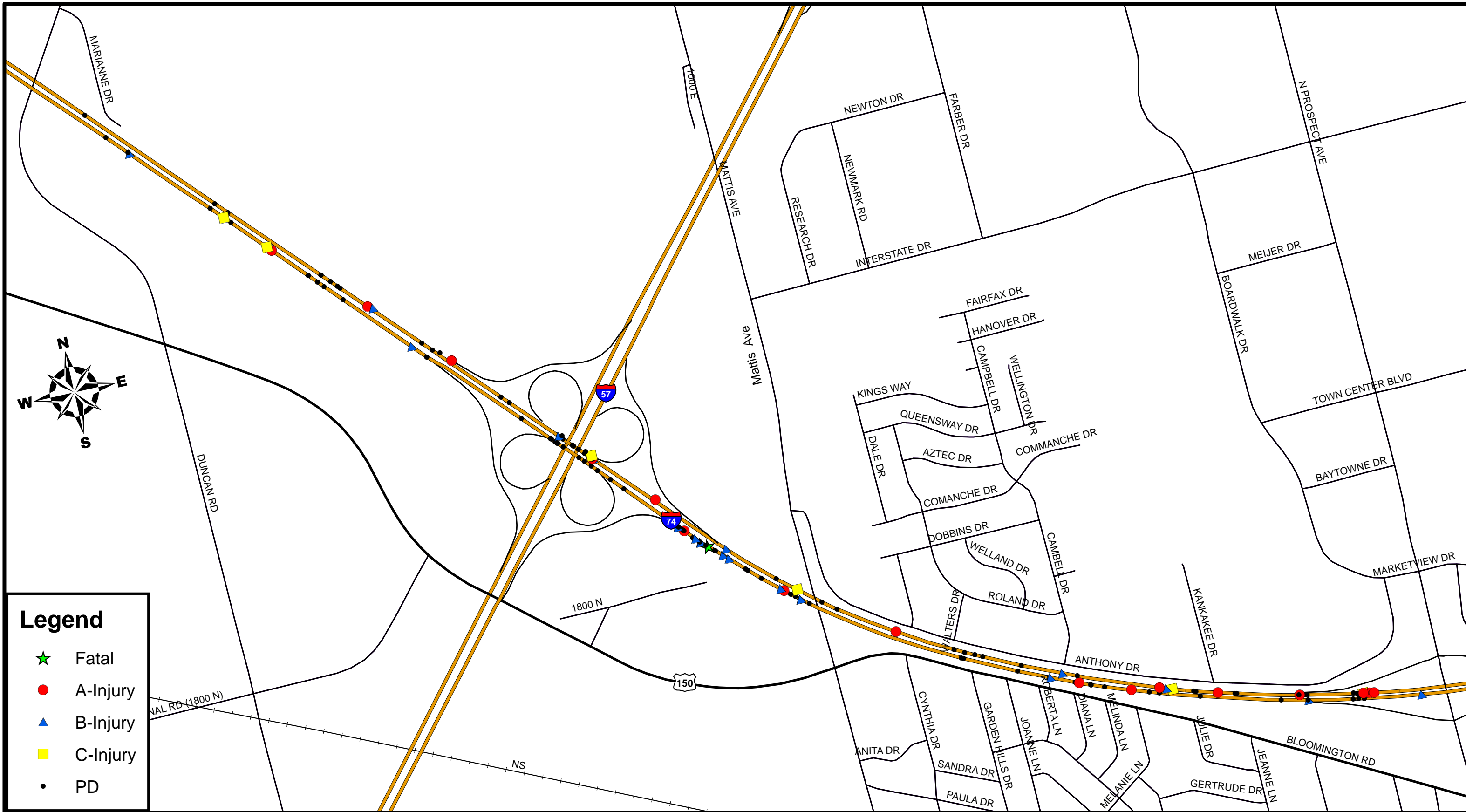


Interchange Reconstruction Project I-74 Crashes from 2008 to 2012

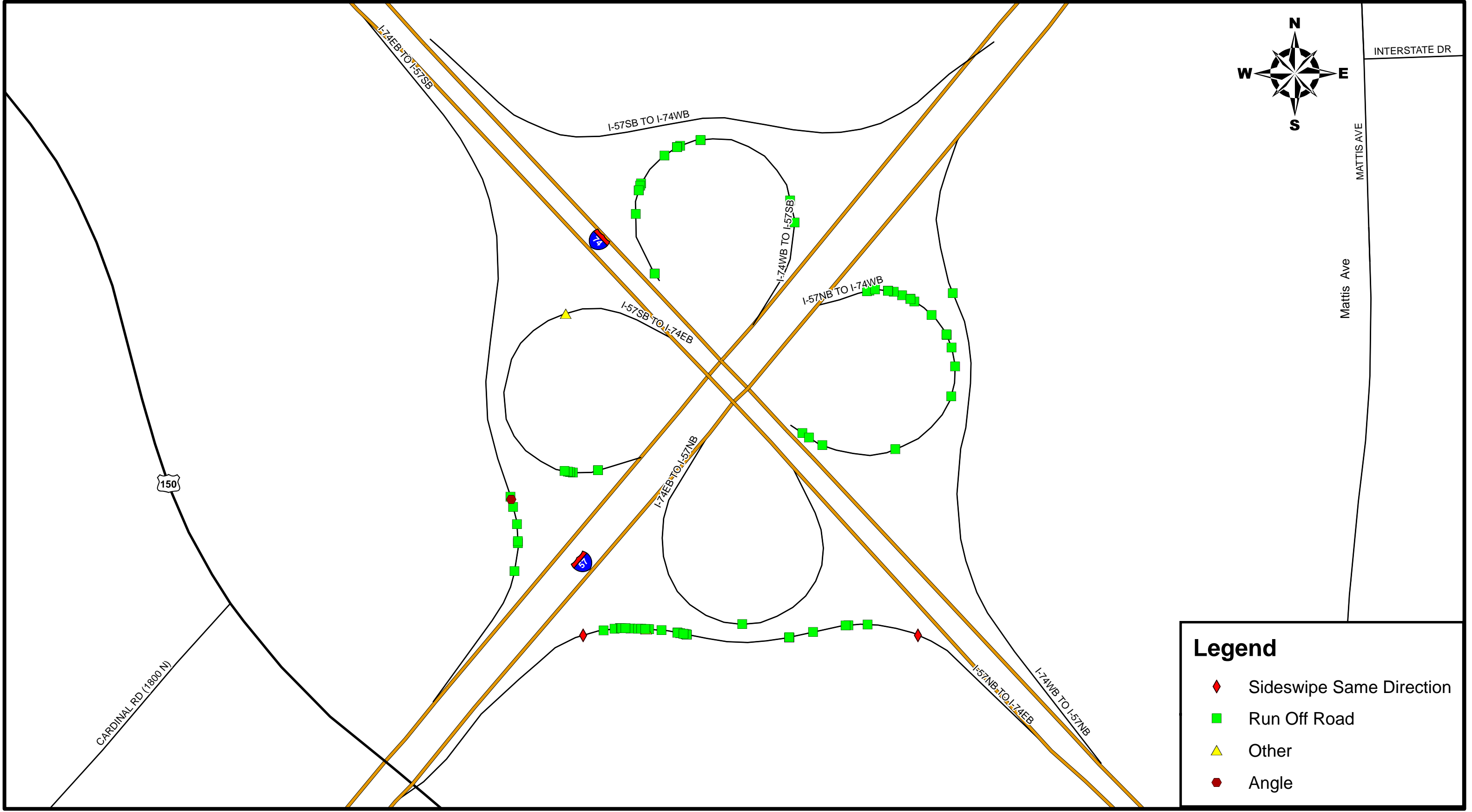


Note: Run Off Road crashes include fixed object, other object, overturned, and parked motor vehicle crashes

