



U.S. Department
of Transportation
**Federal Highway
Administration**

Illinois Division

3250 Executive Park Dr.
Springfield, IL 62703

April 28, 2009

Refer To: HPER-IL

Christine Reed, P.E.
Director of Highways
Chief Engineer
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

Attention: Charles J. Ingersoll, P.E.
Bureau of Design and Environment

Subject: Interstates 57 and 294 Interechange, Cook County, Illinois
Finding of No Significant Impact

Dear Ms. Reed:

The Federal Highway Administration (FHWA) received the Illinois Department of Transportation's (IDOT) April 27, 2009, request to issue a Finding of No Significant Impact (FONSI) for the new interchange between Interstates 57 and 294 and the associated improvements on 147th Street in Cook County, Illinois. The FHWA approved the Environmental Assessment (EA) for public review on August 20, 2008. Public hearings were held on September 10, 2008, and on February 18, 2009. Following the conclusion of the public comment period, IDOT provided FHWA with an addendum to the EA, copies of comments received during the public comment period and IDOT responses to those comments.

The FHWA has reviewed the EA, the addendum to the EA, the comments submitted during the public comment period and the responses to comments. Based on this information, FHWA agrees that the project will not result in a significant impact to the human environment. Enclosed with this letter are two signed original FONSI documents.

Please contact Chris Byars at (312) 886-1606 or me at (217) 492-4625 if you have any questions regarding this determination.

Sincerely,

Matt Fuller
Environmental Programs Engineer

For: Norman R. Stoner, P.E.
Division Administrator

**MOVING THE
AMERICAN
ECONOMY**



Enclosures

ccc: Mr. Kenneth Westlake, U.S. Environmental Protection Agency
Ms. Karla Kramer, U.S. Fish & Wildlife Service
Ms. Kathy Chernich, U.S. Army Corps of Engineers
Mr. Steve Hamer, Illinois Department of Natural Resources
Ms. Terry Savko, Illinois Department of Agriculture
Mr. James Allison, Illinois Environmental Protection Agency
Ms. Anne Haaker, Illinois Historic Preservation Agency
Mr. John Baczek, District 1, IDOT
Ms. Barbara Stevens, Bureau of Design & Environment, IDOT
Mr. Walter Zyznieuski, Bureau of Design & Environment, IDOT
Mr. Rocco Zucherro, Illinois State Highway Toll Authority

Federal Highway Administration

FINDING OF NO SIGNIFICANT IMPACT

**For
Interstate 294 (FAI 294) at Interstate 57 (FAI 57) Interchange
with Improvements to 147th Street
Cook County, Illinois**

The Illinois Department of Transportation (IDOT) and the Illinois Tollway (Tollway) are proposing to construct a new interchange at the intersection of Interstate 294 (Tri-state Tollway) and Interstate 57 with improvements to 147th Street in Cook County, Illinois. The purpose of the project is to provide new interstate access between Interstate 57 and Interstate 294 (Tri-State Tollway) and address capacity, operational, and safety deficiencies along 147th Street within the influence area of the new interchange. The project study area extends along Interstate 57 from approximately 159th Street in the south to the CSX Railroad in the north, for a distance of approximately 2.87 miles, along Interstate 294 from 159th Street on the south to the Metra Rock Island District Rail bridge on the north, a distance of approximately 2.18 miles and along 147th Street from Kedzie Avenue on the west to Western Avenue/Dixie Highway on the east, a distance of approximately 1.49 miles.

This Interstate 294 at Interstate 57 interchange project with 147th Street improvements is included in the 2007-2012 Transportation Improvement Program (TIP) endorsed by the Policy Committee of the Chicago Metropolitan Agency for Planning (CMAP), the Metropolitan Planning Organization (MPO) for the region in which the project is located, and is a part of the 2030 Regional Transportation Plan (RTP) for northeastern Illinois endorsed by CMAP.