Interchange Reconstruction Project I-74 Crashes from 2008 to 2012



Interchange Reconstruction Project Ramp Crashes from 2008 to 2012

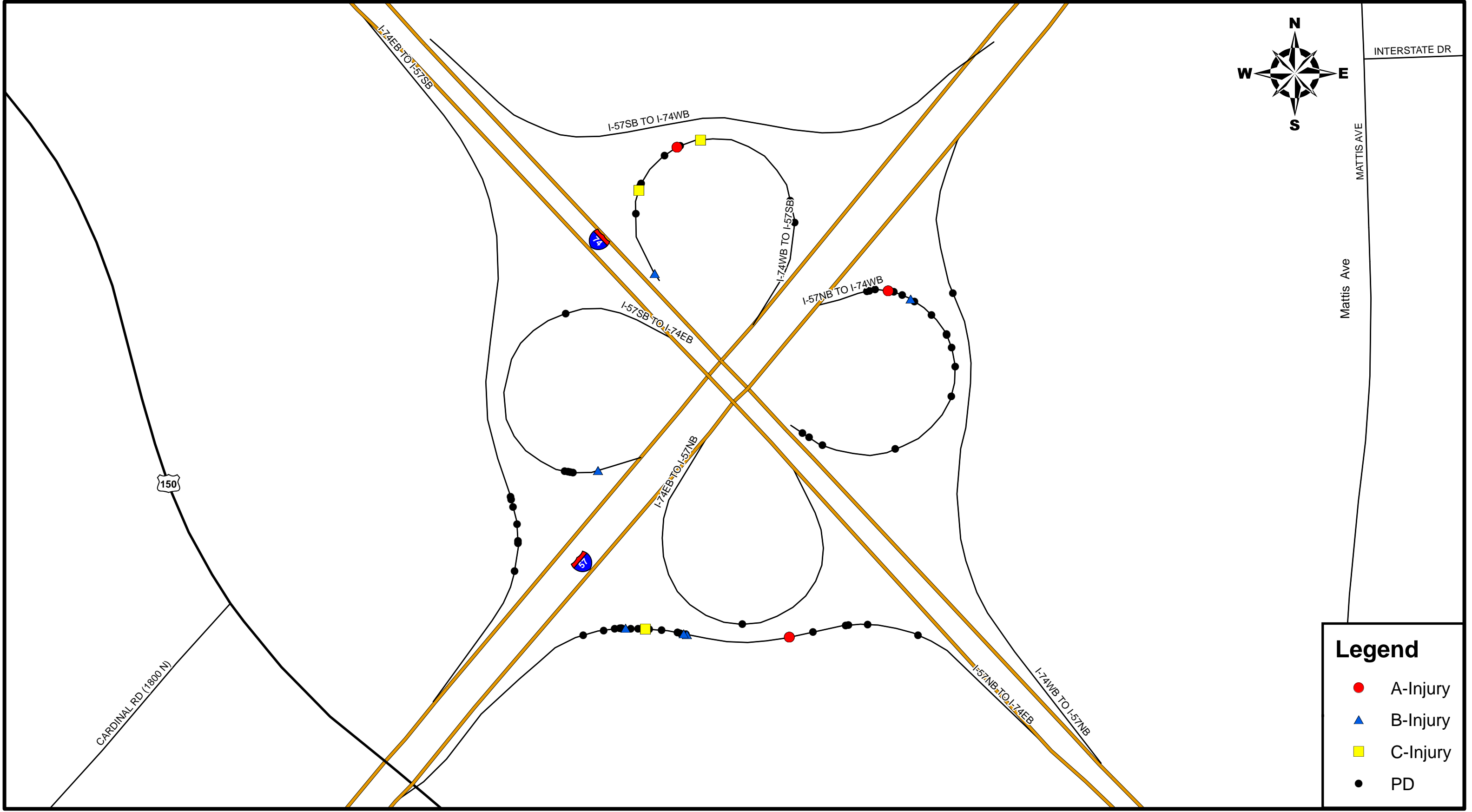


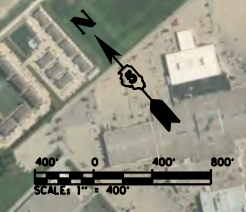
Legend

- ◆ Sideswipe Same Direction
- Run Off Road
- ▲ Other
- Angle

Note: Run Off Road crashes include fixed object, other object, overturned, and parked motor vehicle crashes

Interchange Reconstruction Project Ramp Crashes from 2008 to 2012





LEGEND

AFFECTED	UNAFECTED
	

WATER BODIES

SITE ID #	AFFECTED AREA (ac)
POND #1	1.47
POND #2	0.00
SITE ID #	LENGTH
COPPER SLOUGH	2520'

WETLANDS

SITE ID #	AFFECTED AREA (ac)
2	0.005
4	0.19
9	2.36
10	0.36
11	0.40
12	0.04
13	0.09
14	0.17
15	0.08
Total	3.695

Notes:
 1. Site number based on INHS Delineation Report
 2. These areas are estimated based on preliminary grading and right-of-way limits. Areas are subject to change during development of interchange geometry.
 3. This project has the potential to impact a cultural resource protected by the National Historic Preservation Act.
 4. REC = Recognized Environmental Condition





ALTERNATIVE #1
EXHIBIT 10









PROJECT DATE: 4/22/2025
 PROJECT NAME: I-74/I-57 Interchange
 PROJECT SCALE: 1" = 400'
 DRAWING TITLE: Wetland Delineation
 DRAWING NUMBER: 10



FILE DATE: 11/24/2014
 PROJECT: I-57/74 Interchange Type Study
 SCALE: 200' = 1" (Horizontal)
 DATE: 11/24/2014



SOILS MAP LEGEND

	56B - DANA SILT LOAM
	152A - DRUMMER SILTY CLAY LOAM
	154A - FLANAGAN SILT LOAM
	171B - CATLIN SILT LOAM
	198A - ELBURN SILT LOAM
	622C2 - WYANET SILT LOAM
	802B - ORTHENTS
	W - WATER

INTERCHANGE TYPE STUDY

SOILS MAP

EXHIBIT 12

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly those local drainage basins of small size. The community map repository should be consulted for possible updates and additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodway Areas have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Subleve Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded-advance-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the source of flood elevation information. Accordingly, flood elevation data determined in the FIS report should be utilized in conjunction with the FIRM for purposes of construction of new flood damage-reduction projects.