The proposed action includes the installation of Collector-Distributor (C-D) roadways along both Interstate 294 and Interstate 57, the installation of new ramps between the two interstate facilities for the following movements:

- I-57 Northbound to I-294 Northbound – via two lane flyover ramp
- I-294 Southbound to I-57 Southbound – via two lane ramp
- I-294 Northbound to I-57 Northbound – via one lane ramp
- I-57 Southbound to I-294 Southbound – via one lane flyover ramp.
- I-57 Southbound to I-294 Northbound - via one lane ramp and
- I-294 Southbound to I-57 Northbound – via one lane loop ramp.

In addition, two new local access ramps to and from I-294 northbound will be constructed in conjunction with new toll collection plazas for I-294, located north of 147th Street.

The new configuration includes construction of new bridges over the interstates for the flyover ramps. To accommodate new CD roads on either side of each interstate, the I-57

bridges over I-294 and 147th Street will be reconstructed, and the I-57 bridges over 149th Street, Western Avenue, CSX/CN Railroads will be widened. The I-294 bridge over 147th Street will be reconstructed and the I-294 bridge over Kedzie Avenue will be widened. The Kedzie Avenue bridge over I-57 will be reconstructed. 147th Street improvements include pavement reconstruction and widening to include a bi-directional left turn lane as well as traffic signal replacement at six intersections and a new ramp traffic signal at the new exit ramp from I-294 to 147th Street.

There will be approximately 34 acres of new right-of-way from impacted property owners. Forty-three (43) residential properties and three (3) business properties will be acquired. Temporary construction easements will also be acquired as necessary. All property acquisition will be conducted under the provision of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the IDOT Land Acquisition Procedures Manual.

There are no historic properties identified within the limits of the proposed project rights-of-way. The SHPO concurred on the determination that no historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended, will be affected by the proposed action.

A Pre-Screen carbon monoxide (CO) analysis was completed for the 147th Street project in January 2009. The results from this proposed roadway improvement indicate that a COSIM air quality analysis is not required, as the results for the worst case receptor are below the 8-hour average National Ambient Air Quality Standard for CO of 9.0 ppm that is necessary to protect the public health and welfare.

This project does not meet the definition of a project of air quality concern as defined in 40 CFR 93.123(b)(1). Due to the relatively minimal change in the amount of truck traffic for the project (from an average of 7% for the no build alternate to an average of 8% for the preferred build alternate), it has been determined that the project will not cause or contribute to any new localized PM_{2.5} or PM₁₀ violations or increase the frequency or severity of any PM_{2.5} or PM₁₀ violations. The USEPA has determined that such projects meet the Clean Air Act's requirements without any further Hot-Spot analysis.

In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), the EPA also regulates air toxics. With the preferred improvement plan, it is expected there would be an increase in Mobile Source Air Toxics (MSATs) emissions in the immediate area of the project, relative to the No Build Alternative, due to increased vehicle miles travelled (VMT) associated with the proposed improvements, but there is expected to be reduced MSAT emissions due to EPA's MSAT reduction programs. In comparing various project alternatives, MSAT levels could be higher in some locations than others, but current tools and science are not adequate to quantify them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

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 includes provisions on dust control. Under these provisions, which are also adopted by the Tollway, 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 Tollway or IDOT 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.

Noise barriers were evaluated along the I-294 Corridor and I-57 Corridor for receptors experiencing a noise impact. All the noise barriers along I-294 are reasonable based on the cost per benefited residence except Barrier 294-2 and Barrier 294-2A, as described in the Environmental Assessment. Barrier 294-2 and Barrier 294-2A are not considered economically reasonable because they exceed the IDOT Noise Policy cost criteria of \$24,000 per benefited receiver. However, the Illinois Tollway has decided to construct barrier 294-2 because it will replace a 200 foot section of one of the noise barriers constructed as part of the I-294 widening project, which protects the actively used baseball diamond in Memorial Park. Since this barrier is not considered reasonable and is not eligible for federal-aid funds, the Illinois Tollway will construct this barrier with Illinois Tollway funds. Barrier 294-2A replaces the same section of No-Action barrier as Barrier 294-2 but includes an additional 650-foot extension. The additional barrier length does not benefit any more receptors and therefore will not be constructed. Barriers 294-4 and 294-5 meet both noise reduction requirements and cost effectiveness required by IDOT's Noise Policy, and they will be constructed. Barriers 294-1 and 294-3 do not achieve the required noise reduction, and therefore are not eligible for federal-aid fund. However, the Illinois Tollway will construct these barriers with Illinois Tollway funds. The six noise barriers along I-57 were evaluated and determined to be not cost effective and therefore will not likely be constructed.

The project was coordinated with the Illinois Department of Natural Resources (IDNR) and the U.S. Fish and Wildlife Service (USFWS). There are known and potential habitats for seventeen federal or state listed endangered and threatened species as described in the

following paragraphs. Several Natural Areas, Nature Preserves and prairies occur within the project area. They are collectively known as the Indian Boundary Prairies and they include the presence of state listed plant, bird and insect species. The Dropseed Prairie, designated a Nature Preserve by the State of Illinois, is considered Section 4(f) properties by FHWA. The Gensberg-Markham Prairies, east and west, are located on either side of I-294 south of the interchange. The Dropseed Prairie is located on the east side of I-57, at the southern limit of the project area. The project will impact 3.1 acres of Dropseed Prairie due to the widening of I-57. This impact is limited to the area between the edge of existing pavement and the access control fence and will not affect the use of the prairie or significant natural areas. This area has been used for highway purposes prior to designation as a Nature Preserve; therefore there is no Section 4(f) use. An area of 12.4 acres of the Gensberg Markham Prairie West will also be impacted. The area impacted is not designated as a Nature Preserve and involves an area of low quality, previously impacted buffer area.

The Posen Park District maintains jurisdictional authority over Posen Park, a Section 4(f) resource located just west of I-294, north of the I-294/I-57 crossing. San Francisco Avenue and 149th Street border the Park to the west and south respectively. Approximately 0.4 acres of land located on the eastern edge of the Park will be converted for highway use. The encroachment into the Park is limited to a narrow strip of land that is primarily open space however; some park equipment will be impacted. The proposed action has no adverse effect to the activities, features and attributes within the Section 4(f) resource. The public was given the opportunity to review the impacts to the Park and provide comments at the open-house public hearing held on September 10, 2008 from 4:00 p.m. to 7:00 p.m. at the Posen Village Hall in Posen, Illinois. No comments regarding impacts to the Park were received during the comment period. The Posen Park District concurred with the determination that there will be no adverse effect on the park in a concurrence statement dated March 19, 2009, part of a letter from Illinois Tollway dated October 23, 2008. The Illinois Tollway will mitigate for the taking of parkland by purchasing the impacted Posen Park land for the fair market value of the property and provide two pieces of playground equipment valued at approximately \$15,000 each plus the cost of installation at Posen Park. As a result, the Federal Highway Administration (FHWA) hereby makes a de minimis finding for this use of the Posen Park as it will not adversely affect this resource's activities, features and attributes. The de minimis impact finding is based on the impact avoidance, minimization, and mitigation or enhancement measures detailed in the attached Environmental Assessment.

Four populations of alkali bulrush were identified in ditch areas of the project, comprising approximately 323 square feet in area. Two populations of mountain blue-eyed grass were also identified in the Dropseed Prairie area of the project. Both were identified within 150 feet of the existing edge of pavement and are likely to be impacted. Habitat for the eastern prairie fringed orchid is known to occur in mesic to wet-mesic prairies near the project area but no suitable habitat occurs in the project area and no individuals of this species were identified during multiple site visits. Mitigation of alkali bulrush will not occur as it is proposed to be de-listed in 2009 by the Illinois Endangered Species Protection Board. The state endangered mountain blue-eyed grass will be

translocated prior to construction. Coordination will need to occur with the Illinois Department of Natural Resources. In addition, if the plants are relocated onto Nature Preserve property, coordination will need to occur with the Illinois Nature Preserves Commission, prior to relocation. Other mitigation efforts for disturbing the Gensberg-Markham and Dropseed Prairies will be provided by the Illinois Tollway and will consist of prairie restoration, enhancement and preservation within the Indian Boundary Prairies complex, coordinated with the Nature Conservancy (owners of the prairies) and the Illinois Nature Preserves Commission.