Coastal Base Flood Elevations shown on this map apply only to residents of U.S. North American Vertical Datum of 1988 (NAVD 88). Users of the FIRM should be aware that coastal flood elevations are also provided in the Summary of Subleve Elevations table in the Flood Insurance Study report for the jurisdiction. Elevations shown in the Summary of Subleve Elevations table should be used for construction and/or flood plain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the Floodways were computed at cross sections and interpreted between these sections. The Floodways were based on hydraulic computations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent Floodway data are provided in the Flood Insurance Study report for this jurisdiction.

In the State of Illinois, any portion of a stream or watercourse that lies within the Floodway fringe of a natural (NE) stream may have a state regulated Floodway. The Flood may report these areas as regulated Floodways.

Floodways restricted by anthropogenic features such as bridges and culverts are drawn to reflect natural conditions and may not agree with the model computer widths listed in the Floodway Data table in the Flood Insurance Study report.

Multiple topographic sources may have been used in the delineation of Special Flood Hazard Areas. See Flood Insurance Study report for details on source resolution and geographic content.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 18. The horizontal datum was NAD 83, GRS80 datum. Differences in datum, alignment, projection or UTM zones used in the production of FIMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding correlation between the National Geospatial Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geospatial Survey website at www.ngs.noaa.gov or contact the National Geospatial Survey at the following address:

NGS Information Services, NOAA, NNGS12
National Geospatial Survey SSMC-3, #5002
1215 East-West Highway
Silver Spring, Maryland 20910-0202
202-773-3242

To obtain current elevation, description, and/or location for bench marks shown on this map, please contact the Information Services Branch of the National Geospatial Survey at (202) 773-3242, or visit its website at www.ngs.noaa.gov.

Base map information shown on this FIRM was produced in digital format by the Champaign County GIS Consortium. Color digital orthophotos with a 2-foot pixel resolution were photogrammetrically derived from aerial photography obtained in 2006. Photography Copyright © 2008 by Champaign County GIS Consortium.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The Special Flood Hazard Areas and Floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contain authoritative hydraulic data) may reflect stream channel dimensions that differ from what is shown on this map.

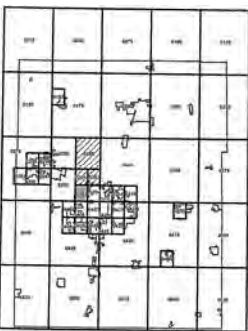
Corporate limits shown on this map are based on the best data available at the time of publication. Boundary changes due to annexations or disincorporations may have occurred after this map was published; map users should contact appropriate community officials to verify current corporate limits locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities with existing National Flood Insurance Program rates, for each community as well as a listing of the panels on which each community is located.

For information on available products associated with the FIRM visit the Map Service Center (MSC) website at <http://www.fema.gov>. Available products may include previously issued Editions of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (MXI) at 1-877-452-6243 (1-877-452-6247) or visit the FEMA website at <http://www.fema.gov/information/mxi>.

PANEL INDEX



Panel Not Printed



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, AR, AV, X, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A**
Zone A: No Base Flood Elevations determined.
- ZONE AE**
Zone AE: Base Flood Elevations determined.
- ZONE AH**
Zone AH: Flood depths of 1 to 3 feet (usually occur due to sloping terrain); average depth determined for areas of flood.
- ZONE AO**
Zone AO: Flood depths of 1 to 3 feet (usually occur due to sloping terrain); average depth determined for areas of flood.
- ZONE AR**
Zone AR: Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR areas are protected from the 1% annual chance or greater flood.
- ZONE AV**
Zone AV: Areas to be protected from the 1% annual chance flood by a flood control system under construction, or base flood elevations determined.
- ZONE V**
Zone V: Coastal flood zone with velocity based (wave action), base flood elevations determined.
- ZONE VE**
Zone VE: Coastal flood zone with velocity based (wave action), base flood elevations determined.

FLOODWAY AREAS IN ZONE AE
The Floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be passed without substantial increases in flood heights.

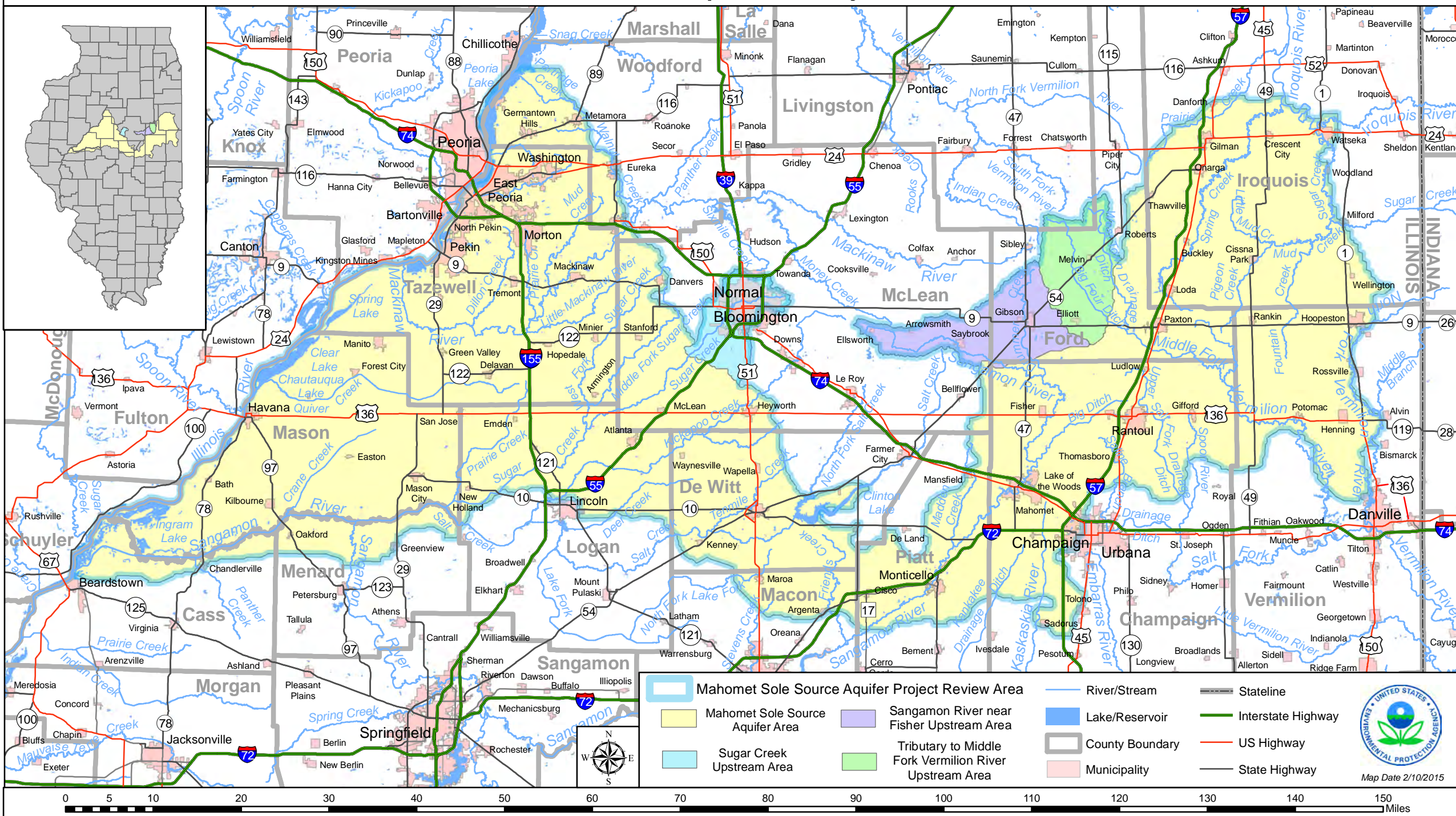
- OTHER FLOOD AREAS**
- ZONE X**
Zone X: Areas of 0.2% annual chance flood. Zone X areas of 1% annual chance flood with average depths of less than 1 foot or with average areas less than 1 square mile; areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
Other Areas: Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are determined to be negligible.

- COASTAL BARRIER RESOURCES SYSTEMS (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
OPAs areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 0.2% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary

Boundary defining Special Flood Hazard Areas of different Base Flood Elevations. Note symbols in Flood Profiles.
Base Flood Elevation value within contours within zone, elevated in feet.

- Referenced to the North American Vertical Datum of 1988
- EL: 67.7
- 1:100000 FT
- 1:25000 FT
- 1:6250 FT
- 1:1562 FT
- 1:390 FT
- 1:97.5 FT
- 1:24.375 FT
- 1:6.09375 FT
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Mahomet Sole Source Aquifer Project Review Area



Mahomet Sole Source Aquifer Project Review Area	River/Stream	Stateline
Mahomet Sole Source Aquifer Area	Lake/Reservoir	Interstate Highway
Sugar Creek Upstream Area	Sangamon River near Fisher Upstream Area	US Highway
Tributary to Middle Fork Vermilion River Upstream Area	County Boundary	State Highway
	Municipality	



Map Date 2/10/2015



Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe Attn: Dennis L. Markwell
From: John D. Baranzelli By: Thomas C. Brooks *Thomas C Brooks*
Subject: Biological Resources Review
Date: June 27, 2013

FAI 74/57
I-74 Sta 1150+00 (E end) Sta 1840+00 (W end) & I-57 Sta 540+00 (S end) Sta 655+00 (N end)
Job No.: C-95-030-11
BDE Seq. No.: 17502 & 17502A
Champaign County

The proposed project involves interchange reconstruction of I-74 and I-57. An undetermined amount of new ROW is required.

A preliminary review was performed of the project area for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. The U.S. Fish and Wildlife Service Region 3 list of threatened or endangered species in Illinois (<http://www.fws.gov/midwest/endangered/lists/illinois-cty.html>) lists Indiana bat (*Myotis sodalis*), Eastern prairie fringed orchid (*Platanthera leucophaea*) and Prairie bush clover (*Lespedeza leptostachya*) as occurring in Champaign County.

Appendix 2 of the Indiana bat (*Myotis sodalis*) Draft Recovery Plan: First Revision lists no records for the Indiana bat in Champaign County. Also, there are no caves, mines (hibernacula); small stream corridors with well developed riparian woods or upland forests (foraging) in the project area. We conclude no effect to the Indiana bat in the project area.

The federally threatened and Illinois endangered Eastern prairie fringed orchid is a plant of open-canopied mesic to wet prairies and high quality wetlands. There is no prairie or high quality wetlands within the project area. Therefore, we conclude absence of the Eastern prairie fringed orchid in the project area.

Prairie bush clover requires dry to mesic prairies with gravelly soils. There is no such habitat in the project corridor. Therefore, we conclude absence of Prairie bush clover in the project area.

This office has determined that there will be no effect to the species listed for Champaign County, Illinois as described above. Please keep this memorandum in your project files as it documents and concludes consultation with the IDNR and USFWS.

The IDNR Natural Heritage Database has no records of listed species, natural areas or nature preserves within the project corridor (NRRT/DIRT report dated September 17, 2012 for the original project and May 25, 2013 for Addendum A). In accordance with the 2013 Memorandum of Understanding by and between IDNR and IDOT, consultation is terminated.

The National Wetland Inventory Map (Rising Quadrangle) depicts wetlands in the project area. The project was sent for field survey. The INHS wetland delineation report and GIS data are posted on the shared drive. The results of the survey indicate the presence of 16 jurisdictional wetlands within the project area (Sites 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17 and 18).

In accordance with IDOT BDE Manual Section 26-8, wetland impacts are to be avoided, minimized and then mitigated. Section 26-8.05(c)4 states that for all projects that are surveyed for wetlands and determined to have wetlands within the study area, a Wetland Impact Evaluation (WIE) form must be completed and submitted to the BDE, even if there are no wetland impacts. Further information on completing and processing of WIEs is contained in IDOT BDE Manual Section 26-8.

The Natural Resources Unit has reviewed this project. The project, as described on the Environmental Survey Request Form, does not require biological surveys. By agreement, no coordination with the Illinois Department of Natural Resources and the U.S. Fish and Wildlife Service is necessary.

JMV

Review for Endangered Species Act - Section 7

See the attached US Fish and Wildlife Service list of endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within the county in which the proposed project is located. We cross-referenced the preferred habitat of each listed species with our knowledge of the project area and determined that listed species and critical habitat are not present.

Should the proposed improvement be modified or new information indicate listed or proposed species may be affected, consultation or additional coordination should be initiated.

Attachment—USFWS species county list

VH

Illinois County Distribution

Federally Endangered, Threatened, and Candidate Species

List Revised October 2013

County	Species	Status	Habitat
Champaign Field Office to Contact: U.S. Fish and Wildlife Service Marion Illinois Sub-Office 8588 Route 148 Marion, Illinois 62959 Phone: (618) 997-3344, ext. 340 FAX: (618) 997-8961 e:mail Marion@fws.gov+A49	Indiana bat (<i>Myotis sodalis</i>)	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
	Northern long-eared bat <i>Myotis septentrionalis</i>	Proposed as Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.
	Eastern prairie fringed orchid (<i>Platanthera leucophaea</i>)	Threatened	Mesic to wet prairies
	Prairie bush clover (<i>Lespedeza leptostachya</i>)	Threatened	Dry to mesic prairies with gravelly soil



Illinois Department of Transportation

Memorandum

To: Joseph Crowe Attn: Bart Sherer
From: John Baranzelli By: Brad Koldehoff
Subject: Cultural Resource Clearance
Date: January 13, 2014

Champaign County
FAI 74/57, I-74/I-57
Sec. 10(5-1-RS-1,14-1-6)R
Job No. P-95-030-11
Seq. #17502B

Attached is a copy of the Environmental Survey Request Form submitted for the above project. The professional staff of the Cultural Resources Unit has made the following determination: "No Historic Properties Affected." This determination follows the stipulations of the joint Programmatic Agreement for the Delegation of Authority for Minor Projects ratified by the Advisory Council on Historic Preservation, FHWA, SHPO, and IDOT on June 14, 2011.