Franklin's Ground Squirrel habitats were identified within the project study area. However, during field studies no Franklin's Ground Squirrels were captured in the immediate vicinity of the interchange project.

Approximately 10,410 trees were identified in the project vicinity. All trees are expected to be impacted by the project. Tree removal will be kept to a minimum and tree replacement will be in accordance with the ISTHA Criteria for Removal and Replacement of Trees or the IDOT Departmental Policy D&E 18, Preservation and Replacement of Trees. Protection and care of existing trees and shrubs to remain within the project limits will be provided in accordance with the IDOT Special Provision for Protection and Care of Trees and Shrubs to Remain. All areas disturbed by construction will be restored to turf cover in accordance with the IDOT BDE Manual, Chapter 59, Landscape Design and Erosion Control.

Seven waters of the United States have been identified in the project area. The proposed project will not impact Midlothian Creek, Calumet Union Drainage Ditch and an unnamed intermittent stream. Dixie Creek, Bellaire Creek, I-57 Ditch and Park Creek will be impacted due to culvert extensions or relocation. The general use water quality standards for copper, lead, zinc and annual daily average chloride concentration were achieved for existing and future project conditions. Proper erosion control methods will be implemented to minimize erosion and sedimentation, according to the IDOT BDE Manual, Chapter 59, Landscape Design and Erosion Control, the Illinois Tollway Erosion and Sediment Control Landscape Design Criteria Manual, and the Illinois Urban Manual. Several methods will be utilized to minimize impacts including erection of perimeter barrier fencing along the four streams. The only runoff that will be allowed to leave the construction zone will be through sedimentation basins. In addition, any disturbed area will be seeded or sodded as soon as practical after construction activities in that area have been concluded.

Floodplain and floodway impacts will occur at four locations. The I-57 Drainage Ditch and Dixie Creek will require relocation, which will affect the designated floodplain/floodway. These two impacts are considered major and will require Letters of Map Revision (LOMR) from FEMA. There will be no increase in the base flood elevations due to the relocations. There are no practical alternatives to construction in the flood plain. Minor floodplain and floodway impacts are expected at Park Creek and Bellaire Creek for culvert extensions with no increase or change in the base flood elevations. Per IDNR/OWR permit criteria, fill in floodplain is not compensated but

available areas in the right-of-way will be utilized to maximize compensatory storage, expected to be at a 1:1 ratio. The modifications to drainage structures included in this project will result in an insignificant change in their capacity to carry flood water. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values; there will be no significant change in flood risks; and there will be no significant increase in potential for interruption or termination of emergency service or emergency evacuation routes. Downstream flood heights are not affected. Therefore, it has been determined that these impacts are not significant.

Approximately 4.3 acres of wetlands from four sites will be directly affected by the improvement. Measures to minimize wetland impacts include the use of steeper side slopes and the addition of retaining walls. Wetland areas to remain will be protected from construction activities by implementing design guidance outlined in the IDOT BDE Manual, Chapter 59, Landscape Design and Erosion Control, the Illinois Tollway Erosion and Sediment Control Landscape Design Criteria Manual, and the Illinois Urban Manual. The mitigation will occur at a ratio of 1.5:1 for Wetlands Site #12 and Site #13, as each are less than 0.5 acres per wetland. Mitigation will occur at a ratio of 2.5:1 for Wetland Site #14 and Site #15. There will be a total of approximately 10.5 acres of wetland mitigation. Wetlands will be mitigated at the Indian Boundary Prairie complex wetland mitigation site and will be coordinated by the Illinois Tollway. The wetland impacts have been coordinated with IDNR and they have determined that IDOT and the Illinois Tollway have minimized wetland impacts through the design process and concur with the mitigation strategies. Based upon the above consideration, it is determined that there is no practicable alternative to the proposed construction in the wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands.