The stamped request form attached documents that no further coordination is required for cultural resources.

A handwritten signature in black ink, reading "Brad Koldehoff".

Attachment

BK:km

Environmental Survey Request Addendum

A. Project Information Bio Cultural Wetlands Special Waste

Submittal Date: 12/19/2013 Sequence No: 17502 B

District: 5 Requesting Agency: DOH Project No: _____

Contract #: 70897 Job No.: C- 95-030-11

Counties: Champaign

Route: FAI 74/57 Marked: I-74/I-57

Street: _____ Section: 10(5-1-RS-1,14-1,6)R

Municipality(ies): City of Champaign (see additional info) Project Length: 8.0467 km 5 miles

From/To (At): I-74 Sta 1150+00 (E end)-Sta 1840+00 (W end) I-57 Sta 540+00 (S end) Sta 655+00 (N end)

Quadrangle: Rising Quadrangle Township-Range-Section: Sec 34 T20N R8E (see additional info)

Survey Target Date: 06/19/2014 Anticipated Design Approval: 06/19/2014

B. Reason for Submittal: (Check all that apply)

Acquisition of additional ROW or easement Addendum: _____ acres Total Project: _____ acres

In-Stream Work Stream Name: _____

Other: ESR Limits were expanded

Field Sign Off (Bio & Cultural Only)

C. Addendum Description: An addendum was required due to a change in the ESR limits from what was originally submitted.

D. Tree Removal?: Don't Know **Number?:** _____ ha/ _____ acres

Existing Bridge(s) Structure Number:	010-1071	On Historic Bridge List:	No
Existing Bridge(s) Structure Number:	010-0169	On Historic Bridge List:	No

Wetland delineation performed by: BDE End. Species Consultation performed by: BDE

E. Contact Person: Bart Sherer **Local Contact Person:** _____

Telephone #: (217) 465-4181 ext. 317 Telephone #: _____

Env. Contact: _____ E-Mail: _____

Telephone #: _____ Title/Company: _____

F. Update Entire Project

Addendum Only

Field Sign Off (Bio & Cultural Only) _____ Received in CO _____

CULTURAL RESOURCES:
NO SURVEY OR FURTHER COORDINATION REQUIRED

Bud Kollhoff 1/13/14

SIGNED DATE



Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe Attn: Bart L. Sherer
From: John D. Baranzelli By: Brad H. Koldehoff
Subject: Cultural Resources – Adverse Effect
Date: February 20, 2014

Champaign County
FAI-57/74, I-57/74
Champaign
Intersection Reconstruction
IDOT Sequence #17502, 17502A
ISAS Log #12197, 13044

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the above referenced project has the potential to cause an Adverse Effect to an ancient American Indian archaeological habitation site (11CH608). Preliminary investigations conducted by Illinois State Archaeological Survey (ISAS) personnel have identified the site as requiring test excavations to evaluate its National Register eligibility. However, access to the site has been denied by the landowner. Therefore, test excavations by ISAS must be undertaken when IDOT has control of the site area that will be potentially impacted by the project.

The Illinois State Historic Preservation Officer (SHPO) has concurred with IDOT's determination of a "Preliminary Adverse Effect," see attached letter. Therefore, a Memorandum of Agreement (MOA) will be developed that stipulates, (1) archaeological test excavations must be conducted prior to construction, and (2) if National Register eligible cultural resources are identified, data-recovery excavations (mitigation) must be completed prior to any construction activities in the vicinity of the site. When the MOA has been ratified, the project will be clear for design approval.

A handwritten signature in black ink, appearing to read "Brad H. Koldehoff".

Brad H. Koldehoff, RPA
Cultural Resources Unit
Bureau of Design and Environment



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

Champaign County
FAI-57/74, I-57/74
Champaign
Intersection Reconstruction
IDOT Sequence #17502, 17502A
ISAS Log #12197, 13044

January 10, 2014

RECEIVED

JAN 10 2014

PRESERVATION SERVICES

Federal Section 106 – Preliminary Adverse Effect

Ms. Anne Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
Springfield, Illinois 62701

Dear Ms. Haaker:

Enclosed are copies of the Phase I Survey Report completed by Illinois State Archaeological Survey (ISAS) personnel concerning archaeological and historical resources potentially impacted by the above referenced project. Survey of the 579-acre project area resulted in the identification of nine archaeological sites within or adjacent to the project limits: 11CH290, 11CH603-609, and 11CH611. No architectural resources eligible for National Register consideration were identified by IDOT's cultural resources staff.

One archaeological site, 11CH608, may hold new information about the prehistory of the region, while the remaining sites appear to lack integrity and information potential. To evaluate the National Register eligibility of site 11CH608, test excavations are recommended. However, access to the site has been denied by the landowner. Therefore, a draft MOA will be developed in coordination with FHWA and submit to your office for review and comment. The MOA will stipulate that (1) site 11CH608 will be evaluated once IDOT controls the portion of the site to be impacted, and (2) data-recovery excavations will be conducted, if warranted.

In accordance with the established procedure for coordination of IDOT projects, we request the concurrence of the State Historic Preservation Officer in our preliminary determination that the proposed project may cause an adverse to an historic property subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended.

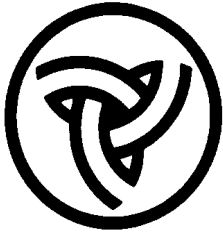
Very truly yours,

Brad H. Koldehoff
Cultural Resources Unit
Bureau of Design & Environment

CONCUR

By: Ann E. Haaker
Deputy State Historic Preservation Officer

Date: 1-10-14



Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe Attn: Bart L. Sherer
From: John D. Baranzelli By: Brad H. Koldehoff
Subject: Cultural Resources – Adverse Effect, Ratified MOA
Date: July 9, 2014

Champaign County
FAI-57/74, I-57/74
Champaign
Interchange Reconstruction
IDOT Sequence #17502, 17502A, 17502B
ISAS Log #12197, 13044

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the above referenced project has the potential to cause an Adverse Effect to an ancient American Indian archaeological habitation site (11CH608). Preliminary investigations conducted by Illinois State Archaeological Survey (ISAS) personnel have identified the site as requiring test excavations to evaluate its National Register eligibility. However, access to the site has been denied by the landowner. Therefore, test excavations by ISAS must be undertaken when IDOT has control of the site area that will be potentially impacted by the project.

A Memorandum of Agreement (MOA) has been developed and ratified (see attached) with the following stipulations: (1) archaeological test excavations must be conducted prior to construction, and (2) if National Register eligible cultural resources are identified, data-recovery excavations (mitigation) must be completed prior to any construction activities in the vicinity of the site.

The project is cleared for design approval provided District 5 ensures the above stipulations are completed in coordination with my office and ISAS personnel prior to any construction activities in the vicinity of the site.

A handwritten signature in cursive script, reading "Brad H. Koldehoff".