A Preliminary Environmental Site Assessment has determined that there is a high risk of encountering contaminated soil within the project limits and additional testing is required. A waiver to complete the Preliminary Site Investigation (PSI) during the design phase was granted. The nature and extent of the involvement will not be known until the PSI is completed. At that time the areas of contamination will be managed and disposed of in accordance with applicable Federal and State laws and regulations, in a manner that will protect human health and the environment. The quantities to be disposed are not expected to have a significant effect on landfill capacity.

A Section 404 permit will be required from the U.S. Army Corps of Engineers, Chicago District, for waters for the U.S. (streams).

It is anticipated that this project will result in the disturbance of one or more acres of total land area. Accordingly, it is subject to the requirement for a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from the construction site. Permit coverage for the project will be obtained either under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. 1LR1 0) or under an individual NPDES permit. Requirements applicable to such a permit will be followed, including the preparation of a Stormwater Pollution Prevention Plan. Such a plan shall identify potential sources of pollution which may reasonably be

expected to affect the quality of stormwater discharges from the construction site. It shall also describe and ensure the implementation of practices that will be used to reduce the pollutants in discharges associated with construction site activity and to assure compliance with the terms of the permit.

There are regulatory floodways which are within the project limits. Permits will be required from the IDNR-Office of Water Resources and Letters of Map Revision filed with FEMA and because construction will disturb more than one acre of ground cover, a Stormwater Management Permit will be required.

An indirect and cumulative impact analysis indicated the proposed action would cause only minor impacts to land use and economics, visual resource, transportation, social/community, air quality, natural resources and water quality. The indirect impacts hinge on construction of the proposed project and the associated developments which would not occur without improved roadway access between Interstate 294 and I-57. The cumulative effects of actions taken will primarily be those associated with new development which will occur based on improved access of undeveloped properties to the interstate.

The project was presented to the public for comment at Public Hearings on September 10, 2008 from 4:00 p.m. to 7:00 p.m and at the Posen Village Hall and February 18, 2009 from 4:00 p.m. to 7:00 p.m. at the Posen Community Center, both in Posen, Illinois. At the September 2008 meeting, a total of 55 people officially signed in. For the February 18, 2009 meeting, 181 people officially signed-in. Approximately 30 additional people attended but elected to not sign-in. Comments included the following:

Comment Category	Comments
Property Impacts – Residential	17
Property Impacts – Commercial/Institutional	6
Drainage/Floodplains	10
Design	9
Access (During Construction, Permanent)	4
Environment (Noise, Air Quality, Trees Replacement)	7
Project Support	4
Project Opposition	3
Other	6

These issues were addressed in letters responding to the comments and are summarized in the Environmental Assessment Addendum, dated April 2009 and included in the Combined Design Report, also dated, April 2009.

The FHWA conducted a Cost Estimate Review of the project from March 2 to March 6, 2009. The results of the meeting and analysis yielded a potential overall project cost for the Preferred Alternative including both 147th Street proposed improvements and the I-

294/I-57 Preferred Build Alternative of \$579 million in 2009 dollars, including design and construction but not including right-of-way acquisition costs.

Additional Cost Estimate Review analysis yielded a potential overall cost of \$687.3 million for mid-year of construction (2012), including right of way acquisition costs. Also from this analysis, the anticipated cost of the project would be \$647.0 million, based on a 70% probability level, as defined by FHWA.

FHWA has determined that this project will not have any significant impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the attached Environmental Assessment (EA) and Environmental Assessment Addendum which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement (EIS) is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the attached EA and supporting documents.

4/29/2009
Date

Mark Tull
For Federal Highway Administration