Brad H. Koldehoff, RPA
Cultural Resources Unit
Bureau of Design and Environment

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
ILLINOIS DEPARTMENT OF TRANSPORTATION,
AND
ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING
RECONSTRUCTION OF I-57/I-74 INTERCHANGE
CHAMPAIGN, CHAMPAIGN COUNTY, ILLINOIS**

WHEREAS, the Illinois Department of Transportation (IDOT) plans to reconstruct the interchange of I-57 and I-74 in Champaign, Champaign County, Illinois (Project), IDOT Sequence #17502, 17502A, 17502B; and

WHEREAS, the Federal Highway Administration (FHWA) may fund the Project thereby making the Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. Section 470f, and its implementing regulations, 36 C.F.R. Part 800; and

WHEREAS, the FHWA has defined the undertaking's area of potential effect (APE) as the proposed project area (as shown in Exhibit A); and

WHEREAS, the FHWA in consultation with the Illinois State Historic Preservation Officer (SHPO) has determined that no standing structures that are eligible for listing on the National Register of Historic Places will be adversely effected by the Project (Exhibit B); and

WHEREAS, the FHWA invited the following Tribes to enter consultation: the Kickapoo, Miami, and Peoria, and no Tribe expressed an interest in consultation; and

WHEREAS, the FHWA has invited the IDOT to participate in consultation and to become a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, the FHWA and IDOT, in consultation with the SHPO, have identified an ancient American Indian habitation area (Site) that has the potential to yield important information about the prehistory of region (11CH608), thus, making the Site eligible for the National Register of Historic Places (NRHP) under Criterion D, and the Site may be adversely effected by the Project; and

WHEREAS, the Site has no affiliation with historic Indian Tribes and is important for the scientific data it likely contains; therefore, it does not require preservation in place; and

WHEREAS, in accordance with 36 CFR Part 800, the FHWA acknowledges and accepts the advice and conditions outlined in the Council's "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," published in the Federal Register on June 17, 1999; and

WHEREAS, the FHWA notified the Advisory Council on Historic Preservation (ACHP) of the preparation of this MOA in a letter dated April 8, 2014 and the ACHP has declined to participate in consultation; and

WHEREAS, execution and implementation of this MOA evidences that the FHWA has satisfied its Section 106 responsibilities for the Project; and

NOW, THEREFORE, the FHWA, IDOT, and SHPO agree that the Project shall be implemented in accordance with the following stipulations to ensure that potential effects on historic properties are taken into account.

STIPULATIONS

The FHWA, IDOT, and SHPO agree that the following steps will be undertaken for the Project:

I. ARCHAEOLOGICAL TESTING (PHASE II)

- A. When the IDOT has secured access to the Site (11CH608), the Illinois State Archaeological Survey (ISAS) on behalf of the IDOT will conduct test excavations within the project limits to identify and evaluate archaeological resources. The IDOT will seek SHPO concurrence in determining the NRHP eligibility of the archaeological resources.
- B. If the resources are determined eligible for the NRHP, and adverse impacts by the Project cannot be avoided, the IDOT, in coordination with the SHPO, will ensure that data-recovery excavations (mitigation) are completed.

II. ARCHAEOLOGICAL MITIGATION (PHASE III)

- A. To mitigate the adverse effect, the IDOT will ensure that data-recovery excavations are completed by the ISAS in accordance with the attached data-recovery plan (Exhibit C), which is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation, and the Advisory Council on Historic Preservation's Treatment of Archaeological Properties: A Handbook. The IDOT will ensure that no construction activities will be undertaken in the vicinity of the Site prior to the conclusion of data-recovery excavations.
- B. Human remains are not expected to be found during the investigations covered by this MOA. However, if encountered, required notifications of the discovery will be made to the county coroner and the SHPO, then after authorization under Illinois Human Skeletal Remains Protection Act (20 ILCS 3440, 17 IAC 4170) and its rules (the Act), the remains along with

any associated artifacts will be removed following procedures for recording and reporting established under the Act. No excavation of human remains will be performed except under the direction of a Certified Skeletal Analyst (17 IAC 4170.300(f)). Disposition of the remains and associated artifacts will be accomplished as determined under the Act.

III. PROFESSIONAL STANDARDS

For the purpose of implementing this MOA, the IDOT shall continue to employ departmental staff with qualifications that meet the requirements of 36 CFR Part 61, Appendix A. At a minimum, the professional staff required to carry out the terms of this MOA shall consist of one permanent, full time, archaeologist. In the event of a prolonged absence of the IDOT archaeologist, IDOT will, in consultation with the FHWA and SHPO, appoint an archaeologist that meets the requirements of 36 CFR Part 61, Appendix A.

IV. DURATION

This MOA will be null and void if its stipulations are not carried out within ten years from the date of its execution. In such an event, the FHWA shall so notify the parties to this MOA and, if it chooses to continue with the Project, then it shall reinitiate review of the Project in accordance with 36 CFR Part 800.

V. POST REVIEW DISCOVERIES

A. *Procedures for an Unanticipated Discovery of Human Remains and Burials:* In the case of an unanticipated discovery of human remains or burials on state land, the IDOT will comply with 20 Illinois Compiled Statutes 3440/0.01, et seq. (Human Skeletal Remains Protection Act) and follow these procedures:

(a) Upon encountering human remains or an unmarked human burial during ground disturbing construction activities, the IDOT will ensure that the construction contractor immediately stops work within a one-hundred-fifty (150) foot radius from the point of discovery. The IDOT will ensure that the construction contractor implements interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.

(b) Immediately following receipt of such notification, the IDOT will ensure that construction activities have halted within a one-hundred-fifty (150) foot radius from the point of discovery and assume responsibility for implementing additional measures, as appropriate, to protect the discovery

from looting and vandalism until the requirements of state law have been completed.

(c) The IDOT will determine if the skeletal remains are human, the degree to which they were disturbed, and, if possible, assess their potential age and cultural affiliation without any further disturbance.

(d) The IDOT will notify the county coroner, Illinois Historic Preservation Agency (IHPA) and SHPO, and other interested parties within forty-eight (48) hours of the discovery.

(e) Within seventy-two (72) hours after notification the county coroner will determine jurisdiction. If the remains are older than 100 years, the county coroner will notify the IHPA and SHPO.

(f) The IHPA is responsible for notifying FHWA, IDOT, and other interested parties within twenty-four (24) hours of its findings.

(g) If it is determined that intact or fragmented human remains are present the IDOT will consult with the IHPA, SHPO, FHWA, and other interested parties regarding additional measures to avoid and protect or mitigate the adverse effect of the Project on the human remains and burial site. These measures may include:

- i. formal archaeological evaluation of the site;
- ii. if the remains are determined to be Native American, consultation with appropriate Tribes will be required;
- iii. visits to the site by the SHPO and other interested parties;
- iv. exploration of potential alternatives to avoid the human remains or burial;
- v. for Native American remains, implementation of a mitigation plan by the IDOT in consultation with appropriate Tribes, including procedures for disinterment and re-interment;
- vi. implementation of the mitigation plan; and
- vii. FHWA approval to resume construction following completion of the fieldwork component of the mitigation plan.

B. *Procedures for an Unanticipated Discovery of Historic Properties:* In the event of an unanticipated discovery of historic properties during IDOT construction activities, IDOT will follow these procedures:

(a) The construction contractor must immediately stop all construction activity within a three-hundred (300) foot radius of the discovery, notify IDOT of the discovery and implement interim

measures to protect the discovery from looting and vandalism. Within forty-eight (48) hours of receipt of this notification of the discovery, the IDOT shall:

- i. inspect the work site to determine the extent of the discovery and ensure that construction activities have halted;
- ii. clearly mark the area of the discovery;
- iii. implement additional measures, as appropriate, to protect the discovery from looting and vandalism; and
- iv. notify the FHWA, the SHPO, and other interested parties of the discovery.

(b) IDOT/FHWA will have seven (7) business days following notification to determine the National Register eligibility of the discovery after considering the filed comments of the SHPO and other interested parties. IDOT/FHWA may assume the newly discovered property to be eligible for the National Register for the purposes of Section 106 pursuant to 36 CFR§ 800.13(c)

(c) If the find is determined to be potentially significant the IDOT will consult with the SHPO and other interested parties regarding appropriate measures for site treatment. For properties determined eligible for the National Register, IDOT/FHWA will notify the SHPO and other interested parties, of those actions for which it proposes to resolve adverse effects. The SHPO and other interested parties will have seven (7) business days to provide their views on the proposed actions to resolve adverse effects. These measures may include:

- i. formal archaeological evaluation of the site;
- ii. visits to the site by the SHPO and other interested parties;
- iii. exploration of potential alternatives to avoid the site;
- iv. preparation of a mitigation plan by the IDOT in consultation with other interested parties for approval by the SHPO;
- v. implementation of a mitigation plan; and
- vi. FHWA approval to resume construction following completion of the fieldwork component of the mitigation plan.

(d) If the find is determined to be either isolated or completely disturbed by construction activities, the IDOT will consult with the SHPO and other interested parties prior to resuming construction.

Execution of this MOA by the FHWA, SHPO, and IDOT and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment

FEDERAL HIGHWAY ADMINISTRATION

By: Max Tuttle Date: July 3, 2014

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: Anne Maat Date: July 3, 2014

INVITED SIGNATORY

ILLINOIS DEPARTMENT OF TRANSPORTATION

By: Kensil A. Garnett Date: 6-25-14
cme

From: Malone, Pat
Sent: Wednesday, November 05, 2014 11:22 AM
To: Sherer, Bart L
Cc: Hamer, Steve; Brooks, Thomas C
Subject: RE: 17502 70897 I-74-57 interchange Champaign Wetlands

Hi Bart,

The areas described within the interchange and maintained ROW are not considered State jurisdictional wetlands and are not subject to review under IPWA.

Pat

From: Sherer, Bart L
Sent: Wednesday, October 29, 2014 8:29 AM
To: 'gregory.a.mckay@usace.army.mil'; Malone, Pat; Hamer, Steve
Cc: Neihart, Scott W; Stults, Jason W; Keys, Rustin B; Brooks, Thomas C; 'Wiesbrook, Scott M'
Subject: 17502 70897 I-74-57 interchange Champaign Wetlands

Gentlemen,

IDOT District 5 is in the process of conducting an Environmental Assessment (EA) for the reconstruction of the I-74/I-57 interchange in Champaign, IL.

A wetland survey of the project area has been performed; several wetlands were delineated within the project corridor. The District is currently pursuing a preferred alternative; with a preferred alternative being chosen we can better identify the wetlands that may be affected by the project.

The District is interested in meeting with you to discuss the following items:

- Of the wetlands delineated, which wetlands would the USACE take jurisdiction of requiring mitigation
- Wetland mitigation options

Attached above is a location map, preferred alternative wetland impact exhibit and wetland delineation report for your information.

The District would like to ask if you are available to meet at the project site on Thursday November 13th, 2014 at 10:30 AM to discuss the project.

If you should have any questions or need additional information, feel free to contact me.

Bart L Sherer
Environmental Coordinator
IDOT Region 3/District 5
Office 217-466-7305
Fax 217-465-3101
bart.sherer@illinois.gov



Pat Quinn, Governor
Robert F. Flider, Director

Bureau of Land and Water Resources

State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/782-6297 • TDD 217/524-6858 • Fax 217/557-0993

November 10, 2014

Ms. Lana Sumner
Crawford, Murphy & Tilly, Inc.
2750 W. Washington Street
Springfield, Illinois 62702-3497

Re: Interstate 57 and Interstate 74 Interchange Reconstruction
Abbreviated Environmental Assessment – 46.7 acres
Champaign County, Illinois
Federal Highway Administration Funds
USDA NRCS Form AD-1006

Dear Ms. Sumner:

The Illinois Department of Agriculture (IDOA) has completed its review of the agricultural impacts associated with proposed interchange improvements in Champaign County, Illinois. The project was examined for its compliance with IDOT's Agricultural Land Preservation Policy as well as the Illinois Farmland Preservation Act (505 ILCS 75/1 et seq.).

The existing conventional full cloverleaf interchange facility connecting I-57 and I-74 was constructed in 1965. The purpose of the proposed interchange reconstruction is to provide safer and more efficient transportation at the interchange. Its construction ultimately results in the conversion of 44.3 acres of Prime farmland soils to a non-agricultural use.

Because the interchange improvements are adjacent to existing Interstate right-of-way and the agricultural impacts have been mitigated to the greatest extent possible, the IDOA has determined that the project complies with IDOT's Agricultural Land Preservation Policy and Illinois' Farmland Preservation Act.

Enclosed are two copies of the USDA NRCS form AD-1006. One copy must be included in the project's environmental assessment; the other is for your files. Should you have any questions or comments, please contact Terry Savko of my staff at 217-785-4458.

Sincerely,

A handwritten signature in black ink that reads "Steven D. Chard".

Steven D. Chard, Acting Chief
Bureau of Land and Water Resources

SDC:TS

Enclosures-2
cc: Jonathon Manuel, Champaign Co SWCD
Agency project file

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 10/21/2014			
Name of Project I-57 & I-74 Interchange Improvements		Federal Agency Involved Federal Highway Administration			
Proposed Land Use Transportation		County and State Champaign, Illinois			
PART II (To be completed by NRCS)		Date Request Received By NRCS 10/21/14		Person Completing Form: Tim Prescott	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated N/A	Average Farm Size 372
Major Crop(s) Corn, Soybeans, Wheat, Hay	Farmable Land In Govt. Jurisdiction Acres: 29,633 % 97	Amount of Farmland As Defined in FPPA Acres: 27,695 % 91			
Name of Land Evaluation System Used Illinois	Name of State or Local Site Assessment System Statewide	Date Land Evaluation Returned by NRCS 11/5/14			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		46.7			
B. Total Acres To Be Converted Indirectly		0			
C. Total Acres In Site		46.7			
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		44.3			
B. Total Acres Statewide Important or Local Important Farmland		0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.00000			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		140			
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government					
5. Distance From Urban Built-up Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Non-farmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160	0	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	140	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	65	0	0
TOTAL POINTS (Total of above 2 lines)		260	205	0	0
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
Reason For Selection: *** When utilizing the Illinois State Site Assessment Corridor factors, 150 points are assigned to the Land Evaluation portion, and 150 points are assigned to the Site Assessment portion of the LESA System for a maximum score of 300 points.		<i>Illinois LESA Corridor</i>			
Name of Federal agency representative completing this form: Lana Sumner, AICP (consultant)			Date: 10/21/2014		

(See Instructions on reverse side)

Form AD-1006 (03-02)

**I-57 and I-74 Interchange Improvements
Champaign County, Illinois
Federal Highway Administration Funds**

PART VI-B Illinois Site Assessment <i>CORRIDOR</i> Factors	Maximum Points	Site A
1. Amount of agricultural land required	30	30
2. Location of the proposed alignment	30	20
3. Acres of off-site agricultural land required for borrow materials	15	15
4. Acres of Prime and Important farmland required for mitigation	15	0
5. Creation of severed farm parcels	10	0
6. Creation of uneconomical remnants	10	0
7. Creation of landlocked parcels	10	0
8. Creation of adverse travel	10	0
9. Relocations of rural residences and farm buildings	10	0
10. Utilization of minimum design standards	10	0
TOTAL SITE ASSESSMENT <i>CORRIDOR</i> POINTS	150	65

PART VII

Relative Value of Farmland	150	140
Total Site Assessment <i>CORRIDOR</i> Factors	150	65
TOTAL ILLINOIS LESA POINTS	300	205

111014
TS

* *The Illinois LESA System applies the **225 point cutoff** when evaluating state and federally funded projects. Site or Corridor alternatives receiving **175 or fewer points** have a **low rating** for protection, and it is not necessary to evaluate additional alternatives. Those alternatives receiving **176 to 225 points** are in the **moderate range** for protection. In most cases, alternatives **exceeding the 225 point level should be retained for agricultural use**, and an alternate site should be utilized for the intended project. Selecting the alternative with the lowest total points will usually protect the best farmland located in the most agriculturally viable areas. LESA also serves to maintain and promote the agricultural industry in Illinois.*



Illinois Department of Transportation

Memorandum

To: Kensil A. Gamett Attn: Craig Emberton
From: John D. Baranzelli By: Thomas C. Brooks
Subject: Natural Resources Review
Date: November 13, 2014

Thomas C. Brooks

I-74/ I-57
T20N/R8E/S26
Champaign County
Seq. #17502 B & C

The proposed project involves reconstruction of the I-74/ I-57 interchange; Addendum C calls for an expansion of the ESR limits.

There will be an unknown amount of land acquisition. There will be in-stream work. There will be an unknown amount of tree removal. Land cover in the vicinity of the proposed improvement is agriculture as well as maintained right-of-way of the existing interchange, and adjacent residential subdivisions.

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. **Therefore, consultation under Part 1075 is terminated.**

This review for compliance with 17 Ill. Adm. Code Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed improvement is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the proposed improvement has not been implemented within two years of the date of this memorandum, or any of the above listed conditions develop, a new review will be necessary.

Review for Illinois Interagency Wetland Policy Act – Part 1090

The National Wetlands Inventory shows wetlands in the vicinity of the project location. Addendum B had been previously cleared for wetlands under NRR dated 01/07/2014. However, after further review, a survey for wetlands was conducted within the Environmental Survey Request limits for the proposed

improvements for Addenda B and C. All potential sites were examined and 10 were determined to be wetlands. The Wetland Delineation Report and spatial information (ArcGIS shapefile) are saved in the project folder.

The project sponsor will consider location and design alternatives to avoid and minimize adverse wetland impacts to the extent practical. After the extent of impacts is determined, a Wetland Impact Evaluation (WIE) form will be completed and submitted to the IDOT Bureau of Design and Environment. Unavoidable adverse wetland impacts are subject to the applicable ratios specified in 17 Ill. Adm. Code Part 1090.50 (c)(8). If the project will avoid adverse wetland impacts, the WIE should reflect the determination that adverse wetland impacts will not occur. The WIE form and instructions for its completion can be accessed at <http://www.dot.il.gov/environment/wetlands.asp>.

Review for Endangered Species Act - Section 7

See the attached US Fish and Wildlife Service list of endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within the county in which the proposed project is located. We cross-referenced the preferred habitat of each listed species with our knowledge of the project area and determined that listed species and critical habitat are not present.

Should the proposed improvement be modified or new information indicate listed or proposed species may be affected, consultation or additional coordination should be initiated.

Attachment—USFWS species county list

VH

Illinois County Distribution

Federally Endangered, Threatened, and Candidate Species

List Revised October 2013

County	Species	Status	Habitat
Champaign Field Office to Contact: U.S. Fish and Wildlife Service Marion Illinois Sub-Office 8588 Route 148 Marion, Illinois 62959 Phone: (618) 997-3344, ext. 340 FAX: (618) 997-8961 e:mail Marion@fws.gov+A49	Indiana bat (<i>Myotis sodalis</i>)	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
	Northern long-eared bat <i>Myotis septentrionalis</i>	Proposed as Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.
	Eastern prairie fringed orchid <i>(Platanthera leucophaea)</i>	Threatened	Mesic to wet prairies
	Prairie bush clover (<i>Lespedeza leptostachya</i>)	Threatened	Dry to mesic prairies with gravelly soil



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT CORPS OF ENGINEERS
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833

December 4, 2014

Regulatory Branch
File Number: MVS-2014-760

Bart L. Sherer
Illinois Department of Transportation
District 5
Paris, Illinois 61944-0610

Dear Mr. Sherer:

We have reviewed your application in regard to the reconstruction of the I-74/I-57 interchange in Champaign, Champaign County, Illinois. Based upon a review of the U.S. Geological Survey 7.5-minute topographical map, the National Wetland Inventory maps, USDA's Web Soil Survey, aerial photos and the application; we have determined that the project will not impact jurisdictional waters or wetlands. Since the project will not be completed within waters of the U.S., a Department of the Army permit is **not** required for the proposed work. If work may infringe on areas believed to be jurisdictional, you are instructed to contact the Corps of Engineers Regulatory Branch for guidance prior to completing any work.

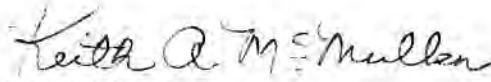
This determination is applicable only to the permit program administered by the Corps of Engineers Regulatory Branch. It does not eliminate the need to obtain other federal, state or local approvals before beginning work. You are reminded that although your proposal does not need a Section 404 permit, based on your submitted plans, any revisions to your proposal may be subject to Section 404 and require subsequent authorization from this office.

The jurisdictional determination for this project is considered a Preliminary jurisdictional determination in accordance with Corps regulations at 33 CFR Part 331. A preliminary jurisdictional determination is not appealable. If you wish, you may request an Approved Jurisdictional Determination (which may be appealed) by contacting our office for further instruction.

If you have any questions, please contact me at (314) 331-8584. Please refer to file number **MVS-2014-760**. The St. Louis District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment

to go to our Customer Service Survey found on our web site at
http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

Handwritten signature of Keith A. McMullen in cursive script.

Keith McMullen
Illinois Section Chief
Regulatory Branch

CC:

Heacock, IEPA
Diedrichsen, IDNR-OWR